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WRITING THE VICTORY PLAN OF 1941

Charles E. Kirkpatrick

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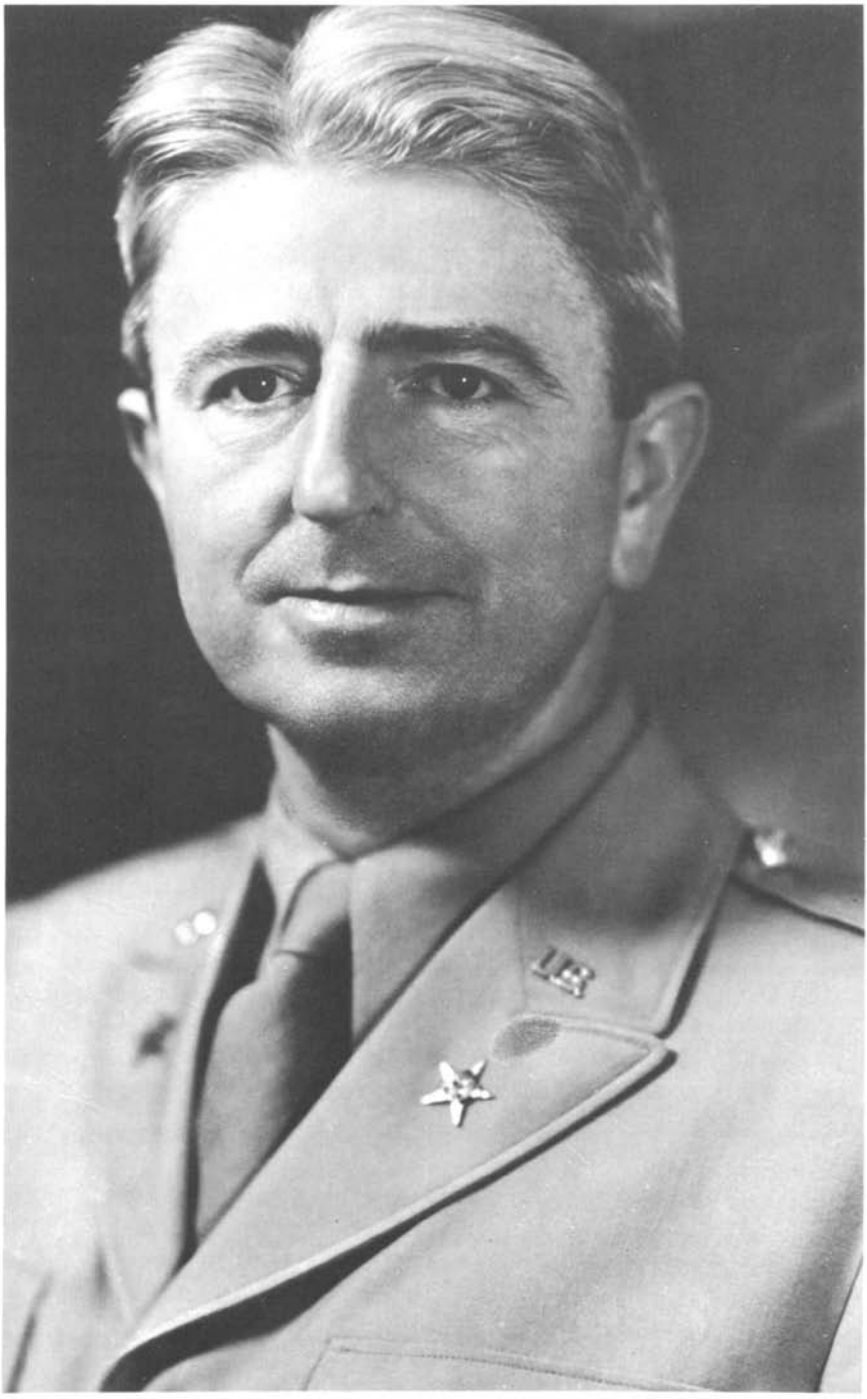

