READINESS VS. MODERNIZATION —
A DILEMMA REVISITED

BY

LIEUTENANT COLONEL ANDREW G. ELLIS
United States Army

DISTRIBUTION STATEMENT A:
Approved for public release.
Distribution is unlimited

19960529 078

USAWC CLASS OF 1996

U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050
USAWC STRATEGY RESEARCH PROJECT

The views express in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

Readiness vs. Modernization -- A Dilemma Revisited

by

Lieutenant Colonel Andrew G. Ellis
United States Army

Colonel James C. Reynolds
Project Adviser

U.S. Army War College
Carlisle Barracks, Pennsylvania 17013

DISTRIBUTION STATEMENT A:
Approved for public release. Distribution is unlimited.
ABSTRACT

AUTHOR: Andrew G. Ellis (LTC), USA

TITLE: Readiness vs. Modernization -- A Dilemma Revisited

FORMAT: Strategy Research Paper

DATE: 15 April 1996 PAGES: 30 CLASSIFICATION: Unclassified

An examination of past experiences can provide insight to avoid future pitfalls. As the United States Army prepares for the 21st Century, it must struggle with how to transform and reorganize itself. Because of fiscal limitations, the Army faces tough decisions of funding current readiness or modernizing for the future; affording both given current budget constraints is not possible without reducing force structure. This paper briefly examines the military/political environment between 1945 and the beginning of the Korean War and compares and contrasts it to today's environment. Budget drawdowns, military force reductions, balanced budget issues, and a changing world order are common threads for both eras that make them worth comparison.
ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Instability of Post-War Budget Cycles</td>
<td>17</td>
</tr>
<tr>
<td>2.</td>
<td>Ratio of Procurement $ to RDT&amp;E $</td>
<td>20</td>
</tr>
</tbody>
</table>
Introduction

Our greatest danger today is that we shall dissipate our enormous potential through inaction and negligence. In other wars there was time to make ready. Today, the make ready time exists only before the aggressor acts. Therefore, now is the time to marshal our strength and our resources.

From a statement by Secretary of Defense Forrestal before the Senate Armed Services Committee - 25 March 1948.³

The United States Army is now undergoing the process of preparing itself for the 21st Century. As part of this process it must determine how it will organize and equip itself for future threats. This reorganization must take into account evolving force structure, technology, and doctrine. The Army has had considerable experience at reorganization and continues the struggle to get it right. Since World War I it has had to transform and restructure itself many times. But history has shown that the changes that most often occur in the wake of major conflicts have not properly prepared our forces for the future. And unfortunately, the price for these inadequate changes is the lives of our soldiers in the next major conflict.

In 1991 the Army's outstanding performance during Operation Desert Storm clearly demonstrated that our nation had the best trained and equipped army in the world. In 1945, at the end of World War II, the United States Army may have also been the best army in the world. But what happened to make it so ill-prepared for the Korean War? More importantly, is our Army dangerously heading down the same path today?

An examination of past experiences can provide insight to help avoid potential and extremely costly pitfalls for the future. Current defense spending trends are focusing on today's readiness at the
expense of sufficient investment in future capabilities. Because of imposed fiscal limitations, the military, and the Army in particular, faces tough decisions of either keeping present weapons systems sharply honed or developing and buying more capable ones. It can't afford both. The hollow army debacle of the 1970's taught the Army some unfortunate lessons and leaders will not tolerate a similar collapse of morale and fighting ability. What limited defense dollars that are available will keep current capabilities ready.

Given the choice between current or future readiness the right decision has been made. However, a price will be paid for not investing in the future. It is a dilemma aptly illustrated by the phrase either you can pay now or pay later. While readiness is maintained today it is paid for at the expense of future readiness. In economic terms money is spent to preserve and enhance current capabilities rather than prepare for the future. This trend can only go on for a short time before it has a deleterious and lasting effect on the ability of our Army to win the nation's future wars.

