

THE U. S. ARMED SERVICES' EXAMINATION
OF THEIR ROLE, 1945-1950

By
CHARLES DUNLAP BENSON

A DISSERTATION PRESENTED TO THE GRADUATE COUNCIL OF
THE UNIVERSITY OF FLORIDA
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1970

Copyright by
Charles Dunlap Benson
1970

PREFACE

World War II introduced revolutionary technological changes into the field of warfare. In 1945 military men faced an uncertainty about the future of their profession, unparalleled in the modern age. This study is intended as an effort to delineate the thinking of U. S. military leaders about postwar service roles. I shall consider the forces that shaped military thinking, describe how the Armed Services reacted, and evaluate their performance. Four factors were paramount in influencing this postwar examination of roles. As these factors provide a framework for the study, the reader should keep them clearly in mind. World War II's impact on American military leaders was the first. The second involved the technological advances of the war years which threatened to make one, two, or all three services obsolete. World power relationships constituted a third influence on the determination of service roles. The fourth consideration was the domestic political context within which U. S. defense policy was made.

The attempt to view the Armed Forces' examination of their role is made easier by the fact that, following World War II, each service began to emphasize the importance of public information programs. For example, the Army established an Army Information School at Carlisle Barracks, Pennsylvania, in 1946 and began publication of the Army Information Digest. All three services made strenuous

efforts to popularize their future roles. These efforts included Congressional hearings, articles in popular and service periodicals, and numerous speeches. I have made use of these sources, as well as official service directives and circulars. The study is not an official one. Classified documents might reveal hidden aspects of postwar military thinking which escaped my research. However, interviews with retired officers who participated in postwar planning indicate that this study treats the major currents of service thought.

I have organized my work into five chapters. The first chapter sets forth the "climate of opinion" concerning the impact of the A-bomb on future war and the armed services. It briefly considers the problems the American military faced in establishing new roles. Chapters two through four contain the body of the dissertation, a description of each service's thinking about postwar roles. The last chapter analyzes the forces which shaped service doctrine and evaluates the response.

The time frame for the study requires some discussion. Hiroshima provides an appropriate starting point. Although the debate over the postwar military program had already begun, the events of August 6 and 9, 1945, gave new meaning and a sense of urgency to the discussion. The closing date is not so clear cut. I have carried some aspects of service thought up to the start of the Korean Conflict in June, 1950. America's military planning, however, was extensively reviewed (October, 1949) following the detonation of Russia's first atomic device. A more lengthy review

in early 1950 (January-March) produced the important document, NSC-68. My study relates service thinking prior to this review.

My work concerns a field of inquiry well covered by political scientists and historians during the past twenty years. While no one has attempted to analyze service attitudes about future roles, there have been a number of studies concerning the unification struggle, military budgets, and other related themes. I have devoted relatively little space to such matters, simply pointing out the available literature in appropriate footnotes. It may be helpful, however, to comment briefly on the unification struggle. Begun during the war, the struggle gained intensity in the fall of 1945. It featured the Air Force's efforts to gain a coequal status, the Army's desires for centralization (a single chief of staff), and the Navy's determination to remain autonomous. A compromise was achieved in January 1947, and the National Security Act passed in July of that year. The initial difficulties of implementing unification machinery (National Security Council, Secretary of Defense, Office of the Joint Chiefs of Staff) left each service with the ability to exert considerable influence on national strategy. As this study will indicate, passage of the National Security Act was not a turning point in the military's examination of its postwar role.

Many people contributed to the writing of this dissertation. I wish to express my appreciation to Mr. Sherman Butler for his aid in securing a number of interlibrary loans. Miss Frances Apperson proved both patient and competent in meeting my needs for

public documents. Miss Joyce Eakin and Colonel George Pappas rendered valuable service to me at the Military History Research Collection. They made my stay at Carlisle Barracks, Pennsylvania, a most enjoyable one. The same is true of Mr. John C. DiNapoli and the library staff at the Naval War College.

Dr. Lyle McAlister read the manuscript and offered suggestions. A number of retired officers graciously allowed me to talk with them. I want to thank them collectively. I am grateful for the financial aid provided by the National Research Council. Much of the work I conducted would not have been possible without the grant provided by the Committee on ACDA Support of Dissertation Research.

My father, Charles Francis Benson, offered much worthwhile criticism, both of style and substance. As my principal advisor, Dr. John K. Mahon gave generously of his time and interest. The merits of this work must be attributed in large part to the assistance these two men gave me. Finally, I want to thank my wife, Louise. Her support has made this possible.

TABLE OF CONTENTS

	<u>Page</u>
PREFACE	iii
ABSTRACT	viii
CHAPTER	
I. THE POSTWAR DEBATE OVER THE NATURE OF FUTURE WAR	1
II. THE ARMY--SEARCH FOR A MISSION	26
III. THE NAVY--BALANCED FLEET OR NAVAL STRATEGIC BOMBING	74
IV. THE AIR FORCE--CONFIDENCE IN STRATEGIC AIR POWER	123
V. AREAS OF AGREEMENT AND CONFLICT IN THE MILITARY'S THINKING ABOUT FUTURE WARFARE	151
BIBLIOGRAPHY	168
BIOGRAPHICAL SKETCH	189

Abstract of Dissertation Presented to the
Graduate Council of the University of Florida in Partial Fulfillment
of the Requirements for the Degree of Doctor of Philosophy

THE ARMED SERVICES' EXAMINATION OF THEIR ROLE, 1945-1950

By

Charles Dunlap Benson

August, 1970

Chairman: John K. Mahon
Major Department: History

The flash over Hiroshima presaged revolutionary changes in the art of war. Many people, both civilian and military, questioned any further need for one or more of the Armed Services. Despite their recent honors, American military leaders were forced to rationalize future service roles. This dissertation attempts to delineate the examination of service roles from V-J Day up to the Korean Conflict.

During the 1945-1950 period, there were important areas of agreement and conflict within the U. S. Military Establishment. Nearly all officers considered modern war total. General agreement existed that materiel rather than men determined war's outcome; this belief was reflected in the emphasis placed on research. A consensus acknowledged that control of the air was a prerequisite to successful military operations. While these points of agreement served as a framework for service thought, elements of conflict received greater attention. Disagreement centered on air power: how it

would be employed, what degree of effectiveness could be expected, and who would control its various aspects.

Four factors were paramount in shaping postwar service doctrine: one, the personal experiences of World War II; two, the technological advances of the war years and postwar period; three, world power relationships (i.e., the Cold War); and four, the domestic political process which determined national defense policy. The first two factors had the effect of strengthening individual service doctrine. Thus the Pacific experience and a belief in a slow rate of technological advance produced a Navy doctrine of balanced conventional forces and a flexible response. The strategic bombing campaigns coupled with a view of rapid technological change fostered an Air Force doctrine of atomic air power with little need for land or sea forces. The Cold War and domestic politics exerted a powerful influence for strategic bombing. Along with the military, Congress considered Russia the only likely enemy. In the event of war, strategic bombing (atomic) appeared to be the most effective means of defeating Russia. These beliefs not only strengthened the Air Force position, but they also had considerable impact on the other services.

Army postwar doctrine never enjoyed a consensus of service opinion; therefore it appears confused and inconsistent. During the first eighteen months, General Marshall's UMT program was official service policy. By 1947 Army leaders were placing less stress on mobilization and the citizen-soldier, more emphasis on immediate ready forces. General Eisenhower's Final Report (February, 1948)

expressed the prevailing service view that ground forces should be employed primarily as defensive forces for air power. A reaction to this acceptance of a secondary role was evident by 1949.

Several conditions promoted a unified front among Navy leaders in 1945. Service doctrine called for a balanced fleet with mobile air (fast carrier task forces), amphibious operations, and submarine capabilities emphasized. While Navy leaders continued to call for a flexible response, the Department made a serious effort to gain a part of the strategic bombing role. When the supercarrier was cancelled in 1949, service leaders responded with a severe attack on national defense policy (B-36 hearings).

Initially, Air Force doctrine stressed the importance of air superiority. Effective strategic bombing depended upon continuous and sustained operations, hence a need to control the air. Despite strong Congressional support, the Air Force was unable to secure appropriations for a balanced seventy group force level. By 1948 many service leaders questioned the need for sustained strategic bombing operations. Accordingly, emphasis was placed on SAC's role of delivering the A-bomb. Tactical air was relegated to a secondary position.

CHAPTER I

THE POSTWAR DEBATE OVER THE NATURE OF FUTURE WAR

Modern war is "total" far beyond the imagination of even those who coined the phrase; it enlists the whole effort of the nation and directs the flowing stream of history. . . . In the next war, labor as well as fighting power will probably be drafted, in the next war, every phase of national effort that does not contribute to victory will probably be eliminated. . . Hanson Baldwin, The Price of Power (1947)

The Atom Bomb and the Future of Warfare

The American military initiated post-World War II planning in an atmosphere of total war. Two world conflicts and a technological revolution underlay this prevailing assumption. In most instances total war implied a condition where: one, every citizen of a belligerent nation is subject to enemy attack; and/or two, every adult in a warring nation provides some service to further the national cause. Lieutenant General Ray McLain epitomized the belief of most general officers when he told a Congressional committee (1945):

It is now a definite pattern of modern warfare that, when a nation engages in war, every element of national life becomes a factor in prosecuting that war, whether it be offensive or defensive. Therefore every element of national life is subject to attack.¹

Less frequently the term entailed a geographical or ideological meaning. Although Cold War developments eroded its acceptance, the assumption of unlimited warfare dominated the military's examination of its role through 1950.²

No such consensus existed in regard to the future of atomic weapons. Differences of opinion among military men and concerned civilians arose from both tactical and strategic considerations. At the tactical level men debated the A-bomb's effectiveness against other weapons systems (e.g.; Navy aircraft carriers), the vulnerability of bombers, and the rate of further technological advances. From the standpoint of strategy, several viewpoints emerged concerning the employment of the atom bomb. One school of thought saw in the A-bomb a new method of warfare, an effective means to produce mass terror with the consequent breakdown of social institutions. A second school viewed the bomb as "just another weapon." Despite its power of destruction, the atom bomb would not drastically change the art of war. Others adopted a middle course. Agreeing that the bomb represented a revolutionary development, they thought its power might be neutralized in some manner, for example, by the fear of retaliation. It would be inaccurate to suggest that a clearly articulated, closely reasoned debate took place. It is possible, however, to summarize the various viewpoints of the post-war period concerning the effect of atomic weapons on future warfare.³

For many observers the flash of light over Hiroshima signaled the complete ascendancy of offensive warfare. Writing a

week after the event, Hanson Baldwin described the next war in push-button terms. "Even more total" than World War II, the next conflict would be a struggle to break the enemy's home front.⁴ The editors of Time saw atomic weapons destroying cities so much faster than the victims could rebuild them that surrender would be the inevitable outcome.⁵ Edward M. Earle considered it futile to think that cities might be spared in future wars. The only hope he held out for urban dwellers was a reversion to a primitive economy.⁶ Among the early statements on atomic warfare, Bernard Brodie's The Absolute Weapon provided the fullest development of the offensive position. Brodie considered the atom bomb a revolutionary development because of its ability to concentrate violence in terms of time. His eight conclusions about the bomb include the statement that "no adequate defense against the bomb exists and the possibilities of its existence in the future are exceedingly remote."⁷

Atomic scientists proved to be the most vocal element believing in the bomb's offensive potential.⁸ Some predicted that a future bomb might endanger the earth. Others saw the United States destroyed by atom bombs disguised as grand pianos or hidden in suitcases.⁹ This statement by Dr. E. U. Condon, a member of the National Defense Research Committee, was representative:

Indications are that the next war should be described as the War of the Pushbuttons. For the atomic bombs are such small and simple devices that it is easy to visualize agents of an enemy nation bringing them in small pieces, under cover of diplomatic immunity and assembling them quietly in the closets or

backrooms of their embassies and consular offices in our chief cities.¹⁰

Professor Harold Urey told the House Military Affairs committee that all industrial nations would be making the bomb in a short time, some within five years. Testifying before the same committee, Dr. Irving Langmuir thought it possible that Russia, in ten to twenty years, could push a button and thereby destroy every living person in the United States.¹¹ In their public statements most atomic scientists agreed that: other nations would soon produce atomic weapons (in five to twenty years), our industrial concentration made us particularly vulnerable to atomic attack, a defense was unlikely, overwhelming advantage lay with the aggressor, and a world organization was essential.¹² J. Robert Oppenheimer expressed the belief of many of his associates in stating: "The atom bomb is something against which no defense is possible. . . . Temporarily the advantage is ours, but actually the advent of atomic power has weakened the military position of the United States."¹³

The scientists' concept of Armageddon found favor with a few military commentators. Hanson Baldwin wrote about "the new face of war." Its prominent features included more powerful bombs, long-range missiles, advanced electronics and aerodynamics, and submarines capable of dominating the oceans. A nation's first line of defense would be the operators of push-button warfare, directing gigantic missiles across the sea. Should these fail, a nation could call upon a second bombardment of short-range missiles and airplanes. A third force would consist of airborne troops trained to mop up and occupy enemy territory.¹⁴

The noted British author, Major General J. F. C. Fuller, presented perhaps the most awesome description of the atomic bomb's future role. Fuller believed the A-bomb and other technological developments made World War II ancient history. Relegating the traditional services to the scrapheap, he predicted the next war would be fought by fearless robots. Countries would gird themselves about with radar sets, their military forces consisting of atom charged and propelled rockets (offensive and defensive). Fuller's battles were placed hundreds of miles in space with an occasional rocket slipping through to destroy a New York or a London. Fuller was not attempting an exact prediction. He closed his description with the statement: "At the moment this picture of Mars 'gone barny' is as good as any other."¹⁵ His view, however, did reflect a doubt that man could control an exploding technology. He assumed that within a few years all nations would have atomic arsenals. When these arsenals came into being, a new conflict might start by design, or more likely by accident.

Other military commentators were more restrained in their predictions. Francis V. Drake criticized both the extremists who envisioned push-button war and those who considered the atom bomb as "just another weapon." Although agreeing that a defense appeared unlikely, he thought the threat of retaliation would prove to be an effective deterrent.¹⁶ In a frequently quoted article, "Air Force in the Atomic Age," General H. H. Arnold emphasized the revolutionary aspects of the bomb due to its ability to decrease the cost of

destruction. However, he saw the possibility that neither side would commence atomic war, knowing that inadequate defenses could not protect its own cities. Nor would aggressive nations wish to destroy an opponent's industrial and economic wealth.¹⁷ William L. Borden considered cities and industries unlikely targets in the next war. Future victory would not depend upon destruction of industry and civilians but rather on the quick elimination of the opponent's forces and atomic stockpiles. When this was accomplished, victors might or might not devastate the defeated country.¹⁸

A few people challenged the assumption of the offense's preeminence. In 1945 and 1946 individual voices could be heard recommending caution or hope. The cautious grounded their position in man's experience. Admiral Chester Nimitz, at a welcoming ceremony in Washington D. C., stated:

Before risking our future by accepting these ideas at face value [traditional forces being obsolete] let us examine the historical truth that, at least up to this time, there has never yet been a weapon against which man has been unable to devise a counterweapon or a defense.¹⁹

President Truman expressed a similar belief a few weeks later. J. F. C. Fuller, despite his pessimism engendered by World War II's brutality, thought it possible that his "constant tactical factor" would prevail. This concept expressed the fact that "thus far in the history of armaments each new weapon has eventually been mastered."²⁰ Drawing on statements of certain scientists for support, Hoffman Nickerson seconded Fuller's position.²¹

Hope was held out by a few scientists and engineers who took exception to the majority view of their associates. In October, 1945, General Andrew G. McNaughton, chairman of the Joint Canadian-United States Defense Board, announced that defenses against the atom bomb were already clearly in sight.²² A few months later scientists were predicting that in a future war high frequency directional finders would cope with an enemy's atom bombs thousands of miles away in space. A considerable number of engineers agreed with Dr. Walter Baker that only the United States had sufficient wealth, materials, and industrial resources to produce the bomb.²³ The most controversial challenge to the offensive position came from the noted air power advocate, Major Alexander P. de Seversky. After an official seven month tour of Germany and Japan, he issued a statement that the Hiroshima bomb if dropped on New York or Chicago would cause no more damage than a ten-ton blockbuster.²⁴ This position, in flat contradiction to all other experts, drew a great deal of criticism on deSeversky. Although his argument is not convincing, his motives were commendable; he hoped to allay the hysteria surrounding the debate over the bomb.²⁵

Public opinion surveys reflected the confusion and disagreement that marked the debate on atomic weapons. Cornell University in cooperation with the Social Science Research Council conducted a series of interviews just before and after the Bikini tests in July, 1946. In a sample of six thousand respondents, a majority (63%) expressed the belief that there was a real danger of atom

bombs being used some day against the United States. However, a majority (55%) also believed that the United States would be able to work out a defense against the bomb before potential enemies had the weapon. Only thirty percent thought the danger that their family might be killed by atomic weapons "fairly great." While there was no significant relationship in survey answers about the likelihood of a future atomic war, the belief in the possibilities of a defense was much weaker among the well informed. The overall impression, a generation later, is one of public concern but not the sense of urgency generated by the scientists.²⁶

Attention to atomic power lessened in the spring of 1946. Aside from the effect of time, the rush of events--the Cold War, labor disputes, demobilization, inflation--drew the public's attention elsewhere. The Bikini tests served further to deflate rash predictions about the future of atomic war. Although the underwater test emphasized the problem of fallout, the results at Bikini seemed to point up the bomb's finite nature. In the Cornell post-Bikini survey a majority indicated that the bomb had done less damage than they expected.²⁷

Critical Literature. 1946-1949, Offense vs. Defense

Civilian writing during the next four years approached the problem of national defense at both popular and expert levels. Service rivalries motivated the writing of a number of articles which appeared in popular magazines. Perhaps the best examples are the

polemical articles that appeared in Reader's Digest during the B-36 controversy. The merit of these essays varies considerably. In contrast are a number of book-length studies, representing a serious effort to shed light on the needs of American defense.²⁸ The studies expressed substantial agreement on many aspects of America's defense. They agreed that the primary change brought about by the atom bomb was its ability to compress violence in terms of time. Future war would be total, its character determined by how soon it occurred. Thus Baldwin and Vannevar Bush spoke of "now" and the "distant future." Brodie and Ralph Lapp expressed a similar concept in terms of atom bomb stocks. There was unanimity in regard to the primary importance of research and intelligence operations. All supported a limited dispersion program for American cities and industry--cost estimates on a full plan of dispersion ran as high as three hundred billion dollars. A majority doubted the ability of America's defense establishment to prepare adequately for the next war. Bernard Brodie and Hanson Baldwin were particularly outspoken in their criticism of the military. The President's Advisory Commission on Universal Training stressed the need for a professional force in being prepared to respond instantly. The needs of the homefront would be met by a training program for large numbers of civilian soldiers. While Baldwin opposed UMT, he joined the others in stressing the need for a large civil defense element as well as a retaliatory force. All saw the United States enjoying a military advantage that would last at least ten years.

Crucial differences of opinion also appeared. These were particularly significant because they paralleled a similar disagreement within the armed forces. The argument centered on the question of whether technological development favored the offense or defense. The areas of debate included: the number of atomic weapons available, their potential for destruction, the capability of strategic bombers, and the rate of technological advance in missiles. Less attention was given to the appropriateness of various strategies, for example, mass terror bombing.

Baldwin and Brodie thought the next war would be an offensive one. War was unlikely until Russia achieved an atomic stockpile. This would probably occur within a decade. While both men conceded the vulnerability of long-range bombers, they assumed a sufficiency of atomic weapons that would allow losses of ninety percent in achieving the opponent's destruction. Brodie went even further in arguing that the bomb's destructiveness made one-way flights feasible. Despite the uncertain status of an effective ICBM, missiles appeared frequently in their calculations about the next war. Brodie described a war opening with an attack of several thousand atom bombs. Destruction would probably be complete in a day, certainly in no more than a week. He emphasized that America's ability to win the next war hinged on the degree to which her armed forces made themselves independent of the civilian economy's supply and support.²⁹ Baldwin, although placing more emphasis on defensive preparations, agreed:

That defense today is in large measure attack
and that that attack must be, strategically, a

national reflex action. . . . The best answer to atomic bombs falling in our cities, the best answer to guided missiles from across the seas streaking through our skies, the best answer to submerged submarines off our coast is instant, swift and deadly retaliation in kind, bigger and better retaliation.³⁰

Vannevar Bush concluded that most of the recent technological advances strengthened the defense; however, the A-bomb and the submarine placed the attack in the ascendancy.³¹

Reaching different conclusions about the effectiveness of atom bomb attacks, Stefan Possony and Lapp predicted that any war in the next ten to twenty years would be defensive in character. Taking exception to the "absolute weapon" view, they described the atom bomb as an evolutionary improvement rather than a revolutionary change in destructiveness. Possony cited the different results at Hiroshima and Nagasaki as evidence that a defense against the A-bomb was not impossible. Dispersion, underground facilities, and a nation-wide air defense system could enable a country to withstand considerable destruction from atomic attack. Lapp developed much the same concept when he spoke of space as our ally.³² Both assumed a relatively small number of atom bombs would be available in the next decade. Lapp referred to one hundred bombs as "no inconsiderable number of weapons, especially for a country which may have a limited supply of uranium or inadequate production facilities."³³

In addition to their reservations about the A-bomb, Possony and Lapp contended that for at least the next few years the defense would hold a decided edge over heavy bombers. Possony noted the

great progress made in radar location, fire directors, and anti-aircraft devices, and the speed differential between jet-propelled fighters and prop driven bombers. Lapp pointed out the technological problems involved in giving jet bombers sufficient range (several thousand miles). Both writers dismissed the long-range missile as a prime carrier of atom bombs before 1970.³⁴

It would be incorrect to suggest that these individuals put forth inflexible positions. The awareness of future technological developments discouraged dogmatism. In The Absolute Weapon (1946) Brodie had contended that a superiority in numbers of bombs was not in itself a guarantee of strategic superiority. By the fall of 1948 he had reversed his position. The change reflected at least three considerations: the enemy's task of neutralizing the United States Strategic Air Command, America's ability to absorb a certain amount of destruction, and the apparent slow pace of bomb production.³⁵ Somewhat similarly, Baldwin's specific proposals in the light of Cold War events differed considerably from his recommendations in The Price of Power (1947). Writing in the summer of 1949, he warned against putting too much emphasis on the atom bomb and strategic air power. Destroying Russia's social structure in a war was not the answer. Aside from the enormous problem of reconstruction, strategic bombing of Russia would not prevent the Red Army from seizing Western Europe. We should increase our tactical air power and conventional ground forces in Europe. A year later Baldwin's priorities were much the same. He thought it possible that neither side would

employ atomic weapons out of mutual restraint.³⁶ Changing contingencies brought changes in viewpoint. Still valid generalizations can be made: one, nearly all concerned persons assumed that the next war would be total; two, there were sharp differences of opinion whether war in the next ten to twenty years would be dominated by the offense or the defense.

Voices in the Wilderness--Adherents of a Limited War Philosophy

A few perspicacious individuals challenged the assumption that the next war would be an unlimited one. Liddell Hart and Hoffman Nickerson expressed the hope that medieval moral restraints might be revived. Hart contended that only an insane individual would begin a war after both sides possessed atomic weapons. Aggressors in particular would want to avoid the widespread destruction of an area they coveted. Instead, they would use infiltration tactics and power policy maneuvers in the diplomatic field. If necessary, this "camouflaged war" could be followed up by strategic operations against subsidiary states or outlying colonies. To meet this threat the democracies needed a defense system which included: one, an atomic missile capability but with stress on defense; two, research, three, professional armies--highly mobile and ready for instant deployment against guerrillas. Conscript armies, mobilization, heavy-bombers, and battleships could be largely eliminated.³⁷

Walter Lippmann questioned the use of atomic weapons as tools of diplomacy. In a widely read article he noted:

The fundamental military weakness of the atomic rocket is that it is a weapon for the extermination of civilians. Such a weapon can be used only in an absolute war. It can not be used for limited objectives. And yet most military operations are for limited objectives.³⁸

He cited several troublesome areas such as Trieste, Indonesia, and Burma where atomic weapons would prove a very poor diplomatic instrument. There was still an essential role in Lippmann's mind for the traditional elements of force--the warship or the detachment of troops.

Some government officials argued for a limited war capability. In July, 1949, George Kennan warned the Joint Strategic Survey Committee of the need for several mobile divisions to be deployed in brush-fire wars.³⁹ By and large, though, such voices were lost in the torrent of total war advocacy.

Armies and Navies in a Pushbutton War?

The debate over future warfare impinged directly on the question of service roles. In the immediate aftermath of Hiroshima many people expressed the belief that traditional forces were no longer needed. Atomic scientists were perhaps the most outspoken, but educators, politicians, and even military men expressed similar sentiments. The remarks of Representative Clare Booth Luce (Rep., Conn.) were typical:

We must remember when we get into a great debate here, about the size of the Army and Navy, that a Navy, and an Air Force, and an Army ten times as large as those we are being

asked for today, would be of little use to us, standing offshore, sitting on airfields, barracked in Army posts, or garrisoned overseas, if, overnight atomic bombs wiped out all our factories and assembly belts.⁴⁰

British Air Chief Marshall Sir Arthur Harris described the heavy bomber as the "dodo" of a next war. He placed future war in the hands of the scientists.⁴¹ While less explicit, General Tomoyuki Yamashita expressed a belief that service roles would change drastically. Interviewed in a Manila prison, he stated: "My experience teaches me that modern war has finally brought about developments in weapons and tactics so revolutionary that now, at last, even strategy must change too."⁴² Where armies had formerly accomplished the capture and/or destruction of objectives, one bomb could now do it. "The war will be over, to all intents and purposes, even if enemy forces are still in existence, still unengaged and still undefeated."⁴³ Among military writers, J. F. C. Fuller and Hanson Baldwin expressed serious doubts about the future employment of conventional forces.⁴⁴

Air power enthusiasts thought the U. S. could safely eliminate land and sea forces. Senator Tom Connally (Dem., Texas), chairman of the Senate Foreign Relations Committee, proposed that the U. S. furnish a flying task force of atomic bombers to the United Nations Security Council. Such a force in Connally's words, "could crush any attack or act of aggression quickly and effectively."⁴⁵ Four years later Representative Clarence Cannon (Dem., Mo.) was calling for the use of allied troops to occupy enemy territory after "we have demoralized and annihilated enemy territory from the air."⁴⁶

Many officers of the Army Air Force apparently thought air power could win the next war on its own. Generals LeMay and Doolittle publically stated that the Navy's carriers were either obsolete or rapidly reaching that state.⁴⁷

Navy leaders expressed concern about their future role. Admiral Marc A. Mitscher thought surface fleets might be useless in ten years. Admiral Nimitz acknowledged the belief held by some submariners that surface fleets would soon disappear.⁴⁸ The possibility that atomic weapons could destroy a nation's industry posed a clear threat to the Navy. As Bernard Brodie noted, "it was possible for navies to lose all reason for being even if they themselves remain completely immune."⁴⁹ Navies existed in large part to sustain a nation's seaborne transportation. If atomic war devastated a nation's industrial base in one day, what role could a navy play?

Many men saw a continuing need for land and sea forces. Some, like Cyril Falls, relied on traditional roles for justification. Others, such as William Borden, envisioned new roles, e.g., naval vessels serving as the principal means of delivering atomic missiles.⁵⁰ Proponents of limited war stressed the need for flexible instruments of force. As the Cold War developed, critics of American policy questioned the wisdom of challenging the Red Army with an atomic threat. Walter Lippmann envisioned the Russians retreating into eastern Russia and advancing into western Europe. While we might destroy European Russia, she would have the industrial base of a conquered western Europe.⁵¹ Even if we used the atom bomb on western

Europe as well as Russia, the United States would face a sizable guerrilla conflict.⁵²

Army and Navy officers frequently admitted that atomic weapons might someday eliminate the needs of their service, but nearly all thought this possibility at least several decades away. In the meantime each service directed its efforts towards establishing a responsible role in the postwar world.

Forces Shaping Service Thought in the Postwar Period

Four areas of military involvement influenced service planning in the first two years after V-J Day. The immediate missions of occupation and demobilization placed a heavy burden on the three services. As late as 1949 Army leaders were complaining that occupational duties precluded any divisional size training operations. While the problems of demobilization ended sooner, they had been more severe. For a few months in 1946 the Navy and Army Air Force found it difficult to maintain active arms, much less deploy significant forces.⁵³ The lengthy quarrel over unification and Universal Military Training comprised areas three and four. Both debates included an examination of service roles. Vincent Davis has contended that the primary force shaping Navy planning after the war was the fear that in unification its air arm would be lost to the Air Force.⁵⁴ Although unification did not have as great an impact on the planning efforts of the other two services, domestic political considerations were a powerful influence. The struggle over UMT

principally affected the Army. Its concepts of a future role assumed implementation of Universal Military Training and were framed in part to justify such a program.

While service planning was shaped by contemporary events, its purpose lay in the future. The major imponderables facing military men in 1945 were the rate and direction of technological change, and the nature of future threats to American security. Initial estimates in both areas seemed reassuring. Major General Leslie Groves and Rear Admiral William Purnell, the military's atomic experts, placed America's lead in A-bombs at from five to twenty years. Both thought the longer period more likely.⁵⁵ Subsequent military planning assumed an enemy atomic capability, but all three services predicated a marked American superiority. As in the literature reviewed earlier, the ensuing five years brought sharp disagreement among the services concerning the evaluation of technological advances. This dispute over weapons systems culminated in the Navy's attack on the B-36. Although the Joint Weapons Systems Evaluation Board was established to arbitrate these disputes, expanded budgets after June, 1950, proved a more effective mediator.

In the first months of peace there was a reluctance to accuse any nation of threatening American security. General Dwight D. Eisenhower, in testimony before the House Armed Forces Committee, stated: "Nothing guides Russian policy so much as a desire for friendship with the U. S."⁵⁶ Questioned by the same committee, General George C. Marshall refused to identify any potential

aggressors. The Cold War soon dispelled any doubts about potential enemies, but the problem of implementing foreign policy continued. In September, 1946, shortly after Henry Wallace's famous speech at Madison Square Garden, Eisenhower stated that it was impossible for him to plan Army and Air Force requirements until he was advised of national strategy.⁵⁷ Passage of the National Security Act in 1947 did not immediately provide the desired lines of communication. In late 1948 the Eberstadt Committee Report (Hoover Commission) criticized the Truman administration's efforts to frame national policy. According to the Eberstadt Committee, individual service interests were shaping military strategy. In October, 1949, General Omar Bradley asserted that the Joint Chiefs of Staff had to assume certain national policy objectives in the absence of any guidelines from civilian superiors.⁵⁸ Given America's new international role and the significant changes in the defense establishment, failures to coordinate foreign policy and military thinking are understandable. Nevertheless, the initial ineffectiveness of the National Security Act machinery hindered the military's postwar examination of its role.

Despite the confusion of contemporary events and the uncertainty about future developments, distinct views emerged in each service concerning future war and their role. Air Force vision demonstrated the sharpest focus; the next war would be total, offensive, and won by the combined efforts of the Strategic Air Command and the Tactical Air Command. The Navy agreed that the next war

would most likely involve the two great powers, but they questioned the wisdom of "mass terror bombing." Accepting the conclusions of defensive proponents, Navy representatives stressed the need for advanced bases, amphibious forces, and mobility. The Army's position was least clearly defined. One group, accepting the Air Force view of future war, relegated the Army to a secondary role of support for air bases and civil defense. A second element, more concerned about the service's prestige, adopted a view similar to the Navy's. They saw a continuing need for large ground forces to seize advanced bases and invade enemy territory. A smaller group, appearing in the late 1940's, began to speak of atomic stalemate and brush-fire wars. In subsequent chapters these service positions will be examined in detail.

NOTES

¹House, Committee on Military Affairs, Hearings, Universal Military Training, 79th Cong., 1st Sess., 1945, p. 562; hereafter referred to as UNT Hearings, 1945.

²Bernard Brodie, A Guide to Naval Strategy (New York, 1965), pp. 225-26. Brodie states that "it had become axiomatic that all modern wars must be total wars."

³William D. Partridge, editorial remarks in "Letters" section, Air Affairs, I (September, 1946), 123-25; Bernard Brodie and Eilene Galloway, The Atom Bomb and the Armed Forces, Legislative Reference Bulletin No. 55, May, 1947 (Washington, 1947), passim.

⁴New York Times, August 13, 1945, p. 9.

⁵"Atomic Age," Time, August 20, 1945, p. 30.

⁶Edward M. Earle, "The Influence of Air Power upon History," The Yale Review, XXXV (Summer, 1946), 577-93.

⁷Bernard Brodie et al., The Absolute Weapon: Atomic Power and World Order (New York, 1946), pp. 28, 71.

⁸The role of the atomic scientists in the early debate over atomic energy would make an interesting study. Their efforts to influence public opinion included lecture tours, the writing of books and numerous articles, and frequent appearances before Congressional committees. A large number threatened revolt against the Army because of its efforts to "muzzle" them. Unfortunately, Robert Gilpin's American Scientists and Nuclear Weapons Policy devotes little attention to the first year's debate.

⁹"In a Locked Room," Time, November 12, 1945, p. 28.

