



**STRATEGY
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**THE ARMY AND TRANSFORMATION, 1945-1991:
IMPLICATIONS FOR TODAY**

BY

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The Army and Transformation, 1945-1991: Implications for Today

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ABSTRACT

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By dividing the Cold War into distinct periods that correspond with the changes in the Army and the nation, it is possible to examine transformation and modernization. There are several themes that are common to each of these periods and how they related to the Army, including the impact of national strategy, especially nuclear strategy and the concomitant rise of the Air Force; the impact of budget and the economy; technology and its seductive promise of "cleaner war;" and the endless quest within the Army for relevancy.

Since the end of World War II the Army has not transformed. Transformation is not modernization, although technological advances are important to both. The history of the Cold War bears stark witness to an army that evolved slowly and carefully through a series of incremental weapons modernization programs, minor organization changes, and doctrinal changes. Transformation was not needed, nor is it likely needed in the future. It is modernization- the introduction of new technologies and upgrades in command and control and weapons systems- that is the imperative of the future for the Army if it is to remain viable as the primary instrument of the nation's policy decisions.

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THE ARMY AND TRANSFORMATION 1945-1991: IMPLICATIONS FOR TODAY

All modern military history is filled with these records of failure in which a nation places its reliance on one single arm and learns too late that that arm will not suffice. It is a tragic lesson and its message is clear, but to date we have not learned it, for we still find political leaders- and plenty in uniform too- forlornly hoping that we can defend ourselves, save ourselves, by choosing what appears to be the easiest, cheapest way.

-General Matthew B. Ridgway¹

From the end of World War II in 1945 until the collapse of the Soviet Union in 1991, the Cold War dominated American strategy and policy. For the United States Army, the Cold War defined its roles, missions, and organizational structure. Prior to the Second World War, the Army was a small and dispersed force of battalion and company-sized units, scattered throughout the United States. After the war, the exigencies of a changed strategic landscape dictated a large standing army for the first time in the history of the Republic. Throughout the decades bounded by the Cold War, the Army attempted to transform itself several times and fight several conflicts, all the while searching for the proper organizational structure to meet the nations' threats.

By dividing the Cold War into distinct periods that correspond with the changes in the Army and the nation, it is possible to examine transformation and modernization. There are several themes that are common to each of these periods and how they related to the Army, including the impact of national strategy, especially nuclear strategy and the concomitant rise of the Air Force; the impact of budget and the economy; technology and its seductive promise of "cleaner war;" and the endless quest within the Army for relevancy.

Since the end of World War II the Army has not transformed. Transformation refers to dramatic changes in organization, employment, and/or doctrine that affect dramatically structure and purpose. Transformation is not modernization, although technological advances are important to both. In contrast, modernization is the constant process of upgrading current weapons and weapons systems, vehicles, and the general conventional accoutrements of war needed by every army. Technological advances make it possible to produce rifles that are lighter and more accurate, trucks that can haul more cargo farther and more efficiently, tanks that are deadlier, and artillery that is more lethal and accurate. Modernization is a constant imperative for all armies. The history of the Cold War bears stark witness to an army that evolved slowly and carefully through a series of incremental weapon's modernization programs, minor organization changes, and doctrinal changes. Transformation was not needed, nor is it

likely needed in the future. It is modernization- the introduction of new technologies and upgrades in command and control and weapon's systems- that is the imperative of the future for the Army if it is to remain viable as the primary instrument of the nation's policy decisions.

Therefore, the period from 1945-1991 is important as it illustrates the many variegated issues that affected the Army as it tried to transform and modernize during the Cold War. The implications for the future are enormous, as many of the issues facing the Army and transformation today are the same issues faced in the previous fifty years.

THE POST-WAR ARMY 1945-1950: OCCUPATION AND MALAISE

On 2 September 1945, the representatives of the Emperor of Japan signed the surrender documents on the deck of the *U.S.S. Missouri*, ending the most devastating conflict in human history. In commenting after the ceremony, General of the Army Douglas MacArthur was succinct: "We have had our last chance. If we do not devise some greater and more equitable system Armageddon will be at our door."² If Armageddon were to come, it would come, of course, in the guise of nuclear bombs and ballistic missiles. For the United States Army in September 1945, however, nuclear warfare with all its attendant complexities was not the most pressing issue. Europe, both victor and vanquished, was in ruins. Japan was equally devastated. The territories of the former colonial powers seethed, while an "Iron Curtain" was inexorably descending on Europe. To fill the void created by the war, the Army embarked on a vast system of military government led by Generals Joseph T. McNarney and Lucius D. Clay in Germany, and Douglas MacArthur in Japan.³ As it had in the aftermath of all previous wars, the Army looked to demobilize its victorious formations that triumphed from the Rhine to Tokyo Bay and treat the war in many respects, as if it were merely an "Indian raid writ large."⁴

Demobilization was a daunting task. On 15 August 1945, General of the Army George C. Marshall made it the Army's primary mission. From a wartime high of more than 8 million soldiers, the Army mustered only 684,000 troops on 1 July 1947.⁵ Underpinning this rapid decline was the assumption by Marshall that Universal Military Training would become law, requiring all young men to spend a year in the service after graduating from high school. Universal Military Training would, Marshall hoped, allow for the rapid expansion of the Army in the event of war. Congress and the budget, however, never provided for the cost of such an expensive system, dooming it and clouding even further the structure of the post-war Army. Most congressmen, like most Americans, assumed that the days of massed armies were a relic of the past.⁶

In making demobilization its highest priority in 1945, Marshall was only reflecting the wishes of President Harry S. Truman. On 6 September 1945, Truman sent Congress eight specific policies he intended to follow in reestablishing the peacetime functions of the nation. The first policy listed is instructive: "Demobilize as soon as possible the armed forces no longer needed."⁷ Truman was merely reflecting the mood of most Americans. The real question that remained unanswered was the last part of the policy- "forces no longer needed." To demobilize effectively and retain those forces needed to affect American security aims, the second half of the policy must precede the first. Without knowing what armed forces were needed, more accurately what the national security strategy was, there was no way to judge which forces to demobilize, and which to retain.

From the beginning of the post-war demobilization, Truman faced continuous domestic pressure to "bring the boys home," even while Army strength dropped precipitously. From 1 September 1945 through 30 June 1947, the number of Army divisions fell from a war-time high of eighty-nine to just twelve. A year later the Army could muster only ten active divisions on its rolls.⁸ Truman and Congress received numerous letters and telegrams pleading for the release of soldiers every day.⁹ Even the soldiers themselves, fresh from victories in Europe, gathered in town squares protesting their retention in service. To General Matthew Ridgway, such "disgraceful exhibitions" undermined discipline and caused him nothing but anger and disgust.¹⁰ Disgraceful though they may have been, the soldiers only reflected the desires of the American public to demobilize even faster. Despite his misgivings, Truman empathized with "parents still waiting for their sons, and with the wives and children longing to see their husbands and fathers again."¹¹ Domestic politics overshadowed any careful examination of the proper size and mission of the post-war Army by ensuring the demobilization would be frenetic. The failure of Congress to consider funding Universal Military Training exacerbated the difficulties.

Despite the seemingly chaotic activity associated with demobilization, the Army had a sizable task to perform in occupying Germany and Japan. As demobilization played havoc with the divisions and units still on active duty, the Army formed the U.S. Constabulary force from the remaining units in Germany to execute law enforcement responsibilities and to support civil authorities.¹² In Korea and Japan, demobilization had equally deleterious effects. Of the three divisions sent to Korea in 1945, two were deactivated and the third was sent to Japan in 1948, leaving only a military advisory group on the peninsula. In Japan, the 1st Cavalry Division operated at only 25 percent of its authorized strength during its first year of occupation duty, with minimally trained teenagers coming to the division as replacements.¹³

Overwhelmed with demobilization and occupation duties, the Army nonetheless tried to capture the organizational and tactical lessons of the war. The European Theater of Operations established the General Board to examine all aspects of the Army's experience. Its committees focused on the division, with three types recommended for retention in the Army: infantry, armored, and airborne. Over the next three years, various conferences, committees, general officers, and the Army staff all tinkered with divisional organizations. In 1948, Department of the Army published the new tables of organization for each of the three divisional types.¹⁴ The end result was an Army that looked much like its World War II counterpart, equipped with the same weapons, though undermanned, and looking to a future in which it seemed increasingly irrelevant.¹⁵ The newly achieved independence of the Air Force and unification of the Armed Forces in 1947 only served to reinforce this seeming irrelevance.

As the Army continued to help in rebuilding Germany and Japan, Truman faced the harsh reality of Soviet designs in Europe and elsewhere in the world. George Kennan's "long telegram" of February 1946 forced the U.S. leaders to confront their failure to provide a national strategy. Just over a year later, on 12 March 1947, the Truman Doctrine was born with the proclamation by the President that "it must be the policy of the United States to support free peoples who are resisting attempted subjugation by armed minorities or outside pressures."¹⁶ Yet, how was the United States to do this, when the Army would continue to demobilize through June of that same year? At the same time Truman, a fiscal conservative, was steadily reducing the financial resources available to defense. Defense expenditures declined from \$81.6 billion in 1945 to \$44.7 in 1946, to a paltry \$13.1 billion for 1947.¹⁷ Faith in the Air Force and America's nuclear monopoly allowed Truman to dwell in an unreal world of flawed policy, while the Army continued an inexorable slide into oblivion.

With a dearth of funding and no draft to replenish its ranks, the Army numbered only 538,000 soldiers on 30 June 1948. Congress reluctantly passed the Selective Service Act of 1948, but a difficult budget battle increased Army end strength by only 100,000 troops. With U.S. policy fixed on atomic power, Secretary of Defense Louis Johnson continued to cut defense expenditures below the ceiling set even by Truman for 1949.¹⁸ Johnson's actions precipitated the "Revolt of the Admirals" when he canceled the aircraft carrier *United States*. But his cuts also affected the Army as well. Facing reality, Army Field Forces Headquarters issued reduced Tables of Organization and Equipment, cutting division strength by a third. The 2d Infantry Division at Fort Lewis, Washington numbered only 12,000 men in 1949, but kept every unit in existence by making across-the-board reductions, while overseas commands cut one battalion per regiment.¹⁹ In essence, Truman's contradictory military and foreign policies forced

the Army to eat itself. As the 1940's ended, the Secretary of the Army still considered occupation as the organization's biggest single task. Many problems remained unresolved, including serious shortages of modern equipment, and a non-existent research and development program.²⁰ World events would not wait for the Army to fix these problems.

THE SHOCK OF THE KOREAN WAR: 1950-1953

When North Korean forces crossed the 38th parallel on 25 June 1950, the United States Army numbered 591,000 soldiers out of an authorized strength of 630,201, organized in ten divisions.²¹ Containment as a national policy was limping badly, and Truman himself sensed this many months prior to the invasion of the South by the North Koreans. In response to the Soviet Union's explosion of a nuclear device, the victory in China by the communists led by Mao Tse-Tung, and rising tide of anticommunist sentiment in the Congress, Truman directed the Secretaries of Defense and State to reexamine United States objectives and plans on 30 January 1950. The resulting document, NSC-68, was a watershed in how the United States would prosecute the Cold War.²² When NSC-68 arrived on Truman's desk in June 1950, it recommended large increases in defense spending to build up the American military and allies in order to balance the Soviet Union's growing world power and ambitions. Characteristically, Truman refused to allow publication of the document and decided to wait until after the November elections before approaching Congress with any budget increase.²³ Truman chose to equivocate; the North Koreans did not.

