

A Campaign of Logistics: An Analysis of Basing, Culmination, and Operational Reach at the Pusan Perimeter

A Monograph

by

MAJ Craig M. Banner

US Army



School of Advanced Military Studies
US Army Command and General Staff College
Fort Leavenworth, KS

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Name of Candidate: MAJ Craig M. Banner

Monograph Title: A Campaign of Logistics: An Analysis of Basing, Culmination, and Operational Reach at the Pusan Perimeter

Approved By:

_____, Monograph Director
Eric Price, ABD

_____, Seminar Leader
Andrew Watson, COL

_____, Director, School of Advanced Military Studies
Kirk Dorr, COL

Accepted this 23rd day of May 2019 by:

_____, Director, Graduate Degree Programs
Robert F. Baumann, PhD

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Abstract

A Campaign of Logistics: An Analysis of Basing, Culmination, and Operational Reach at the Pusan Perimeter, by MAJ Craig M. Banner, 45 pages.

This monograph analyzes the role of the United States, Republic of Korea (ROK), and Democratic Republic of Korea (DPRK) during the Pusan Perimeter campaign through the elements of operational art, specifically basing, culmination, and operational reach. Despite the disastrous initial efforts of the United States and ROK armies (ROKA), both forces learned from their mistakes and effectively used basing at the port of Pusan to maintain operational reach and prevent culmination while denying the Korean People's Army's (KPA) ability to do the same. Lieutenant General (LTG) Walton Walker's system of interior lines, enabled by increased logistics support at the port of Pusan, coupled with the Far East Command's (FECOM) annihilation of the KPA's intermediate and rear basing zones rendered the DPRK's lines of communications (LOCs) untenable and unable to support frontline KPA forces, ensuring the KPA's defeat at the Pusan Perimeter. The existential threat and long-term strategic consequences facing the ROK and United States at the Pusan Perimeter has broad operational and strategic implications towards large-scale combat operations (LSCO) and in preserving the principles outlined in the post-WWII international order.

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Acronyms

ADRP	Army Doctrine Reference Publication
CCMD	Combatant Command
COIN	Counterinsurgency
CONUS	Continental United States
DOD	Department of Defense
DPRK	Democratic People's Republic of Korea
EUSA	Eighth US Army
GEN	General
FECOM	Far East Command
FM	Field Manual
ISB	Intermediate Staging Base
JLCOM	Japan Logistics Command
KPA	North Korean People's Army
KATC	Korean Army Training Center
KATUSA	Korean Augmentation to the US Army
KMAG	Korean Military Advisory Group
KSC	Korean Service Corps
LTG	Lieutenant General
LOC	Line of communication
LSCO	Large-Scale Combat Operations
NATO	North Atlantic Treaty Organization
NDS	National Defense Strategy
NMS	National Military Strategy
NSS	National Security Strategy
POW	Prisoner of War

ROK	Republic of Korea
ROKA	Republic of Korea Army
2LT	Second Lieutenant
2LC	Second Logistical Command
UN	United Nations
US	United States
USSR	United Soviet Socialist Republics
WWII	World War II

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Introduction

As Second Lieutenant (2LT) Addison Terry led his platoon into Korea in early July 1950, major combat operations were not of any great concern to his soldiers. President Harry Truman's classification of Korea as a police action put 2LT Terry and his men at ease.¹ A proud member of the US 27th Infantry Regiment "Wolfhounds," 2LT Terry felt that his unit's sterling reputation, earned through success in combat during World War II (WWII), would intimidate and drive out the advancing KPA.² As 2LT Terry occupied a mountain peak fifteen miles east of Taejon to protect the right flank of the 24th Infantry Division, he felt that his platoon held an unparalleled vantage point that could easily counter any potential threats posed by the KPA.³

However, as 2LT Terry saw the mass of advancing KPA infantry supported by heavy artillery and T-34 Soviet tanks, he soon became aware of the vulnerable state associated with his position.⁴ 2LT Terry watched the unfolding scene at the bottom of the ridge quickly deteriorate as the 24th Infantry Division retreated and then became enveloped by the KPA.⁵ Feeling increasingly helpless, 2LT Terry soon lost contact with his higher headquarters and any chance of efficient logistical resupply.⁶ As the KPA's T-34 tanks trained their sights on his position, 2LT Terry realized that the 3.5-inch bazookas, howitzers, and obsolete radios, maps, and compasses provided to his platoon were no match for the KPA's superior equipment and inherent motivation to annihilate US forces.⁷

¹ Addison Terry, *The Battle for Pusan* (Novato, CA: Presidio Press, Inc., 2000), 40, 47, 57.

² Terry, 50.

³ Terry, 16, 18, 22.

⁴ Terry, 14, 27-30.

⁵ Terry, 27-30.

⁶ Terry, 24.

⁷ Terry, 32-37, 42, 50, 58, 77.

Within minutes, 2LT Terry's location became untenable as the KPA repeatedly shelled his position. As his platoon became dislodged from their camouflaged positions and exposed to enemy gunfire, 2LT Terry wondered what had befallen him. In his mind, his platoon was full of competent artillerymen and part of unit with a storied past, but five men now lay dead or wounded, with the situation growing increasingly perilous.⁸ Instead of the anticipated police action, 2LT Terry now realized that the situation had manifested itself into actual combat and that the once absurd speculation of the newly-formed Pusan Perimeter becoming a Korean Dunkirk might well now come to pass.⁹

The update to Field Manual (FM) 3-0 published in October 2017 marks a considerable shift in the US Army's approach towards contemporary operations. Apart from brief periods of conventional operations at the outset of the Iraq and Afghanistan campaigns, much of the US Army's focus has centered on the proper application of Counterinsurgency (COIN) operations. While FM 3-0 acknowledges the need for COIN to achieve a desired end, the document's overriding focus is on LSCO and emphasizes the necessity for the US Army to refocus its efforts towards conventional approaches within the context of great power competition.

With FM 3-0 comes a renewed focus on operational logistics. LSCO requires greater logistical anticipation and responsiveness than COIN to enable each of the six strategic phases that the US Army performs throughout an operation.¹⁰ The shift towards LSCO, paired with the decision to allocate approximately 70% of the US Army's logistical capabilities to the reserve and national guard components, suggests potential problem areas in the ability to meet the resourcing requirements associated with LSCO.¹¹

⁸ Terry, 27-30.

⁹ Terry, ix.

¹⁰ US Army, *FM 3-0 (2017)*, 32.

¹¹ Michael Bold, "Army Reserve refocuses on updated threat picture," US Army.mil, November 21, 2016, accessed September 24, 2018, https://www.army.mil/article/178639/army_reserve_refocuses_on_updated_threat_picture.

The Korean War represented a rapid departure from total war during WWII through its stated aims of conducting limited war for limited objectives. However, the first six months of the Korean War, including the Pusan Perimeter campaign, comports with the general definition of LSCO as outlined in FM 3-0.¹² Given recent updates to doctrine that emphasize a renewed focus towards LSCO, this monograph seeks to analyze the factors that impacted the outcome of the Pusan Perimeter campaign and considers how the lessons from this experience can influence our understanding of LSCO in support of future operations.

The rapid demobilization of US Army forces following WWII adversely affected the readiness of the operational force at the start of the Korean War. The lack of preparedness shown by the US Army and ROK armed forces contrasts with the high degree of readiness exhibited by the KPA at the outset of the Korean War. Despite these contrasting levels of readiness, US/ROKA forces prevailed at the Pusan Perimeter for two reasons. The systematic use of interior lines between the port city of Pusan and the Naktong River line, paired with the destruction of DPRK intermediate basing zones and forced relocation of rear basing areas into Vladivostok, enabled responsive logistics resupply operations in support of US/ROKA forces while restricting the ability for the KPA to adequately provision its forces over untenable LOCs during the Pusan Perimeter campaign.

This Pusan Perimeter campaign bears similarities, but also significant differences, with previous conflicts involving the United States, Europe, and the USSR. Similarities include Nazi Germany's march on Moscow during Operation Typhoon and Frederick the Great's Prussian campaign against France and Austria during the Seven Years War. During Operation Typhoon, Germany used blitzkrieg and annihilation tactics that ultimately culminated outside of Moscow. Like the DPRK, Nazi Germany's invasion of the Soviet Union proved initially successful, but

¹² US Department of the Army, *Field Manual (FM) 3-0, Operations* (Washington, DC: Government Printing Office, 2017), 2. At its core, large-scale combat operations consist of highly contested, lethal environments where enemies employ advanced capabilities that rival or surpass that of the US military.

both systems of supply could not resolve the problems of logistics and the communications necessary to exploit offensive operations towards Moscow and Pusan.¹³ Prussia's involvement in the Seven Years War in 1757 under the direction of Frederick the Great also bears similarities to the Pusan Perimeter Campaign. When Prussia faced simultaneous offensives from France and Austria 200 miles apart, Frederick the Great strategically allocated resources and reinforcements across precarious defensive positions while preparing for offensive actions that annihilated an ill-prepared Austrian flank and destroyed a Franco-German army twice his size.¹⁴

Differences include the focus on counterinsurgency operations, like Operations Iraqi Freedom and Enduring Freedom. During the Pusan Perimeter campaign, the focus began and continued with ousting the DPRK from the ROK across a known front of operations. While expelling Al Qaeda and Saddam Hussein from Afghanistan and Iraq, respectively, was the original aim of the US government, subsequent COIN operations did not contain a readily definable front.¹⁵

Methodology

This monograph relies on primary and secondary sources to determine, through operational art, how KPA and US/ROKA logistical readiness affected the outcome at the Pusan Perimeter during the Korean War. Derived from the theory of operational art, the elements of culmination, basing, and operational reach provide the lens to interpret these sources and assess each combatants' ability to sustain their respective forces over extended distances. The elements of culmination, basing, and operational reach provide the connection between the introduction,

¹³ David Stahel, *Operation Barbarossa and Germany's Defeat in the East* (Cambridge, UK: Cambridge University Press, 2009), 43, 88, 120-121, 433; David Stahel, *The Battle for Moscow* (Cambridge, UK: Cambridge University Press, 2017), 218; Appleman, Roy E., 408.

¹⁴ Geoffrey Parker, *The Cambridge History of Warfare* (Cambridge, UK: Cambridge University Press, 2012), 185.

¹⁵ Lisa Munday, *Understanding the U.S. Wars in Iraq and Afghanistan*, ed. Beth Bailey and Richard H. Immerman (New York, NY: New York University Press, 2015), 178-189.

case study analysis, and analysis of logistical readiness at the Pusan Perimeter. The findings from this analysis will assess the role of logistical readiness in the outcome of this period within the Korean War along with its viability towards contemporary operations associated with LSCO.