¹⁰E. U. Condon, "Atomic Energy and the Future, Will the Next Conflict Be 'The War of Pushbuttons'?" Army Ordnance, XXIX (November-December, 1945), 393.

¹¹New York Times, October 24, 1945, p. 4; "Better than Dynamite?" Time, October 22, 1945, p. 26.

¹²New York Times, October 14, 1945, pp. 1, 4. While these points were extracted from a manifesto prepared by Los Alamos scientists, they accurately reflect views expressed in other sources; e.g., Saturday Review of Literature, October 27, 1945, to December 29, 1945; Harrison Brown, Must Destruction Be Our Destiny?; "Twelve Points," Time, November 12, 1945, p. 28.

¹³J. Robert Oppenheimer, "Atomic Weapons and the Crisis in Science," Saturday Review of Literature, November 24, 1945, pp. 9-11; "Terribly More Terrible," Time, October 29, 1945, p. 30.

¹⁴New York Times, August 8, 1945, p. 4; August 13, 1945, p. 9; October 23, 1945, p. 6; October 25, 1945, p. 10; October 26, 1945, p. 4.

¹⁵J. F. C. Fuller, Armament and History (London, 1946), p. 195; "The Age of Annihilation: The Atomic Bomb and Warfare of the Future," Army Ordnance, XXX (January-February, 1946) 34-39.

¹⁶Francis V. Drake, "Let's Be Realistic about the Atom Bomb," Reader's Digest, XLVII (December, 1945), 108-12.

¹⁷Gen. Henry H. Arnold, "Air Force in the Atomic Age," in One World or None, eds. Dexter Masters and Katherine Way (New York, 1946), pp. 26-32.

¹⁸William L. Borden, There Will Be No Time (New York, 1946), passim.

¹⁹New York Times, October 6, 1945, p. 6.

²⁰Fuller, Armament and History, p. 190.

²¹Hoffman Nickerson, "Limitless War?" Army Ordnance, XXX (March-April, 1946), 207-08.

²²"Heads Up!" Time, October 15, 1945, p. 21. The efforts to convince the American public that a defense was feasible were not devoid of humorous aspects. Rep. Carl Vinson's Naval Affairs Committee made headlines with the statement that a defense against atomic bombs was already under development. Implying that Navy scientists provided the information, a committee spokesman told reporters that radio waves would soon be used to detonate bombs far off in space. Questioned the following week about the authority of this statement, the source given was Larry Crosby, brother of the famous singer. New York Times, October 12, 1945, pp. 1, 5; Time, October 22, 1945, p. 26.

²³New York Times, October 3, 1945, p. 3; January 14, 1946, p. 4.

²⁴"Good News," Time, November 12, 1945, pp. 29-30; Major Alexander deSeversky, "Atom Bomb Hysteria," Reader's Digest, XLVIII (February, 1946), 121-26.

²⁵Ibid.; for example of criticism see Robert Littell, "What the Atom Bomb Would Do to Us," Reader's Digest, XLVIII (May, 1946), 125-28.

26"Public Reaction to the Atomic Bomb and World Affairs," Cornell University (Ithaca, N. Y., 1947). The survey showed a near even division on the question of a world war's likelihood in the next twenty-five years. The low information group was the most pessimistic. This group also gave stronger support to large peacetime forces; the median suggested figures of the survey being nearly twice what the Truman administration was programming.

27Ibid., p. 29.

28Hanson Baldwin, The Price of Power (New York, 1947); Brodie, The Absolute Weapon; Vannevar Bush, Modern Arms and Free Men (New York, 1949); U. S., President's Advisory Commission on Universal Training, A Program for National Security (Washington, 1947), hereafter referred to as the Compton Report; U. S., President's Air Policy Commission, Survival in the Air Age (Washington, 1948), hereafter referred to as the Finletter Report; Ralph E. Lapp, Must We Hide? (Cambridge, Mass., 1949); Stefan T. Possony, Strategic Air Power (Washington, 1949).

29Brodie, The Absolute Weapon, pp. 70-38; Baldwin, Price of Power, pp. 147-75.

30Baldwin, Price of Power, p. 153.

31Bush, Modern Arms and Free Men, p. 56.

32Possony, Strategic Air Power, pp. 15-33, 169-85; Lapp, Must We Hide?, pp. 1-11. Possony also developed at some length the argument that neither side would initiate atomic war because of political considerations, pp. 30-31.

33Lapp, Must We Hide?, pp. 61-63.

34Possony, Strategic Air Power, pp. 19-20; Lapp, Must We Hide?, pp. 119-28.

35Brodie, The Absolute Weapon, pp. 46-49; "The Atom Bomb as Policy Maker," Foreign Affairs, XXVII (October, 1948), 17-33.

36Baldwin, "What Kind of War," Atlantic Monthly, CLXXXIV (July, 1949), 22-27; "Strategy for Two Atomic Worlds," Foreign Affairs, XXVIII (April, 1950), 386-98.

37B. H. Liddell Hart, "War-Limited," Harper's, CXCII (March, 1946), 193-203.

38Walter Lippmann, "Why Are We Disarming Ourselves?" Infantry Journal, LIX (December, 1946), 41-43. The article also appeared in Redbook and Reader's Digest.

³⁹Samuel P. Huntington, The Common Defense (New York, 1961), p. 41.

⁴⁰U. S., Congressional Record, 79th Cong., 1st Sess., 1945, XCI, Part 7, 8871.

⁴¹Time, September 10, 1945, p. 35. Harris was one of the leading advocates in World War II of letting air power alone defeat Germany.

⁴²Gen. Tomoyuki Yamashita transcribed by Captain Lowell M. Limpus, "Strategy Must Change," Infantry Journal, LVIII (April, 1946), 18.

⁴³Ibid. Although many Japanese used the atom bomb as a rationalization for their defeat, the tone of this interview would seem to indicate that these were Yamashita's true feelings arrived at after some thought.

⁴⁴Supra, pp. 5-6; New York Times, August 13, 1945, p. 9.

⁴⁵New York Times, September 9, 1945, p. 35.

⁴⁶U. S., Congressional Record, 81st Cong., 1st Sess., 1949, XCV, Part 4, 4501.

⁴⁷New York Times, August 12, 1945, p. 4E; September 16, 1945, p. 6E; Senate, Committee on Military Affairs, Hearings on Unification, 79th Cong., 1st Sess., 1945, p. 308; hereafter referred to as Unification Hearings, 1945.

⁴⁸New York Times, October 18, 1945, p. 5; Adm. Chester W. Nimitz, "Atomic Age Navy," Colliers, May 11, 1946, p. 66.

⁴⁹Brodie, The Absolute Weapon, p. 82.

⁵⁰Borden, There Will Be No Time, pp. 88-110.

⁵¹Lippmann, Infantry Journal, LIX (December, 1946), 41-43. For similar views expressed by Hanson Baldwin in 1949 see "What Kind of War," Atlantic Monthly, CLXXXIV (July, 1949), 22-27.

⁵²Walter Lippmann, "The Russian-American War," Atlantic Monthly CLXXXIV (July, 1949), 17-21. Lippmann did not deny that strategic air power would play a vital role in a war with Russia. He was concerned lest we neglected other aspects of our military establishment.

⁵³The Forrestal Diaries, (ed.) Walter Millis, (New York, 1951), p. 196. Comments in interviews provide additional support. Samuel

Huntington, The Common Defense, p. 38, has referred to demobilization as the "last phase of World War II; as such it was not the alternative to a wiser and more effective policy but rather a prerequisite to it."

⁵⁴Vincent Davis, Postwar Defense Policy and the U. S. Navy, 1943-1946 (Chapel Hill, 1966), pp. 149-50.

⁵⁵New York Times, October 10, 1945, pp. 1, 4; October 17, 1945, p. 4. In a public meeting in Washington, D. C. December 11, 1945, Gen. Groves observed "that the bomb was not a problem for us but for our grandchildren." Brodie, The Absolute Weapon, p. 64.

⁵⁶Army-Navy Journal, November 17, 1945, p. 412.

⁵⁷Army-Navy Journal, September 21, 1946, p. 64. Secretary of Commerce Wallace's speech questioned the wisdom of Secretary of State James Byrnes' tough stand against Russian expansionism. As President Truman had publicly approved Wallace's speech, the effect was to create much confusion about U. S. foreign policy. The incident was climaxed by Wallace's dismissal.

⁵⁸House, Committee on Armed Services, Hearings, The National Defense Program--Unification and Strategy, 81st Cong., 1st Sess., 1949, pp. 416-17; hereafter referred to as Unification and Strategy Hearings.

CHAPTER II

THE ARMY--SEARCH FOR A MISSION

The Army is caught between two epochs. Nobody really knows as yet what an army's function will be in the age of atomic war. There are as many opinions as generals and experts but no certainty. Like the rest of our society, the Army does not know where it is heading. . . "Men Wanted, Mission Wanted," Newsweek (December 23, 1946)

Trends in Army Doctrine. 1945-1950

With allowance for overstatement, the Newsweek comment is a good evaluation of Army thinking, not only during demobilization but for the entire period up to Korea. A consensus existed on only one aspect of future war; it would probably be total. Army leaders expressed a wide variety of opinions concerning the impact of atomic weapons, the role of ground forces, and how technological advances (e.g., air transport) would affect the employment of ground forces. These disagreements help explain, in part, the instability of Army doctrine after World War II.

The expectation of Universal Military Training shaped the Army's philosophy during the first eighteen months of the postwar period.¹ War Department leaders framed their doctrine in part to justify UMT, with emphasis on a mobilization capability. While the Army acknowledged the paramount importance of air power, the term

was used in a broad sense including tactical, transport, and interception functions as well as strategic air. The A-bomb was viewed as an evolutionary weapon. Army leaders assumed that a future war would be very much like the closing stages of World War II.

Domestic and international developments produced a change in Army doctrine that was clearly evident by early 1948. Numerous forces--including church, labor, and segregationist--blocked passage of UMT in Congress. Without such a program, an early effective manpower mobilization seemed impossible. At the same time a potential Russian invasion of western Europe emerged as a serious threat to American security. Army leaders adopted a philosophy emphasizing the predominant role of strategic air power. The Army would serve principally as a defensive screen for the Strategic Air Command and to deny Russia bases close to the United States. A central tenet of this doctrine was the belief that extensive ground combat on the continent of Europe should be avoided; atomic weapons could bring Russia to its knees.

A significant reaction to this acceptance of a secondary role appeared in 1949. In articles and speeches Army leaders began to criticize over-reliance on a "strategic blitz" theory. They pointed out the ill effects of such a strategy on our European allies in NATO. Some Army officers began serious efforts to develop tactical roles for atomic weapons in hopes of developing the ability to compete with the Russian and Chinese mass armies. Other officers thought the Army's principal role lay in preparing for limited war.

Still, the Army's official policy continued to focus on a Russian invasion in Europe and a counter strategic atomic bombardment.

Individual attitudes about the Army's role showed less susceptibility to change. UMT remained the cornerstone of General Marshall's concept for a postwar Army. General Eisenhower's "New Look," stressing strategic air power in lieu of ground troops, was a continuation of the views he held while Chief of Staff (1946-1947). Throughout this period, Major General James Gavin saw the Army's role as one of adopting its basic combat structure to an airborne capability. In November, 1945, Lieutenant General Ray McLain was telling Congress that ground troops would still play the decisive role in future war, atomic or otherwise. This same attitude, four years later, made him an ideal officer for the Chief of Information post at a time when the Army attempted to recover prestige. General Omar Bradley emphasized the need for teamwork and balanced forces in his many speeches. Others saw the Army's immediate tasks--occupation, training, and weapons development--as so time-consuming that they could not worry about formulating a role in the atomic age.

General Marshall and Universal Military Training

The postwar's first major statement of Army policy came with the publication of General Marshall's Final Report in October, 1945. In the closing section Marshall briefly stated the War Department's view of future defense needs. The statement stands today as a classic presentation of the case for a program of universal military

training.² While acknowledging the importance of air power, Marshall focused on the need for an effective citizen-Army. Conceding the prospect of devastating rocket attacks, he emphasized a mobilization capability. Marshall grounded his argument in World War II experience. Out of a military force of over fourteen million men, only one and a half million had served in the infantry (Army and Marine). The remainder largely fought a war of machinery. From this recent experience Marshall concluded that technological advances increased the need for manpower in warfare. The introduction of the new factor, atom bombs, did not alter this fact. Should we be compelled to employ such a weapon in a future war, it would require additional millions of men in our Armed Services. Over the next decade our security rested in the ability to mobilize an Army of four million men within a year. An effective program of UMT might serve as a deterrent for generations.³ Marshall listed four missions for the Regular Army. One involved the responsibility of defending the continental United States from a sudden enemy attack. This duty would fall principally on Army air power. A second mission was the provision of security garrisons for outlying bases. The plans and operations function comprised a third role. The last and probably most important mission was "to provide the knowledge, the expert personnel, and the installations for training the citizen-soldier upon whom, in my view, the future peace of the world largely depends."⁴

Marshall's Report has been criticized for failing to interpret accurately the nation's defense needs in an age of atomic

warfare.⁵ In Marshall's behalf, it should be noted that military authorities predicted at least a decade's interval before other nations could produce an atomic weapon.⁶ This aside, Marshall clearly did not view the atomic bomb as a revolutionary development. He told a Congressional hearing in late 1945:

In the A-Bomb we see a dreadful force, but it is merely another force. The developments. . . in air power are almost as remarkable. . . The use of the word "atomic" I fear will do more violence to logic than it will to alter the fundamentals of warfare.⁷

Despite the destructive potential of atomic weapons, one attack would not defeat a nation. Nor would intercontinental bombing prove a serious threat for a number of years. Marshall stressed the importance of rapid deployment of our Armed Forces to prevent an enemy gaining the bases necessary for launching destructive air attacks. On several occasions during these late 1945 hearings, Congressmen asked Army leaders to justify the need for a large citizen-Army in the light of the atom bomb. Marshall reiterated his belief in the deterrent effect of a strong UMT program. While both he and General McLain stated that atomic warfare would place increased importance on ground forces, neither elaborated.

A few specific roles for the ground Army were mentioned. General Eisenhower introduced the concept, later stressed by the Compton Report, that a large well trained citizen-Army would greatly increase the ability of the United States to maintain order and undertake mobilization after an atomic strike. Major General Ray E. Porter, Director of the War Department's Special Planning Division,

drew on the Peenemunde example of World War II in justifying ground forces. We would need troops capable of moving in immediately to seize the enemy's atomic energy plants and launching sites.⁸ Frequently the proposals were vague, revealing a general uncertainty among Army leaders as to just what role a citizen-Army would play. Typical was Eisenhower's remark "that UMT is necessary as long as the qualities of stamina, leadership, etc.--in any kind of battle--are important to the United States."⁹

Circular 119--The Army Would Avoid Definite Assumptions about Future Warfare

War Department Circular 119, "General Principles Governing Preparation of Post-War Plans," was published in April, 1946. Although the document appeared over the signature block of a new Chief of Staff, Dwight D. Eisenhower, War Department thinking revealed little change from the previous year's concepts. The document did spell out a belief only implied in the 1945 testimony; the War Department would avoid the adoption of definite assumptions about the nature of future warfare. In view of rapid technological changes the authors maintained that it was particularly undesirable at this time to make positive assumptions about the nature of warfare even during the next ten or fifteen years. They hedged their point somewhat by acknowledging that any war of the next few years would be fought with weapons presently on hand.¹⁰

The circular recognized the preeminent role of the Air Force; "Under current conditions and those of the predictable future,

the influence of air power cannot be overemphasized."¹¹ As with nearly every military statement of the period, the paper acknowledged the importance of research and intelligence activities. Its missions for the ground forces duplicated those of Marshall's Report, adding an omnibus statement that the Army would participate in all types of offensive and defensive operations either in the United States or abroad. Despite the ban against definite assumptions, a succeeding section of the circular contained a brief sketch of a future war. The ground army's missions included invasion of enemy territory to seize missile sites, defense of critical installations, and rapid mobilization of the reserve army needed to win a world war. The publication directed all officers to familiarize themselves with War Department Circular 347 (1944). This circular, prepared by General John MacCauley Palmer, presented the formal Army position regarding the desirability of a citizen-Army (and hence UMT).¹²

The Army's Efforts to Surmount the Confusion of 1946

While the UMT program represented Army doctrine during the first eighteen months after V-J Day, Army leaders considered this an interim period. Demobilization was so vast an operation that little training could be accomplished until it was completed. A lack of guidelines as to future size or responsibilities handicapped all service planning. The United Nations was a further complication. In light of our commitment to that organization, the Army listed the provision of forces to the United Nations as one of its roles. This

responsibility was clear. Less obvious was the proper course to adopt concerning the success or failure of the Baruch Proposals (the U. S. 1946 effort to establish atomic arms control). Some leaders in the War Department believed, or professed to believe, that planning should proceed on the assumption that atomic weapons would be outlawed. Donald B. Robinson, writing in the American Mercury, ascribed such views to ranking military men. America's security lay in the capability to rapidly mobilize its industrial war machine. Even should atomic, chemical, and biological weapons be outlawed, the next war would be more devastating than World War II; again, fire power would prove decisive. Robinson noted that much Army planning did not reflect the assumption of an atomic weapons ban. As an example, importance was placed on stockpiling essential materials and weapons in case a sudden atomic strike should cripple the United States' industrial capacity.¹³ Interviews and War College papers indicate a majority of the military entertained doubts about the wisdom of the atomic energy control talks.¹⁴

While service planning was hobbled in 1946 by major uncertainties, Army leaders demonstrated a concern to provide effective planning agencies. The Special Planning Division, set up in 1943 to prepare for postwar problems, continued its efforts in the areas of manpower, training, and strategy. In the tradition of the Army War College, the Command and General Staff College faculty at Fort Leavenworth directed its attention to general strategy and tactics.¹⁵ The War and Navy Departments joined together in establishing the

Joint Research and Development Board. Under the direction of Vannevar Bush, this Board was responsible for research and engineering in guided missiles, radar, biological warfare, and other pertinent subjects. In June, 1946, the War Department instituted its own Directorate for Research and Development. At the same time General Eisenhower announced a department research and development policy. Among its tenets, one stated "that the Army must have civilian assistance in military planning as well as for the production of weapons."¹⁶ To implement this, a War Department Civilian Panel was created. The policy statement's last point emphasized the need for officers to become fully aware of the advantages which the Army could derive from the close integration of civilians in military planning.

The following year General Eisenhower organized another agency in an effort to relate potential technological developments to future warfare. In April, 1947, he announced the formation of an Advanced Study Group, comprised of three young field grade officers. Their task was to formulate a picture of warfare as far as twenty-five years into the future. While their efforts fell into the category of pure rather than applied research, the War Department planned to continually review the group's conclusions in hopes of incorporating its ideas into Army planning. Ulterior motives may have played an important part in the establishment of the Group. The services were being criticized at the time for failing to adjust to the new technological developments. The group's formation

received much publicity, but there is no public record of its subsequent work.¹⁷

Growing Appreciation for an "Immediate Ready" Force--
Legislative Reference Bulletin No. 55 (May, 1947)

During the eighteen month interim period after V-J Day, Army leaders demonstrated a growing awareness that atomic weapons greatly reduced the military's reaction time. However, rather than abandon UMT with its emphasis on mobilization, they made exaggerated claims about its potential. Military men pictured a reserve army of millions mobilized and ready for action in a matter of days. They wrote of the need for "instant mobilization" of American industry. Major General Henry Aurand suggested that American industry maintain blueprints and tools for rapid conversion to war materials. Retired General Brehon Somervell seconded this proposal and urged strong support for the Army and Navy Munitions Board in its efforts to develop an industrial mobilization plan.¹⁸ While agreeing that mobilization time should be reduced, civilian critics thought the Army's emphasis reflected "pre-atomic" thinking. They doubted that UMT or mobilization blueprints would prove of much value in a future atomic war. Primary attention should be directed to our regular forces.¹⁹ The appearance of Legislative Reference Bulletin No. 55 (May, 1947) made it clear that Army thinking was moving with the critics.

The bulletin, entitled The Atomic Bomb and the Armed Services, was prepared at the request of the Armed Services committees.

In addition to lengthy statements by each of the two military departments, the bulletin contained remarks and surveys by the compilers, Bernard Brodie and Eilene Galloway. The significant aspect of the Army's statement was the supposition that, within the next decade, all planning would have to rule out lengthy mobilizations. The possibility of a destructive atomic attack eliminated the cushion of time enjoyed in previous wars. The emphasis must be shifted from the reserve citizen-Army to the Regular Army's capability of immediate response.²⁰ Among the basic points established by this Army study were: one, the importance of forces in being--retaliatory (air), defensive, and striking (ground); two, the "overriding importance of strategic bombing"; three, the need to devote a larger portion of the national budget to defensive measures to insure a retaliatory capability. The Army planners mapped out a strategy which called for the absorption or diversion of initial strikes. Our air defense should be effective enough to insure the survival of our bombing force and to discourage further enemy assaults. The enemy attack would trigger immediate strategic bombing counterattacks. Ground troops would be deployed to secure essential bases in the United States and abroad. The last step involved a mobilization of national resources. While a decision might well come in the first days, the nation could not be assured of this. As it was economically unfeasible to retain ready forces sufficient for all the possible missions of an atomic war, we should continue a mobilization capability. This included stockpiling materials and training a reserve army.²¹

The War Department planners noted other considerations. Alliances became more, not less important, in an atomic war.²² An initial attack could be better absorbed if the enemy had to direct it at a number of countries. Overseas bases would enhance the effectiveness of our strategic response. The study called for a civil defense program under civilian control. Army planners reasoned that in times of emergency the military would be absorbed in its efforts to destroy the enemy's will and capacity to wage war. Furthermore, the nature of the task required effective action at all levels of government. This could be done more appropriately by a federal civilian agency. The National Guard would bear heavy responsibilities in maintaining order after an atomic attack and in defending important areas against possible enemy airborne invasion. The study concluded that atomic weapons altered military tactics very little. Ground forces would continue to use World War II tactics with somewhat more attention paid to dispersion and mobility, particularly when concentrating forces for large offensive operations.²³

The Compton Committee Report--UMT for a Strategic Air War

Within the same month (May 29, 1947) the publication of the "Report of The President's Advisory Commission on Universal Training" gave further evidence of a change in Army thinking. With uncommon discernment, the Compton Committee postulated possible U. S. involvement in a war "through the aggressive tactics of some nation against its neighbors, in a distant part of the world, which

we and the United Nations could not countenance either because of ultimate threats to world security or because our international conscience would not permit us to stand passive. . ."²⁴ The United States could become involved in a war enforcing the Monroe Doctrine or in a U. N. police action against a small nation. Clearly the committee's greatest concern, though, was the possibility that the United States might be attacked directly by a powerful enemy.

In attempting to prescribe a program for national security, the Compton Committee suggested five characteristics of future warfare. Long-range aircraft, operating across the Arctic, made a sneak attack vastly more probable; a present atomic monopoly promised the United States immunity for no more than five to ten years. Secondly, the speed and force of such a sneak attack obligated the United States to maintain a ready force that could instantly retaliate with the most modern and powerful weapons. Thirdly, with war more mechanized there would be a sharp decrease in combat troops and a similar increase in technical forces. Fourthly, modern war would be total in that all segments of a society would assist a nation's war effort and be subject to personal attack. Finally, the Compton Committee thought fifth column activity would play a large role in future warfare. In support of their description of future warfare, the committee cited the "restrained testimony" of Lieutenant General J. Lawton Collins:

We could expect that the war would start very suddenly and come through the air, and that the enemy would try to eliminate the United States at the outset. . . .The attack would

be primarily at the great cities and would cause great destruction both to physical structures and the people. It might involve atomic bombs, radioactive materials, biological warfare, and crop-destroying chemicals. The atomic bomb would probably be used against cities in preference to military targets. We would have chaos. . . , civil disorder, and sabotage. The initial bombing attack would likely be followed by air-borne troops.²⁵

The committee concluded that American security rested on: one, the maintenance of air power and airborne troops capable of thwarting enemy attacks, seizing intermediate bases, and launching strategic bombing; and two, a program that would provide trained men in all parts of the country ready and able to cope with disorder, sabotage, and possible invasion.²⁶

Commitment to a Strategic Air Strategy--
Eisenhower's Final Report (February, 1948)

Military testimony presented at hearings on the 1948 Appropriations Bill (February-March, 1947) still reflected the transitional character of Army planning. Brigadier General George A. Lincoln, Chief of the Plans and Policy Group, made the initial presentation. He reasserted the principle of Circular 119 (1946) that any war of the next two or three years would closely resemble the last phases of World War II. This included tactics, weapons, and the need to mobilize a large military force. The bulk of his testimony, however, echoed the concepts presented in the Legislative Reference Study. Within a few years Russia could strike across the Arctic with one-way bomber flights. This potential threat compelled us to develop

a strategic response. Overseas bases were essential to facilitate interception and provide a springboard for counterattack. Lincoln listed a series of Army missions including: occupation, intelligence operations, base security, maintaining Reserve forces for emergencies, civil defense, and mobilization planning.²⁷

The testimony of two other Army officers reflected the pre-occupation and hopes of Army leaders in regard to present and future roles. General Eisenhower saw two outstanding tasks confronting the Army: the effective occupation of defeated countries and the maintenance of an Army Air Force capable of being our first line of defense. In contrast, General McLain, head of the Legislative and Liaison Division, predicted that ground forces would still play the dominant role in any major war. He thought it possible that atomic weapons would not be used in a future war, either because of international control or strategic considerations. If an atomic blitz did take place, it was unlikely that either side could achieve a knockout. The final phase would be a struggle between balanced teams--air, sea, and ground--in which the accompanying attrition would eventually determine the victor.²⁸

General McLain's views notwithstanding, the Army's acceptance of a secondary status to strategic air power reached its apogee in 1948. Two years earlier a national magazine had quoted General Eisenhower in favor of principal reliance on a strategic air force.²⁹ The recognition of the Air Force's independence in July, 1947, did not reduce Eisenhower's commitment to air power. In his Final

Report as Chief of Staff (February 7, 1948) he detailed a strategy placing primary reliance on our strategic air arm. In this capability Eisenhower saw the means of avoiding "long drawn out and costly land operations."³⁰ The United States should develop a policy that took advantage of our industrial might and technological resources. We should avoid employing large ground forces against our potential enemy. "Such a conflict can bleed a nation white and yet result in nothing but stalemate." Strategic air power, properly supported by ground and sea elements could "batter an enemy into readiness to quit a war."³¹ Eisenhower referred to the Army's role as a vital one. It included the defense of important home bases from enemy airborne assaults, the seizure of advanced bases for air and sea power, and the immediate mobilization of a large reserve force. Gone was Marshall's year of mobilization time. Eisenhower wanted National Guard and Organized Reserve units at their required M-Day strengths (roughly 800,000 men) "not a year or two years after a war but on the first day of hostilities."³² Victory would depend on the United States' performance during the war's first sixty days.

Army Roles in a War with Russia--1948

The Czechoslovakian crisis in March, 1948, focused public attention on our defense posture. In the ensuing debate Secretary of the Army Kenneth G. Royall and Chief of Staff Omar Bradley redefined the Army's strategic concept. Essentially, it was a continuation of the Eisenhower position, responding to a Soviet attack with

strategic air power. However, there was some change in emphasis. Even taking into account the forum for their presentations--Congressional hearings on Selective Service, UMT, and increased appropriations--both men were more aggressive in their defense of the Army's role. On two occasions Bradley criticized those men who would deny the need for ground forces in an atomic age. "Large and powerful air forces alone do not constitute effective air power. Only by employment of air forces in concert with land and sea forces can there be such a thing as effective air power."³³ In support of his view Bradley cited General Spaatz's statement that an air campaign could not be waged from the North American continent. He recalled our World War II experience in China where bombing efforts had been halted by the failure to defend air bases against Japanese infantry. Bradley consistently adhered to Defense Secretary Forrestal's policy of balanced forces.³⁴

Both Royall and Bradley postulated hypothetical wars on several occasions to illustrate Army roles. The initial functions of ground forces would be threefold: one, assist the civil authorities in disaster relief; two, stamp out subversive activities of fifth columnists; three, protect essential areas from enemy airborne invasion. Of course army air defense units would have a vital role in countering the initial attack--at the time there were two anti-aircraft battalions in the United States. The next would involve denying to the enemy bases from which he could attack the continental United States--for example, Alaska, Greenland, Iceland, or the Azores.

In phase three the Army would seize an area on the Eurasian land mass for use as a major airbase. Such a base could be no further than 2,000 miles from enemy targets, preferably 1,500 miles or closer. Bradley anticipated that this mission would require seven divisions (375,000 ground troops) to defend an area large enough for twenty air groups. Concerning the extent of land combat, Bradley was somewhat vague. On one occasion he implied that the defense of one large air complex would constitute the Army's primary employment. Elsewhere he spoke of the need to continually advance airbases closer to enemy territory "to make the air effort more continuous, effective, and conclusive."³⁵ Ground forces would also be required to meet situations where air power was relatively ineffective, for example, guerrilla activity. Mobilization requirements received relatively little attention, even in the UMT hearings.³⁶

The additional appropriations sought by the Army at this time would have permitted an expansion to twelve active duty divisions.³⁷ In his testimony Bradley indicated that any significant offensive action, such as the establishment of an air base on the European continent, would require at least eighteen divisions. He hoped the other six could be obtained from the National Guard.

Army leaders were in a difficult position with both the President and Congress reluctant to enlarge the ground forces. One must question, however, their commitment to this offensive role. Its conduct depended on the use of Guard divisions which Bradley admitted were incapable of early deployment. This situation typifies

the conditions that shaped Army planning throughout the five year period. As one retired officer has stated, the Truman budgets forced the armed services to establish priorities. There was general agreement that an atomic air strike capability was of greatest importance. The Navy's ability to maintain intercourse with our allies came next. Ground forces were a poor third, occupation duties using up most of what funds the Army received. Service leaders had little choice at this time other than to accept a strategy relying on atomic bombing. Many Army officers doubted that we would have to deploy large ground forces overseas should a war with Russia break out.³⁸

Discontent within Army Ranks over Secondary Role

Despite statements of Army officials to the contrary, the morale of Army personnel in the 1948-49 period was low.³⁹ A lack of funds, reductions in manpower, the use of antiquated equipment, and poor military housing created widespread dissatisfaction among enlisted men and junior officers. Promotions for non-commissioned officers were slow. Air Force officers appeared to advance, while the freeze on Army officer promotions stretched on indefinitely.⁴⁰ Among higher ranking officers there was concern about the Army's apparent acceptance of a secondary role. The Office of the Chief of Information, U. S. Army, after carefully examining public statements made in 1948, arrived at these conclusions about official Army doctrine:

- a. That despite all assertions to the contrary, the role of the Army has in fact become secondary.
- b. That the Army is no longer considered as a force capable of decisively changing the balance in war by virtue of its own mobility and hitting power.
- c. That the present concept of Army employment in war is primarily that of a defensive screen for the Air Force.
- d. That the necessity for Army Field Forces closing with the enemy in such a way as to compel a maximum deployment of his forces under conditions of ultimate disadvantage no longer exists.
- e. That the Army will not be employed in such a way as to win allies or encourage resistance to the enemy by other people.⁴¹

The authors thought the adoption of these views was partly the cause of the field forces' weak political position, and that it was dangerous to allow such concepts to become fixed in the public mind. Should "the present optimistic evaluation of the decisive effect of air bombardment prove to be unwarranted" the nation would need an effective ground force.⁴²

Other sources reveal the fears that existed among Army officers in 1948. Lieutenant General Paul Caraway served at the National War College during much of this period. He recalls a feeling among many of his associates that: one, service leaders such as Eisenhower were threatening the very existence of the Army by their wholehearted acceptance of the strategic air concept; two, the Army was hurting itself by failing to adopt an attractive counter-doctrine emphasizing the importance of ground troops. Among these

officers there was grave concern that the nation's defense strategy would relegate the Army to a civil defense role. They exerted their influence to discourage this.⁴³

Efforts to Reestablish Importance of the Ground Role--1949

This concern about public appreciation of the Army's role helped effect a change in the attitude of service leaders. In a widely read speech delivered February 4, 1949, General Bradley attacked "enthusiasts who ascribe to air power limitless capabilities in winning an instant decision. Air power, like every other weapon has gaping limitations for war, as we shall know it for many years to come."⁴⁴ Much of the speech concerned the Army's role if war broke out. Bradley presented a strategic concept much like that of the previous year. Primary emphasis should be placed on a strategic air capability. The Army's initial offensive role consisted of seizing bases for SAC and denying areas from which the enemy might bomb us. However, Bradley stressed an additional responsibility:

The United States being prepared, in the third round of a war, to strike at the enemy's forces, wrest from him his bases, and destroy his armies in large-scale ground assaults. Whether they be airborne or seaborne, these piercing attacks of mobile mechanized troops provide the only weapon that can find its way to the roots of enemy resistance and there crust it or subdue it.⁴⁵

Should we neglect our Army, we might be forced to wage an air war of attrition. In an atomic age this could be disastrous; in Bradley's famous allusion the gingham dog and calico cat would eat

each other. The Chief of Staff included in his speech a concept dear to the hearts of infantrymen and conspicuously absent from earlier statements: "Ultimately a war between nations is reduced to one man defending his land while another tries to invade it."⁴⁶ In subsequent speeches and Congressional testimony Bradley stressed the need for a mobile striking force and an effective mobilization base. Our national strategy should include the effort to challenge the Russian Army if it should advance into western Europe. Russian control of all continental Europe would magnify our military problems.⁴⁷

Bradley's statements and those of other department spokesmen reflected a fairly consistent Army position throughout 1949. War was possible but not likely. If it came, it would almost certainly pit the United States against Russia. Strategic bombing should be our initial and primary response, but the American public was putting too much faith in SAC's capabilities. Secretary Gordon Gray referred to this attitude as a form of Maginot Line thinking. Army roles were several. Home defense would involve protection of atomic installations and cities from sabotage and airborne assaults. Army troops within the United States would also be responsible for air defense and immediate mobilization efforts. Twelve mobile divisions would provide a minimum home force to carry out these responsibilities. A second high priority task was the control of strategic areas bordering the Arctic region. As many as six to nine divisions might be required. Establishing airbases on the European continent

constituted a third mission. A cardinal tenet of Army doctrine was that "if strategic bombing is to have appreciable effect it must be sustained and continuous."⁴⁸ In the last stage of the war, the Army would enjoy the predominant role. As General McLain stated: "Against a determined power occupying a large land mass, large ground forces are the only element capable of delivering the final decisive blow."⁴⁹ Undertaking such a task would place a heavy responsibility on Reserve forces.⁵⁰

From a service standpoint 1949 statements were not optimistic. McLain's article was directed to young Army officers who might not appreciate the importance of the Army's role in a future war, who might feel the more spectacular roles of other services had minimized their own. Secretary Gray's radio address, mentioned above, was prompted by concern that the public did not think the Army as important as it once was. General Collins acknowledged a disparity between Army plans and capabilities, citing the occupation responsibility as the chief cause. The slow progress of National Guard and Reserve units cast doubt on the wisdom of building plans around their early employment.

