STEEL FOR BODIES: AMMUNITION READINESS DURING THE KOREAN WAR

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ABSTRACT

STEEL FOR BODIES: AMMUNITION READINESS DURING THE KOREAN WAR, by MAJ Peter J. Lane, 107 pages

A nation's ability to wage war is largely shaped by the preparations that it has undertaken in the period since the last war it has waged. The policies that support preparation for the next war are often forced to compete for resources against other domestic programs. Deficiencies in the U.S. Army's ammunition readiness during the Korean War are illustrative of the many challenges faced in resourcing readiness in the face of competing domestic and military priorities.

The U.S. Army's readiness for battle at the beginning of the Cold War was closely linked to reliance on a strategy of mobilization, which proved itself ill suited to respond to the needs of the nation's strategy to contain the growth of Communism. Military leaders struggled to develop a joint strategy to meet the Soviet threat, and to secure presidential support to resource a military establishment that was ready and capable of fighting the next war. Securing presidential support for increased funding was complicated by divisions between military services exacerbated by the National Security Act of 1947, different perceptions of the nature of the Soviet threat, and domestic political pressures to limit defense spending.

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INTRODUCTION

In 1945, the triumphant victors of World War II looked forward to what they believed would be a bright future. With the prewar depression fresh in their minds, the soldiers, sailors, and defense workers, victorious in the "Last great war"[1] believed they had earned for themselves an era of peace, full employment, and access to creature comforts they had previously only dreamed about. The American public's postwar contentment with improved conditions at home would be increasingly colored by concerns about troubling events overseas.

As early as the Potsdam Conference in July 1945, it became increasingly clear to President Truman that the postwar relationship with the Union of Soviet Socialist Republics (USSR) would be challenging. Soviet Premier Joseph Stalin and his government were proving more intransigent in the development of postwar plans for Europe. It was becoming clear to the United States and Great Britain that the Soviets were intent on establishing Communist control over the Eastern European States they had occupied during their advance eastward into Germany.

Postwar U.S.-Soviet confrontations in Eastern Europe, the Near-East, and Asia were causing confusion and concern over Soviet intentions among America's leaders and policy makers. But, these events went largely unnoticed by an American public focused on events at home. News of the fall of U.S.-supported, Nationalist China, to Communist forces and the announcement of the Soviet detonation of an atomic bomb in July 1949 dramatically raised concerns among the public about Communist aggression.

On 24 June 1950 war broke out on the Korean Peninsula, when the Soviet-sponsored North Korean Peoples' Army (NKPA) invaded the southern Republic of Korea (ROK). The U.S. intervention to defend South Korea, while initially popular, generated increasing concern and debate as the conflict devolved into World War I-like trench warfare. As the price in blood and treasure mounted, the inability to achieve a victorious conclusion was particularly troubling to the American public, causing them to question the administration and decision making of their own government.

In 1953, during the third year of American involvement in the Korean War, controversy erupted over an allegation of ammunition shortages affecting U.S. forces. This discord revealed American frustration with the growing perception that their military, recently victorious in World War II, was now unprepared to fight and unable to win in Korea. This paper analyzes these ammunition shortages and the perceptions of unpreparedness they engendered and examines how defense policies regarding military readiness and national strategy were negatively affected by domestic political considerations.

After outlining the circumstances that brought the ammunition shortages to the forefront of the public consciousness in 1953, chapter 2 examines the factors which were identified as having contributed to the occurrence of ammunition shortages. Chapter 3 analyzes the causes of the shortages to identify their relationship to America's national policy or military strategy. The national policies and military strategy which contributed to the occurrence of ammunition shortages will then be examined to determine the impact of domestic politics on their development.

Background

Ammunition shortages happen, to some degree, in all wars, and they occurred during the Korean War. When LTC Brad Smith led Task Force Smith into America's first battle with the NKPA on 5 July 1950, south of Suwon, his soldiers did not have the ammunition they needed to fight effectively.[2] As armies rush to deploy men and equipment at the beginning of wars, shortages invariably occur, as they did in the Korean War's early days. But, the rumors which began to circulate in Washington, D.C., during January 1952 were different. These rumors were not about shortages caused by a newly established and expanding logistics system, but about a chronic recurring ammunition problem which affected U.S. forces a year and a half into the war.[3] As the rumors of ammunition shortages on the Korean front lines spread, they quickly became fodder for the contentious presidential campaign which pitted the Republican Party's candidate, the recently retired General of the Army Dwight D. Eisenhower against the Democrats' Governor Adlai Stevenson of Illinois.

The Republican Party's central theme during the 1952 presidential election was the urgent need to correct the nation's course from the policies of the Democrats which had, according to the Republican Party Platform, "squandered the unprecedented power and prestige which were ours at the close of World War II."[4] The Republicans believed that at the heart of the Democrat's failures was their flawed strategy in Korea, where they alleged that poorly developed policies had created the conditions for communist aggression, and then committed U.S. forces to fight there without giving them the strategy and resources to win.[5] Preceding his nomination as the Republican candidate, Eisenhower had kept his thoughts about the Truman administration's prosecution of the

Korean War to himself.[6] This lack of a defined position, was in fact, one of the qualities that made him so attractive to politicians seeking to draft him into politics. During the election, Eisenhower generally restricted his comments on the Korean War to advocating increased training and arming of Koreans so they could assume the burden of fighting; as well as stating that he would go to Korea in order to better assess the situation.[7]

Following President-elect Eisenhower's decisive election victory over Governor Stevenson on 4 November 1952, he initiated planning for his promised trip to Korea, which he intended to complete prior to being sworn in as President in January. Taking President Truman up on his offer of use of the presidential aircraft, Eisenhower was accompanied for much of the trip by: JCS Chairman General of the Army Bradley, Secretary of Defense Designate Wilson, and Secretary of State Designate Dulles. In Korea, Eisenhower received detailed briefings on the conduct of the war from the Far East Command (FECOM) Commander General Mark Clark and the Eighth U.S. Army Korea (EUSAK) Commander General James Van Fleet. He also toured units, meeting with U.S. and ROK soldiers and airman, trying to get a feel for conditions and the force's fighting capacity. On his brief visit, Eisenhower met twice with ROK President Syngman Rhee, during which Rhee repeated his request that UN forces help the ROK in defeating the communist forces and in unifying the Korean Peninsula. Upon his return to the U.S., Eisenhower released a formal statement discussing what he had learned in Korea.[8]

Eisenhower's formal statement and informal remarks, given to the press upon his return, summarized the observations made during his three-day whirlwind tour of Korea. While in Seoul, General Clark had briefed the President-elect on the ammunition shortages, which the American public were beginning to hear rumors about.[9] In his public

statement, Eisenhower alluded to these shortages when he stated that certain “problems of supply” had reached rather serious proportions and required early correction.[10] Veiled as this statement was, in addition to other rumors of ammunition shortages circulating in Washington, D.C., it triggered a quick reaction from the Army.

On 19 December 1952, senior Army logisticians, in response to the mounting reports of problems, called a press conference ostensibly to talk about the procurement of weapons. During the course of the press conference, prepared statements were distributed, and it was stated that President-elect Eisenhower had been dissatisfied with the ammunition stocks available to forces in Korea, and it was that “problem of supply” which his prepared statement alluded to. MG William Reeder, Deputy Assistant Chief of Staff for Army Supply (G-4), provided an explanation for the shortage that pointed towards several causes, including: the belief that Korea would only be a “police action” and not require large scale production, the requirements for ammunition have steadily grown during the course of the conflict, and lagging output from production lines. In an attempt to place the shortages in a positive light, LTG Williston B. Palmer, a former X Corps commander and the new Army Supply Chief stated that while commanders were not getting all the shells needed for every gun in the “aggregate” they have “plenty to cool off the Communist forces.” The press conference and rendered statements were reported on the front page of *The New York Times* on 20 December, under the headline ”Army says forces lack ammunition for a Korea Drive. . . . Pentagon insists no lives are lost through shortages.”[11] Instead of calming the concerns of the American public and their representatives, as had been the intent of the briefing, quite the opposite effect was achieved.

Rapidly, a chorus of concerned voices in the Congress and in the press alleged that a cover-up had been attempted. Less than a week later, a *Time Magazine* feature discussed who was to blame for the shortages, with suggestions ranging from the Army bureaucracy, the Truman administration, or perhaps communist sympathizers in the government.[12] The controversy continued to build until it reached its apogee with the return of the retiring commander of EUSAK, General James Van Fleet, to America.

As General Van Fleet traveled across the U.S. in route to Washington, D.C., for his Army out-processing and retirement ceremony, he received numerous civic and military honors along the way, befitting a returning commander of his stature. In the course of his travels, he was often called upon to give public speeches and provide interviews to the press. A common, controversial, theme developed in his remarks; General Van Fleet believed that the Eighth Army was strong enough to defeat the Communists if they were given the resources and were allowed to fight. While emphasizing that this was his personal assessment, he was clearly suggesting that he could have won the war, but was restrained by the policies and directives given him, and by an ammunition system that left him handicapped during his twenty-two months in command.[13]

General Van Fleet arrived in Washington, D.C., on 3 March, in time to lunch with President Eisenhower who presented him his retirement award, a fourth Distinguished Service Medal. In the period leading up to his retirement ceremony on 31 March, in addition to out-processing the institution he had called home for thirty-seven years, Van Fleet was kept busy appearing before Congressional Committees to share his views on the Korean War, but more specifically, to expand upon his accusation that throughout his

time in command, his units had suffered from chronic ammunition shortages. General Van Fleet appeared before a number of committees in both the House and Senate, but it was his appearances before the Senate Armed Services Committee on 5, 6, and 10 March 1953 which resulted in the initiation of an investigation by the Committee's Subcommittee on Preparedness.[14]

On 12 March 1953, the Senate Armed Services Committee resolved that during the twenty-two months of General Van Fleet's command "there have been serious and at times critical shortages of ammunition" and that during that period General Van Fleet reported the shortages almost daily. Yet, unresolved, the shortages "substantially restricted the action of our troops and endangered our defense lines." The Subcommittee Chairman Senator Margaret Chase Smith and her four fellow subcommittee members were directed to investigate and report to the committee "the officials and conditions responsible for this situation."[15]

During the course of nine days of hearings in April of 1953, the subcommittee, consisting of two Democrats Senators Byrd and Kefauver and three Republicans Senators Smith, Cooper, and Hendrickson, heard testimony from a roster of witnesses which included numerous general officers, past and present secretaries of defense, and other services, as well as numerous subject matter experts. In receiving testimony and exhibits that amassed into a transcript exceeding 500 pages, the Subcommittee on Preparedness effectively identified, during the course of the investigation, many of the factors contributing to the perceived ammunition shortages. Not surprisingly though, the committee found it "difficult to pinpoint the responsibility for the situation."[16] Suggesting

that no one in the chain of command from the President down to the Ordnance Department had "discharged its responsibilities in a creditable fashion."[17]

As the conditions causing the perceived shortages were resolved in 1953, the controversy receded from the public memory and the political utility of definitively concluding the investigation of the issue faded away. The subcommittee rendered a final report in December 1954 which, while summarizing the factors contributing to the occurrence of ammunition shortages during the Korean War, failed to address the impacts of demobilization, national strategy, and budget policies which had created the conditions for the shortage, or the domestic political concerns which had effected them.[18] This failure to understand and address the impacts of domestic political concerns on policies effecting military preparedness allowed the problem of ammunition shortages to reoccur in future conflicts.

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[1]A phrase commonly used following the conclusion of World War II. It is perhaps a sarcastic reference to the illusions present at the conclusion of World War I.

[2]T. R Fehrenbach, *This Kind of War: The Classic Korean War History* (New York: The MacMillan Company, 1963), 65-71. Smith's forces were equipped with 2.36 rocket launchers, which were ineffective against the NKPA T-34 tanks, rather than the Army's newly developed 3.5-inch rocket launchers which were capable of penetrating the T-34's armor. Smith had few rounds for his 75-millimeter recoilless rifles, and only a handful of armor-piercing rounds for the 105-millimeter howitzers that were attached.

[3]"Truman Bids House Vote G.I. Pay Raise," *The New York Times,* 15 January 1952, 14. Joint Chiefs of Staff (JCS) Chairman General of the Army Omar Bradley, appearing before the Senate Armed Services Committee, contradicted Secretary of Defense Robert Lovett by stating that serious bottlenecks still existed and that deliveries were well behind schedule-so much so, he said, that there were shortages even in the combat lines in Korea.

[4]Republican Party, Republican Party Platform of 1952 [database on-line] (Republican Party Convention, Chicago, 1952, 1); available from http://www.presidency.ucsb.edu/docs/platforms/republican/R1952.htm; Internet.

[5]Republican Party, Republican Party Platform of 1952 (Republican Party Convention, Chicago, 1952, 2-4) [database on-line]; available from http://www.presidency.ucsb.edu/docs/platforms/republican/R1952.htm; Internet.

[6]Eisenhower to "Swede" Hazlett, 21 June 1951, in Louis Galambos, ed., *Papers of Dwight David Eisenhower* (Baltimore: Johns Hopkins University Press, 1989), 12:370.

[7]Eisenhower to Basil Brewer, 24 October 1952, in Galambos, *Papers of Dwight David Eisenhower*, 13:1396.

[8]Eisenhower to Syngman Rhee, 5 December 1952, in Galambos, *Papers of Dwight David Eisenhower*, 13:1443.

[9]Fehrenbach, *This Kind of War*, 439.

[10]Leo Egan, "Eisenhower, Here, Confident of Speeding Korea Solution; Calls His Trip a "Beginning," *The New York Times*, 15 December 1952, 1.

[11]Austin Stevens, "Army Says Forces Lack Ammunition for a Korea Drive," *The New York Times*, 20 December 1952, 1.

[12]"Heavy-Caliber Cover-up," *Time Magazine*, 29 December 1952, 14.

[13]Harold B. Hinton, "Ammunition Short, Van Fleet Asserts," *The New York Times*, 6 March 1953, 1; Paul Braim, *The Will to Win: The Life of General James A Van Fleet* (Annapolis: Naval Institute Press, 2001), 320-322.

[14]"Gen. Van Fleet: Enough ammunition for what? Not to win the war, and that was what he wanted," *U.S. News & World Report*, 20 March 1953, 76.

[15]U.S. Senate, Hearings before the Preparedness Subcommittee Number 2 of the Committee on Armed Services, U.S. Senate, Eighty-Third Congress, First Session on Ammunition Shortages in the Armed Services: 1, 8, 9, 10, 13, 15, 16, 17, and 20 April 1953 (Washington, DC: GPO, 1953), 1.

[16]U.S. Senate. *Interim Report of the Preparedness Subcommittee Number 2 of the Committee on Armed Services, U.S. Senate, Eighty-Third Congress, Investigation of the Ammunition Shortages in the Armed Services* (Washington, DC: GPO, 1953), 16.

[17]Ibid.

[18]U.S. Senate, *Final Report of the Preparedness Subcommittee Number 2 of the Committee on Armed Services, U.S. Senate, Eighty-Third Congress ,Investigation of the Ammunition Shortages in the Armed Services* (Washington, DC: GPO, 28 December 1954).

CHAPTER 2

CAUSES OF THE AMMUNITION SHORTAGE

Defining a Shortage

The New Lexicon Webster's Dictionary of the English Language definition of "shortage" is: "the fact that there is less of something than required."[1] Defining what constitutes a shortage is a fairly straight-forward undertaking, when a dictionary definition is used. As the senators of the Senate Armed Services Committee undertook an initial inquiry into the alleged Korean ammunition shortages in March of 1953, they found this necessary first step to be problematic. As General Van Fleet stated during his testimony, "You get lots of definitions on what a shortage is, and that is where there is disagreement."[2] In the course of his initial testimony to the Senate Armed Services Committee, General Van Fleet was asked by Committee Chairman Saltonstall to clarify his allegations of ammunition shortages in light of statements made by others that, while the stockpiles in the Far East had been less than desired, "no soldier on the front ever gets everything he wants to fire, but that there was no real shortage in any one special category."[3] In responding, General Van Fleet defined what he believed constituted the shortage in Korea by stating,

> We did not dare shoot from our stockpile below that level, both authorized and critical level, so therefore we would give a quota of ammunition rather than a ration. We would give out a quantity for a 10-day period, based upon expected arrivals, hoping that our level would not only stay the same but might improve a little; but our experience was that it would go down, causing us to give less of a quota on succeeding periods of ten days. Now, of course, the soldier or the man at the gun never knows that story; that is at a higher level, looking ahead, and planning for the future.[4]

Unable to reconcile disagreement over whether there had in fact been shortages, Chairman Saltonstall scheduled a hearing on 10 March 1953, at which both Army Chief of Staff General Lawton Collins and General Van Fleet would appear. The intent of the hearing was to reconcile apparent contradictions between General Van Fleet's allegations of shortages and previous statements by General Collins and General Omar Bradley, the Chairman of the Joint Chiefs of Staff, who had indicated that no shortages had occurred that had impacted front-line troops. The expected testimony revolved around the Generals' differing ideas of what constituted a shortage of ammunition.

In beginning his remarks to the committee, General Collins pointed out that the war in Korea was being waged from a peacetime footing, one in which America's forces were nearly simultaneously mobilizing forces, waging a large scale conflict, and demobilizing materials from the previous war. Given this fact, Collins believed that the question of Korean theater ammunition supplies could not be looked at in isolation, but must be considered as a part of the nation's worldwide ammunition situation. In apparent deference to his friend General Van Fleet, General Collins expressed his belief that it was natural that commanders at various levels may have differing views on what was necessary to accomplish a mission, and that good commanders always attempt to give their subordinates all the tools available to accomplish the task, to include "as much ammunition as possible."[5]

General Collins expressed his continued dissatisfaction with the ammunition reserve stocks, which he believed impaired the Army's readiness. While emphasizing that Congress had appropriated all the funds requested for ammunition since the beginning of the Korean War, he stated that, "The Army's ammunition situation is nothing new."