Albert C. Wedemeyer, principal author of the Victory Plan as a major in 1941, shown in 1943 as a general officer. *(U.S. Military Academy)*

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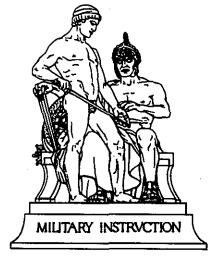

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Foreword

A striking feature of World War II was America's ability to raise and equip a modern army seemingly overnight. Emerging from its negligible base in 1941 and competing with the needs of the other services and Allies, the Army stood in just forty-eight months at 8 million men with equipment second to none. Such a prodigious feat owes much to sound military planning, as *The Victory Plan of 1941* carefully demonstrates. But this study also underscores the fact that even in 1941 warfare had become so vast in scope, so expensive, and so technologically complex that nations could never again afford to maintain in time of peace the armies needed in time of war. As Albert Wedemeyer, the remarkable Army officer who wrote the 1941 plan, makes clear, mobilization transcends purely military matters and must be understood to embrace the total capacity of nations. The conclusion seems inescapable: the United States Army must keep mobilization planning at the center of all its military planning.

The experience of the nation's total mobilization for World War II offers good counsel, not so much in its details of numbers and types of units raised or materiel required as in its description of the thought process Wedemeyer and his colleagues used in reaching these decisions. I recommend the following analysis of Wedemeyer's vital work to military planners and to all those studying mobilization and logistics. It will provide a clear picture of how our recent predecessors approached the complex challenge of preparing for modern war, a challenge that remains with us today.

21 December 1989

HAROLD W. NELSON
Colonel, USA
Chief of Military History

The Author

Major Charles E. Kirkpatrick is an Air Defense Artillery officer who commanded units in the Federal Republic of Germany and in the United States and later served as an assistant professor in the Department of History, United States Military Academy. He subsequently taught military history and tactics at the United States Army Air Defense Artillery School. Major Kirkpatrick received the B.A. *cum laude* and with honors in history from Wake Forest College in 1969, and the M.A. in European history the following year. He was a Ford Fellow at Emory University, from which he earned the Ph.D. in 1987. Major Kirkpatrick is the author of *Archie in the A.E.F.: The Creation of the Antiaircraft Service of the United States Army, 1917–1918* (1984).

Preface

As the research for this study progressed, it quickly became evident that the documentary record alone could never resolve all of the questions about how and why the Victory Plan was written. Nor could it reveal how certain decisions were reached, or upon what influences. In answering such questions, I was fortunate to have the help of the author of the Victory Plan. General Albert C. Wedemeyer spent long hours patiently discussing his duties of the summer of 1941, and equally long hours reading and commenting upon my draft manuscript. Through these discussions and through following the general's reading program, I not only gained insights into the development of the Victory Plan, but also an education in strategic thought. I am indebted to General Wedemeyer for the latter as much as for the former.

The members of the Center of Military History panel on this manuscript have materially improved the work, and I particularly thank Mr. Morris MacGregor, Col. Michael D. Krause, Col. Thomas Wilkerson, Dr. Jeffrey J. Clarke, Dr. Jack Nunn, and Mr. John Elsberg. I also acknowledge with particular gratitude the critical reviews of this paper by Professor Maurice Matloff, Professor Carl Boyd, Professor Charles Endress, and Dr. Keith E. Eiler, General Wedemeyer's biographer. I am indebted to Dr. Edward J. Drea, Dr. Bruce R. Pirnie, Dr. Michael Deis, Mr. Terrence J. Gough, Col. Paul Miles, Col. W. Scott Dillard, Col. Henry Gole, Lt. Col. Robert Frank, and Lt. Col. Gregory Fontenot for their frank and helpful comments. My colleagues in the Military Studies Branch have read and commented upon successive drafts of the manuscript, and I wish particularly to thank Majs. Steve E. Dietrich, Thomas Grodecki, and Jon House and Dr. Edgar Raines for their advice and forbearance. I am especially grateful to Dr. Alexander S. Cochran, Jr., chief of the Military Studies Branch, who has shared his expertise in the field and guided my research, helping me to develop my ideas and the structure of the monograph. Dr. Cochran has been a deft and gentle editor, as well as a thoughtful critic.