Structure

This monograph seeks to analyze the impacts of operational art and the role that logistics performed in the outcome of the Pusan Perimeter campaign from 1 August to September 15, 1950. While the necessity of placing logistics at the proper place and time is often an undervalued aspect of warfighting, the ability to do so has been decisive in the outcome of military campaigns throughout history. The role that logistics performed, largely in terms of the US/ROKA's ability to replenish its forces at a faster rate than the KPA, proved to be a primary determinant in the outcome of the Pusan Perimeter campaign.¹⁶

The introduction covers the research question, thesis, methodology, structure, scope and limitations, doctrinal framework, and historical doctrine portions of this monograph. The doctrinal framework section covers contemporary and historical doctrine. This is followed by a case study of the Pusan Perimeter campaign that provides an analysis of logistical readiness through the elements of basing, culmination, and operational reach for US/ROKA and DPRK forces. An analysis of strategic implications of the Pusan Perimeter in relation to LSCO and the contemporary operating environment follows the case study. Specifically, this section will discuss operational and strategic concerns facing the Department of Defense (DOD) with respect to the elements of basing, culmination, and operational reach within the context of LSCO. The conclusion summarizes the monograph and seeks to answer the proposed research question.

¹⁶ Schrader, 3-5.

Scope and Limitations

This monograph seeks further understanding of LSCO through the lens of operational art and the 45-day period during the Korean War known as the Pusan Perimeter campaign. As a result, research for this monograph only involves the Pusan Perimeter campaign itself and does not examine operational art across the entirety of the Korean War. One significant detail to note concerns the instrumental efforts of the Far East Command's (FECOM) Fifth Air Force during the Pusan Perimeter campaign; indeed, virtually all contemporary research acknowledges that, had the Air Force not intervened, the Pusan Perimeter campaign likely would have failed and, with it, the fate of the ROK itself.¹⁷ With this acknowledgment noted, the focus areas for this monograph are on the armies of the United States, ROK, and DPRK. United Nations (UN) troops began to arrive for service in the Korean War near the end of the Pusan Perimeter campaign.¹⁸ While the contributions of allied nations were unquestionably instrumental to the prosecution of further campaigns in the Korean War, those efforts are beyond the scope of this monograph.

ADRP 3-0 lists ten elements of operational art. However, the analysis within this monograph will only cover the elements of basing, culmination, and operational reach. The basis for this approach lies with the understanding that a combination of these three elements contributes materially towards sustaining logistical readiness during contested operations. When planned and executed properly, basing, culmination, and operational reach provides a connecting link that increases the likelihood for the sustainability of logistics support during contested operations.¹⁹

¹⁷ Appleman, Roy E., *United States Army in the Korean War; South to the Naktong, North to the Yalu* (Washington, DC: US Government Printing Office, 1986), 476-477; US Department of the Army, *Korea 1950* (Washington, DC: US Government Printing Office, 1997), 82-84.

¹⁸ Appleman, 382.

¹⁹ Hutson, James A., *The Sinews of War: Army Logistics 1775-1953* (Washington, DC: US Government Printing Office, 1988), 617.

While this monograph seeks to provide analysis through the perspectives of the United States, ROK, and DPRK armies, limited access to ROK and DPRK source materials means that analysis of their actions relies largely on US sources. In the case of the DPRK, confirming the accuracy of North Korean actions during this forty-five-day period is extremely difficult due to the current geopolitical environment between the United States and North Korea. Therefore, the analysis of DPRK actions is not independently verifiable in most cases. Additionally, while ROKA sources of the Korean War certainly exist, it is difficult to obtain exhaustive resources of South Korean accounts. These difficulties exist in large part due to the limitations of travel to independently locate and verify ROKA accounts. As a result, US material comprises the preponderance of available resources and research. Where possible, US observations have been corroborated with ROK and DPRK source materials.

Doctrinal Framework

Contemporary Doctrine

Operational art involves the pursuit of strategic objectives through the arrangement of tactical actions in time, space, and purpose. As implied through its definition, operational art encompasses the strategic, operational, and tactical levels of war and involves processes that incorporate shared understanding, purpose, and collaboration across each echelon. Ten elements exist within the theory of operational art that assist commanders with an intellectual framework to visualize and describe an operational approach towards a complex problem.²⁰

The element of basing involves encampments designed to support sustainment activities for military operations. Basing is typically a key determinant in force projection, as these areas provide critical support and services necessary to extend military operations in time and space. Effective basing mechanisms are critical to the success of operations due to its vital role in positioning and employing resources necessary to enable and sustain tactical operations.²¹

The element of operational reach involves the distance and duration necessary to extend military operations. Operational reach is a tether; commanders seek to extend this tether far enough to achieve their military objectives in time and space. Operational reach balances the tension between endurance, momentum, and protection. Endurance involves the ability to employ and extend military operations for a protracted period. Momentum consists of exploiting, retaining, and executing military operations upon seizing the initiative that allows friendly forces to maintain and complete the organization's stated objectives. Protection is closely related to

²⁰ US Department of the Army, *Army Doctrine Reference Publication (ADRP) 3-0, Operations* (Washington, DC: Government Printing Office, 2017), 23, 26.

²¹ US Army, *ADRP 3-0* (2017), 31.

endurance and momentum through analysis that allows commanders to allocate capabilities against anticipated enemy actions that ultimately extend military operations.²²

The element of culmination reflects a point in time and space in which a military force can no longer continue its form of operations. Culmination represents a temporary shift in relative combat power and applies to offensive, defensive, and stability operations. Culmination typically results from resourcing decisions at higher echelons or in direct combat actions and often involves the reconstitution of tactical forces to continue military operations.²³

Historical Doctrine

The origins of Western logistics military doctrine date back to the Thirty Years War from 1618 – 1648, when Gustavus Adolphus and Albrecht von Wallenstein became the progenitors of efforts aimed towards sustaining rapidly growing armies across Europe.²⁴ The ideas captured by Adolphus and Wallenstein formed the contemporary basis for later Western military thought, as demonstrated through Carl von Clausewitz's *On War* and Antoine-Henri Jomini's *The Art of War*. In *The Art of War*, Jomini described basing as a crucial activity that brings together reinforcements, resources, and becomes the starting point for offensive operations. The placement of basing was a crucial determinant for an army's operational reach due to the difficulties associated with sustaining distant bases of operation over an extended period of time.²⁵ Jomini also used history as a guide to warn nations against distant invasions across extensive LOCs that can result in a military force's culmination. In the event that distant invasions across extended areas did occur, Jomini recommended the formation of an alliance with a respectable power to

²² US Army, *ADRP 3-0* (2017), 30-31.

²³ US Army, *ADRP 3-0* (2017), 29.

²⁴ Martin Van Creveld, *Supplying War: Logistics from Wallenstein to Patton* (New York, NY: Cambridge University Press, 1977), 5-17.

²⁵ Antoine-Henri Jomini, *The Art of War* (London, UK: Greenhill Books, 1996), 77-79.

provide the army with basing, supplies, and refuge to regenerate itself in preparation for future combat operations.²⁶

In *On War*, Clausewitz defined basing in existential terms through its description as the only true means of providing supply, replenishment, and communications in support of a military force. Clausewitz also described the protection of basing during military operations as a critical factor since bases of operations constitute the originating point for the army and all of its operations.²⁷ Similar to Jomini, Clausewitz argued that the placement of basing can extend or restrict the duration of a military force's operational reach.²⁸ Clausewitz also discussed the culminating point of the attack in detail, stating that military objectives require successful completion before offensive capabilities diminish and the enemy imposes its will on the attacking force.²⁹

The US Army released an updated version of *FM 100-5, Field Service Regulations, Operations*, in 1949 based on its experiences during WWII. While FM 100-5 does not discuss bases of operations in explicit terms, the manual discusses the importance of supply. FM 100-5 describes the importance of placing installations along critical terrain features outside of a hostile position that dominate routes of communication. A failure to do so will result in the surrender, or culmination, of the military force.³⁰ FM 100-5 also places great importance on maintaining an adequate level of supplies throughout an operation through proper maintenance, protection, and self-containment. Similar to the concept of operational reach, FM 100-5 describes the continuity

²⁶ Jomini, 171-173.

²⁷ Carl von Clausewitz, *On War*, ed. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 341.

²⁸ Clausewitz, *On War*, 343. Clausewitz uses Napoleon's 1812 campaign as one of his historical examples. In this example, Clausewitz faults Napoleon for his failure to place basing in areas that would allow for a continuation of military operations and as a limitation in seeking refuge during the Grand Armee's retreat from Moscow.

²⁹ Clausewitz, 528.

³⁰ US Department of the Army, *Field Manual (FM) 100-5, Operations* (Washington, DC: US Government Printing Office, 1949), 220.

of supply as essential to the military force's ability to prolong military operations, while failing to analyze the role of supply can negatively affect the entire plan of operations.³¹ While US doctrine like FM 100-5 was not uniformly adopted by the ROKA, policies and procedures that used these field service regulations quickly formed mutual understanding between US and ROKA forces.³²

The DPRK relied almost exclusively on the Soviet Union's doctrine when forming the KPA.³³ In fact, the Soviet Red Army merely modified its existing doctrine from WWII to meet existing conditions in Korea.³⁴ Logistics doctrine was no exception. The DPRK used the doctrine provided by the Soviet Union effectively at the start of the Korean War and took full advantage of US/ROKA disorder by quickly seizing and establishing basing areas, along with vast amounts of enemy equipment, across the Korean peninsula to maintain its increasingly long LOCs.³⁵

Soviet doctrine emphasized the use of forward, intermediate, and rear basing areas to conduct sustainment activities during contested operations. The forward area typically involved small breakdown or issue points that were located anywhere from the point of contact to 30 miles from the front line. These issue points were largely ad-hoc, heavily camouflaged, and rarely contained more than critical rations and small arms ammunition.³⁶ Basing in the intermediate zone was semi-permanent and typically found anywhere from 30-60 miles from the front line. Intermediate zone basing areas also contained a wide range of heavy weapons, equipment, and supplies designed to facilitate offensive and retrograde operations.³⁷ Supply installations in the

³¹ US Army, *FM 100-5 (1949)*, 227-228.

³² Sawyer, 73-75.

³³ Schrader, 65.

³⁴ US Department of the Army, *The Enemy Supply System in North Korea, USAFFE Intelligence Digest, II*, no. 4 (Washington, DC: Government Printing Office, 1953), 15-16; Schrader, 25.

³⁵ Schrader, 33; Appleman, 394.

³⁶ US Department of the Army, *Supply and Transportation System of the Chinese Communist and North Korean Forces in Korea*, (Tokyo, Japan: Headquarters, Eighth US Army, 1951), 33, 61-62; Schrader, 74-75.