Calling attention to testimony he had previously given to the House and Senate Committees on Appropriations, General Collins pointed out that as early as 9 December 1950 he had expressed concerns about the Army's "reserve position."[6] And, that on 5 May 1952, while providing testimony in an attempt to prevent Congress from limiting appropriations, he had stated that,

> If combat in Korea should continue, or if our troops in Europe were attacked, we would have no reserves of some of the most important types of ammunition and our frontline troops would have to limit their expenditures to what came off our production line. Some of the types of ammunition most important to our frontline soldiers have been rationed in Korea because production still does not equal normal battle expenditures, and World War II stocks either have been exhausted or have approached exhaustion.[7]

Believing that he had effectively differentiated between ammunition stocks in reserve and those in the hands of soldiers, Collins agreed with General Van Fleet that there can be very different uses of the term shortage. Acknowledging that there had been rationing in Korea, Collins stated that, "our problem has always been that we have not been able to build our ammunition reserve stockages to the point where we feel they should be." But that, "there has never been a shortage of ammunition in the hands of our troops," unless it was one which was caused by local problems in the distribution of supplies.[8]

At the conclusion of the testimony rendered by Generals Collins and Van Fleet, and other officials with knowledge of the alleged shortages, the Senate Committee on Armed Services adjourned and, following closed consultations, prepared and released on 12 March, a unanimously adopted committee resolution which affirmed the committee's agreement with General Van Fleet's allegation that there had been serious and at times critical shortages of ammunition which had substantially restricted his forces' actions.

The committee further resolved that the chairman appoint a subcommittee for the purpose of the investigation with the goal of reporting to the committee the "officials and conditions responsible for this situation of ammunition shortages in our services."[9]

In remaining fixated on the ammunition situation in Korea, the Armed Services Committee failed to grasp the significance of General Collins' remarks. In his attempt to clarify the Army's position and actions, which at times appeared in opposition to General Van Fleet's allegations, General Collins had illustrated that the issue was much larger than the Korean conflict. Any shortages appearing in Far East reserves were symptomatic of much larger failures. The deficiencies in ammunition supplies were caused by a combination of factors, the foremost being the failure to adequately understand the nature of the conflict we were engaged in, and what efforts would be required to win. This, in turn affected our ability to sustain ourselves in the Far East and elsewhere. The failure to develop and manage adequate strategic reserve stocks were exposed when they proved insufficient to sustain theater stocks while our unprepared industrial production capacity was slowly being mobilized. These more critical lessons would also largely elude the investigating subcommittee.

In her opening remarks to the Preparedness Subcommittee's initial hearing on 1 April 1953, the Chairperson, Senator Margaret Chase Smith, reviewed the Subcommittee's charter, clarifying that in conducting their investigation, the Subcommittee's goal was to identify the causes of the shortages, wherever they may have occurred, with the purpose of preventing their recurrence. Acknowledging the confusion over terminology, she pointed out that whether it was called rationing, allocations, quotas, or shortages; the public was concerned about any restriction or limitation on the

soldier in the front lines. To illustrate the need to answer the public's concerns over the shortages, Senator Smith asked Senators Byrd and Johnson to read letters they had received from constituents, relating statements from service members in Korea concerned about rationing of ammunition. The committee emphasized the importance of maintaining public confidence that forces were being adequately supported, particularly as controversy grew over the goals and attritional nature of the war. Both the Subcommittee and the witnesses called implicitly understood the impact the hearings would have on public confidence.[10]

In examining the deficiencies of ammunition supply during the Korean War, and their attendant causes, it is important to understand that there were a myriad of factors which effect logistics execution in wartime. This study is focusing on the factors which were the greatest determiners of not only the Korean shortages, but also those which effected U.S. forces deployed all over the globe. These factors are the belief that the war would be a "police action" of limited duration and scope, the steady growth in ammunition requirements during the course of the war, and the lagging ammunition production lines which only reached full production as reserve stocks neared exhaustion.

In 1945 and 1946, the United States was experiencing increasing Soviet intransigence as the Soviets consolidated their hold over Eastern Europe, as well aggressive posturing along the USSR's southern periphery. In March of 1945 the Soviet Union was exerting pressure on Turkey over the Dardenelles. During July's Potsdam Conference, President Truman perceived Stalin's intention to expand the Soviet sphere of influence. And, perhaps most presciently, Winston Churchill in a speech in Fulton, Missouri in March of 1946 warned that, "From Stettin in the Baltic to Trieste in the

Adriatic, an iron curtain has descended across the continent."[11] Despite growing unease caused by concerns over the goals of the Soviet Union and world Communism, the United States allowed the dismantling of its powerful military machine by succumbing to pressures to speed the demobilization of U.S. forces following the completion of the war.

Demobilization and Reconversion.

The vast productive capacity of America played a critical role in the Allies' success against the Axis powers during World War II. At the war's conclusion, America rushed to return to normalcy, quickly reducing the size of its armed forces and converting industries dedicated to producing military equipment and supplies into ones producing civilian goods again. The rush to dispose of vast stocks of military equipment and supplies and the rapid conversion of its productive capability, and the failure to retain the capability to quickly remobilize this capacity, sowed the seeds of the nation's unpreparedness for its next war.

In serving as the primary provider of material for the allied war effort, the U.S. production of civilian goods, by necessity, was dramatically curtailed. As the Allied forces rapidly advanced across France, hopes were raised that there would be an early end to the war, with the belief that industry would be able to be rapidly reconverted to the production of consumer goods. In preparation for this end, the production of artillery ammunition was reduced as the allied advance progressed, until allied consumption increased dramatically in the heavy fighting to penetrate the Siegfried Line. This increase in ammunition consumption caused a surge in U.S. production, as factories attempted to meet some of the highest production goals of the war. Much of the ammunition produced in this effort never reached Europe before the war ended. The resulting excess completed

ammunition, as well as a large inventory of work in process, was the basis for the Army's postwar ammunition reserve stocks.

The rapid conclusion of the war in Europe, and the subsequent abrupt end to the war against Japan triggered by the use of the atomic bomb, left logisticians with the daunting challenge of consolidating and inventorying the vast amounts of material, which included these large ammunition stocks. This daunting task required the skills of the Army's corps of technical service soldiers, who had the knowledge and understanding of material inspection, inventory and storage, as well as the specific aspects of different commodities. As pressure mounted to rapidly provide for the needs of the civilian population, both at home and abroad, the decision was made to speed the transfer to civilian use those military stores deemed excess to military demand. The efforts to rapidly account for and transfer needed materials, diverted the attention of the technical services from the critical task of consolidating and inventorying ammunition.

If the tasks facing the technical services were not daunting enough, as the demands to quickly demobilize service members overseas increased, the armed services, at the Truman administration's direction, adopted a rotation system based on the accumulation of points for the duration of overseas service. This action decimated the ranks of the technical services. Service troops, who typically worked in rear areas, had by the war's end often accumulated more points than combat soldiers, who were more frequently injured and replaced. As combat formations attempted to turn in their ammunition, the personnel charged with accomplishing the technical tasks of inspection, inventory, and storage were often inexperienced or unqualified to accomplish the task correctly. Combat units, themselves racing to prepare for rotation, often took advantage

of the inexperienced service troops, by cutting corners in the turn in process. The end result of the rush to demobilize, was a vast quantity of ammunition, in a variety of conditions, of which the Army had incomplete, inaccurate, or altogether missing inventory records.[12]

As the postwar Army dealt with a dramatic reduction in forces, it struggled to meet the requirement to man occupation forces. Commanders fought to maintain their combat capability, often at the expense of maintaining appropriate levels of technical services troops in the force structure. Postwar personnel turbulence caused by downsizing and restructuring, combined with the shortage of service troops, and the continuing task of transferring military property to civilian use only made the task of determining an accurate inventory status of ammunition more difficult. The ammunition inventory task was only completed in the months preceding the outbreak of the Korean War.[13] The illusion of vast reserves of ammunition was caused by this lack of an accurate or timely inventory and, during much of the interwar period, hid the reality that by 1950, war reserve ammunition was of the wrong type and quantity for another conflict.

The report of large ammunition stocks was deceptive because throughout the postwar period, the remaining serviceable ammunition was being consumed. Resistance to procurement of ammunition types, available in reserve stocks, forced the Army to use these stocks for training activities and for transfer to foreign countries under the Military Defense Assistance Program (MDAP).

The ammunition remaining, was of a quantity and type that was not suitable to support active units' war fighting requirements. The 1950 reserve stocks can be classified into a number of different categories by varying degrees of utility. Least useable was

unserviceable ammunition, which had either been unserviceable at the time of collection or had deteriorated while in storage. Equally unusable was ammunition designed for weapon systems no longer in use. These unserviceable rounds were slowly being renovated or destroyed. The bulk of the reserve consisted of rounds classified as “least preferred”, meaning of a specialty type or older design, that was superceded by newer versions, which were “more preferred.” Ammunition in the “more preferred” category made up a small portion of the reserve. Most of these rounds came into service late in World War II, and as a result there was little opportunity to build up these stocks before the war’s end.[14]

As the Army gained an understanding of the unbalanced nature of these stocks, through its ongoing inventory, efforts were made to undertake maintenance action and new production to correct the imbalances. General Hughes, then Chief of Ordnance, attempted to secure funding for limited production to correct these problems in May 1949. The slightly more than $1.2 billion dollars requested for this production, included in the preparation of the 1951 basic budget, was reduced by both the Army and the Bureau of the Budget to a sum less than $30 million dollars.[15] This attempt to economize, which was continuous between the wars, ensured that the war stocks were not in the state of readiness necessary to provide uninterrupted support for a large-scale war.[16]

During the course of the World War II, in an effort to provide the ammunition required for combat, manufacturers of civilian products had converted their production lines to the task of producing ammunition components for assembly into rounds in government loading and assembly plants. Concerned by the specter of unemployment and depression, which had occurred after the victory of World War I, planners were intent on

rapidly reconverting these production lines to the output of consumer goods. In doing so, it was recognized that the Army would need to retain some ammunition production capability.

As the Army terminated contracts for war production in civilian plants, they also declared a large portion of Army built production facilities as excess, and turned them over to the Reconstruction Finance Corporation or the War Assets administration for sale. By selling or leasing these plants subject to the national security clause, this guaranteed that the plants would be maintained in a condition to be reconverted to war production within 120 days. The Army did retain some productive capacity as a part of the Industrial Plants Reserve, which included the 17 installations of the Army's permanent arsenal system and over 60 standby installations. The standby installations were plants, works, arsenals, and laboratories, which were Army owned but contractor operated. Most of the standby installations were incompatible with civilian production, and so they were largely inactivated. Inactivated plants quickly deteriorated because of the limited funds allocated for postwar maintenance and preservation.[17]

As the Army's ammunition production capability was either terminated sold, leased, or moth-balled, the special tools needed for that capability were also liquidated. Building the machines used to produce ammunition was costly, during World War II the government took the lead by purchasing the machine tools, as well as much of the actual production machinery, used by civilian contractors. At war's end the majority of the machinery used in non-government facilities, as well as the machine tools used to produce them, were sold to their operators, or other manufacturers, for dramatically reduced prices with the intent to stimulate the production of consumer goods. Only a

fraction of the remaining machine tools and production machinery were purchased by the Army and consolidated into the industrial reserve, often suffering the same lack of required maintenance.[18]

The condition of the Army's machine tool reserve is of critical note. Historian James Huston states, "A nation's capacity to wage modern war could almost be gauged by its machine tool capacity."[19] History had shown that shortages of machine tools often resulted in mobilization bottlenecks. The large-scale sale of the military's existent machine tool stocks at the end of World War II not only reduced the military's ability to rebuild their production capacity, it also devastated the domestic machine tool industry. The machine tool industry had actively cooperated in the war effort, and earned slim profits building the nation's war machine. The industry planned to recoup lost profits during postwar retooling and reconversion to civilian production. When the government flooded the market at war's end, instead of placing the bulk of the machine tools in the war reserve, many machine tool companies went out of business. By 1950, the Industrial Reserve had less then 2 percent of the machinery, which had been used to support the wartime economy. The difficulty and delay in procuring the necessary machine tools to reestablish ammunition production during the Korean War played a significant role in production delays.[20]

Funding Production

The U.S. was slow to realize that Korea was but one battle in the larger cold war, which would continue for decades. Prior to 1949, we believed that our possession of atomic weapons would sufficiently deter communist aggression. When faced with a high intensity conventional conflict in Korea, we failed to identify it as such, instead labeling

it a "police action."[21] In minimizing the importance of the conflict and the time and material that would be required to conclude it, a number of conditions were created that contributed to the ammunition shortages.

This misplaced over confidence led to the erroneous assessment by some key decision makers that the war could be fought using war reserve stocks. They believed that this decision would enable the growing consumer economy to remain relatively unaffected by avoiding full mobilization, which would have been necessary to rapidly establish and expand the military's ammunition production capacity. Instead, this approach delayed appropriating the funds needed to begin the required industrial expansion. Assistant Secretary of Defense (Comptroller) Alexander gave the service chiefs budget guidance in a memorandum dated July 15, 1950 stating:

> Supplementary estimates for material should cover the replacement of items issued for the Korean operations, including establishment of necessary pipelines, such replacement to be limited to critical materials except that in the category "Major Procurement and Production" the budget should not include initial equipment for its units ordered to the Far Eastern area, but only for loss replacement for critical items in excess of normal peacetime requirements included in the regular 1951 budget.[22]

This guidance created confusion between Army budget officials and their Department of Defense (DOD) counterparts, because it indicated a continued policy of drastic economy begun under Secretary of Defense Johnson. The Army interpretation of the guidance was that all ammunition forecasted for consumption in Korea should be budgeted for in the first supplemental appropriation. Referring the action to the Office of the Chief of Ordnance for a forecast of consumption and requirements, the Army submitted a request for funds for ammunition amounting to $2.4 billion dollars. This was the amount believed

to be required to establish and expand production lines to fully replace ammunition consumed in Korea.[23]

When this request was received by Department of Defense reviewers, they did not believe its amount. One of the reviewers General McHarney, the head of the Defense Management Committee, responded, "You don't mean to say the you are going to buy ammunition when you have all those excess stocks of it?"[24] The intent had been for the Army to request funds to replace expenditures, not to prepare for expenditures in the future. As a result the Army was limited only to ammunition, which was deemed "critical." After consultations with senior Army leaders, the request was adjusted downwards to $374 million, effectively delaying establishment of production capacity until additional funding was appropriated.[25]

Following this defeat, Army budget officials continued to argue for increased appropriations to enable the activation of a larger production program than allowed by the meager funds granted in the first supplemental. Effectively communicating their argument for increased production, they suggested that funds in the Military Defense Assistance Program (MDAP) could be used in September 1950, and later replaced by funds received in the second supplemental. Planning to commit these funds began, only to be halted by the impact of the successful Inchon landing in September 1950. This action caused Secretary of the Army Pace to direct that the use of the MDAP funds be postponed pending further guidance. He was concerned that the apparent rout of the North Korean People's Army (NKPA) would be perceived as indicating a rapid end to the war, and endanger the likelihood of additional funds being appropriated for the war that could be used to repay the MDAP loan. Inability to repay the loan would have been

an embarrassment to the Army. This belief, was reinforced in a memorandum by Defense Secretary Marshall to the Joint Chiefs of Staff (JCS), dated 27 September 1950, in which he gave statements of general assumptions to be used in budgeting, saying,

> In the preparation of budget estimates for the third (actually second) supplemental request for fiscal year 1951 and fiscal year 1952 it will be assumed that: Combat operations in Korea will be concluded by June 30, 1951. . . . [I]t is essential to avoid peaking industry in fiscal year 1951 and fiscal year 1952, thereafter discontinuing or greatly reducing actual production."[26]

This belief that the war would terminate early proved to be mistaken. Chinese Communist attacks against U.S. forces in November 1950 lead to increases in forces committed and ammunition requirements. The failure to appropriate funds to reestablish meaningful ammunition production was now of even greater importance given the projected 18 month lead time required to get meaningful flows of ammunition. Funds appropriated in 1951, could not begin to result in ammunition appearing on the front lines until well into1953. This prolonged dependence on reserve stocks was increasingly problematic as ammunition requirements escalated dramatically.

Requirements Determination and Consumption.

Before continuing this examination of the causes of the Korean ammunition shortages, it is helpful to clarify the special terminology that is used throughout the balance of this study. During World War II, logisticians made dramatic improvements in standardizing the science of forecasting requirements. Developing accurate forecasts was critical because it determined the quantities of supplies that must be produced or procured, and then transported to the point of consumption. It also allowed the services to determine how frequently supplies required replenishment.