During the first few days of fighting, the United States struggled to respond. In Washington, Matthew Ridgway observed that senior military and civilian officials hoped air and naval forces alone could contain the North Koreans. The "bright delusion" of scaring the North Koreans with an air and naval display quickly collapsed as the Republic of Korea (ROK) Army crumbled under the hammer blows of the enemy's far more numerous tanks and better prepared infantry.²⁴ In Korea, MacArthur cabled Washington in the early morning hours of 30 June asking to commit two divisions to the fighting. Truman authorized the movement of a regimental combat team to Korea immediately, while acceding to MacArthur's full request later that morning.²⁵ Task Force Smith led the U.S. Army's effort to stop the North Koreans in early July 1950- with disastrous results.²⁶

The commitment of this under-strength task force was not the product of rational analysis of the capabilities of the Army in Japan to stop the North Koreans, or a testament to its readiness and ability to deploy quickly. It was, in fact, born of the desperation of domestic politics. American politics in the Spring of 1950 was "infected by [a] sense of betrayal" and by

an ugly national mood of the fear of communist conspiracy. Senator Joseph McCarthy of Wisconsin was leading the charge to find communist collaborators at all levels of the government and bureaucracy. Faced with charges that the Democrats had "lost" China to Mao, the explosion of an atomic bomb by the Soviets in August 1949 and their boldness in blockading Berlin, and the convictions of Alger Hiss on perjury and Klaus Fuchs on passing atomic secrets to the Soviets in early 1950, Truman had no choice but to commit America to the defense of Korea.²⁷

While the personnel turbulence inherent in the penurious defense budgets of the years 1945-1950 ended with Task Force Smith, there were many other problems that were not as visible. The most serious problems facing the Army at the start of the Korean War were the twin issues of supply and training. There had been no Army modernization or transformation in the five years after World War II; only an attempt to refine the divisional organizations developed during the war, while concentrating on demobilizing the Army during the occupation. Army procurement stopped in 1945 with the exception of food, clothing, and medical supplies. Units had to operate with equipment left over from the war despite increasing obsolescence. Maintenance became problematic as the Army failed to procure repair parts, leaving equipment of all types in a deplorable state of disrepair. Reductions in personnel and facilities allowed only for minimal maintenance on most equipment, while budgetary restrictions reduced the amount of spare parts and assemblies available. Of the 3,202 medium "Sherman" tanks in the United States in 1950, 1,326 were unserviceable. The vast majority of the Army's motor transport was six or more years old, with conditions even worse in Eighth Army in Japan.²⁸ Since the end of the war, Far East Command had received no new equipment of any kind, including tanks and vehicles. Authorized 221 recoilless rifles, Eighth Army fielded only twenty-one. 13,780 two and a half ton trucks were on hand, but only 4,441 were in running condition; of the 18,000 "jeeps" in the command, 10,000 were unserviceable.²⁹ Equally distressing, however, was the state of other classes of supply in the theater.

Ammunition of all types was in short supply and stocks were out of balance. The vast quantities of ammunition remaining from World War II rapidly declined from training requirements, transfers to allies, and normal deterioration. Since penurious budgets prevented new ammunition acquisitions, there were inadequate amounts of most types.³⁰ Artillery ammunition, in particular, was always in short supply throughout the Korean War, especially in the last two years. As Ridgway (and later General James Van Fleet) emphasized, American firepower was the major counter to the massed attacks of the Chinese Communist Forces. It was not unusual to have numerous artillery battalions firing simultaneously in support of

beleaguered U.S. and U.N. soldiers. One battalion fired 11,600 rounds in a twelve-hour period, a rate of one round per howitzer per minute. Ammunition for heavy artillery battalions was always insufficient and had to be rationed; this forced commanders to build special ramps for tanks so that they could fire their main guns as artillery.³¹ While ammunition was a problem, the lack of training in the combat units fighting the war was an even bigger problem. The sad tales of the 8064th Heavy Tank Platoon (Provisional) and the 8066th Mechanized Reconnaissance Platoon (Provisional) reflect both the training and equipment problems facing Eighth Army.

Desperate to get some armored force into the fight in Korea to counter the North Korean T-34 tanks, Eighth Army formed the 8064th and 8066th platoons on 10 July 1950.³² During the nearly five years of occupation duty, Eighth Army turned in all of its M-4 "Sherman" medium tanks and reduced the tank battalion of each division to a single company of seventeen M-24 "Chaffee" light tanks. When the M-24 tanks proved to be of dubious value in fighting the North Korean T-34's, Eighth Army scoured its depots and found three M-26 "Pershing" heavy tanks. All three tanks suffered from a variety of mechanical problems after five years of neglect. Desperate for anything that could stand up to the North Korean tanks, it was decided to rebuild the Pershings, form them into a provisional tank platoon (the 8064th), and crew them with men from the tank company of the 1st Cavalry Division. Additionally, another provisional unit, the 8066th, was formed from men out of Kobe Base, Japan, who had previous armor experience. The platoon consisted of five M-8 "Greyhound" armored cars used by the military police in Tokyo for crowd control. The 8066th arrived in Pusan in the middle of July, with the 8064th following on 16 July 1950.

The 8064th Heavy Tank Platoon went into combat almost immediately, moving northward from Pusan by rail to Chinju in the southern sector of the now rapidly diminishing United Nations perimeter. Arriving at the station in Chinju at 0300 hours on 28 July, the tanks' engines overheated immediately, as their fan belts stretched out of shape after running only a few hours. Since there were no M-26 fan belts in theater, attempts were made to fabricate new belts in Japan. After three days all efforts failed, and Eighth Army ordered the tiny force out of Chinju and back to Pusan. Unfortunately, the North Korean 6th Division beat the evacuation train into town, forcing the 8064th to fight its way out. After a brief fire fight, the tankers abandoned their overheated machines, leaving thirteen men killed or captured.

The 8066th Mechanized Reconnaissance Platoon suffered a similar fate only two days later. Attached to the 1st Battalion, 29th Infantry Regiment, the 8066th was ambushed while participating in a reconnaissance in force westward from the village of Chungam-ni back toward

Chinju on 2 August 1950. The North Koreans destroyed four of the five armored cars of the platoon and killed the platoon leader.

The two provisional platoons led an evanescent life in combat in Korea. They were the product of a desperate command seeking a solution to the North Korean armored threat. Hastily organized, operating equipment they had never trained on, and haphazardly committed to combat, the 8064th and 8066th failed to achieve even a modicum of success, despite the heroics of individuals. A provisional tank battalion was formed in August, and the Army scoured the old Pacific battlefields in search of any Sherman tanks left over from the war. The 70th Tank Battalion, formed at Fort Knox, Kentucky, actually equipped its C Company with M-26 Pershing tanks sitting on concrete pedestals around the post. All of these problems, and the wastage of men and material, were due to the hasty nature of the post war demobilization.

Building a tank requires a long lead time. Thousands of parts must be manufactured and assembled. Specialized tools and dies are required, as are skilled engineers and workers. Because of the extensive time required to retool and reenergize American tank production during the Korean War, more troops were using the World War II vintage Sherman tank than the newer M-46 "Patton" as late as October 1952. The M-46 was not a new tank from the ground up. It was simply a new turret mated to existing M-26 hulls. Had the Army not been in the process of converting 800 M-26s into M-46s, it is likely that only World War II era tanks would have reached the battlefield prior to 1953.

Throughout the five years preceding the Korean War, the time and quality of basic training provided to the incoming Army private fluctuated wildly depending on funding levels. At the end of the Second World War a seventeen week training cycle was standard. Within a year this had dropped to eight weeks, followed by another temporary cut to a mere four weeks in November and December of 1946, as the Army struggled to fill overseas occupation units. In May 1947 the cycle increased to thirteen weeks, only to fall once again to eight weeks less than a year later.³³ The training cycle in the years prior to Korea caused considerable upheavals in the training and readiness of all Army units. Adding to the training deficiencies was the lack of live-fire training. Immediately following the end of World War II, General Jacob Devers, Chief of Army Field Forces, suspended all unit live-fire training even though the Army had a well-developed, wartime tested series of live fire exercises for squads, platoons, and companies. His rationale, and that of his successor, General Mark Clark, was simple: safety. Safety was a greater concern to the Army's peacetime leaders than training readiness. A mere twelve days after Task Force Smith's destruction, the Army reconstituted live fire training.³⁴ With the safety of peacetime shattered and the Korean War seemingly validating the tenets of NSC-68, the

fiscal restraint of the Truman Administration became another casualty. For the Army, innovation and desperation reigned as it struggled to get trained units and more equipment into the fight.

The first order of business was to fill the divisions fighting in Korea, while providing MacArthur the reinforcements needed. The Army evolved a simple strategy: fill the divisions fighting as quickly as possible, while rebuilding the general reserve to meet threats that might arise elsewhere. Eighth Army came up with a similar solution. It cannibalized the 7th Infantry Division both of people and equipment to fill out the three divisions fighting in Korea. With the Army staff unable to send sufficient replacements to the Far East to replace the heavy losses in the initial fighting, the Army assigned South Koreans to each division. As the fighting increased MacArthur asked for more and more troops. He received the 2d and 3d Infantry Divisions, the last two divisions in the General Reserve, from the United States. The Army continued to expand piecemeal, and asked for and received permission from Truman to federalize four understrength National Guard divisions in August 1950. It was not until the Chinese intervention in November 1950 that the President declared a national emergency. Within a year and a half of the war's outbreak, the United States Army doubled in divisions from ten to twenty.³⁵

Ultimately, the Army mobilized nearly three million men, stopped the combined North Korean and Chinese armies, restored the status quo ante bellum, and continued to defend against other threats, most notably in Europe. There was, however, little in the way of transformation or change in the Army. Instead, it adapted the weapons and tactics of the Second World War to the enemy and terrain of Korea. The division itself changed little, and the tactical innovation of the first year of the war gave way to the enervating tactics of firepower dominance in the positional warfare of the last two years of combat. The only real change occurred in a personnel rotation policy that moved individuals rather than units out of Korea. The program, designed by the Army to share the combat burden, did keep experienced staffs in Korea, but left platoons, companies, and battalions bereft of cohesion or *esprit de corps* as soldiers rotated in and out. The average tanker and infantryman rotated back to the States after nine and ten months respectively, while service support troops could stay as long as eighteen months.³⁶

As the war ended in 1953, so too did the Truman administration. For five years following the surrender of Japan, Truman tried to wage a Cold War by starving the Army and relying on atomic supremacy. The shock of the North Korean invasion of the South itself was not enough to loosen Truman's grip on the economy- only the intervention of the Chinese in the war could do that. The end result was a gigantic rearmament program- the building of the hydrogen bomb, many different types of lesser atomic weapons, new supercarriers, the B-52 bomber, and

missiles of all types.³⁷ The Army spent the years 1945-1953 in demobilizing initially, occupying Germany and Japan, expanding during the Korean War, reinforcing Europe, and finally fighting a limited war. At no time, however, did the Army seriously contemplate more than minor changes to its organization or approach to war. The official position was that there was no need for doctrinal changes.³⁸ Bereft of ideas and the desire to change, the Army entered the mid-1950s facing the same issues that were extant in the mid 1940s.