While the Army spokesmen of 1949 understandably emphasized the role of ground forces, they accepted the national strategy which placed primary reliance on an atomic retaliatory capability. Their concern was to ensure an effective complementary force to SAC. In the debate over strategy during the B-36 controversy, General Collins called for balanced defenses. He did not join with Navy officers in

criticizing our reliance on an atomic blitz.⁵¹ General McLain was an exception to this general outlook. He criticized our over dependence on atomic weapons. Within a few years a Russian atomic capability would neutralize its effectiveness. Future warfare held out the prospect of extensive guerrilla operations where atomic bombs would have no use.⁵² In various service magazines other Army officers expressed sharp criticism of America's strategic air concept.

The ablest critic was a Fort Leavenworth instructor, Lieutenant Colonel William R. Kintner. In March, 1948, as support for a strategic bombing strategy reached its highest point, Kintner warned of the consequences of ignoring the Army's needs. Essentially his article was a plea for a flexible national strategy. Kintner noted "that all military means can under certain circumstances produce conditions which may indirectly eliminate the enemy's will to resist. The selection of a proper means depends on the overall circumstances."⁵³ Examining present developments in technology, he thought that ICBM's were several decades away because of accuracy problems. Short range air defense missiles, however, would soon be operational. Along with radar and jet fighters, they would severely limit the effectiveness of SAC's present bombers. Aside from this technological consideration, Kintner doubted if air power could defeat a continental nation such as Russia. People failed to weigh the difficulty of securing accurate intelligence essential for effective bombing (assuming a limited number of A-bombs as Kintner did). Finally, Kintner believed the American public would

refuse to accept a strategic air plan for very long when they realized its logical conclusion--vast destruction for both opponents. Kintner held high respect for the Navy's continued function of serving as a mobile fortified base. Sea power would remain for many years the most practical means of extending our power to areas from which air-ground operations could be initiated. Kintner's greatest concern was that the American public would succumb to the technological attraction of a strategy based on air and sea power. Despite appearances, the ground soldier was not "archaic."⁵⁴

The following year Kintner attacked the central theme of the strategic bombing theory, the Douhet principle that command of the air is a necessary and sufficient condition for victory. After listing a number of air power limitations, Kintner stated: "If the Douhet principle is followed by choice or necessity (i.e., the use of mass-destruction weapons), the purely military success of strategic airpower may harm, rather than support, the ultimate goals of national policy."⁵⁵ Acknowledging air power's dominant role in modern warfare, he cited two important deficiencies: its drain on national resources, and the possible damage of its misapplication.⁵⁶

Another critic, Major General Charles L. Bolte, argued that new weapons had changed the nature of war very little. He criticized the belief that we could defeat Russia "by bombs and blockade alone."⁵⁷ The Army's primary role should be to close with the enemy and occupy its vital areas. The safeguarding and advancing of bases was a secondary responsibility. Lieutenant Colonel

Carl T. Schmidt attacked the prevailing assumption that a future war had to be total. "The object is not to destroy the enemy. It is to remove his will to fight. It may or may not be necessary to destroy his armed forces, his industrial system--the less incidental damage the better."⁵⁸ Unrestricted aims and methods of war compromise the attainment of a satisfactory peace. World War II was an obvious example. Total war produced immense physical and spiritual damage. While an enemy might force us to abandon restraint, our defense posture should not be predicated on a policy of total response.⁵⁹

The Army in the Air

During these years most Army officers expressed a greater concern about weapons and aspects of land warfare than about America's strategic concept. Service magazines and public speeches provide an excellent source of official and individual opinion. Among the topics discussed, the most popular aspect of future warfare concerned the potential of airborne operations. Major General A. C. McAuliffe believed: "In the new atomic age, the principal avenue of attack against any nation will be in the air, not only for bombs and guided missiles but also for combat troops and for weapons and supplies to support them."⁶⁰ McAuliffe cited the great technical strides made in air transport during World War II. He claimed that airborne operations in the late war had been "invariably successful." McAuliffe thought it possible, within a few years, for an enemy to strike with a combination of atom bombs and airborne

soldiers. Following the destruction of an atomic attack, an airborne invasion "would not find it too difficult to seize and hold important air and naval bases, influential leaders, and key industrial installations. . ." Thinking along these lines, McAuliffe listed defense against an airborne invasion (probably following an atomic attack) as the "principal mission of the ground forces."⁶¹

Major General James M. Gavin and Lieutenant Colonel Fred L. Walker each wrote a series of articles depicting the future of the Army in an airborne capability.⁶² The next war would probably witness the use of atomic weapons, but it would not be a pushbutton affair.⁶³ Larger and faster moving armies, more extensive battlefields, more rapid victories and defeats would mark future warfare. Advances in air transport would allow the dispersion and mobility essential to the employment of atomic weapons on the battlefield. Walker visualized direct attacks, airborne armies bypassing overseas bases and striking directly at the enemy's homeland. This concept implied a need for some type of universal training program. All able-bodied men would be organized into home defense units to guard against such a threat.

Given the state of technology in the late 1940's, Gavin's and Walker's articles bore an air of unreality. Lieutenant Colonel William A. Kuhn, a Fort Leavenworth instructor, attempted to define the immediate potential of an airborne army. At least four different operations seemed feasible: one, involving a relatively early juncture with other land forces in an effort to further a ground operation;

two, an operation to neutralize enemy installations which did not present suitable targets for air bombing; three, a mission of establishing an airhead in enemy territory; four, seizure of a base for furtherance of a common mission. Kuhn noted slow progress was being made on technical problems, but was encouraged by the results of the Berlin Airlift. The Army had two prime responsibilities in preparing for large-scale airborne operations. First, it had to increase efforts to insure that all combat and service support units were air transportable. The second need involved the development of doctrine for the logistical support of forces in the airhead.⁶⁴

Enthusiasm for the airborne was not limited to magazine articles. General Eisenhower in his Final Report stressed the need for making ground forces air transportable. His description of future warfare envisioned a role for airborne forces much larger than that of World War II.⁶⁵ About this same time, General Gavin was initiating a forty-three hour block of instruction on airborne operations at the Command and General Staff School. Talking on "Airborne Operations in the Future" Gavin predicted division fronts covering one hundred and seventy-five miles. Tactical atomic weapons would make such broad deployments essential while helicopters would make them feasible.⁶⁶ Evaluating the instruction at its completion, Colonel E. R. Heiberg and Lieutenant Colonel Carl W. Kohls recommended allotting additional time to the subject. Heiberg stated: "The greater complexity of supply by air and the probability of greater use of airborne forces in the future, are arguments in

favor. . ."67 Two years later, in early 1950, the Army announced an enlarged program for training airborne troops. Chief of Staff J. Lawton Collins, said that the Army expected airborne forces to play a major role in any future war.⁶⁸ Two of the Army's most promising general officers, Matthew Ridgway and Maxwell Taylor, were staunch proponents of airborne operations.

Airborne enthusiasts acknowledged the need to solve serious technological problems before airborne troops could perform many of the missions envisioned for them. Ridgway called for greater firepower over the drop zone. More effective tactical air support appeared to offer the best solution. Airborne troops also needed anti-aircraft weapons, more artillery, and some armor on the ground. Present capabilities were limited to the 105mm howitzer. Ridgway thought the answer here would most likely be an aircraft that could carry and land such equipment on unimproved airfields. Until the U. S. developed a capability of landing heavy equipment by air, American airborne forces could not hope to cope with a well-armed enemy.⁶⁹ In his statement giving airborne training first priority, Collins admitted that airborne operations had advanced little since World War II.⁷⁰ Despite the problems of airlift, proponents thought airborne operations would be a major factor in future warfare.

A few voices rose in opposition. Colonel Jasper N. Bell discounted the use of large scale airborne forces on logistical grounds. He referred to a corps size airborne operation as a "logistical nightmare." Supplies necessary to enlarge an airhead would be

consumed by service personnel needed to unload and distribute the goods. Bell summed up such a situation. "It would appear that an impasse has been reached: exploitation is impossible unless the airhead can be expanded and expansion is impossible without exploitation."⁷¹ Bell thought any other means of attacking a large objective would expend less effort. British Air Chief Marshal John C. Slessor criticized the use of large airborne units on other grounds. First, any large airborne operation required "virtually complete air superiority" for a week or longer. The West could not expect to achieve such superiority in most areas against their likely enemy. Secondly, the development of airborne forces was an expensive proposition. Slessor cited the Allies' World War II experience where the cost of airborne forces had surpassed the amount spent in developing the atom bomb. Maintenance of a large airborne army would be almost prohibitive from an economic standpoint.⁷² Apparently many American officers concurred in this assessment. Generals Devers, Caraway, Cook, and Colonel Pappas admit having discounted the airborne becoming the standard unit for the American Army on grounds of aircraft limitations, the expense, and the requirement of air superiority.⁷³ For these same reasons they contend that few Army leaders really feared an airborne invasion by the Russians. We had no such capability, and the Russians were unlikely to develop one for many years.

Although airborne operations received more attention in Army magazines, developments in a related field caused greater concern within the service. In the struggle over unification, many

Army officers had opposed relinquishing control of tactical air. The Air Force's initial neglect in this area stimulated Army efforts to reconstitute its own tactical air unit.⁷⁴ While this bore little fruit in the 1940's, the Army's dissatisfaction was generally recognized. In his First Annual Report Secretary Forrestal criticized the Air Force for failing to meet tactical air needs. The Army found fault with its tactical air support in three areas. The first involved the application of the Air Force's doctrine of cooperation between coequal forces. There was a widespread feeling that control of tactical air elements should reside with the ground forces commander. A second area of criticism concerned pilot training for close air support. The pilots' task was a difficult one, and the Air Force was not giving it emphasis. The third problem was poor coordination between the services in establishing doctrine. Army officers cited the effectiveness of Marine Aviation to demonstrate the advantages of closer air-ground relations. The issue was tied in with the larger effort of the Army to reestablish its role in 1949. In July of that year, General Bradley and General Devers, Commander of Field Forces, reached an understanding with Air Force leaders which reduced service grievances. In the October B-36 hearings General Collins expressed satisfaction with the Army's tactical air support.⁷⁵

The Army and the A-bomb--Tactical Employment
and a Civil Defense

While Army leaders acknowledged the tremendous impact of atomic weapons on future warfare, the initial reaction was that such

weapons would have little tactical value.⁷⁶ Major General A. C. McAuliffe, Army representative at the Bikini tests, ruled out the atom bomb's use as a tactical weapon on two grounds. The first concerned the difficulty of controlling the weapon's blast, heat, and radioactive effects. Friendly ground troops would face significant hazards should they be deployed anywhere near the bomb's target. Secondly, the bomb's great expense would limit its usage to the most profitable targets. Recalling his World War II experience in Europe, McAuliffe considered Normandy the only situation where atomic weapons could have been employed effectively.⁷⁷ Command and General Staff College studies through 1947 reflect a similar attitude. Division and Corps operations were predicated on World War II conditions with little concern for the possible use of atomic weapons. The instruction included a one hour presentation (Top Secret) on the "Principles of Nuclear Physics and the A-Bomb."⁷⁸

Understandably, Major General Leslie R. Groves was among the first to express disagreement. He stated publicly in 1947 that large ground forces would likely disappear. Groves anticipated the use of widely dispersed small forces (combat team size), air transported and air supplied.⁷⁹ Airborne enthusiasts adopted this position as an additional argument in favor of paratroops. In 1948 instructors at Fort Leavenworth began an intensive study of the tactical employment of atomic weapons. After carefully examining the principal battles of the European theater, they decided that in nearly every case the employment of one or several A-bombs was

feasible. Their studies included the Battle of the Bulge, in which McAuliffe had played a central role. The C&GS College panel concluded that tactical atomic weapons would aid the ground forces immeasurably.⁸⁰ The school curricula soon reflected this change in view. Class hours on atomic weapons were increased, and unit problems assumed the capability of employing atomic weapons.⁸¹ By the fall of 1950 military magazines were publishing articles such as "The Atomic Battlefield" and "The Tactical Use of the Atomic Bomb."⁸² Most service leaders saw in tactical atomic weapons a means to restore the Army's place in the American defense structure. The tremendous firepower potential neutralized the enemy's advantage in numbers.

How the Army would deal with the Bomb's threat to American industrial areas was another matter. In the initial shock of Hiroshima some officers envisioned home defense as a primary role of the future Army. Asked why we needed an army in the atomic age, General Devers responded with a question: "If a bomb were dropped and killed 250,000 people who would clean up the place?"⁸³ Lieutenant General Charles Hall, Director of Organization and Training, replied: "We must have an organization which can take over any section of the country in case of fire or disaster."⁸⁴ National Guard officials welcomed the task of home defense. Major General Kenneth Cramer, Chief of the National Guard Bureau, thought the Guard offered the most practical and realistic defense in the event of war. Its characteristics of decentralized control and widely dispersed units

were essential elements in defending against atomic-airborne attack.⁸⁵ Official service policy focused on one aspect of home defense, counter-sabotage. Throughout the period Army officers expressed much concern about the difficulty of combating fifth column activities. Typical was this statement from the War Department's 1947 legislative request:

A major concern in both defensive and offensive planning must be adequate provision for combating fifth-column activity. Sabotage, subversion, strikes, and civil unrest can disrupt mobilization, home defense measures, and ultimately the overall war effort.⁸⁶

The authors assumed that the size of the task would require the employment of Army troops.

While officers frequently authored articles advocating dispersal of our important installations or placing them underground, Army leaders said little about the need to make the nation less vulnerable at home.⁸⁷ Department policy throughout this period advocated civilian direction of the civil defense program. Where Army assistance was required, the chief responsibility would fall on the National Guard and the Organized Reserve. Despite official policy, some Army officers feared that certain service leaders wanted to assume primary responsibility for civil defense. To thwart such a development, these officers reached a general understanding that no one would make a public statement regarding civil defense. This action was taken lest anyone misconstrue a remark to mean the Army considered civil defense as one of its roles.⁸⁸

Public criticism, when it appeared, censured Army leaders for not providing direction in the area of civil defense. Horatio

Bond, Chief Engineer of the National Fire Protection Association, accused the military establishment of failing to perform its one function in civil defense, providing an estimate of the situation. This involved a determination as to possible types of attack, effectiveness of enemy weapons, and numbers of attacks among other factors. Bond acknowledged that civil defense should be nonmilitary, allowing the Armed Forces to prosecute the war. But until the military told state and local units what to expect, they could do little effective planning.⁸⁹ In a survey conducted by Stefan Possony, forty-one former officers cited civil defense as the single most important factor in the United States' planning for a defensive war. This concern was in marked contrast to America's lack of a home defense organization, the absence of plans for the protection of industry.⁹⁰

Arctic and Amphibious Operations

In two operational areas Army interest declined over the five year period. During the 1946-1947 training year emphasis was placed on experimentation and specialized combined training in amphibious operations and mountain/Arctic training.⁹¹ The course work at Fort Leavenworth included several detailed amphibious problems. By 1950 somewhat less attention was being devoted to such exercises. Perhaps, the cause lay in the Army's inability to reduce the size of the Marine Corps to the extent desired. More likely the change in attitude reflected an opinion expressed publicly by Bradley; the advent of atomic weapons precluded future large scale amphibious

operations. The Army's interest in cold weather capabilities stemmed from the belief of many service officers that the next war would be waged over the Arctic. In a series of exercises the Army investigated the effect of Arctic conditions on material and men. The field tests revealed a need for vehicles that could pull light artillery and supplies across tundra and snow. The adverse climatic conditions placed a premium on careful and complete planning and training. Strict troop discipline was essential. Army leaders concluded that the difficulties of Arctic operations would prohibit any large scale ground operations for years to come.⁹²

Guerrilla Warfare--The Army's Biggest Oversight

Probably the most serious shortcoming in the Army's post-war examination took place in the area of guerrilla and counter-guerrilla warfare. Fort Leavenworth gave the subject little attention. In the 1947-1948 session none of the tactical problems prepared by the School of Combined Arms involved a guerrilla situation. The School of Intelligence devoted one hour to "Clandestine Activities." As of the Korean War, the Army did not have an official manual on guerrilla warfare. FM 100-5 (Operations) devoted eight paragraphs to the subject.⁹³ The valuable experience in Greece received little attention in military periodicals.⁹⁴ Spokesmen such as Bradley expressed occasional concern about this type of warfare, but the Army made no effort to make it a meaningful role. Major General Charles H. Gerhardt attributes this failure to our experience

in World Wars I and II. Neither conflict had impressed American officers with the importance of guerrilla warfare. Brigadier General Robert Cook recalls that few of his associates anticipated employment of American troops in an area where large elements of the population opposed our presence.⁹⁵

The few statements that appeared in periodicals concerning guerrilla warfare were highly critical of the Army's attitude toward the subject. One anonymous author characterized the Army as "marching with Braddock" in its failure to prepare for psychological and partisan warfare. He stressed the fact that technological advances made secret warfare more potent. Automatic weapons and high explosives replaced the weight of numbers in combat. Radio communication provided the means of control that had previously handicapped guerrillas. Air transport met the needs of supply. The author listed three reasons for the employment of "undercover methods": secret forces were needed to offset our numerical inferiority of conventional troops; such forces could accomplish certain essential missions which conventional troops were incapable of performing; they would prove instrumental in the defeat of the enemy's secret forces. In his preview of future warfare Lieutenant Colonel Walker reached much the same conclusion. Arguing that twentieth century conditions lent themselves ideally to "gangster" type operations, Walker advocated the training and equipping of a portion of the Regular Army for guerrilla warfare.⁹⁶ Both men remained bound to prevailing service thought in that they viewed future guerrilla warfare as part of a larger world conflict.

While devoting most of his attention to an historical summary of guerrilla warfare, Marine Colonel Sam B. Griffith made some pertinent comments in 1950 about the future of these operations. He criticized the popular belief that guerrillas could not exist in a western industrial country. Conditions in such societies provided a fertile field for their activities. Griffith also attacked the concept that air power could easily defeat guerrillas. He thought airplanes would prove of little value in directly combating partisans. While guerrilla operations would be important in the next major war, they were typical of any ideological conflict. The solution for guerrilla warfare was not solely military; but to the extent that force was required, mobile ground columns were needed. "Partisans must be beaten at their own game."⁹⁷ Colonel Griffith believed the American military did not recognize the dimensions of the problem, let alone have plans to cope with it.

Other articles drew on World War II experiences to demonstrate the relevancy of guerrilla warfare. In the summer of 1949 the Infantry Journal ran two articles on Russian guerrilla operations as described in captured documents and German Army intelligence reports. Lieutenant Colonel W. R. Peers and Major Robert B. Rigg related their experiences in Burma and China, the latter as a prisoner of the Red Army. The articles concluded that in every situation where guerrillas were well organized, supplied, and directed they achieved excellent results.⁹⁸

Atomic Technician or Trooper?

During a Congressional hearing on unification, General Eisenhower was asked about the Army's role. He answered: "I tried to correlate that in my mind with what the Army had to do during the war. We had to do everything--amphibious operations, boat crews, airborne divisions, mountain divisions, civil government, etc."⁹⁹ This response said much about the difficulty Army leaders faced in a postwar examination of service roles and missions. The uncertainty of technological change increased the problem. The field of atomic weapons provides one example. In 1945 many people thought the Bomb signaled the end of ground forces. Five years later the direction of atomic development seemed to point toward an increased role for ground troops. Army thinking in this period cannot be neatly summarized, but two articles point up the basic currents of thought. One, by Major General J. L. Homer, minimized the role of ground forces and a mobilization capability. With guided missiles determining the outcome of a future war, the Army's principal function was to provide security troops. While few officers espoused such a pessimistic view, Homer's statement was the total war-strategic bombing doctrine carried to its logical (or technological) conclusion.¹⁰⁰ The second statement was in a series of articles by Colonel S. L. A. Marshall on battle command in a future war. Like Homer, Marshall assumed that future war would be total. However, he concluded that modern technology increased the need for large infantry forces. Even with the destructive potential of the A-bomb, Marshall

believed "the contest between land armies will continue to be the concluding act in war."¹⁰¹ The two articles reflect the consensus that the Army should prepare for total war with Russia. They also indicate the disagreement and general uncertainty as to how large and what kind of role the Army would play. Faced with similar problems, Navy leaders found it less difficult to achieve agreement on a strategic concept.

NOTES

¹John M. Swomley, Jr., The Military Establishment (Boston, 1964), pp. 67-68 quoting a statement made by Gen. Milton A. Reckord before the House Armed Services Committee, April 22, 1948.

²Walter Millis (ed.), American Military Thought (New York, 1966), pp. 435, 463.

³Gen. George C. Marshall, General Marshall's Report: The Winning of the War in Europe and the Pacific (New York, 1945), pp. 117-23. In addition to Marshall's Report, other sources revealing the rationale for UMT are A Program for National Security (Compton Report) and Congressional Hearings--House (1945) and Senate (1948). These same hearings include adverse testimony. Swomley's The Military Establishment relates the efforts of the opposing forces. Army leaders placed principal emphasis on the benefits accruing to our national defense. Frequently, however, they also expressed the belief that UMT would improve educational and moral standards. The Fort Knox model program was initiated in large part to prove the latter contention.

⁴Ibid., p. 120.

⁵Russell Weigley, Towards an American Army (New York, 1962), pp. 243-54.

⁶Supra, p. 18.

⁷House, Subcommittee on Appropriations, Hearings, First Surplus Appropriation Rescission Bill, 1946, 79th Cong., 1st Sess., 1945, p. 527; hereafter referred to as First Rescission Bill.

⁸Unification Hearings, 1945, pp. 49-62; UMT Hearings, 1945, pp. 59-89, 561-63, 613-24.

⁹UMT Hearings, 1945, p. 64.

¹⁰U. S., War Department, Circular 119, 24 April, 1946 (Washington, 1946), p. 1.

¹¹Ibid., p. 1.

¹²ibid., p. 3.

¹³Donald B. Robinson, "The Army's Plans for the Next War," The American Mercury, LXIV (February, 1947), 140-46.

¹⁴See The Forrestal Diaries, pp. 94-96 for examples of the military's distrust of Russia.

¹⁵Col. Lawrence J. Legere, Jr., "Unification of the Armed Forces" (Ph.D. dissertation, Dept. of Pol. Sc., Harvard University, 1950), provides a good review of the Special Planning Division's operations; comment on Fort Leavenworth faculty's work comes from an interview with Gen. Paul D. Adams, November 7, 1969. The Army War College was closed down from 1941 until 1950.

¹⁶Maj. Gen. Henry S. Aurand, "Army's Research Program," Bulletin of Atomic Scientists, I (November, 1946), 10.

¹⁷"Army Planning for Future," Army-Navy Journal, May 17, 1947, pp. 941, 944; ibid., June 14, 1947, p. 1058.

In the October and December, 1950 issues of U. S. Army Combat Forces Journal Lloyd H. Norman, Chicago Tribune reporter, described the activities of the Advanced Study Group and said unclassified portions of their work would soon appear, entitled "A Program for National Security Progress." In an effort to locate the document, Miss Joyce Eakin, Librarian at the Military History Research Collection, contacted counterparts at OCMH and JCS--the Group was placed under JCS in December, 1949. They knew of no such document and expressed doubt that any study had emerged from the Group's work.

¹⁸UMT Hearings, 1945; Army Information Digest, II (June, 1947), passim; Maj. Gen. Henry S. Aurand, "Industry and the New Weapons," Army Ordnance, XXXI (January-February, 1947), 330-31; Gen. Brehon Somervell, USA Ret., "Industrial Preparedness," Military Engineer, XXXIX (September, 1947), 365-67.

¹⁹Brodie, The Absolute Weapon, p. 29. Baldwin, Price of Power, pp. 266-68 provides the best contemporary criticism of UMT. Baldwin contended that we could not afford both an effective ready force and a viable UMT program. Furthermore, the latter would add little or no strength to a nation at the start of a future atomic war. Baldwin believed a future war would be won or lost in the first sixty days.

²⁰The extremely poor relations which existed between the Regular Army and the Reserve Officers' Association in 1947 make a story in itself. While several considerations influenced the War Department (the struggle for UMT, the large pool of World War II veterans), there can be no denying the neglect of the Reserve program. In May, 1947, the National Guard enrollment constituted twelve percent of its authorized strength. By December this had increased to about thirty-three percent. Provision for and training of the Organized Reserve Corps was even less satisfactory. I think the War Department's lack of concern for the Reserve forces was in part a reflection of the changing view about the importance of a

reserve force. Swomley, The Military Establishment, pp. 61-70 and Martha Derthick's "Militia Lobby in the Missile Age: The Politics of the National Guard" in Changing Patterns of Military Politics, Samuel Huntington (ed.), provide background. See also Compton Report, pp. 417-45 and Army-Navy Journal, October 4, 1947, p. 123; December 20, 1947, p. 406.

²¹Brodie and Galloway, The Atomic Bomb and the Armed Services, pp. 62-86.

²²According to one retired officer, the concept of the European Recovery Program emerged from discussions in the National War College. Interview with Gen. Paul D. Adams.

²³Brodie and Galloway, The Atomic Bomb and the Armed Services, pp. 72-74, 84-85.

²⁴Compton Report, p. 9. About fifty of the nearly two hundred witnesses appearing before the committee were affiliated with the War Department. A majority of the remainder represented lay opposition.

²⁵Ibid., p. 13.

²⁶Ibid., pp. 7-19.

²⁷House, Subcommittee on Appropriations, Hearings on Military Establishment Appropriations Bill for 1948, 80th Cong., 1st Sess., 1947, pp. 1-14; hereafter referred to as 1948 Appropriations Bill Hearings.

²⁸Ibid., pp. 80, 1241-43.

²⁹Charles J. V. Murphy, "The State of the Armed Forces," Reader's Digest, IL (December, 1946), 43-46.

³⁰Gen. Dwight D. Eisenhower, Final Report of the Chief of Staff United States Army to the Secretary of the Army (Washington, 1948), p. 9.

³¹Ibid., p. 13. Note that Eisenhower could continue to support UMT by emphasizing its "civil defense" benefits; supra, p. 30.

³²Ibid., p. 17.

³³House, Committee on Armed Services, Hearings, Selective Service, 80th Cong., 2nd Sess., 1948, p. 6209; hereafter referred to as Selective Service Hearings.

³⁴Ibid., pp. 6210, 6215.

³⁵Senate, Committee on Armed Services, Hearings, Universal Military Training, 80th Cong., 2nd Sess., 1948, p. 352; hereafter referred to as UMT Hearings, 1948.

³⁶Ibid., pp. 339-54; Selective Service Hearings, pp. 6093-97, 6209-45; House, Subcommittee on Appropriations, Hearings on Military Establishment Appropriations Bill for 1949, 80th Cong., 2nd Sess., 1948, pp. 1-16; hereafter referred to as 1949 Appropriations Bill Hearings.

³⁷During the fiscal year 1948, the Army averaged about 560,000 men. Of these, 500,000 were tied up in occupation or support activities. Bradley was seeking an increase to a strength of 822,000. Gen. Marshall surely had the Army in mind in early 1948 when he referred to our defense structure as "a hollow shell."

³⁸Interview with Gen. Adams. He recalled that the Air Force received the bulk of the appropriations during these years. Actually the defense budget was divided rather evenly in this five year bloc. The Air Force did not begin to receive a disproportionate share until the Eisenhower years, e.g., fiscal 1949--Air Force, 4.7 billion; Navy, 4.9 billion; Army, 4.2 billion--Schilling, Hammond and Snyder, Strategy, Politics, and Defense Budgets (New York, 1962), p. 46.

³⁹House, Subcommittee on Appropriations, Hearings on Military Establishment Appropriation Bill for 1950; 81st Cong., 1st Sess., 1949, pp. 5-6; hereafter referred to as 1950 Appropriations Bill Hearings.

⁴⁰Interview with Col. George S. Pappas, August 11, 1969. Interview with Brig. Gen. Robert L. Cook, October 10, 1969. See Russell Weigley, History of the United States Army (New York, 1967), pp. 501-04 for deficiencies in postwar Army training and equipment.

⁴¹Army, Command and General Staff College, 1949-50 Regular Course, Subj. 5030, "The Army Information Function," p. 6. The Military History Research Collection, Carlisle Barracks, Pennsylvania, has a set of C&GS College lesson plans for the 1945-1950 period.

⁴²Ibid., pp. 5-7.

⁴³Interview with Lt. Gen. Paul R. Caraway, August 15, 1969.

⁴⁴Gen. Omar Bradley, "One Round Won't Win the Fight," Army Information Digest, IV (April, 1949), 32.

⁴⁵Ibid., 33.

⁴⁶Ibid., 34.

⁴⁷1950 Appropriations Bill Hearings, p. 569; Gen. Omar Bradley, "Address Given at the Command and General Staff College," Army Information Digest, IV (August, 1949), 59-61.

⁴⁸Gordon Gray, "The Army's Role in Maintaining the Nation's Defense," Armored-Cavalry Journal, LIII (September-October, 1949), 8-9.

⁴⁹Lt. Gen. Raymond S. McLain, "The Army's Role: A 1949 Perspective," Military Review, XXVIII (January, 1949), p. 9.

⁵⁰McLain, Military Review, XXVIII (January, 1949), 3-17; Gray, Armored-Cavalry Journal, LIII (September-October, 1949), 8-9; Lt. Gen. Manton Eddy, "Defensive and Offensive Phases of Future War," Army Information Digest, IV (September, 1949), 63-64; Gen. J. Lawton Collins, "The Nature of Modern War," Military Review, XXVIII (November, 1948), 3-7.

⁵¹Unification and Strategy Hearings, pp. 543-52.

⁵²McLain, Military Review, XXVIII (January, 1949), 10-11.

⁵³Lt. Col. William R. Kintner, "Team of Decision," Infantry Journal, LXII (March, 1948), 16; "Spending for Defense," Ordnance, XXXIII (July-August, 1948), 30-32.

⁵⁴Kintner, Infantry Journal, LXII (March, 1948), 15-20.

⁵⁵Lt. Col. William R. Kintner, "A Survey of Air Power," Military Review, XXIX (April, 1949), 35.

⁵⁶Ibid., 29-35.

⁵⁷Maj. Gen. Charles L. Bolte, "The Role of Land Forces in Future Warfare," United States Naval Institute Proceedings, LXXV (January, 1949), 21-31.

⁵⁸Lt. Col. Carl T. Schmidt, "The Limitation of Total War," Military Review, XXIX (September, 1949), 14-15.

⁵⁹Ibid., 13-16.

⁶⁰Maj. Gen. A. C. McAuliffe, "Atom Bomb--Ground Forces," Air Affairs, I (March, 1947), 356.

⁶¹Ibid., 356-57.

⁶²Lt. Gen. James M. Gavin, "Airborne Armies of the Future," Infantry Journal, LIX (December, 1946), 18-26; LX (January, 1947), 21-22; Lt. Col. Fred L. Walker, "Your Next War," Infantry Journal, LX (June, 1947)-LXI (August, 1947).

⁶³Their reasons were much like those expressed in some civilian and Navy statements--the great cost of the weapons, the senselessness of destroying a nation, the fear of reprisal.

⁶⁴Lt. Col. William A. Kuhn, "How Far Along Are We in Developing an Airborne Army?" Military Review, XXX (April, 1950), 41-50.

⁶⁵Eisenhower, Final Report, p. 15.

⁶⁶Army, Command and General Staff College, 1947-48 Regular Course, Lesson 3400, "Airborne Operations in the Future."

⁶⁷Army, Command and General Staff College, 1947-48 Regular Course, Lesson 3403, "Airborne Operations."

⁶⁸Military Review, XXX (April, 1950), 64.