In several visits to the city of Washington, Dr. Keith Eiler discussed with me General Wedemeyer's work in the summer of 1941

and provided additional documentation from the general's collected papers at the Hoover Institution. Dr. Alfred M. Beck kindly allowed me to use an interview he had conducted with General Wedemeyer in the course of his own research. I am indebted to the staffs of the Military Reference Branch of the National Archives of the United States, and particularly Mr. Leroy Jackson; the Washington National Records Center at Suitland, Maryland; and the archives of the United States Army Military History Institute at Carlisle Barracks, Pennsylvania, especially Dr. Richard Sommers and Mr. David Keogh, for their professional help. The archivists' extensive knowledge of their collections enabled them to point out valuable areas of research I had not theretofore considered. Linda Cajka prepared the photographic layout, and Sfc. Marshall T. Williams prepared the cover. Finally, I owe special thanks to Mr. Duncan Miller, who edited the manuscript and whose suggestions materially improved both style and content.

While this study could not have been written without the assistance of all of these scholars and friends, I am responsible for the interpretation that I have placed upon the facts, and for any errors that may exist, either in point of fact or in the analysis of those facts.

Washington, D.C.
21 December 1989

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Introduction

"The first thing for a commander in chief to determine is what he is going to do, to see if he has the means to overcome the obstacles which the enemy can oppose to him, and, when he has decided, to do all he can to surmount them."

Napoleon I
Maxim LXXIX

The Victory Plan of 1941 was, although not many War Department staff officers realized it while it was being drafted, the blueprint both for the general mobilization of the United States Army for World War II and for the operational concept by which the United States would fight the war. The Victory Plan predicted the future organization for an army that did not yet exist, outlined combat missions for a war not yet declared, and computed war production requirements for industries that were still committed to peacetime manufacture. It did all of this with remarkable accuracy, considering that the intentions of the United States government were anything but clear in 1941. Very few staff papers have ever had its prescience, its impact, or its far-reaching consequences. Fewer still have dealt so concisely, yet comprehensively, with grand strategic concepts.

General Hans von Seeckt once remarked that general staff officers have no names, a fact as true in the United States Army as in the German Army of the Seeckt era. Characteristically, major plans took shape at the hands of many talented staff officers, each contributing his part to the completed work. To an extent, this was also true of the Victory Plan, for many officers in the War Plans Division and other agencies of the War Department General Staff labored to produce that document. Unlike other plans, however, the Victory Plan took shape under the direction of a single officer who developed the conceptual framework, outlined and allocated specific tasks for subordinate planners, guided the efforts of other staff officers, and finally integrated the many different parts of the plan into a coherent whole. Furthermore, the War Plans Division was a relatively small organization for the many and diverse tasks it han-

dled. Before Pearl Harbor, WPD had only fifty-two officers, of whom only a handful were available to assist the principal author. To this extent, the Victory Plan may be considered the work of one man, although it reflected the efforts of many other officers.

This intellectual tour de force was the accomplishment of Albert C. Wedemeyer, then a major in the War Plans Division of the War Department General Staff. At every turn, the document bears the imprint of Wedemeyer's mind, his experience, and his professional education. As he peered into an indistinct future from which any sort of war could emerge, making plans to mobilize the Army for threats he could only dimly perceive, Albert Wedemeyer harvested the fruits of twenty years of military experience, education, and study. In this case, at least, the man and the plan are indissolubly linked and must therefore be considered together if one is to understand how the Victory Plan was written.

Such an understanding is vital for modern planners, for World War II is the only full mobilization the United States Army has experienced in the modern age. Quantitative issues often preoccupy modern planners who try to figure the number of divisions, types and quantities of weapons, training, and deployment of the Army upon mobilization. Certainly these are important matters, but the question may well be raised whether they are the only important issues to be considered. In fact, such quantitative issues are almost always variables that depend upon the social, political, military, and technological contexts of the day. Rather, therefore, than seeking numerical answers to constantly evolving questions, the modern planner must devise a rational approach to solving a problem that has endless and conflicting variables.