AN UNCERTAIN TRUMPET: THE PENTOMIC ARMY, 1954-1960

The inauguration of Dwight D. Eisenhower ushered in the end of the Korean War, and another national military strategy based on the atomic bomb and airpower. If anyone in the Army hoped for a more sympathetic attitude towards its problems, they were dashed almost immediately by the administration's announcement of the "New Look" defensive policy. Despite reservations from the Army, the Eisenhower administration formalized its policy in July 1953 when it issued NSC 162.³⁹ There was nothing really that new about the New Look. The basic structure of the policy was an expanded strategic air force and reliance on technology, which allowed for a severe reduction in conventional forces. Reductions in conventional forces also meant lowered defense costs and savings to the nation. To Eisenhower it was simple. "If we should proceed recklessly and habitually to create budget deficits year after year, we have with us an inflationary influence that can scarcely be successfully combated. Our particular form of economy could not endure."⁴⁰ Eisenhower was convinced that the kind of force he led across the channel in 1944 offered no use whatsoever in the world of the atomic bomb. "Now, our most valued, our most costly asset is our young men. Let's don't use them any more than we have to," he told the *Washington Post*.⁴¹

For the senior leadership of the Army, the lessons and hardships of the Korean War seemed not to matter. When he presented his first budget as Army Chief of Staff to Secretary of Defense Charles E. Wilson in 1953, Ridgway had an epiphany: "[The] military budget was not based so much on military requirements, or on what the economy of the country could stand, but as on political considerations."⁴² This is a timeless and important observation that is just as true today. Political considerations, both domestic and external, will always supersede any logic for force structure requirements, especially for the Army. Only the requirements of a "hot war" dull the tendency to find economies in the unglamorous and seemingly non-strategic role the Army plays in American security. Once the war is over, however, the long knives of the bureaucrat and politician return to carve away excess "fat." To General Maxwell Taylor, now commanding Eighth Army in Korea, the ultimate effect of the Korean War was not to show the

weaknesses inherent in the reliance of the United States on airpower and atomic weapons, but just the opposite. Faith in "atomic airpower" was strengthened, not reduced. To Taylor, the New Look was little more than the old air power dogma set forth in Madison Avenue trappings.⁴³ How would the Army respond?

Facing another series of seemingly endless cuts with no apparent role in national strategy other than civil defense, tested Army leadership. The Army ended the Korean War with twenty divisions and 1.5 million men. By 1955, however, Army strength was 1.1 million, dropping steadily to 859,000 and eleven combat divisions during the last year of the Eisenhower administration.⁴⁴ During his two years as Chief of Staff, Ridgway fought against large troop cuts by arguing that U.S. commitments to the nascent NATO, South Korea, and other allies precluded the types of reductions sought by the administration. The French crisis at Dien Bien Phu in the Spring of 1954 gave the New Look its first real test. Sending in an Army survey team, Ridgway argued that five to ten divisions and billions of dollars in infrastructure improvements would be needed to fight and defeat the Viet Minh. The Army did not have that combat force ready in the United States, and Eisenhower was unwilling to drop atomic weapons.⁴⁵ Despite the apparent failure of the policy of massive retaliation, the Army budget continued to shrink as did Ridgway's influence. By the end of his two years as Army Chief of Staff, Ridgway was *persona non grata* in the Eisenhower administration. His replacement, Taylor, brought a sophistication and understanding of the Washington political landscape his predecessor lacked. He also brought a determination to keep the Army in the public eye.

As Chief of Staff, Taylor faced the mounting problem of an Army with an image problem. The seemingly indecisive nature of the Korean War only further worsened the public opinion of the Army. Taylor decided the olive-drab uniform, worn since World War I, had to go. After a series of "fashion shows," Taylor decided to field a new Army green uniform.⁴⁶ An Army spokesman predicted that the newly clad soldier could "appear beside the other services without apology for his appearance."⁴⁷ Uniforms, however, were the least of the Army's problems, but Taylor's efforts at least signaled that changes were coming for the senior service. A more tangible effort came immediately from Taylor in the form of a paper entitled "A National Military Program" in which he outlined his ideas that came to be known as "Flexible Response." Taylor proposed giving the limited war forces (the Army and to a lesser extent the Navy and Marines) equal priority with the nuclear deterrent forces (the Air Force, specifically the Strategic Air Command).⁴⁸

Taylor presented his program to the Joint Chiefs of Staff in March 1956. It was promptly ignored, and led the chairman, Admiral Arthur Radford, to propose his own program calling for

radical reductions in the strength of the Army. Embracing fully Eisenhower's policy of massive retaliation, Radford proposed reducing the Army to 575,000 men, leaving most of the ground combat to the Marines and American Allies.⁴⁹ Radford's proposal simply fit the outcome of the spring 1956 three-year examination of defense requirements initiated by Wilson. While calling for sufficient deterrence to counter the growing Soviet nuclear arsenal, the study also called for a defense budget ceiling of \$38 billion for the next year's budget. By making drastic cuts in personnel in the Army, Radford sought to meet this ceiling.⁵⁰ Taylor, faced with these reductions, embarked on an interesting and somewhat disingenuous course of action.

Prior to becoming Chief of Staff, Taylor forwarded a copy of his ideas on flexible response to the Army staff. The document made it into the hands of a small group of five colonels in the Operations Directorate who embraced the Taylor position. The group divided themselves into an "inside team" led by Brigadier General Lyal Metheney, responsible for informing the Army on the aspects and implications of Flexible Response, and an "outside team" led by Colonel George Forsythe, responsible for being Taylor's and the Army's media watchdogs, bringing the Army message to the public and Congress.⁵¹ While Taylor battled with Wilson, Radford, and Eisenhower on the proper role and mission of the Army in official channels, Forsythe and Metheney battled on other fronts. The members of the "colonel's revolt" knew they were on their own, but enjoyed the tacit support of Taylor, who emphasized that he wouldn't know them if they were ever uncovered.⁵² The first volley from the clandestine group came in the form of a "leak" to Anthony Leviero of the *New York Times*. On 13 July 1956, Leviero published an article detailing the Radford plan and its massive personnel cuts, as well as the reduction of Army units in Germany to small atomic task forces.⁵³ The resulting uproar in Europe over the implications to NATO in the Radford plan caused Eisenhower to scrap any idea of reducing the Army to a mere civil defense force, and saved the Army temporarily. Taylor knew he had to do more.

Before he left his post as Chief of Staff, Matthew Ridgway started the Army on the path towards its first real transformation since World War I. In April 1954 he directed the development of smaller, more mobile divisions that were capable on the nuclear battlefield. The study, Atomic Field Army (AFTA-1), was ready by the fall of 1954, and tested throughout the next two years. Instead of creating smaller units, however, all of the recommendations from the field actually called for larger divisions than those of post-World War II.⁵⁴ Discarding AFTA-1, Taylor seized upon the work done at the Army War College entitled "Doctrinal and Organizational Concepts for Atomic-Nonatomic Army During the Period 1960-1970," PENTANA for short. The PENTANA concept called for small, 8,600 man divisions that were built around five small self-sufficient battle groups. Taylor approved the study in June 1956, and used the

newly reactivated 101st Airborne Division as the test bed.⁵⁵ Showing his appreciation for the nuances of the political and social climate, Taylor conjured up the "Madison Avenue adjective, 'pentomic,'" to describe the changes to the division.⁵⁶

In September 1956 the 101st Airborne was organized under the pentomic concept, and by December 1956 the Army recommended reorganization of all divisions to both the Secretary of Defense and the President.⁵⁷ After a series of unit evaluations, the new design was considered suitable for short duration, and the Army embarked on its most ambitious reorganization since the start of the First World War. Over the next four months, new tables of organization and equipment were designed and issued, and Taylor himself visited the school commandants to discuss and sell the reorganization.⁵⁸ With a glamorous new name for its divisions, Taylor made his second major effort to make the Army more relevant when he created the Strategic Army Corps (STRAC), centered around the XVIII Airborne Corps, the newly formed 101st Airborne Division, and the 82d Airborne Division at Fort Bragg, North Carolina. STRAC was a mobile reserve for use supposedly on a moment's notice, and maintained at a high state of readiness.⁵⁹ New divisions and a new strategically employable corps were not enough, however.

Facing a Congress and nation fascinated with all things atomic, Taylor directed the Army to embrace atomic technology. New divisions still did not make the Army budget more glamorous or more palatable, whatever Madison Avenue labels were attached. Earlier, Wilson returned the Army budget to Taylor, directing him to substitute "requests for newfangled items with public appeal," instead of much needed small arms, trucks, and tanks.⁶⁰ Accordingly, Taylor embraced the development and employment of tactical nuclear weapons and delivery systems along with missile technology. Soon Army literature was filled with ideas like the convertiplane and flying platforms for the individual soldier. In a briefing on 12 May 1956 by the Army staff to Taylor, he directed the Commander of Continental Army Command to develop an atomic capability for direct support artillery, because it was "increasingly difficult to visualize a general war without the use of tactical atomic weapons."⁶¹ To Taylor the move was clear given the climate in Washington and the nation. "Nuclear weapons were the going thing, and by including some in the division armament, the Army staked out its claim to a share in the nuclear arsenal."⁶² There was a tremendous price to pay, however, for this move toward atomics, and it came in conventional weapons modernization.

By embracing missiles and battlefield nuclear weapons, Taylor was relegating conventional modernization to the bottom of the Army priority list in the 1950s. Under the guidance of LTG James Gavin and the engineering team of Werner von Braun at Redstone Arsenal in Alabama, Army missile technology was second to none. A massive continental air

defense program gave the Army some relevance, but caused bitter inter-service fighting with the Air Force over the control of missile technology. At the end of June 1959, there were 62 surface-to-air missile battalions on site around various cities and key installations in the continental United States alone.⁶³ While the Army won some and lost some of these inter-service battles, the real impact was to see even more of the Army budget drained away from modernization programs.⁶⁴ Battlefield atomic weapons also contributed to the Army budget drain. In May 1953, the Army fired a small nuclear shell from the 280-mm cannon and immediately began production of the weapon. Throughout the 1950s, the Army deployed nuclear cannons to Europe even though they were obsolete as soon as they arrived. Weighing eighty-three tons, the cannon could not be airlifted, and took two tractors to move its road-bound bulk. It was a glamorous weapon to be sure, but it did not fit into the Pentomic structure of the Army, and it siphoned off precious funding the Army desperately needed for modernization.⁶⁵

As the 1950s and the Eisenhower administration came to an end, so too would the Army's great stillborn transformation, the Pentomic Era. Despite the Madison Avenue labels, exciting developments and accomplishments in missile technology, atomic cannon, and even nuclear tipped rockets, the size of the Army continued to decline. Budgets never increased sufficiently, making the Army choose between modernization and transformation. The Army of 1959 was not mechanized, and most soldiers still carried the World War II era M-1 Garand rifle, even though the more modern M-14 was available. In 1957, the Army devoted more than 43 percent of its research and development budget to missiles and nuclear weapons and only 4.5 percent to new vehicles.⁶⁶ Conventional weapon and equipment modernization, though desperately needed, could not take place in conjunction with the transformation to the Pentomic design without additional infusions of cash that were not to come from the Eisenhower administration. The end result was an Army more unprepared for limited war than the one Taylor inherited. A fixation with technology, and rapid organizational changes without possessing the requisite weapons and equipment, was the legacy of the Pentomic era. Changes in Washington were coming, as were changes in the Army.