⁶⁹Army-Navy Journal, November 26, 1949, p. 332.

⁷⁰Infantry Journal, LXVI (January, 1950), 30.

⁷¹Col. Jasper N. Bell, Air University Quarterly Review quoted in "News and Comment," Infantry Journal, LXIV (May, 1949), 41.

⁷²Military Review, XXVIII (February, 1949), 73-77.

⁷³Interview with Gen. Jacob Devers, August 14, 1969, Lt. Gen. Paul Caraway, Brig. Gen. Robert Cook, Col. George Pappas.

⁷⁴Unification and Strategy Hearings, pp. 543-52; interview with Lt. Gen. Paul R. Caraway.

⁷⁵Ibid. Interview with Gen. Jacob Devers; Lt. Col. William R. Kintner, "Where Is Our Tactical Air Power?" Infantry Journal, LXV (August, 1949), 22-24.

⁷⁶Supra, p. 37.

⁷⁷McAuliffe, Air Affairs, I (March, 1947), 353-58.

⁷⁸Army, Command and General Staff College, 1947-48 Regular Course, Lessons 3501-3709 (School of Combined Arms), Lessons 2000-2901 (School of Intelligence).

⁷⁹Army-Navy Journal, August 23, 1947, pp. 1353, 1361.
Interview with Lt. Gen. Leslie R. Groves, August 15, 1969.

⁸⁰Interview with Gen. Paul D. Adams.

⁸¹Army, Command and General Staff College, 1950-51 Regular Course, Books 1-4.

⁸²Lt. Col. David B. Parker, "The Atomic Battlefield," Military Engineer, XLII (September-October, 1950), 344-48; Maj. Gen. James M. Gavin, "The Tactical Use of the Atomic Bomb," U. S. Army Combat Forces Journal, I (November, 1950), 9-11. Technological developments opening the possibility of smaller yield atomic weapons played an important role in this change of attitude.

⁸³House, Subcommittee on Appropriations, Hearings on Military Establishment Appropriations Bill for 1947, 79th Cong., 2nd Sess., 1946, pp. 572-73; hereafter referred to as 1947 Appropriations Bill Hearings.

⁸⁴1948 Appropriations Bill Hearings, pp. 22-23.

⁸⁵Maj. Gen. Kenneth F. Cramer, "The National Guard in the Post-War Military Establishment," Military Review, XXVIII (June, 1948), 8.

⁸⁶Army Information Digest, II (February, 1947), 15.

⁸⁷Brig. Gen. Robert W. Johnson, AUS Ret., "Dig, Son, Dig," Army Ordnance, XXXI (January-February, 1947), 347-49; Maj. Gen. Henry S. Aurand, "Industry and the New Weapons," Army Ordnance, XXXI (January-February, 1947), 330-31.

⁸⁸Interview with Lt. Gen. Paul R. Caraway. That support for such a role existed is evidenced by Col. William B. Bunker's article, "Guarding the Home Front," U. S. Army Combat Forces Journal, V (March, 1955), 33-38.

⁸⁹Horatio Bond, "Military and Civil Confusion about Civil Defense," Bulletin of Atomic Scientists, IV (November, 1949), 295-97.

⁹⁰Stefan T. Possony, "What's Our Number One Problem?" Infantry Journal, LXIV (February, 1949), 19-21. By 1949 the War and Defense Departments had published the Bull and Hopley Reports, respectively, both dealing with Civil Defense. Efforts to implement them were still in the future.

⁹¹1947 Appropriations Bill Hearings, pp. 562, 569.

⁹²Cpt. A. M. Kamp, Jr., "Task Force Frost," Army Ordnance, XXXI (May-June, 1947), 507-08; Lt. Col. Roy E. Moore, "Our Arctic Problem," Ordnance, XXXIV (September-October, 1949), 112-14. Interview with Gen. Jacob Devers.

⁹³Maj. Robert B. Rigg, "Get Guerrilla-Wise," U. S. Army Combat Forces Journal, I (September, 1950), 7-11.

⁹⁴Lt. Col. F. H. Loomis, "Report from Greece," Military Review, XXX (April, 1950), 3-10.

⁹⁵Interview with Maj. Gen. Charles H. Gerhardt, October 12, 1969. Interview with Brig. Gen. Robert L. Cook.

⁹⁶"We March with Braddock," Infantry Journal, LXIV (January, 1949), 48-50. Lt. Col. Walker, Infantry Journal, LXI (August, 1947), 45.

⁹⁷Col. Sam B. Griffith, "Guerrilla," Marine Corps Gazette, XXXIV (August, 1950), 44.

⁹⁸Brooks McClure, "Russia's Hidden Army," Infantry Journal, LXV (July, 1949), 6-12; LXV (August, 1949), 13-20; Lt. Col. W. R. Peers, "Guerrilla Operations in Northern Burma," Military Review, XXVIII (June, 1948), 10-16; XXVIII (July, 1948), 12-20; Maj. Robert B. Rigg, "How the Chinese Communists Wage War," Infantry Journal, LXIV (February, 1949), 4-9; "Get Guerrilla-Wise," U. S. Army Combat Forces Journal, I (September, 1950), 7-11.

⁹⁹House, Committee on Expenditures in the Executive Departments, Hearings. National Security Act of 1947, 80th Cong., 1st Sess., 1947, p. 276; hereafter referred to as National Security Act Hearings.

¹⁰⁰Maj. Gen. J. L. Homer, "Guided Missiles and Future Warfare," Military Review, XXVII (November, 1947), 13-20.

¹⁰¹Col. S. L. A. Marshall, "On Future War," Infantry Journal, LX (June, 1947), 25.

CHAPTER III

THE NAVY--BALANCED FLEET OR NAVAL STRATEGIC BOMBING

History shows that the tide of battle can change quickly and terribly, and that the wise fighter must have a full bag of tricks ready for any contingency, even though the unpredictable course of events does not require the use of them all--the very fact that the course of events is unpredictable justifies the urgent need for flexibility. . . . Vice Admiral Robert B. Carney, Unification and Strategy Hearings, October, 1949.

Trends in Navy Doctrines, 1945-1950

In contrast to the War Department, most Navy leaders shared compatible views about their postwar service roles. There were several reasons for this likeness of mind. During the war Navy leadership had integrated its air arm into service strategy. Despite inevitable disagreements about the postwar strengths of ships by type, Navy men generally accepted the priority of naval air.¹ Secondly, in the wake of the atomic explosions, the Navy was most frequently criticized as an obsolete agency by civilian and military critics. Navy leaders were forced to rationalize a strategy that justified their continued existence. A third factor promoting the adoption of a united front was the threat of the Army Air Force. Navy leaders seriously feared that the Air Force would attempt to absorb naval aviation in the process of unification. They believed

such a development would emasculate the Navy. Finally, Secretary Forrestal's leadership was an important factor in the Navy's early and frequent expression of a detailed strategic concept.²

Service leaders, during the first two postwar years, advocated a balanced Navy emphasizing air power, but including submarine and amphibious operations. This view was based on a consideration of the victorious Pacific campaigns and a conservative attitude toward technological change--a belief that A-bombs and ICBM's would not be decisive for several decades. By 1948 considerable pressure developed within Navy ranks to secure part of the strategic air role. When the cancellation of the super-carrier in April, 1949, threatened to doom naval strategic bombing, service leaders experienced a brief panic. Their subsequent attack on the B-36 was cast in the prevailing terms of a total war philosophy. Many Navy leaders supported a flexible defense and a balanced Navy throughout the five year period. The strategy was rendered less effective, however, by the Navy's focus on Russia as America's only likely enemy.

Like their Army and Air Force counterparts, Navy spokesmen assumed in 1945 that modern warfare would be total. Speaking before the Army Industrial College, Admiral Nimitz noted: "Modern war is total. No nation can wage successful war which fails to utilize its industrial capacity to the fullest extent."³ Commenting on the Japanese strategy of fighting for limited objectives, another Navy source concluded: "Experience proves that in the modern world there is no such thing as a war of limited objectives; there is only total

war which ends with the exhaustion and defeat of one of the contestants."⁴

There was also general agreement within the Navy hierarchy that in the next war the United States could not depend upon a lengthy mobilization period. Forrestal told a Senate committee that "time for preparation after attack has vanished."⁵ Vice Admiral Marc A. Mitscher, a naval aviator, thought it extremely likely that the next war would begin with a sneak attack, directed toward the industrial heart of America. No enemy "will attack slowly or on the outer rims or periphery of our defense."⁶ Our survival would depend on what the United States could accomplish in the first few days. Accordingly, it was imperative that the United States develop a powerful offensive (air) capability. Mitscher proposed to lodge this force in a two-ocean Navy "capable of immediate attack against any enemy."⁷ Admiral William Halsey, representing a more conservative wing of Navy leadership, minimized the danger to the American continent. Although the next war might be initiated by air attacks over oceans, or perhaps the Arctic, these battles would not be decisive. We would still have to put land forces on enemy territory.⁸ While Navy leaders were divided as to the relative future importance of air versus ground forces, they agreed that American response would have to be rapid.

A Flexible Response for Total War

Navy views paralleled the beliefs of Army and Air Force leaders as to the nature of future war and its opening phase.

Significant differences of opinion emerged over how the American military establishment should prepare for the challenge. Essentially, Navy doctrine argued for a flexible response. One Navy report stated:

The experiences of warfare are never conclusive. . . . The impact of technology on modern warfare is such as to render generalization and prediction doubly dangerous. . . . It is impossible ever wholly to anticipate war's requirements as the experience of the Germans and the Japanese revealed. Any exclusive adoption of a single weapon or type of weapon immediately limits freedom of action and greatly simplifies the enemy's problem of defense.

Reviewing the Pacific campaign, the authors concluded that American success was made possible by the integration of many different types of weapons and forces. Admiral King took much the same view in his Final Report. King attributed the Axis defeat to their inability to develop a flexible military establishment. As a result both the German and Japanese fleets lacked balance. In contrast: "While ours was a vast fleet, it was also a highly flexible and well balanced fleet, in which ships, planes, amphibious forces and service forces in due proportion were available for unified action whenever and wherever called upon."¹⁰

Navy opposition to unification was grounded, in part, on the fear that such action would reduce America's military flexibility. Spokesmen frequently cited the British naval air experience. Placed under the control of the Royal Air Force, carrier training languished. Consequently, British naval air was deemed generally ineffective in

World War II. In reply to Air Force claims that they could have defeated Japan by themselves, Admiral Nimitz pointed out that balanced forces were required to secure necessary close-in bases. Nimitz cautioned against making any nasty assumptions about the character of our next enemy. "Who can predict whether or not the national economy and strength of a future enemy is one which can best be attacked by air power, sea power, or land power or a combination?"¹¹ Secretary Forrestal was the most persistent Navy advocate of a balanced force. Citing the contrasting character of the Pacific and European theaters, he argued for the fullest possible development of each of our military services. "We must be adequately prepared to fight a war of whatever character the future may bring."¹²

Navy Missions in Future Warfare

Within the context of this balanced defense establishment, what roles would the Navy play? To a certain extent, the answers revealed a continuing legacy from Alfred T. Mahan. Navy spokesmen emphasized the importance of controlling the seas. While new weapons might appear, victory lay with the dominant sea power. Even more frequently Navy leaders spoke of the need to insure American seapower's offensive capability. Vice Admiral Charles M. Cooke, Deputy Chief of Naval Operations, updated Mahan into World War II terms. He thought the Navy should be prepared to seize positions closer to our overseas enemy while denying him the same opportunity. Carrier forces would assist in air war. In addition to cutting off

enemy supply lines, the Navy would have the responsibility for projecting marine ground forces and land air forces overseas to seize enemy positions from which we were being bombarded.¹³ Admiral King expressed a similar view in emphasizing the importance of America's postwar Fleet Marine Force:

We are stressing the amphibious forces in our plan because we hope that the country now realizes that defense does not consist of waiting passively for an enemy's blows. In view of the new weapons it becomes increasingly vital that we have the means to get into an enemy's territory and force a decision there, rather than have the fighting make a shambles of our own country.¹⁴

Other features of the Navy's postwar strategic concept represented a departure from Mahan's doctrines. In questioning Navy leaders about the need for a large postwar Navy, Congressmen pointed out the lack of a potential enemy fleet. Admiral King replied that it was no longer a matter of one fleet against another. He cited Okinawa where the Navy had been fully engaged for three months against an enemy that had no fleet and predicated the Navy's future existence on the performance of like missions. Perhaps the most significant change envisioned by Navy leaders was the renewed importance of bombardment, this time by plane and missile. Mitscher, Sherman, and other flyers saw Naval Air playing an important role in future strategic air operations. Nimitz, among others, predicted the extensive deployment of missile firing vessels. In both cases, advocates assumed a future ability to strike targets as far as twelve hundred miles from shore.¹⁵

Such developments, however, were sometime in the future. The Navy's plans for the next decade emphasized the proven concepts of World War II. Greatest attention would be given to the capabilities of the fast carrier task force. In Forrestal's words these units give us "a remarkable mobility and an enormous reach."¹⁶ Carrier forces offered the most effective means, frequently the only means of securing local air superiority in distant parts of the world. They were valuable tools in the conduct of amphibious operations and antisubmarine warfare. Underwater warfare postulated a second major function. Navy spokesmen stressed the performance of American submarines in the Pacific theater. They noted late German developments increased the effectiveness of submarines. Understandably, the admirals were somewhat vague about how submarines would be employed against an enemy such as Russia. Usually, they suggested the possibilities of a missile-firing capability. Antisubmarine warfare was also a matter of naval concern, although not what it would become by 1949. A third vital naval role involved the Fleet Marine Force. Nearly all Navy leaders spoke of the likelihood of amphibious operations in a future war. Rear Admiral Ralph A. Ofstie's attitude was typical:

It appears to me that a future war must be fought just about the way it was fought in the Pacific; that is to say, we must move forward to obtain bases fairly close to the enemy in moderate range and then apply everything we have to overcome his will to fight.¹⁷

Concerned laymen questioned the wisdom of the Navy's intention to cast postwar missions in the light of its World War II

experiences. Representative Chet Holifield (Dem., Cal.) wanted to know what the Navy thought about the A-bomb:

Navy testimony has completely ignored the development of atomic energy. We have. . . had no evaluation, no scientific recognition of the fact that such a thing as Hiroshima and Nagasaki took place. I wonder why. . . Navy testimony ignores this factor which, in the minds of many people, is a tremendous revolutionary factor in warfare?¹⁸

Vice Admiral Louis Denfeld replied that atom bombs were not sufficiently developed to affect the immediate future. Forrestal believed no one could presently predict the ultimate effect of technological changes on navies. In the meantime the best defense against an A-bomb was an intercepting aircraft, preferably launched far from American shores by carrier task forces.¹⁹

Congressional doubts about the utility of a navy in the atomic age fed upon the criticisms leveled by Air Force officers. The Navy responded in kind. During the unification hearings, Nimitz stressed the Navy's contribution of advanced Pacific bases for strategic air. Vice Admiral Cooke countered Air Force claims that air power had accounted for two-thirds of Japan's shipping losses. Citing an official Japanese report, Cooke credited United States submarines with fifty-five percent of the Japanese losses, Naval Air another twenty percent. According to Nimitz this destruction of sea power was the chief cause of Japan's defeat. Appearing before the McMahon Committee, Vice Admiral W. H. P. Blandy, Deputy CNO for Special Weapons, challenged the Air Force contention that navies were obsolescent. "There seems to be an impression that the

usefulness. . .of a vessel. . .is determined by what can destroy it. . . .What renders a ship obsolete is not what can destroy it but what can replace its function."²⁰ Sometime in the distant future airplanes might be able to patrol the entire ocean space and handle all trans-ocean logistics. Until then, if a ship is performing an essential function, it made no difference what weapon could destroy it.

Testimony by Admiral Nimitz summarized the Navy's initial thinking about postwar roles in 1946. Atomic weapons and other technological advances would have a profound effect on the future employment of our military forces. While the armed forces should prepare for these changes, they still had to provide the forces necessary for a war tomorrow. The next war might be decided in a struggle for advanced air bases or consist of an atomic attack and subsequent invasion. In either case the United States would need sea power to defend crucial areas and project forces overseas. Not only were ships an unprofitable target for atom bombs, they also held great potential as a means of delivering atomic weapons against the enemy. Finally, the Navy would have to maintain certain capabilities for the foreseeable future including: amphibious forces, carrier task forces, surface fighting ships to support the first two categories, submarines, antisubmarine and reconnaissance units, and supply vessels.²¹

Navy Response to the "Atomic Blitz" Challenge--
1947 Congressional Hearings

Although service thinking continued to express a belief in balanced forces, Navy Leaders, after 1946, focused more attention on the threat engendered by atomic weapons and the popularity of the "strategic blitz" theory. Their concern was justified. Representative W. J. Bryan Dorn (Dem., S. C.) expressed the opinion of many Congressmen when he criticized Rear Admiral Ofstie's concept of the next war.²² According to Dorn: "The next war will be won or lost in the first 24 hours."²³ He attributed this view to no less an authority than General Eisenhower and "the high command." Intercontinental bombers eliminated the need for island warfare. Congress' strenuous efforts in 1948 and 1949 to increase American air power reveal the strength of these views on Capitol Hill.

The Navy's defense against a strategic blitz theory emphasized technological considerations. In the 1947 Congressional hearings, Navy spokesmen questioned the effectiveness of long-range bombing. Forrestal thought that recent developments, e.g., the jet interceptor and the VT fuze, made bombing raids of over one thousand miles very difficult. Vice Admiral G. F. Bogan and Rear Admiral Ofstie referred to strategic bombing as an obsolescent form of warfare. They cited British Field Marshal Harris and General Arnold in support of this view. Bogan noted: "There is nothing even on the drawing boards as an advanced development of existing bombers that will regain the edge for the offensive."²⁴ The popularity of

pushbutton warfare was also assailed. Ofstie placed reliable long-range missiles fifteen to twenty years away. According to Forrestal, pushbutton warfare would require new discoveries in addition to engineering improvements. Bogan criticized the popular assumption that A-bombs were now the dominant weapon in war. "Every scientist states that atomic warfare is a number of years away; the more they know the greater the time estimate."²⁵ The Bikini tests had demonstrated the relative invulnerability of vessels against an atomic attack. To secure destruction, enemy aircraft would have to deliver the Bomb within one thousand yards of a ship.²⁶

Legislative Reference Bulletin No. 55 (May, 1947)--
A Conservative View of Technological Change

Service views concerning the effect of technological changes on future roles received a more elaborate expression in the Legislative Reference Bulletin (May, 1947), The Atom Bomb and the Armed Forces.²⁷ Navy leaders predicted a minimum period of ten to fifteen years before an enemy possessed a sizeable stockpile of atomic weapons and an effective means of delivery. During this "intermediate period" the United States should rely heavily on present types of naval forces--carrier air, amphibious, general escort, and submarine. If war broke out, these forces provided the capability to project our military power overseas. They served as an effective deterrent; the Mediterranean fleet was a good example of the Navy's effectiveness in "showing the flag." In the early stages of an atomic age (both great powers having an effective atomic

capability), the needs for a Navy would continue. To prove this latter point, Navy thought focused on three aspects of the military situation: the role of advanced bases in atomic warfare, defense of fleets against atomic bomb attack, and the dispersion of important naval industries ashore.

Navy officials believed that even after enemy forces secured atomic weapons:

The importance of depriving the enemy of bases near one's own shores and preferably of acquiring and maintaining bases close to his territory remains at least as great as before. The logic supporting this proposition derives from the characteristics of atom-bomb carriers presently known or conceivable.²⁸

Civil scientists agreed that effective intercontinental missiles were not in the offing. "Revolutionary discoveries" in the fields of propulsion and control were required, "comparable in scope and in magnitude of effect to the discovery and utilization of atomic fission itself."²⁹ While a rocket with several stages could theoretically achieve a range of three thousand miles, its weight was prohibitive. The same problem, and a scarcity of material, stood in the way of atomic fueled missiles. From these and other considerations Navy officials concluded "that rockets with atomic warheads capable of thousands of miles of range are not to be expected for at least another twenty-five years."³⁰ In the interim the United States should not base its national strategy on large subsonic bombing aircraft. They could not be counted on to deliver scarce and expensive atomic bombs against a strong and well-alerted enemy.

Radar, air defense missiles with VT fuzes, and jet propulsion (presently suited only for short-range aircraft due to the tremendous fuel consumption) gave the defense a distinct advantage. The solution was to rely on short-range jet-propelled bombers or supersonic missiles. In either case we would need launching sites within five hundred miles of the target.

The present state of military technology placed a premium on advanced bases. They provided the United States with a means of early detection and interception of enemy long-range bombers. The presence of advanced bases might divert part of the enemy's initial strike. They would prove essential in the deployment of American forces overseas. In the atomic age, large scale amphibious operations such as Normandy were unlikely. Airborne invasions would probably characterize the initial stages of future landings. Airborne operations, however, were only feasible over short distances. We would need numerous forward staging areas. This capability in turn depended on our control of the sea.³¹

Navy leaders were optimistic about a fleet's ability to survive in an age of atomic weapons. The Navy's active defenses, i.e., fighter plane cover and antiaircraft fire, had reached a high level of efficiency during the latter stages of World War II. Requirements of maneuverability had established a dispersion pattern which precluded the destruction of more than one vessel by an atomic explosion. Certain characteristics of atomic weapons increased the fleet's advantage. For a long time to come, atom bombs would have

to be delivered by large slow-moving bombers, the type of aircraft that had difficulty in penetrating a fleet's defensive screen. More important, A-bombs would continue to be relatively expensive and scarce for many years. It was unlikely that an enemy would expend ten A-bombs to destroy a vessel (assuming ninety percent effective defense) when more attractive targets were available. Spokesmen did acknowledge the need to alter certain aspects of ship design and deployment in line with the results of the Bikini tests.³²

The dispersion of vital land facilities received the least attention. The Army-Navy Munitions Board's initial efforts to eliminate vulnerable bottlenecks in American industry were cited. Navy leaders recommended the retention of government-owned yards, especially those existing in the deep South. Efforts should be made to further develop a maintenance and supply capability at sea. The Navy's relative unconcern reflected a belief that the problem was a combined defense one and would be treated at a higher level.³³

The Bulletin included a critique of the Navy views by Bernard Brodie. He questioned a basic premise of the Navy's position, the assumption that atomic weapons would continue to be scarce and expensive. Assuming the contrary, Brodie concluded that long-range bombing could accept up to ninety percent losses and still prove decisive. In a rejoinder, Admiral D. C. Ramsey noted: "Many things can happen in the next fifteen years, but it seems now to be quite a risky assumption on which to base major conclusions that atomic bombs may be available in amounts up to 5000 by 1960."³⁴

From his World War II experience, Ramsey thought it questionable whether American pilots would accept a ten percent chance of returning. Admittedly they might, if they thought their efforts would prove decisive. Ramsey reiterated the Navy belief that recent technological developments gave defenses a decided edge over long-range unescorted bombers.³⁵

Service Roles within Unification
(National Security Act of 1947--Newport Conference August, 1948)

During the spring months of 1947, service leaders were also taking part in the final hearings of the unification struggle.³⁶ Although the National Security Act of 1947 proved to be a Navy victory in many respects, the accompanying Service Functions paper presented a rather limiting description of service roles. Executive Order 9877 (July 26, 1947) defined the Navy's general function as "prompt and sustained combat at sea." An additional responsibility involved "the preparation of naval forces necessary for the effective prosecution of war."³⁷ Specific functions included: the control of vital sea areas, the seizure of minor enemy shore positions, naval reconnaissance, antisubmarine warfare, amphibious operations in coordination with the Army and Air Force, and maintenance of the Marine Corps. The last function directed the Navy "to assist the Army and the Air Force in the accomplishments of their missions."³⁸

Despite the Functions paper, friction over service roles continued. The Air Force desired no assistance in the conduct of strategic air warfare. Navy leaders, however, claimed a partial

responsibility, pointing out the absence of any limit on Navy Air activities in the presidential order. Secretary of Defense Forrestal attempted to iron out the differences of opinion at the Key West Conference in March, 1948. The principal aspect of the resulting compromise involved the establishment of "primary" and "collateral" functions in areas of disagreement. Strategic air warfare and tactical air support (for the Army) became primary functions of the Air Force, collateral functions of Navy and Marine Air. Conversely, the Navy was given primary responsibility for antisubmarine warfare and aerial minelaying, while the Air Force gained collateral roles. As Forrestal noted:

In addition, each Service is charged with collateral functions, wherein its forces are to be employed to support and supplement the other Services, in carrying out their primary function, whenever such participation will result in increased effectiveness and will contribute to the accomplishment of the over-all military objectives.³⁹

The body of listed Navy functions indicated a broadening of their role. In the general statement after the phrase, "for prompt and sustained combat operations at sea" a clause was added "and for air and land operations incident thereto."⁴⁰ Primary missions now included the conduct of air operations necessary to the accomplishment of objectives in a naval campaign. Naval amphibious operations were expanded from the "seizure of minor shore positions" to the conduct of "such land operations as may be essential to the prosecution of a naval campaign."⁴¹ Furthermore, the Navy was

responsible for the training of all forces involved in joint amphibious operations. The Marine Corps enjoyed primary interest in the development of landing force tactics but was not to become a second land army. An important concession to the Navy did not appear in the document. According to Forrestal, the Joint Chiefs of Staff had agreed that the Navy would not be prohibited from attacking any targets, inland or otherwise, which were necessary for the accomplishment of its mission.⁴²

As it related to air power roles, the Key West Agreement was one in name only. The spring and summer months of 1948 were marked by frequent clashes between Navy and Air Force representatives. Air Force leaders viewed the Navy's proposed 65,000 ton flush deck carrier as an encroachment on their primary function. They refused to consider Navy capabilities in their strategic air planning. Navy leaders rightly feared Air Force statements about needless duplication of aircraft. Forrestal's second effort to reach an understanding produced another apparent victory for the Navy. The Newport Conference, August 20-22, 1948, focused on the "collateral functions" concept. Forrestal secured an agreement among the Joint Chiefs of Staff:

Each service has full and undivided responsibility and commensurate authority in the field of the primary functions assigned to it by the Key West Agreement. This does not preclude participation of other services. On the contrary, it requires the fullest consideration and use of any available forces, regardless of service, if they add to the effectiveness and economy of the operations.⁴³

Presumably, this included the use of appropriate Navy forces in strategic air warfare.⁴⁴

Navy Efforts to Enter the Strategic Bombing Field--1948

The Navy's efforts to secure at least part of the strategic air mission reflected a changing view within the department. While service leaders deprecated intercontinental bombing, a growing number saw atomic weapons determining the next war's outcome. In late 1947 Rear Admiral Daniel V. Gallery, Assistant Chief of Naval Operations for Guided Missiles, circulated a memorandum within the Navy Department expressing his views about the next war. Gallery noted that the Navy had been on the defensive since the end of World War II, countering accusations of obsolescence. The Navy had grounded its position in the traditional role of controlling the seas.

Much has been said about anti-submarine warfare, naval reconnaissance, protection of shipping, and amphibious operations. It has been assumed, at least implicitly, that the next war will not be much different from the last one. This assumption is basically wrong.⁴⁵

Strategic bombing would decide the outcome of the next war. The victor would be the side that developed both a capable delivery system and an effective defense. It was time for the Navy to initiate an aggressive publicity campaign proving that it could deliver the Atom Bomb more effectively than the Air Force.

If the Navy makes delivery of the atomic bomb its major mission and if we develop the proper

ships, planes, and tactics, the Navy can become the principal offensive branch of the National Defense System--the branch which actually develops the knockout blow.⁴⁶

Gallery buttressed his position with the prevailing Navy arguments concerning present technology. Transoceanic bombing would not be feasible for many years. Present Russian defenses could decimate B-29 or B-36 attacks. The assumption that we could launch immediate counterattacks from intermediate bases was unrealistic. Russia would not initiate war until she possessed a significant number of atomic weapons. At that time England and other nations might adopt a neutralist position. Overseas bases were almost impossible to defend, certainly more difficult than to protect mobile carriers. Rather than build transoceanic range into our bombers and thereby reduce the plane's effectiveness over enemy territory, the United States should focus its attention on far-ranging carriers. Missiles would not radically alter the Navy's favorable position. Gallery believed ship-launched missiles would prove more effective than transoceanic types.⁴⁷

With the Navy responsible for strategic air warfare, the Air Force could turn its full attention to the defense of the United States. The advent of atomic weapons greatly increased our need for an effective continental warning net and an interceptor fighter defense.

It is entirely unsound for us to put great emphasis on a strategic air striking force at the expense of leaving us open to retaliation. . . . The most important job of the Air Force has now become the defense of the

United States, intercepting and knocking down an enemy attack.⁴⁸

A strategy emphasizing deterrence was unwise on two grounds. One, it made the erroneous assumption that effective defenses against atomic attack were not possible. Two, if the strategy were not convincing, the United States would sustain horrible damage before defeating an enemy.

In conjunction with his retirement, Admiral Nimitz issued a valedictory in January, 1948, entitled, "The Future Employment of Naval Forces." While much of the document expressed ideas presented in earlier hearings, there were significant changes in emphasis. Nimitz noted that in any future war of significant size, the United States would be pitted against an enemy possessing superior manpower. Consequently our strategy should be directed toward highly specialized operations. "We should plan to inflict unacceptable damage through maximum use of our technological weapons and our ability to produce them in great quantities."⁴⁹ As the most likely enemy possessed few combatant ships other than submarines, the Navy should be used initially to project its weapons against vital enemy targets on land. Until we developed long-range bombers capable of intercontinental distances, "naval air power launched from carriers may be the only practicable means of bombing vital enemy centers in the early stages of a war." Nimitz' paper bore a marked resemblance to Eisenhower's Final Report (February, 1948) in its emphasis on air power, strategic bombing, and the desirability of avoiding large scale ground operations. Of course, Nimitz ascribed a much larger role to Navy Air, particularly over the next few years.⁵⁰

Amid the strong public support for strategic bombing in 1948, other Navy spokesmen enlisted their service in this role. Vice Admiral Arthur W. Radford told a Chautauqua gathering that Navy "carrier forces were capable of striking deep into an enemy hinterland."⁵¹ He noted that ninety-two percent of the important targets in the world lay within twelve hundred miles of the sea; any target lay within fifteen hundred miles of carrier-based aircraft. Radford emphasized the rapid response time of carrier task forces, likening them to the Revolutionary Minute Men. Rear Admiral P. B. Nibecker, Chief of the Navy's Office of Industrial Relations, said that Navy Air would probably deliver the most important attacks. Planes bearing atomic weapons would have to be launched from carriers until we were able to establish land bases sufficiently close to enemy targets.⁵² Periodicals provided a means of recruiting support. During 1948 Vice Admiral John D. Price, Admiral Blandy, Rear Admiral Theodore Lonquest, Rear Admiral Felix Johnson, and Mr. Walter E. Strope, Department of Navy architect, supplied articles in which the strategic air role was emphasized. In nearly every instance the author cited a carrier's range, mobility, and relative invulnerability.⁵³

Continuing Support for a Flexible Response--1948

The great amount of public support for strategic bombing clearly influenced Navy thinking. The importance attached to construction of a supercarrier reflects this desire to secure an A-bomb

capability. However, the degree of interest should not be exaggerated. Navy leaders continued to speak of and believe in the essential importance of a balanced Navy. Just before assuming the office of Chief of Naval Operations, Admiral Denfeld reported his views about the next war in a popular magazine. According to Denfeld, most Navy men believed that a war with Russia in the next five years would closely resemble World War II. This included requirements for amphibious forces, surface gunfire support, carrier task forces, and antisubmarine units.⁵⁴ Denfeld's Congressional testimony in April, 1948, revealed a similar line of thought, with particular emphasis on the need for tactical air superiority.

General Spaatz has stated that control of the air must be won before massive, effective, round-the-clock strategic bombing can be carried out. This is borne out by the analysis of the Joint Strategic Survey Committee on strategic bombing in World War II. The chief implication of gaining this control is the acknowledged need for pushing springboard bases close enough to the targets to enable fighters to win the preliminary struggle for air supremacy and to furnish cover for the bombers.⁵⁵

In many areas of the world, carrier planes would have to secure this tactical air control. After overseas bases were established for the Air Force, the Navy would be responsible for 25,000 tons of shipping per day (General Bradley's estimate assuming a five division defense of a large airhead on the European continent).