At the conclusion of World War II, logisticians attempted to use the historical consumption data gathered over the course of the war to craft planning factors for use in future conflicts. In doing this for ammunition, a unit of measure called the *Day of Supply* (DOS) was developed. The DOS for a particular weapon is the average quantity of rounds per day, that experience has indicated can be expected to be fired by each of the weapons present in a large organization over a large period of time. In determining the DOS after World War II, unit data from the European and Pacific theaters were used. Using these large populations and the long duration of the conflict, an average rate of consumption was determined for each theater. When the European DOS and the Pacific DOS were compared, logically the European consumption was higher because of the continuous nature of the combat, versus the sporadic island hopping in the Pacific.[27]

In an attempt to arrive at a single planning factor, input was solicited from Army Field Forces Command, who rejected both of the theaters' DOS as being too low. They believed the Pacific DOS incorporated too many days of noncontact time. The European DOS, they argued, failed to account for the rationing which had occurred during portions of the campaign. They felt that the DOS should reflect what would have been fired, had it been available. When General Hughes, the Chief of Ordinance, was presented with the proposed Army Field Forces' DOS, he protested that the quantities of ammunition required would exceed the nation's ability to finance, produce, and capacity to transport in time of war. In the end, a compromise was struck between the World War II DOS and the Field Forces' recommended DOS, which was adopted for use by the Army.[28] This common DOS allowed logistics planners to use the deployment flow into a theater,

outlined in a war plan, to forecast requirements. With time and experience, commanders with higher authority, tailored the DOS to accurately reflect their requirements.

The next point of discussion is how those requirements are met. In the years between World War II and Korea, there was essentially no ammunition production, so it was assumed that initial requirements would be met from reserves, until production could resume. In the end production would have to not only meet the consumption requirement, but would also have to replenish the reserves. Implicit in this, are sufficient reserves to satisfy the requirement during the period until full production is attained, or rationing is required.

Due to vagaries of ammunition transportation to the theater, rarely was a steady flow achievable or sustainable over time. Stocks must be established to provide for periods when the flow is interrupted or consumption spikes. The level of supplies needed to provide a degree of reliability of supply is the *Minimum Safety Level*, which is measured in DOS. The safety level for the Far East Command at the beginning of the Korean War was 45 DOS, which, at the request of the theater in October 1951, was raised to 60 DOS to more fully account for the time required to transport ammunition across the Pacific Ocean.

Over and above this safety level of 60 DOS for all weapons in the theater, an *Operating Level* of 30 DOS was maintained to provide for the natural fluctuations in consumption and transport. Not counted in any of these DOS were the *Unit Basic Loads* (UBLs), which were generally presumed to be five DOS.[29]

The Army's ammunition system was based on a continuous refill system in which each unit carried its prescribed basic load, which was replenished as used. A report that

ammunition had been consumed normally generated a replacement request. Commanders controlled subordinate units' ammunition consumption by regulating the rate at which ammunition was replaced. This *available supply rate* was expressed in rounds per weapon per day, and represented the consumption that available supply rates would support.[30] Far East Command (FECOM), G4 would submit a theater periodic stock status report every ten days to the Overseas Supply Division at the San Francisco port of embarkation, which constituted a request for replacement of ammunition up to authorized theater stock levels.

The *authorized theater stock level* is the product of the average day of supply for a weapon system, multiplied by the quantity of the weapon in theater, multiplied by the number of DOS deemed essential to have on hand. Any change to any of the three inputs could have a dramatic effect in the theater's stockage level, as it relates to the on hand stocks, without a round being fired. This data combined with consumption data, provided Ordnance planners with their production requirements. This seemingly straightforward method of determining production requirements quickly became confusing when the inputs in determining the authorized stockage levels began to change. The inability of both the appropriations process and ammunition production to respond rapidly to these changes contributed to the perception of ammunition shortfalls.

Changing Requirements

In June of 1950, the Department of Defense had no war plan for the defense of the Korean peninsula. As units were committed into action, the logistics system struggled to keep them provisioned with the ammunition required for combat. Because there was no prior planning as to the forces to be committed, there was a limited ability to forecast

requirements. Instead, logisticians drew initial supplies from stocks maintained in FECOM depots in Japan, and transported them to airfields in Korea or the port located in Pusan. Logisticians in the Continental United States (CONUS) rushed stores from depots to ports for overseas shipments.

In July of 1950, planners requested and received dramatic increases in the number of rounds in the approved DOS (see table 1). The immediate effect of the increased DOS was a drastic reduction of the stores on hand (in example, a quantity representing sixty DOS was now ten DOS following the sixfold increase in rounds in each DOS). These increases were necessary to ensure sufficient ammunition was being rushed into the theater from CONUS stocks. The intensity of the fighting, particularly in the defense, and subsequent breakout from the Pusan perimeter, required that the limited quantity of indirect fire systems expend quantities of ammunition far exceeding the DOS tables based on World War II data.[31]

Table 1. Increases in the Day of Supply

ITEM	Dept of Army Standard DOS	Korea 1 July 1950	Korea 14 July 1950	Korea 8 Oct 1950	Korea 1-Sep-1951	Korea 1 Nov 1951	Korea 1 Nov 1952
Howitzer, 105 mm	35	30	180	30	40	55	55
Howitzer, 155 mm	30	25	140	20	40	40	40

Table prepared from data submitted in support of testimony by General Palmer, Army G4, as it appears in U.S. Senate, *Hearings before the Preparedness Subcommittee,* 384.

In three months the ammunition situation in Korea stabilized, to the extent that by October of 1950, when the temporarily raised supply rate was returned to the lower rates, 200,000 tons of ammunition above requirements for Korea had arrived in Japan. The

success of the Inchon landing in September 1950 and the rapid advance of UN forces north of the 38th parallel prompted the cancellation of all but a few outstanding requisitions.[32] It appeared again that the war would end in short order. The apparent abundance of ammunition in theater as the war appeared to wind down, caused the funds logistics planners believed necessary to establish and grow production, to again not be appropriated.[33] The buildup of ammunition was not in vain.

UN forces were fortunate that such a large stock of ammunition had built up in FECOM. On 24 November, as UN forces advanced north towards the Yalu river Chinese Communist volunteers launched attacks against both Eighth Army forces in the western portions of North Korea, and X Corps on the eastern side of the Taebak mountain range. As UN forces fought to disengage from the mass attacks and withdraw south, their ammunition consumption again leapt. Not only were their levels of expenditure increasing now that they were again in contact with the enemy, but in the haste to withdraw south, often being forced to fight or bypass fortified Chinese roadblocks, much material and ammunition was abandoned or destroyed. In response, ammunition was again transported from depots in Japan, and the supply flow from CONUS restarted.[34]

Although the opportunity to gain funds for the expansion of the production base, by borrowing funds from MDAP, was lost; the Chinese intervention would finally generate enough concern in the halls of Washington, that the nation's leaders would resolve to do what was necessary to counter what was seen as a world-wide Communist threat, merely manifested in Korea. Appropriations, both through supplementals and finally through normal budgeting, funneled funds into the expansion of the ammunition production base.[35] But, precious time had been lost, and the funds finally appropriated in

1951, would not have an effect on the battlefield until late 1953.[36] In the meantime, ammunition needs continued to be supported from a dwindling ammunition reserve.

In response to the on going communist threat, and to better support forces in Korea, President Truman approved several key policies on 15 and 16 December 1950. On 15 December, the president established the Office of Defense Mobilization to integrate and streamline the nation's defense mobilization program. That evening, President Truman also announced a broad program to build up the nation's military preparedness. Some of the critical measures in the program were the expansion of the Armed Forces to 3.5 million men; the enactment of price controls for key materials; the establishment of the Office of Defense Mobilization to direct and synchronize the government's mobilization programs; the curtailment of some consumer production; military production would be expedited; and the President would declare a state of national emergency.[37]

By proclaiming a national emergency on 16 December 1950 President Truman greatly assisted the military's effort to boost defense production. This declaration enabled the Army to let contracts through negotiation rather than being required to go through the more time consuming process of formal advertising, which was required by the Armed Services Procurement Act of 1947. This action also returned to military production the plants that had been sold or leased at the end of World War II under the national security clause.[38] America's industrial might could now be brought to bear just as ammunition expenditures would reach new heights. The question was, would the ammunition produced reach the battlefield before the ammunition reserves were exhausted?

Ammunition Consumption

On 14 April 1951, Lieutenant General James Van Fleet assumed command of the Eighth U.S. from General Ridgeway, upon Ridgeway's assumption of command from the relieved General McArthur. Van Fleet was an experienced combat leader who had begun World War II by leading a regiment ashore during D-day and ended it as a Corps Commander. General Van Fleet, who had recently gained fame advising the Greek Army in their victory over a Communist insurgency, had been selected for this commandant at the request of President Truman.[39]

As Van Fleet took command, the three corps making up Eighth Army were digging in positions north of Phase Line Kansas, along the Imjin River trace north of the South Korean capitol of Seoul, in preparation for an expected Communist offensive. A week later, the numerically superior Chinese Communist Forces (CCF) launched the First Step, Fifth Phase Offensive on the night of 22 April in an attempt to seize Seoul.[40] Under the weight of the CCF attacks, Van Fleet authorized a slow withdrawal to Phase Line Kansas, supported by massed air and artillery fires. While his forces were defending along the Imjin river line, Van Fleet was also preparing defensive positions along Lines Golden and No Name, which were for the final defense on the northern outskirts of Seoul.

Concerned about the destruction of the Eighth Army, General Ridgeway, who was now the Far East Commander, advocated the abandonment of Seoul and withdrawal of the Eighth Army to positions south of the Han River. Van Fleet, understanding the psychological significance of retaining the capitol, refused. He told General Ridgeway that he was confidant that his forces could holdout and, using air and artillery fires, he

could severely damage the enemy. By 29 April, Eighth Army had succeeded in grinding the Chinese advance to a halt generally along Lines Golden and No Name, retaining Seoul. Despite the high profile losses of the 6th ROK Division and the British Gloucestershire Regiment, Van Fleet had successfully used air attacks and naval and Army indirect fires to inflict an estimated 75,000 to 80,000 enemy killed and wounded, of which about 50,000 were lost in front of Seoul.[41] Van Fleet soon got another opportunity to show his preference for the use of artillery fire.

As the CCF withdrew out of artillery range to refit, the Eighth Army set about consolidating and improving its defensive positions along No Name Line. Van Fleet, believing intelligence reports, strengthened his defense along the western approach to Seoul, stressing his intent to use firepower to defeat the enemy. As long as sufficient ammunition could be brought forward, Van Fleet directed that five times the normal day of fire be used to counter enemy attacks. The number of rounds per artillery tube allocated in the Van Fleet Day of Fire is in table 2

Table 2. The Van Fleet Day of Fire

ROUND	QUANTITY
105-mm Howitzer	300
155-mm Howitzer	250
155-mm Gun	200

Source: Mossman, *Ebb and Flow*, 442.

In preparing for this, the Eighth Army G4 estimated that because of the need to dedicate all transportation resources to move ammunition, this rate of fire could only be

maintained for about seven days, during which the troops could sustain themselves from forward stockpiles of other supplies.

On 16 May 1951, the CCF launched their Second Step, Fifth Phase Offensive not in the west as Van Fleet expected, instead pushing their main effort attacks against X Corps which was located in the mountainous center of the peninsula.[42] In what would come to be known as the Battle for the Soyang, the 2d Infantry Division again took the brunt of the CCF attack. The CCF belief that by attacking in the center of the peninsula that they would avoid substantial UN fires was proven wrong. Following Van Fleet's guidance on fires, during the seven days from 17 to 23 May, UN gunners supporting X Corps fired over 309,958 rounds. This effort pushed Eighth Army logisticians to the limit of what they could support, with Corps' reserves falling to a single DOS, yet stocks at firing batteries never went empty during the course of the battle.[43] The generous expenditure of artillery again appeared to be decisive for the Eighth Army, with CCF casualty estimates approaching 65,000. In one valley alone over 5,000 corpses were counted, proving the moniker of the "May Massacre" had been well deserved. Amazingly, ammunition expenditures had not yet reached their peak.[44]

With Van Fleet's encouragement, ammunition consumption had leapt dramatically, with consumption in May exceeding the approved ammunition day of supply by 20-50 percent. To support this rate of consumption, the Far East Command attempted to get the authorized expenditure rates doubled. The FECOM G4, already concerned about the ability of war reserves to sustain the combat in Korea until new production began to arrive balked. In a compromise, the rates were increased for two types of rounds: 105 millimeters from 30 to 40, and 155millimeters from 20 to 40

rounds.[45] But significantly, FECOM's request to raise the safety level from 45 to 60 days was approved. This was the point at which the U.S.'s *worldwide* ammunition situation truly became precarious. Using 155-millimeter rounds to illustrate the impact, by increasing the DOS from 20 to 40 rounds, and adding an additional 15 days of supply to the minimum safety level, FECOM in effect increased the stockage level by 60 percent in a single day at time when the worldwide stock of that round was only 4 million rounds. Essentially, a quarter of the worldwide reserves would be tied up maintaining FECOM stocks.[46]

With the commencement of truce talks on 10 July 1951, major offensives ceased and the war transitioned to operations labeled as active defense. Combat actions for the duration of the war were limited to smaller offensives designed to improve defensive positions along the Main Line of Resistance (MLR) in preparation for an armistice. This transition of the war into what some termed "the sit down war" did not result in a dramatic decrease of expenditures. In fact, by concentrating artillery fires for limited advances, while the rest of the MLR was static, U.S. forces actually participated in some of the most intense days of firing in the war.

In a series of attacks in the hills near Inje, Korean artillery expenditures reached the high point for the war. During the period 18 August to 5 September, 2d Infantry Division attacks were supported with about 1,087,500 rounds. This averaged out to approximately 10,000 rounds per day for each of the five 105-millimeter howitzer battalions, and 7,500 rounds for each of the three 155-millimeter howitzer battalions firing in support of the division. These rates raised questions about the necessity of these extravagant expenditures.

As the war entered this static phase, the CCF were increasingly able to incorporate their artillery into their operations. By occupying relatively static positions, they could now bring their artillery forward and use prepared, heavily fortified firing points, to fire on UN positions. This increased level of protection enabled the Communists to increase their number of tubes dramatically, going from an estimated 530 tubes in October 1951 to 1,246 by July of 1952.[47] This resulted in an increase in UN counterbattery fire missions. Because the CCF artillery pieces were well dug in, the amount of UN artillery used in this mission was substantial, in order to achieve the desired effect. By 1953 counterbattery missions constituted 9 percent of the total artillery missions, with an average 5,400 rounds used along the 150 mile MLR in daily counterbattery fire missions.[48] More significantly, the transition to static defensive positions also increased the amount of interdictory fire. These fires designed to harass and disrupt enemy activities constituted an increasing portion of the U.S. fire missions.

The change in the character of the war from a mobile war to a static war increased the UN forces' consumption of ammunition. As table 1 shows, over the course of the Korean War, the quantity of rounds authorized as a day of supply grew to support the increasing consumption associated with the changing type and intensity of operations. The effect of this increase was seen in two different areas: the first was that an increase in the number of rounds authorized for a DOS had the short term effect of lowering the on-hand supply levels, as measured in DOS, without any change in the actual number of rounds on hand. Over time, this decrease in supply levels caused an increased number of rounds to flow into theater to raise the actual stockage back up to desired levels. In the end, this increased the number of rounds in theater, and gave commanders more

ammunition in reserve and on the line. It did, however, significantly drain the reserve stocks worldwide and contributed to occurrences of that were termed shortages. General Palmer, the Army G4, illustrated this impact effectively in his testimony to the preparedness committee by saying, in September 1951 there were on hand in the Far East 175 days of supply of supply of the 105 howitzer ammunition. A month later, in October, the level had dropped to 85 days of supply yet the actual number of physical rounds had dropped only eight percent, while the number of days of supply was cut in half.[49] The second factor, which was closely related, and also magnified this effect was the increase in the number of weapon systems in theater.

Just as increasing the quantity of rounds in the day of supply decreases the quantity of ammunition on hand as measured in DOS, so does an increase in the number of weapon systems demanding a share of the ammunition. Throughout the Korean War the numbers of weapon systems steadily increased, thus lowering the on-hand levels, and conversely increasing the amount of ammunition needed to flow into FECOM. Unfortunately, this was not done as part of a long-range plan, instead being in response to some change in circumstances. Because there was no visibility on future increases, there was no mechanism to plan for increasing ammunition requirements in the future.

When U.S. forces initially deployed to Korea, units were typically only equipped with two-thirds of their authorized personnel and equipment due to measures to economize on force structure and equipment.[50] As personnel and equipment became available, the units were filled out to their full authorized manning, with divisions given the priority. Over time, additional units were added to support the divisions specifically corps artillery units. Each division typically had between three and five artillery

battalions firing in support of its operations. This capability was phased in over time, largely because of the need to renovate World War II weapons systems to support the increase in weapon systems.

The quantity of artillery tubes not only increased for U.S. forces, but also in the Republic of Korea Army (ROKA). The ROKA started the war with only one 105-millimeter artillery battalion per division. This comparatively small amount of firepower was certainly responsible for what was, at times, ineffective performance against the enemy. As weapon systems became available in theater, additional battalions were added to ROKA divisions to give them firepower comparable to a U.S. Division, of three battalions of 105-millimeter howitzers and one battalion of 155-millimeter howitzers.[51] Supporting fires in the form of Corps artillery were typically supplied by U.S. artillery units. Combining increases in both U.S. and ROKA artillery units, the number of tubes between February 1951 and September 1952 grew as shown in table 3.

Table 3. Increases in Number of Artillery Pieces

WEAPON SYSTEM	FEBRUARY 1951	SEPTEMBER 1952
155-mm Howitzer	226	420
105-mm Howitzer	610	912

Data for this table was extracted from figures supplied during the testimony of General Palmer, G4 as shown in U.S. Senate, *Hearings before the Preparedness Subcommittee,*396.