THE ROAD ARMY AND THE COMING OF VIETNAM, 1961-1975

"I am directing the Secretary of Defense to undertake a complete reorganization and modernization of the Army's divisional structure, to increase its non-atomic firepower, to improve its tactical mobility in any environment, to facilitate its coordination with our major allies, and to provide modern mechanized divisions in Europe and new airborne brigades in both the Pacific and Europe." So spoke President John F. Kennedy on 25 May 1961 to a joint session of

Congress.⁶⁷ Embracing the ideas of Taylor and Flexible Response, Kennedy eschewed the Massive Retaliation policy of the Eisenhower administration. The Army was ready. In January 1959 General Bruce C. Clarke, commanding general of Continental Army Command, directed the start of a new study, Modern Mobile Army 1965-70 (MOMAR I). Clarke wanted a design that was capable of fighting anywhere in the world in a nuclear or non-nuclear environment. MOMAR I increased tactical mobility and maneuverability, as well as greater conventional firepower in the division.⁶⁸ Optimized for limited war, the forces envisioned under the MOMAR were capable of applying graduated combat power as events dictated from "a fist to a megaton." One of the key features of the MOMAR I field army was the inclusion of separate completely air transportable brigades. These brigades were to be multi-capable and transportable on a minimum number of air force strategic lift aircraft to anywhere in the world in a matter of hours. There were two division designs, medium and heavy, with the medium division also designed to be air transportable.⁶⁹ MOMAR I met resistance within the Army and was never tested or adopted, but it served as a reference point for the next phase- Reorganization Objectives Army Division (ROAD) 1965.

The ROAD concept was approved quickly by the Secretaries of the Army and Defense, followed by Kennedy's approval and announcement of the changes in May 1961. The basic features of the ROAD concept were a common division base, three brigade headquarters, with battalions added in a building block fashion.⁷⁰ For the first time in its history, the U.S. Army would field a truly mechanized division that could rapidly assemble and disperse on both the conventional and nuclear battlefield. The three brigade headquarters reflected the influence of the old armored division combat command and had no units permanently assigned. Brigades could control two to five maneuver battalions, and this inherent flexibility meant that the division could task organize brigades and battalions as it saw fit. Although there was some criticism that the ROAD division was too flexible, the Army approved the design without testing. It concluded that the concept was merely a return to a wartime proven design.⁷¹ The ROAD division was merely the logical evolutionary successor to the World War II armored division structure.⁷² The only true transformation of the Army since the end of the Second World War, the Pentomic Division, was dead. International events, however, would keep the Pentomic formations alive for a few more months, launch a major transformation with the helicopter, and prove the soundness of structuring the Army to fight non-nuclear wars.

In May 1961 conditions in Laos and South Vietnam deteriorated to such a degree that a presidential task force set up to analyze the situation recommended a massive increase in U.S. forces in South Vietnam. In Laos, Secretary of State Dean Rusk recommended preparations for

military action as part of the South East Asian Treaty Organization (SEATO) to defend Indochina. The SEATO plan called for 30,000 combat troops from the treaty signatories, but both Britain and France had no intention of sending troops. Facing increased Soviet intransigence in Berlin, Kennedy opted not to send any more troops to Southeast Asia.⁷³ The Army, structured to fight on the nuclear battlefield and suffering from the deleterious effects visited on it by the "New Look," was in no position to operate in Vietnam and in Europe simultaneously, where Soviet Premier Nikita Krushchev once again threatened the security of Berlin. On 13 August 1961 Berliners awoke to find a barbed wire barricades separating the Soviet sector from that of the three Western Powers. Concrete, guard dogs, watchtowers, and land mines followed quickly, as the Iron Curtain took physical form in the historic capital of Germany. The limits of massive retaliation were tested once again, with the Kennedy administration finding their options unpalatable.⁷⁴ The need for an Army capable of flexible operations in limited wars became paramount. The Pentomic Army lacked flexibility in its small, untested, tactically immobile battle groups.

On 25 July 1961, JFK asked Congress for additional funding to bring the understrength pentomic divisions up to strength and modernize their equipment. In response to the crisis in Berlin, McNamara authorized each of the five divisions posted to Europe an additional 1,000 soldiers each, allowing them to finally mechanize completely with armored personnel carriers. Additionally, new M14 rifles replaced the venerable M1 Garand, the new light machine gun M60 made its way to Europe while the production of the M60 main battle tank accelerated.⁷⁵ A major deficiency was rectified in the Pentomic divisions with the fielding of the armored personnel carriers, but the divisions were still weak. The Army now modernized with zeal, a process impossible when it transformed to the Pentomic structure just five years prior. Although ready to implement the reorganization of its divisions to the ROAD structure, it was not prudent to try and convert in the midst of crisis. Accordingly, McNamara approved the activation of two new Regular Army divisions in January 1962 and delayed the conversion of the rest of the Army until early 1963. On 3 February the 1st Armored Division activated at Fort Hood, and two weeks later the 5th Infantry Division activated at Fort Carson. The discovery of Soviet missiles in Cuba three months later caused 1st Armored Division to move to Fort Stewart where it had access to the port of Savannah. "Old Ironsides" conducted a series of amphibious exercises throughout the fall, serving notice that the revitalized ROAD Army was indeed an effective instrument of national policy. The remainder of the Army reorganization was complete by May 1964.⁷⁶ A changed national security strategy, coupled with the impetus of international crisis exposed the weaknesses of the Pentomic Army.

Although the ROAD concept was a return to the traditional divisional concept of World War II and Korea, it was different in scope and structure making it relevant for the 1960s and beyond. The modernization program so desperately needed by the Army accelerated in tandem with the ROAD reorganization. Choked off from money and personnel the previous ten years, the Army gained strength, tactical mobility, firepower, and relevance in the Cold War arena. In two other areas of major importance, counterinsurgency and air mobility, the Army also advanced. On 30 November 1961 Kennedy summoned all of the Army's major commanders to the White House for an extraordinary summit on counterinsurgency. "I want you guysto get with it," Kennedy admonished the Army officers. Most Army officers thought that the Army could handle guerrilla problems without special emphasis if the funding and manpower issues of the previous administration were rectified. Nothing else was needed outside of the already hard working special forces units.⁷⁷ While it is debatable if the Army was prepared to fight the type of war it faced in Vietnam, it embraced fully the other area of major emphasis, air mobility.

As early as 1956 the Army was testing the helicopter and the concept of "Sky Cavalry"⁷⁸ at Fort Rucker, Alabama. Under the out-spoken leadership of BG Carl I. Hutton and Colonel J.D. Vanderpool, the Army conducted a series of tests on the utility of the armed helicopter. Fearing bureaucratic interference from the Air Force, Vanderpool and his troopers conducted the tests with volunteers on the weekends and in the evening. Touring the country, both Vanderpool and Hutton met with industry representatives and managed to get them to provide expertise at no cost to the government. Scrounging through Navy and Air Force depots, weapons and gun-sites made their way to Fort Rucker and Fort Benning. Vanderpool met with Farell T. Mayhood, chief engineer at a General Electric branch plant in Vermont and got the engineer to agree to fabricate a rocket kit for a helicopter at no cost to the Army. The organizational concepts for Sky Cavalry came from the 1936 horse cavalry doctrine manual with helicopters substituting for the horses.⁷⁹ The Sky Cav experiment died in 1958, another victim of the struggles of the Army to both modernize and transform during the Pentomic era. The seeds of success, however, were sown by those early sky troopers and needed only a sympathetic person in the administration to flower. Robert McNamara was that unlikely person.

In April 1962 McNamara sent memorandums to the Secretary of the Army Elvis J. Stahr in which he argued Army was not doing enough to advance the potential of helicopter aviation. McNamara instructed Stahr to take a "bold new look, divorced from traditional viewpoints and past policies, and free from veto or dilution by conservative staff review."⁸⁰ Within a week Lieutenant General Hamilton H. Howze, commander of XVIII Airborne Corps, was appointed president of the Mobility Requirements Board (Howze Board). For three feverish months, the

Howze board tested and evaluated every aspect of air mobility.⁸¹ Forty different field tests consumed over 11,000 flying hours at Fort Bragg. At the conclusion of this frenetic effort the Board submitted its report on 20 August, recommending that the Army develop an air assault division following the ROAD division model. 459 helicopters would carry the sky troopers into battle, while armed helicopters provided aerial rocket support. The Air Force immediately objected to the Howze Board findings.⁸²

The Howze Board was the engine of modernization and transformation in the post-WW II Army. The board recommended a five-year program whereby the Army would transform into a sixteen-division force of eleven ROAD divisions, five air assault divisions, three air cavalry combat brigades, and five air transport brigades. Air assault divisions, air transport brigades, and air cavalry brigades were envisioned as extremely mobile reserves for Eighth Army in Korea, counterattack forces in support of NATO in Germany, and as part of the Strategic Army Corps in the United States.⁸³ The flexibility and utility envisioned by Taylor in developing the Pentomic division, now was possible. The helicopter would radically change how the Army moved men and material on the battlefield. Coupled with the new wire guided anti-tank missile technology emerging in the early 1960s, the helicopter had the potential to be a hard-hitting mobile reserve in a general war with the Soviet Union. In the growing war in Vietnam, Howze saw the helicopter providing the "most effective" way to augment the fight in South Vietnam. U.S. forces would be free "from local limitations to surface transportation," and that "their extreme mobility will permit a flexibility of employment much to be desired, perhaps as a counterattack reserve or as a blocking or enveloping force."⁸⁴ The Army had answered Kennedy's call to "get with it" in combating guerrillas- and the helicopter would be central to the approach.