This paper briefly examines the austere military environment between 1945 and the beginning of the Korean War and how it affected the material readiness of the Army. This era will be compared and contrasted with the evolving acquisition trends facing today's Army. The similarities facing the post World War II Army (1945-1950) and the Army of the Nineties are striking. Budget drawdowns, military force reductions, and balanced federal budget issues all taken within the context of a significant change in world order make these eras worth comparison.
It is hoped that examples brought forth in this paper can provide a historical perspective to illuminate the pitfalls of our nation's current post-Cold War era military buildup.

**Task Force Smith**

*It is while men talk blithely of the lessons of history that they ignore them. The lesson of Korea is that it happened.*

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

"No more Task Force Smiths" recently served as the battle cry for United States Army leadership to keep its focus on force readiness. The disastrous fate suffered by Task Force Smith during the opening rounds of the Korean War clearly illustrated the price of unpreparedness. "One of the most memorable and stirring events of that forgotten war was the initial clash between the United States troops and the victorious North Korean Army. Fought during the first days of July 1950, it presaged the violence with which that war would be fought."

The North Koreans crossed the 38th Parallel shortly before dawn on the 25th of June 1950. Although the South Koreans fought bravely they were no match for the North Korean forces. On the evening of 30 June, LTC Charles B. Smith assembled his task force at Camp Wood in Japan. This task force, nearly 540 strong, consisted of two understrength companies, Bravo and Charlie of his own 21st Infantry Regiment, and a battery of six 105mm howitzers from the 52nd Field Artillery Battalion. Antitank capabilities for the force consisted of two 75mm recoilless rifles and six 2.36 inch bazookas. Each man
carried 120 rounds of ammunition and two days of C rations.⁵

Smith's job was to delay the North Korean advance until the rest of the 24th Infantry Division arrived from Japan. More importantly the deployment of the Task Force was to lend moral support to the South Koreans by letting them know that the Americans would stand beside their ally. Major General Dean, the division commander, issued orders to Smith as he departed Itazuke Air Base in Japan on the 30th:

"When you get to Pusan, head for Taejon. We want to stop the North Koreans as far from Pusan as we can. Block the main road as far north as possible. Make contact with General Church. If you can't find him, go to Taejon and beyond if you can. Sorry I can't give you more information—that's all I've got. Good luck to you, and God bless you and your men!" ⁶

Five Days later Task Force Smith was dug in front of the advancing North Koreans. At 0700 on 5 July, tanks were observed in the distance -- heading for Smith's position. While the task force had a few anti-tank weapons, it had practically no anti-tank ammunition for the howitzers and very little for the recoilless rifles and bazookas. Although special anti-tank ammunition called HEAT (High Explosive Anti-Tank) had been developed for the artillery, it was in short supply. In fact, the battery assigned to Task Force Smith had only six HEAT rounds.⁷

At 0816 the battery opened fire on the advancing tanks with high explosive (HE) rounds. The artillery scored some direct hits with its HE rounds but little damage was done. The North Koreans with their Soviet built T-34 tanks continued to advance. Even the artillery's HEAT rounds bounced off the tanks.

As the tanks continued to close to within 700 meters the Americans fired their recoilless rifles. "Round after round burst
against the T-34 turrets with no apparent effect." Lieutenant Ollie
Connor, one of Task Force Smith's officers, took a 2.36 inch rocket
launcher and fired at the nearest tank that was now only 15 yards
away. The weapon failed to penetrate the tank's armor. He then fired
22 rockets at the rear of the tank where the armor was thinnest. Some
of the rounds failed to explode properly and none of the rounds did
any damage. Of the thirty-three T-34 tanks only four were taken out
of action. As the tanks continued their march through the American
position they cut all the communication wires from the infantry
positions. Radios were wet and old and failed to work; the artillery
had no idea what was happening. When the supporting North Korean
infantry arrived, Task Force Smith had little left to give.

The battle lasted all of seven hours. At 1400 Smith ordered his
men to withdraw. Task Force Smith's position had been overrun.

This ended the first encounter that American soldiers had with
the North Koreans. The Task Force's losses were about 150 officers
and men -- roughly 27 percent of the force. Task Force Smith had
fought bravely but failed because it was not prepared for war.