Secretary John L. Sullivan's testimony focused on our need to command the seas. He reviewed the logistical support provided by the Navy in World War II and then spoke of the large Russian

submarine fleet (exceeding two hundred and fifty). Sullivan acknowledged that strategic bombing was the Air Force's responsibility. To be effective, however, a strategic bombing policy "must be of the saturation variety requiring daily strikes of very large numbers."⁵⁶ This entailed intermediate bases supported by a massive sea effort. Addressing a Joint Orientation Conference for important public figures in November, 1948, Sullivan stressed these points: a future war would not be decided by strategic bombing alone, the sea remained a vital avenue of supply, surface ships remained important despite technological developments, and carriers were highly invulnerable to attack.⁵⁷

At the Navy War College Admiral Raymond A. Spruance was highly critical of the priority given to our strategic bombing capability. Spruance reasoned that Russia would not challenge the United States until she possessed a sizeable stock of atomic weapons. When this situation arrived, neither side was likely to use its A-bombs for fear of retaliation. Conventional warfare would be more probable. Admiral H. T. Deutermann recalls that the two major exercises conducted by the War College in 1948 concerned amphibious operations in the Persian Gulf and in Africa. Predicated on a Russian take-over of Europe, both problems were built around conventional warfare.⁵⁸

Navy Fortunes Ebb--1949

The Navy's future in 1949 did not look very bright. Truman's insistence on economy had driven the 1950 budget to a level

which produced widespread dissatisfaction within the military. As Vice Admiral J. D. Price, Deputy Chief of Naval Operations, indicated: "Naval aviation generally is being programmed at its lowest level since the war, in terms of ships, men, and operating power."⁵⁹ The Navy's operational air force in February, 1949, consisted of 8,113 planes, eighty percent of them built during World War II. The rate of procurement threatened to reduce Navy Air to less than 3,000 operational aircraft by 1955.⁶⁰ Addressing a group of Navy officers, Vice Admiral Robert B. Carney noted:

If roles and missions are used as the yardstick, we are confronted with the fact that majority sentiment favors less comprehensive Navy functions than was the case in the last war. . . . Dollar-wise, the Navy's budget is declining. . . . Even more serious are the various pressures in behalf of restricting the Navy's roles and missions.⁶¹

Louis Johnson's first actions as Secretary of Defense increased the Navy's despondency about its future. Following the cancellation of the supercarrier in April, 1949, Vice Admiral Bogan described the morale of the Navy as "lower today than at any time since. . . 1916."⁶² Bogan attributed this attitude to the uncertainty among career personnel as to the future role of the Navy. The cutbacks in the Navy's budget also triggered strong service criticism of national strategy, culminating in the widely publicized B-36 hearings of October, 1949.

B-36 Hearings (June-October, 1949)--
The Navy's Attack on an "Atomic Blitz" Strategy

The B-36 hearings were initiated June 8, 1949, following charges by Representative James E. VanZandt (Rep., Pa.) of

irregularities in Air Force procurement. The agenda prepared by the House Armed Services Committee called for: an investigation of VanZandt's charges, an examination of Navy and Air Force roles and missions to determine the feasibility of a supercarrier, and a study of the effectiveness of strategic bombing. Hearings conducted in August cleared the Air Force of any malfeasance in their procurement practices. The other matters remained in abeyance until early fall. On October 3rd Captain J. G. Crommelin released statements by several admirals in which service morale was described as extremely low. Chairman Carl Vinson (Dem., Ga.) opened hearings three days later on problems of unification and strategy. In twelve days of hearings, thirty-eight witnesses appeared, including almost the entire high command of the Navy. The resulting testimony provided the rationale behind the Navy's opposition to a strategic bombing doctrine.⁶³

Admiral Radford, Commander in Chief Pacific Fleet, began the testimony with an attack on the prevailing mood of the American public. "The B-36 has become, in the minds of the American people, a symbol of a theory of warfare--the atomic blitz--which promises them a cheap and easy victory if war should come."⁶⁴ Radford considered an "atomic blitz" strategy technologically unsound. Sacrificing too many capabilities to gain long range, the B-36 would not be able to penetrate jet fighter defenses. The few that succeeded would not be able to hit precision targets from 40,000 feet. Political and moral considerations also made the strategy unacceptable.

In planning to wage a war, if we are forced to fight, we must look to the peace to follow. We

must know what kind of a peace we wish to have and what price we are willing to pay to achieve it. . . . A war of annihilation might possibly bring a Pyrrhic military victory, but it would be politically and economically senseless. In my opinion the American people, if they were well informed on all factors involved, would consider such a war morally reprehensible.⁶⁵

Radford opposed the "mass killing of noncombatants" because of the experience he had gained in studying the postwar problems of Germany and Japan.

Turning to a positive approach, Radford acknowledged the importance of air power as the dominant factor in our national security. Air power, however, covered a broad field of activities. The Air Force's strategic air role entailed much more than the atomic blitz of cities. It included the fighter effort to secure air superiority, an essential condition for effective strategic bombing. The strategic air role also involved attacks on pinpoint targets such as communications centers and military installations. Radford believed that Naval Air would play a crucial part in meeting these requirements. "At some critical phase of a future war--and that phase may come early--the security of our country may substantially depend on the mobile air power [of carrier task forces] required to insure control of the air in vital areas."⁶⁶ The United States, through sound organization, training, and equipment, could determine the way in which the next war was waged. The important consideration was to remain the most powerful air power, balanced in a land and sea capability. Radford concluded: one, the B-36

was not satisfactory from a technological standpoint; two, the Air Force had neglected its tactical and fighter missions by over-emphasizing the Strategic Air Command; three, too great a reliance on an "atomic blitz" strategy would not deter a war, nor win it, nor produce a stable liveable peace; four, we should develop weapons capable of maximum effectiveness from all land and sea areas which we can control.⁶⁷

Admiral Ofstie believed a defense based on strategic bombing was certain to fail. The United States needed "balanced power rather than the single-shot philosophy."⁶⁸ The recent memory of Iwo Jima attested to this. "Under the ideal conditions of shallow penetration and a weak defending force, the long-range unescorted bomber was faced with a mission beyond his capabilities."⁶⁹ It was not certain that a strategic bombing attack would destroy the enemy capacity and will to resist. The Strategic Bombing Survey Reports demonstrated the heavy damage a society could absorb and continue to function. Ofstie contended that such a strategy threatened America's fundamental beliefs and commitments.

Our country has had a long history in support of measures for the amelioration of the effects of warfare. If we now consciously adopt a ruthless and barbaric policy toward other peoples, how can we prevent the breakdown of those standards of morality which have been a guiding force in this democracy since its inception? The concept of indiscriminate bombing attacks on nonmilitary targets undermines these accepted standards and if it is initiated may destroy them.⁷⁰

Admiral Blandy, former director of the Bikini operation and Special Weapons section, acknowledged the changes introduced by

the A-bomb. It allowed us to "saturate" a city with far fewer planes and bombs. However, the present superiority of air defenses tended to reduce the A-bomb's revolutionary impact. For at least the next five to ten years, the Navy would have to perform amphibious operations, antisubmarine tasks, minesweeping, and numerous other missions. A war in this period could well be a lengthy one. The transport of crucial materials, e.g., uranium from Africa, would depend on our control of the sea. Carrier task forces would attack a number of targets including enemy naval forces, merchant shipping in coastal waters, naval and air bases. The latter might be hundreds of miles inland threatening Army or Air Force operations. Like Radford and Ofstie, Blandy was highly critical of indiscriminate area bombing. Our experience with Germany demonstrated the ineffectiveness of terror bombing against a totalitarian state. Rather than slaughter innocent people, the United States should program its atomic weapons for specific military targets--air and sea bases, communication and transport centers, and troop concentrations. The Strategic Air Command should be modified to provide more security for the bomber and greater accuracy of bombing.⁷¹

Admiral Halsey began his testimony with a recollection of hearings twenty-five years earlier when big bomber exponents had derided carrier capabilities. World War II should have dispelled such beliefs. Turning to the future, Halsey predicted: "War will not commence with attacks against the continental United States. Attacks would be directed against allies and positions whose loss

would leave us in economic, political, and psychological isolation."⁷² The United States must be able to react immediately when war comes, but this "instant retaliation" should be directed against military targets. The mass bombing of industrial areas would have no direct effect on the advance of the enemy armies. Rather, these attacks on population centers "would cause the enemy peoples to unite in fiery patriotism."⁷³ The largest portion of Halsey's statement concerned the importance of tactical air superiority. Our control of the sea, coupled with the mobility of aircraft carriers, offered the most effective means of securing air superiority in large areas of the world.

A brief statement sent to the committee by Admiral King stressed two points. The first related to Russia's recent atomic explosion. "A likely possibility now is that there will be some kind of stalemate unless both sides expect to destroy each other. . . We might have, therefore, a war fought much like the last."⁷⁴ The second concerned the value of developing a number of ways to deliver the A-bomb, thus increasing the effectiveness of our atomic striking power.

Vice Admiral Robert B. Carney, Deputy Chief of Naval Operations (Logistics), challenged the present strategic concept in terms of America's peacetime capabilities.

The peacetime forces we maintain in being must be within our peacetime dollar capability and, at the same time, they must be forces which can be expanded toward effective peak effort in time of war, and capable of expansion in many directions in order not

to be caught flat-footed by the unforeseeable successes and set-backs of combat.⁷⁵

Two logistical facts constituted America's primary military problem. First, an effective strategic air force could not be maintained with the present allocation of funds for aircraft procurement. Second, increased allocations for bomber procurement would force disastrous cuts in other areas. If strategic bombing were to be an integral part of America's national strategy, then we should attempt to develop this capability with the least expense. Logistical studies showed that intercontinental bombing was twice as expensive as bombing from overseas bases or from carriers. Unless overriding considerations justified a strategic bombing concept, the United States should avoid its inflexibility.

Subsequent testimony by Admirals Kinkaid, Spruance, Nimitz, and Denfeld and Generals Vandegrift and Magee revealed similar beliefs about American military needs. The Marine representatives were particularly concerned about the Air Force's failure to maintain adequate "close-air support." Kinkaid expressed the fear that reliance on strategic bombing might result in a false sense of security, "a Maginot Line mentality." Spruance refused to believe that atomic attacks would quickly decide a future war. Our aim in a war with Russia should be to overthrow the Communist party but not to alienate the Russian people. If we avoided mass bombing, effective propaganda could well trigger large revolts against the Communist war effort. A statement by Kinkaid summarized the Navy's view of a proper strategy against Russia.

A realistic strategy. . .will provide for holding the Mediterranean, getting command of the air, keeping sea lanes open, holding western Europe, landing of our troops at an early date, establishing bases and providing mobile bases, none of which can be accomplished by strategic bombing.⁷⁶

Although cancellation of the supercarrier focused attention on Navy aviation, antisubmarine warfare enjoyed the highest priority in 1949-1950's research and development program. On several occasions Secretary Matthews and Admiral Denfeld expressed concern about Russia's growing fleet of submarines. Our own underwater capability was not slighted. Present missions included attacking enemy merchant shipping (in Russia's coastal waters), radar picket duty, reconnaissance, and air-sea rescue. Denfeld noted the efforts to develop missile-firing submarines and transport subs capable of carrying men or cargo.⁷⁷ This latter role received attention in an article prepared by Rear Admiral M. R. Browning. Nuclear power held forth possibilities of technical improvement which would increase submarines' effectiveness in their conventional roles and give them "a new and hitherto unexploited value as a supply and transport vessel."⁷⁸ He doubted that any nation would possess the quantity or adaptability in atomic weapons to employ them against submarines for many years. Even if they did, surface ships would find it increasingly difficult to locate submarines.⁷⁹

Navy Journal Opinion

Service periodicals provide another source for gauging the Navy's attitudes about postwar roles.⁸⁰ The 1946 prize essay

in the United States Naval Institute Proceedings spoke of the continuing need to control supply lanes across the oceans. Until land-based planes could perform this mission, the Navy would serve a vital role. The author noted: "No service will become obsolete unless made so by itself. War is not stable enough to deliver solemn pronouncements."⁸¹ Teamwork of land, sea, and air forces had won World War II; it should characterize future planning. In another article Captain M. M. Dupre, Jr. expressed the prevailing belief that modern war was total. "It may well be that the character of war will be altered in the future by scientific discovery. But for the present and the predictable future total war is a reality."⁸² Dupre considered it likely that a countermeasure for the A-bomb would be developed. Both he and Captain F. J. Nelson thought reserve forces would remain important over the next few years.⁸³

By 1947 Navy periodicals began to reflect the service hostility toward a strategic bombing doctrine. Lieutenant William H. Hessler attacked certain common fallacies in American thought. These included the disposition to overrate the A-bomb, the belief that sea power was no longer important because the next war would be very brief, and the assumption that any future war necessarily would be fought with atomic weapons.⁸⁴ Admiral Blandy acknowledged the atom bomb's vast implications for war but did not think it made conventional forces obsolete. As atomic attacks would not bring a nation to its knees, sea power was still needed to project land forces overseas for an invasion.⁸⁵ Rear Admiral W. S. Parsons, the

man who fuzed the Hiroshima bomb, thought it would take many years to develop an effective intercontinental missile or long-range jet bomber. The relative ineffectiveness of atomic weapon delivery systems meant that "for at least the coming generation sea power will continue to be decisive."⁸⁶

The Navy's role as a tool of diplomacy received great emphasis in the service magazines. Commodore Ernest M. Eller noted that navies were still the primary means of exerting military pressure short of war on nations adjoining the sea. Carrier task forces with their air and land capabilities were the perfect diplomatic instrument. Their presence was sufficient in most cases to avert open conflict as recent events in the Near East had attested (Turkey and Iran). "Whatever influence guided missiles or atomic explosives may or may not have upon destroying the ability of sea power to save this nation in war, these weapons can not replace and will little check sea power in its equally important role of maintaining the peace--equally important, if not more so, today."⁸⁷ There was no danger of the Air Force usurping this role. Long-range aircraft could spend only a few minutes over a troubled area. Landing, or even flying over adjacent countries, infringed on sovereignty. Establishing air bases abroad involved the deployment of security troops and entailed significant supply problems. This would likely promote rather than ease tensions. Clearly, "sea power [carrier task forces] is the logical means by which we can exert international police responsibility."⁸⁸

Commander M. A. Peel, Jr. wrote along similar lines in a May, 1948, article. The Navy's mobility allowed us to dispense with garrisons in distant areas, reducing the cost of our peace-keeping role. A visible naval force was a more effective agent in a troubled area than some long-range bombers five thousand miles away.⁸⁹ Marine Major Guy Richards viewed the naval task force as the perfect global policeman. Its range, self-sufficiency over long periods of time, and firepower made it a "combination matchless for exerting the influence of law, order, and authority simply by its presence and the multiplicity of its powers to act."⁹⁰ Lieutenant Commander William D. Lanier, USN Reserve, wrote of the need to make our potential power apparent. "The foreign citizen, friendly or antagonistic, must actually see U. S. ships, planes, guns, and men, and see them repeatedly, before he will concede the ability of the United States to either help or hurt him."⁹¹ On occasions when potential power was not a sufficient deterrent, the Navy's mobility would place it at the scene ready for immediate action. During the dark days of Secretary Louis Johnson's administration, Navy League editors urged their members to speak out in public about the Navy's vital contribution to American peace time roles.⁹²

While some officers focused on the Navy's diplomatic role, others continued to attack the atomic blitz strategy. Captain Whitaker F. Riggs, Jr. repeated the standard Navy line about the vulnerability of A-bomb carriers and the scarcity of atomic weapons.⁹³ The 1949 prize essay listed a number of objections to the use of atomic weapons. Concentrating on A-bombs reduced our flexibility,

strategically and tactically. Aside from contaminating objective areas, atomic weapons were uneconomical against pinpoint targets. More important, in many instances A-bombs could not be used. It was highly unlikely that we would employ them against over-run countries (e.g., France). Political considerations would prevent their use in situations short of total war.⁹⁴ 1950's prize essay attacked the immorality of an atomic blitz strategy. The author expressed horror at the attitude held by many Americans: "Go drop bombs on all their big cities."⁹⁵ Although few Navy officers subscribed to these views, the Navy had failed to popularize an adequate alternative based on seapower. In the Honorable Mention essay Rear Admiral Charles R. Brown explored the purposes of war. Its real aim was not destruction but rather to make the enemy change his mind with a minimum of cost and destruction. Our unconditional surrender policy in World War II had actually prolonged the war. The American people should consider postwar objectives before approving any military strategy.⁹⁶

Marine Corps' statements and actions reveal some ambivalence in regard to the impact of atomic weapons. Ranking officers generally accepted the Navy's conservative estimate of technological developments. General Alexander A. Vandegrift, Commandant through 1948, assumed "for many years to come the United States can only be reduced by seaborne attack."⁹⁷ General Geiger believed that atomic weapons would probably remain in limited production for many years. During this period it was unlikely that any nation would utilize atomic weapons against amphibious assaults.⁹⁸ Both men, however,

acknowledged the need to prepare for the atomic age. Of greater significance Marine leaders took active measures to revamp the Corps along atomic lines. The Marine division was changed from a fixed number of regiments to a variable number of infantry battalions, all capable of independent action. Greater dispersion and decentralization of control, two essential attributes in atomic warfare, were the paramount considerations underlying the reorganization. Efforts were made to increase the Corps' mobility through the use of helicopters. Important advances were made in this area before 1950.⁹⁹

Articles in the Gazette reflected a broad interest in future warfare. Topics ranged from missiles to Arctic carrier operations to psychological warfare. Amphibious warfare, understandably, received the greatest amount of attention. Marine authors, to a man, thought this function would continue in importance. Lieutenant Colonel Robert E. Cushman expressed a common belief:

To reach a decision against an enemy, those elements that close with the enemy, must have staying power--and this will require bases of operations in close proximity to the foe. These bases are best secured by the Fleet Marine Force.¹⁰⁰

Most Marine officers acknowledged the need for extensive changes in tactics. As Lieutenant Colonel Frederick P. Henderson noted, the VT fuze alone greatly increased the hazards of an amphibious assault.¹⁰¹ Future operations would require increased mobility and dispersion. Consequently, Marine officers emphasized the need for extensive employment of armor and airborne/airtransported elements. When A-bombs became plentiful, Marine units would have to close with

the enemy quickly. In General Geiger's words: "The safest man in an atomic bomb attack is the man in the front lines."¹⁰²

Two articles anticipated Marine roles in the event of a war with Russia. Major Guy Richards called for a strategy excluding the use of atomic weapons. Various factors--rapid Russian development of an atomic capability, fear of injuring allies, concern for American hostages--might prevent our using the A-bomb. Rather, we should dominate the vast Eurasian coastline with our superior amphibious forces. "Hit and run" raids would gradually decimate the Red Army.¹⁰³ Commander I. E. McMillan thought the next war would be a matter of days. He saw an urgent need for a commando striking force. Airborne and armed with atomic weapons, this force would be able to seize or destroy strategic enemy positions. Their size, esprit, and previous training made the Marines a logical choice to undertake this role.¹⁰⁴

As the above views indicate, most Marines placed future operations in a large context. Fletcher Pratt expressed a common belief when he wrote: "The idea that the A-bomb, like gas, will not be used is simply absurd. Modern warfare is total, including the choice of weapons."¹⁰⁵ An account of a Chinese incident was the only guerrilla-related article printed by the Gazette.¹⁰⁶ Few authors even mentioned the possibilities of limited war. One exception was Major General Pedro del Valle. In calling for a Corps airborne capability, he stressed its value in rapid movement to a limited engagement. He thought airborne forces would prove

particularly valuable against guerrillas. Lieutenant Colonel Robert D. Heinl noted that the Marine Corps' small war tradition and speciality had "within little more than a decade waned almost to the vanishing point."¹⁰⁷ He recommended a greater emphasis be put on the skills and tactics of small operations. It was quite likely that a future war would develop into an Eurasian stalemate, creating a need for numerous small units capable of conducting partisan-style operations.¹⁰⁸

When they expressed an opinion about the Navy's role, most Marine officers praised the balance achieved in World War II. Lieutenant Colonel James D. Hittle, author of The Military Staff, considered the United States Navy to be the first in history to evolve and apply the concept of the balanced fleet. He acknowledged the need for more combat naval aviation. This element increased and extended the fleet's striking power. In the future planes and submarines might replace surface vessels as transports for the Fleet Marine Force. It would be a mistake, however, to neglect any one role of the Navy. "Both the Fleet Marine Force and naval aviation have their *raison d'etre* in the concept of the balanced fleet. Neither are today logically justified without it."¹⁰⁹ The United States would also err if it based its defense on the "unsupported contentions of air power enthusiasts."¹¹⁰ Land-based air power lacked the strategic mobility provided by a balanced Navy task force.

Activities at the Naval War College provide another measure of the Navy outlook. Postwar assignments included student

papers covering a variety of topics, the most frequent dealing with U. S.-Russian relations.¹¹¹ About one-third of the students in the 1947-48 class wrote papers concerning "The Influence of the Atomic Weapon on Future Naval Warfare." While these studies varied in sophistication and perceptiveness, certain generalizations can be made. Nearly all the students assumed that Russia would have only a limited supply of atomic weapons during the foreseeable future (minimum of fifteen years). Most of the Navy officers believed that submarines would serve an important role as a platform for A-bomb missiles. Some expressed doubt about a similar role for carriers either because of construction problems--the A-bomb required a large airplane--or their relative vulnerability as compared to a submarine. Thus Commander C. H. Clark wrote: "Whatever other mistakes we might make, let us not make the one of building larger and larger carriers."¹¹² Carrier task forces would have an important function in the seizing of overseas bases and in defending the United States from air attack. Most students thought the next war would begin with a surprise strategic air strike, but no one suggested that the United States initiate a "preventive war." Although a majority thought the next war would be a brief one, there was strong support for dispersing naval shore facilities. Atomic weapons would increase the tempo of violence but many traditional Navy roles remained.

The postwar period was a difficult one for Navy leaders. Despite their service's outstanding performance in World War II, a

powerful element in the American political arena threatened to reduce sharply the Navy's roles and force levels. A majority of the Navy leadership thought the balanced fleet would continue to represent an essential aspect of American defense for at least several decades. A significant minority, however, believed that strategic bombing was the only important role for America's military. While balanced fleet proponents generally set service policy, their views enjoyed relatively little public support as compared to the doctrines of the Air Force.

NOTES

¹Adm. Felix Stump, USN, Ret. says a significant minority of "surface men" opposed the dominant role given to Navy Air during the first eighteen months after the war; interview August 14, 1969. Adm. Nimitz stated that some submariners thought their role more important. Majority approval appears certain, however. See Davis, Postwar Defense Policy and the U. S. Navy, pp. 119-34 for a fuller discussion.

²Vincent Davis' Postwar Defense Policy and the U. S. Navy provides an excellent treatment of the Navy's initial efforts to shape a postwar strategic concept. In the last chapter Davis briefly traces the Navy-Air Force struggle over strategic bombing through 1949. Davis contends that the heart of the postwar Navy was to be its air power. Navy leaders fashioned their forces around aviation, "not in response to a new strategic concept or to an analysis of the international political situation but rather in response to an institutional threat to the Navy which originated within the domestic political arena," i.e., the danger of the Air Force subsuming Naval Air in a unification scheme. As the following pages will indicate, I believe the struggle with the Air Force had an important effect on Navy thinking. However, the Navy's view of its postwar roles represents more than a rationalization in response to the Air Force threat. In making his point, Davis has overemphasized the Navy's concern for strategic bombing.

³Adm. Chester W. Nimitz, "Industry and the Navy," Army Ordnance, XXX (March-April, 1946), 183.

⁴Office of the Chief of Naval Operations, U. S. Naval Aviation in the Pacific (Washington, 1947), pp. 54-55. Vincent Davis, Postwar Defense Policy and the U. S. Navy, pp. 264, 339 (footnote 125) suggests that "very early in the postwar period [naval officers began] to put forward arguments that foreshadowed the growing call for a limited war capability." His example, however, is the source cited above. The Navy authors are calling for a flexible response in a total war situation not for a limited war capability.

⁵Unification Hearings, 1945, p. 578.

⁶Theodore Taylor, The Magnificent Mitscher (New York, 1954), pp. 315-18. These pages provide a valuable extract of a memorandum prepared by Mitscher for Forrestal September 24, 1945.

⁷Ibid., pp. 315-16.

⁸Unification Hearings, 1945, pp. 537-45.

⁹Office of the Chief of Naval Operations, U. S. Naval Aviation in the Pacific, p. 53.

¹⁰Adm. Ernest J. King, U. S. Navy at War 1941-1945, Official Reports to the Secretary of the Navy by Fleet Admiral Ernest J. King (Washington, 1946), p. 169.

¹¹Unification Hearings, 1945, p. 392.

¹²Ibid., p. 579.

¹³Ibid., p. 276.

¹⁴UMT Hearings, 1945, pp. 90-91.

¹⁵First Rescission Bill, p. 5; House, Committee on Naval Affairs, Hearings, Post-War Navy, 79th Cong., 1st Sess., 1945, pp. 1196-97; hereafter referred to as Post-War Navy Hearings, House; Taylor, The Magnificent Mitscher, pp. 315-18; Senate, Committee on Naval Affairs, Hearings, Post-War Navy, 79th Cong., 2nd Sess., 1946, pp. 76-78; hereafter referred to as Post-War Navy Hearings, Senate; Adm. Chester Nimitz, "Atomic Age Navy," Colliers, May 11, 1946, pp. 12-13.

¹⁶Post-War Navy Hearings, House, pp. 1168-69.

¹⁷National Security Act Hearings, p. 634; Post-War Navy Hearings, House, p. 1169; Post-War Navy Hearings, Senate, pp. 77-78, 87.

¹⁸UMT Hearings, 1945, p. 723.

¹⁹Post-War Navy Hearings, House, p. 1165.

²⁰Senate Special Committee on Atomic Energy, Atomic Energy Hearings, 79th Cong., 1st Sess., 1945, pp. 392-93.

²¹Post-War Navy Hearings, Senate, pp. 74-79.

²²Supra, p. 80.

²³National Security Act Hearings, p. 642.

²⁴Ibid., p. 695.

²⁵Ibid., p. 696.

²⁶Ibid., pp. 632-45, 689-705.

²⁷Supra, pp. 35-37. Whereas the Army portion was a statement prepared by the War Department, the Navy section consisted of a series of interviews Bernard Brodie conducted with service representatives. While not an official policy statement, Adm. Nimitz reviewed Brodie's synthesis, and his office issued a concurrence.

²⁸Brodie and Galloway, The Atom Bomb and the Armed Forces, p. 29.

²⁹Ibid., p. 30.

³⁰Ibid., p. 31.

³¹Ibid., pp. 32-33. Nothing was said about the difficulty of securing advanced bases along the Arctic route.

³²Ibid., pp. 34-39.

³³Ibid., pp. 39-40.

³⁴Ibid., p. 54.

³⁵Ibid., pp. 42-55.

³⁶For treatment of the unification controversy see Demetrios Caralay, The Politics of Military Unification (New York, 1966) or Legere, "Unification of the Armed Forces."

³⁷The Federal Register, XII, No. 147 (July 29, 1947), p. 5005.

³⁸Ibid., 5007.

³⁹Army-Navy Journal, April 3, 1947, p. 807.

⁴⁰Ibid., p. 822.

⁴¹Ibid.

⁴²Ibid., pp. 801, 807, 809, 822-23.

⁴³Ibid., August 28, 1948, p. 1435.

⁴⁴Paul Y. Hammond's "Super-Carriers and B-36 Bombers" in American Civil-Military Decisions (ed.) Harold Stein (Birmingham, 1963) provides an excellent treatment of the Navy-Air Force conflict in 1948-49, including a consideration of their doctrine. See pp. 474-88 concerning Key West, Newport, and other 1948 developments. Of course the Forrestal Diaries provides valuable insights of one man's involvement in the struggle, pp. 390-478.

⁴⁵Hammond, "Super-Carriers and B-36 Bombers," p. 480.

⁴⁶Drew Pearson, "Merry-Go-Round," Miami Herald, April 9, 1948, p. 6A.

⁴⁷Ibid.

⁴⁸Miami Herald, April 10, 1948, p. 6A. The leak of this memo to Drew Pearson produced widespread repercussions. Secretary of the Navy Sullivan secured an official statement from Adm. Denfeld that the memo did not represent Department views. Adm. Gallery was reprimanded.

⁴⁹Vital Speeches, January 15, 1948, pp. 214-17.

⁵⁰Ibid.

⁵¹Army-Navy Journal, July 17, 1948, p. 1258.

⁵²Army-Navy Journal, November 13, 1948, p. 309.

⁵³V. Adm. John D. Price, "The Navy-Army Air Team," Ordnance, XXXIII (September-October, 1948), 117; Adm. W. H. P. Blandy, "The Navy in the Atomic Age," The Pegasus, XI (January, 1948), 16; R. Adm. Theodore Lonquest, "Sea-Air Power," The Pegasus, XII (November, 1948), 6-10; R. Adm. Felix Johnson, "The Navy in World Affairs," The Pegasus, XI (January, 1948), 1-2; Walter E. Strope, "The Navy and Atomic Warfare," Ordnance, XXXIII (July-August, 1948), 20-22.

⁵⁴U. S. News and World Report, November 28, 1947, pp. 48-51.

⁵⁵Selective Service Hearings, pp. 6180-6208. In this same testimony Adm. Denfeld revealed the following disposition of the Navy: Pacific--5 large carriers, 3 light carriers, 1 battleship, 9 cruisers, 57 destroyers, 34 submarines, 237 miscellaneous types; Atlantic--5 large carriers, 6 light carriers, 1 battleship, 9 cruisers, 65 destroyers, 41 submarines, and 209 miscellaneous types. Amphibious assault life for one Marine division was available in each ocean.

⁵⁶House, Subcommittee on Appropriations, Hearings on Department of Navy Appropriation Bill for 1949, 80th Cong., 2nd Sess., 1948, p. 6.

⁵⁷National Military Establishment, "Minutes of Joint Orientation Conference," November, 1948 (Washington, 1948), pp. 314-25. The U. S. Army War College Library has a copy of this conference's minutes.

⁵⁸Interview with Adm. H. T. Deutermann, USN Ret., March 14, 1970.

⁵⁹House, Subcommittee on Appropriations, 1950 Appropriations Bill Hearings, Navy, 80th Cong., 1st Sess., p. 582. The 1950 budget called for new obligational authority of Army--\$4.5 billion, Air Force--\$4.6 billion, Navy--\$4.3 billion. For 1949 budget supra, p. 69.

⁶⁰Number of aircraft procured by Navy in 1948--708; 1949--1,222; 1950--843 (anticipated). The average length of plane life was estimated at six years, but over 600 planes were lost each year in crashes from 1948-50. Congressmen were highly critical of this latter figure. Up through 1949 the Navy's reliance on World War II aircraft and general inventories had allowed it to deploy a force level out of proportion to its budget. Thus in 1947 the Navy had consumed over \$1 billion of inventory goods not accounted for in appropriations. By 1949 the well was running dry so to speak. For an excellent treatment of postwar budgetary intricacies see R. Adm. H. G. Hopwell, Director of Budget, statement in 1949 Appropriations Bill Hearing, pp. 12-42. In actual force levels the 1950 budget produced the following reduction: attack carriers 11 to 8, cruisers 26 to 18, aircraft 10,687 to 7,765. House, 1950 Appropriations Bill Hearing, Navy, pp. 4-5, 596-98.

⁶¹V. Adm. Robert B. Carney, "The Foundations of Future Navy Planning," U. S. Naval War College Information Service for Officers, I (October, 1948), p. 4.

⁶²Army-Navy Journal, October 8, 1949, p. 139.

⁶³House Document 600, "Unification and Strategy," 81st Cong., 2nd Sess., March 1, 1950, provides a good summary of the background, hearings, and conclusions drawn by the committee.

⁶⁴Unification and Strategy Hearings, p. 41.

⁶⁵Ibid., p. 51.

⁶⁶Ibid., p. 50.

⁶⁷Ibid., pp. 39-132. Radford was followed by a group of aviators offering testimony concerning the B-36's inability to evade Navy Banshee jets and the need for precision bombing. The most controversial aspect of this testimony was the statement by Com. Eugene Tatom that an A-bomb dropped on one end of the Washington National Airport would not harm a man standing in the open at the other end. The remark exemplified the Navy's continued effort to play down the A-bomb's potential.

⁶⁸Ibid., p. 189.

⁶⁹Ibid., p. 184.

⁷⁰Ibid., p. 189. Ofstie had served as the Navy representative on the U. S. Strategic Bombing Survey Groups in Germany and Japan.

⁷¹Ibid., pp. 201-36. Adm. Blandy's view closely resembled Gen. Marshall's in his emphasis on maintaining an expandible nucleus and an effective Reserve program.

⁷²Ibid., p. 237.

⁷³Ibid., p. 238.

⁷⁴Ibid., p. 251. Three weeks earlier Truman had announced U. S. knowledge of the first Russian atomic explosion. It is rather surprising that these hearings contain so few references to the recent events in Russia. It is also interesting to note that King envisioned large-scale conventional war rather than limited wars.

⁷⁵Ibid., p. 302.

⁷⁶Ibid., p. 274. Of course many Navy leaders granted SAC a role once airheads were established in Europe, or English bases were secure. Adm. Denfeld was a casualty of the so-called "revolt of the admirals." Secretary of the Navy Matthews forced his retirement shortly after the closing of the Unification and Strategy Hearings. Congress' displeasure is described in House Document 600, March 1, 1950.

⁷⁷Army-Navy Journal, July 2, 1949, p. 1274; July 23, 1949, p. 1354. Army Information Digest, IV (April, 1949), 63-64.

⁷⁸R. Adm. M. R. Browning, "Tomorrow's Submarine," Military Review, XXVIII (September, 1948), 26.

⁷⁹Ibid., 25-32.

⁸⁰As R. Adm. Ernest M. Eller, USN, Ret., told Mr. Vincent Davis, the Proceedings give the reader a good idea of the general trend in strategic thought. Adm. H. T. Deutermann, USN Ret., expressed the same feeling to me in an interview. The Marine Corps Gazette considers itself a semi-official organ and is viewed as such by many Marine officers. Both magazines proved particularly valuable for my study, because the views of field grade officers predominate. In one issue of this period, the Gazette lamented its inability to secure articles from General Officers. Other service-related magazines of varied worth for this study included: All Hands--Navy's information magazine, Now Hear This--Navy League,

Leatherneck--Marine's information magazine, U. S. Naval War College "Information Service for Officers"--begun in 1949, and Ordnance which provided a number of articles on all three services.