The Victory Plan provides an example of just such an approach and highlights some of the most important themes in modern military planning. It shows that the prevailing political and military conditions decisively affect the possible choices open to the planner. It points out that any military plan, to be effective, must relate to attainable national objectives. It emphasizes that mobilization planning cannot be considered distinct from operational and logistical planning, for all three must be components of any comprehensive strategic plan. It shows that no plan is ever complete and final, but must continuously be amended to suit evolving circumstances. Above all, it illustrates the fact that the dividing line between the purely political and the purely military are increasingly blurred in the modern age. The Victory Plan began, and continued through-

out its revisions, as a politico-military plan. The Army consistently viewed the world in terms of that politico-military, or grand strategic, focus. That was its chief success.

Finally, the Victory Plan demonstrates that the personal attributes and professional qualifications of the planner are crucial, because they influence the options among which he is willing to choose. Wedemeyer's background, both his experience and his reading, was important. Every man is the sum of his experiences, and a different officer would have written a different plan. Wedemeyer's reading certainly helped to shape his intellect. How far it influenced the Victory Plan is for the reader to judge.

The purpose of this monograph is to describe the planning process that Albert C. Wedemeyer used in the summer of 1941 to write the plan that became the outline for mobilization and operations during World War II. The first step in understanding the planning process is gaining some understanding of the planner himself, both personally and intellectually. Then it is important to review the political context in which Wedemeyer had to work, both for its constraints and for what it permitted. Only then is it possible to review the drafting of the Victory Plan itself with some understanding, for it was not written in an abstract, antiseptic environment.

CHAPTER 1
The Planner

"A surveyor—even a tourist, if you will—has at least a wide perspective and can take in the general lie of the land, where the miner only knows his own seam."

Sir Basil H. Liddell Hart

". . . the officer who has not studied war as an applied science, and who is ignorant of modern military history, is of little use beyond the rank of Captain."

Field Marshal Garnet
Joseph Wolseley

By modern standards, Albert Coady Wedemeyer had reached the twilight of a relatively undistinguished career when he reported to the War Plans Division of the War Department General Staff in May 1941. Until very late in his military service, he did nothing that made him stand out from the crowd; in fact, the only early distinction he enjoyed was an entirely negative one. As a lieutenant in his first assignment at Fort Benning, Georgia, he had been court-martialed for involvement in a minor drinking incident. After twenty-one years and eight months as a company grade officer, Wedemeyer became a major in 1940. An infantryman who had never led troops in battle, he had spent a disproportionate amount of time as an aide but had only sketchy experience on staff.[1] He had never commanded a battalion.[2]

[1]Repetitive tours as aide were suspect. George Marshall, in declining the position of aide-de-camp to the Governor General, Philippine Islands, wrote that "if I became an aide for the fourth time I fear, in fact I feel sure, that to the army at large I would be convicted of being only an aide and never a commander." Letter, G. C. Marshall, to Henry L. Stimson, 22 December 1927, in Larry I. Bland and Sharon R. Ritenour (eds.), *The Papers of George Catlett Marshall,* Vol. 1, *"The Soldierly Spirit" December 1880—June 1939* (Baltimore: Johns Hopkins University Press, 1981), p. 322.

[2]Battalions were commanded by majors in the interwar Army. Biographical data concerning General A.C. Wedemeyer are drawn from his memoir: *Wedemeyer Reports!* (New York: Henry Holt & Company, 1958), and from other materials cited in the bibliography.

Undistinguished to that point he might have been, but Major Wedemeyer nonetheless wrote an estimate that became one of the fundamental planning documents for the United States Army in World War II. In it, he demonstrated an extraordinary grasp of strategic issues and a clear perception of a way to grapple with them. The question immediately arises as to how an officer of such limited practical experience in the art of war developed such capacity. Certainly American domestic politics, as well as the condition of the Army in 1941, circumscribed the possibilities Wedemeyer could consider and thus helped to shape the Victory Plan. But his intellectual preparation was even more significant because it determined the kinds of options he would consider and the kinds of choices he would make. In common with many of his peers, much of Wedemeyer's professional and intellectual education was less the product of military schooling than of personal initiative and experience in the interwar Army.