There were many reasons that have been given for the poor
performance of the Americans. Inadequate training and a lack of
discipline were significant factors. The Army had turned soft.
However, the focus of this paper concentrates on the Army's material
preparedness for war. In this respect, it was the lack of equipment
modernization that occurred during the inter-war years that
dramatically manifested itself in the unpreparedness of Task Force
Smith.
The Army: World War II to the Korean War

Agreeing on a strategy was far simpler than creating the forces necessary to implement it. In a period of fiscal austerity, the plan failed to resolve really hard issues impinging on traditional service roles and missions.

Confrontation in Asia: The Korean War

At the end of World War II the Army was under considerable public pressure for its rapid redeployment to the United States. Americans were ready to enjoy a period of peace and prosperity. It was generally believed that another major war would not be a concern in the foreseeable future.

After the surrender of Japan the public demanded a rapid demobilization that upset the Army's plans for an orderly drawdown. By 1947, the Army (including the Air Corps) was reduced from eight million troops to just a little more than one million. Its eighty-nine divisions had been reduced to twelve. The American public, always suspicious of large standing armies looked forward to an era of peace with little thought that war would occur again in the near future.

An economy minded Congress and President Truman's commitment to a balanced budget severely limited the Army's ability to react to the need for new programs or improvements to existing weapons. The result was an Army ill-prepared for the demands of the Korean War.

From 1945 to 1950, the trend in American military thinking, as always during peacetime, was the reliance on the traditional mobilization in the event of war, rather than in armed preparedness to prevent war. What the United States failed to realize until too late was that in the emerging bi-polar world, conventional forces and
their readiness would be as integral to deterrence as nuclear forces.

The Budget

Many people were prone to believe that push button secret weapons would be so decisive as to relegate the unglamorous role of the infantryman to the background. Nothing could be further from the truth. The cold fact is that we never have enough money in peacetime to produce new, developed weapons in quantities required to equip the entire Army.  

General Mark W. Clark, Chief Army Field Forces

Once World War II ended, United States force levels and defense budgets plummeted. By Fiscal Year 1948, defense outlays dropped to less than 10 percent of their World War II peak. Secretary of Defense Forrestal criticized these actions in a report to the President and Congress in 1948:

"We have scrapped our war machine, mightiest in the history of the world, in a manifestation of confidence that we should not need it any longer. Our quick and complete demobilization was a testimony to our good will rather than to our common sense."17

But once the war had ended "President Truman's trench level military outlook, combined with his fiscal conservatism and contempt for generals and admirals, had led him to gravely weaken the armed forces of the United States during his first inherited term as Commander-in-Chief."18 President Truman was determined that in post-war America the budget would be balanced and the 250 billion dollar national debt reduced without incurring new federal taxes.19 This policy strapped military spending. As a comparison, at the peak of World War II appropriations, monies allotted for the military totaled 87 billion dollars or 42 percent of the Gross National Product (GNP). In FY 1949, however, the budget submitted to Congress came to only 4 percent of the GNP.20
Truman used what simply can be termed a "remainder method" of dealing with defense appropriations. All other expenditures were subtracted from revenues and what was left was the recommended military appropriation.\textsuperscript{21} Fluctuations in the Army strength during the interwar years were reflected by the changing levels of the defense budget. Any plan there may have been for controlling force reductions could never have been executed using this method for military appropriations.

As a result of Truman's funding prioritization he imposed unrealistic and even crippling budget ceilings on the Pentagon. Threatened by these fiscal objectives the military recommended a maximum post-war austerity budget of about 15 billion dollars a year. Truman subjectively cut this figure by a third to 10 billion.\textsuperscript{22}

In the battle for the budget among the services, the Air Force was clearly the winner. Defense spending was dedicated to building the United State's nuclear arsenal and a capability to deliver these weapons. The post-war strategy for the defense of the United States depended upon its sole possession of the atomic bomb, but in 1947 it did not have any, and even the Air Force admitted that it was not sure it could deliver one to a target even if it had one.\textsuperscript{23} Therefore, an air-delivered nuclear capability was the nation's predominant strategic solution to deter the Soviets. The other services were neglected in the rush to build an effective nuclear arsenal and the capability to deliver it.\textsuperscript{24}

The Army ended up in the worse shape of all especially considering what it was about to face in Korea.\textsuperscript{25} What little the
Army had in its budget was largely devoted for maintenance and pay and allowances at the expense of equipment modernization.\textsuperscript{26} (note: modernization covers those things directly related to both research and development -- to include testing -- and the procurement of weapons and equipment.)