Despite Air Force objections, McNamara ordered the Army Chief of Staff, General Earl Wheeler to test the Board recommendations. Wheeler ordered the formation of the 11th Air Assault Division (Test) at Fort Benning in February 1963 under MG Harry Kinnard. After two years of extensive tests, the 11th Air Assault Division exchanged its colors for the 1st Cavalry Division, and prepared to deploy to South Vietnam.⁸⁵ The tests of the new air assault division did not occur in a cocoon insulated from the events transpiring in Southeast Asia. For several years Army helicopter pilots had learned how to handle their machines in a counterinsurgency environment. In fiscal year 1963 alone, Army helicopters flew 100,000 sorties, transported 275,000 Vietnamese soldiers, and 2000 tons of cargo.⁸⁶ Many airmobile concepts were combat tested in Vietnam while the 11th Air Assault Division continued to explore the employment of an air assault division.⁸⁷ The "First Team" deployed to Vietnam in the summer of 1965, and fought

its first major engagement in the Ia Drang Valley in November 1965, validating the concept of the air assault division.⁸⁸

As the Army turned its full attention to fighting the war in Vietnam, it was the ubiquitous helicopter that came to symbolize American power during the war. The helicopter freed the Army from enervating forced marches, and allowed deep incursions by battalions and brigades into enemy held terrain at nearly a moment's notice. The new national strategy of "Flexible Response," coupled with the support of Robert McNamara, allowed the Army to overcome the deleterious effects of the penurious defense budgets of the 1950s. Transformation, misguided under the PENTOMIC concept, came to partial fruition with the ROAD division and the concepts inherent in the air assault division and the helicopter. The Army could now completely mechanize, field new rifles, machine guns, tanks, and vehicles of all types, as well as integrate the helicopter into every division. Helicopters were vital instruments of war in every division, with entire infantry battalions moving in a single lift of helicopters. Fighting throughout Vietnam in 1966, the 1st Infantry Division regularly had ninety lift helicopters available to it on a daily basis.⁸⁹

But, it was the new family of helicopters, specifically the Bell UH-1 series, which facilitated the partial transformation of the Army. Despite the urgings of the Howze Board, the Army never abandoned the traditional divisional design, nor did it replace armored and mechanized divisions with air assault divisions, air transport brigades, or air cavalry brigades. The Vietnam War required helicopters, air mobile units, and light infantry formations, but the threat to the nation was still in Europe. The same units and helicopters that were so important in operations in Vietnam, were of marginal utility in fighting the massed armored formations of the Warsaw Pact. The Army prudently retained the capabilities of the helicopter as espoused by the Howze Board and demonstrated in war, but rejected a complete transformation to a helicopter based force. The helicopter, like the tank and machine gun before it, was integrated into the Army writ large, making it only a partial transformation. Indeed, the helicopter can be viewed as simply the logical extension of Army modernization to the air medium following the independence of the Air Force in 1947, and not truly transformational at all. The Army and the nation regained the ability to fight limited wars, giving the President more options than simply massive retaliation or capitulation. The war in Vietnam, however, dragged on for the next ten years, sapping the Army's strength and savagely mauling its morale. The fall of Saigon in April 1975, saw the Army enter a new phase of reflection and search for relevance.

COLD WAR TRIUMPH, 1975-1991

Even before the first North Vietnamese tank rumbled through the streets of Saigon in April 1975, the U.S. Army was re-examining its roles and structure. As the last Army combat units were departing Vietnam in 1973, the Arabs and Israelis fought the devastating Yom Kippur War of October 1973. The lethality of modern anti-tank weapons supplied to the Arabs by the Soviet Union, and the incredible devastation of the tank battles on the Golan Heights served as a necessary corrective to the enervating years of the war in Vietnam, and as a stimulus to doctrinal change within the Army.⁹⁰ The necessity of fighting the war in Vietnam after 1965 stunted the continued modernization of the Army as it required more and more of the nation's budget to fuel the expansion of the war. Consequently, the Army faced a situation in 1973 where a generation of modernization was "lost" from 1965 to 1972 while the Soviet Union substantially modernized and strengthened its forces.⁹¹ Understanding the severity of the situation, the new Army Chief of Staff, General Creighton W. Abrams, spurred the development of a new tank, a new infantry fighting vehicle, and new cargo and attack helicopters. Supporting combat operations in Vietnam pillaged the Army in Europe. Abrams moved to correct the personnel deficiencies facing these "hollow" divisions. Additionally, he moved to restructure the Army by revitalizing the Army Reserve forces, with the result that the Regular Army could not go to war without mobilizing the reserves.⁹²

While the Army sought to modernize and stabilize its manpower, there was a concomitant effort to examine the divisional structure and Army doctrine. The first effort at divisional reorganization was titled the Division Restructuring Group. Under the concept recommended by the group, divisions would still have three brigades, but each would be substantially larger by fielding more tank and mechanized infantry battalions. Anti-tank companies sporting new wire guided missiles and more organic aviation support rounded out the larger divisions. Wanting a rapid force redesign that would improve readiness and improve the capability of the Army's forward deployed forces, the Army Chief of Staff, General Bernard W. Rogers ordered a one-year test of the design at the beginning of 1977. Eighteen months later the test ended without the adoption of the new organization by the Army.⁹³ As the decade of the 70s came to end, the Army still searched for an organization that could fight and win on the European battlefield without resorting to tactical nuclear weapons.

In late 1978, General Donn Starry, commander of the Army Training and Doctrine Command moved to extend the Division Restructuring Group work by initiating a study titled "Division 86." As before, the focus was on the heavy division and the possible fight in Europe. The new division numbered nearly 20,000 soldiers in ten tank and mechanized infantry

battalions. An aviation brigade fielded attack helicopters that could extend the tank killing ability of the division even further. Approved in August 1980, the Army restructured the heavy divisions even though the new M-1 Abrams tank and M-2 Bradley Fighting Vehicle would not be immediately available to every division.⁹⁴ The emphasis was on firepower: conventional firepower that could stem the onslaught of Warsaw Pact forces through the Fulda Gap and across the North German plain. Division 86, however, was really nothing more than a retooled and polished ROAD division. It would take the election of 1980 to insure its success.

Inaugurated even as the humiliating Iranian hostage crisis came to end, Ronald Reagan immediately labeled the Soviet Union as an outlaw empire prepared to go to any lengths to obtain its goals. The national strategy of the United States was no longer détente, but crusade and conversion.⁹⁵ As with the election of Kennedy twenty years earlier, the Army's modernization program would have arrived stillborn without the political backing and increased budgets of the Reagan administration.

With the M-1 tank and new helicopters rolling off the assembly lines for the heavy divisions, the Army now directed its efforts toward the "light divisions" (airborne, air assault, and infantry). Initial efforts focused on the 9th Infantry Division and new technologies and organizational concepts in order to design a motorized division capable of being airlifted anywhere in the world.⁹⁶ Additionally, a new focus on the infantry division resulted in a truly light 10,791 man light division capable of movement in 550 sorties in less than four days. The new light division cost less and was easier to maintain than the old infantry division and it met the needs of the Army for an easily deployable formation that enhanced strategic response. Under the rubric Army of Excellence (AOE), the conversion of the standard infantry divisions started in 1984.⁹⁷ It seems obvious that the AOE light division was really nothing more than the logical extension of the Air Transport Brigade recommended twenty years prior by the Howze Board. The one division that actually held the possibility of transforming the Army, the high technology 9th Division, languished.

The modernization program of the 1980s was expensive and critical to Army readiness. The high technology experimentation in the 9th Division was time-consuming, however, and not deemed similarly critical. Congress, focused on fielding the weapons systems needed for the AOE division, did not support the expense engendered by the experiments in a high technology motorized division. Despite these obstacles, a heavily vehicle dependent motorized division design emerged in 1986, but without the technology to support the design. No assault gun or specialized wheeled vehicle was ever developed for the division, leaving the Army to fill it with existing designs that were inadequate to the task.⁹⁸ Even though the budgets of the Reagan

years were generous, the modernization needs of the Army after the years of combat in Vietnam were more important than any possible technological advantage offered by the experiments of the 9th Division.

The modernization efforts continued apace as the decade of the 1980s came to a close. Coupled with the refined AirLand Battle doctrine, the AOE Army triumphed in the desert in February 1991 in the war with Iraq. The modernization and design efforts begun in 1962, paid off in a war of just 100 hours against a foe armed with the weapons and tactics of a now defunct Soviet Union. The triumph of the desert, however, was fleeting. For the next ten years the Army would drift, seeking only to maintain force structure and manpower levels. In 1994 General Gordon R. Sullivan initiated the Force XXI efforts in the Army. Force XXI is an attempt to marry digitization and the Army's experimentation under one over-arching process. Doctrine and force design revision along with system development ran concurrently in the test bed 4th Infantry Division at Fort Hood.⁹⁹ Despite their efforts, however, there has been no transformation in the Army since the end of the Gulf War, and more cuts in end strength seem inevitable. What does the future portend for the Army?

2015 AND BEYOND: TRANSFORMATION, RAPID DECISIVE OPERATIONS, AND THE OBJECTIVE FORCE ARMY

One of the first acts of General Eric Shinseki, current Army Chief of Staff, was to replace the standard saucer cap of the Army green uniform with the black beret. His actions are strikingly similar to those of Maxwell Taylor forty-five years ago. The green uniform, like the beret, signaled that change was coming. The scope and direction of the type and amount of change that is needed is contentious. Does the Army need to transform into the Objective Force, or does it really need to modernize and adapt the current force structure? Since the end of the Second World War, it is clearly the latter that served both the Army and the nation best. Whatever the mission- occupation, combat in Korea and Vietnam, interventions in Lebanon and the Dominican Republic, deterrence in Europe- gradual, persistent modernization was instrumental in keeping the Army relevant and ready to fight. There are several arguments used today by those who argue that current Army force structure is increasingly irrelevant in the post-Cold War security environment. These individuals constantly tout the canard that the current armored and mechanized formations, now pejoratively termed the "Legacy Force," are as useless today as the horse cavalry was in the 1930s.

In an address to the Association of the United States Army on 8 November 2001, General Shinseki told the audience "we must be able to project power anywhere in the world...that goal was critical as we crafted the Army vision over two years ago."¹⁰⁰ The Army, however, does not

control how it gets to the fight. It is Air Force aircraft and Navy ships that transport each and every soldier. The Army vision may be clear, but the Navy and Air Force may not share a similar view. When the Howze Board recommended the far-reaching application of helicopter technology to the Army writ large, it still did not solve the problem of the dearth of strategic lift aircraft extant in the Air Force. It took the direct intervention of Robert McNamara to recognize that the transformation of the Army would die without strategic airlift. Consequently he initiated the development of the C-141 long range transport, and accelerated deliveries of the C-130E turboprop. By 1964, with the 11th Air Assault Division testing and validating the concepts proposed by the Howze Board, Air Force airlift capability had increased 75% over what was available just three years prior.¹⁰¹ It is instructive therefore, that recently the largest contract ever awarded by the Department of Defense was for the Joint Strike Fighter, and not a new transport aircraft. The cost of the Joint Strike Fighter would pay for the current program of Army transformation four times over.¹⁰² How does the Army get to the fight quickly if there are not enough transports? Without a synthesizing and unifying concept within Department of Defense, and indeed without a person willing to do this difficult task, there will be no real strategic deployability for the Army.