By the standards of his day, Wedemeyer's career was unexceptional, at least until 1936. Indeed, long years as a company grade officer were the rule for his generation, and officers in the interwar years followed no set career pattern. The product of long years of service in the junior grades was quite often an officer who knew exactly what to do when given an important and demanding job. Such capacity was never an accident, of course, and Wedemeyer's career illustrates the care some of those men took to prepare themselves for duties that, in the mid-1930s, many expected never to hold. In Wedemeyer's case, years of military routine masked steady intellectual growth.

The Development of a Strategic Thinker

Albert Wedemeyer grew up in Nebraska, the son of a strict Lutheran father and an Irish Catholic mother. He had a strong, warm family relationship in which both parents guided his education and shaped his ethical and moral beliefs. A Jesuit schooling that was Spartan in its severity reinforced strong concepts of obligation and duty that Wedemeyer assimilated from his father. While he enjoyed a sound secondary education, Wedemeyer was perhaps more profoundly affected by his father's example of a life of learning. The elder Wedemeyer was an omnivorous reader who encouraged in his son a habit of what the latter called "kaleidoscopic" reading, reinforced by serious discussions based upon that reading.

Wedemeyer grew up in a stimulating atmosphere of ideas and frequently conversed with the distinguished men who visited his father. By the time he finished his secondary education, young Wedemeyer had obtained a broad general understanding of economics and had read widely in history and biography.[3]

Senator George W. Norris appointed Wedemeyer to the military academy; he reported to West Point in June 1916, graduating in April 1918 with one of the classes abbreviated by the First World War. By his own admission he did not do particularly well academically, later remarking that Jesuit schooling made him proficient in Latin, but that Latin was of very little utility in a world dominated by calculus. Although graduated and commissioned, Wedemeyer and his classmates were returned to West Point in the awkward status of student officers in November 1918. The following year they finally left the academy, and the entire class made an observation tour of European battlefields before going to their first duty stations. While visiting Paris, young Wedemeyer first met both General John J. Pershing and George C. Marshall, then a lieutenant colonel.

Wedemeyer reported to the Infantry School in September 1919 as a student. After graduation, he was assigned to the 29th Infantry Regiment at Fort Benning in June 1920 and began his military service as an instructor, living in the tents of an extremely primitive new Army post. In 1922 he became involved in the minor drinking incident that culminated in the court-martial that appeared to spellthe end of his brief military career. Despite the court-martial, however, Brigadier General Paul Malone selected Wedemeyer to be his aide-de-camp, a duty that lasted two years. When Malone moved from the Infantry School to Fort Sill, Oklahoma, Wedemeyer continued as his aide but also contrived to meet the requirements for graduation from the Artillery Battery Officers' Course. He then moved to Fort Sam Houston, Texas, where Malone assumed command of the 2d Field Artillery Brigade of the 2d Infantry Division, while Wedemeyer assumed command of the headquarters battery of that brigade.

With experience as an aide and as an artilleryman behind him, Wedemeyer moved to the Philippine Islands in 1923. He served briefly with the 31st Infantry Regiment in Manila before taking up

[3]Col. Don H. Hampton (Interviewer), "Interview with General Albert C. Wedemeyer" (Carlisle Barracks, Pa.: USAWC/USAMHI Senior Officer Oral History Program, 14 March 1984), p. 2.

duties in the 57th Infantry at Fort McKinley. He spent three years in Philippine Scout infantry companies, and then returned to Fort Washington, Maryland, where he commanded a company in the 12th Infantry. In 1927 he became aide-de-camp to Brigadier General Herbert Williams, commanding general of the Military District of Washington. In 1930 Wedemeyer went to China, where he was a staff officer in a battalion of the 15th Infantry at Tientsin. From China he returned to the Philippines, where he became aide-de-camp to Major General Charles E. Kilbourne at Corregidor. When Kilbourne was succeeded in command by Major General Stanley D. Embick, Wedemeyer remained as Embick's aide.