⁸¹Com. Russell H. Smith, "Notes on our Naval Future," United States Naval Institute Proceedings, LXXII (April, 1946), 489-503; hereafter referred to as USNIP. (Unless otherwise stated all ranks for USNIP authors are Navy; all ranks for the Gazette are Marine.)

⁸²Cpt. M. M. Dupre, Jr., "Toward Total Security," USNIP, LXXII (October, 1946), 1289-98.

⁸³Cpt. F. J. Nelson, "This Fateful Interlude," USNIP, LXXII (December, 1946), 1553-62.

⁸⁴Lt. William H. Hessler, "Geography, Technology, and Military Policy," USNIP, LXXIII (April, 1947), 379-89.

⁸⁵V. Adm. W. H. P. Blandy, "The Atom Bomb--Sea Forces," Air Affairs, I (March, 1947), 359-66. Blandy disagreed with Navy leaders who contended that ships would be unattractive targets because of the scarcity of A-bombs. He predicted they would soon be plentiful, but thought ship dispersion would prove an effective counter to atomic attacks. He saw missile launching ships growing increasingly important in the atomic age.

⁸⁶R. Adm. W. S. Parsons, "Atomic Energy--Whither Bound," USNIP, LXXVIII (August, 1947), 895-907.

⁸⁷Com. Ernest M. Eller, "Sea Power and Peace," USNIP, LXXVIII (October, 1947), 1165.

⁸⁸Ibid.

⁸⁹Com. M. A. Peal, Jr., "War-Making Must Be in the Hands of Those Who Hate War," USNIP, LXXIV (May, 1948), 537-47.

⁹⁰Maj. Guy Richards, USMC, "The Navy's Stake in the Future," USNIP, LXXIV (February, 1948), 195.

⁹¹Lt. Col. William D. Lanier, "Operation Destiny," USNIP, LXXVI (January, 1950), 30.

⁹²Now Hear This, February 15, 1950, p. 1.

⁹³Cpt. Whitaker F. Riggs, Jr., "A Suggested Guide for Amateur Military Critics and Prophets," USNIP, LXXIV (August, 1948), 935-49.

⁹⁴Lt. Col. H. B. Seim, "Atomic Bomb--The X-Factor of Military Policy," USNIP, LXXV (April, 1949), 387-93.

⁹⁵Cpt. Ernest M. Eller, "Will We Need a Navy to Win?" USNIP, LXXVI (March, 1950), 239.

⁹⁶R. Adm. Charles R. Brown, "American National Strategy," USNIP, LXXVI (April, 1950), 355-63.

⁹⁷Gen. Alexander A. Vandegrift, "The Marine Corps in 1948," USNIP, LXXIV (February, 1948), 138.

⁹⁸Lt. Richard S. Hodgson, "The Atom Bomb Comes into Focus," Marine Corps Gazette, XXX (October, 1946), 22-23.

⁹⁹See Col. Robert Heintz, Soldiers of the Sea (Annapolis, Maryland, 1962), pp. 510-36 for postwar developments in Marine concepts.

¹⁰⁰Lt. Col. Robert E. Cushman, "Where Do We Go from Here?" Marine Corps Gazette, XXXII (May, 1948), 11.

¹⁰¹Lt. Col. Frederick P. Henderson, "The VT Fuze vs. Amphibious Operations," Marine Corps Gazette, XXXI (May, 1947), 50-56.

¹⁰²Lt. Hodgson, Marine Corps Gazette, XXX (October, 1946), 23.

¹⁰³Maj. Guy Richards, "Target Eurasia and the Next War," Marine Corps Gazette, XXXI (December, 1947), 10-18. In a rebuttal (March, 1948) Lt. Col. F. P. Henderson argued that most of the Eurasian coastline would not be worth invading. Western Europe was the crucial area, and Russia would make any amphibious landing there most difficult.

¹⁰⁴Com. I. E. McMillan, "A Suggested New Role for the Navy-Marine Corps Team," Marine Corps Gazette, XXXIII (October, 1949), 10-16.

¹⁰⁵Fletcher Pratt, "Beachheads of World War III," Marine Corps Gazette, XXXII (August, 1948), 20.

¹⁰⁶Cpt. Walter R. Mansfield, "Ambush in China," Marine Corps Gazette, XXX (March, 1946), 13-16, 39-42. It was early 1950 before the Marine Corps schools instituted a 17 hour bloc of instruction in partisan warfare.

¹⁰⁷Maj. Gen. Pedro A. del Valle, "Tactical Possibilities of Airborne Attack," Marine Corps Gazette, XXXI (December, 1947),

22-25; Lt. Col. Robert D. Heinl, Jr., "Small Wars--Vanishing Art?" Marine Corps Gazette, XXXIV (April, 1950), 23.

¹⁰⁸This type of reasoning in support of a limited war capability appeared more frequently than the concern about Communist expansion along the periphery, e.g., Korea.

¹⁰⁹Lt. Col. James D. Hittle, "Sea Power and the Balanced Fleet," Marine Corps Gazette, XXXII (February, 1948), 59.

¹¹⁰Ibid.

¹¹¹This reflected the College's intent to place greater emphasis on giving its students a broad view of international relations, less stress on problem-solving related to navy battles.

¹¹²Com. C. H. Clark, "The Influence of the Atomic Weapon on Future Naval Warfare," U. S. Naval War College term paper, Newport, Rhode Island, April 26, 1948.

CHAPTER IV

THE AIR FORCE--CONFIDENCE IN STRATEGIC AIR POWER

Another war, however distant in the future, would probably be decided by some form of air power before the surface forces were able to make contact with the enemy in major battles. This is the supreme military lesson of our period of history. . .General Carl Spaatz, Foreign Affairs, April, 1946.

Like their Navy associates, Air Force leaders emerged from World War II with a well-defined strategic concept. Several factors underlay their belief in strategic bombing based on air supremacy. The intellectual heritage of General Giulio Douhet was an important influence. Air Force leaders paid more than lip service to Douhet's ideas. While frequently citing his work in public statements, they also debated the relevancy of his specific concepts in the atomic age.¹ The experience of World War II, understandably, also had a strong impact on postwar attitudes. Most Air Force officers believed strategic bombing was decisive in both the European and Pacific campaigns. More important, the technological developments revealed during the closing months of the war--including the A-bomb, V-2 rocket, and jet aircraft--promised to make strategic bombing invincible. As with the other services, political considerations shaped service doctrine. Emphasizing the strategic bombing role helped the Air Force to achieve an independent and equal status.

The appeal of an atomic blitz doctrine was an effective means to gain Congressional support in the struggle over appropriations. Acknowledging the political aspect, it appears that Air Force leaders sincerely believed strategic air power would dominate America's next war.

General Arnold's Final Report and the Strategic Bombing Survey--
Air Power the First Essential for National Security

A series of late 1945 reports and hearings focused attention on the Air Force's postwar thinking. In his "Third Report to the Secretary of War," General Henry H. Arnold concluded with remarks on the future of air power. He believed that certain characteristics of modern war largely determined the direction the Air Force must take. Arnold assumed that modern war was total; all citizens would participate and be subject to the "ravages of war." A future attack on the United States could come without warning. Initiated by means of air power, this attack would "pass over all formerly visualized barriers or 'lines of defense' and deliver devastating blows at our industrial, economic, or governmental heart even before surface forces can be deployed."² In any future war the Air Force would be the first service to engage the enemy. Quite possibly, large armies and navies would see no action. In any case, air superiority was the first essential for national security.

These conditions of modern warfare placed specific requirements on America's Air Force. First, it had to be capable of immediate response. Secondly, it must focus its attention on strategic

bombing. Although tactical air superiority remained a prerequisite to surface combat, strategic bombing was the primary weapon in America's arsenal and the chief threat to her security. Third, we must have the means to secure air superiority as the prerequisite to strategic bombing. "The great unit cost of an atomic bomb means that as nearly as possible every one must be delivered to its intended target."³ The solution lay in the maintenance of overseas bases and the use of long-range escort fighters. Eventually new bombers or rockets would ensure penetration without air control. For the present Arnold believed: "Absolute air power in being at all times. . . is the only form of defense that offers any security whatever, and it must continue to be an essential part of our security program for a long time to come."⁴ Arnold saw the implications of technology. He noted that an air force is always verging on obsolescence. Besides emphasizing research and more effective intelligence activities, he called for flexible Air Force doctrines. "Any air force which does not keep its doctrines ahead of its equipment, and its vision far into the future, can only delude the nation into a false sense of security."⁵

Shortly before the appearance of Arnold's "Third Report," The United States Strategic Bombing Survey issued its Over-All Report, European War.⁶ The Survey concluded: "Allied air power was decisive in the war in western Europe." Even a great military power could not "live long under full-scale and free exploitation of air weapons over the heart of its territory."⁷ The report,

however, did not attribute victory to strategic bombing alone. In referring to air power, the U. S. S. B. S. clearly included the accomplishments of tactical and antisubmarine aviation. Strategic bombing's limitations were pointed out. The U. S. S. B. S. made public the fact that German industrial output increased sharply from 1942 until late 1944. The Survey also noted the ability of the German people to withstand the strategic air attack. The report advised caution in predicting the terror effect of strategic bombing against a police state. In July, 1946, the U. S. S. B. S. issued its Summary Report, Pacific Theater. Its findings did not praise strategic bombing unduly. The Survey noted that naval interdiction of overseas imports would have reduced Japanese war production forty to fifty percent by August, 1945. The Report, however, acknowledged: "Control of the air was essential to the success of every major military operation."⁸ Looking into the future, the U. S. S. B. S. concluded that air supremacy would be a prerequisite to future use of atomic weapons. Although some opponents used particular sections of the Reports to deprecate strategic bombing, Air Force leaders seemed pleased with the general conclusions.⁹

The Air Force Sets Forth Postwar Doctrine--
Unification Hearings (October, 1945)

The Air Force's desire to gain an independent coequal status produced the most detailed statement of postwar service doctrine, the Senate Unification hearings in October, 1945. At these hearings Generals Arnold, Spaatz, Doolittle, and Kenney made a strong

presentation of Air Force views. They agreed that, henceforth, control of the air would be the prime essential of America's defense. As Doolittle put it: "The first lesson [of World War II] is that you can't lose a war if you have command of the air, and you can't win a war if you haven't."¹⁰ The initial thrust of a future attack would be directed through the air against the continental United States. Kenney was certain that no aggressor would again make the mistake of allowing the United States sufficient time to rearm. All four stressed America's vulnerability to trans-Polar attacks. Arnold and Doolittle utilized large maps to illustrate the distortion produced by popular Mercator projections. Quoting distances from Alaska and Maine, they demonstrated that nearly all important world targets lay within the 5,000 mile radius of a B-36 bomber. Technology had telescoped not only distance but also time. In any future war we would have to win control of the air with the force-in-being. This force should be primarily offensive, capable of quickly taking the war to the enemy's territory.

Convinced the next war would be decided in the air, the Air Force spokesmen sought complete control of the role. Kenney thought it essential that "primary responsibility for air warfare rest with the coequal, coordinate Air Force, whatever the character of the earth's surface underneath."¹¹ Doolittle wished to classify all weapons according to the medium in which they traveled. Any directed weapon (controlled after takeoff) using the air as a medium would belong to the Air Force. Although they acknowledged a role

for naval aviation, Arnold and Spaatz considered it imperative that the Air Force receive a clearly defined mission to maintain air superiority.

Air Force spokesmen were loathe to view air power's dominant position as a consequence of nuclear fission. Doolittle cautioned the Senate committee against viewing the A-bomb as a revolutionary development. Spaatz noted a tendency to "over-emphasize long-range bombardment and to ignore the versatile application of air power."¹² Whereas some critics, e.g., Bernard Brodie, thought surprise atomic attacks could provide victory without air superiority, Air Force leaders insisted that control of the air was essential. We would continue to need high-performance defensive fighters, long-range escort fighters, and large transports. Several considerations may account for the little emphasis placed on atomic weapons during the Unification hearings. Atomic bombs, as Arnold noted in his "Third Report" might well be scarce for some years. It was possible that their use would be outlawed or that nations would abstain from employing them. The recent experience of Germany and Japan demonstrated that conventional bombing could decide a war. As Spaatz stated in a Foreign Affairs article, strategic bombing had become the most powerful instrument of war before the A-bomb was detonated, because it effectively applied the principles of mass, objective, and economy of force. Control of the air, however, was a "first and absolute requirement" for strategic bombing.¹³

Impact of A-bomb on Air Power

While Air Force spokesmen stressed air superiority more than atomic bombing in the Unification hearings, they clearly appreciated Hiroshima's implications. Particularly in statements intended for wide public dissemination, Air Force leaders underscored the significance of the A-bomb. In a December, 1945, Colliers article, General Spaatz warned that one-way B-29 raids were already feasible. One surprise atomic attack could cause serious damage to the United States. His point was emphasized by a polar projection, cast across the article's first two pages, which showed distances from important American cities to major centers around the world. Nearly all fell within the 6,500 mile range of the B-29.¹⁴ Spaatz contended that recent technological developments forced us to maintain split-second readiness or we would lose the next war:

We must set up a defense but in a different sense because it is startlingly clear that the offense now has a crushing advantage. Therefore we must rely on a total offense triggered by the enemy's first attack and capable of totally destroying him.¹⁵

Spaatz thought the development of such a retaliatory capability might well deter an aggressor.

General Arnold expressed similar views in the widely publicized book, One World or None. "In the near future, we expect that offensive air power will outstrip defense and become adequate to accomplish almost any degree of destruction." The Air Force's responsibilities were twofold. It had to insure that no enemy

gained a superior defensive system. This involved the development of detection devices, effective jet interceptors, and eventually counters to "pilotless weapons." More important, "our defense can only be a counteroffensive." The United States must be able to retaliate "even after receiving the hardest blow the enemy can deliver." This required widespread strategic bases, continued improvement of our delivery means, and a stockpile of atomic weapons.¹⁶

As a corollary to the belief that air power would dominate future warfare, most Air Force leaders envisioned greatly reduced roles for armies and navies. Doolittle and LeMay publicly referred to carriers as obsolescent weapons. No capital ship would survive in an atomic age. When intercontinental bombers appeared, large armies would no longer be needed. Service leaders frequently cited Japan's surrender without an invasion as the prototype of future war. Major Alexander P. de Seversky told Air University classes that World War II should have been waged solely with air power. Many students agreed with his statement:

If war comes in five, ten, or fifteen years the main issue will be an air battle for control of the air ocean. Victory in the skies will be the decisive factor. Therefore we must immediately divert the major portion of our national resources to build an impregnable air cover.¹⁷

De Seversky saw no need to occupy the ruins of an enemy, hence no role for ground forces. This latter view was probably too radical for most Air Force officers. Police actions (not of the Korean level) would necessitate small army and navy units.¹⁸

Some Air Force officers advocated a balanced military establishment. General Arnold, certainly one of the most perceptive General Officers of the time, warned that "preparedness, although it must be built around atomic weapons, therefore, cannot be built around atomic weapons alone." The reference was to the possibility that an atomic stalemate would emerge. "Proper account must be taken of the other forces of land, sea, and air."¹⁹ Both Arnold and Lieutenant General Ira C. Eaker thought an atomic war would degenerate into a conventional conflict.²⁰ Cold War events also tended to moderate Air Force statements somewhat. It was evident by 1948 that any early war with Russia would require advance strategic air bases. These in turn would depend on substantial Army and Navy contributions. The change in attitude was reflected in General Spaatz' remarks before the President's Air Policy Commission. "We are convinced that it is not any one arm which wins a war, but a well-balanced team composed of the three principal arms."²¹

Efforts of Popularize Air Power--
The Finletter Report

Air Force statements made during the first thirty months after the war followed closely concepts set forth in the Unification hearings. Service leaders called for a seventy group Air Force including: a long-range strategic striking force, capable of immediate and sustained retaliatory action; day and night fighters for the air defense of the continental U. S.; and tactical air support for ground forces. Priorities were in that order. Air Force

leaders predicted the next war would likely begin with a strategic air strike against America's industrial centers. Most of the conflict would occur in the air spaces over the northern polar regions.²² While placing greatest emphasis on the Strategic Air Command, the Air Force had to maintain a mobilization capability. Control of the air was still considered essential. Secretary Symington liked to quote General Arnold's aphorism: "The second-best air force is worth no more than a second-best poker hand."²³ Noting that present Air Force strength would allow full strategic air operations for only a month, Spaatz stated:

With or without the atomic bomb, we cannot gamble on these attacks being decisive. The Air Force must be prepared to close with the enemy and win the air war. We must advance our air-base areas so that all of our air power operating from land bases can be projected against the enemy in sustained mass operations.²⁴

The Report of the President's Air Policy Commission (January 1, 1948) focused public attention on the Air Force's strategic concept. The Commission, chaired by Thomas K. Finletter, listened to five months of testimony from military and civilian authorities. Out of this welter of information, the Commission concluded that the United States must implement a new defense strategy grounded in air power.²⁵ The Finletter Report stressed: the likelihood of a surprise air attack against the continental United States, the use of polar routes, the primary need for a retaliatory bombing capability, and the importance of air superiority. As testimony concerning the enemy's A-bomb potential varied widely, the Commission

thought "it would be an unreasonable risk, and therefore, a reckless course, to rely on other nations not having atomic weapons in quantity by the end of 1952."²⁶ Possession of atomic weapons by a possible enemy would not in itself create a serious danger. "He must have the planes and missiles capable of making a sustained assault on our mainland."²⁷ The Air Force's present force level of fifty-five groups was insufficient to gain air superiority. Seventy groups constituted the absolute minimum for United States' security.

1948--Emphasis on the A-bomb and SAC

Early 1948 saw not only a considerable debate over the Finletter Report but also a shift in Air Force attitudes. The increasing intensity of the Cold War and the interservice struggle, coupled with a growing stockpile of A-bombs, led Air Force leaders to emphasize the effect of atomic bombing. In a typical public remark General Kenney said the United States would respond to a Russian attack with "a stockpile of A-bombs larger than any in the world, plus the air power to carry them to the enemy."²⁸ Frequent Newsweek essays, penned by retired General Spaatz, stressed the "horrors of the air-atomic combination."²⁹ Secretary Symington noted:

A B-36, with an A-bomb, can take off from this continent and destroy distant objectives which might require ground armies years to take--and then only at the expense of heavy casualties. The B-36 can do the job within 16 hours after take-off from this continent, and then return non-stop to its home base--all this at a risk of 16 American lives.³⁰

The strongest statements appeared in a series of articles written by

William B. Huie for Reader's Digest. Described as a confidant of Air Force generals, Huie portrayed the Strategic Air Command winning the next war by itself. It is difficult to evaluate these statements. In part they represent "saber rattlings," an effort to increase the deterrent effect on Russia. Interservice rivalry over military appropriations was also a consideration. Fighting the next war solely with atomic air power had a wide appeal in these years of the American monopoly. Air Force officers admit that some of what was said in this period should be considered propaganda.³¹ Whatever the motive, the A-bomb was the central element of service thinking by 1948.

The Air Force gave primary attention to the manning and equipping of a Strategic Air Command during the two years prior to Korea. Secretary Symington acknowledged this in his 1949 Report and said the emphasis was consistent with the strategic plans of the Joint Chiefs of Staff.³² When Truman required force reductions in early 1949, the Air Force diverted \$300 million to provide a fourth heavy-bomber group. This action, allegedly taken without Secretary Forrestal's approval, helped trigger the B-36 controversy. The Air Force's rebuttal to Navy criticism of strategic bombing stressed two themes. First, SAC represented the most effective deterrent to war. General Hoyt Vandenberg, Chief of Staff, quoted a Winston Churchill statement that was quite popular among Air Force leaders. "It is certain that Europe would have been communized and London under bombardment some time ago but for the deterrent of the atomic bomb in the hands of the United States."³³ Second, strategic bombing

capitalized on American technical skill and minimized the loss of American lives. Symington noted that if war came: "We believe that the atom bomb plus the air power to deliver it represent the one means of unleashing prompt crippling destruction upon the enemy, with absolute minimum combat exposure of American lives."³⁴

Vandenberg ascribed a third value to SAC. He thought its threat forced Russia to expend vast sums on purely defensive measures, thus reducing their ability to develop an offensive capability. The alternative to strategic bombing was a defensive strategy pitting American manpower against Russian masses.

Air Force plans for the employment of SAC underwent a gradual but significant change in the 1948-1950 period. Officers referred less frequently to the need for sustained bombing. Efforts to achieve an intercontinental bombing capability proceeded rapidly. These efforts included the modification of new B-36's for tanker service, the development of refueling techniques, and the replacement of B-29's (radius of about 3,000 miles) with B-36's (5,000 mile radius). The refueling concept was inappropriate for sustained operations involving large numbers of bombers. Substituting B-36's for B-29's actually reduced the numerical strength of the Strategic Air Command as each B-36 group had twelve fewer planes than the medium bomber group. The determination to build an H-bomb (late 1949) reinforced this trend. General Vandenberg, in his Annual Report for 1949, indicated that the results of a nuclear strike might well remove the need for sustained attacks. As stockpiles

grew in size, "the damage that can be inflicted by a successful attacking force may be so great as to justify the possible loss of a major portion of that force."³⁵ Defensive measures, even if they promised to destroy a high percentage of the enemy's offensive capability, offered less security than a nuclear armed strategic force. Air Force strength levels reflected this changing view. Spokesmen continued to call for a balanced seventy group Air Force, but force reductions were absorbed primarily by fighter and tactical support elements.³⁶

Air Force Problems

Air Force morale at this time was high. Their success with the Berlin Airlift (June, 1948-May, 1949) brought public acclaim. Operation Vittles, as it was named, gave service spokesmen the opportunity to praise the Air Force as an instrument of diplomacy.³⁷ Most Air Force officials did not expect hostilities until Russia developed the A-bomb. As late as February, 1949, the Deputy Chief of Staff, Operations, Major General S. E. Anderson, predicted this was at least three years away.³⁸ Certain problems did concern Air Force leaders. General Vandenberg told reporters in 1949 that none of the Air Force's fighters were satisfactory. The early jet models were designed in the mid-1940's as all-purpose fighters. Subsequent improvements in the long-range bomber established a need for specially designed interceptors and escorts. Vandenberg cited the F-86 as our best current interceptor. It lacked high altitude maneuverability

and proper radar equipment. Although the XF-89 and the XF-94 would improve our continental air defense considerably in the early 1950's, they were still refinements of an all-purpose model. None of the present fighters could serve effectively as escorts on long-range bombing missions, although efforts were being made to modify the F-88 and F-90. Considerable disagreement existed with Army officers over the desired characteristics of tactical aircraft. Many ground officers defended employment of the old reciprocating F-47's and F-51's, arguing that these planes were more effective than jets in identifying and destroying ground targets. Air Force officers considered it foolish to use a tactical support aircraft that could not defend itself in the air.³⁹

A second problem, of less immediate concern but having immense implications, was rocket development. There were no missile-weapons systems under production prior to 1950, but Air Force leaders realized that guided missiles might soon revolutionize warfare. The Navy, however, had received the largest portion of the initial research funds, fifty-seven percent of the small appropriations made from 1946 to 1949. Air Force leaders took steps to rectify this balance in late 1949.⁴⁰

Air Force Journal Opinion--
A Strong Belief in Strategic Air Power

While forces at work within the Defense Establishment tended to moderate Air Force statements, service periodicals reflected an extreme air power philosophy.⁴¹ Note has been made of

Alexander de Seversky's articles.⁴² Air Force officers frequently expressed similar views. Major General H. J. Knerr decried the waste of money on armies and navies. "The objective of modern warfare is no longer the armed forces of an opponent. The objective is the industrial organization and resources of the enemy."⁴³ Colonel Barton Leach, Air Force Reserve (Harvard Law School professor), expressed the common belief that Russia was our only conceivable enemy. Our defenses should be tailored accordingly with strategic air power receiving the vast bulk of the appropriations.⁴⁴ Colonel Dale O. Smith pleaded that America abandon the outmoded concept that wars were always decided by open combat between armed forces. Such a view hampered the full development of our strategic bombing capability.⁴⁵

A preponderance of journal opinion supported the service intention to give highest priority to the Strategic Air Command. Colonel John H. de Russy considered the matter beyond the realm of debate. "Strategic bombing at the enemy's vital core will in the long run have greater effect upon surface operations than the destruction of any targets at the ends of the tentacles."⁴⁶ Major John J. Driscoll stressed a point mentioned frequently by Air Force spokesmen; no strategic bombing force in World War II was ever turned back. While ten to fifteen percent losses in a sustained bombing campaign were prohibitive, an atomic armed force could lose half of its planes and still destroy the enemy.⁴⁷

Lieutenant Colonel Joseph L. Dickman admitted that World War II had not borne out Douhet's principles concerning strategic

air power, but he thought the next war would. The atomic bomb and sonic speeds actualized the Italian's belief in the aircraft as an omnipotent weapon. Atomic weapons were ideally suited to effect the concept of attacking a nation's will to resist. Dickman thought control of the air, Douhet's first principle, had taken on a unique importance as a nation's ability to survive largely depended on it. Recent developments necessitated a reassessment of two concepts. First, strategic bombing would not require mass formations although the initial surprise attack might assume that character. Secondly, Douhet's prescription to devote full attention to the offense was no longer sound. "The potentialities of the atomic bomb are too tremendous for a nation to afford not to take all possible precautions against such an attack."⁴⁸ Dickman, however, was not optimistic about developing an effective defense (an attitude shared by many). Douhet had warned that no resources should be diverted to the support of auxiliary aviation. Dickman agreed that expenditures on tactical air power should never jeopardize the development of our strategic bombing capability. He thought the Army, eventually, would take complete control of tactical aviation in accordance with Douhet's philosophy.

Air Force officers disagreed about the proper employment of strategic air power; their differences stemming largely from the secrecy surrounding A-bomb production. Several articles supported the prevailing national strategy: control of the air, the need for intermediate bases, and sustained bombing.⁴⁹ Other officers were

highly critical of these views, suggesting that such a position reflected an attempt to prepare for World War III with the last war's concepts. Colonel Dale Smith was an early and frequent critic. He maintained that A-bombs would end the next war within thirty days. Pending development of an intercontinental bomber, B-29 pilots should be educated to the worth of one-way atomic missions and their possibilities of survival.⁵⁰ Brigadier General Otis Benson, Jr. thought basic tactics of air warfare were reverting to World War I ideas with the emphasis on surprise and deception. A-bombs and costly bombers made single plane attacks more feasible than mass assaults.⁵¹ Colonel Thomas E. Moore recommended that the United States eliminate its global strategic air bases. "Let us plan to dispatch our super craft individually [from the U. S.], or in small numbers, to deliver the atomic charge to enemy objectives during the hours of darkness, relying upon speed, altitude, and built-in devices for protection."⁵²

A consensus existed that strategic bombing should be directed against an enemy's urban centers. The Navy's criticism in October, 1949, did not alter this agreement, but it did provoke Air Force rebuttals. Major General Orvil Anderson considered the immorality charge a serious threat to our security. "If we permit ourselves to become mesmerized with this humanity aspect, we can place ourselves in position to lose a war, because we will have failed to exploit the power of modern science in our own defense."⁵³ Anderson thought humanity could best be served by the survival of Western civilization. In the present world struggle this was

possible only through the use of America's superior atomic air power. Chaplain John J. Wood concurred in these views. The same moral principles applied to A-bombs as to other weapons; their use should be limited to direct attacks against legitimate military targets. Given the nature of modern war, urban areas were included in this category.⁵⁴

The Air Force's tactical role, although of secondary importance, did not go unnoticed in service periodicals. Some officers considered it a mistake to differentiate between tactical air and strategic air power. Major Ben Parker cited World War II's example in arguing that the two air forces functioned most effectively when supplementing each other's efforts. The Tactical Air Command's missions were threefold: one, deny the enemy the use of its air arm; two, isolate the enemy's land forces from their sources of supply; three, directly assist operations of our ground forces. Accomplishment of the first two depended to a large extent on the assistance of strategic air forces.⁵⁵ While Colonel R. J. Browne acknowledged that tactical operations included a major responsibility for joint coordination (with ground units), he thought all air force units should be designed to perform both strategic and tactical roles. "Air forces should not be named as a 'tactical' or 'strategic' air force, but should be left to employ their power as the situation dictates."⁵⁶ Lieutenant General E. R. Quesada emphasized coequality of command. The tactical air commander could not employ his forces effectively unless he made the decisions as to priorities of targets.

Optimistically, General Quesada stated that "one of the major roles of Tactical Air Power in a future conflict may be the prevention of a hostile force from engaging in a battle with our surface forces."⁵⁷ Prior to Korea, other officers expressed a similar confidence in the possibilities of air interdiction.

A few articles cautioned against an overreliance on strategic bombing. Colonel Cecil E. Combs criticized the inflexibility of our national strategy:

Certain national policies may require a high degree of selectivity or discrimination in the way in which force is applied. Total methods of mass destruction are only adaptable to total warfare. A strategic air offensive is a total effort not suitable for policing purposes or guerilla tactics.⁵⁸

Dr. Fritz Marx described Air Force policy as a "closed" decision incompatible with the politics of American democracy. Present United States defenses were geared for one type of war, relying on an absolute weapon. This posture provided little freedom in the conduct of our foreign policy.⁵⁹ In a perceptive article Lieutenant Colonel John P. Healy anticipated the defense problems that would confront the United States over the next two decades. Unless America planned to initiate a preventive war:

It must be prepared to effectively wage non-atomic as well as atomic war. These are not simply different orders of magnitude of war, nor will preparing for atomic war, the greater order of magnitude, automatically ready us psychologically or logistically for the lesser order of non-atomic war.⁶⁰

Too great a reliance on atomic power invited aggression at a

non-atomic level. This attack would not be aimed directly at the United States but rather at the periphery of American interests. "Lacking non-atomic means of military containment we should be forced to use atomic means or to write off these interests as temporarily beyond salvage."⁶¹ The employment of atomic weapons in cases of a limited challenge would imperil our high moral standing.

Support for a Preventive War?

Despite this concern for a flexible defense, Healy agreed with a group of air power advocates who thought America should take advantage of its present atomic monopoly. Healy advanced no specific actions, but he contended that "the existence of such power points to the necessity for its energetic political use against that day when it will be negated."⁶² Colonel Taylor Drysdale recalls that a sizeable minority of Air Force officers desired a more aggressive foreign policy in the late 1940's. He believes the "preventive war" label stigmatizes these men's views. They wished to confront Russia on certain issues. e.g., Berlin, with the option of yielding or suffering an atomic attack.⁶³

Whether such a hard line policy meets the definition of preventive war is debatable. Other statements by Air Force officers clearly advocated a strategic air offensive before Russia gained an atomic capability. Colonel Louis E. Coira thought the assumption "that this nation must necessarily continue in the future. . .to absorb the first blow before committing its armed forces is not only

unsound but unless challenged might risk the ultimate survival of our nation."⁶⁴ The destructive nature of modern war made it imperative that the United States abandon its antiquated system of going to war. Henceforth, Coira asserted, the president must assume the power to initiate an "offensive-defensive" effort. Colonel Matthew K. Deichelmann considered independent executive power a basic requisite to American defense. "He [the president] must know that preventive action, when the situation demands, will receive the enthusiastic acclaim of a people who realize that such a course is the only alternative to catastrophe."⁶⁵ In the remainder of the editorial Deichelman justified an aggressive offensive policy. Colonel Dale Smith, examining American history, found that the United States had always taken the military initiative following inflammatory incidents. "Historically, then, it hardly makes sense to say we will not fight until attacked." Smith thought the best defense was "the first offense in force."⁶⁶

Occasionally in the 1948-1950 period, journals noted military support for a preventive war. In Congressional testimony and public addresses, Air Force leaders denied approval of any aggressive policy. The issue reached a climax in September, 1950. Secretary of the Navy Matthews suggested in two public speeches that the United States "institute a war [against Russia] to compel cooperation for peace."⁶⁷ Although Matthews was silenced, Major General Orvil A. Anderson, Commandant of the Air War College, permitted a reporter to quote remarks in favor of a preventive war. The Air Force responded

by suspending Anderson. Generals Vandenberg and Spaatz (Retired) issued condemnations of the preventive war concept.⁶⁸

Historians have criticized the Air Force for failing to relate their desired force level to any particular strategic concept. Walter Millis has suggested that the Air Force's seventy group program was based mainly "on a calculation of what the traffic would bear."⁶⁹ Although Air Force spokesmen made little effort to explain the strategic implications of forty-eight groups vs. seventy groups, their force levels were appropriate to their basic strategic concept. The seventy group force, first proposed in 1945, provided the capability of gaining air superiority and waging a strategic bombing campaign. The 1948 Air Force, relying largely on World War II planes, still reflected this balance. Air Force spokesmen's chief concern at this time appeared to be the few number of B-29's in the strategic bombing force, 390 as compared with the 14,000 bombers available for the German campaign in World War II (including British). The tight budgets of the 1949-1950 period forced the Air Force to choose between balance and a more effective Strategic Air Command. A growing belief in the efficacy of an atomic blitz decided the issue. This attitude was responsible, in part, for the Air Force's strenuous efforts to replace B-29 groups (thirty planes) with B-36 groups (eighteen planes). Inasmuch as SAC's primary purpose was to deter a major conflict with Russia, Air Force policy was a success. Failure to provide adequately for lesser conflicts brought its consequences in Korea.