³⁷ US Army, *Supply and Transportation System of the Chinese Communist and North Korean Forces in Korea*, 24-25; Schrader, 75.

rear area were permanent facilities, typically found at distances greater than 60 miles from the front line, and located within DPRK industrial facilities and major cities.³⁸

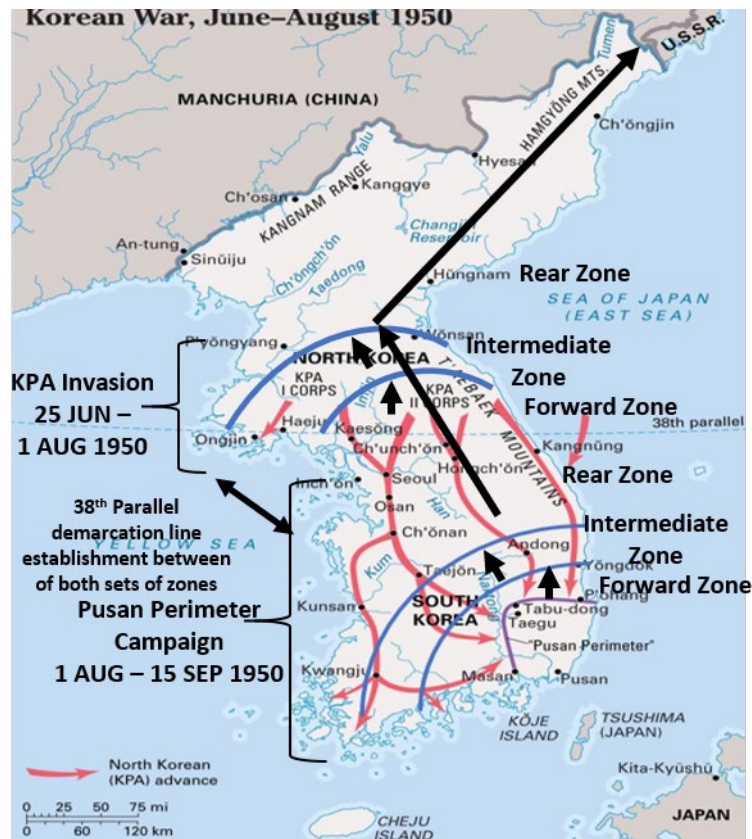


Figure 1. KPA forward, intermediate, and rear basing zones from the KPA invasion through the Pusan Perimeter Campaign. Encyclopedia Britannica. “Korean War, June – August 1950,” accessed February 5, 2019, <https://www.britannica.com/event/Korean-War/media/322419/70868>.

These three types of basing areas were located near main supply routes (MSR’s) or natural avenues of approach.³⁹ The flow of materiel began in rear basing centers located at Pyongyang and Wonsan before movement to intermediate basing areas in Seoul and Kumch’on, where

³⁸ US Army, *The Enemy Supply System in North Korea, USAFFE Intelligence Digest, II*, no. 4, 20; Schrader, 75-77.

³⁹ US Army, *The Enemy Supply System in North Korea, USAFFE Intelligence Digest, II*, no. 4, 26; Schrader, 77.

military units would coordinate to receive materiel before transport to forward basing areas or directly to the end user.⁴⁰

Case Study: The Pusan Perimeter Campaign

Introduction

The DPRK invaded the sovereign nation of the ROK at 0400 hours (Korean local time) on 25 June 1950. Due to frequent cross-border skirmishes that had recently occurred, it took several hours before the United States and even ROK forces noticed that the DPRK had launched a full-scale invasion.⁴¹ This issue became further complicated by the fact that a substantial portion of the ROKA's five divisions had taken official leave, which left approximately 17,000 men to man various basing centers across the northern half of the country.⁴²

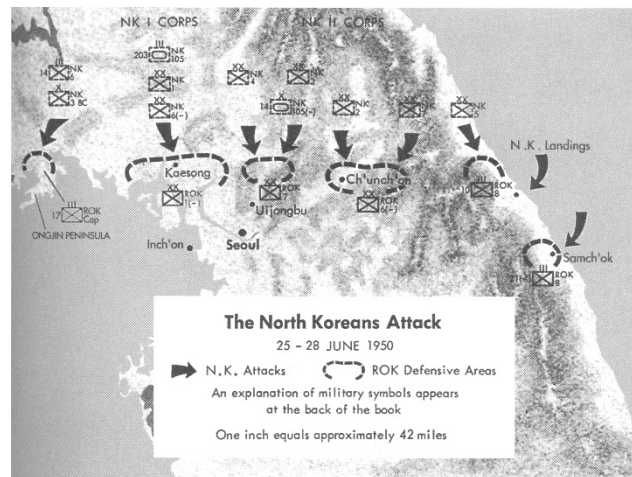


Figure 2. North Korea attacks the Republic of Korea – 25 – 28 June 1950. T. R. Fehrenbach, *This Kind of War: A Study in Preparedness* (New York, NY: MacMillan, 1963), xvii.

⁴⁰ Schrader, 111.

⁴¹ John Toland. *In Mortal Combat: Korea, 1950-1953* (New York, NY: William Morrow and Company, Inc., 1991), 23-26; Allan R. Millet, *The Korean War: The Essential Bibliography Series* (Dulles, VA: Potomac Books, Inc., 2007), 17-18.

⁴² William J. Flanagan. "Korean War Logistics: The First One Hundred Days." US Army War College Study Project, Carlisle, PA, 1985, 11; Hutson, *The Sinews of war: Army Logistics 1775-1953* (1988), 617; Millet, *The Korean War: The Essential Bibliography Series*, 18.

The DPRK's advance was as quick as it was decisive. The initial success experienced by the KPA convinced the DPRK that the entire peninsula would fall under their control in two weeks.⁴³ General Douglas MacArthur, Commander in Chief of the FECOM, received authority from President Harry Truman to employ US ground combat forces into Korea on 30 June.⁴⁴

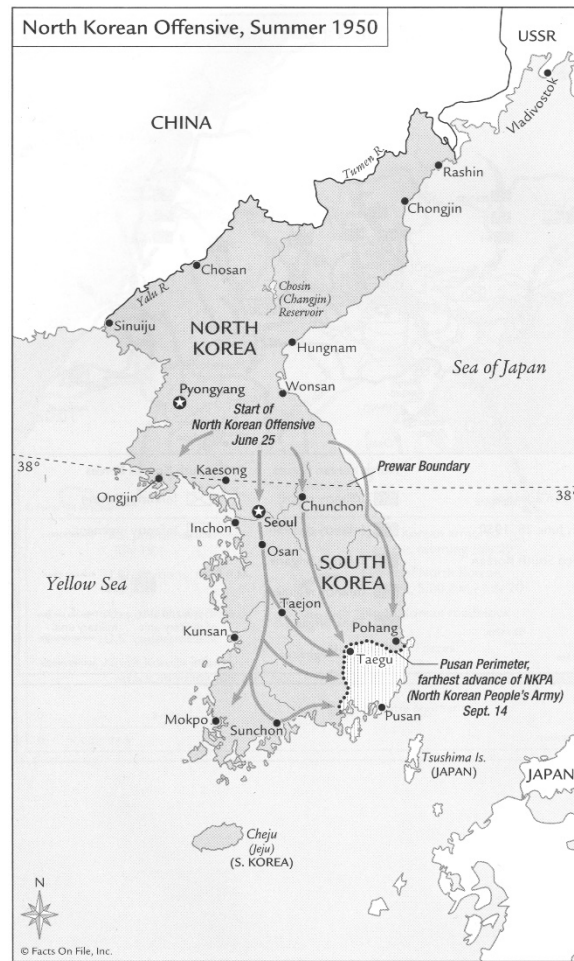


Figure 3. KPA Gains throughout the Pusan Perimeter Campaign. Paul M. Edwards, *Almanacs of American Wars: Korean War Almanac* (New York, NY: Facts on File, Inc., 2006), 551.

The US/ROKA's general lack of preparedness in contrast to the DPRK quickly became apparent. The swift pullout of US forces from the Korean peninsula in 1949 had left 500 Korean

⁴³ Flanagan, 17.

⁴⁴ Terrence J. Gough, *U.S. Army Mobilization and Logistics in the Korean War: A Research Approach* (Washington, DC: US Government Printing Office, 1987), 12.

Military Augmentation Group (KMAG) forces to train the ROKA.⁴⁵ Far more substantial were the significant restrictions that the United States imposed on the ROKA concerning heavy military equipment, which grew out of fears that ROK President Syngman Rhee intended to invade the DPRK at various periods leading up to the start of the war.⁴⁶ Even with later US support, these restrictions nearly resulted in the strategic defeat of the ROK government and its military forces due to imbalances in combat readiness that heavily favored the DPRK.⁴⁷

Despite continued ROKA efforts and the insertion of a significant number of US forces and materiel into Korea during July, the KPA continued their advance south towards Pusan unimpeded. The DPRK became increasingly convinced of their conquest of the entire Korean peninsula until early August, when the Eighth US Army (EUSA) formed extensive defensive positions along the Naktong River, a defensive line that eventually became known as the Pusan Perimeter.⁴⁸

The Naktong River formed an exterior defensive line that stretched 80 kilometers from east to west and physically separated the KPA from US/ROKA forces during the Pusan Perimeter campaign.⁴⁹ The Naktong River, Sea of Japan, and Korea Strait formed the western, eastern, and southern boundaries, respectively. Multiple rivers and mountains along the Naktong River line provided natural obstacles that proved indispensable in preventing the KPA from accessing various avenues of approach into the US/ROKA defensive positions.⁵⁰ The Pusan Perimeter formed a roughly rectangular-shaped area anchored along the Naktong River that measured 160

⁴⁵ Clay Blair, *The Forgotten War: America in Korea 1950-1953* (New York, NY: Doubleday, 1987), 45-46.

⁴⁶ Edwin P. Hoyt, *The Pusan Perimeter: Korea, 1950* (New York, NY: Stein and Day Publishers, 1984), 13-14.

⁴⁷ Hoyt, 13-14; Brian Catchpole, *The Korean War: 1950-53* (New York, NY: Carroll & Graf Publishers, Inc., 2000), 13; Korea Institute of Military History. *The Korean War: Volume One*, 446.

⁴⁸ Appleman, Roy E., 248-252; Korea Institute of Military History, 569.

⁴⁹ Korea Institute of Military History, 431.

⁵⁰ Korea Institute of Military History, 431-432.

kilometers from north to south.⁵¹ The port city of Pusan marked the southeast corner, with Masan and Taegu forming the southwest and middle points of the perimeter, respectively.⁵²

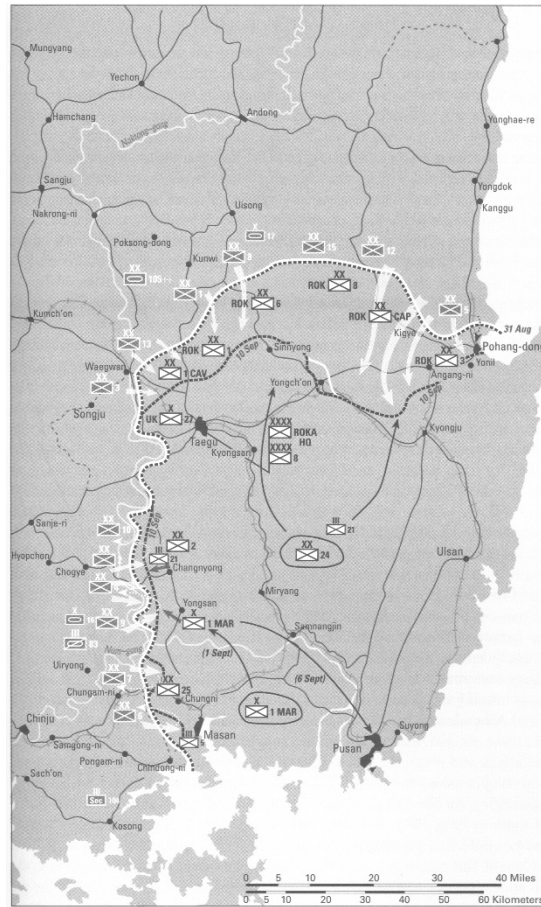


Figure 4. Pusan Perimeter outline. Millett, *The War for Korea, 1950-1951*, 229.