During the fiscal years 1946 to 1950 inclusive, the average yearly direct appropriation for carrying out research and development in the Army was approximately 100 million dollars.\textsuperscript{27} Compared with World War II funding levels not including the Manhattan Project, this was less than one-fiftieth of what was spent only a few years earlier.\textsuperscript{28} If military research and development was in a sorry state, procurement was worse. Any procurement after World War II was limited mainly to food, clothing, and medical supplies. Shrinking budgets and the shifting of American industry away from military production forced the Army to operate with what it had from World War II. Money was simply not available for new arms procurement.\textsuperscript{29}

The Army did request funding based on what it considered minimum essentials, only to have the appropriations fall far short of the mark. "For fiscal year 1948, for instance, the Ordnance Department estimated it would need $750 million to cover procurement of essential ammunition and equipment, storage and distribution of ordnance material, maintenance of stand-by plants and arsenals, training and research and development. The Bureau of the Budget cut this figure to $275 million and then the Congress reduced the final appropriation to $245 million."\textsuperscript{30}

However, in early 1950 a document labeled NSC 68 finally
acknowledged the need to spend money to rebuild conventional armed forces to the point where they presented a credible deterrent. But for the Korean War and the United States Army, this acknowledgement came too late.

**Research and Development (R&D) and Procurement**

As you remember, at the end of World War II the nation reverted to a peacetime economy. Production stopped on military hardware and concentrated on civilian products. Army appropriations were drastically cut and the reduced budget permitted only limited funds for R&D and almost none for production. The budget for R&D on all types of automotive equipment of which tanks were only a part, averaged about $5 million a year. When this is compared to Chrysler's R&D budget of $25 million, for the same period, you can see how little we had. General Joe Collins, Chief of Staff U.S. Army, in a speech before the Armor Association, 1951.

The equipment excesses of World War II made it difficult to convince Congress to authorize new program starts and by 1950 the stockpiles of World War II vintage material were deteriorating rapidly. Budget cuts starting in 1945 severely retarded the procurement of new equipment and the R&D of even better equipment. The limited Army R&D that did take place focused on guided missile research and atomic energy programs. The Army like the other services seemed enamored with the research of atomic weapons and the means to deliver them.

There was some development of more conventional tactical weapons, but they clearly received lower priority. Among the new items that were developed were the Patton, a heavy tank; newer model tactical trucks; and artillery weapons. However, as a result of budget restrictions, most research attention centered around product improvements of the existing World War II equipment.
It was clear that during the five years after World War II the United States Army did not have a coherent modernization program. Although some development of new weapons and vehicles continued at a much slower pace, the procurement of these items was almost negligible. Several weapons systems had been developed and fielded late in World War II but had not been procured in large quantities. For example, although the M-26 Pershing tank had been fielded, most armor units remained equipped with the M-4 Sherman tank.35 And by 1950 only 319 of the newly developed M-46 General Patton tanks were on hand; none were in Korea.36

**Modernization Deficiencies**

*Since the end of World War II ground weapons had been developed, but none had been procured...In 1950 its vehicles in many cases would not run. Radiators were clogged, engines gone. When ordered to Korea, some units towed their transport down to the LSTs, because there was no other way to get it to the boat.*37

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

Among all the readiness problems plaguing the Army during 1945-1950, the most obvious and glaring deficiency came in the modernization of its equipment. Research was conducted on much needed improvements in weapons and other equipment, but it was impossible in most cases to fund their complete development and production.38 For example, an improved 3.5-inch caliber rocket launcher to replace the 2.36-inch bazooka of World War II was developed. This new weapon had the penetration power to burn through the hull of the T-34. But rather than place the weapon in the hands of the soldier it was put on the shelf. At the time, there wasn’t enough money in the coffers to develop and produce long range bombers, nuclear bombs, and bazookas
too; the priorities went to strategic weaponry.\textsuperscript{39}