Deployability is an interesting concept that deserves some discussion. What exactly does the word mean or imply? The Army has sought a force that was easily deployed since the end of the Second World War. The Airborne Division seems to meet this demand quite nicely. Why then the search for something "more deployable?" The Air Transport Brigades recommended by the Howze Board and the light division of the AOE Army, all meet the requirement to deploy quickly and easily. In fact, the ROAD organization was so flexible that the 1st Infantry Division could deploy to Vietnam minus its heavy equipment and fight effectively.¹⁰³

The new Interim Brigade Combat Team is the latest Army initiative to get a force quickly to the fight. Because the heavy forces (tank, mechanized infantry) lack the ability to deploy quickly goes the argument, and light forces lack tactical mobility and survivability, the Army needs a force mounted in light wheeled armored vehicles that are transportable by C-130 "Hercules" aircraft. Without dedicated assets, however, it does not matter how heavy or how light the Army force is (or the type or number of vehicles). The Interim Brigades still require strategic lift assets to traverse the globe. C-130 aircraft will not move them from the Continental United States to the Middle East or Europe, C-17 jet transports will. These same Air Force aircraft require secure runways and enormous amounts of fuel, if they are available to the Army at all. Many, if not all of the C-17s, will be busy moving Air Force supplies and equipment in order to sustain

the Air Expeditionary Force, especially since the air arm has become the initial force used in recent years.¹⁰⁴ To Maxwell Taylor, there was a solution:

Because of the very high performance of their airplanes, designed primarily to meet the needs of the air battle today, the Air Force is not equipped to discharge its responsibilities to the Army in ground combat. [The Army] should have its own organic tactical air support and tactical air lift.... Special restrictions of size, weight, and in the case of weapons, of range should be abolished forever and the Army encouraged to exploit technology to the maximum.... Such an Army would take over much of the counterattrition function, which is now split up in many quarters of the defense establishment, to the simplification of our functional budgeting. It would have as its motive force the concept of a hard, mobile striking force ready to move and fight anywhere on the ground.¹⁰⁵

A second "air force" is not appropriate, but the Army must maintain a hard-hitting, mobile, strike force. It is interesting to observe that the helicopter fulfilled Taylor's vision for tactical air support and air lift on the battlefield. Without strategic lift, however, it does not matter how the Army is structured- light, medium, or heavy. The intervention in Lebanon in 1958 is a perfect example of the problems the Army faces in the future.

As political conditions deteriorated in Lebanon in the summer of 1958, it seemed as if the changes wrought by Taylor in transforming the Army were going to pay off. The 101st Airborne Division was restructured under the Pentomic structure and was part of the Strategic Army Corps, formed by Taylor for just such a contingency operation. Under the general war in Europe scenario, the Army was to receive 80 million ton-miles of air transport from the Air Force's Military Air Transport Service of the 188 million-ton miles it could deliver. To deliver the 101st to Lebanon would require 143 million ton-miles of airlift capacity, a total the JCS was unwilling to deliver. Consequently, the Strategic Army Corps sat out the operation in Lebanon while Army forces scrambled to get into theater from bases in Germany.¹⁰⁶ Legacy force, interim force, objective force, pentomic force- the type and structure of the force is irrelevant if there is nothing to transport them to the fight.

"Strategy wears a dollar sign," wrote Bernard Brodie in 1959.¹⁰⁷ Although Brodie was referring primarily to nuclear weapons, the cost of conventional weapons today continues to increase exponentially due to the high cost of sophisticated technology. Operations and maintenance (O&M) costs for the Abrams tank and Bradley Fighting Vehicle are double that of their predecessors, and today's combat aircraft cost 30-50 percent more to operate than prior models.¹⁰⁸ Delaying or canceling the modernization programs and upgrades for weapons systems only increase these costs. Both the Truman and Eisenhower administrations insisted

on budgetary efficiencies at the expense of the Army. Are we seeing the same indications today?

For the Army there is a clear warning in the Korean War experience. The military is rightfully subordinate to the policies of the president, despite the deleterious effect the policies have on readiness and training. Truman was not going to increase spending on the military despite the explosion of a Soviet nuclear device in August 1949, the triumph of Mao in China, the Berlin blockade, and numerous other international warning signs. How to react and modernize the force under such stultifying conditions is important. The Army chose to maintain the status quo of the World War II divisional structure, eventually issuing reduced Tables of Organization and Equipment to meet the realities of the penurious defense spending prior to the outbreak of the war. The Army's real mission was occupation, plain and simple, and it carried out that mission with great care and efficiency. Witness the strong and stable nations of Japan and Germany today. More importantly, despite the avowed or assumed national strategy or strategic interest, the Army was the only force that could save the fledgling South Korean government and people from annihilation at the hands of the Communist North Koreans. The "bright delusion" that air or naval power alone will stop or intimidate a determined foe is just as fallacious today as it was in June 1950. Bombing Serbs in Bosnia or Al Qaeda terrorists in Afghanistan worked only because a proxy ground force was used. And the extent of the "victories" in both cases is debatable.

When faced with the increasingly stringent budgets of the mid to late 1950s, General Maxwell Taylor chose to attack the strategy upon which the budget was based. Taylor, an opponent of the administration's New Look strategy of massive retaliation, actively organized and succored a clandestine group within the Army Staff as soon as he became Chief of Staff. Intent on disrupting the proposed cuts in Army end strength advocated by the Chairman of the Joint Chiefs of Staff, Admiral Arthur Radford, and the Secretary of Defense Charles Wilson, Taylor chose to have this group leak sensitive, indeed classified, information to the press. Furious, Wilson had all the Chiefs publicly proclaim their unity with Taylor himself averring that there was "no mutiny or revolt" in the Army.¹⁰⁹ Politically adept, Taylor reassigned the group of colonels to great assignments, while the furor over the leaks stemmed the plans of Wilson and Radford to cut drastically the size of the Army.¹¹⁰ Taylor's example, however, presents an interesting dilemma. His actions saved the Army from becoming merely a civil defense force for use only after a nuclear holocaust, but his method was one of subterfuge and deceit. Are we to sanction this sort of guerrilla campaign now in pointing out the need to fund Army modernization?

Strategy and doctrine provide venues to argue the need to modernize the Army. Doctrine teaches what to think and what to do while serving a vital intermediate function of bridging the gap between strategic theory and war in practice.¹¹¹ Currently, U.S. Joint Forces Command is working on a joint operational concept for the next decade titled Rapid Decisive Operations (RDO). RDO is the asymmetric assault of an adversary from directions and dimensions from which the adversary has no counter. It will integrate knowledge, command and control, and operations to achieve the desired effect.¹¹² The key to understanding this concept is that once deterrence fails and military force is employed, RDO will “provide the capability to rapidly and decisively coerce, compel, or defeat the enemy to accomplish strategic objectives without a lengthy campaign or an extensive build up of forces.”¹¹³ It seems obvious that the Army’s future Objective Force will provide forces for this doctrine, but what type of force is needed? Will science and technology breakthroughs in the future allow the Army to field the Objective Force? The past sixty years detail the many dangers in this approach. Is it prudent to substitute knowledge and information for protection and combat power? How do you coerce, compel, or defeat an eighteen year old girl intent on blowing herself up in a crowded market without physically dominating the area in which she lives? The end result of the current push to get a lighter Army to the fight quickly, is the transformational equivalent of getting Custer to the Little Big Horn faster.¹¹⁴

Current operations can easily overcome any impetus to change or modernize as the five years immediately following World War II demonstrated. It is entirely possible that current peacekeeping operations in the Balkans and other such operations created by the current “Global War on Terrorism” will consume the Army for the next decade. Even if real transformation is attempted, technological dead ends and failures will exhaust limited funds and leave the force simply small, as Maxwell Taylor discovered with the anemic pentomic battle groups. The quest for technology can also lead to legitimizing a weapon system that is patently absurd and unusable, like the Davy Crockett, a 150-pound miniature nuclear rocket devised for use by the battalion commander, while the true engine of modernization, the helicopter, goes untapped.¹¹⁵ Of course, the greatest obstacle to any change is war- both Korea and Vietnam consumed the Army for years and the Global War on Terror promises the same. The history of the Army during the Cold War shows us that current Army transformation is destined for failure.

While I have no crystal ball, nor do I claim any degree of prescience, there are solid lessons from the Cold War years. The Army could face a crisis of historic proportions by the year 2010. While the armed forces continue to fight terror wherever it is found in the world, the initial surfeit of funds lavished on the Department of Defense by the Congress could dwindle to

pre-war levels as social and domestic fiscal issues reassert themselves. If current decisions are any indication, the Army will continue to cancel modernization programs, extend the service life of older weapons systems, and cut force structure in order to meet the inevitable monetary constraints imposed, all in an effort to continue funding the science and technology experimentation considered crucial to the Objective Force. Many of the technologies needed to make the Objective Force a reality will be delayed, others will be deemed unusable (ala the Davey Crockett), and more still will simply not work. All the while, the Legacy Force will molder in its motor pools and barracks, under-funded and un-modernized.

The current approach to transformation, waiting on technology to show us the way for the Objective Force, will lead to the "Balkanization" of the Army into disparate groupings, a process that has already begun. The 75th Infantry Regiment (Ranger) used to be the elite light infantry of the regular Army. Today, they are classified as a "special" force, for use only in "special" operations. With the signing of the Camp David peace accords in 1982, no one in the Army envisioned the commitment of 1000 soldiers to the Sinai for an indefinite period, but the Army is still there, and an infantry colonel is selected every year to command this force. Bosnia and Kosovo continue to require brigade-sized units that rotate every six months, keeping the peace with no end to the duty in sight. Nearly fifty years after the truce at Panmunjom, the U.S Army continues to man the defenses in Korea with the 2d Infantry Division. How long will U.S. forces stay in Afghanistan to maintain the peace? Since special operations formations are smaller and cheaper than conventional forces, and peacekeeping operations do not require sophisticated armored forces, a doctrine based on swift, clean conflicts, and rapid decisive operations will naturally accentuate "special" forces, the use of proxy ground forces, and high technology solutions. The Army will provide either special forces, or specialized peacekeeping/civil affairs brigades- just as Eisenhower envisioned the use of the Army after a nuclear war. The quest for deployability and lightness will only exacerbate this phenomenon.

It is possible to look too far forward as the Pentomic era showed. When General William Dupuy took over TRADOC in 1979, he was convinced the Army spent too much time trying to divine the future.

...people aren't smart enough to see what we'll need in the year 2000. The reason we aren't smart enough to do that is the people we ask in 1979, for instance, to look at the shape of the Army in the year 2000, possess a 1979 mentality. So, the Army they see out there is simply a reflection of the 1979 Army with some gimmicks. They'll say "By then we'll have more lasers, and we may have atomic energy, and we may have this, and we may have that." But the concept is all based on a 1979 consciousness and information. I just don't believe human beings can look to the long-range future that well, so I stopped most of the long range studies. I also tried to make some sense out of the so-

called weapons requirement process....Somebody was supposed to sit down and visualize the perfect weapon of the future. Then, after you have visualized and described it, you turn it over to the engineers and the scientists and asked them to make one....[but] there isn't anybody in TRADOC or CDC [Combat Developments Command] who can see further than the scientists or the engineers have already seen.¹¹⁶

We, of course, possess a 2002 mentality, and Dupuy's advice is sound. Instead of repeating the tired dogma that the current Army force structure is too heavy to get to the fight quickly, should we not ask how quickly does the force really need to be there, and then build the strategic lift needed to meet that goal? The real answer to this question and the others associated with transformation goes back to the reason the Army exists at all- to fight and win the nation's wars by providing sustained ground combat forces. Therefore, as the current legacy systems reach the end of their lifecycle between the years 2010-2015, the technologies needed to make the Objective Force a reality could be stillborn, forcing the Army to improvise in a major theater of war, much as it did in 1950 in Korea.