Despite a tenuous balance where victory remained uncertain during August and September, US/ROKA forces emerged victorious in stemming the tide of the KPA advance. The successful breakout from the Pusan Perimeter occurred simultaneously with General (GEN) MacArthur's amphibious landing at Incheon, which capitalized on the DPRK's extended LOCs

⁵¹ Korea Institute of Military History, 431-432; Allan R. Millett, *The War for Korea, 1950-1951* (Lawrence, KS: University Press of Kansas, 2010), 187.

⁵² Appleman, 252-253.

and decreasing combat strength by forcing the KPA to fight on two fronts.⁵³ The success of the Incheon landing allowed for the EUSA to breakout of the Pusan Perimeter and conduct a subsequent pursuit and exploitation of KPA forces north of the 38th parallel.⁵⁴

United States of America / Republic of Korea

. . . There will be no more retreating, withdrawal, or readjustment of the lines or any other term you choose. There is no line behind us to which we can retreat. Every unit must counterattack to keep the enemy in a state of confusion and off balance. There will be no Dunkirk, there will be no Bataan, a retreat to Pusan would be one of the greatest butcheries in history. We must fight to the end. . . I want everybody to understand that we are going to hold this line. We are going to win.

-LTG Walton H. Walker, EUSA Commander

The Pusan Perimeter campaign changed the course and character of the Korean War. No longer did US/ROKA forces adhere to the operational-level tactic of delaying actions through trading space for time, for there was simply no more space to sacrifice on the Korean peninsula.⁵⁵ Instead, US/ROKA forces now relied on establishing and maintaining defensive fortifications predicated on limiting the advance of the KPA to Pusan. If the KPA proved successful in this endeavor, it would result in the near-certain annihilation of US/ROKA forces and bring the entire Korean peninsula under a single communist sphere of influence. The daunting task of holding the Pusan Perimeter and reversing the tide of consecutive KPA tactical victories rested on the shoulders of approximately 90,000 US/ROKA forces.⁵⁶ The fate of the ROK and the long-term credibility of the United States was at stake.

⁵³ T. R. Fehrenbach, *This Kind of War: A Study in Preparedness* (New York, NY: MacMillan, 1963), 160-177.

⁵⁴ Fehrenbach, 160-177.

⁵⁵ Korea Institute of Military History, 569.

⁵⁶ Appleman, 264.

Basing

The logistical build-up that sustained the Pusan Perimeter campaign began in earnest during July. During this time, logistics activities were directed towards importing vast amounts of materiel into Pusan before the KPA completed their conquest of the ROK.⁵⁷ This logistical build-up occurred through basing activities that began in San Francisco, then traveled through Yokohama in Japan before moving to its final destination in Pusan.⁵⁸ Ports in Seattle, New York, and New Orleans also served as 'sub-ports' to fulfill any necessary requirements.⁵⁹ These three basing locations, spanning more than 5000 miles in length, provided the critical link of basing from its origination in the United States to its final destination in the ROK.

Logistical basing in Pusan, South Korea's main port, became operational upon the formation of the 2nd Logistical Command (2LC) under Brigadier General Crump Garvin. Logistical basing in Japan fell the Rear Headquarters, EUSA until 25 August 1950, when GEN MacArthur established the Japan Logistical Command (JLCOM) under the direction of Major General Walter L. Weible. From this point forward to the end of the Korean War, the JLCOM operated as the primary requisitioning agency for FECOM.⁶⁰

The establishment of these logistical commands represented the first time that a service support organization became a separate organization under a major command; in this case, the EUSA.⁶¹ While the formation of these logistical commands proved sound during the Korean War, structural and procedural challenges occurred almost immediately. Three major problem areas

⁵⁷ James A. Hutson, *Guns and Butter, Powder and Rice: US Army Logistics in the Korean War*. (London, UK: Associated University Press, 1989), 86-87.

⁵⁸ Hutson, *Guns and Butter, Powder and Rice: US Army Logistics in the Korean War*, 50-56, 214-223.

⁵⁹ Matray and Boose, Jr., 165; Hutson, *Guns and Butter, Powder and Rice: US Army Logistics in the Korean War*, 60.

⁶⁰ Appleman, 116; Hutson, *Guns and Butter, Powder and Rice: US Army Logistics in the Korean War*, 60; Korea Institute of Military History, 353-354.

⁶¹ Hutson, *Guns and Butter, Powder and Rice: US Army Logistics in the Korean War*, 60-61.

related to the element of basing occurred that had decisive effects on the outcome of the Pusan Perimeter campaign.

The first problem area revolved around the absence of a logistical support plan for combat operations in Korea.⁶² As a result, the development of a logistical apparatus occurred on a piecemeal basis. While the 2LC absorbed much of this risk, the unit was not prepared for many non-doctrinal tasks that were quickly assigned to the organization, one of which included the management of a rapid influx of refugees and prisoners of war (POW) that crossed into the Pusan Perimeter.⁶³ These additional tasks complicated the perpetual logistical challenges associated with supporting US forces coming into theater, developing a logistical network within the port of Pusan, and sustaining the ROKA in combat.⁶⁴

The second problem area stemmed from a lack of resident knowledge associated with the operation of basing centers across Korea and Japan. This occurred due to a general lack of individual and collective training in this area during occupation duties following WWII.⁶⁵ The United States was able to overcome these basing shortfalls in two significant ways.

First, the United States was able to simplify the transition of equipment from basing in Japan to US/ROKA forces at Pusan almost immediately due to the earlier consolidation of millions of tons of equipment, supplies, and vehicles, known as Operation Roll-Up, from across the Pacific to Japan following WWII.⁶⁶ The use of this equipment shortened the distances necessary to ship the same equipment from the United States by 5000 nautical miles and provided

⁶² Gough, 70.

⁶³ Korea Institute of Military History, 448; Flanagan, 17.

⁶⁴ Flanagan, 17.

⁶⁵ Gough, 21, 22, 26, 56, 59-61, 75.

⁶⁶ Matray and Boose, Jr., 168; Hutson, *Guns and Butter, Powder and Rice: US Army Logistics in the Korean War*, 25, 83; Flanagan, 71; Gough, 68.

greater flexibility to US/ROKA forces operating within the Pusan Perimeter.⁶⁷ Second, the 2LC and JLCOM were able to capitalize on the use of unskilled Korean and Japanese labor; the use of this labor provided approximately 260,000 personnel to conduct security, supply, and maintenance duties that began during the Pusan Perimeter campaign and continued until the end of the war.⁶⁸ Freeing up these tasks from US/ROKA military personnel allowed for further management of essential logistical tasks and requirements during the Pusan Perimeter campaign.

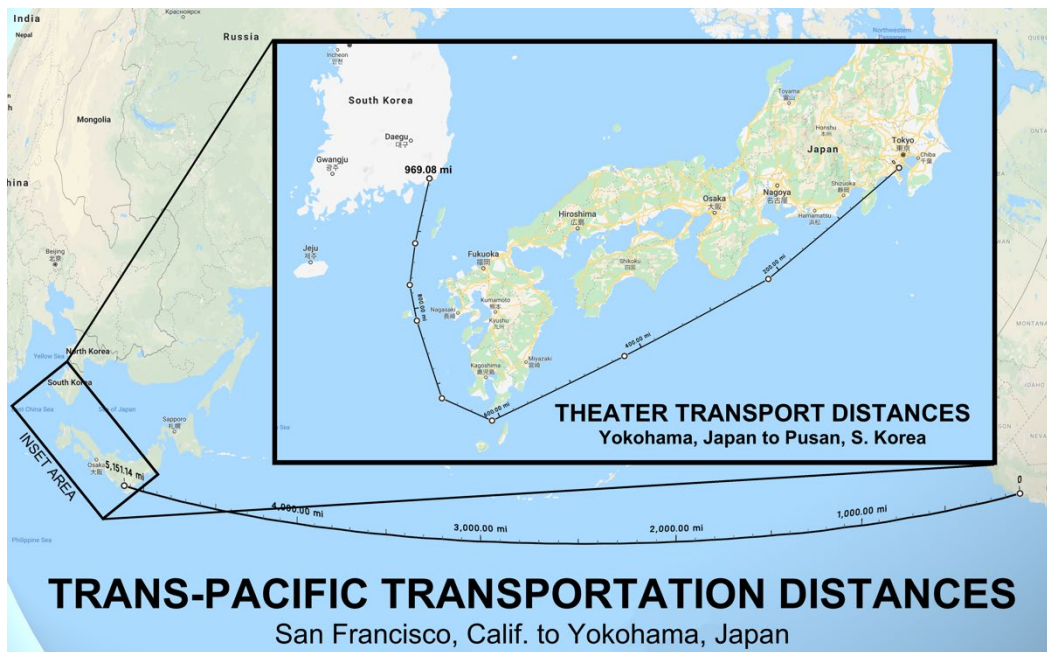


Figure 5. Approximate distance from the Port of San Francisco, CA to the Port of Yokohama, Japan and from the Port of Yokohama, Japan to the Port of Pusan, ROK. Google Map Sourcing Data.

The third problem area resulted from the challenges associated with basing within the ROKA. The ROKA defense plan called for flexibility in placing eight divisions within their respective encampments across the northern half of the country.⁶⁹ With the exception of Taegu,

⁶⁷ Google Maps. Approximate distance from the Port of San Francisco, CA to the Port of Yokohama, Japan and from the Port of Yokohama, Japan to the Port of Pusan, ROK, accessed February 4, 2019, <https://www.google.com/maps/@33.5500883,133.8227509,6z/data=!4m2!1m1!3e4?hl=en&authser=0>.

⁶⁸ Flanagan, 23; Hutson, *Guns and Butter, Powder and Rice: US Army Logistics in the Korean War*, 60-61.

⁶⁹ Korea Institute of Military History, 138-139, 143.

the KPA's initial invasion resulted in the capture of all northern encampments and vast amounts of US/ROKA equipment. Additionally, while Pusan was not initially a key ROK area for basing, constant KPA patrolling along the Naktong River forced the ROKA to strike a tenuous balance between maintaining basing between Taegu and Pusan during the Pusan Perimeter campaign.⁷⁰

The advantages of Pusan and Taegu as vital basing centers soon became obvious due to strategic necessity and self-preservation. US/ROKA forces quickly established a system of interior lines and life support mechanisms that stemmed from involuntarily shortened LOCs within the Pusan Perimeter.⁷¹ Another contingency plan created the Davidson Line, a 90-kilometer defensive position north of the city of Pusan, to serve as a contingency basing area if the KPA permanently breached the Naktong River line.⁷²

The increasing availability of ROKA forces and unskilled Korean labor during August proved to be a significant advantage during the Pusan Perimeter campaign. From its headquarters in Taegu, the ROKA established the Korean Army Training Center (KATC) to assist in the replacement process. The KATC consisted of two replacement centers, a Student Cadre's Unit, and a Ground General School near Pusan that trained 500 enlisted recruits daily, 1,500 irregular warfare troops over one month, and 250 officers weekly, respectively. The effectiveness of this training program, which originated from basing in Taegu and Pusan, enabled the ROKA to fill five combat divisions to full strength, activate new military units, and augment recruits to support American units in a matter of weeks during the Pusan Perimeter campaign.⁷³

⁷⁰ Appleman, 259, 290, 334; Korea Institute of Military History, 463-464.