NOTES

¹See. Lt. Col. Joseph L. Dickman, "Douhet and the Future," Air University Quarterly Review, II (Summer, 1948), 3-15; hereafter referred to as AUOR.

²Army-Navy Journal, November 24, 1945, p. 430.

³Ibid., p. 452.

⁴Ibid., p. 454.

⁵Ibid., p. 448.

⁶The U. S. S. B. S. was set up by President Roosevelt in 1944 with the express purpose of studying the effects of strategic bombing. Franklin D'Olier served as chairman of the agency which included over 300 civilians and 850 military personnel.

⁷The United States Strategic Bombing Survey, Over-All Report, European War (Washington, 1945), p. 107.

⁸The United States Strategic Bombing Survey, Summary Report, Pacific War (Washington, 1946), p. 27.

⁹See Davis, Postwar Defense Policy and the U. S. Navy, pp. 153-55 for a contrary opinion on the Air Force's attitude concerning the U. S. S. B. S. Legere, "Unification of the Armed Forces," pp. 429-36 describes an effort by the Air Force to make the U. S. S. B. S. Report appear more favorable to strategic bombing. My conclusion reflects attitudes expressed in hearings, periodicals, and interviews.

¹⁰Unification Hearings, 1945, p. 291.

¹¹Ibid., p. 233.

¹²Ibid., p. 343.

¹³Gen. Carl Spaatz, "Strategic Air Power," Foreign Affairs, XXIV (April, 1946), 385-97.

¹⁴Davis, Postwar Defense Policy and the U. S. Navy, pp. 151-55 and Legere, "Unification of the Armed Forces," pp. 403-42 describe the Air Force's efforts to popularize their role in the postwar period. During the fall of 1945 several long-distance non-stop flights received wide publicity. One example was the flight from Japan to Chicago led by Gens. Curtis LeMay and Emmett O'Donnell. Awarded a Distinguished Flying Cross at a Wings Club banquet the following day, LeMay remarked that his trip demonstrated the possibility of an atomic attack. New York Times, October 2, 1945, pp. 1, 3.

¹⁵Gen. Carl Spaatz, "Air Power in the Atomic Age," Colliers, December 8, 1945, p. 12.

¹⁶Gen. Henry H. Arnold, "Air Force in the Atomic Age," One World or None, pp. 26-32.

¹⁷Maj. Alexander P. de Seversky, "A Lecture on Air Power," AUQR, I (Fall, 1947), 25-42 and (Winter, 1947), 23-40.

¹⁸Interviews with Col. William Travis, USAF, Ret., August 18, 1969 and Col. Taylor Drysdale, USAF, Ret., September 12, 1969. The Air Force base in California is named in honor of Col. Travis and his brother for their performance in World War II.

¹⁹Arnold, "Air Force in the Atomic Age," One World or None, p. 32.

²⁰Ibid.; Second Surplus Rescission Bill, 1946, p. 440.

²¹Army-Navy Journal, November 22, 1947, p. 297.

²²Charles J. V. Murphy, "The Polar Concept: It Is Revolutionizing American Strategy," Life, January 20, 1947. Murphy quoted Gen. Arnold as saying, "If there is a Third World War its strategic center will be the North Pole," p. 61.

²³1949 Appropriations Bill Hearings, p. 5.

²⁴Selective Service Hearings, p. 6153.

²⁵Understandably, air power advocates gave the Finletter Report wide publicity. Air Affairs, magazine of the Air Force Association, reprinted the entire report in its March, 1948, issue and mailed complementary copies to thousands of local and national government officials. The issue provided numerous quotes such as that of the New York Times, "A policy so well thought out, so sanely presented, so well buttressed by straight thinking that it is difficult to see where it can be attacked except in small details."

²⁶Finletter Report, p. 14.

²⁷Ibid., p. 15.

²⁸Newsweek, May 17, 1948, p. 30.

²⁹Ibid., September 20, 1948, January 10, 1949, March 7, 1949; Reader's Digest, LIV (January, 1949), 27.

³⁰Remarks of Sec. of the Air Force Stuart Symington at the Annual Lincoln Day Banquet of the Catholic Club of Norwalk, Connecticut. Reprinted in Unification and Strategy Hearings, pp. 312-13.

³¹Interviews with Cols. Travis and Drysdale. Remark attributed to Gen. LeMay by Gen. Adams in interview.

³²Department of Defense, Second Report of the Secretary of Defense (Washington, 1950), p. 243.

³³Unification and Strategy Hearings, p. 454.

³⁴Ibid., p. 402.

³⁵Second Report of the Secretary of Defense, p. 266.

³⁶Air Force strength levels, 1945-1950:

	<u>70 groups (pro- posed 1945-1950)</u>	<u>55 groups (fiscal 1948)</u>	<u>48 groups (fiscal 1950)</u>
Heavy (B-36) and medium bombers (B-29)	21	13	3 11
Long-range recon., weather, mapping	5	3	6
Day and all- weather fighters	25	24	20
Light bombers	5	3	1
Tactical recon.	4	4	1
Medium cargo	6	5	2
Heavy cargo	4	3	4

A fourth heavy-bomber group was added in mid-1949. Sensitive to the criticism of unbalance, Air Force spokesmen emphasized the tactical character of the Air National Guard; 3 light bomber groups and 24 fighter groups. See 1950 Appropriations Bill Hearings, pp. 131-34.

³⁷Gen. Carl Spaatz, USAF, Ret., "The Era of Air-Power Diplomacy," Newsweek, September 20, 1948, p. 26.

³⁸1950 Military Appropriations Bill Hearings, pp. 37-41.

³⁹"Is the Fighter Obsolete?" Air Force, XXXII (July, 1949), 18-20.

⁴⁰Ned Root, "Who Will Guide the Missiles?" Air Force, XXXII (October, 1949), 15-19.

⁴¹Prior to 1947 the majority of Air Force articles appeared in the Military Review. The establishment of the Air University at Montgomery in 1947 was accompanied by the publication of the Air University Quarterly Review.

⁴²Suora, p. 130.

⁴³Maj. Gen. H. J. Knerr, "If We Should Fight Again," Military Review, XXVII (December, 1947), 25.

⁴⁴Col. W. Barton Leach, "The Bear Has Wings," Air Force, XXX (February, 1947), 17-19; see also Maj. John J. Daunt, "The Balance in Our Armed Forces," AUQR, III (Winter, 1949), 66-69.

⁴⁵Col. Dale O. Smith, "Operational Concepts for Modern War," AUQR, II (Fall, 1948), 3-14.

⁴⁶Col. John H. de Russy, "Selecting Target Systems and Targets," AUQR, I (Spring, 1947), 77-78.

⁴⁷Maj. John J. Driscoll, "The Scope of Air Power," Ordnance, XXXIII (May-June, 1949), 405-07.

⁴⁸Lt. Col. Dickman, AUQR, II (Summer, 1948), 11.

⁴⁹Col. Clifford J. Heflin, "Mobility in the Next War," AUQR, I (Fall, 1947), 64-76; Lt. Col. Frank R. Pancake, "The Strategic Striking Force," AUQR, II (Fall, 1948), 48-56. Lt. Col. Travis Hoover, "Strategic Air Operations and Organization," Military Review, XXVIII (March, 1949), 47-54.

⁵⁰Col. Dale O. Smith, "One-Way Combat," AUQR, II (Spring, 1948), 3-9; for a similar view see Brig. Gen. Julius Lacey, "Editorial," AUQR, II (Summer, 1948), 63-65.

⁵¹Ned Root, "Strike One City," Air Force, XXXIII (March, 1950), 17.

⁵²Col. Thomas E. Moore, "Employment of Strategic Air Power," AUQR, II (Spring, 1948), 64.

⁵³Maj. Gen. Orvil A. Anderson, "Air Warfare and Morality," AUQR, III (Winter, 1949), 11.

⁵⁴Chaplain (Col.) John J. Wood, "The Morality of War," AUQR, IV (Summer, 1950), 31-42.

⁵⁵Maj. Ben L. Parker, "Air Power in a Tactical Role," Military Review, XXVI (August, 1946), 49-53.

⁵⁶Col. R. J. Browne, "TAC vs. STRAT," Military Review, XXVIII (April, 1948), 37.

⁵⁷Lt. Gen. E. R. Quesada, "Tactical Air Power," AUQR, II (Spring, 1948), 44.

⁵⁸Col. Cecil E. Combs, "The Air Offensive in Overall Strategy," AUQR, II (Spring, 1948), 21.

⁵⁹Fritz Morstein Marx, "Formulating the Air Force Program," AUQR, IV (Spring, 1950), 5-16.

⁶⁰Lt. Col. John P. Healy, "Air Power and Foreign Policy," AUQR, II (Fall, 1948), 19.

⁶¹Ibid., p. 20.

⁶²Ibid., p. 23.

⁶³Interview with Col. Drysdale.

⁶⁴Col. Louis E. Coira, "Military Action Prior to Declaration of War," AUQR, I (Winter, 1947), 66.

⁶⁵Col. Matthew K. Deichelmann, "American Security," AUQR, II (Fall, 1948), 67-69.

⁶⁶Col. Dale O. Smith, "Air Power as Peace Power," AUQR, III (Summer, 1949), 8; Smith, ibid., I (Fall, 1947), 5.

⁶⁷"Instituting a War," Time, September 4, 1950, pp. 11-12.

⁶⁸"The Armed Nests," Time, September 11, 1950; Army. Navy, Air Force Journal, September 9, 1950, p. 36; Gen. Carl Spaatz, "Preventive War?" Newsweek, September 11, 1950, p. 26. Gen. Anderson denied that he had openly urged a preventive war. Privately, he was a staunch advocate for the concept. Conversation with Dr. Eugene Emme, December 28, 1969.

⁶⁹Walter Millis, with Harvey C. Mansfield and Harold Stein, Arms and the State (New York, 1958), p. 148.

CHAPTER V

AREAS OF AGREEMENT AND CONFLICT IN THE MILITARY'S THINKING ABOUT FUTURE WARFARE

In the post-World War II period military men shared certain assumptions about their roles. There was universal agreement regarding the importance of strategic intelligence operations and technological advances. Nearly all military men considered modern war total. This belief, instilled by the experience of World Wars I and II, was much more widely held than the contrary view that atomic weapons would make total war obsolete. General agreement existed that materiel rather than men determined war's outcome. Some men challenged J. F. C. Fuller's contention that "weapons were 99% of victory," but the great emphasis on research reflected the military's respect for technology.¹ A consensus acknowledged that control of the air was a prerequisite to successful military operations. Air power, with or without atomic weapons, enjoyed a preeminent position. By 1946 most American military leaders viewed Russia as our probable enemy in a future war. Although Cold War events prompted this attitude, given the military's other assumptions about modern warfare, Russia posed the only serious threat.

These areas of agreement were important in that they constituted a framework upon which the military built postwar plans.

Elements of conflict, however, received the greater attention at the time. The points of contention, both within and between the services, centered on air power: how it would be employed, what degree of effectiveness could be expected, and who would control its various aspects. Air Force enthusiasts envisioned atomic-armed land-based aircraft eliminating the need for other forces within a decade. Army and Navy leaders doubted that technology would move so fast. The latter forecast a role for naval aviation extending into the 1970's. Public officials decried the intense service quarrel. The bitter rivalry diverted attention from America's defense problems and lowered service morale. More importantly, the roles and missions debate failed to enlarge the boundaries of service doctrine. Prior to Korea none of the services seriously challenged the basic assumptions of postwar military thought--total war, technology, and the preeminence of air power. The services, instead, directed their efforts to gaining a major role in the coming war with Russia.

Forces Which Shaped Service Doctrine

Critics have found little to praise in postwar service doctrine. They have attacked the Army and Navy for "pre-atomic" thinking, the Air Force for promoting an inflexible atomic blitz strategy.² While most of the criticism is justifiable, critics have made little effort to explain why service doctrine was faulty. No one has closely examined the important factors that shaped military thinking from 1945 to 1950. Numerous forces influenced service

doctrine, but four were paramount: the effort to assess the meaning of World War II, the problem of estimating the rate of future technological advances, the need to adjust service capabilities to America's new international role, and the concern for domestic political considerations.

Russell Weigley has said of the postwar Army experience:

As the wartime Army shrank to peace strength . . . its reorganization too proceeded less as an attempt to meet new kinds of international perils than as a conventional postwar effort to assimilate the lessons of the war just ended. Even the unification [Act]. . . looked less to present and future dangers than to the experiences of the late war.³

Reorganization was not the only aspect of military life that exhibited a retrospective view. Service periodicals devoted the bulk of their space to World War II campaigns. These articles stimulated much debate, most of which was worthwhile. In similar fashion the service schools devoted much of their time to assimilating World War II's lessons. Contrary to the implication in Weigley's statement, this interest in World War II was not inappropriate. Tied down by numerous duties or isolated in a fighting zone, most officers had been unable to think constructively about service roles during the war. Furthermore, the World War II experience was not immediately obsolete. Most military men agreed that any war begun before 1955 would closely resemble World War II in its style of fighting.

The war's impact on service thinking was a large one. As the House Armed Services Committee noted after the B-36 hearings:

"All advocates of every theory of American security turn back to the experiences of World War II for historical example--for illustration--to prove the soundness of their own arguments."⁴ Unfortunately, the American experiences in World War II were diverse. Few men, for example, had served extensively in both the European and Pacific theaters. The experience in Europe, particularly the success of strategic bombing during the last eighteen months, gave credence to the Air Force faith in atomic air power. For airmen the 1945 B-29 raids on Japan, culminating with Hiroshima and Nagasaki, confirmed the European experience. Navy leaders, however, viewed the B-29 raids as only one aspect of the Pacific campaign, certainly not the major factor in bringing about Japan's defeat. Service leaders, to be sure, used the popularity of World War II campaigns as a means to gain public support for service views and thereby larger appropriations. While acknowledging this propaganda aspect, differing World War II experiences were clearly an important factor in producing the postwar conflict over national strategy.

The difficulty of meshing diverse military experiences appears rather small when compared to another problem the defense establishment faced, estimating the rate and direction of technological change. Three major viewpoints emerged in the debate. One group contended that the next conflict would begin before armies could transform recent technological advances into decisive weapons. World War III, accordingly, would be very much like the past war. A second group, mainly Air Force officers and Naval aviators,

portrayed World War III in radically different terms, requiring complete reliance on air weapons and an air power strategy. A third group thought the next war would be substantially different, but they were unwilling to predict its character. These disagreements reflected similar differences of opinion which existed in the scientific community. Many physicists concurred in Harold Urey's 1945 prediction that several nations would be producing A-bombs by 1950.⁵ Others agreed with J. Robert Oppenheimer's 1948 assessment that the Soviets would not have atomic weapons "for a long time to come."⁶ There were like differences in regard to rockets, jet aircraft, nuclear power plants, and other weapons systems. The B-36 controversy was essentially a technological matter. While service interests expanded the controversy into a general review of national strategy, the basic issue was whether intercontinental prop-driven bombers could penetrate a jet fighter defense. Military men almost invariably adopted a view of technological change favorable to their service. One may, for this reason, question their sincerity or technological understanding. It appears likely, however, that service leaders adopted a technological viewpoint because it fit in with their past experience as well as rationalized their present interests. Thus, in the B-36 controversy, Air Force advocates honestly believed in their bomber's capability while Navy leaders entertained equally sincere doubts.

The secrecy surrounding American atom bomb production was responsible for much of the conflict concerning an appropriate

strategy. In the five years after Hiroshima, only a small group of men (fifteen-twenty) was privy to this knowledge. The extreme secrecy was caused by the disappointingly low rate of bomb production from 1946 to 1948 and by the concern that Russian knowledge of our limited supply would reduce its deterrent effect.⁷ As late as 1950 the American A-bomb stockpile apparently numbered about 250; the scarcity contributed to the decision not to employ the Bomb in Korea.⁸ While the secrecy was appropriate, it impeded meaningful public debate over national strategy. As Representative Vinson noted during the B-36 hearings, Congress found it difficult to judge national strategy when its members did not know the size of America's atomic stockpile. This lack of information hampered unofficial military thinking (outside the JCoFS strategic planning) and heightened the disagreement over the validity of a strategic bombing policy.

Military planning was further complicated by the need to coordinate force levels with America's new international role. Dean Acheson has described the State Department's efforts to create a new order.⁹ Military men played an active role in shaping our postwar foreign policy; by previous standards the extent of their participation was revolutionary. The military warmly approved the Truman administration's initial moves to contain Russian expansionism. The programs to rebuild Europe economically and militarily were supported, even though it meant reduced service budgets. Service leaders frequently expressed their concern that foreign policy and defense capabilities should be closely integrated.

Despite the military's extensive participation, and general good will toward Truman's foreign policy, the period was marked by ineffective coordination between the defense establishment and the foreign policy making agencies. Service leaders complained on several occasions of lack of guidance regarding national policy.¹⁰ The Eberstadt Report (Hoover Commission) on National Security Organization was "particularly concerned by the inadequate liaison that still exists between foreign policy and national military power."¹¹ The Report concluded that rather than national policy determining service roles, "to far too great an extent, the unilateral aims and policies of the military services are combining to make the strategy they are supposed to serve, and the strategy is tending to make the national policy."¹² With hindsight one can see that service aims did not dictate national policy. The 1947-1950 strategy of an atomic blitz against Russia was not solely a result of the Air Force's faith in Douhet principles. The Eberstadt Committee's criticism, however, was basically sound. Prior to Secretary Johnson's cancellation of the supercarrier in April, 1949, the accepted practice apparently was to divide the military budget in thirds and let each service purchase what it wanted. The confusion of the unification controversy and the difficulty of implementing the National Security Act's machinery (National Security Council, Office of Secretary of Defense) help explain the failure to coordinate defense and foreign policy. One result was to increase the importance of each service's effort to delineate a role. A second result was to

intensify service conflict within the domestic political sphere as each service attempted to popularize its missions.

During the postwar period domestic politics exerted a detrimental influence on service planning. From September 1945 until late 1949 (after Russia's first atomic explosion) the three services devoted almost as much attention to the unification struggle as they did to national defense. Few military leaders expected a war with Russia while we enjoyed an atomic monopoly, a situation that would likely last ten to twenty years. This estimate was shared by a majority of public officials in the State Department. Although war was unlikely, the interservice rivalry was a present reality. Army and Navy leaders, in particular, faced a serious challenge to service prestige and power. In 1948 and 1949 Congress passed measures supporting a seventy group Air Force and an unbalanced defense program. Only the opposition of President Truman and Secretary Forrestal prevented the Air Force domination that was to characterize later Eisenhower administrations. The unification controversy focused attention on service roles and missions, but this benefit was more than offset by the misdirection of service time and energy. More significantly the three services shaped their doctrine to please a Congress intent on an atomic blitz strategy, and thereby contributed to an inflexible defense posture.

A second aspect of the domestic political process was largely responsible for the inadequacy of American military forces in June, 1950. Throughout the period the Truman administration

insisted that military budgets fall within a range of \$13-\$15 billion. The figure was determined by giving the defense establishment roughly one-third of the tax revenues. A few men, notably Secretary Forrestal, opposed the low budget, but most of the military accepted this formula for determining the defense appropriation. Some leaders, in fact, gave strong support to Truman's fiscal restraint. Bradley frequently stated that a sound economy was the most important element in our defense.¹³ Military spokesmen warned that Russia's strategy was to defeat us by forcing large defense budgets and eventual economic collapse. When considering our military budget, service spokesmen frequently compared it with our pre-World War II expenditures rather than our postwar responsibilities. The influence of the Depression was still plainly evident.¹⁴

Given the budget limitation and current responsibilities (occupation duties and the Berlin Airlift, for example), the services were unable to anticipate or undertake a number of missions. Forced to reduce strength levels, they cut back capabilities that appeared of little use against Russia. Thus, the Navy sharply reduced its mine-sweeping capability, a decision it was to regret at Wonsan in 1950. Potential roles such as antiguerrilla warfare received little attention.

Service Views of Their Roles--A Summary

The forces impinging upon military thinking, quite naturally, brought forth a different response from each of the three

services. The conditions of the postwar world seemed least congenial to the Army. Service leaders came out of the war impressed by two facts: preparedness was essential if we were to avoid another holocaust; and once begun, modern war placed enormous requirements on a nation's economy and manpower. America's future defense needs could best be met through a program of Universal Military Training and detailed mobilization planning. Despite the Army's strenuous efforts to popularize UMT, the public remained unconvinced of the need for a large ground force. The program seemed to run counter to the direction of technological change. The widely held view of Russia as our only likely enemy was an additional handicap. General Eisenhower expressed the public mood in 1948 when he stated that America should avoid employing large ground forces against the Red Army. National strategy in the late 1940's relegated the Army to a secondary position. Her role was chiefly one of securing strategic air bases and preventing Russia from using intermediate areas (e.g., Greenland) for air bases. Low morale and a general uncertainty about future roles evidenced the Army's concern about its declining importance. Two developments in 1949, however, were to improve the Army's position considerably. Russia's early development of an atomic bomb increased the likelihood of limited wars. Our progress toward a tactical atomic weapon offered Army leaders the means to combat mass armies without deploying vast numbers of American men.

Naval leaders emerged from World War II firmly convinced of the need for flexible defense forces and mobile (naval) air

power. Looking back over twenty-five years, the Navy position appears to have been the most appropriate for the postwar period. Navy leaders, unfortunately, could not convince the public of their doctrine's merit. During the late 1940's they found it expedient to depart somewhat from their original views.

The belief that Russia was our only possible enemy posed the most serious threat to Navy roles. As critics of the Navy quickly pointed out, Russia had no surface fleet, could not be blockaded, and could not be attacked by present carrier aircraft. The only Russian threat lay in her submarines. The American Navy, therefore, should concentrate on antisubmarine warfare and reduce its other forces. Navy leaders, rather than postulate other enemies, attempted to establish roles for a war with Russia. Their contingencies were plausible, for example, they assumed a requirement for operations in the Mediterranean and Persian Gulf following a Russian invasion of the Middle East. These efforts had little influence on national strategy prior to Korea.

A number of critics thought the recent technological developments would eliminate the surface navy. Service leaders responded in several ways. At the tactical level the Navy attempted to make ships more resistant to atomic blast. Fleet patterns were altered to secure more dispersion. In the domestic political debate, Navy leaders sided with the scientists who considered atomic warfare at least twenty years distant. At the strategic level the Navy made a concerted effort to gain part of the strategic bombing role.

The effort was undertaken out of a fear that, without such a role, the Navy would soon be relegated to a secondary position. Concentration on a suitable weapons system, i.e., the supercarrier, forced the Navy to temporarily abandon its belief in a balanced force. Cancellation of the carrier prototype cast Navy leaders into a gloom which did not lift until Korea.

For Air Force leaders World War II had demonstrated the correctness of Douhet's principles. Strategic bombing, made possible through control of the air, would prove decisive in future wars. The appearance of Russia as America's likely enemy strengthened the Air Force position. Immune to naval blockade and possessing a formidable army, Russia could only be defeated by strategic air power. Atomic weapons and the long-range bomber made this a relatively easy task. Although some critics questioned the ability of prop-driven bombers to penetrate jet defenses, Air Force leaders had no doubts. The A-bomb's tremendous destruction would permit bombers to attack from as high as 40,000 feet. The critics' morality charge was tacit admission that area bombing was technically sound. The Air Force's chief problem lay in the domestic political arena where she was forced to compete for appropriations against entrenched bureaus. Despite the popularity of their doctrine, Air Force leaders could not secure a major portion of the military budget. Unable to fund a seventy group force, service leaders reduced the strength levels of escort fighters and tactical air support--roles which Air Force doctrine was minimizing anyway.

An Evaluation of the Military's Examination
of Service Roles

The five years after World War II witnessed a serious effort on the part of the American military to keep abreast of rapidly changing conditions. The National War College, the Industrial College of the Armed Forces, the Armed Forces Staff College, and the Air University were established. The Naval War College revamped its program to focus more attention on national strategy and service roles. A number of planning boards were established by each service, dealing with technology, organization, or missions.¹⁵ Weapons development proceeded in numerous fields; atomic weapons, missiles, aviation (helicopters as well as aircraft), nuclear submarines, advanced aircraft carriers, chemical, and biological warfare were among the most important. With each weapons system, consideration was given to its employment and impact on service doctrine. This heightened concern about future service roles is evident in the service periodicals, as one can readily see by comparing postwar with prewar issues.

The discussion of service roles, at least in the military journals, was conducted freely and unfettered. Numerous points of view appeared, including occasional dissent from prevailing service opinion. A couple of the best articles in the Air University Quarterly Review were critical of the priority given to the Strategic Air Command. The Military Review (Fort Leavenworth) published articles advocating the elimination of nearly all ground forces.¹⁶

Two conditions, however, did limit meaningful debate. One was the secrecy surrounding certain technological developments, particularly the A-bomb. The second was the Defense Establishment's efforts to discourage interservice conflict. When Air Force Brigadier General Frank A. Armstrong, Jr. made some disparaging remarks about future Navy roles at a Norfolk social gathering, his conduct was investigated.¹⁷ While Armstrong escaped a reprimand, Admiral Gallery was not so fortunate in his efforts to undercut the Air Force.¹⁸ The so-called "revolt of the admirals" was climaxed by Admiral Denfeld's dismissal as Chief of Naval Operations. The civilian leadership of the defense establishment had little success controlling the interservice conflict, but they did, on occasion, make comment costly.

Given the bitterness of the quarrel over service roles, it is understandable that the integrity of a specific position was sometimes questioned. Thus after the B-36 hearings, Hanson Baldwin noted: "Some of the Navy's interest in morality as applied to strategic bombing seems new-found."¹⁹ Retired officers have expressed doubt concerning the honesty of certain viewpoints--for example, the Air Force's belief in the efficacy of strategic bombing or the Army's optimistic outlook in regard to airborne operations. These feelings reflect the fact that service spokesmen frequently overstated their case. Most public statements, however, accurately portrayed personal belief.

The military's examination of its role was rendered less effective by certain presuppositions that were not discarded until

the Korean Conflict. The most significant was the belief that a large military budget could wreck our economy. A second one concerned the military's view of the international scene. Throughout this period the officer corps focused on Russia as the only serious threat to United States interests. This outlook was a natural reaction to postwar Soviet expansionism. The concentration on Russia also reflected the prevailing American belief that military power was a consequence of industrial might. Few service leaders in these years thought nonindustrial nations could pose a serious challenge to American forces. Articles in military journals revealed a low opinion of the Chinese armies. Practically no attention was paid to our small Korean commitment or to guerrilla operations in Southeast Asia. In contrast, British military men were among the most perceptive in anticipating "wars of liberation."²⁰ Although Britain's broad colonial interests help explain this prevision, Americans enjoyed sufficient opportunities to gain similar insights. American military thought was rendered inflexible by the certainty of its belief that Russian ground and air forces posed the only threat to our security.

NOTES

¹Fuller, Army Ordinance, XXXI (January-February, 1946), 34. See Fuller's Armament and History for a fuller development of the thesis that materiel determined the outcome of 20th century wars.

²For example see Timothy W. Stanley, American Defense and National Security (Washington, 1956), p. 74; S. Arthur Devan, Planning National Defense 1950-1970, Public Affairs Bulletin No. 75 (September, 1949) (Washington, 1949), pp. 42-60.

³Weigley, History of the United States Army, p. 487.

⁴House Document 600, "Unification and Strategy," p. 4.

⁵Supra, p. 4.

⁶Philip M. Stern, The Oppenheimer Case: Security on Trial (New York, 1969), p. 113. It is interesting to note that in 1945 Oppenheimer also believed that within a few years several other nations would have atomic weapons. Stern's book provides a lengthy section on the H-bomb debate (1949-1952) including military views about the "super-bomb," pp. 133-98.

⁷Interview with Col. Drysdale. As the Air Force representative on Vannevar Bush's Joint Research and Development Board, Drysdale was one of the select few who knew the size of our A-bomb stockpile in 1949.

⁸"Atomic Energy: The Technical Facts," The New Republic, April 3, 1950, p. 14. This figure was derived by striking a mean between published estimates in Business Week and in the Armed Forces Chemical Journal and from rough calculations with public data on atomic production facilities. Gen. Caraway, in an interview, remarked that a few of his associates arrived at similar estimates through their own calculations. Col. Drysdale, in an interview, said these estimates were reasonably close to the actual figure. The New Republic noted, however, that this information "was unknown to many public officials who frame policy." See also Brodie, Guide to Naval Strategy, p. 227.

⁹Dean Acheson, Present at the Creation (Washington, 1969), passim.

¹⁰Supra, p. 19.

¹¹The Committee on the National Security Organization, National Security Organization prepared for The Commission on Organization of the Executive Branch of the Government (Washington, 1949), p. 4.

¹²Ibid., p. 38.

¹³Army-Navy Journal, July 2, 1949, pp. 1266-267 provides the full text of a speech given by General Bradley at Fort Leavenworth July 1, 1949 in which he conveys such ideas.

¹⁴A number of retired officers have stated in interviews that they opposed the period's tight budgets, particularly after Louis Johnson became Secretary of Defense. All the evidence in print, however, reflects the opposite attitude.

¹⁵Supra, pp. 33-34 for a brief discussion on Army planning agencies.

¹⁶Supra, p. 64, pp. 142-43.

¹⁷Senate, Committee on Armed Services, Hearings Unification of Armed Forces, 80th Cong., 1st Sess., 1947, p. 641.

¹⁸Supra, pp. 91-93, 117.

¹⁹Time, October 17, 1949, p. 23.

²⁰Liddell Hart's views on the likelihood of limited wars have been described on page 13. See also Lt. Gen. Sir Gifford Martel, "The Trend of Future Warfare," Journal of Royal United Service Institute, August, 1947, reprinted in the AUOR, I (Winter, 1947), 86-93.

BIBLIOGRAPHY

U. S. Public Documents

Congressional Hearings

- House, Select Committee on Post-War Military Policy. Proposal to Establish a Single Department of Armed Forces. 78th Cong., 2nd Sess., 1944.
- House, Committee on Military Affairs. Hearings, Universal Military Training. 79th Cong., 1st Sess., 1945.
- House, Subcommittee on Appropriations. Hearings, First Surplus Appropriation Rescission Bill, 1946. 79th Cong., 1st Sess., 1945.
- House, Committee on Naval Affairs. Hearings, Post-War Navy. 79th Cong., 1st Sess., 1945.
- Senate, Committee on Military Affairs. Hearings on Unification. 79th Cong., 1st Sess., 1945.
- Senate, Special Committee on Atomic Energy. Atomic Energy Hearings. 79th Cong., 1st Sess., 1945.
- House, Subcommittee on Appropriations. Hearings, Second Surplus Appropriation Rescission Bill, 1946. 79th Cong., 2nd Sess., 1946.
- House, Subcommittee on Appropriations. Hearings on Military Establishment Appropriations Bill for 1947. 79th Cong., 2nd Sess., 1946.
- Senate, Committee on Naval Affairs. Hearings, Post-War Navy. 79th Cong., 2nd Sess., 1946.
- House, Subcommittee on Appropriations. Hearings on Military Establishment Appropriations Bill for 1948. 80th Cong., 1st Sess., 1947.
- Senate, Committee on Armed Services. Hearings on National Defense Establishment Unification of Armed Forces. 80th Cong., 1st Sess., 1947.

- House, Committee on Expenditures in the Executive Departments. Hearings, National Security Act of 1947. 80th Cong., 1st Sess., 1947.
- House, Committee on Armed Forces. Hearings, Selective Service. 80th Cong., 2nd Sess., 1948.
- House, Subcommittee on Appropriations. Hearings on Military Establishment Appropriations Bill for 1949. 80th Cong., 2nd Sess., 1948.
- House, Subcommittee on Appropriations. Hearings on Department of Navy Appropriation Bill for 1949. 80th Cong., 2nd Sess., 1948.
- Senate, Committee on Armed Services. Hearings, Universal Military Training. 80th Cong., 2nd Sess., 1948.
- House, Subcommittee on Appropriations. Hearings on Military Establishment Appropriations Bill for 1950. 81st Cong., 1st Sess., 1949.
- House, Subcommittee on Appropriations. Hearings on Department of Navy Appropriation Bill for 1950. 81st Cong., 1st Sess., 1949.
- House, Committee on Armed Services. Hearings, The National Defense Program--Unification and Strategy. 81st Cong., 1st Sess., 1949.
- House Document 600. Unification and Strategy. 81st Cong., 2nd Sess., March 1, 1950.

Government Reports

- Marshall, George C. General Marshall's Report: The Winning of the War in Europe and the Pacific. New York: Simon and Schuster, 1945.
- The United States Strategic Bombing Survey. Over-All Report, European War. Washington: USGPO, 1945.
- King, Ernest J. U. S. Navy at War 1941-1945, Official Reports to the Secretary of the Navy by Fleet Admiral Ernest J. King. Washington: U. S. Navy Department, 1946.
- The United States Strategic Bombing Survey. The Effects of Atomic Bombs on Hiroshima and Nagasaki. Washington: USGPO, 1946.

The United States Strategic Bombing Survey. Summary Report, Pacific War. Washington: USGPO, 1946.