The post World War II Army was relegated to live off of whatever excesses it may have had from the war. This policy worked for a while, but as items became unserviceable, the Army bought no replacements.\textsuperscript{40} At the outbreak of the Korean War "no division had its proper wartime quota of weapons and equipment. What equipment they did have was World War II worn, and old."\textsuperscript{40} The thinking of Congress and the administration during the inter-war years was that there were plenty of the old arms around and given the Yankee habit to make do -- the Army was told to make do.\textsuperscript{41}

The Eighth Army, responsible for the Far East, generally filled its material shortfalls by repairing World War II equipment it found rusting on nearby islands. Nearly 90 percent of the weapons and 75 percent of the vehicles in Japan that were in the hands of the soldiers were part of this rebuild program. Later it would show that under the rigors of sustained combat operations the equipment would not stand up well.\textsuperscript{42}

The rebuild program was necessary because the Army did not have any modernization plan to replace the aging World War II equipment. No new tanks or vehicles had been placed into the Eighth Army's inventory since the end of World War II. Some weapons such as 4.2 mortars and recoilless rifles were difficult to find.\textsuperscript{43} "Eighth Army was authorized 226 recoilless rifles but only had 21. Of 18,000 quarter-ton 4x4 vehicles in the Eighth Army stocks, 10,000 were serviceable and out of 18,780 half-ton 6x6 trucks only 4,441 were in running condition."\textsuperscript{44}
Besides being worn and old the equipment was technologically dated. In fact, much of the Army's equipment that it fought with during World War II proved inadequate even during that war. The most serious deficiency was in armor and anti-armor technology and weaponry.45 "In addition to the high velocity manner of penetrating armor, another method of penetration is by burning a hole through the steel of a tank's body with a shaped charge projectile. In this latter case our small bazookas truly did not have the burning power to get through the skin of a T-34."46

Even the basic infantryman's weapon received less than rave reviews. A report filed from Korea provides these remarks. "In subfreezing weather, the carbine operates sluggishly and depending on the degree of cold will require anywhere from five to twenty warm-up shots before it will fire full automatic."47 Even during World War II operations, including the Pacific, the carbine was hardly a success. But nothing was done to either replace the weapon or make it over into a dependable weapon.48

As a result of the Korean War and the dismal performance of the American weapons, military research and development was accelerated. A number of projects already under development were put on a crash priority. More effective anti-tank weapons became an immediate requirement. The production of the already developed 3.5-inch rocket launcher was the first answer to that requirement.49 Later, increased budgets permitted development of better anti-tank mines and the 105 mm recoilless rifle to replace the ineffective 75 mm recoilless rifle.

But increasing budgets was only part of the solution. Weapons
were needed in Korea immediately. Development and large scale production of these arms had to be timely to make a difference. As part of a streamlined acquisition process, provisions were made to allow production before service testing and combine engineer and user tests. At the time, these actions were considered emergency measures only used in exceptional cases. They did, however, permit a much shorter time between the development and issue of arms to the troops.\textsuperscript{50}

By January 1951 fifteen major vehicles including tanks, self-propelled guns, cargo and armored infantry vehicles, and tank recovery vehicles were being developed at accelerated rates.\textsuperscript{51} But for the ill-fated Task Force Smith and the American forces thrown into battle during the opening rounds of the Korean War, it was too late. The Army was not prepared. Modernization by crisis almost cost the Army the war.

The climate of drawdowns and shrinking defense budgets that faced the Army during 1945-50 face us today. Reductions in both these eras were fueled by the perception that we no longer faced any large scale threats to our security and that without that threat a smaller army is justified. In 1945, the United States may have had the best Army in the world, but in five years it entered the Korean War unprepared. The Army's lack of equipment modernization played a major role in that unpreparedness.
The Army - Post-Cold War

As our Army becomes smaller, the more modern and technologically
overmatching it must become to maintain its future land force
dominance.32

LTG W. Forster, Mil Dep to Sec Army for RD&A -- Oct 1993

As a result of the overwhelming victory in Operation Desert Storm
in early 1991, the United States Army was filled with a renewed
confidence about its future. But five years later this confidence may
be waning. Some doubt that today's Army matches up with the Desert
Storm Army that grew out of the extensive modernization efforts of the
1980s.