⁷¹ Korea Institute of Military History, 432.

⁷² Korea Institute of Military History, 432-433; Appleman, 391.

⁷³ Appleman, 383-384; Korea Institute of Military History, 448.

Culmination

Culmination loomed large over US/ROKA forces throughout the entire Pusan Perimeter campaign. Surviving the KPA's continuous offensive onslaught during August and September required due diligence and strong situational awareness from US/ROKA forces to ensure their self-preservation. While US/ROKA forces continued to experience catastrophic losses and commit serious tactical errors, crucial decisions made throughout the Pusan Perimeter campaign prevented culmination from becoming a permanent condition and set the conditions for a successful transition to the offense.⁷⁴

From the outset of the Pusan Perimeter campaign, LTG Walker knew that he could not withdraw any further than the Naktong River line without sacrificing critical terrain.⁷⁵ Indeed, a withdrawal to the Davidson Line would impose significant difficulties on the entire force, increase the chance for permanent culmination, and violate LTG Walker's intent of keeping a foothold on the Korean peninsula.⁷⁶ At the same time, LTG Walker knew that he did not have enough forces to adequately defend the established boundaries and depths of the Pusan Perimeter.⁷⁷ These issues forced LTG Walker to make a series of crucial decisions to prevent an irreversible penetration of the Pusan Perimeter by KPA forces.

The eastern area of the Pusan Perimeter, which held the city of P'ohang-dong and the Yanil Airfield, provided a direct link to Taegu, the location of the ROKA and EUSA headquarters.⁷⁸ To successfully defend the eastern corridor, LTG Walker chose to array ROKA forces along the most likely avenues of approach along the eastern sector at the expense of securing mobility corridors along the northern and western boundaries of the Naktong River

⁷⁴ Korea Institute of Military History, 430-431.

⁷⁵ Appleman, 289.

⁷⁶ Korea Institute of Military History, 431, 443-445; Appleman, 334.

⁷⁷ Appleman, 289-290, 320, 334; Korea Institute of Military History, 445, 459.

⁷⁸ Korea Institute of Military History, 437.

line.⁷⁹ While this decision carried a large amount of risk, LTG Walker's action reduced the frontage areas across the eastern front and provided US/ROKA forces with greater flexibility in establishing defensive fortifications to meet emerging threats along this corridor.⁸⁰

To mitigate potential shortfalls in security across the eastern corridor, LTG Walker established an intricate system of interior lines that provided forces with the ability to respond to emergencies within six miles of Po'hong-dong and the Yonil Airfield in two to five minutes by air.⁸¹ LTG Walker's system of interior lines radiated out from basing in Pusan, and allowed the allocation and distribution of logistical resupply operations to coincide with the employment of combined arms maneuver at different locations.⁸² These actions made key differences in the performance of ground forces to respond effectively to sizable attacks by three KPA divisions on 11 August and achieved LTG Walker's designed purpose of preventing the culmination of US/ROKA forces on the eastern front.⁸³

LTG Walker's success in securing the eastern portion of the perimeter against numerically superior forces with minimal resources influenced his decision to implement similar systems across the entire Pusan Perimeter, a tactic used to great effect during the battles for Chinju, Masan, Taegu, Po'hong-dong, and the first and second battles of the Naktong bulge during the KPA's August and September offensives.⁸⁴ To do this, LTG Walker synchronized timing with a small set of reserves that he had at his disposal. LTG Walker used nightly briefings from EUSA commanders to synchronize current tactical situations with subsequent battlefield circulation in a constant effort to determine where a situation that might involve these reserves

⁷⁹ Appleman, 368-369.

⁸⁰ Korea Institute of Military History, 513.

⁸¹ Appleman, 319-333.

⁸² Korea Institute of Military History, 431-432.

⁸³ Appleman, 302, 331, 342.

⁸⁴ Korea Institute of Military History, 451-569.

may develop.⁸⁵ LTG Walker's system of interior lines ultimately allowed the EUSA to maneuver reserve forces from any two locations inside of the Pusan Perimeter within a period of 24 to 48 hours in response to various contingencies.⁸⁶

Operational Reach

The ability to effectively employ combat power across significant distances became a primary factor that influenced the outcome of the Pusan Perimeter campaign. Many historians have argued that operational decisions and outcomes during the Korean War often rested on logistical considerations.⁸⁷ As a result, victory in the Pusan Perimeter campaign went to the force that exercised operational reach at a higher capacity than the other.

While Operation Roll-Up was decisive in quickly providing desperately needed equipment to US/ROKA forces at the start of the Korean War, the use of these expedients proved to be no match for the KPA throughout the initial invasion and early days of the Pusan Perimeter campaign.⁸⁸ The United States denied funding for heavy equipment to the ROK for several years prior to the outbreak of the Korean War due to fears that President Rhee would use this equipment to invade the DPRK.⁸⁹ Since the United States supplied the ROKA with 90% of its logistical capabilities, it fell to the former to quickly rectify this problem or face a decisive defeat at the hands of the KPA.⁹⁰

US/ROKA forces quickly figured out that the amount of force that the United States could bring to bear depended on the ability to generate logistics capabilities in theater.⁹¹ During

⁸⁵ Appleman, 334-335.

⁸⁶ Appleman, 334-335.

⁸⁷ Matray and Boose, Jr., 163; Schrader, 3-5.

⁸⁸ Appleman, 379-380; Fehrenbach, 35, 42-44.

⁸⁹ Hoyt, 13-15.

⁹⁰ Gough, 120; Appleman, 519.

⁹¹ Hutson, *The Sinews of war: Army Logistics 1775-1953*, 615.

July, the US military shipped 10,666 tons of supplies and equipment to the port of Pusan. Cranes and construction equipment were expedited from Japan and the United States to facilitate the offloading of this equipment.⁹² By the start of the Pusan Perimeter campaign, surface transportation began to meet daily requirements to forces along the Naktong River, aided in part by standard rail gauges that matched those used in Japan along with a railroad loop that could deliver equipment and troops throughout the entirety of the Pusan Perimeter.⁹³ By August, the number of supplies and equipment increased to a minimum of 1,000 tons per day, with more than 500 medium and heavy tanks arriving by the third week of August that could outmatch the T-34's provided to the DPRK by the Soviet Union.⁹⁴ By the beginning of September, US tanks outnumbered the KPA's tanks on the battlefield by a ratio of at least five to one.⁹⁵

By the end of the Pusan Perimeter campaign, the port of Pusan received nearly two million tons of supplies and equipment.⁹⁶ The United States demonstrated endurance through their ability to rapidly generate combat power from basing in CONUS and Japan to Pusan, Taegu, and forces along the Naktong River line for protracted periods of time. Given the initial logistical austerity within the ROK, the ability for US/ROKA forces to synchronize the vast influx of supplies and available infrastructure with the unfolding tactical situation proved invaluable in overcoming the existential threats posed by the KPA.

US/ROKA forces were able to achieve momentum by effectively replacing personnel losses in similar ways that regenerating equipment losses maintained endurance. At the start of the Pusan Perimeter campaign, US/ROKA forces were at an approximate end strength of 92,000

⁹² Appleman, 259.

⁹³ Appleman, 259-261; Benson, 76.

⁹⁴ Hoyt, 211; Appleman, 381.

⁹⁵ Millett, *The War for Korea, 1950-1951*, 223; Appleman, 381.

⁹⁶ Hutson, *The Sinews of war: Army Logistics 1775-1953*, 620.

personnel.⁹⁷ During the initial invasion, the ROKA lost nearly half of this fighting force. As a result, FECOM and the ROK government instituted several programs designed to augment combat losses during the Pusan Perimeter campaign.

One such program became known as ‘Operation Flushout,’ which required FECOM forces in Japan to reassign a portion of their troops to replace the casualties incurred from combat operations in Korea. While Flushout performed its stated purpose of regenerating combat losses on paper, many of the troops sent forward did not perform the same occupational specialties that comprised the majority of combat casualties.⁹⁸ Another program integrated 30,000 to 40,000 ROK troops, called Korean Augmentation to the United States Army (KATUSA), into the US Army force structure to regenerate depleted American ground forces.⁹⁹ While most units were able to free up combat power by using KATUSAs to carry heavy weapons, perform hard labor, and conduct various security details, the language barriers, differences in loyalties, and disparities in training readiness resulted in the United States halting this program following the Pusan Perimeter campaign.¹⁰⁰

Despite the questionable degree of success within these programs, many tangible factors aided US/ROKA forces. The ROK increased their defense budget from 27.7% to 75% of the general budget to cope with the increased demands for the war, which allowed the ROKA to recruit massive amounts of troops to assist in the war effort through warfighting or hard labor.¹⁰¹ 15,000 Korean policemen attached to the US Army at the start of the Pusan Perimeter campaign contributed materially by conducting rear area security operations against guerilla forces and

⁹⁷ Korea Institute of Military History, 444.

⁹⁸ Robert Leckie, *Conflict: The History of the Korean War, 1950-1953* (New York, NY: G.P. Putnam’s Sons, 1962), 117; Paul M. Edwards, *Almanacs of American Wars: Korean War Almanac* (New York, NY: Facts on File, Inc., 2006), 79, 92.

⁹⁹ Appleman, 385.; Stanley Sandler, *The Korean War: An Encyclopedia* (New York, NY: Garland Publishing Inc., 1995), 159-160.

¹⁰⁰ Appleman, 385-389; Korea Institute of Military History, 517.

¹⁰¹ Korea Institute of Military History, 445-447.

managing an influx of 25,000 refugees per day into the Pusan Perimeter.¹⁰² The ROKA also significantly offset the logistical demands of the campaign by recruiting laborers to carry rations, deliver supplies to units across the battlefield, and evacuate casualties to rear areas.¹⁰³ By the end of the Pusan Perimeter campaign, US forces deployed more than 100,000 forces into Korea while the ROKA were raised to an end strength of 205,000 personnel.¹⁰⁴ The combined efforts of US/ROKA forces preserved momentum through the continued regeneration of personnel losses. This momentum sustained and extended the operational reach of US/ROKA forces throughout the Pusan Perimeter campaign and set the conditions necessary to seize the initiative.¹⁰⁵

Democratic People's Republic of Korea

Comrades, the enemy is demoralized. The task given us is the liberation of Masan and Chinju . . . the liberation . . . means the final battle (Pusan) to cut off the windpipe of the enemy.