The combination of increasing the number of artillery pieces, increases in the number of rounds per day of supply, and the rise in the minimum safety level for the theater, all combined to multiplicatively increase the quantity of ammunition supply

levels required by FECOM. Until mid-1952, these supplies of ammunition came exclusively from war reserve stocks. In mid-1952, a small quantity of rounds, produced using in-process components began to augment reserves. But, full-scale production was required to alleviate the growing ammunition strategic reserve supply problem. When this occurred, delays in the production of new ammunition moved to the forefront as the nexus of the supply problem.

Challenges of Production

As General Collins, the Army Chief of Staff, stated at the beginning of his testimony to the Senate Armed Services Committee during its March Hearings, the Korean War was waged on a peacetime footing.[52] The challenges of reinvigorating an ammunition industry previously engaged in only small-scale demilitarization and renovation efforts illustrate well the accuracy of Collins' statement. In light of the steadily escalating ammunition requirements of the Far East Theater, and the limited capability of the nation's ammunition reserves, the delay in the full-scale production of ammunition became the most critical factor contributing to the ammunition shortage. Not only was the ammunition industry in a poor state, but, the rest of the American economy was booming and it was hard to entice businesses to take on this critical, yet less lucrative activity. The Truman administration soon found itself at odds with another aspect of their post-World War II goals.

The rapid expansion of consumer goods production following World War II was exactly what the Truman administration had hoped for. Their efforts to quickly shift what had become excess military production to the civilian sector were very successful. So successful in fact, that there was now little excess industrial capacity to shift back to

ammunition production. The failure to declare a national emergency until January of 1952, ensured that for the first year and a half of the war, when starting production was critical to the military, it would have to compete against the profitable production of consumer goods. The requirement to advertise contracts, in an unreceptive business environment, wasted precious time. Only with President Truman's declaration of a national emergency on 16 January 1952, would the military be given a priority in production and have the ability to let contracts through negotiation instead of through advertising.

An additional effect of the booming economy was the influence it had on securing the manpower needed for production. By 1950, the nation had reached a degree of full employment, which many economists had previously thought impossible.[53] The need for qualified manpower extended through all phases of procurement, from administration to production. Beginning the procurement processes of advertising and negotiation with contractors, would first require the government to hire and train the personnel needed to accomplish this.[54] In 1950, the fourteen Ordnance District offices and the Ordnance Ammunition Center (OAC) were staffed with a total of 21 military personnel and 263 civilian employees. By 1953, the workload had required the work force to be expanded to 127 military and 6,200 civilian personnel.[55] Assembling a qualified staff, capable of meeting civil service hiring standards, was merely one of the challenges in the administrative phase of the production process.

Administrative Lead Time

During his testimony before the Subcommittee on Preparedness, General Ford, the Chief of Ordnance, outlined many of the challenges, which caused administrative lead

time to average 113 days.[56] Pre-procurement actions included the determination of actual requirements which enabled the computations to determine the request, through the appropriation process, for funds. Once an appropriation was enacted by Congress, the funds were transferred incrementally down through the Department of Defense, the Department of the Army, finally arriving at Ordnance Branch. Contracts could not be let until funds were in procurement accounts. Concurrent with this process, critical production planning, negotiation, and coordination occurred with contractors.[57]

The most critical aspect of the administrative phase was the Army's role as, what equated to the prime contractor for ammunition production. Because of the inherently dangerous nature of certain aspects of ammunition production, specifically assembling the complete round with the explosive charge, propellant, and fuse, the Army accomplished those aspects of production in its own plants. Other aspects of production, such as the manufacture of metal components, shell casings, shell projectiles, and packaging for shipment were contracted out to manufacturers. The planning and coordination to schedule components to be completed, on hand, and ready for assembly was critical. A shortage of a single component could delay production for months. While this may seem simple, it was actually quite complex. As the Deputy Chief of the Ammunition Branch, Colonel Medaris told the Senate Committee for Armed Service, while a typical round consists of approximately 15 different components, the Army procured over 270 different types of rounds. In an attempt to simplify the process, and achieve some economies of scale, the Army had designed some round types to use parts interchangeably with other round types. This reduced the number of separate components down to only 1,000, but increased the importance of dependable delivery.[58]

With money on hand, the procurement plan completed, and requirements scheduled, the Ordnance districts could finally begin the contracting process. Potential contractors studied production requirements, developed plans and cost estimates prior to bid submission. The government then selected the lowest qualified bidder and entered into contract negotiation. Prior to signature, contracts were subject to a lengthy review process to ensure compliance with contracting regulations. The actions that preceded the signing of a contract made up what is termed “Administrative lead time.” Once the contract was signed, the production phase began.

Production Lead Time.

The contractor then began to accomplish all the things necessary to begin the production of ammunition. These pre-production activities, following the completion of the contract, made up what is called “production lead time.”[59] The production lead-time encompassed all activities preceding full production. Administrative and production lead time generally accounted for 18 to 24 months.

Contractors began by completing their production plan, which included determining facility, personnel, tooling, and material procurement, which had to occur. Any contracts for facilities modification or tooling which had to be let, were a priority, as having the tools and facilities were required to move on to the hiring and training of personnel. One of the biggest causes of delay was difficulty encountered in the procurement of tools.

The sad state of the tool making industry has been discussed previously. Not until the Declaration of National Emergency in January 1951 did the government have the power to direct the priorities of the industry towards ammunition production. The tool

industry, in apparent good faith, vastly overestimated their capabilities to produce tools for ammunition production. They entered into contracts for tool production with timelines that they were unable to fulfill.[60] These unforecasted delays, when added to the known low capacity of the industry, caused pronounced slippage in component production schedules, which in some cases doubled the time planned to prepare for production.[61] This in turn, disrupted the closely synchronized assembly schedules, and protracted production timelines.

As production lines neared completion, contractors began to hire and train production workers. In the tight employment market, there were often challenges in finding qualified personnel. Often times, unskilled workers were hired, who then had to be trained in their task. Invaluable to the process was the availability of "know-how files" compiled by the Ordnance Corps as they demobilized ammunition production at the end of World War II. These instructions on how to complete the various production tasks, were, when possible, supplemented by having former ammunition workers provide instruction. This was particularly valuable for complex machining, assembly, and loading tasks.[62] Simultaneous with these personnel activities, contractors also identified and contracted with producers or providers of the materials required for the production of the contracted for components.

In the procurement of critical materials such as steel, aluminum, and other materials used to produce not only the ammunition, but also the machine tools necessary in the production process, the government was again placed in competition with both civilian production and other defense procurement programs. Delays in acquiring these materials were routinely encountered. Not until July 1951, did the government take action

to direct priorities to assist the machine tool industry. While the ammunition production program benefited from this action, the action was in general support of defense production programs. There were other programs, such as tank production, which were considered of higher priority than ammunition. Finally in December of 1951, the ammunition production program specifically received special priority recognition outside of the Army.[63]

Typically between ten and twelve months after completion of the contract, a "pilot lot" was produced. This test product of the design process was sent to Aberdeen Proving Grounds where it was tested to ensure that the component met all of the production standards specified in the contract. If the component did not meet specifications, then adjustments in the production process were made, and specimens retested, until the component produced was within specifications. This being accomplished, the contractor produced his first "manufacturing lot," which was in turn tested to verify the production process would yield components that met specifications.

With the production process proven, the contractor then set about expanding his production capacity to levels required to meet the production goals specified in the contract. This typically included acquiring additional machines and workers. This expansion of the production capability typically ended with the line achieving full production at between 18 to 24 months into the process.[64]

When the components were completed, they were then shipped to the designated government loading plant where they had explosive charges applied to war-heads, cartridge cases were filled with propellant, and the assembled round fused. Once the round was completed, it was again sent to Aberdeen Proving Grounds for testing to

ensure that it met specifications prior to the lot being shipped. The rounds were then specially packaged and shipped. Production of ammunition did not happen overnight. During the Korean War, it remained a complex process taking considerable time, to produce a reliable round in the desired quantities.

Expanding the nation's ammunition production capabilities to full production from what was essentially a standing start, was a large complex task which took considerable time, effort, and resources even when things went smoothly. During the investigation by the Congressional Subcommittee on Preparedness, it became clear that the process had not gone smoothly but had encountered problems and delays, some of which should have been foreseen, including the shortfalls in machine tools and difficulties finding employees.

In the end, the Ordnance Department was able to work through delays and successfully reestablish production before the nation's ill-prepared ammunition reserve stocks were exhausted. After examining the contributions that production delays, unbalanced reserves, and escalating requirements made to the development of ammunition shortages, we return to where we started. Were there ammunition shortages? And, how do you define a shortage?

Ammunition Shortage in Context

All parties acknowledged that there were certainly, on occasion, local shortages. In particular, early in the war, shortages were largely due to problems of local distribution given the poor distribution infrastructure found in the challenging terrain of Korea.[65] These shortages occurred at the end of the supply line, in the front echelons of combat units. But this was the exception, not the norm.

General Van Fleet, in his testimony both to the Committee on Armed Services and to its Subcommittee on Preparedness expressed the concerns he had about shooting "from our stockpile below that level, both authorized and critical level, so therefore we would give a quota of ammunition rather than a ration."[66] It becomes apparent after reviewing the body of General Van Fleet's testimony that while he was clearly a decorated combat commander, he had a limited in-depth understanding of the logistics of ammunition. By suggesting that he got concerned when stocks dipped below the 90-day level, he appeared to not understand that his ammunition levels *should* have fluctuated in the range between 60 and 90 days of supply.[67] By differentiating between a quota and a ration, Van Fleet again appears confused. He appears to have believed that replenishment normally occurs by day of supply, which one could misconstrue as constituting a ration. In fact, ammunition is normally replenished based on the available supply rate, which is in fact a quota of rounds allocated per gun.

In his presentation of data on ammunition levels in FECOM, General Palmer, the G4, states forcefully in his testimony that,

> Despite shortages in FECOM reserves and in the pipelines, despite difficulties in getting our production lines going, and despite our having to haul ammunition 5,000 miles across water, we have supplied our troops with enough firepower to outshoot the enemy by an impressive 10 rounds to his 1.[68]

The facts, support his statement as seen in table 4, which shows that ammunition levels remained above the safety level for the majority of the period from January 1951 to March 1953. This casts doubt Van Fleet's allegation of there being "a serious shortage of ammunition ever since I have been in Korea; there has been a critical shortage at times."[69]

Table 4. Ammunition Levels from January 1951 to March 1953

Round Type	Months Below 60-Day Level	Months Above 60-Day Level	Months Above 90-Day Level
155-mm Howitzer	4	23	6
105-mm Howitzer	0	27	12

Data extracted from tables presented during General Palmer's testimony in U.S. Senate, Hearings before the Preparedness Subcommittee, 396.

Of the months that 155-millimeter rounds were below the safety level, the lowest the on-hand levels got was 45 days of supply in December 1951, inclusive of unit basic loads. This is equal to the original safety level that FECOM operated under, and equates to 612,000 rounds on 31 December. There were, from Van Fleet and other senior leader's point of view, shortages in theater reserves. This perception was due to the failure to consider the context of the large size that the theater reserves had grown to. With that perception of shortage, any action by commanders to ration use, was perceived by soldiers as proof that there was a shortage.

The fact was that the supply levels had been inflated by the combination of factors previously discussed, to levels well beyond what was required. By continually increasing the number of rounds constituting a day of supply, in reaction to tactical events of limited duration, the number of rounds allocated exceeded the number of rounds fired. This is seen in table 5.

Table 5. Ammunition Usage Compared to Day of Supply

Round Type	World War II Average Useage	Korea Useage (26 Jun 50-10 Nov 52)	Approved Dos (1 Nov 1952)
105-mm	35	35.2	55
155-mm	30	19.4	40

Information extracted from data presented in Huston, *Guns and Butter*, 164.

General Van Fleet was clearly a commander who was trying to ensure that his soldiers had all the ammunition needed to protect them. Unhappy with the static role his Army played in the limited war fought during the negotiation of the armistice, he sought to throw off the reigns and launch an offensive that would secure victory. When this was not allowed and he was criticized for lavish artillery expenditures, Van Fleet launched the only offensive left open to him. He attacked those who, he perceived, begrudged him the ammunition needed to protect his soldiers from dying in a sit down war. General Van Fleet may have felt constrained, because he was not given all the ammunition he wanted to "match mass, human wave with steel rather than with bodies."[70] In returning to America and voicing his concerns about the way the war in Korea was being fought, Van Fleet hoped to rally the nation. As he told the Senate Armed Service Committee, "America has always won its wars, and always will, and that properly aroused we will put into a war what it takes."[71]

In hoping to rally the nation to new exertions, by pointing out, perhaps incorrectly, that America troops were not being given the ammunition they needed to fight and win in Korea, General Van Fleet unintentionally revealed a much uglier truth- America had been unprepared, on a global scale to counter the open aggression of the Soviet Union and the forces of global Communism. While FECOM's theater reserves were perhaps perceived as being short, when the facts were revealed during testimony, the truth was that in 1952 the Army's worldwide reserves of artillery ammunition had nearly been exhausted as the industry struggled to reach full production.

The situation the Army found itself in 1952, was best explained by the Army Chief of Staff, General Collins. On 5 May 1952 he argued bluntly to prevent cuts in funding:

> We cannot cut ammunition. Too many American lives are immediately at stake in Korea and too many lives are potentially at stake in Europe. The most severe drain has been on ammunition, and we could not risk a reduction in deliveries under any circumstances. If combat in Korea should continue, or if our troops in Europe were attacked, we would have no reserves of some of the most important types of ammunition.[72]

General Collins' statement was supported by General Palmer's testimony in which he presented data on the reserves that showed that the truly substantial shortages were in reserve stocks in the U.S. and Europe (table 6). If the Subcommittee on Preparedness were to fulfill their charter, which in the words of the Chairperson, Senator Smith, was to identify the causes of the shortages, with the purpose of preventing their recurrence; they would have to go beyond the causes they identified: the inability to grasp the nature and potential duration of the war in Korea, the unpreparedness of the nation's reserve stocks, and the inability to quickly mobilize and bring to bear the industrial power of the nation. The committee would have to look deeper to identify how these conditions had been allowed to arise.

Table 6. Ammunition Authorizations, Stocks, and Shortages

	31 Dec 1951			31 Mar 1952			30 June 1952			30 Sep 1952		
Shell, HE 105mm	Auth'd	On-hand	Short	Auth'd	On-hand	Short	Auth'd	On-hand	Short	Auth'd	On-hand	Short
FECOM	2,320	2,388	+68	2,593	4,660	+2,067	3,332	4,793	+1,461	3,286	4,206	+920
U.S. + other	35,027	5,523	29,504	33,706	5,192	28,514	35,004	3,953	31,051	34,956	5,434	29,522
MDAP	2,576	1,580	996	5,966	1,610	4,356	5,801	1,782	4,019	10,038	2,247	7,791
Total	39,923	9,491	30,432	42,265	11,462	30,803	44,137	10,528	33,609	48,289	11,887	36,393
Shell, HE 155-mm												
FECOM	870	612	258	868	1248	+380	1,104	1,137	+33	1,098	961	137
U.S. + other	15,963	1,935	14,028	14,049	916	13,133	12,900	809	12,091	12,001	1,033	10,968
MDAP	5,890	3,594	2,296	1,158	78	1,080	1,422	120	1,302	3,093	355	2,738
Total	22,723	6,141	16,582	16,075	2,242	13,833	15,426	2,066	13,360	16,192	2,349	13,843

Data drawn from a table presented during General Palmer's testimony as shown in U.S. Senate. *Hearings before the Preparedness Subcommittee*, 394.

[1]As defined in *The New Lexicon Webster's Dictionary of the English Language* (New York: Lexicon Publications, 1989), 920.

[2]U.S. Senate, *Hearings before the Committee on Armed Services on Ammunition Supplies in the Far East: Testimony by General James A. Van Fleet and Others, March 5, 6, and 10 1953* (Washington, DC: GPO, 1953), 30.

[3]Ibid., 22.

[4]Ibid.

[5]Ibid., 70-71.

[6]Testimony given to a subcommittee of the House Committee on Appropriations, 9 December 1950, as quoted in U.S. Senate, *Hearings before the Committee on Armed Services*, 71.

[7]Testimony given to a subcommittee of the Senate Committee on Appropriations, 5 May 1952, as quoted in U.S. Senate, *Hearings before the Committee on Armed Services*, 71.

[8]U.S. Senate, *Hearings before the Committee on Armed Services*, 73.

[9]The Senate Armed Services Committee Resolution, dated 12 March, as printed in U.S. Senate. Hearings before the Preparedness Subcommittee Number 2 of the Committee on Armed Services, U.S. Senate, Eighty-Third Congress, First Session on Ammunition Shortages in the Armed Services: April 1, 8, 9, 10, 13, 15, 16, 17, and 20, 1953. Washington, DC: GPO, 1953, 1.

[10]Ibid., 1-5.

[11]"Mr. Churchill's Address Calling for United Effort for World Peace," *New York Times*, 6 March 1946, 4.

[12]James A. Huston, *Guns and Butter, Powder and Rice* (Selinsgrove: Susquehanna University Press, 1989), 25-28.

[13]William R. Reeder, *The Korean Ammunition Shortage* (Syracuse: Syracuse University, 1954) 4-5.

[14]Huston, *Guns and Butter*, 35; and Reeder, *Korean Ammunition Shortage*, 5.

[15]Information provided in the statement of LTG G.H. Decker, Army Comptroller as quoted in U.S. Senate, *Hearings before the Preparedness Subcommittee*, 285.

[16]Ibid.