The continuing decline in budgets coupled with an increase in
tasks have jeopardized the Army's ability to both remain ready and
modernize for the future. As the Army conducted its recent drawdown
it made readiness its first priority. This drawdown was orderly, well
planned, and well executed especially when compared to the force
reductions occurring after World War II and Vietnam.

Today this smaller army is well trained, well equipped, well led,
and at a high state of readiness and morale. Its performances
restoring democracy in Haiti and deterring a second conflict in the
Persian Gulf send a clear message of this readiness.33

Unlike the post-war Armies of World War II and Vietnam, today's
Army has avoided the recurring and troublesome dilemma of creating a
hollow force. Army leadership must be commended for this successful
transition. However, the problem that faces our leaders is that
today's readiness does not easily translate into future readiness.

The United States Post-Cold War National Military Strategy is
based on having sufficient forces to prevail in two nearly simultaneous major regional contingencies (MRCs). In 1993 a Bottom-Up Review (BUR) was conceived to assess what military resources and requirements were needed to support such a strategy.\textsuperscript{54}

Critics may argue the realism of this two MRC strategy especially after the demise of the Soviet Union. Recent history points out that the enemies of the United States have refused to take advantage of our involvement in one war to start another with us: not during the three years of the Korean War, the ten years of the Vietnam War, or the eight months of the Persian Gulf crisis of 1990-91.\textsuperscript{55} Nevertheless our strategy of fighting two MRCs stands.

When the United States entered the post-Cold War era, defense planners were faced with the challenge of political and budgetary pressures. These pressures focused on accelerating defense reductions to cash in on the so called peace dividend. Defense budgets continued to be caught in an ever-tightening vise between domestic spending and fiscal policy considerations such as deficit reduction and spending control.\textsuperscript{56}

Significant force level reductions, major procurement cancellations, and spending cutbacks were initiated by the Bush administration and are being executed at an accelerated rate by the Clinton administration. There is a real and immediate concern that defense planning will be dictated by increasingly constrained budgets. The military has always taken these constraints into consideration in its planning. It has developed its strategy, and then, based on fiscal guidance, found the best way to support it. The fear now is
that resources may drive the strategy "and decisions will be dictated by an increasingly constrained budget process that undercuts responsible defense planning. Just how seriously future planning will be compromised is uncertain, but the history of past defense budget cycles is not reassuring." Figure 1 provides a graphic representation of the instability of several recent post-war cycles. Today defense spending continues to shrink. An unsettling thought is that if this historical trend rings true it will surely mean that for future conflicts either additional time and money will be needed to prepare our forces or, more realistically, that they will enter these conflicts ill-prepared.

![Graph showing defense spending from 1940 to 1990 with key peaks labeled: WWII Peak 1944-45, Korea Peak 1953, Vietnam Peak 1968, Reagan Peak 1986.]

Figure 1
The Budget

DoD budget authority, in real terms, has been in decline since FY 1985. We have finally reached the end of our builddown. It would be dangerous to continue to downsize our forces at this time. The balanced budget amendment would cut defense spending to whatever level its arbitrary formula dictated and thereby displace the carefully considered judgments of members of Congress, presidents, and civilian and military leaders as to what spending is necessary and wise. I do not believe such an approach to questions of national security would serve America well.59

John J. Hamre, Under Sec. of Def. (Comptroller) Jan 1995

Trade-offs between the readiness and modernization accounts always come with the territory of defense spending. It follows that these trade-offs grow more acute as money becomes tighter. Today readiness is maintained at the expense of modernization. Given the trade-off, this decision is sound. But the question remains: how long can this trend continue before it impacts the force? Lack of adequate modernization funding today eventually translates into poor readiness tomorrow. "Superbly trained and supported troops that are equipped with inferior weapons may be considered unready for combat."60

The defense drawdown, which began about nine years ago, is nearly complete. During that time the defense budget has been reduced by 40 percent. Much of that reduction was paid out of the defense modernization account. As a result, there has been a five-year slow down in modernization. In 1996 the defense modernization account will be the lowest it has been in ten years, about one-third of what it was in 1986.61

The Army's modernization strategy during this period of downsizing is to live off excess current generation systems. As
forces are drawn down, the older equipment is decommissioned and replaced with newer equipment thus maintaining a lower age of the fleet.\textsuperscript{62} But now that the drawdown is nearly finished, so too is the modernization reprieve from aging.