Brodie, Bernard and Galloway, Eilene. The Atom Bomb and the Armed Forces, Legislative Reference Bulletin No. 55, May, 1947. Washington: The Library of Congress, 1947.

President's Advisory Commission on Universal Training. A Program for National Security. Washington: USGPO, 1947.

Office of the Chief of Naval Operations. U. S. Naval Aviation in the Pacific. Washington: USGPO, 1947.

President's Air Policy Commission. Survival in the Air Age. Washington: USGPO, 1948.

Eisenhower, Dwight D. Final Report of the Chief of Staff United States Army to the Secretary of the Army. Washington: USGPO, 1948.

The Committee on the National Security Organization. National Security Organization prepared for The Commission on Organization of the Executive Branch of the Government, January, 1949. Washington: USGPO, 1949.

Department of Defense. First Report of the Secretary of Defense. Washington: USGPO, 1949.

Devan, S. Arthur. Planning National Defense 1950-1970, Public Affairs Bulletin No. 75, September, 1949. Washington: The Library of Congress, 1949.

Department of Defense. Second Report of the Secretary of Defense. Washington: USGPO, 1950.

Other Government Sources

Army Command and General Staff College Lesson Plans, 1947-1950. Available at C&GS College, Fort Leavenworth, Kansas, and Military History Research Collection, Carlisle Barracks, Pennsylvania.

Congressional Record. Vol. XCI (79th Cong., 1st Sess.)-XCV (81st Cong., 1st Sess.).

The Federal Register. Vol. XII (1947).

- National Military Establishment. "Minutes of Joint Orientation Conference," November, 1948. Available at Army War College Library, Carlisle Barracks, Pennsylvania.
- Naval War College Term Papers, 1945-1950. Available at Naval War College, Newport, Rhode Island.
- War Department Circular 119, 1946.

Books

- Acheson, Dean. Present at the Creation: My Years in the State Department. Washington: W. W. Norton & Co., 1969.
- Baldwin, Hanson. The Price of Power. New York: Harper & Brothers, 1947.
- Bechhoefer, Bernhard G. Postwar Negotiations for Arms Control. Washington: Brookings Institute, 1961.
- Blackett, P. M. S. Military and Political Consequences of Atomic Energy. London: Turnstile Press, 1948.
- Borden, William L. There Will Be No Time: The Revolution in Strategy. New York: The Macmillan Company, 1946.
- Brodie, Bernard. A Guide to Naval Strategy. 5th ed. revised. New York: Frederick A. Praeger, 1965.
- Brodie, Bernard et al. The Absolute Weapon: Atomic Power and World Order. New York: Harcourt, Brace and Co., 1946.
- Brown, Harrison. Must Destruction Be Our Destiny? New York: Simon and Schuster, 1946.
- Bush, Vannevar. Modern Arms and Free Men: A Discussion of the Role of Science in Preserving Democracy. New York: Simon and Schuster, 1949.
- Caralay, Demetrios. The Politics of Military Unification: A Study of Conflict and the Policy Process. New York: Columbia University Press, 1966.
- Coale, Ansley J. The Problem of Reducing Vulnerability to A-Bombs. Princeton: Princeton University Press, 1947.

- Davis, Vincent. Postwar Defense Policy and the U. S. Navy, 1943-1946. Chapel Hill: The University of North Carolina Press, 1966.
- Earle, Edward M. (ed.) Makers of Modern Strategy: Military Thought from Machiavelli to Hitler. Princeton: Princeton University Press, 1943.
- Eliot, George F. The Strength We Need: A Military Program for America Pending Peace. New York: The Viking Press, 1946.
- Emme, Eugene M. (ed.) The Impact of Air Power. New York: D. Van Nostrand Co., Inc., 1959.
- Fuller, J. F. C. Armament and History. London: Eyre & Spottiswood, 1946.
- Gilpin, Robert. American Scientists and Nuclear Weapons Policy. Princeton: Princeton University Press, 1962.
- Hammond, Paul Y. Organizing for Defense: The American Military Establishment in the Twentieth Century. Princeton: Princeton University Press, 1961.
- Heinl, Robert. Soldiers of the Sea: The United States Marine Corps, 1775-1962. Annapolis: United States Naval Institute, 1962.
- Hessler, William H. Operation Survival: America's New Role in World Affairs. New York: Prentice-Hall, 1949.
- Huntington, Samuel. (ed.) Changing Patterns of Military Politics. New York: The Free Press of Glencoe, Inc., 1962.
- _____. The Common Defense: Strategic Programs in National Defense. New York: Columbia University Press, 1961.
- Lapp, Ralph E. Must We Hide? Cambridge: Addison-Wesley Press, 1949.
- Legere, Lawrence J., Jr. "Unification of the Armed Forces," Ph.D. dissertation, Department of Political Science, Harvard University, 1950.
- Masters, Dexter and Way, Katherine. (eds.) One World or None: A Report to the Public on the Full Meaning of the Atomic Bomb. New York: McGraw-Hill Book Co., Inc., 1946.
- Millis, Walter. (ed.) American Military Thought. New York: Bobbs-Merrill Co., 1966.

- _____. (ed.) with the collaboration of E. S. Duffield. The Forrestal Diaries. New York: The Viking Press, 1951.
- _____, Mansfield, Harvey C. and Stein, Harold. Arms and the State: Civil-Military Elements in National Policy. New York: The Twentieth Century Fund, 1958.
- Possony, Stefan T. Strategic Air Power: The Pattern of Dynamic Security. Washington: The Infantry Journal Press, 1949.
- Public Reaction to the Atomic Bomb and World Affairs. Ithaca: Cornell University, 1947.
- Stanley, Timothy W. American Defense and National Security. Washington: Public Affairs Press, 1956.
- Schilling, Warner R., Hammond, Paul Y., and Snyder, Glenn H. Strategy, Politics, and Defense Budgets. New York: Columbia University Press, 1962.
- Stein, Harold. (ed.) American Civil-Military Decisions. Birmingham: University of Alabama Press, 1963.
- Stern, Philip. The Oppenheimer Case: Security on Trial. New York: Harper & Row, 1969.
- Smyth, Henry De Wolf. Atomic Energy for Military Purposes. Princeton: Princeton University Press, 1945.
- Swomley, John M., Jr. The Military Establishment. Boston: Beacon Press, 1964.
- Taylor, Theodore. The Magnificent Mitscher. New York: W. W. Norton & Co., Inc., 1954.
- Weigley, Russell. History of the United States Army. New York: The Macmillan Company, 1967.
- _____. Towards an American Army: Military Thought from Washington to Marshall. New York: Columbia University Press, 1962.

Articles and Periodicals

- Adams, Paul D. "Land Defense against Airborne Attacks," Military Review. XXIX (September, 1949), 27-33.

Air Affairs. 1945-1947.

Air Force. 1946-1950.

American Mercury. 1946-1949.

Anderson, Orvil A. "Air Warfare and Morality," AUOR, III (Winter, 1949), 5-14.

_____. "Teaching the Dynamics of Decisive Air Power," The Pegasus, XI (June, 1948), 8-11.

Anderson, Roy L. "The Marine Corps and the Helicopter," Marine Corps Gazette, XXXIII (August, 1949), 13-15.

Armstrong, D. "Is War Primarily a Matter of Weapons?" Infantry Journal, LVIII (December, 1945), 53-55.

Army Information Digest. 1946-1950.

Army-Navy Journal. 1945-1950. Became the Army, Navy, Air Force Journal in 1950.

Army Ordnance. 1946-1947.

"Atomic Energy: The Technical Facts," The New Republic, April 3, 1950, pp. 12-16.

Aurand, Henry S. "Army's Research Program," Bulletin of Atomic Scientists, I (November, 1946), 10.

_____. "Industry and the New Weapons," Army Ordnance, XXXI (January-February, 1947), 330-31.

Baldwin, Hanson. "A-Bomb Calls for Re-study of All Our Plans for Defense," Reader's Digest, XLVII (October, 1945), 8-12.

_____. "The Myth of Security," Foreign Affairs, XXVI (January, 1948), 253-63.

_____. "Wanted an American Military Policy," Harper's, CXCII (May, 1946), 403-13.

_____. "What Kind of War," Atlantic Monthly, CLXXXIV (July, 1949), 22-27.

_____. "Strategy for Two Atomic Worlds," Foreign Affairs, XXVIII (April, 1950), 386-98.

- Betts, A. W. "Nuclear Weapons," Military Engineer, XLI (March-April, 1949), 104-07.
- Blandy, W. H. P. "The Atom Bomb--Sea Forces," Air Affairs, I (March, 1947), 359-66.
- _____. "The Navy in the Atomic Age," The Pegasus, XI (January, 1948), 16.
- Bolte, Charles L. "The Role of Land Forces in Future Warfare," USNIP, LXXV (January, 1949), 21-31.
- Bond, Horatio. "Military and Civilian Confusion about Civil Defense," Bulletin of Atomic Scientists, IV (November, 1949), 295-97.
- Box, Clyde. "Personnel Mobilization in World War III," AUQR, III (Summer, 1949), 15-28.
- Bradley, Omar. "Address Given at the Command and General Staff College," Army Information Digest, IV (August, 1949), 59-61.
- _____. "Creating a Sound Military Force," Military Review, XXIX (May, 1949), 3-6.
- _____. "One Round Won't Win the Fight," Army Information Digest, IV (April, 1949), 31-35.
- Brodie, Bernard. "The Atom Bomb as Policy Maker," Foreign Affairs, XXVII (October, 1948), 17-33.
- Brown, Charles R. "American National Strategy," USNIP, LXXVI (April, 1950), 355-63.
- Brown, John N. "Amphibious Warfare and the Atom Bomb," Marine Corps Gazette, XXXI (September, 1947), 58-59.
- Browne, R. J. "TAC vs. STRAT," Military Review, XXVIII (April, 1948), 33-37.
- Browning, Miles R. "Tomorrow's Submarine," Military Review, XXVIII (September, 1948), 25-32.
- Bunker, William B. "Guarding the Home Front," U. S. Army Combat Forces Journal, V (March, 1955), 33-38.
- Carney, Robert B. "The Foundations of Future Navy Planning," U. S. Naval War College Information Service for Officers, I (October, 1948), 4-12.

- Carter, William R. "Industrial Mobilization Planning," AUQR, III (Winter, 1949), 36-48.
- Coira, Louis E. "Military Action Prior to Declaration of War," AUQR, I (Winter, 1947), 66-78.
- Collins, J. Lawton. "The Extension of Selective Service," Vital Speeches, February 15, 1950, pp. 284-85.
- _____. "The Nature of Modern War," Military Review, XXVIII (November, 1948), 3-7.
- Combs, Cecil E. "The Air Offensive in Overall Strategy," AUQR, II (Spring, 1948), 14-24.
- Compton, A. H. "Atomic Power in War and Peace," Saturday Review of Literature, October 27, 1945, pp. 18-19.
- Condon, E. U. "Atomic Energy and the Future, Will the Next Conflict Be 'The War of Pushbuttons'?" Army Ordnance, XXIX (November-December, 1945), 393-95.
- Cousins, Norman. "Modern Man Is Obsolete," Saturday Review of Literature, August 18, 1945, pp. 5-9.
- Cramer, Kenneth F. "The National Guard in the Post-War Military Establishment," Military Review, XXVIII (June, 1948), 3-9.
- Cranwell, John P. "Sea Power and the A-bomb," USNIP, LXXII (October, 1946), 1267-76.
- Cushman, Robert E. "Amphibious Warfare: Naval Weapon of the Future," USNIP, LXXIV (March, 1948), 301-09.
- _____. "Defense against Airborne Attack," Marine Corps Gazette, XXX (December, 1946), 37-41.
- _____. "Where Do We Go from Here?" Marine Corps Gazette, XXXII (May, 1948), 10-14.
- Daunt, John J. "The Balance in Our Armed Forces," AUQR, III (Winter, 1949), 66-69.
- Deichelmann, Matthew K. "American Security," AUQR, II (Fall, 1948), 67-69.
- Del Valle, Pedro A. "Strategic Study of the Atlantic Theater," Marine Corps Gazette, XXXI (November, 1947), 10-14.

- _____. "Tactical Possibilities of Airborne Attack," Marine Corps Gazette, XXXI (December, 1947), 22-25.
- Denfeld, Louis E. "A Force for Peace," Ordnance, XXXIII (March-April, 1949), 318-19.
- _____. "To Destroy the Enemy," Army Information Digest, IV (August, 1949), 3-6.
- De Seversky, Alexander. "Atomic Bomb Hysteria," Reader's Digest, XLVIII (February, 1946), 121-26.
- _____. "A Lecture on Air Power," AUQR, I (Fall, 1947), 25-42; I (Winter, 1947), 23-40.
- Devers, Jacob. "Air Transportability of the Infantry Division," Infantry Journal, LXI (September, 1947), 26-28.
- _____. "Airtransportability of the Infantry Division," Military Review, XXIX (April, 1949), 14-18.
- _____. "Telling the Army's Story," Army Information Digest, I (June, 1946), 3-6.
- Dickman, Joseph L. "Douhet and the Future," AUQR, II (Summer, 1948), 3-15.
- Drake, Francis V. "Let's Be Realistic about the Atom Bomb," Reader's Digest, XLVII (December, 1945), 108-12.
- Driscoll, John J. "The Scope of Air Power," Ordnance, XXXIII (May-June, 1949), 405-07.
- Dupre, M. M., Jr. "Toward Total Security," USNIP, LXXII (October, 1946), 1289-98.
- Earle, Edward M. "The Influence of Air Power upon History," The Yale Review, XXXV (Summer, 1946), 577-93.
- Eddy, Manton. "Defensive and Offensive Phases of Future War," Army Information Digest, IV (September, 1949), 63-64.
- Eisenhower, Dwight D. "The American Army's Role," Vital Speeches, December 1, 1946, pp. 127-28.
- Eller, Ernest M. "Sea Power and Peace," USNIP, LXXIII (October, 1947), 1161-73.
- _____. "Will We Need a Navy to Win?" USNIP, LXXVI (March, 1950), 237-47.

- Fairchild, Muir S. "Thinking and Planning for the Future," The Pegasus, XI (June, 1948), 1-3.
- Falls, Cyril. "Communist Campaigns against Greece," Military Review, XXIX (May, 1949), 77-80.
- _____. "Military Theories in the U. S.," Military Review, XXIX (April, 1949), 93-95.
- Fuller, J. F. C. "The Age of Annihilation: The Atom Bomb and Warfare of the Future," Army Ordnance, XXX (January-February, 1946), 34-39.
- Gavin, James M. "Airborne Army's First Test," Infantry Journal, LXIII (January, 1948), 22-30.
- _____. "Airborne Armies of the Future," Infantry Journal, LIX (December, 1946), 18-26; LX (January, 1947), 21-22.
- _____. "The Future of Airborne Operations," Military Review, XXVII (December, 1947), 3-8.
- _____. "The Future of Armor," Infantry Journal, LXII (January, 1948), 7-11.
- _____. "The Tactical Use of the Atomic Bomb," U. S. Army Combat Forces Journal, I (November, 1950), 9-11.
- Glantzberg, Frederick E. "The New Air Force and Science," AUQR, I (Spring, 1947), 3-16.
- Goshorn, J. A. "Should We Go Underground?" Military Review, XXIX (May, 1949), 33-43.
- Gray, Gordon. "The Army's Role in Maintaining the Nation's Defense," Armored-Cavalry Journal, LIIII (September-October, 1949), 8-9.
- _____. "Budgeting Our Army's Strength," Army Information Digest, IV (December, 1949), 3-6.
- Griffith, Sam B. "Guerrilla," Marine Corps Gazette, XXXIV (July, 1950), 43-50; XXXIV (August, 1950), 36-45.
- Gross, William M. "Ground Support: Jet Era," The Pegasus, XV (March, 1950), 8-11.
- Hamilton, J. E. "The National Military Establishment and Dollars," USNIP, LXXV (November, 1949), 1217-27.

- Hart, B. H. Liddell. "War Limited," Harper's, CXCII (March, 1946), 193-203.
- Healy, John P. "Air Power and Foreign Policy," AUQR, II (Fall, 1948), 15-26.
- Heflin, Clifford J. "Mobility in the Next War," AUQR, I (Fall, 1947), 64-76.
- Heinl, Robert D. "Small Wars--Vanishing Art?" Marine Corps Gazette, XXXIV (April, 1950), 22-25.
- Helmick, P. F. "Our Search for Guided Missiles," Air Force, XXXI (January, 1948), 26-27, 46.
- Henderson, Frederick P. "Concerning 'Target Eurasia,'" Marine Corps Gazette, XXXII (March, 1948), 8-13.
- _____. "The VT Fuze vs. Amphibious Operations," Marine Corps Gazette, XXXI (May, 1947), 50-56.
- Hessler, William H. "Geography, Technology, and Military Policy," USNIP, LXXIII (April, 1947), 379-89.
- Hittle, James D. "Sea Power and the Balanced Fleet," Marine Corps Gazette, XXXII (February, 1948), 52-59.
- Hodgson, Richard S. "The Atom Bomb Comes into Focus," Marine Corps Gazette, XXX (October, 1946), 22-24.
- Homer, J. L. "Guided Missiles and Future Warfare," Military Review, XXVII (November, 1947), 13-20.
- Hoover, Travis. "Strategic Air Operations and Organization," Military Review, XXVIII (March, 1949), 47-54.
- Huber, Bud. "Cold Facts about a Cold Country," Air Force, XXX (April, 1947), 30-33.
- Hudson, John S. "Keeping up with Amphibious Warfare," Marine Corps Gazette, XXX (December, 1946), 21-26.
- Huie, William Brasford. "Why We Must Have the World's Best Air Force," Reader's Digest, LIV (March, 1949), 27-34.
- Infantry Journal. 1945-1950.
- Johnson, Felix. "The Navy in World Affairs," The Pegasus, XI (January, 1948), 1-2.

- Johnson, Melvin M. "Choose Your Weapons, America: Atomic Warfare Demands Balanced Forces," Army Ordnance, XXXI (July-August, 1946), 42-44.
- Johnson, Robert W. "Dig, Son, Dig," Army Ordnance, XXXI (January-February, 1947), 347-49.
- Kamp, A. M., Jr. "Task Force Frost," Army Ordnance, XXXI (May-June, 1947), 507-08.
- Kenney, George G. "The Long-Range Arm of the Air Force," The Pegasus, XI (May, 1948), 3-5.
- _____. "Strategic Air Command," Military Review, XXVII (August, 1947), 3-7.
- Kepner, William E. "The Atom Bomb--Air Forces," Air Affairs, I (March, 1946), 367-69.
- Kintner, William R. "The Effectiveness of Psychological Warfare," Marine Corps Gazette, XXXII (January, 1948), 48-51.
- _____. "Political Limitations of Air Power," USNIP, LXXVI (March, 1950), 249-55.
- _____. "Spending for Defense," Ordnance, XXXIII (July-August, 1948), 30-32.
- _____. "A Survey of Air Power," Military Review, XXIX (April, 1949), 29-35.
- _____. "Team of Decision," Infantry Journal, LXII (March, 1948), 15-20.
- _____. "Where Is Our Tactical Air Power?" Infantry Journal, LXV (August, 1949), 22-24.
- Knerr, H. J. "If We Should Fight Again," Military Review, XXVII (December, 1947), 23-26.
- Knox, Dudley W. "Naval Campaign of the Future," Marine Corps Gazette, XXXIV (July, 1950), 14-17.
- Kuhn, William A. "The Concept of Airborne Forces," Military Review, XXVIII (February, 1949), 17-24.
- _____. "How Far Along Are We in Developing an Airborne Army?" Military Review, XXX (April, 1950), 41-50.

- Lanier, William D. "Operation Destiny," USNIP, LXXVI (January, 1950), 27-33.
- Lavert, J. "Are Navies Obsolete?" The Military Engineer, XL (October, 1948), 451-55.
- Leach, W. Barton. "The Bear Has Wings," Air Force, XXX (February, 1947), 17-19, 64.
- Lee, Robert M. "Troop Carrier Its Tactical Role," The Pegasus, XIV (November, 1949), 1-5.
- Lippmann, Walter. "The Russian-American War," Atlantic Monthly, CLXXXIV (July, 1949), 17-21.
- _____. "Why Are We Disarming Ourselves?" Infantry Journal, LIX (December, 1946), 41-43.
- Littell, Robert. "What the Atom Bomb Would Do to Us," Reader's Digest, XLVIII (May, 1946), 125-28.
- Livezey, William E. "Sea Power in a Changing World," Marine Corps Gazette, XXXVIII (April, 1949), 19-27; XXXVIII (May, 1949), 17-19.
- _____. "Naval Air Power," Ordnance, XXXVIII (January-February, 1949), 265-67.
- Lonnquest, Theodore. "Sea-Air Power," The Pegasus, XII (November, 1948), 6-10.
- Loomis, F. H. "Report from Greece," Military Review, XXX (April, 1950), 3-10.
- Lowe, James T. "Aviation and War," Air Affairs, I (September, 1946), 67-80.
- Maire, Roman W. "Airborne Cargo," Infantry Journal, LXIV (February, 1949), 11-14.
- Mansfield, Walter R. "Ambush in China," Marine Corps Gazette, XXX (March, 1946), 13-16, 39-42.
- Martel, Gifford. "The Trend of Future Warfare," AUQR, I (Winter, 1947), 86-93.
- _____. "Future War-Battle Command," Infantry Journal, LX (May, 1947)-LXI (December, 1947).

- Marshall, S. L. A. "The Mobility of One Man," Infantry Journal, LXV (October, 1949), 8-26.
- McAuliffe, A. C. "The Atom Bomb--Ground Forces," Air Affairs, I (March, 1947), 353-58.
- McClure, Brooks. "Russia's Hidden Army," Infantry Journal, LXV (July, 1949), 6-12; LXV (August, 1949), 13-20.
- McConaughy, James L. "The Midway Goes North," Marine Corps Gazette, XXX (July, 1946), 10-14.
- McCutcheon, Keith. "The ABC's of Guided Missiles," Marine Corps Gazette, XXXI (June, 1947), 10-16; XXXI (July, 1947), 23-27.
- McLain, Raymond S. "The Army's Role: A 1949 Perspective," Military Review, XXVIII (January, 1949), 3-17.
- McMillan, I. E. "A Suggested New Role for the Navy-Marine Corps Team," Marine Corps Gazette, XXXIII (October, 1949), 10-16.
- Miami Herald. April 1-10, 1948.
- Military Engineer. 1945-1950.
- Military Review. 1946-1950.
- Miller, George H. "Strategy of the Future--A Second Look," USNIP, LXXVI (May, 1950), 473-83.
- Mitscher, Marc A. "Action in the Pacific," Army Ordnance, XXX (March-April, 1946), 179-81.
- Moore, Roy E. "Our Arctic Problem," Ordnance, XXXIV (September-October, 1949), 112-14.
- Moore, Thomas E. "Employment of Strategic Air Power," AUQR, II (Spring, 1948), 57-65.
- Mott, N. F. "Can Atomic Weapons Keep the Peace?" Bulletin of Atomic Scientists, IV (January, 1949), 11-12.
- Murphy, Charles J. V. "The Polar Concept: It Is Revolutionizing American Strategy," Life, January 20, 1947, pp. 61-62.
- . "The State of the Armed Forces," Reader's Digest, II (December, 1946), 43-46.

Nelson, F. J. "This Fateful Interlude," USNIP, LXXII (December, 1946), 1553-62.

Nelson, Otto L., Jr. "The General Staff and the Future," The Infantry Journal, LVIII (January, 1946), 8-21.

Newsweek. 1946-1950.

New York Times. 1945-1949.

Nickerson, Hoffman. "Limitless War?" Army Ordnance, XXX (March-April, 1946), 207-08.

_____. "The Navy in U. S. National Strategy," USNIP, LXXVIII (February, 1947), 149-51.

Nimitz, Chester W. "Atomic Age Navy," Colliers, May 11, 1946, pp. 12-13, 66-69.

_____. "Industry and the Navy," Army Ordnance, XXX (March-April, 1946), 183.

Noble, Albert G. "Sea Power for Peace," Ordnance, XXXIV (July-August, 1949), 22-23.

_____. "Weapons and the Navy," Ordnance, XXXVIII (September-October, 1948), 92.

Norman, Lloyd H. "Operation Future," U. S. Army Combat Forces Journal, I (October, 1950), 17-19; I (December, 1950), 29-31.

Now Hear This. 1950.

Oppenheimer, J. R. "Atomic Weapons and the Crisis in Science," Saturday Review of Literature, November 24, 1945, pp. 9-11.

Ordnance. 1948-1950.

Pancake, Frank R. "The Strategic Striking Force," AUQR, II (Fall, 1948), 48-56.

Parker, Ben L. "Air Power in a Tactical Role," Military Review, XXVI (August, 1946), 49-53.

Parker, David B. "The Atomic Battlefield," Military Engineer, XLII (September-October, 1950), 344-48.

Parsons, W. S. "Atomic Energy--Whither Bound," USNIP, LXXIII (August, 1947), 895-907.

Peal, M. A., Jr. "War-Making Must Be in the Hands of Those Who Hate War," USNIP, LXXIV (May, 1948), 537-47.

Pearce, Ben. "Report from the Far North," Air Force, XXXI (June, 1948), 13-17.

Peers, W. R. "Guerrilla Operations in Northern Burma," Military Review, XXVIII (June, 1948), 10-16; XXVIII (July, 1948), 12-20.

The Pegasus. 1946-1950.

Peters, Bernard. "The USAF and Psychological Warfare," AUQR, III (Spring, 1949), 3-16.

Pine, Lynn W. "Military Aspects of Atomic Power," Military Engineer, XXXVIII (April, 1946), 149-51.

Possony, Stefan T. "What's Our Number One Problem?" Infantry Journal, LXIV (February, 1949), 19-22.

Pratt, Fletcher. "Beachheads of World War III," Marine Corps Gazette, XXXII (August, 1948), 20-25.

----- . "The Case for the Aircraft Carrier," Reader's Digest, LIV (May, 1949), 53-58.

Price, John D. "The Navy-Army Air Team," Ordnance, XXXIII (September-October, 1948), 117.

Puleston, W. D. "Dimensions and Characteristics of a Future War," USNIP, LXXVI (June, 1950), 591-605.

----- . "Effect of the U. N. and A-Bomb on Defense," USNIP, LXXII (August, 1946), 1017-30.

Quesada, E. R. "Tactical Air Power," AUQR, II (Spring, 1948), 37-45.

Rand, H. P. "A Progress Report on the U. S. Constabulary," Military Review, XXIX (October, 1949), 30-38.

Reader's Digest. 1945-1950.

Richards, Gay. "The Navy's Stake in the Future," USNIP, LXXIV (February, 1948), 183-96.

- _____ . "The Riddle of Combined Arms: 1949," USNIP, LXXV (August, 1949), 881-89.
- _____ . "Target Eurasia and the Next War," Marine Corps Gazette, XXXI (December, 1947), 10-18.
- _____ . "The Weapons of Victory," Ordnance, XXXIII (November-December, 1948), 242-44.
- Rigg, Robert B. "Get Guerrilla-Wise," U. S. Army Combat Forces Journal, I (September, 1950), 7-11.
- _____ . "How the Chinese Communists Wage War," Infantry Journal, LXIV (February, 1949), 4-9.
- Riggs, Whitaker F., Jr. "A Suggested Guide for Amateur Military Critics and Prophets," USNIP, LXXIV (August, 1949), 935-49
- Robinson, Donald B. "The Army's Plans for the Next War," American Mercury, LXIV (February, 1947), 140-46.
- Root, Ned. "Who Will Guide the Missiles?" Air Force, XXXII (October, 1949), 15-19.
- _____ . "The New Air Force," Air Force, XXXI (July, 1948), 12-17.
- _____ . "Strike One City," Air Force, XXXIII (March, 1950), 17.
- Russy, John H. de. "Selecting Target Systems and Targets," AUQR, I (Spring, 1947), 69-78.
- Sachaklian, Harry A. "Air Power and the Heartland," AUQR, IV (Summer, 1950), 5-16.
- Saturday Review of Literature. 1945-1946.
- Schanzle, R. F. "Sea Power: A New Testament," Marine Corps Gazette, XXXIII (September, 1949), 10-15.
- Schmidt, Carl T. "The Limitation of Total War," Military Review, XXIX (September, 1949), 13-16.
- Seim, H. B. "Atomic Bomb--The X-Factor of Military Policy," USNIP, LXXV (April, 1949), 387-93.
- _____ . "The Navy of the Future," Army Information Digest, V (April, 1950), 3-8.
- Sherman, Forrest P. "Speed the Core of Power," The Pegasus, XV (January, 1950), 1-4.

- Sikorsky, Igor I. "Military Future of the Helicopter," Marine Corps Gazette, XXXIII (August, 1949), 10-12.
- Smith, Dale O. "Air Power as Peace Power," AUQR, III (Summer, 1949), 3-14.
- _____. "One-Way Combat," AUQR, I (Fall, 1947), 3-9.
- _____. "Operational Concepts for Modern War," AUQR, II (Fall, 1948), 3-14.
- Smith, Russell H. "Notes on Our Naval Future," USNIP, LXXII (April, 1946), 489-503.
- Smith, William H. "The Demands of the Future," Military Engineer, XL (January-February, 1948), 51-54.
- Somervell, Brehon. "Industrial Preparedness," Military Engineer, XXXIX (September, 1947), 365-67.
- Spaatz, Carl. "Air Power in the Atomic Age," Colliers, December 8, 1945, pp. 11-12.
- _____. "The Era of Air-Power Diplomacy," Newsweek, September 20, 1948, p. 26.
- _____. "Evolution of Air Power," Military Affairs, XI (Spring, 1947), 3-16.
- _____. "General Spaatz on Atomic Warfare," Life, August 16, 1948, pp. 91-104.
- _____. "If We Should Have to Fight Again," Life, July 5, 1948, pp. 35-40.
- _____. "Strategic Air Power," Foreign Affairs, XXIV (April, 1946), 385-97.
- Stratemeyer, George E. "Air Defense Command," The Pegasus, XII (October, 1948), 1-5.
- Strope, Walter E. "The Navy and Atomic Warfare," Ordnance, XXXIII (July-August, 1948), 20-22.
- Sturgis, S. D., Jr. "Air Power and Air Bases," The Pegasus, XIII (January, 1949), 6-9.
- Swenson, John H. "Airborne Possibilities," Military Review, XXVI (July, 1946), 43-46.

Time. 1945-1950.

Tompkins, Rathvon M. "To War by Air," Marine Corps Gazette, XXXI (January, 1947), 9-13.

Vandegrift, Alexander A. "The Marine Corps in 1948," USNIP, LXXIV (February, 1948), 135-43.

Vital Speeches. 1946-1950.

Vogel, Bertram. "Military Lessons Learned and Not Learned," USNIP, LXXIV (June, 1948), 723-31.

Walker, Fred L., Jr. "Your Next War," Infantry Journal, LX (June, 1947)-LXI (August, 1947).

Weigart, Hans W. "U. S. Strategic Bases and Collective Security," Foreign Affairs, XXV (January, 1947), 250-262.

Wendt, William R. "Outlaw the A Bomb?" USNIP, LXXV (March, 1949), 334-35.

Whyte, William H., Jr. "Will the Queen Die?" Marine Corps Gazette, XXX (January, 1946), 10-12.

Wise, William H. "Future of the Tactical Air Force," AUQR, III (Spring, 1949), 33-39.

Wood, John J. "The Morality of War," AUQR, IV (Summer, 1950), 31-42.

Yamashita, Tomoyuki transcribed by Lowell M. Limpus. "Strategy Must Change," Infantry Journal, LVIII (April, 1946), 16-18.

Interviews

General Paul D. Adams, USA, Ret., November 7, 1969, Tampa, Florida.

Lieutenant General Paul R. Caraway, USA, Ret., August 15, 1969, Washington, D. C.

Brigadier General Robert L. Cook, USA, Ret., October 10, 1969, Winter Park, Florida.

Vice Admiral H. T. Deutermann, USN, Ret., March 14, 1970, Lake Santa Fe, Florida.

General Jacob Devers, USA, Ret., August 14, 1969, Washington, D. C.

Colonel Taylor Drysdale, USAF, Ret., September 12, 1969, Orlando,
Florida.

Major General Charles H. Gerhardt, USA, Ret., October 12, 1969,
Winter Park, Florida.

Lieutenant General Leslie Groves, USA, Ret., August 15, 1969,
Washington, D. C.

Colonel George Pappas, USA, August 11, 1969, Carlisle Barracks,
Pennsylvania.

Admiral Felix Stump, USN, Ret., August 14, 1969, Fairfax, Virginia.

Colonel William Travis, USAF, Ret., August 18, 1969, Savannah,
Georgia.

BIOGRAPHICAL SKETCH

Charles Dunlap Benson was born February 14, 1939 in St. Louis, Missouri. Having attended high school in Winter Park, Florida, he received a B. A. from Davidson College in 1960. At Davidson he was a member of Phi Beta Kappa, Omicron Delta Kappa, and the All Southern Conference football team. He served as an artillery officer in the 82nd Airborne Division from 1960 to 1963. In 1964 he received an M. A. T. from The Johns Hopkins University. Mr. Benson is a member of the American Historical Association and Phi Alpha Theta History Honor Society. He is married to the former Billy Louise Perry. They have two children, Elizabeth Louise and Charles David.