[17]James A. Huston, *Outposts and Allies: U.S. Army Logistics in the Cold War, 1945-1953* (Selinsgrove: Susquehanna University Press, 1988), 74-75.

[18]Information provided in the statement of General Ford, Chief of Ordnance as quoted in U.S. Senate, Hearings before the Preparedness Subcommittee, 502.

[19]Huston, *Outposts and Allies*, 74.

[20]Ibid.; and Reeder, *The Korean Ammunition Shortage,* 10-11.

[21]These words, in fact, first appear in a question asked Truman during a press conference on 29 June 1950 at which President Truman was denying that we were at war. A reporter asked Truman if it would be correct to label Korea a police action? To which Truman replied that "that is exactly what it is." As told in David McCullough. *Truman* (New York: Simon & Schuster, 1992), 782.

[22]W. J McNiel, "Memorandum of Budget Guidance," dated 27 September 1950, as quoted in the testimony of General Decker, Army Comptroller in U.S. Senate, *Hearings before the Preparedness Subcommittee,* 287.

[23]Reeder, *Korean Ammunition Shortage,* 27.

[24]Ibid., 28.

[25]Information derived from the testimony of General Decker, Army Comptroller in U.S. Senate, *Hearings before the Preparedness Subcommittee,*287; and Reeder, *Korean Ammunition Shortage,* 27.

[26]George Marshall, "Memorandum of Budget Guidance," dated 27 September 1950, as quoted in the testimony of General Decker, Army Comptroller in U.S. Senate, *Hearings before the Preparedness Subcommittee,*286.

[27]Reeder, *Korean Ammunition Shortage,* 22-24; and information provided in the statement of Colonel Medaris, Assistant Chief, Ammunition Branch, Office of Chief of Ordinance as quoted in U.S. Senate, *Hearings before the Preparedness Subcommittee,* 383-4.

[28]Reeder, *Korean Ammunition Shortage,* 22-24.

[29]Information provided in the statement of General Palmer, G-4 as quoted in U.S. Senate, *Hearings before the Preparedness Subcommittee,* 396-401.

[30]Huston, *Guns and Butter,* 156-57.

[31]In October of 1950, there were still only 54 155-mm howitzers in Korea. Reeder, *Korean Ammunition Shortage.* 27.

[32]Huston, *Guns and Butter,* 162-63.

[33]As discussed earlier, a plan had been developed to borrow funds from the MDAP account to fund the expansion of the ammunition base, with the intent to repay from funds appropriated in the second and third supplementals. With the end of the war in sight, the doubts about receiving funds in the supplemental appropriations caused the Army to not borrow the funds because of fears they would not be able to repay it. Information derived from the testimony of General Decker, Army Comptroller in U.S. Senate, *Hearings before the Preparedness Subcommittee,* 287; and Reeder, *Korean Ammunition Shortage,* 27.

[34]James A. Huston, *Sinews of War: Army Logistics 1775-1953* (Washington, DC: GPO, 1970), 620-623.

[35]The second supplemental appropriation, which had already been prepared for submission, was signed on 6 January 1952 and contained over $4 billion in funding for Ordnance procurements.

[36]This became evident in General Decker's statement appearing in U.S. Senate, *Hearings before the Preparedness Subcommittee,*288, when he states that the failure to appreciate the importance of lead time in relation to appropriation of funds caused only $2 billion worth of material from the $6.7 billion of Army funds made available to even have reached the Far East.

[37]Anthony Leviero, "Truman Sees U.S. in Danger; Sets Austerity: Plans Wage-Price Curbs in Some Industries; Will Call Million More; Asks Rail Strike End," *New York Times,* 16 December 1950, 1.

[38]Huston, *Guns and Butter,* 110; General Decker's written statement includes a copy of the implementation directive associated with the declaration and a discussion of its impacts in U.S. Senate, *Hearings before the Preparedness Subcommittee,* 344,

[39]Braim, *The Will to Win,* 239.

[40]The First Step Fifth Phase offensive is sometimes called the Chinese Spring Offensive. The latter term is not synonymous, as it also includes the Second Step, Fifth Phase Offensive, which occurred in May 1951.

[41]The casualty figures listed are drawn from Billy Mossman, *Ebb and Flow: November 1950-July 1951* (Washington, DC: GPO, 1990), 437; and are based on United Nations Command figures for the entire offensive. Fehrenbach's estimate of 15,000 refers only to portions of the battle fought along Phase Line Kansas.

[42]Mossman in *Ebb and Flow,* suggests that the CCF Commander focused his attack here in an attempt to avoid the devastating fire power used against him during the 1st Step Offensive. It was perhaps believed that the mountains would make the

employment of air and artillery less effective, and that transporting the ammunition would prove too difficult.

[43]Huston, *Guns and Butter*, 160-61; *Battle of the Soyang River: An Analysis of Artillery Support, X Corps Sector, 1 May-29 May 1951,* Hqs, X Corps Artillery, 30 July 1951.

[44]T. R. Fehrenbach, *This Kind of War: The Classic Korean War History* (Washington, DC: Brassey's, 1994), 334.

[45]Department of the Army, G4, Requirements Division figures cited in Huston, *Guns and Butter*, 164.

[46]Reeder, *Korean Ammunition Shortage*, 64.

[47]William Robertson, "The Korean War: The United Nations' Response to Heavy Bombardment," Combat Studies Institute Report No. 13, *Tactical Responses to Concentrated Artillery* (Ft. Leavenworth, KS: US Army Command and General Staff College, Combat Studies Institute, 1990), 108.

[48]"Robertson, *United Nations' Response*, 112.

[49]General Palmer as quoted in U.S. Senate, *Hearings before the Preparedness Subcommittee*, 396.

[50]David Martin, "Artillery Ammunition in the Korean War," *Army Logistician*, September-October 1998, 30-33.

[51]Ibid.

[52]U.S. Senate. *Hearings before the Committee on Armed Services*, 70-71.

[53]Reeder, *Korean Ammunition Shortage*, 12-13, 45.

[54]*Historical Summary Covering the Period 2 September 1945 through 30 June 1951* (Ordnance Ammunition Center, Rock Island, IL, 9 June 1953), 76. The summary discusses the reorganization of the Procurement Division into the Material Division, greatly expanded because of new hires, and requiring approximately a month of training before they could begin the procurement process.

[55]Ibid.

[56]During testimony before the subcommittee, those seeking to blame Ordnance for the shortage presented a case where administrative lead time had been 287 days. This was an aberration, with 113 being closer to the norm. The cited problem contract had encountered a myriad of problems in the negotiation phase. Discussed in Reeder, *Korean Ammunition Shortages*, 32-33.

[57]Reeder, *Korean Ammunition Shortage,* 15-23; and U.S. Senate, *Hearings before the Preparedness Subcommittee,* 458 in which General Ford, Chief of Ordinance, talks the subcommittee through the administrative and production processes step by step.

[58]Colonel Medaris gives a lengthy explanation of the ammunition production process during his testimony before the Armed Services Committee found in U.S. Senate, *Hearings before the Committee on Armed Services,* 98-107. He returns to fill the same role during the subcommittee hearings. His testimony is interspersed with that of General Ford as found in U.S. Senate, *Hearings before the Preparedness Subcommittee,* 456-469.

[59]The terms administrative and production lead time are commonly used manufacturing terms, which are used uniformly across all sources when referring to these two phases of ammunition production.

[60]Reeder, *The Korean Ammunition Shortage,* 65-66.

[61]This information is extracted from Colonel Medaris' and General Ford's explanation of the production process appearing in U.S. Senate, *Hearings before the Preparedness Subcommittee,* 464-465. An even more detailed discussion of the bottleneck caused by delays in machine tool procurement is found in Ordnance, *Historical Summary,* 80-81.

[62]Ordnance, *Historical Summary,* 71-72.

[63]Information derived from the summary of the production process provided by Colonel Medaris and General Ford as found in U.S. Senate, *Hearings before the Preparedness Subcommittee,* 456-469; in Reeder, *Korean Ammunition Shortages,* 64 the efforts of General Ford to get this priority for ammunition production is discussed.

[64]Information derived from the summary of the production process provided by Colonel Medaris and General Ford as found in U.S. Senate, *Hearings before the Preparedness Subcommittee,* 456-469.

[65]Both individuals testifying before the subcommittee, as well as historians such as Huston agree that at times some local shortages did occur. They were consistent with shortages that had occurred in previous wars, as well as those subsequent.

[66]U.S. Senate, *Hearings before the Committee on Armed Services,* 22.

[67]Reeder agrees that Van Fleet often appeared confused about the relation of his supply levels to his ability to fire.

[68]General Palmer's testimony as quoted in U.S. Senate, *Hearings before the Preparedness Subcommittee,* 397.

[69]U.S. Senate, *Hearings before the Committee on Armed Services,* 11.

[70]General Van Fleet's testimony as quoted in U.S. Senate, *Hearings before the Committee on Armed Services*, 19.

[71]Ibid., 16.

[72]General Collins' testimony before a subcommittee of the Senate Committee, 5 May 1952 as quoted in U.S. Senate, *Hearings before the Preparedness Subcommittee*, 613.

CHAPTER 3

THE CHALLENGES OF PREPAREDNESS

As World War II concluded, the world had undergone an important change in the dynamics of international power. The role of the United States in the international arena underwent a fundamental change that was not immediately understood. As the United States assumed a dominant role in world leadership, its national strategy shifted to one of containing the USSR. Although not immediately realized, this shift in national strategy required the U.S. military to adjust its traditional approach to national security. A delay in realizing the new military requirements, and resourcing them, more than ever before effected the military's preparedness to achieve the nation's objectives. This chapter examines these changing strategies and the requirements to support them, and the political forces affecting them to determine their impact in creating the conditions that resulted in the ammunition crisis of 1952.

The achievement of victory over the Axis Powers, finalized with the defeat of Japan in August 1945, left a dramatically different world than had existed on the eve of the war in 1939. The nations of continental Europe, particularly France and Germany, lay shattered after years of conflict and exploitation. Great Britain, exhausted by years of struggle was, like the other colonial powers, relegated to a lesser role as her national power waned. The balance of power that had maintained the peace for the twenty years preceding the war, had been vitally damaged. In the war's aftermath, the wartime allies, the United States and the USSR, were the only two nations in a position to fill the void

and provide leadership in the postwar era. The two nations' responses to this new role of leadership were, initially, very different.

As the war in Europe and Japan concluded, the United States looked optimistically to the future. It believed that in the postwar era the defeated and newly liberated nations would exert their right of self-determination to develop democratic governments. In this environment, America hoped that the recovering economies would foster a new era of global free trade that would result in economic growth and improved living conditions for all. The U.S. and others looked to the newly established United Nations (UN) to administer an era of peace attained through a strengthened system of collective security.[1]

Strategy of Mobilization

In this anticipated era of postwar international cooperation and economic rebuilding, the United States expected that its military establishment would revert to its historical peacetime strategy of mobilization, although slightly altered in recognition of the new roles of air power and the atomic bomb. It was believed that the key elements of this would include: some contribution to the envisioned UN military forces; maintenance of occupation forces with subsequent withdrawal to forward bases retained in Europe and the Pacific; a strong air force and navy; continuation of the atomic monopoly until an effective system of international controls was developed; a very small Regular Army; and the maintenance of large, well organized reserves developed through Universal Military Training (UMT).[2]

As the relationship between the United States and the Soviet Union began to become strained in the summer and fall of 1945, it became clear that the United States

would be forced to assume the leadership role for the western allies in dealing with the increasingly intransigent Soviets. President Truman, in the wake of the Potsdam Conference in July, 1945 started to recognize the challenges ahead in dealing with the Soviets. While he believed that the Soviets were intent on creating a protective sphere of influence, he also believed that Stalin was a politician with whom he could workout compromises.[3] Not foreseeing the confrontations to come in the future, the United States continued to assume that a reduced military establishment could meet its national objectives of peace and stability.

With the war in Europe concluded, and the war in the Pacific nearing its end, the American public was already voicing its anticipation of a return to a comfortable existence behind the protective waters of its surrounding oceans. America had historically been resistant to overseas involvement and a large military establishment, preferring to rely on a strategy of mobilization for its defense. In place prior to World War II, the strategy was based upon the premise that the protection afforded by the Atlantic and Pacific oceans, patrolled by a strong Navy, would grant it the time necessary to mobilize industry and the manpower necessary to expand its Army to deal with any threat on the horizon. A resurgence of these isolationist tendencies and a desire to quickly reduce its expensive military forces back to peacetime levels gained momentum in a public unaware of any postwar concerns over Soviet intentions.[4]

Demobilization and Reconversion

The economic disruption that occurred during the demobilization following World War I had taught the nation's leaders the importance of postwar planning. Consequently, planning to reduce the nation's military and to convert industrial

production from military to civilian goods was begun in 1942. A rapid return to civilian production was deemed critical to meeting the pent up demand created by wartime rationing, and to creating jobs for the returning servicemen. In 1944, in an attempt to establish a degree of fairness to the discharge process, the Joint Chiefs of Staff (JCS) announced that individuals would be demobilized using a point system which would release those serving longest overseas first. These seemingly well laid out plans quickly encountered problems when the war concluded.[5]

The ending of the war, and the public's understandable desire to see the rapid return of long absent loved ones quickly came into conflict with the requirement of the military to accomplish critical postwar tasks. The Army was forced to attempt to balance the need for occupation forces and the need to collect and dispose of vast overseas stores of material against the rising demands for the return of soldiers to America. Noting this conflict, President Truman stated in his memoirs that,

> Once hostilities are over, Americans are as spontaneous and as headlong in their eagerness to return to civilian life. . . . This impatience is the expression of a deeply rooted national ideal to want to live at peace. But the tragic experience following World War I taught us that this admirable trait could lead to catastrophe. We need to temper and adjust the rate of demobilization of our forces so we would be able to meet our new obligations in the world.[6]

The headlong rush for demobilization, experienced after World War I, arose again as the Army struggled to meet its post-World War II requirements, with predictably catastrophic implications for meeting present and future responsibilities. As the public's voice rose to speed demobilization, it found a receptive ear in the Republican Party. The Republicans saw in demobilization an issue that they could use in the fight to regain control of Congress during the upcoming 1946 congressional elections. Seizing this opportunity, Republican leaders began to stir up public discontent over the pace of

demobilization and began to speak out to speed it up. In doing so, they ignored the need to maintain military strength by delaying and finally defeating the administration's efforts to pass legislation to enact Universal Military Training. Tired of war, isolationism gained favor with the American public.[7]

Public and congressional pressure quickly mounted, with mail flooding into Congress urging the acceleration of demobilization reaching 80,000 letters and telegrams per week. Democratic congressmen, concerned about reelection, joined the movement to speed demobilization. As pressure outside the military grew, within the military, service members also began to agitate for accelerated discharge.[8] Yielding to the pressure, the military sped up demobilization with serious consequences. Army Chief of Staff George C. Marshall described the impact by stating,

> For the moment, in a widespread emotional crisis of the American people; demobilization has become, in effect, disintegration, not only of the armed forces but apparently of all conception of world responsibility and what it demands of us.[9]

The rapid drawdown in forces from 8 million soldiers in May 1945 to only 684,000 volunteers in June of 1947 would dramatically impair the Army's ability to fulfill its responsibilities.[10]

Nowhere was the acceleration of demobilization more acutely felt than in the technical services. The sudden loss of experienced technical service soldiers degraded the Army's ability to collect, inventory, store, and dispose of the mountains of material spread over the globe. Because the technical service troops typically served in rear areas, they did not suffer high numbers of casualties, and because of their length of service, they typically had high discharge points resulting in early release. This attrition of experienced

technicians resulted in improper handing and storage of ammunition, as well as prevented the conduct of accurate inventories, as discussed in detail in chapter 2.[11]

The delay and eventual failure of the Republican Congress to pass UMT after 1946 further impacted the Army's ability to fulfill its postwar responsibilities. UMT was central to the Army's ability to maintain steady manning and training levels in the post-war Army and strongly supported by Army Chief of Staff, George C. Marshall, who advocated a strategy based on mobilization.[12] Without UMT, the Army was forced to rely on a reluctant public to fill its ranks. In order to keep pace with the losses in its ranks, the Army was forced to steadily lower its enlistment standards. The lower quality soldiers proved ill suited to accomplishing the technical tasks critical to transferring excess property to war reserve stocks, and maintaining it to readiness standards.

Shift to Containment

By the spring of 1946, the economy was growing rapidly to meet civilian demands and the Army had weathered the worst of the disruption caused by the public pressure for demobilization. The Army's leaders were busy negotiating and planning the reorganization of the Armed Services into the National Military Establishment, and managing its occupation duties. The Truman administration was increasingly preoccupied with a series of confrontations and disagreements with the progressively more intransigent Soviets over the administration of the Eastern European countries it had occupied at war's end.