All the services are in a quandary in the budget wars, but the manpower intensive Army is in a uniquely difficult position. Unwilling to cut too deeply into the personnel and current readiness accounts, the Army has had to cut back or kill many modernization programs.

In preparing for the Fiscal Years 1995–99 budgets, the Army killed fifty-seven programs and cut another twenty-seven.\textsuperscript{63} For Fiscal Year 1996, the Army has $10.7 billion for modernization: an amount less than half of the Air Force or Navy funding.\textsuperscript{64} Just six years ago the Army had close to $20 billion in the same accounts.\textsuperscript{65}

But what about the future? By the year 2000 the defense modernization accounts will begin to increase. But this planned increase is based on several critical assumptions. First, that Congress will support the plan and the defense budget will stop declining and begin to go up. Second, considerable savings will be realized from base closings. Third, significant savings will be made from overhauling and streamlining our defense acquisition system.\textsuperscript{66}

These assumptions are optimistic and may never be realized. But even if savings were generated, it is not a sure bet that the money would remain in the defense coffers. More importantly, today's hiatus from modernization would create such a massive procurement bow-wave in the future that many budget analysts predict that modernization in the
next century may not be affordable.  

Army R&D and Procurement

"We cannot sustain low levels of procurement for long. Because readiness of our current military forces is the absolute number one priority, and because the size of the force has been fixed by the Bottom-Up Review of 1993, the up-front costs of downsizing actually came from the modernization accounts."* Mr. Gilbert Decker - Asst. Sec of the Army for RDA, 1994

Clearly the modernization accounts are a critical concern to the Army. What has occurred since the years of the Reagan build up is reflected in Figure 2. Of interest is that not only have resources for weapons research and development and procurement dropped dramatically, but also the ratio of procurement to research and development has shrunk. A normal ratio of procurement to research and development for a healthy modernization program is on the order of

![Ratio of Procurement $ to RDT&E $](image)

Figure 2
three to one. The Army is now operating at almost a one to one ratio.

Modernization funding for Fiscal Year 1996 is at a low across the Department of Defense. Army procurement has dropped nearly 71 percent and research and development is down 22 percent when compared in real terms with 1985 figures. While in the past five years procurement dollars have continued to go down almost by 56 percent, research and development funding has remained stable.

The rationale provided by the Army for these cuts and delays in procurement is that in the near term the risk is acceptable. Our weapons in 1991 were clearly the best in the world and are arguably the best today. And by maintaining a solid R&D funding base, the technology will be at hand for future threats.

"The Pentagon's latest strategy in the buying game is to fund the research and development of future weapons systems without actually buying them. A high profile example of this is the Comanche helicopter program." The Army has decided to delay production of the Comanche indefinitely but continue with its development.

This strategy ignores that the completion of R&D is only the first step in modernization. While the item may be developed and placed on the shelf, producing it when needed is at best years away. During this time the shrinking industrial base continues to atrophy and superior weapons are not in the hands of our soldiers. Thus the benefits of almost a decade of development are not realized by our soldiers.
During the military build-up, the Army bought 947 M-1 Abrams Tanks in 1987. In contrast, not a single tank has been produced since 1994, and none are projected in the future. And the only new tracked combat vehicle scheduled to begin production in this century, the Armored Gun System, was cancelled. Major research and development efforts focus on the Crusader, advanced field artillery system, and the Comanche, armed reconnaissance helicopter. But these systems will not begin full rate production until after 2005, if at all.

While it can be argued that the United States' weapons remain unchallenged, it is uncertain how long this will remain true. During peacetime, the maintenance of high levels of readiness often translates into increased OPTEMPO. Eventually equipment will need to be replaced. During war, the need for arms replenishment is critical. A prolonged drought in production could have disastrous effects not only for the Army but also for the Defense-Industrial Base that supports it.