Finally, the history of the Cold War shows clearly that the Army will continue to lose budget battles to the high technology weapons created for the doctrines like Rapid Decisive Operations. The current conventional force structure will age and become obsolete. A decade of modernization will be lost, factories closed, engineering and scientific experts diverted to other areas. Congress will look for economies in personnel costs and the force structure, cut programs, and argue with the president on proper "strategy," while the Army continues keeping the peace and fighting terrorism around the globe. And then, in an area assumed to be outside U.S interest it will happen- a conflict that presents no proxy, is not decided rapidly, and with an enemy who is not affected by high technology solutions, or who can counter American high technology weapons with counter measures of their own. Even in the 21st Century, we may discover too late that you still need to physically dominate your foes, and that this cannot be done by high flying aircraft, cruise missiles, unmanned drones, satellites, or information superiority.

Word Count: 13, 362

ENDNOTES

¹ Matthew B. Ridgway, *Soldier: The Memoirs of Matthew B. Ridgway* (New York: Harper and Brothers Publishers, 1958), 192.

² General Douglas MacArthur as quoted in Allan R. Millett and Peter Maslowski, *For the Common Defense: A Military History of the United States of America* (New York: The Free Press, 1984), 466.

³ Russell F. Weigley, *History of the United States Army* (New York: Macmillan Publishing Company, 1967), 485.

⁴ *Ibid.*, 486.

⁵ William W. Epley, *America's First Cold War Army, 1945-1950* (Arlington, Virginia: Association of the United States Army, August 1999), 4.

⁶ Stephen E. Ambrose, "The Armed Forces and American Strategy, 1945-1953," in *Against All Enemies: Interpretations of American Military History from Colonial Times to the Present*, ed. Kenneth J. Hagan and William R. Roberts (New York: Greenwood Press, 1986), 306.

⁷ Harry S. Truman, *Memoirs by Harry S. Truman: Volume One, Years of Decision* (Garden City, N.Y.: Doubleday & Company, Inc., 1955), 484.

⁸ Epley, 4.

⁹ Truman, 509.

¹⁰ Ridgway, 166.

¹¹ Truman, 509.

¹² John B. Wilson, *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades* (Washington, D.C.: Center of Military History, 1998), 211.

¹³ *Ibid.*, 211-212.

¹⁴ *Ibid.*, 222-225.

¹⁵ Weigley, 502.

¹⁶ John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy* (New York: Oxford University Press, 1982), 22.

¹⁷ *Ibid.*, 23.

¹⁸ Weigley, 501.

¹⁹ Epley, 17.

²⁰ Department of Defense, Semiannual Report of the Secretary of the Army, July 1 to December 31 1949 (Washington, D.C.: Government Printing Office, 1950), 125-126.

²¹ James F. Schnabel, *Policy and Direction: The First Year* (Washington, D.C.: Office of the Chief of Military History, 1972), 43-45.

²² Doris M. Condit, *The Test of War, 1950-1953. History of the Office of the Secretary of Defense, Volume II* (Washington, D.C.: Office of the Secretary of Defense, 1988), 5,6.

²³ Ambrose, 310.

²⁴ Ridgway, 192.

²⁵ For an outstanding account of the events surrounding the commitment of the U.S. Army to the Korean peninsula see Joseph C. Goulden, *Korea: The Untold Story of the War* (New York: Times Books, 1982), 101-105.

²⁶ For an outstanding description of the fighting of Task Force Smith see Roy K. Flint, "Task Force Smith and the 24th Infantry Division: Delay and Withdrawal, 5-19 July 1950," in Charles E. Heller and William A. Stofft eds., *America's First Battles, 1776-1965* (Lawrence, Kansas: university of Kansas Press, 1986), 266.

²⁷ Burton I. Kaufman, *The Korean War: Challenges in Crisis, Credibility, and Command* (New York: Alfred A. Knopf, 1986), 36.

²⁸ Schnabel, 45-46.

²⁹ Ibid., 59.

³⁰ Ibid., 46.

³¹ Robert A. Doughty, *The Evolution of US Army Tactical Doctrine, 1946-76. Leavenworth Paper Number 1* (Fort Leavenworth, Kansas: Combat Studies Institute, 1979), 11.

³² The story of these two provisional platoons is adapted from my article, Arthur W. Connor, Jr, "The Armor Debacle in Korea 1950: Implications for Today," *Parameters* XXII No. 2 (Summer 1992): 66-76.

³³ Epley, 12-13.

³⁴ Ibid., 12-13.

³⁵ See Wilson, Chapter 9.

³⁶ T.R. Fehrenbach, *This Kind of War: A Study in Unpreparedness* (New York: The Macmillan Company, 1963), 505; Weigley, 510.

³⁷ Ambrose, 317.

³⁸ Doughty, 12.

³⁹ Daun Van EE, "From the New Look to Flexible Response, 1953-1964," in *Against All Enemies: Interpretations of American Military History from Colonial Times to the Present*, ed. Kenneth J. Hagan and William R. Roberts (New York: Greenwood Press, 1986), 322.

⁴⁰ Eisenhower, in a letter to Alfred M. Gruenther, 4 May 1953 in *The Papers of Dwight David Eisenhower. The Presidency: The Middle Way XIV*, eds. Louis Galambos and Daun Van EE (Baltimore: The Johns Hopkins Press, 1996), 203.

⁴¹ Stephen E. Ambrose, *Eisenhower, Volume II. The President* (New York: Simon and Schuster, 1984), 171.

⁴² Ridgway, *Soldier*, 272.

⁴³ Maxwell D. Taylor, *The Uncertain Trumpet* (New York: Harper and Brothers, 1959), 17

⁴⁴ A.J. Bacevich, *The Pentomic Era: The U.S. Army Between Korea and Vietnam* (Washington, D.C.: National Defense University Press, 1986), 19.

⁴⁵ Van EE, 328.

⁴⁶ John M. Taylor, *General Maxwell Taylor: The Sword and the Pen* (New York: Doubleday, 1989), 197. Hereafter cited as *The Sword and the Pen*.

⁴⁷ Bacevich, 23.

⁴⁸ Van EE, 330.

⁴⁹ *Ibid.*, 330.

⁵⁰ Douglas Kinnard, *President Eisenhower and Strategy Management: A Study in Defense Politics* (Washington: Pergamon-Brassey's, 1989), 57.

⁵¹ Interview between LTC Frank L. Henry and LTG George I. Forsythe, U.S. Army Military History Institute, Senior officer's Debriefing Program, Project 74-1, Carlisle Barracks, PA, 326.

⁵² *The Sword and the Pen*, 209.

⁵³ Kinnard, 57; Taylor, *Uncertain Trumpet*, 41-42. Taylor writes that Leviero benefited from a "deliberate leak" and astute investigation, when it was actually the inside group of the Operations Directorate who fed him the details.

⁵⁴ Wilson, 269-270.

⁵⁵ *Ibid.*, 273-274.

⁵⁶ *Swords and Plowshares*, 171.

⁵⁷ Doughty, 16.

⁵⁸ Wilson, 277-279.

⁵⁹ Van EE, 332.

⁶⁰ *Swords and Plowshares*, 171.

⁶¹ U.S. Department of the Army, Deputy Chief of Staff for Military Operations. Briefing for Chief of Staff on Army Organization 1960-70 (PENTANA), 15 May 1956. Copy in the Military History Institute archives.

⁶² *Ibid.*, 171.

⁶³ Statement by General Maxwell D. Taylor before the Senate Armed Services committee, 22 January 1959. Copy in the Military History Institute archives.

⁶⁴ Bacevich, 98-100.

⁶⁵ *Ibid.*, 83-84.

⁶⁶ *Ibid.*, 100.

⁶⁷ E.F. Fisher, *Relationships of the ROAD Concept to Moral Considerations in Strategic Planning*, OCMH Monograph No. 106S, 3. Copy in the Military History Institute archives.

⁶⁸ Glen R. Hawkins and James Jay Carafano, *Prelude to Army XXI: U.S. Army Division Design Initiatives and Experiments, 1917-1995* (Washington, D.C.: Center of Military History, 1997), 15. Hereafter cited as *Prelude to Army XXI*; Doughty, 19.

⁶⁹ United States Army Continental Army Command. MOMAR (Modern Mobile Army 1965-70), working papers, 9 June 1959. Copy in the Military History Institute archives.

⁷⁰ Doughty, 21.

⁷¹ *Prelude to Army XXI*, 17.

⁷² Fisher, 83.

⁷³ Robert S. McNamara, *In Retrospect: The Tragedy and Lessons of Vietnam* with Brian VanDeMark (New York: Times Books, 1995), 37.

⁷⁴ Henry Kissinger, *Diplomacy* (New York: Simon and Schuster, 1994), 583-585.

⁷⁵ Wilson, 305.

⁷⁶ Wilson, 306-308; Van EE, 336.

⁷⁷ Kennedy as quoted in Andrew F. Krepinevich, Jr, *The Army and Vietnam* (Baltimore: The Johns Hopkins University Press, 1986), 31. The entire thrust of the Krepinevich book is that the Army did not prepare to fight a counterinsurgency in Vietnam, hence the roots of the defeat.

⁷⁸ See LTG James Gavin, "Cavalry, And I don't Mean Horses," *Armor* 68 (May-June 1954).

⁷⁹ Frederic A. Bergerson, *The Army Gets an Air Force: Tactics of Insurgent Bureaucratic Politics* (Baltimore: The Johns Hopkins University Press, 1980), 70-76.

⁸⁰ McNamara as quoted in *Prelude to Army XXI*, 17.

⁸¹ Wilson, 314.

⁸² *Prelude to Army XXI*, 17-18.

⁸³ U.S. Army Tactical Mobility Requirements Board, Final Report (Fort Monroe, Virginia: Continental Army Command, 20 August 1962), 6. Copy in the Military History Institute archives.

⁸⁴ *Ibid.*, 15.

⁸⁵ Bergerson, 115-116.

⁸⁶ Department of Defense, Annual Report for Fiscal Year 1963, including the Reports of the Secretary of Defense, Secretary of the Army, Secretary of the Navy, Secretary of the Air Force (Washington, D.C.: Government Printing Office, 1964), 111.

⁸⁷ Doughty, 29.

⁸⁸ For the definitive account of that first fight in the Ia Drang see LTG (Ret) Harold G. Moore and Joseph L. Galloway, *We Were Soldiers Once and Young: Ia Drang- The Battle That Changed the War in Vietnam* (New York: Random House, 1992).

⁸⁹ Senior Officer Oral History Program, *Changing an Army: An Oral History of General William E. Dupuy*, interviewed by LTC Romie L. Brownlee and LTC William J. Mullen, III (Carlisle Barracks, PA: United States Army Military History Institute, 1986), 148.

⁹⁰ John L. Romjue, *From Active Defense to AirLand Battle: The Development of Army Doctrine, 1973-1982* (Fort Monroe, VA: United States Army Training and Doctrine Command, June 1984), 2.

⁹¹ Doughty, 41.

⁹² Harry G. Summers, "The Army After Vietnam," in *Against All Enemies: Interpretations of American Military History from Colonial Times to the Present*, ed. Kenneth J. Hagan and William R. Roberts (New York: Greenwood Press, 1986), 362-363.

⁹³ *Prelude to Army XXI*, 19-20.

⁹⁴ John L. Romjue, *The Army of Excellence: The Development of the 1980s Army* (Fort Monroe, VA: United States Army Training and Doctrine Command, 1993), 9-11.