A growing sense of crisis in the U.S.-Soviet relationship, caused by a series of controversies over Poland, the Balkans, U.N. procedures, Iran, the Dardanelles, and the Italian peace treaty, reinforced the warnings from the Truman administration's

conservatives regarding Soviet intentions. Ambassador to the USSR Averill Harriman, Secretary of the Navy James Forrestal, and others were issuing dire warnings about Soviet intentions and America's diminished ability to respond due to demobilization. They were equally concerned about the apparent ineffectiveness of American diplomatic efforts to counter the Soviet actions.[13] President Truman increasingly came to share the concerns and dissatisfaction with American diplomatic efforts. In a rebuke given Secretary of State Byrnes on 5 January 1946 regarding his conduct in dealing with the Soviets, President Truman appeared to have decided that the time had come for firmness of action, stating that, "Unless Russia is faced with an iron fist and strong language another war is in the making. Only one language do they understand…how many divisions have you?"[14] President Truman's growing concerns were validated by a speech given by Premier Stalin on 9 February 1946 in Moscow. In a rare public speech, Stalin stressed the incompatibility of communism and capitalism, and implied that he believed that a war between adherents to the two systems was inevitable. These unambiguous statements of incompatibility caused grave concern among members of the administration. Even liberals, such as Supreme Court Justice William O. Douglass, saw ominous overtones in the speech. Douglas remarked to Forrestal that Stalin's speech constituted "the Declaration of World War III."[15]

In response to Stalin's speech, the State Department queried its Moscow embassy for an assessment of Soviet intentions. The response, penned by Charge d'affairs George Kennan became one of the seminal Cold War documents, and triggered a shift to a strategy of containment towards the Soviets. In his "Long Telegram," Kennan ascribed Soviet actions not to its Communist ideology, but to "a traditional and instinctive Russian

sense of insecurity." Kennan attributed aggressive Russian moves to a desire to establish a protective sphere on their periphery. He also argued that the immediate Soviet threat was not of arms, but of infiltration and subversion. To counter this, Kennan advocated unity stating that "their success will really depend on the degree of cohesion, firmness and vigor which the Western world can muster." Critical to developing this "cohesion," Kennan recommended that the Truman administration must "see that our public is educated to the realities of the Russian situation."[16]

Kennan's telegram came at a pivotal moment. Truman had already been moving toward increased firmness in dealing with the Russians, driven by voices within his administration and by Republican criticism of "appeasement."[17] The dilemma was how the strategy of "Containment" would be implemented given America's diminished military capabilities and the ongoing pressure for demobilization.[18]

For the remainder of 1946, the Truman administration displayed resolve in not granting any significant concessions to the Soviets. Demonstrating its adoption of Kennan's recommendations, the administration turned back Russian designs in the Dardanelles with a show of naval force, and abandoned its efforts to establish international control of atomic energy. Instead, Truman recognized the need to possess a unilateral atomic monopoly, in part to counterbalance weakened conventional forces. In July 1946 Truman initiated the first use of American economic power to alleviate conditions that might breed communism by extending a $3.75 billion loan to Great Britain.[19] By the end of 1946, the United States had begun efforts to develop three of the four components that would be the pillars of its strategy to contain Soviet aggression; collective security agreements, nuclear deterrence, and the use of its powerful economy

to support its allies.[20] It would take a few more years before the need for a conventional deterrent would be realized.

The Republican victory in the 1946 congressional elections effectively eliminated any hope of stemming the erosion of conventional military power. Responding to the demands of a vocal public, the Republican controlled Congress enacted measures to return the United States to isolationist policies, despite their accusations of "appeasement" against the Truman administration. Cutting military budgets and reducing the size of the peacetime Army were viewed as essential for achieving their other priorities; reduced government, balanced budgets, and tax cuts. Budget cuts were largely directed at Army programs, because the Republicans believed they understood the lessons of World War II. Naval power was essential to controlling the seas and air power was essential to employing the new cornerstone of American national defense, the atomic bomb.[21] This approach limited the Truman administration's options for responding to the crisis of 1947 and beyond.

Despite concerns over growing Soviet intransigence, and the loss of Congress to the Republicans in the 1946 elections, the Truman administration began 1947 with renewed confidence. The resignation of Secretary of State Byrnes and subsequent appointment of General Marshall to succeed him, provided new focus and energy to the State Department. In February 1947, the British government notified the United States that, because of continuing fiscal problems, it could no longer support the Greek government in its fight to resist Communist rebels. Worried that without support, the Greek government would fall and put nearby nations at risk, Truman resolved to provide

economic and military assistance to the struggling government. He now had to convince the Congress and the nation.

Meeting with a bipartisan group of congressional leaders on 27 February, Truman sought support for the Greek government. This support was won with an impassioned appeal by Assistant Secretary of State Dean Acheson. Acheson presented a skilled argument that convinced the congressional leaders that failing to act would endanger the rest of Europe, already facing communist subversion. He argued that to defend American security, it was critical the United States strengthen the ability of free people to resist communist aggression. Congressional leaders pledged their support, contingent upon President Truman presenting the same argument before Congress and the American people.[22]

On 12 March 1947, President Truman addressed a joint session of Congress. In carefully worded remarks, he argued for assistance to the Greek and Turkish governments, and in doing so presented to the nation the policy that would become known as the Truman Doctrine.[23] He began by highlighting the threat that the spread of totalitarian governments in Europe posed to world peace; and argued that it was in America's interest to stop this in order to prevent future wars. To do this, Truman stated that, "it must be the policy of the United States to support free peoples who are resisting attempted subjugation by armed minorities or by outside pressures." To provide this support, Truman requested that the Congress approve the release of $400 million to the Greek and Turkish governments.[24]

The pronouncement of the Truman Doctrine was a continuation of the strategy to use America's economic power to counter communist subversion in Europe. But more

importantly, it was the first deliberate attempt by Truman to educate the American people to the threat posed by the Soviets. Without explicitly naming the Soviets, Truman acted upon Kennan's recommendation to explain the nature of the threat in order to gain public support for the necessary policies. Secretary of State Marshall's "Plan," undertaken in June 1947, continued these two efforts.

The development of a massive, multiyear aid package for the struggling economies of Europe was a logical step in both containing the spread of communist subversion, by alleviating difficult living conditions in Europe; and developing a conventional force capable of deterring Soviet aggression, by laying the groundwork for a European security alliance.[25] President Truman, in his memoirs, stated the significance of the plan in saying,

> The Marshall Plan will go down in history as one of America's greatest contributions to the peace of the world. I think the world realizes that without the Marshall Plan it would have been difficult for western Europe to remain free from the tyranny of Communism.[26]

The Marshall Plan also served as a long-term stimulus for the American economy by increasing demands for American goods and products. The plan fit well with Truman's top priority of the postwar period, expanding the strong American economy.

Military Strategy

The preceding discussion of the development of the new American strategy of "Containment" to counter Soviet expansion has outlined the employment of diplomatic and economic means to counter increased Russian aggression. This is not an intentional exclusion of the military instrument of power; instead it is an acknowledgement that until 1950, military power, other than the deterrent effect of the atomic bomb, played no role

in exercising the containment strategy. Examining its absence is important to understand why ammunition shortages occurred during the Korean War.

At the conclusion of World War II, the United States military quickly turned its focus from war fighting to occupation and demobilization. Repeating the historic post-war trend, the focus of military leaders was returning soldiers home as rapidly as possible, while also consolidating and disposing of material. Anticipating diminished funding during peacetime, the military was intent on building its reserves for the next conflict with the mountains of material remaining after the wars conclusion. Recognizing the demands of occupation and the anticipated requirement to provide forces in support of the UN, the postwar strength in 1947 was large by peacetime standards with funding levels increased accordingly.[27]

Military leaders understood the difficulties caused by mobilizing industry support for the war effort. As they disposed of excess property, they took measures to retain an industrial reserve that would be capable of mobilizing to meet the requirements of the next war.[28] As postwar military planning began, it was fundamentally based on the strategy of mobilization that was the norm for the American military. Political and military leaders envisioned the next war as a total war, fought along the same lines as World War II, and their postwar planning reflected this belief. Central to their plans was the belief that nuclear monopoly was a viable deterrent.[29] In this framework, the need for a large "Army in being" was not deemed relevant. General Eisenhower envisioned preparedness as, "A state of organized readiness to meet external aggression by a timely mobilization of public opinion, trained men, proved weapons and essential industries, together with the unmatched spiritual resources of America."[30]

The American military established its planning priorities in keeping with the administration's foreign policy objectives as defined by President Truman and the Department of State, and turned its attention to other critical issues.[31] During the years between 1945 and 1947, Army leaders struggled with the reorganization into a single "National Military Establishment" (NME) while also attempting an internal reorganization, focused primarily on its Technical Services.

This internal focus was reinforced by President Truman, in September 1946, when he reviewed a threat analysis prepared by the Joint Strategic Survey Committee (JSSC) at the request of his Special Counsel, Clark Clifford. In their analysis the JSSC stated that the Russians and the United States were locked in a deadly conflict, not a "shooting war," but a war never the less.[32] The JSSC went on to describe the Soviet objective as world domination. The President, upon reviewing the assessment immediately had all copies impounded, stating, "This is so hot . . . it could have an exceedingly unfortunate impact on our efforts to try to develop some relationship with the Soviet Union."[33] Clearly, at this point, President Truman did not perceive that the threat would require a conventional military response beyond that the peacetime military could provide.

Unification and the Budget

The consolidation of the military services was driven by two distinctly different principles. The first was the formalization of the JCS structure created during World War II by General Marshall to provide for unified strategic planning.[34] The second was the elimination of what President Truman viewed as "waste and inefficiency existing as a result of the operation of two separate and un-coordinated military departments."[35] While

the military services understood and generally agreed with the first, the latter evoked resistance and fear in organizations that had, in the course of the war, developed many apparently redundant organizations and functions that each now wished to retain. In the end, neither principle would be well served by the structure created by the passage of the National Security Act of 1947 (NSA of 1947).

The NSA of 1947 was essentially a compromise between War Department and Department of the Navy plans for unification. Unable to get the two departments to agree to a compromise, President Truman and the Congress imposed the organizational structure contained in the NSA upon the services.[36] The NSA established the National Military Establishment with a Secretary of Defense at its head. The NME was composed of the Army, Navy, and Air Force, each within their separate department headed by a civilian Secretary. The NSA did not create a unified department as originally intended; instead creating a federation of independent services. While this organization was less than ideal, the true weakness of the NSA was in providing the Secretary of Defense only general powers over the services, able to do little more then encourage cooperation and negotiate compromises.[37] The first Secretary of Defense, James Forrestal, soon regretted his efforts, while Secretary of the Navy, to weaken the future powers of the position he assumed.[38]

Historian Lawrence Korb states that the making of military policy can be divided into four phases: planning for the use of force; securing funding to implement the plan; procurement; and operations.[39] During the Truman administration military budgets were set by spending ceilings and the services were required to determine policy based on those ceilings. The services, struggled to stake out roles and missions, and were unable to

reconcile that "in defense, dollars are policy."[40] The last two years of Forrestal's life were spent attempting to get the JCS to plan within the means allotted them by the Truman administration.

The source of the budget difficulties lay in the NSA of 1947. The NSA had failed to resolve the dispute, ongoing since 1945, over clearly delineating the missions and roles of the services. Specifically, the disputes centered around ownership of the air mission, disputed by the Navy and Air Force; the need for a robust Marine Corps, which the Army and Navy disagreed upon; and whether the Air Force would be the sole wielder of the atomic bomb, which the Navy desired a role in. The basis for the disagreements was the need to remain relevant to effectively compete for a larger share of the dwindling inter-war budgets, needed to procure new weapon systems.[41]

The failure to resolve the disputes over roles and mission through legislation transferred the onus to Secretary of Defense Forrestal who, having only general power over the services, was also unable to decisively settle the issue. The subsequent battles between the services over securing their piece of the pie, spilled over into Congress and the media. Both the Navy and the Air Force appealed directly to sympathetic congressional leaders to support their programs, much to the chagrin of Secretary Forrestal and President Truman. President Truman, tired of the public disputes between the services over the FY 1949 Supplemental Appropriation Bill,[42] personally delivered guidance to the services in preparing the FY 1950 budget, telling them,

> As Commander in Chief I expect these orders to be carried out whole-heartedly, in good spirit and without mental reservation. If anyone present has any questions or misgivings concerning the program I have outlined, make your views known now-for once this program goes forward officially, it will be the administration

> program, and I expect every member of the administration to support it fully, both in public and in private.[43]

President Truman believed that to have any hope in winning a come from behind victory in the Presidential election of 1948 he would need to maintain his efforts to balance the budget. He was also concerned about the impact of any perceptions of military weaknesses that might arise from continued battles between the services. The effects of a Republican tax bill, passed over his veto in the spring of 1948 would make these two goals difficult.[44]

By 1948, President Truman believed that diplomatic and economic efforts would not be sufficient to contain the Soviets, saying:

> There was no doubt as to the course I had to take. . . . [T]here was only one way to avoid a third world war, and that was to lead from strength. We had to rearm ourselves and our allies and, at the same time, deal with the Russians in a manner they could never interpret as weakness.[45]

The challenge facing Secretary of Defense Forrestal was to devise a strategy to accomplish this, while keeping the services' budgets under the low caps set by President Truman's Bureau of Budget.[46] Forrestal, ever concerned about the Soviet threat, believed that the solution was to convince President Truman of the need to increase military spending, by presenting him a defense budget using projections for a joint military plan, based upon an objective analysis of the Soviet threat.[47] While Forrestal's efforts failed, this was the beginning of requirements based budgeting that would later by systematized by Secretary of Defense Robert McNamara.[48] Forrestal also believed that the joint planning process would resolve lingering questions about roles and missions.[49] President Truman, responded on 15 July 1948 and acknowledged that the analysis could prove useful, but rejected delaying the 1950 budget for this purpose, stating "I do not feel that

the preparation of the initial 1950 budget estimates can be delayed or based wholely [*sic*] on this effort."[50]

The failed attempt to develop the first integrated budget, for FY 1950 illustrated the fundamental differences between President Truman and his National Military Establishment. The President was intent on balancing two competing demands; the national economy with his domestic agenda and an adequate military capability. The President and the National Security Council had provided the military services no definitive guidance on what they would consider adequate, as it related to capabilities to accomplish the national policy objectives. The military had been provided no guidance on their role within the strategy of containment, beyond that of nuclear deterrence.[51]

Left without clear guidance, the military developed an integrated military plan, titled Halfmoon,[52] which was based on the application of a strategy of mobilization to counter a Soviet invasion of Europe and the Middle East. Envisioning a total war conducted on a global basis, similar to World War II, the costs to support the plan vastly exceeded the $14.475 billion budget ceiling established by the Bureau of the Budget. Forrestal recognized that, despite tensions caused by the Berlin Crisis, Truman would not accept the $29 billion estimate based on Halfmoon's requirements.[53] He appointed the McNarney Board to pare down the estimates. Forrestal's attempts to reduce the request to the President's ceiling ultimately failed. The JCS, and in the end Forrestal himself, were unwilling to concede that the $14.4 billion ceiling resourced a military prepared to meet the perceived threat.[54] In an attempt convince the President of the need to raise the budget ceiling, Forrestal directed the preparation of three separate requests, with summaries of the forces they resourced; $14.4 billion, 16.9 billion, and $23 billion.[55] Unable to

reconcile the JCS belief that "It is essential to our national security to bring our military strength to a level commensurate with the distinct possibility of global warfare"[56] with the budget caps, Forrestal submitted two budget estimates, for $14.4 billion and $16.9 billion to the President.

Buoyed by his recent victory in the 1948 presidential election, President Truman stuck to the budget guidance he had given the services, sending instructions to the Budget Director stating, "Attached is a memorandum from the Secretary of Defense in regard to the budget. I don't know why he sent two [*sic*]. The $14.4 billion budget is the one we will adopt."[57] The defeat of his efforts to improve the nation's defense posture took a heavy toll on Forrestal. In trying to negotiate with the JCS during a time when budget ceilings exacerbated their normal differences, Forrestal had been unable to overcome the institutional pressures at play. In aligning himself with the services against the President during an election year, when budget considerations were paramount, Forrestal had damaged his credibility, and that of the services.[58] Unable to bear the burdens placed upon him, Forrestal suffered a breakdown, and soon after, committed suicide. Louis Johnson, who was intent on achieving further economies in the Defense Budget, replaced Forrestal as Secretary of Defense.[59]

The Department of Defense (DOD), under Secretary of Defense Louis Johnson, continued to labor under the economies imposed by Truman's budget ceilings, exacerbated by Johnson's intent to extract further savings.[60] Empowered by the 1949 Amendment to the NSA of 1947, which granted him directive authority over the services, Johnson began cutting spending less than a month after taking office, by canceling the Navy's long sought super carrier the *United States*.[61] In June he agreed to the reduced FY

1951 budget ceiling of $13.5 billion without consulting the JCS about the reduction's implications. To prepare the services for their future budget, he ordered that $1 billion dollars be cut from FY 1950 spending. Johnson clearly understood the task President Truman had given him, to provide budget discipline in the DOD.

Johnson's approach had the desired effect on the JCS. Faced with the choice of cutting their own budgets, or having Johnson do it without their input, the Chiefs recognized that they had little choice but to cooperate with their new boss. Historian Lawrence Korb stated that,

> Johnson's actions put the fear of God into the Joint Chiefs and made them real team players. They refused to challenge the budget ceilings in two meetings with Truman and they supported the budget in Congress. Army Chief Collins actually tried to demonstrate to Congress that the Army contributed more to the nation's security with less men.[62]

While Johnson effectively cowed the Chiefs, the increased economies continued to degrade the military's capabilities and increase service rivalries. Johnson's unabashed promotion of airpower fit in well with the reliance on atomic weapons to deter Soviet aggression; to the detriment of conventional capabilities.[63] In this climate, getting money for conventional ammunition production did not stand a chance. The administration soon got the wakeup call to place national security ahead of fiscal control and budgetary restraint.