-Major General Pang So-hand, 6th North Korean Division Commander

As the KPA approached the Naktong River line during the latter part of July 1950, Kim Il-Sung became increasingly convinced that it was only a matter of time before he would be able to reunify the Korean peninsula. Since US/ROKA forces had thus far been unable to halt the rapid southward advance of his forces, Kim Il-Sung planned to fulfill his promise to the Soviet Union, China, and the DPRK of liberating the Korean peninsula by 15 August, the fifth anniversary of the surrender of Japan during WWII.¹⁰⁶ However, Kim Il-Sung knew that time was of the essence. As each day passed, the United States was rapidly building an international coalition against his country while bringing in vast amounts of materiel to mount a last stand from

¹⁰² Korea Institute of Military History, 449-450.

¹⁰³ Korea Institute of Military History, 465.

¹⁰⁴ Hutson, *The Sinews of war: Army Logistics 1775-1953*, 620; Korea Institute of Military History, 518.

¹⁰⁵ US Army, *ADRP 3-0* (2017), 30-32.

¹⁰⁶ Appleman, 290.

within the Pusan Perimeter.¹⁰⁷ With his credibility, international standing, and plan for communist reunification on the line, Kim Il-Sung dispatched thirteen KPA divisions with explicit instructions to take Pusan in short order and annihilate or drive any remaining US/ROKA forces off of the peninsula and into the Sea of Japan.¹⁰⁸

Basing

Edward Luttwak, a political scientist who specializes in military strategy, expands on the basing paradox that the victor must confront following their initial success(es) in *Strategy: The Logic of War and Peace*:

The victorious army is advancing away from its homeland, whose training camps, industry, supply depots, and workshops sustained its recent success. It must obtain all that it needs from supply lines that are becoming longer and longer ... distance diminishes their capacity. The defeated army by contrast is presumably falling back toward its own bases, so that its own supply lines are becoming shorter...the victorious army must therefore increase its effort merely to sustain itself.¹⁰⁹

Luttwak's description of the basing paradox aptly describes the DPRK's operational situation at the start of the Pusan Perimeter campaign. The KPA's overwhelming success at the outset of the Korean War became suddenly offset from extended supply lines that violated the basic tenets of their newly-adopted military doctrine.¹¹⁰ This confluence of events ultimately contributed to the KPA's inability to employ basing as an effective sustaining mechanism during the Pusan Perimeter campaign.

The start of the Pusan Perimeter campaign marked a turning point in the KPA's ability to maintain its basing centers and increasingly precarious LOCs. The turning point began in earnest with the US air interdiction campaign on 2 August that specifically targeted the DPRK's

¹⁰⁷ Appleman, 290.

¹⁰⁸ Hoyt, 107-110; Appleman, 208, 247; Korea Institute of Military History, 440-441.

¹⁰⁹ Edward N. Luttwak, *Strategy: The Logic of War and Peace* (Cambridge, MA: The Belknap Press of Harvard University Press, 2001), 17.

¹¹⁰ Schrader, 74-80, 157-163.

industrial base along with its intermediate basing centers.¹¹¹ As FECOM destroyed increasing numbers of industrial facilities and basing centers, the KPA abandoned much of its basing in the intermediate zone. With the understanding that the US air interdiction campaign would not extend into China and the Soviet Union for political reasons, the KPA moved a vast amount of its remaining industrial base and semi-permanent basing to the USSR, with the port city of Vladivostok becoming the DPRK's primary rear basing center throughout the Pusan Perimeter campaign.¹¹²

While the loss and relocation of intermediate and rear basing centers violated KPA doctrine in support of combat operations, the more immediate issue that confronted the DPRK pertained to the unsustainable LOCs that now primarily originated in Vladivostok and ended with forward units operating in the vicinity of the Naktong River line, a distance of approximately 500 miles.¹¹³ These unsustainable LOCs meant that virtually no basing centers existed between rear and forward basing centers. This absence of intermediate basing zones had a profound impact on the DPRK's ability to operate an effective supply chain during the Pusan Perimeter campaign. While exact numbers are difficult to determine, a steady decline of artillery, small arms rifles, and ammunition replenishment from rear to forward basing centers occurred during August that resulted in an inability to fulfill two-thirds of front-line requisitions by the end of August 1950, with the primary means of logistical resupply coming from captured enemy stocks and stores. By mid-September, resupply from rear basing centers to forward areas ceased entirely.¹¹⁴

¹¹¹ Korea Institute of Military History, 440-443; Schrader, 74-76, 165. Intermediate basing zones at the outset of the Korean War were primarily located in Pyongyang and Kum'chon; these basing locations became rear zone areas once the KPA advanced to the Naktong River line in the vicinity of the Pusan Perimeter starting 1 August. During the Pusan Perimeter campaign, the primary intermediate basing centers were located in the logistically strategic center of Taejon as well as in Andong.

¹¹² US Central Intelligence Agency, *Intelligence Memorandum No. 326: Military Supplies for North Korea*, 15 September 1950, declassified by 011866 on 27 January 1976, 1-5.

¹¹³ US Central Intelligence Agency, 1-5. See Figure 1 for further details on the KPA's route from Vladivostok to the outskirts of the Pusan Perimeter near the completion of this campaign.

¹¹⁴ Appleman, 393-394.

Culmination

In *On War*, Carl von Clausewitz discusses the culminating point of the attack, stating that military objectives require successful completion before offensive capabilities diminish and the enemy imposes its will on the attacking force.¹¹⁵ During the Pusan Perimeter campaign, the KPA maintained a singular focus towards offensive action; this unrelenting focus towards achieving strategic objectives through offensive action showed that culmination did not seriously factor in to the KPA's planning during their drive towards Pusan. The DPRK's continuing lack of focus in this regard continued unabated despite the constant flow of materiel into the Korean peninsula and the US/ROKA's increasingly successful air interdiction campaign against frontline KPA troops.¹¹⁶

KPA actions during this period became increasingly focused on concentrating mass to expose gaps in perimeter defenses and mitigating shortfalls associated with decreasing mobility corridors from continued US air interdiction.¹¹⁷ US/ROKA forces were well aware of the vulnerabilities associated with establishing defensive fortifications in depth during the Pusan Perimeter campaign. KPA forces were also aware of these shortcomings. To take advantage of thinly held defensive lines across US/ROKA positions, the KPA aimed to force a crossing of the Naktong River as soon as its forces were prepared to accomplish this task.¹¹⁸ KPA forces only needed to determine the location of thinly held forces and mass its forces accordingly to exploit a gap in US/ROKA perimeter defenses.

Rather than adjusting their tactics to meet increasingly superior US/ROKA force ratios and firepower, the KPA simply followed the same tactics in August that led them to success

¹¹⁵ Clausewitz, 528.

¹¹⁶ Appleman, 377, 505.

¹¹⁷ Korea Institute of Military History, 505-509, 568-570.

¹¹⁸ Appleman, 289-290, 320.

during June and July.¹¹⁹ These tactics followed a pattern of frontal attacks, flank envelopments, and infiltration of rear areas. However, despite previous success, these KPA tactics began to falter due to relatively continuous and connected US/ROKA defensive lines that provided increased measures of stability.¹²⁰ While US/ROKA flanks became increasingly exposed as a result of disorganized withdrawals during the early battles that followed the DPRK's invasion, the KPA now had to contend with flanks that rested along the Korean peninsula's coastlines and were secured by US naval forces.¹²¹ The increased ability for US/ROKA forces to respond in a timely manner rendered the KPA's previous attacks irrelevant and forced them to rely on frontal attacks to penetrate and exploit perimeter defenses.¹²²

The KPA's solution to this problem was to concentrate massive amounts of combat power in decisive areas to exploit gaps in US/ROKA perimeter defenses. From its base in Kumch'on, the KPA attempted this pattern repeatedly with limited success. One example of this was the fight along a flat, narrow mountain valley approximately two miles long across the Sangju-Taegu corridor, otherwise known as the "Battle of the Bowling Alley," from 12-25 August.¹²³ Designed to expose a significant opening along the Taegu front that would facilitate future offensives towards Pusan, the KPA committed entire divisions and its remaining armored platforms to wage nightly battles against US/ROKA forces.¹²⁴ The KPA gained the most significant amount of ground inside of the Pusan Perimeter during this time when they advanced along a ten mile area across the Taegu front following a limited withdrawal by the US 27th Infantry Regiment.¹²⁵

¹¹⁹ Appleman, 392-394.

¹²⁰ Appleman, 392-394.

¹²¹ Appleman, 392-394.

¹²² Appleman, 392-394.

¹²³ Appleman, 356.

¹²⁴ Sandler, 63, 284.

¹²⁵ Edwards, 76.

However, two overriding factors continued to halt KPA advances that became emblematic of their eventual culmination. The first factor involved the KPA's inability to match increasingly superior US/ROKA forces and equipment, both in quantity and quality. While the KPA continued to receive reinforcements and equipment during this time, virtually all personnel replacements consisted of raw recruits with no basic training or combat experience.¹²⁶ The same went for equipment, where replacements of Soviet-built T-34 tanks became increasingly scarce.¹²⁷ The second overriding factor involved the continued weakening of the KPA's extended supply lines. Although the KPA could achieve limited breakthroughs inside of the Pusan Perimeter, these forces were incapable of logistically sustaining these penetrations while simultaneously dealing with air interdiction raids and US/ROKA armor and artillery attacks against concentrated positions.¹²⁸ These two factors had the effect of repeatedly denying continued attempts by the KPA to exploit opportunities as soon as they began to breach US/ROKA perimeter defenses.¹²⁹

The US/ROKA's continued targeting of KPA mobility corridors through ground counteroffensives and air interdiction raids had a substantial impact on the latter's culmination. As the air interdiction campaign picked up steam, the focus soon turned towards the destruction of KPA rolling stock and logistical infrastructure.¹³⁰ However, the most decisive of these efforts focused on air strikes that crippled the KPA's distribution network.

The KPA predominantly traveled along three mobility corridors MSR's that began in Seoul and ended in forward areas operating in the vicinity of the front lines at the Naktong River. The western corridor was the most advantageous to KPA forces due to its trafficability; as a

¹²⁶ Appleman, 392-393; Fehrenbach, 158-159; Korea Institute of Military History, 508.

¹²⁷ Appleman, 392-393.

¹²⁸ Appleman, 407-408, 466.

¹²⁹ Appleman, 407-408, 469; Korea Institute of Military History, 522.