⁹⁵ Kissinger, 766-767.

⁹⁶ Wilson, 391.

⁹⁷ Ibid, 391-394.

⁹⁸ Romjue, *The Army of Excellence*, 75-77.

⁹⁹ *Prelude to Army XXI*, 27-28.

¹⁰⁰ General Eric Shinseki, address to the Association of the United States Army, Washington, D.C., 8 November 2001.

¹⁰¹ Department of Defense, Annual Report for Fiscal Year 1964, including the Reports of the Secretary of Defense, Secretary of the Army, Secretary of the Navy, Secretary of the Air Force (Washington, D.C.: Government Printing Office, 1966), 3.

¹⁰² See Greg Schneider, "Lockheed Martin Beats Boeing for Fighter Contract," *The Washington Post*, 27 October 2001, Section A, page A01.

¹⁰³ Wilson, 323-324.

¹⁰⁴ Earl H. Tilford, *Halt Phase Strategy: New Wine in Old Skins* (Carlisle Barracks, PA: Strategic Studies Institute, 23 July 1998).

¹⁰⁵ Taylor, *Uncertain Trumpet*, 169-171.

¹⁰⁶ Roger J. Spiller, *Not War But Like War: The American Intervention in Lebanon*, Leavenworth Paper Number 3 (Fort Leavenworth, Kansas: Combat Studies Institute, January 1981), 8-9.

¹⁰⁷ Bernard Brodie, *Strategy in the Missile Age* (Princeton N.J.: Princeton University Press, 1959), Chapter 10.

¹⁰⁸ Michele A. Flournoy editor, *QDR 2001: Strategy Driven Choices for America's Security* (Washington, D.C.: National Defense University Press, 2001), 121.

¹⁰⁹ David T. Fatua, "The Inconsonant Culture: Ridgway, Taylor and the Proper Role in Civil-Military Relations" a Paper Presented to the Conference of Army Historians, 1996, 19 June 1996.

¹¹⁰ Taylor, *The Sword and the Pen*, 209-210.

¹¹¹ Colin S. Gray, *Modern Strategy* (New York: Oxford University Press, 1999), 36.

¹¹² U.S. Joint Force Command, *A Concept for Rapid Decisive Operations*, Final Draft (Washington, D.C.: J9 Futures Lab, 25 October 2001), v.

¹¹³ *Ibid.*, 11.

¹¹⁴ This idea comes from a discussion with my faculty advisor, Dr. Conrad Crane, who heard Dr. Andrew Krepinevich make a similar comment to the media. For a plausible scenario see John A. Antal's essay "Battleshock XXI," in Robert L. Batemen III, editor *Digital War: A View From the Front Lines* (Novato, CA: Presidio Press, 1999), 81.

¹¹⁵ Bacevich, 96.

¹¹⁶ Dupuy Oral History, 181.

BIBLIOGRAPHY

- Bacevich, A.J. *The Pentomic Era: The US Army Between Korea and Vietnam*. Washington, D.C.: National Defense University Press, 1986.
- Bergerson, Frederic A. *The Army Gets An Air Force: Tactics of Insurgent Bureaucratic Politics*. Baltimore: The Johns Hopkins Press, 1980.
- Bundy, McGeorge. *Danger and Survival: Choices About the Bomb in the First Fifty Years*. New York: Vintage Books, 1990.
- Collins, J. Lawton. *War in Peacetime: The History and Lessons of Korea*. Boston: Houghton Mifflin Company, 1969.
- Condit, Doris M. *The Test of War, 1950-1953. History of the Office of the Secretary of Defense Volume II*. Washington, D.C.: Office of the Secretary of Defense, 1988.
- Department of the Army. Assistant Chief of Staff for Force Development. Evaluation of ROAD Operational and Organizational Concepts, 8 August 1966. Copy at the United States Army Military History Institute, Carlisle Barracks, Pennsylvania.
- _____. Deputy Chief of Staff for Military Operations. Briefing for Chief of Staff on Army Organization 1960-70 (PENTANA), 15 May 1956. Copy at the United States Army Military History Institute, Carlisle Barracks, Pennsylvania.
- _____. U.S. Army Continental Army Command. MOMAR (Modern Mobile Army, 1965-70) working papers, 9 June 1959. Copy at the United States Army Military History Institute, Carlisle Barracks, Pennsylvania.
- Department of Defense. Annual Report of the Secretary of Defense and the Annual Reports of the Secretary of the Army, Navy, and Air Force, for Fiscal Year 1962. Washington, D.C.: Government Printing Office, 1963.
- _____. Semiannual Report of the Secretary of Defense and the Semiannual Reports of the Secretary of the Army, Navy, and Air Force, July 1 to December 31 1949. Washington, D.C.: Government Printing Office, 1950.
- _____. Annual Report of the Secretary of Defense and the Annual Reports of the Secretary of the Army, Navy, and Air Force, for Fiscal Year 1963. Washington, D.C.: Government Printing Office, 1964.
- _____. Annual Report of the Secretary of Defense and the Annual Reports of the Secretary of the Army, Navy, and Air Force, for Fiscal Year 1964. Washington, D.C.: Government Printing Office, 1966.
- Department of State. *Foreign Relations of the United States* Volume VII (July 1950). Washington, D.C.: Government Printing Office, 1976.
- Doughty, Major Robert A. *The Evolution of U.S. Army Tactical Doctrine, 1946-1976*. Leavenworth Paper No. 1, Combat Studies Institute, Fort Leavenworth, Kansas. Fort Leavenworth, Kansas: Command and General Staff College, August 1979.

- Epley, William W. *America's First Cold War Army, 1945-1950*. A National Security Affairs Paper Published on Occasion by the Institute of Land Warfare, Association of the United States Army. Land Warfare Paper No. 32. Arlington, VA: Association of the United States Army, August 1999.
- Fehrenbach, T.R. *This Kind of War: A Study in Unpreparedness*. New York: The Macmillan Company, 1963.
- Fisher, Dr. E.F. *Relationships of the ROAD Concept to Moral Considerations in Strategic Planning*. OCMH Monograph No. 106S, prepared by the Histories Division of the Office of the Chief of Military History, Department of the Army, 28 October 1964. Military History Institute, Carlisle Barracks, Pennsylvania.
- Freedman, Lawrence. *The Evolution of Nuclear Strategy*. 2d ed New York: St. Martin's Press, 1989.
- Gaddis, John Lewis. *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy*. New York: Oxford University Press, 1982.
- Gavin, James M. *War and Peace in the Space Age*. New York: Harper and Brothers Publishers, 1958.
- Goulden, Joseph C. *Korea: The Untold Story of the War*. New York: Times Books, 1982.
- Hagan, Kenneth J and William R. Roberts editors. *Against All Enemies: Interpretations of American Military History from Colonial Times to the Present*. Contributions in Military Studies, Number 51. New York: Greenwood Press, 1986.
- Hawkins, Glen R. and James Jay Carafano. *Prelude to Army XXI: U.S. Army Division Design Initiatives and Experiments 1917-1995*. Washington, D.C.: United States Army Center of Military History, 1997.
- Kaufman, Burton I. *The Korean War: Challenges in Crisis, Credibility, and Command* New York: Alfred A. Knopf, 1986.
- Kinnard, Douglas. *President Eisenhower and Strategy Management: A Study in Defense Politics*. Washington, D.C.: Pergamon-Brassey's, 1989.
- Kissinger, Henry. *Diplomacy*. New York: Simon and Schuster, 1994.
- Krepinevich, Andrew F, Jr. *The Army and Vietnam*. Baltimore: The Johns Hopkins University Press, 1986.
- Leffler, Melvyn P. *A Preponderance of Power: National Security, The Truman Administration, and the Cold War*. Stanford: Stanford University Press, 1992.
- Mallin, Maurice A. *Tanks, Fighters, and Ships: U.S. Conventional Force Planning Since WW II*. Washington, D.C.: Brassey's (US) Inc., 1990.
- McNamara, Robert S. *In Retrospect: The Tragedy and Lessons of Vietnam* with Brian VanDeMark. New York: Times Books, 1995.

- Millett, Allan R. and Peter Maslowski. *For the Common Defense: A Military History of the United States of America*. New York: The Free Press, 1984.
- Ridgway, General Mathew B. *Soldier: The Memoirs of Matthew B. Ridgway as told to Harold H. Martin*. New York: Harper and Brothers Publishers, 1958.
- _____. *The Korean War: How We Met the Challenge; How All-Out War Was Averted; Why MacArthur Was Dismissed; Why Today's Objectives Must Be Limited*. Garden City, New York: Doubleday and Company Inc., 1967.
- Rose, John P. *The Evolution of U.S. Army Nuclear Doctrine, 1945-1980*. Boulder, CO: Westview Press, 1980.
- Schilling, Warner R, Paul Y. Hammond, and Glenn H. Snyder. *Strategy, Politics, and Defense Budgets*. New York: Columbia University Press, 1962.
- Schnabel, James F. *Policy and Direction: The First Year. The United States Army in the Korean War*. Washington, D.C.: Office of the Chief of Military History, 1972.
- Spiller, Roger J. *Not War But Like War: The American Intervention in Lebanon*. Leavenworth Paper No. 3, Combat Studies Institute, Fort Leavenworth, Kansas. Fort Leavenworth, Kansas: Command and General Staff College, January 1981.
- Taylor, John M. *General Maxwell Taylor: The Sword and the Pen*. New York: Doubleday, 1989.
- Taylor, Maxwell D. Statement Concerning Strength, Organization, and Deployment of the Army before the Senate Armed Services Committee, 22 January 1959. Copy at the United States Army Military History Institute, Carlisle Barracks, Pennsylvania.
- _____. *The Uncertain Trumpet*. New York: Harper and Brothers Publishers, 1959.
- Truman, Harry S. *Memoirs by Harry S. Truman: Volume One Year of Decisions*. Garden City, New York: Doubleday and Company Inc., 1955.
- United States Army Military History Institute, Carlisle Barracks, Pennsylvania. Senior Officer's Oral History Program, 1977. Interview between LTC Ted S. Chesney and LTG William R. Desobry.
- _____. Senior Officer's Oral History Program, 12 April 1974. Interview between LTC Robert T. Reed and General Hamilton H. Howze.
- _____. Senior Officer's Oral History Program: Project 77-3, 1977. Interview between COL William L. Golden, COL Richard C. Rice and General Melvin Zais.
- _____. Senior Officer's Oral History Program: Project 74-1, 1974. Interview between LTC Frank L. Henry and LTG George I. Forsythe.
- _____. The Matthew B. Ridgway Papers.
- _____. The Donn M. Starry Papers.

United States Army Tactical Mobility Requirements Board, Fort Bragg, North Carolina, 20 August 1962. Copy at the United States Army Military History Institute, Carlisle Barracks, Pennsylvania.

Weigley, Russell F. *History of the United States Army*. New York: MacMillan Publishing Co., Inc., 1967.

_____. *The American Way of War: A History of United States Military Strategy and Policy*. New York: MacMillan Publishing Co., Inc., 1973.

Wilson, John B. *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades*. Washington, D.C.: Center For Military History, 1998.