Recognizing the increasing danger posed by the Soviet Union, and the relative weakness of American capabilities, the United States entered into the North Atlantic Treaty Organization (NATO) in April 1949, with the nations previously committed to the Brussels Pact. This collective security agreement aligned the United States with allies to both bolster the defense structures of the Western European nations, and to realize the

contributions those nations could make to counterbalance the American acceleration of the atomic weapons program in place of building large conventional forces.[64] The passage of the Mutual Defense Assistance Act, on 6 October 1949 authorized the provision of military assistance to America's NATO partners under what would become the Mutual Defense Assistance Program (MDAP).[65]

As the fall of 1949 neared, the American military struggled to meet the added burdens of NATO and MDAP, with restricted force levels and insufficient budgets left over from the Johnson era.[66] Under Johnson's leadership, the temporarily increased force levels of 1948 had returned to near their 1947, postwar low.[67] It was clear to many that America's military strength was declining relative to the strong Soviet conventional forces. In September of 1949, when the detonation of a Soviet atomic weapon was revealed, three years earlier than most experts had expected, the comfort found by many in America's atomic monopoly was erased. The 1 October 1949 Chinese Communist proclamation of victory over the Nationalists added to the shock of the Soviet's accomplishment.[68] In a matter of weeks, the premise upon which American postwar security was based was turned on its head. A thorough reevaluation of American national security strategy was initiated.[69]

NSC 68 and Rearmament

At the beginning of February 1950, as a ten-member ad hoc State-Defense Policy Review Group headed by Paul Nitze, the new head of the Department of State's Policy Planning Staff, surveyed the capabilities of the United States Military. They were convinced that changes were needed. The Defense Department representative, Major General Truman Landon, initially presented a DOD position paper that deemed current

programs, reliant on atomic weapons, as being adequate for the defense of the nation. Nitze quickly established that this was Secretary Johnson's view in support of his plan to continue to extract savings from the defense budget. Nitze also realized that Landon gave this assessment little credence.[70] The two sides agreed to set the DOD position aside and attempt to gauge the true state of the nation's capabilities in order to determine the course needed to counter the Soviet advantage.

In gaining the Defense Department delegation's commitment to the review, Nitze was presented with an unparalleled opportunity to shape U.S. national security policy. Nitze and his team seized the occasion, working day and night to complete a draft by 20 February. The draft, which closely resembled the final product, began with a sweeping review of the conflicting goals of the United States and the Soviet Union. Using strong rhetoric, the paper identified the two sides as the free and the slave, with the two systems irreconcilably different, and the slave intent on the domination of the free.[71] With the framework of the conflict identified, the paper turned to an assessment of the two sides capabilities, contrasting them against each other.

The paper observed that since the end of World War II, the United States had pursued two major goals: to promote a healthy international community and to contain the spread of Soviet aggression. While pursuing these goals, American military capabilities had steadily declined in relation to Soviet power. America, reliant on a strategy of mobilization, now might not be afforded sufficient time to mobilize in order to prevent the Soviets from seizing a decisive advantage.[72] While America still retained an atomic advantage in relation to the Russian atomic capabilities; as Soviet atomic production increased, the advantage would be neutralized. In such a situation, the

advantage would go to the side with the greater remaining conventional forces. In this regard, America was believed to be at a disadvantage.[73]

Against this background, the paper then considered four alternative courses of action. A return to isolationism and the initiation of a preemptive war were quickly discarded as not viable options. The third option was to essentially continue with the current programs and policies. NSC-68 argued that, "From the military point of view the actual and potential capabilities of the United States, given a continuation of current and projected programs, will become less and less effective as a war deterrent."[74] Discarding a continuation of the status quo, the fourth option was deemed the only one that was realistic. The fourth course of action advocated a "substantial and rapid building up of strength in the free world. . . . To support a firm policy intended to check and roll back the Kremlin's drive for world domination."[75]

In shaping the argument for an expansion of forces and rearmament in NSC 68 Nitze, who was an economist by training, included statistical data to illustrate that the U.S. economy, with a gross national product of $250 billion, could easily sustain the $35-40 billion dollars that Nitze projected would be required on an annual basis to fund the program he outlined.[76] Secretary of State Acheson later insisted that Nitze remove all cost estimates prior to submission to President Truman, saying,

> Paul you don't have to put that figure in this report. It is right for you to tell me about it and I will tell Mr. Truman, but the decision on the amount of money involved should not be made until it is costed out in detail. One first ought to make the decision as to whether this is the policy one wants to follow, and then the degree to which one actually implements it with appropriations is a separate question.[77]

Secretary of State Acheson understood the significance afforded balanced budgets by President Truman. The inclusion of large cost estimates would have made the policy, in effect, dead on arrival.

Prior to NSC 68's submission to the President, it was vetted among a number of experts in the atomic energy, defense and foreign affairs communities with mixed response. Many thought the assessment of Soviet intentions overly simplistic or even wrong. Many also took exception to the strident language used throughout. In overstating the Soviet threat, some believed that the measures it recommended were excessive. Secretary of Defense Johnson shared the latter view. When presented the paper during a meeting at the State Department, Johnson exploded in a stream of obscenities, clearly unhappy with the product his "trusted" representatives had helped craft, and stormed from the building.[78]

President Truman, when presented with NSC 68 on 12 April 1950, deferred final action pending "further information on the implications of the conclusions contained therin."[79] The DOD plan to meet NSC 68's objectives were clearly effected by Johnson's attitude, in projecting lower force requirements and extending the buildup until 1954 when it would reach its peak.[80] Even with this outlook, the projection increased force strengths by a third and doubled expenditures. Johnson and others believed that President would have little stomach for this program that would have destroyed Truman's policies of fiscal restraint and balanced budgets.[81]

President Truman's careful consideration of NSC 68 was telling, after the quick dismissal of Forrestal's less costly program the year earlier. Truman's perception of the changed nature of the threat would be reinforced by the North Korean invasion of South

Korea in June of 1950. Truman realized that the invasion of South Korea necessitated a buildup of forces. Approved in September 1950 as NSC 68/1, the measures to mobilize the industrial resources of America were delayed until the declaration of National Emergency following the Communist Chinese intervention against the UN forces, not specifically in response to events in Korea, but as a part of America's larger rearmament effort.[82]

Because the Korean War did not fit the model of the "next war" envisaged by the Chief's of Staff, that of a total war, it was not fought and resourced as the next war. While the mobilization of personnel was required to bolster the low troop strengths created during the years of post-World War II economy; logistically it was largely fought using stores remaining from World War II, particularly in the commodity of ammunition.[83] It was not until the ammunition stores began to dwindle, in 1952 that ammunition production received any increased emphasis. By that point, the larger rearmament effort, initiated through the programs contained in NSC-68, had started. As Reeder points out, Korea was relegated "to a secondary role from the logistical viewpoint."[84] Because of the long lead times for ammunition discussed in Chapter 2, the additional emphasis place on ammunition production was at this point, ineffective in influencing the ammunition situation in Korea.

By the beginning of the rearmament effort triggered by NSC 68 in 1951, the die had largely been cast which led to the occurrence of ammunition shortages on a worldwide level during the Korean War. The years of relying on stocks remaining after World War II, in the belief that sufficient time would be presented to mobilize industry to fight the next war, had left America's ammunition reserves ill suited to meet a protracted

war, without industrial mobilization. No one had envisaged that the next war would not be a total war, that mobilization would not occur, and that our nation's new found prosperity would in fact delay any expansion of ammunition production. The years of economy, reorganization, and division among the services had focused attention away from a realistic assessment of the Army's ammunition capabilities. In 1949, when the Chief of Ordnance realized the state of the ammunition reserve, based on the recently completed inventory of the World War II ammunition stocks, and tried to secure funding to take corrective action, his message was largely ignored due to the limitations imposed by Secretary of Defense Johnson's economy program.[85]

The leaders of the United States military had realized the troubling lack of conventional war-fighting capability they provided the nation in 1948, yet by 1949 they were unwilling to take action in the face of the growing Soviet threat. That it would take the efforts of Paul Nitze, a State Department staff principle, and a Chinese Communist attack on forces fighting in Korea to awaken Army leaders to the dangers posed by reliance on a now irrelevant strategy of mobilization to defend the nation, indicates that the Army leadership had failed in its responsibility to ensure the Army was ready to answer the nation's call. To understand this failure, it is necessary to examine the civil-military arena in which they operated, and the implications that it holds for future military preparedness.

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[1]James F. Schnabel, *The Joint Chiefs of Staff and National Policy 1945-1947,* The History of the Joint Chiefs of Staff, vol. 1 (Washington, DC: Office of Joint History, Office of the Chairman of the Joint Chiefs of Staff, 1996), 7.

[2]Samuel P. Huntington, *The Common Defense: Strategic Programs in National Politics* (New York: Columbia University Press, 1961), 26-27.

[3]Harry S. Truman, *Year of Decisions, Memoirs*, vol. 1 (Garden City, NY: Doubleday & Co., 1955), 411; Walter Millis, ed., *The Forrestal Diaries* (New York: The Viking Press, 1951), 78; John Lewis Gaddis, *The United States and the Origins of the COLD WAR, 1941-1947* (New York: Columbia University Press, 1972), 243. Gaddis states that Truman equated Stalin to a midwest politician, who he understood and with whom he could deal.

[4]Huntington, *The Common Defense*, 25-26. Huntington outlines the pre-World War II strategy of mobilization.

[5]Schnabel, *JCS 1945-47*, 92-93. Schnabel states that initial discussions between the Departments of War and Navy about demobilization began in 1942. In 1943 the JCS established a planning group to develop demobilization plans. Concurrent civilian planning was being conducted by the Office of War Mobilization and Reconversion (OWMR).

[6]Truman, *Year of Decisions*, 506.

[7]Ken Hechler, *The Facts on Demobilization, 1945-1946*, 1952, Hechler Papers, Truman Presidential Library, 10-13, 16-20. A study prepared for President Truman for use in defending his policies. In pages 10-13 Hechler outlines the Republican efforts to speed demobilization. In pages 16-20 Hechler discusses the rising public pressure to speed demobilization.

[8]Ibid., 13-16.

[9]General George C. Marshall, New York Herald Tribune Forum, 29 October 1945, quoted in Hechler, *Facts of Demobilization*, 17.

[10]*American Military History*, rev. ed.(Washington, DC: Center of Military History, 1989), 530-531.

[11]Reeder, *The Korean Ammunition Shortage*, 2-3.

[12]Huntington, *The Common Defense*, 58-59. Huntington discusses the argument for UMT and its final rejection by Congress in 1952.

[13]Huntington, *The Common Defense*, 33-34. Huntington discusses Harriman's warnings to President Truman; Millis, *The Forrestal Diaries*, 100. As early as September of 1945 Forrestal had voiced concerns about Soviet behavior. In October of 1945 Forrestal urges President Truman to educate the American people about the Soviet threat to stem the rush of demobilization.

[14]Truman, *Year of Decisions*, 552.

[15]Gaddis, *Origins of the Cold War*, 299-301; Douglas as quoted by Forrestal in Millis, *Forrestal Diaries*, 134.

[16]George Kennan, "The Long Telegram" as transcribed by Forrestal in Millis, *Forrestal Diaries*, 135-140.

[17]Gaddis, *Origins of the Cold War,* 313-315. Gaddis discusses the mounting Republican accusations of "appeasement" concerning the administrations policies.

[18]The term "Containment," as the new strategy came to be known, came from an article titled "Sources of Soviet Conduct" penned by Kennan under the nom de plume "X" and published in *Foreign Affairs* in July 1947.

[19]Gaddis, *Origins of the Cold War,* 316-317.

[20]Allan R. Millett and Peter Maslowski, *For the Common Defense: A Military History of the United States of America*, rev. and exp. ed. (New York: The Free Press, 1994), 494-498. Millet and Maslowski identify the Inter-American Treaty of Reciprocal Assistance (Rio Pact) of 1947 along with the establishment of the UN as the first in what would be a series of collective security agreements the U.S. would enter into.

[21]Gaddis, *Origins of the Cold War,* 344-346.

[22]Harry S. Truman, *Years of Trial and Hope, Memoirs*, vol. 2 (Garden City, NY: Doubleday & Co., 1956), 103-104; Gaddis, Origins of the Cold War, 348-350; Dean Acheson, *Present at the Creation: My Years in the State Department* (New York: Norton, 1969), 219.

[23]Recognizing the threat also faced by Turkey, the assistance program was expanded, at the recommendation of the State Department, to include Turkey.

[24]Harry S. Truman, *Special Message to the Congress on Greece and Turkey: The Truman Doctrine* (text of congressional address, Public Papers, 1947, acessed 27 January 2003); available from http://www.trumanlibrary.org/trumanpapers/pppus/1947/56.htm.

[25]Truman, *Years of Trial and Hope*, 248-251. Truman discusses the linkage between the Marshall Plan and the Brussels Pact, which was the precursor to NATO.

[26]Ibid., 119.

[27]*American Military History*, 531; Director for Program and Financial Control OASD (C), Table FAD 800, 31 January 1978, OSD Historian as cited in Steven Rearden, *The Formative Years 1947-1950*, vol. 1, *History of the Office of the Secretary of Defense* (Washington, DC: Historical Office, Office of the Secretary of Defense, 1984), 309. Rearden states that 1947 active forces were four times the size they had been on the eve of World War II in 1939. The annual military appropriations rose from $1.8 billion in FY 1940 to $10 billion in FY 1948, a five-fold increase.

[28]The details of the components of the industrial reserve are given in Rearden, *The Formative Years*, chapter 2.

[29]*American Military History*, 539-540.

[30]Eisenhower, *The Final Report*, 7 February 1948, 2. as quoted in Huntington, *The Common Defense*, 45.

[31]Schnabel, *JCS 1945-1947*, 36-37. Schnabel discusses Truman's 12 "fundamentals" of U.S. foreign policy and the subsequent Department of State enumeration of the objectives of foreign policy, summing them up as, "platitudinal in nature and address[ing] general problems, mainly social and economic. They contained no specific objectives that required military planning," 37.

[32]Memo, JCS to President, "Presidential Request for Certain Facts and Information Regarding the Soviet Union," 27 July 1946 as quoted in Schnabel, *JCS 1945-1947*, 48-49.

[33]Extracted from the final report as printed verbatim in Arthur Krock, *Memoirs: Sixty Years on the Firing Line* (1968), 419-428 as quoted in Schnabel, *JCS 1945-1947*, 50.

[34]Schnabel, *JCS 1945-1947*, 110.

[35]Truman, *Years of Trial and Hope*, 46-47.

[36]Millet and Maslowski, *For the Common Defense*, 503.

[37]*American Military History*, 532-533.

[38]Rearden, *The Formative Years*, 538-539. Rearden discusses Forrestal's realization that the NSA of 1947's adoption of the Department of the Navy's vision for limited power in the Office of the Secretary of Defense had resulted in a lack of the power necessary for the Secretary of Defense to achieve and maintain discipline in interservice relations. Douglas Kinnard, *The Secretary of Defense* (Lexington,KY: The University Press of Kentucky, 1980), 5. Kinnard suggests that the central obstacle that Forrestal had to overcome during his tenure as Secretary of Defense was the result of his victory, while Secretary of the Navy, in the battle to curtail the power of the proposed defense secretary's power.

[39]Lawrence J. Korb, *The Joint Chiefs of Staff: The First Twenty-five Years* (Bloomington, IN: University Press, 1976), 94.

[40] Bernard Gordon, "The Military Budget: Congressional Phase," *The Journal of Politics*, November 1961, quoted in Korb, *JCS: The first Twenty-five Years*, 95.

[41]Omar Bradley and Clay Blair, *A General's Life* (New York: Simon and Schuster, 1983), 490-493. General Bradley discusses the competing roles, which drove the battles over the FY 1949 Supplemental Appropriation Bill and the FY 1950 Budget.

[42]Rearden, *Formative Years*, 317-327. The 1949 Defense supplemental was initiated in response to the "Crisis of '48," triggered by a Soviet inspired coup in Czechoslovakia and tensions developing in Germany. As the crisis appeared to cool, the services made no effort to reduce their estimates. Truman took this as opportunism on their part.

[43]President Truman, Oval Office, 13 May 1948, as quoted in Millis, *Forrestal Diaries*, 437-438. Interestingly, this message came from a memorandum prepared by Forrestal's assistant Wilfred McNeil for the President. It was clearly intended to support Forrestal's efforts to forge agreement among the JCS about the budget.

[44]Truman, *Years of Trial and Hope*, 174-175. Truman discusses the challenges presented to his economic program by the Republican Congress while outlining the issues being debated during the 1948 Presidential election.

[45]Ibid., 171.

[46]Huntington, *The Common Defense*, 280. National Defense spending 1946-1948 was $15 billion, $11.5 billion, and $12.1 billion.

[47]Forrestal to President Truman, letter 10 July 1948, Truman Library, PSF 1945-1953, Defense: Secty of, [1 of 2], box 135. This is the cover letter attached to a memorandum for the Executive Secretary, National Security Council requesting an "Appraisal of the Degree and Character of Military Preparedness Required by the World Situation." This began the process which result in NSC 20.

[48]Rearden, *The Formative Years*, 336-337.Rearden outlines the system Forrestal planned to use. *American Military History*, 604-606. McNamara's system of planning is discussed.

[49]Letter, Forrestal to President Truman, 10 July 1948,

[50]Letter, Truman to Forrestal, 15 July, 1948, Truman Library, PSF 1945-1953, Defense: Secty of, [1 of 2],Box 135.

[51]Millet and Maslowski, *For the Common Defense*. 498. Millet and Maslowski state that the general statements of policy provided by the administration did not translate into military programs.