Conclusion

"While many of the conditions of war vary from age to age with the progress of weapons, there are certain teachings in the school of history which remain constant...It is wise to observe things that are alike, it is also wise to look for things that differ." 

A.T. Mahan

As the Army undergoes its transformation into Force XXI, it must continue to reassess its ability to fight and win the nation's future wars. In 1991, the Army basked in the glow of its outstanding successes in Operation Desert Storm. It was clear then that the
United States had the best equipped army in the world; this was not by mistake. The army that was sent to Desert Storm was built from the massive modernization efforts and expenditures of the 1980s. Today, however, the Army maintains its readiness at the expense of modernization.

Are there lessons that can be learned from the past? No one can predict the future, but there are reasonably clear pictures of what the past tells us about the possibilities. In the case of defense spending, past experience warns us against a prolonged pause in investment, particularly when high levels of readiness are gradually consuming existing equipment and resources.

"No more Task Force Smiths" rallied leadership to keep the Army from becoming a hollow force. And true to this vision, current force readiness is the number one priority. But by an almost exclusive focus on current readiness has future readiness been mortgaged? The delicate balance between current readiness and modernization that translates into future readiness must be found.

This is most likely the largest challenge that will face the Army and the Defense Department in upcoming years. Finding the resources to fund both current and future readiness will be difficult. This challenge is further complicated by continuing to stretch the Army to meet an unrelenting series of operational deployments that drain current readiness resources. All of this must now be considered within the context of a balanced budget amendment, which according to the Department of Defense Comptroller "further injects great uncertainty and chaos into defense planning, which needs to have
stability and a long term perspective."\textsuperscript{75}

Defense budgets will not increase anytime soon. If the United States is keep its preeminence in military power for tomorrow some tough decisions will have to be made today. Decisions based on striking a balance among force structure, readiness, and modernization. Creating this balance should be the primary focus of defense planners.

At the core of this issue stands the National Security Strategy requirement of fighting two MRCs; is it realistic? A possible trade off may involve less force structure in exchange for expanded modernization. Force readiness is a top priority but so is modernization. As Chairman of the Joint Chiefs of Staff General Shalikashvili said "modernization is tomorrow's readiness."

If history tells us anything it is that the past gives us a window to the future. In 1945 as in 1991, the United States Army was the best in the world. But in a little more than five years the Arsenal of Democracy's army that won World War II was not even prepared for one MRC -- Korea.

For today, a Task Force Smith disaster has been avoided but has it only been postponed?


5. T.R. Fehrenbach, 97.

6. Ibid.

7. Colon, 36.


9. Ibid., 102.


13. Ibid., 3.


15. Ibid., 3.

16. Tate, 54.


19. Ibid.


22. Blair, 6.

23. Stokesbury, 40.

24. Department of History, United States Military Academy, 8.

25. Ibid.


30. Ibid., 46.


33. Chapman, 16.

34. Ibid.

35. Chapman, 16.

36. Schnabel, 46.

38. Chapman, 15.
40. Davies, 27.
40. Fehrenbach, 102.
41. Ibid., 428.
42. Schnabel, 59.
43. Davies, 27.
44. Schnabel, 59.
45. Davies, 28.
46. Major General W.G. Weaver, Some Aspects of the Korean War (As viewed from the early 1950's) (San Antonio, 1966), 45.
48. Ibid.
49. Office, Assistant Chief of Staff, G-4, Summary of Major Activities Relating to the Korean Conflict for the Period 25 June through 8 September 1951, Memorandum from the Chief of Staff, Washington, 13 December 1951, 2.
50. Ibid., 1.
51. Ibid.
55. Ibid., 4.
57. Ibid., 4.

58. Ibid., 5.


60. Record, 2.

61. Perry, 2.

62. Ibid.


64. LTG Ronald V. Hite (Mil Deputy to the Asst. Sec of the Army for RD&A), Briefing presented to the Ordnance Corps Senior Service College Students, Aberdeen Proving Ground Md., (16 December 1995).

65. Ibid., 63.

66. Perry, 2.


70. Ibid., 10.


73. Association of the United States Army, 36-37.


75. Hamre, 1.
BIBLIOGRAPHY


29