¹³⁰ Robert Frank Futrell, *The United States Air Force in Korea, 1950-1953* (rev. ed., Washington: Office of Air Force History, 1983), 130, 157-158; Schrader, 166-167.

result, nearly all military supplies flowed down this avenue of approach at the start of the Pusan Perimeter campaign. The central corridor was also beneficial and included numerous supplementary and parallel roads that fed into multiple supply lines. The eastern corridor was the least advantageous due to the rugged, mountainous terrain along the ROK's eastern coast and its susceptibility to US air interdiction efforts.¹³¹

While the US FECOM would not realize the full potential that these air strikes had until after the Incheon landings, the continued targeting of these routes effectively canalized the KPA to the central and eastern corridors.¹³² The KPA's abandonment of the western mobility corridor rendered the distribution system unusable, limited its ability to resupply its forces, and performed a pivotal role in forcing the DPRK's culmination at the Pusan Perimeter.¹³³

Operational Reach

Maintaining endurance was not a significant problem for the KPA at the outset of the Korean War.¹³⁴ However, as the Pusan Perimeter campaign wore on into the latter part of August, the KPA soon began to reach its operational limits at the outskirts of Taegu.¹³⁵ The most prominent example of Kim Il-Sung intervening to mitigate the KPA's increasingly desperate logistics situation involved rerouting the last of the DPRK's remaining stock of T-34 Russian-built tanks to forces operating near Taegu. Interestingly enough, this turned out to be the only resupply of significant combat power to the KPA during the Pusan Perimeter campaign.¹³⁶

¹³¹ US Department of the Army, *Railroads and Highway Transport in North Korea and Their Impact on Enemy Logistics*, USAFFE Intelligence Digest, I, no. 13 (Washington, DC: Government Printing Office, 1953), 44; Schrader, 110-112.

¹³² Schrader, 159.

¹³³ Schrader, 110-112.

¹³⁴ Schrader, 160.

¹³⁵ Korea Institute of Military History, 506.

¹³⁶ Korea Institute of Military History, 506; Appleman, 354.

The harmful effects resulting from the acute shortage of readily available supplies soon translated to disaster on the battlefield.¹³⁷ While the KPA's daily logistical requirements were minuscule in comparison to US/ROKA forces, resupply operations soon became the primary concern for Kim Il-Sung and senior DPRK government officials.¹³⁸ Facing an increasingly lengthy and dangerous route to move supplies from the rear to forward areas, the DPRK forced the KPA to make significant modifications at the front to make ends meet.

Chief among these modifications was a policy that prohibited units below the division level from accessing the KPA's motorized vehicles.¹³⁹ Designed to alleviate the strain of transporting supplies to the front from Vladivostok, the KPA parted with these vehicles in an attempt to provide rear areas with the means to fulfill increasingly significant materiel shortfalls.¹⁴⁰ As a result, motor vehicles became practically nonexistent below the division level.¹⁴¹ The KPA's method of transporting supplies at the division level and below soon centered on the use of pack animals and forcibly conscripted ROK civilians as human bearers.¹⁴² However, since no standardized allocation existed across the KPA, units were largely left to their own devices to requisition the means and delivery of logistics support from the local population.¹⁴³ The KPA also became increasingly reliant on captured enemy stocks and stolen supplies from the local population as its primary means of equipping themselves for warfighting.¹⁴⁴ The DPRK's restrictions on the use of motor vehicles and inability to provide the barest of logistical necessities

¹³⁷ Appleman, 376-379.

¹³⁸ US Central Intelligence Agency, 1-5.

¹³⁹ Schrader, 110.

¹⁴⁰ Appleman, 619; US Central Intelligence Agency, 1-5.

¹⁴¹ Schrader, 110.

¹⁴² Schrader, 110, 135-136; US Central Intelligence Agency, 1-5; Appleman, 395.

¹⁴³ Schrader, 135.

¹⁴⁴ Korea Institute of Military History, 502-503, 506-509.

to its forces created insurmountable difficulties that resulted in the eventual collapse of the KPA's distribution systems and warfighting capabilities by the end of the Pusan Perimeter campaign.¹⁴⁵

The difficulties associated with preserving endurance through transporting and sustaining supplies and equipment deteriorated further with the rapidly decreasing momentum of KPA troops. As the Pusan Perimeter campaign wore on into the latter part of August and the early part of September, the KPA's expectations of victory soon began to translate into the possibility of defeat. Frontline KPA military officers also contended with the influx of raw recruits that lacked basic combat training and arrived without the equipment necessary to supplement combat forces.¹⁴⁶

Simply transporting men from rear areas to the front proved to be exceedingly difficult. The DPRK's worsening supply situation and inability to halt the increasingly invasive presence of US/ROKA troops meant that the KPA soldier could not rely on their leadership to alleviate the hardships they faced. Constant air interdiction raids on any sign of movement during the day forced the KPA to limit maneuver and forced marches at the corps level and below to the night, often through treacherous terrain with limited visibility.¹⁴⁷ A scarcity of motorized vehicles additionally meant that the KPA soldier conducted forced marches across increasingly greater distances, which limited their ability to conduct other combat-related tasks.¹⁴⁸ As rations became scarce, the KPA soldier gradually depended on acquiring food and supplies through forage and, when that failed, stealing from the local population.¹⁴⁹

These hardships eventually devastated the morale of KPA forces as the Pusan Perimeter campaign wore on, which worsened with malnutrition, disease, and a general loss of stamina that

¹⁴⁵ Schrader, 5, 28, 59, 95, 97, 110, 121, 135, 137, 161.

¹⁴⁶ Appleman, 395.

¹⁴⁷ Schrader, 136-137; Korea Institute of Military History, 508-509.

¹⁴⁸ Schrader, 136-137.

¹⁴⁹ Korea Institute of Military History, 508-509.

significantly impaired combat effectiveness.¹⁵⁰ In the end, the KPA's continued focus towards offensive maneuver through the penetration of perimeter defenses by frontal attacks resulted in a despondent force that was unable to fight due to sheer exhaustion.¹⁵¹ Indeed, one estimate shows that the KPA's 12th Division was completely combat ineffective and no longer able to fight in mountainous terrain due to utter exhaustion by the middle of August.¹⁵²

Strategic Implications of the Pusan Perimeter campaign towards LSCO

Korea showed that all is not easy in this world ... If the free nations want a certain kind of world, they will have to fight for it, with courage, money, diplomacy – and legions. It was time for free, decent societies to continue to control their military forces, but to quit demanding from them impossible acquiescence in the liberal view toward life. A “modern” infantry may ride sky vehicles into combat, fire and sense its weapons through instrumentation, employ devices of frightening lethality in the future – but it must also be old-fashioned enough to be iron-hard, poised for instant obedience, and prepared to die in the mud. If liberal, decent societies cannot discipline themselves to do all these things, they may have nothing to offer the world. They may not last long enough.

-T. R. Fehrenbach, *This Kind of War*

The update to FM 3-0, *Operations*, in 2017 warns of an operational environment that poses threats far greater than the COIN and counterterrorism operations faced during the wars in Iraq and Afghanistan. Indeed, as the United States focused its efforts towards COIN and counterterrorism operations following 9/11, great powers worked to modernize their militaries to achieve parity and put US military forces at a relative disadvantage.¹⁵³ To avoid a future situation similar to the one that the United States and ROK faced at the Pusan Perimeter, FM 3-0 emphasizes the need to develop and train the US Army in a manner that allows the force to meet the emerging threats posed by the current operational environment.¹⁵⁴ The elements of basing,

¹⁵⁰ Appleman, 393-394.

¹⁵¹ Korea Institute of Military History, 502-503, 506-509.

¹⁵² Appleman, 333.

¹⁵³ US Army, *FM 3-0*, (2017), 3.

¹⁵⁴ US Army, *FM 3-0*, (2017), 3.

culmination, and operational reach each play a pivotal role in the success or failure of sustaining the duration of future conflicts.

One 2015 estimate shows that the US military currently maintains more than 800 military bases across seventy countries outside of the United States.¹⁵⁵ US military basing ranges in size and scope, but the overall number far exceeds that of any other country and bears an enormous cost, ranging from \$160 to \$200 billion in FY 2014 alone.¹⁵⁶ The strategic environment, particularly geostrategy involving Russia and China, outlines the need to periodically assess whether basing initiatives contribute to the current and emerging threats faced by the United States and its allies.

The *National Security Strategy* (NSS) and *National Defense Strategy* (NDS) both align with FM 3-0's description of great power competition, particularly with respect to the malign influence and subversive actions of China.¹⁵⁷ One example involves China's continued economic subversion and land reclamation efforts across the Indo-Pacific Region and the South China Sea, respectively. Another example of China's economically subversive actions extends to Djibouti, where recent military basing and infrastructure investments provides China with an opportunity to exercise future diplomatic and economic leverage in Africa.¹⁵⁸ Should China choose to exercise its diplomatic and economic leverage over unpaid debts, the Chinese military may move to take over strategic ports located near the Bab-el-Mandeb Strait that could threaten access to Camp Lemonnier in Djibouti, endanger US freedom of navigation, and negatively affect approximately

¹⁵⁵ David Vine, "Where in the World Is the U.S. Military?," *Politico Magazine* (online), July/August 2015, accessed December 11, 2018, <https://www.politico.com/magazine/story/2015/06/us-military-bases-around-the-world-119321>.

¹⁵⁶ Vine, "Where in the World Is the U.S. Military?"

¹⁵⁷ US Army, *FM 3-0*, (2017), 3; United States, *Summary of the 2018 National Defense Strategy* (Washington, DC: Government Printing Office, 2018), 3-4, 6; United States, *National Security Strategy* (Washington, DC: Government Printing Office, 2017), 13-14, 44-45, 55-57.

¹⁵⁸ Reuters, "'Significant' consequences if China takes key port in Djibouti: U.S. general," Thomson Reuters, accessed December 11, 2018, <https://www.reuters.com/article/us-usa-china-djibouti/significant-consequences-if-china-takes-key-port-in-djibouti-u-s-general-idUSKCN1GI2V0>.

15% of the world's commerce through international shipping. These actions serve the strategic benefit of China through increased access to basing that simultaneously extends operational reach in direct support of the country's Belt and Road Initiative into Africa.¹⁵⁹

The US military's operational reach, as shown through its continuous ability to extend its military capabilities in time and space, is unprecedented, with six combatant commands (CCMD) that cover areas of responsibility spanning the entire world that no current or potential adversary can match. The US military's global reach manifests itself through formal military alliances, like the North Atlantic Treaty Organization (NATO), that provide the DOD with the ability to respond assertively to various contingencies within each CCMD. While NATO's mission and relevancy continues to endure beyond the post-Cold War era, an undercurrent of issues threaten the durability of the alliance and, by extension, the US military's continued ability to extend its global reach and respond effectively during LSCO.

The 2017 NSS makes clear that Russia views NATO as a threat.¹⁶⁰ Russia seeks to undermine NATO by meddling in the domestic political affairs of countries within the alliance to weaken US influence and divide allies against one another.¹⁶¹ Russia realizes that NATO provides a strategic advantage to the United States and seeks to exploit divisions that ultimately undermine the alliance's strategic interests.¹⁶² Russia's continued threat towards the existence of NATO underscores the necessity of keeping the alliance intact to prevent any weakening of the post-WWII international order.

Despite the continued relevance of NATO, current threats seek to exacerbate tensions within the alliance to a degree that could weaken or render its essential functions untenable. Current US concerns about members following through with NATO defense spending damages

¹⁵⁹ Ali and Stewart, "Significant' consequences if China takes key port in Djibouti: U.S. general."

¹⁶⁰ United States, *National Security Strategy*, 36-37.

¹⁶¹ United States, *National Security Strategy*, 36-37.