[52]Rearden, *The Formative Years*, 337. Rearden provides the general outline of HALFMOON which assumed that the Soviets would seize Western Europe and the Middle East. The mobilization of a land force to recapture Europe would require at least a year. While this was being done, the U.S. would secure bases from which to launch strategic bombing missions, using atomic bombs, against vital targets inside Russia.

[53]Ibid., 342.

[54]Ibid., 347.

[55]Rearden, *The Formative Years*, 350-351.

[56]Ibid., 349.

[57]Truman to Web, memo 2 Dec 1948, PSF, Truman Papers as quoted in Rearden, *The Formative Years*, 351.

[58]Rearden, *The Formative Years*, 356-357; Millis, *The Forrestal Diaries*, 551.

[59]Rearden, *The Formative Years*, 47-49. Rearden discusses the circumstances surrounding Forrestal's resignation and Truman's selection of Johnson as Secretary of Defense. Rearden states that two of Johnson's priorities were improving efficiency and lowering expenditures within the Department of Defense.

[60]The 1949 Amendment to NSA of 1947 passed soon after Johnson took office and, among other measures, changed the title from the National Military Establishment to the Department of Defense.

[61]Bradley and Blair, *A General's Life*, 502. Outraged, Secretary of the Navy Sullivan resigned.

[62]Korb, *The Joint Chiefs of Staff*, 101.

[63]Bradley and Blair, *A General's Life*, 502.

[64]Rearden, *The Formative Years*, 457; Kenneth Condit, *The Joint Chiefs of Staff and National Policy 1947-1949*, vol 2, *History of the Joint Chiefs of Staff* (Washington, DC: Office of Joint History, Office of the Chairman of the Joint Chiefs of Staff, 1996), 286. Condit states that budget austerity had virtually dictated a strategy built around that principle.

[65]*American Military History*, 543. MDAP consolidated all of America's assistance programs to partners around the globe, with assistance to NATO nations being a component part.

[66]Rearden, *The Formative Years*, 521.

[67]Condit, *JCS 1947-1949*, 11 and 151. The 1947 end strength was 1,565,858 and the 1948 end strength was 1,551,456.

[68]Rearden, *The Formative Years*, 522.

[69]Bradley and Blair, *A General's Life*, 518-519.

[70]David Callahan, *Dangerous Capabilities: Paul Nitze and the Cold War* (New York, HarperCollins, 1990), 103-104; Rearden, *The Formative Years*, 525.

[71]Rearden, *The Formative Years*, 527-528. Rearden provides a detailed summary of NSC-68's contents.

[72]Ibid., 529.

[73]Ibid., 530.

[74]References and quotations are from NSC 68, "Report to the President Pursuant to the president's Directive of 31 January 1950," 7 April 1950, FRUS 1950, I:235-92 as quoted in Rearden, *The Formative Years*, 530.

[75]Ibid.

[76]Callahan, *Dangerous Capabilities*, 117-120.

[77]Secretary of State Dean Acheson as quoted in Callahan, *Dangerous Capabilities*, 120-121.

[78]Callahan, *Dangerous Capabilities*, 114-115. This outburst was symptomatic of the belligerent manner with which Johnson treated the rest of the cabinet. When Truman was informed of Johnson's behavior he called Acheson to express his outrage. This incident appears to have caused Truman to decide that Johnson needed to be removed.

[79]Rearden, *The Formative Years*, 533.

[80]Ibid., 534.

[81]Ibid., 534-535.

[82]Reeder, *Ammunition Shortages in Korea*, 35-37.

[83]Information provided by Secretary of the Army Frank Pace in U.S. Senate, *Hearings before the Preparedness Subcommittee*, 173.

[84]Ibid., 36.

[85]Information provided in the statement of LTG G.H. Decker, Army Comptroller as quoted in U.S. Senate, *Hearings before the Preparedness Subcommittee*, 285.

CHAPTER 4

CONCLUSION

Ensuring that the nation is prepared to fight the next war is no easy task. It requires leaders who can manage an interrelated set of factors and understand the effect that a decision regarding one factor, may have on the others. To determine and achieve the correct type and level of preparedness, a leader, with the help of his advisors, must assess the threat against the nation, and what strategies will be required to defeat that threat. Based on the threat and the strategy to defeat it, leaders then must make an assessment of the time they will have to prepare to defeat the threat. That assessment of how much time will be available to prepare to defeat the threat, will allow leaders to determine how much money must be allocated now and in the future to ensure preparedness.

At the conclusion of World War II, it was not immediately understood that the Soviet Union was the next threat, and that the amount of time available to prepare for the next war might be dramatically less than it had been in the past. The decision to return to a preparedness strategy of "as needed mobilization" following the war was evidence of this lack of understanding. The increased level of funding required to maintain a deterrent force, versus a force which would be expanded and supported through mobilization, made the adoption of a deterrence strategy in support of containment a difficult political decision, one only viable as the nature of the Soviet threat became more evident.

As the national strategy shifted to containment to counter increased Soviet aggression, President Truman and his advisors initially chose not to rely on a

conventional military deterrent. They turned to economic and diplomatic means out of a realization that by 1946, demobilization had left the atomic weapon as the only remaining effective military tool, and that a military confrontation with ill prepared conventional forces could quickly escalate to a situation requiring the use of atomic bombs.[1] Truman was hesitant to consider using the atomic bomb again, and unwilling to detract from America's economic recovery by launching a conventional build-up. He chose to rely on a strong economy, which historian and Truman Special Assistant, Ken Hechler states Truman considered his "best answer to communism."[2]

That there was not a reassessment and adjustment of the nation's military preparedness concepts, as the threat became more clearly a conventional military one in 1948, is indicative of a disconnect in the civil-military relationship. The nation's military leaders had the responsibility for advising the President on the military implications of changes in the threat and the continued limitation of the funds necessary to achieve the right level of military preparedness to defeat the threat.

Ammunition preparedness is particularly illustrative of the relationship of time and money in being prepared to meet a threat. For a nation to be ready to fight, it must have sufficient balanced stocks of ammunition on hand to sustain initial action until the nation can produce ammunition to continue to wage war. The ability of the nation to rapidly mobilize its ammunition production base is directly related to the amount of resources allocated to maintain the production base in peacetime. An existing industrial base will mobilize more quickly than one that must be built, as was seen in the mobilization for World War II. An ammunition base that is active, even at low rates of production, will mobilize more quickly than one that is dormant, which was the case

during the Korean War. Critical to resourcing the appropriate level of ammunition readiness is the support of the civilian leadership who provide the resources for military preparedness. To understand why the nation was not prepared, in terms of ammunition, during the Korean War, examining the relationship between the military and civilian leaders during that period is critical because it affected the understanding of the nature of the threat and the resources appropriated to be prepared to meet it.

World War II fundamentally changed the civil-military environment that the United States military operated in. Prior to World War II, the U.S. military's overseas activities were limited in quantity and scope. The military services' focus was primarily oriented on domestic activities, which was the norm for the U.S. military in peacetime given the nation's isolationist foreign policy and reliance on a preparedness strategy of mobilization. In times of peace, the military had become conditioned to having funding for its programs limited because of the priority given to domestic programs.

In times of war the military received strong support for funding, freeing it from many of the resource constraints experienced in peacetime. The United States military strategy of mobilization was reflective of this feast or famine support for military programs. The military believed that, post-World War II, it would return to this same environment, albeit at increased levels of manning reflective of world conditions, as evidenced by its immediate transition to demobilization.

While assuming that America would largely return to its traditional isolationist foreign policy once its occupation obligations had been fulfilled, the United States military had difficulty realizing that world events precluded an American retreat into isolation. The peacetime involvement this internationalist foreign policy would require of

the military was not foreseen, nor its implications initially understood. The United States military would become a slave to two masters, domestic budget concerns and the requirements placed upon it by increasing foreign commitments.

The military was now forced to compete with domestic programs for the diminished resources that balanced budgets entail, while also supporting increased force structures and procurement of new weapon systems to support a foreign policy increasingly confronted by an aggressive former ally. Supporting both the reduced spending programs of President Truman, and structuring a force that supported his foreign policy objectives proved a difficult endeavor for military leaders who had been conditioned by dependence on the strategy of mobilization.

The military, directly subordinate to the President, is implicitly required to support his priorities and programs. Because the military, after World War II, now operated in both the domestic and foreign affairs arenas, it found itself subject to very divergent priorities. The Truman administration was noted for having a "split personality"[3] in the conduct of its domestic programs and foreign affairs. Its domestic policy was based on liberal reform policies and conducted by the "Fair Deal" generation of "New Dealers,"[4] albeit limited by Truman's fiscally conservative beliefs.[5] Its foreign policy and defense establishment were populated by conservative Democrats and Republicans who were committed to an internationalist agenda of conservative containment of Soviet aggression.[6] This was a foreign policy, which by its very nature used the threat of military force as one of its tools of diplomacy. Limited by the budget ceilings imposed by Truman's Bureau of the Budget[7], the military struggled to provide the foreign policy establishment a viable force for use as leverage against the Soviets.

The National Security Act of 1947, while intended to improve coordination between the services and to achieve cost savings by the elimination of redundancies, in fact achieved neither by creating the National Military Establishment. The federation of services, led by the Secretary of Defense with only general authority over the services was particularly ineffective when faced with low budget ceilings.[8] Asked to fulfill a more active role in peacetime, when budget ceilings made meeting the new requirements difficult, the tendency of the services to be protective of "its piece of the pie" could not be suppressed by the structure established. As Huntington states,

> At no point in the history of military policy after World War II were the President and his Budget Bureau confronted with a truly joint, integrated military program, publicly announced and supported by all military men as indispensable minimum for national security.[9]

Instead, the Services attempted to "make do" with the individual budgets they could secure. Forced to prioritize programs in an attempt to support a growing list of requirements with diminishing budget appropriations. They exercising their self-preservation instincts, sniping at each other in the hopes of securing increased funding at the expense of other services' programs.[10] In this difficult budget environment, short cuts were taken to save dollars. An easy target was the support structures, which were deemed, based on the strategy of mobilization, only truly necessary in wartime. Production of ammunition all but ceased, and little funds were made available to preserve the war reserves on hand, or the production base that would be required to make more.

In the interservice battles to preserve programs and secure funding, the high profile, public nature, of the conflicts only damaged the services' credibility. Truman came to view the Service Chiefs more as antagonists than allies who "frequently brought pressure to force me to alter the budget which had been carefully worked out to achieve

balance with the other needs of the government and our economy as a whole."[11] Viewed in this light, it was not surprising that when, in 1948, the Services presented a unified budget to meet the threats as they perceived them, their budget proposal was ignored in favor of the already established budget ceiling.

The politicization of the budget process certainly played a role in Truman's perception of the military services. The Congress serves as the keeper of the purse strings in our governmental structure. The President develops the budget program, and following World War II, the JCS would testify in support of the military portions of the President's plan. Prior to NSA of 1947, the Technical Service Chiefs, and other senior officers participating in the development of budgets had largely provided this testimony.[12] This was because, in their peacetime role, the technical service's programs made up the bulk of military spending. Following World War II, the Service Chiefs themselves testified before Congressional Committees in support of the budget program, which changed the dynamic of this process greatly.[13]

The Service Chiefs, unlike the technicians they had sent to testify previously, filled a political role. They used this opportunity to lobby the Congress for funds and support, often differing from the President's program. In this process, the Service Chiefs became enmeshed in the political battles occurring between the Republican Congress and Democratic President. The congressional sponsors that the services depended upon to champion their programs, often used what the Services viewed as a utilitarian relationship, as a political tool to use against the President. The politicization of the Service Chiefs by the budget process only made their already difficult relationship with the President more problematic. The increased role of politics in the budgetary process

continued to make this a contentious issue, affecting the civil-military relationship for years after. It has required further legislation to better define the civilian control over the military.[14]

The issue of civilian control of the military and the responsibilities that that control entails, played a significant role in creating the state of military unpreparedness during the Korean War. It is the responsibility of the Executive Branch of government to balance its two primary responsibilities, domestic programs and the nation's security. Because both rely on the same pool for resources, these competing demands must be balanced. To assist the President in maintaining the appropriate balance between the two, he relies on subject matter experts to provide him an unbiased explanation of the implications of his policy decisions.

For defense programs, the Joint Chiefs of Staff fulfilled this advisory role for the President. It was incumbent on them to explain to President Truman the implications of his decision to limit defense spending at a time of increased threats to the nation's security. Because the Service Chiefs had allowed their actions to be politicized, it appeared that they were acting only in their own service's interests, the President did not see them as unbiased, and viewed their recommendations and advice as suspect.

The many weaknesses of the National Security Act of 1947 have been largely overcome, and perhaps a few new weaknesses created, by the many organizational restructurings that the Department of Defense has undergone since the end of the Korean War.[15] But, the politicization of the relationship between military leaders and our nations elected officials, which was central to the occurrence of ammunition shortages during the Korean war, has remained a constant factor affecting our nation's military preparedness.

That an ammunition shortage occurred during the Vietnam War,[16] and is possible today as we prepare for a war against Iraq suggests that our nation's military and civilian leaders must continue to work on bridging the gap that often develops between military readiness and the pursuit of domestic political agendas.

At the heart of the issue is America's historical tendency to approach the military preparedness of the nation's ammunition base with a "feast or famine" mentality. In peacetime, when military budgets are reduced, the maintenance of reserve stocks and the production base are easy areas to cut funding to achieve a cost savings. The uniqueness of the Korean era ammunition shortage was the magnitude of the problem, caused by the organizational weaknesses in the military services created by the NSA of 1947. A current examination of our military's ammunition readiness indicates that this problem has not gone away and we must continue to work to reconcile the competing priorities of domestic programs and military readiness.

As our nation goes to war with Iraq in the spring of 2003, consideration of the nation's current state of ammunition readiness provides insight into the military's continued difficulty in ensuring that it has the resources necessary to retain an ammunition production base capable of responding to the demands of wartime consumption. Since 1991 the number of government owned ammunition production facilities has been reduced from 28 to 13 facilities.[17] The number of active production lines has decreased from 270 to 73. This represents an overall reduction in the production base capacity of 68 percent during the last ten years. This reduction in capacity has effectively eliminated the capability to surge production which, at best can only affect 10 percent of the "go-to-war" shortfalls in our ammunition reserve stocks.[18] In the case of

artillery ammunition, there are no active production facilities.[19] This lack of production capacity for artillery ammunition, when combined with the unprepared status of artillery ammunition reserves, causes artillery ammunition to be classified as C-4, the lowest level of preparedness in the ammunition Material Readiness Review (MRR) system.[20] This apparent lack of emphasis on artillery ammunition is perhaps reflective of the increased emphasis placed on the use of Precision Guided Munitions (PGM) in today's military operations.

As the Army downsized its ammunition industrial base during the last decade, it has adopted a policy of industrial mobilization in which the industrial base is designed to be mobilized to replenish reserve stocks after the "next war" is concluded. Based on the current state of the ammunition reserve, and available production capabilities, the success of this policy is dependent on the "next war" being a short one. If the war becomes protracted, or should another conflict occur simultaneously, we will not have the luxury of trading "steel for bodies" as General Van Fleet did in Korea.

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[1]Kinnard, *The Secretary of Defense*, 11.

[2]Ken Hechler, interview by author, 3 February 2003. The interview consisted of written responses to prepared questions mailed to him.

[3]Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, MA: The Harvard Press, 1957), 376.

[4]Ibid., 376. Huntington states that following the war, what remained of the Roosevelt administration which had administered the "New Deal" programs before and during the war, were replaced by a new generation of bureaucrats who administered Truman's "Fair Deal" polices along generally the same liberal lines.

[5]Millis, *The Forrestal Diaries*, 536.Speaking of Truman's fiscal conservatism, Forrestal said, "He is a hard-money man if I ever saw one."

[6]Ibid., 203; Forrestal discusses a survey conducted by James Reston of the New York Times that indicated that of thirty-nine major appointments of Republicans or nonpartisans to important posts, twenty-two were in the State Department, ten in the Department of Defense, and five in other national security agencies, and only two in domestic departments.

[7]The Bureau of the Budget was typically viewed as giving preference to the President's "Fair Deal" programs.

[8]Truman, *Years of Trial and Hope*, 53. Truman acknowledges that the Secretary of Defense required more authority than NSA of 1947 had granted to be effective in managing the services.

[9]Huntington, *The Common Defense*, 379.

[10]Ibid., 380.

[11]Truman, *Years of Trial and Hope*, 34.

[12]Huntington, *The Soldier and the State*, 412-413. Huntington outlines the role of the Technical Services in the appropriations process prior the passage of NSA of 1947.

[13]Ibid., 415-418; Huntington discusses the changed relationship between the Service Chiefs and Congress.

[14]Ibid., 416-417; Huntington discusses how increased interaction with Congress placed the Service Chiefs in a difficult position, between supporting the President's programs and speaking out against them in a public forum.

[15]The NSA of 1947 was amended five times between 1947 and 1958.

[16]The Joint Logistics Review Board, *Logistic Support in the Vietnam Era*, Monograph 2, *Ammunition* (Washington, DC: GPO, 1970), 100-102. The JLRB discusses the inadequacy of reserve stocks in providing sufficient time to mobilize the ammunition production base. The JLRB also states that the production base was not initially responsive to the requirements that developed. This last condition was largely due to the failure to mobilize national resources in support of the conflict.

[17]Alan R. Beuster, Briefing, "Update on the Ammunition Industrial Base" (Rock Island, Chief, Industrial Base, Assessment Division, Operation Support Command, 1 August 2002), slide 2.

[18]Ibid., slide 3.

[19]Ibid., slide 4.

[20]Ibid., slide 5.

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