¹⁶² United States, *National Security Strategy*, 58.

relationships with other countries and the perception of the alliance overall.¹⁶³ Any perceived reluctance to provide full support to a NATO country in the event of Russian aggression, as noted with the perceived aggressiveness of Montenegro upon the country's induction in 2017, undermines the stability of the alliance and fails to deter Russia from seeking regional hegemony across Eurasia.¹⁶⁴ Over time, a weakening of the NATO alliance through a loss of trust, economic capital, and overall military capabilities will negatively affect the ability for the United States to project its military capabilities and respond effectively against great powers, thus limiting US operational reach across the world.

Recent diplomatic and economic advances by Russia and China seek to undermine perceived US advantages across each military domain.¹⁶⁵ The efforts pursued by these adversaries seek to put the United States and its allies on a path towards strategic culmination in all four instruments of national power. The primary method for China and Russia to achieve this is by undermining the trust, confidence, and cohesion of the post-WWII international order through the creation of regional hegemonies within their respective areas of influence. The NSS, NDS, and NMS all use the established legitimacy of the United States and its allies as a backdrop to combat threats that seek to undermine the development of democratic societies, the spread of rapid technological advancements, and the stability of the post-WWII international order.¹⁶⁶

¹⁶³ Michael Birnbaum, "Ahead of NATO summit, allies wonder: Will NATO survive Trump," The Washington Post, accessed December 11, 2018, https://www.washingtonpost.com/world/europe/ahead-of-nato-summit-allies-wonder-will-nato-survive-trump/2018/07/08/3af62604-8134-11e8-b3b5-b61896f90919_story.html?utm_term=.38a5f061986f.

¹⁶⁴ Guardian Staff and Agencies, "'Very aggressive': Trump suggests Montenegro could cause world war three," The Guardian, accessed December 11, 2018, <https://www.theguardian.com/us-news/2018/jul/19/very-aggressive-trump-suggests-montenegro-could-cause-world-war-three>.

¹⁶⁵ US Army, *FM 3-0*, (2017), 15.

¹⁶⁶ United States, *National Security Strategy*, 12, 17, 20-22, 35, 37, 41-42, 47-49, 51, 57-58, 61-62, 65; United States, *Summary of the 2018 National Defense Strategy*, 3-7, 9-10, 12; United States, *The National Military Strategy of the United States* (Washington, DC: Government Printing Office, 2015), 3, 5, 7-8, 12, 15.

The logistical infrastructure required to sustain LSCO necessitates global partnerships and agreements that deny the ability for adversaries to gain access to advantages that can negatively affect the strategic mobility of the United States and its allies. The use of intermediate staging bases (ISB) during LSCO, for example, is a critical component of logistical operations whose successful implementation often requires the efforts of many countries. Crafted properly, an analysis of countries whose infrastructure may prove critical in the ability to sustain LSCO may provide key capabilities that can predetermine culmination points at the operational and strategic levels.

The United States and its allies have a finite amount of resources. While the application of these resources may not completely offset China's economically subversive actions in Africa or Russia's destabilizing activities in the Ukraine, disengagement is simply not an option. US Secretary of State Dean Acheson's decision to exclude the ROK from the American zone of concern in 1950, coupled with the withdrawal of all but a small contingent of KMAC troops in Korea in 1949, signaled to the DPRK, Soviet Union, and China that the United States would unlikely defend the ROK in the event of an invasion.¹⁶⁷ These decisions emboldened US adversaries and nearly resulted in culmination for US/ROKA forces on the Korean peninsula. To prevent future occurrences like the Pusan Perimeter campaign, the United States must continue to support its allies through a variety of diplomatic, economic, and military initiatives. These actions ultimately provide the United States with the ability to respond to various contingencies that decrease the potential for strategic culmination in the event of LSCO.

Conclusion

The victor of the Pusan Perimeter campaign went to the force that could most effectively exercise its logistical capabilities in the face of an increasingly complex operational environment.

¹⁶⁷ John Lewis Gaddis, *On Grand Strategy* (New York, NY: Penguin Press, 2018), 54.

While US/ROKA forces ultimately prevailed, the end result of this campaign was not inevitable and the ramifications of a defeat were grave for either side. Indeed, had the DPRK emerged victorious, their success likely would have resulted in the complete collapse of the ROK as a viable nation-state, caused irreparable damage to the credibility of the United States to contain communism across the continent of Asia, and likely would have brought about an indefinite conclusion to the Korean War. An analysis of the elements of basing, culmination, and operational reach portray the operational circumstances as they pertain to logistics at the Pusan Perimeter and inform the broader context of the eventual victory by US/ROKA forces.

There is no mistaking the improvisation that occurred in the establishment of US/ROKA basing from the KPA invasion to the end of the Pusan Perimeter campaign. Success through basing at Pusan became directly linked through the effective use of CONUS ports, the ability to recognize the need to capitalize on shortened LOCs based on tactical and operational circumstances, the ROKA's ability to hastily establish basing to extend the length of contested operations, and the establishment and flexibility of the 2LC and JLCOM under the direction of the EUSA and FECOM, respectively. Together, these factors provided advantages in basing that offset the shortcomings experienced by US/ROKA forces during the early weeks of the Korean War. The ad-hoc formation of basing at Pusan, aided by multiple coordinated efforts by US/ROKA forces, became decisive in the outcome of the Pusan Perimeter campaign.

The KPA used Soviet doctrine effectively throughout the early periods of the Korean War, as demonstrated through the army's ability to maintain a constant flow of supplies from rear basing centers through intermediate zones to end users located at the forward areas. However, the US air interdiction campaign that began at the start of the Pusan Perimeter campaign quickly forced the KPA to abandon or relocate its remaining intermediate and rear basing centers north into the city of Vladivostok in the Soviet Union. This action had a decisive impact on the US/ROKA's ability to control the DPRK's flow and movement of supplies.

Though the tactical situation remained tenuous throughout the campaign, the natural obstacles that formed the Pusan Perimeter provided US/ROKA forces with a continuous line of troops for the first time during the Korean War. LTG Walker's understanding that culmination was not a permanent condition allowed for an orderly withdrawal and prompt establishment of defensive fortifications across the Naktong River. LTG Walker's implementation of a system of interior lines ensured that ground and air components could quickly respond to KPA threats across the Pusan Perimeter. These actions all set the conditions necessary for a transition to the offense.

The KPA's singular focus on offensive action without regard to changing tactical and operational conditions proved instrumental to their eventual culmination. The KPA's increasingly desperate attempts to penetrate perimeter defenses along the Naktong River line sacrificed the last of its remaining critical combat power. These actions exacerbated the ability for the DPRK to resupply their forces due to the continuous targeting of logistical nodes that severed the use of primary and alternate supply routes. An inability to limit offensive actions in a manner that would allow for adequate provisioning of KPA forces led to a substantial loss of combat power and greatly contributed to the DPRK's culmination at the Pusan Perimeter.

The initial austerity of the logistics environment within the Pusan Perimeter did not lend itself to an inevitably successful outcome for US/ROKA forces. US/ROKA forces had to quickly request, allocate, and distribute vast amounts of personnel and materiel during a limited period while simultaneously contending with a tactical environment that presented existential threats and challenges. To do this, US/ROKA forces instituted various programs in short order to rapidly generate desperately needed equipment and personnel. Though these programs experienced various degrees of success, continued efforts geared towards properly positioning and allocating equipment and personnel to confront existing threats from KPA forces proved invaluable in extending the US/ROKA's operational reach.

Effective air interdiction raids by US/ROKA forces had a significant impact on the operational readiness of the KPA. As the Pusan Perimeter campaign wore on, supply shortages that stemmed from a lack of motorized equipment at the front adversely affected the ability of the KPA to penetrate US/ROKA perimeter defenses. Over time, these deficiencies forced KPA soldiers to resort to desperate measures, like forage, stealing, and forcible conscription of the local population to maintain a semblance of combat effectiveness. Altogether, these hardships limited logistical resupply and led to a collapse of morale that increased as the KPA's distribution system became increasingly untenable. The gradual decline of the KPA's momentum and endurance reduced the extent of its operational reach and contributed materially to the DPRK's downfall at the Pusan Perimeter.

Two primary factors contributed to the victory of US/ROKA forces at the Pusan Perimeter. These factors were decisive not only in the success during the Pusan Perimeter campaign, but in subsequent operations that aided the success of the Incheon landing and the retreat of the KPA north of the 38th parallel later in the Korean War.

The first factor involved LTG Walker's superior system of interior lines across the Pusan Perimeter. From the establishment of basing at the port of Pusan, LTG Walker ensured this system of interior lines benefited through responsiveness of logistical support and an ability to respond to a myriad of contingencies. Functional legacy equipment and infrastructure left over from the Japanese occupation enabled the movement of vast numbers of personnel and equipment. This infrastructure, coupled with increasingly reliable intelligence and logistics support, provided LTG Walker with the flexibility necessary to combat emerging threats and proved successful at the operational level.

The second factor involved the successful air interdiction of intermediate and rear basing zones by FECOM forces in areas occupied by the KPA, both in the ROK and the DPRK. These air interdiction efforts compromised the KPA's ability to adequately resupply their forces with logistics and personnel. By destroying virtually all intermediate basing zones across the DPRK,

these air interdiction efforts deprived large amounts of equipment, weaponry, and logistics support needed for front-line soldiers within the vicinity of forward basing areas. Forcing the relocation or abandonment of significant industrial capabilities effectively stripped the DPRK of its ability to manufacture and supply the means necessary to continue the KPA's prosecution of the war effort. Altogether, the destruction of intermediate basing zones and forced relocation or abandonment of rear basing areas created untenable LOCs that stretched approximately 500 miles from Vladivostok to forward basing centers. The success of these air interdiction efforts by US forces became apparent when virtually all logistics support to front-line KPA soldiers ceased in the days leading up to the conclusion of the Pusan Perimeter campaign.

Today's strategic context, as outlined in the NSS, NDS, NMS, and FM 3-0, details threats far greater than the COIN and counterterrorism operations faced in Iraq and Afghanistan. The elements of basing, culmination, and operational reach are critical to maintaining a high degree of readiness on an international scale. Through effective basing, the DOD can ensure the protection of its assets through initiatives that offset operational and strategic challenges from great powers like China and Russia. To prevent strategic culmination, the United States must continue to invest in relationships and monitor the negative influences from adversaries that seek to undermine the post-WWII international order. These actions, when continued on an international scale, will work towards maintaining global stability while ensuring the satisfaction of US national security interests. The United States can maintain its global reach influenced by the post-WWII international order by continuing to exercise influence through global alliances like NATO, which continues to remain relevant and deter great powers that exhibit malign influence.

As demonstrated through an analysis of basing, culmination, and operational reach, the outcome of the Pusan Perimeter campaign required the quick and effective integration of US/ROKA logistics support and combined arms maneuver to achieve a successful end. With today's strategic environment growing increasingly complex, it is imperative that the US military maintain a strong sense of logistical readiness in anticipation of future conflicts. These actions

will ensure that the US military remains ready to combat a myriad of forces that seek to undermine the stability of the post-WWII international order and the strategic interests of the United States and its allies.

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