During his first tour of duty in the islands, Wedemeyer courted and wed Embick's daughter while her father commanded a regiment on Corregidor. In the intervening years, his father-in-law became Wedemeyer's professional mentor, influencing his thinking on strategic issues. General Embick particularly excited Wedemeyer's interest in the economic aspect of warfare and the economic war-making potential of the nation.

Even before his marriage, Wedemeyer had enjoyed a professional relationship with Embick. Wedemeyer's parents sent him parcels of books with which to educate himself about the Philippine Islands, and he had exchanged these books with then-Colonel Embick on the troopship taking them to the Far East in 1923. Embick later encouraged Wedemeyer to organize discussion groups of officers during the years on Corregidor. Professional reading served as the context for such social gatherings of Wedemeyer's peers—intelligent and articulate men who met periodically to discuss current events, the books they had been reading, and professional interests. The highlights of such meetings were the occasional sessions in which distinguished guests such as General Leonard Wood spoke with Wedemeyer and his friends.

In 1934 Wedemeyer returned to the United States to attend the Command and General Staff College and was an honor graduate of his two-year course. At that time, the United States and Germany had a reciprocal agreement whereby their respective armies exchanged staff college students, and the Leavenworth commandant, impressed by Wedemeyer's performance and noting from his record that he had studied German, recommended him for attendance at the German staff college, the *Kriegsakademie*. After graduation from Leavenworth, Wedemeyer filled in the few months before he was due to arrive in Germany by serving on the general staff in

Washington, temporarily assigned in the Intelligence Division, G–2, in June and July of 1936.

In the course of his sojourn in Washington, Wedemeyer made the acquaintance of Colonel Friedrich von Boetticher, the military attaché at the German embassy and, by virtue of his seniority, dean of the attachés on duty in the capital. Colonel von Boetticher, like any attaché, cultivated friendships with many American officers. In time, Wedemeyer got to know him socially and visited the von Boetticher family occasionally. It happened that the attaché's daughter and the daughter of General Ludwig Beck, chief of the German General Staff, were both at that time enrolled in Sweetbriar College. Wedemeyer's chance meeting with Beck's daughter through von Boetticher's hospitality gave him an entrée to German military society that von Boetticher guaranteed by sending ahead letters of introduction to officers in Berlin.

After he arrived in the German capital in the summer of 1936 Wedemeyer immersed himself in the German language and in the complex German military studies. Far more than the American Command and General Staff College, the *Kriegsakademie* stressed the strategic factors in warfare, with particular emphasis on those elements that are understood today to be a part of grand strategy. Wedemeyer appreciated the relationship of economic power to war potential and was impressed with the German understanding of the role of war as an instrument of national policy.

The years in Berlin also afforded Wedemeyer a chance to do a great deal of serious reading, and he studied both the great captains and the traditional military classics, thoroughly grounding himself in the theory of warfare. The books that impressed him most were those that emphasized the importance of flexibility and mobility, topics of immediate concern in the German Army of 1936. The curriculum of the *Kriegsakademie* stressed the application of technology to maneuver, reflecting the German preoccupation with avoiding another positional war. Military history, a topic of weekly study at the *Kriegsakademie*, served to illustrate contemporary doctrinal concerns. Instructors consciously linked the historical examples to students' tactical discussions, reinforcing their academic appreciation of the issues involved through study of specific battles. Staff rides were accordingly an essential part of tactical instruction; Wedemeyer's staff group went to Tannenberg.

In his final summer in Berlin, Wedemeyer was assigned to a tour with troops, as were all *Kriegsakademie* graduates. Although an

American should probably have been excluded from such duty, Wedemeyer found himself attached to an antitank battalion, where he exercised command of a *Panzerabwehrkompanie* during the annual maneuvers. In the process, he learned a great deal about the mobility of German units, as well as about the German Army's approach to the technical problem of antitank defense.[4] He had the rare opportunity to see German maneuver doctrine, for which he had acquired a thorough academic appreciation, put into practice. Wedemeyer was deeply impressed with German battle doctrine, and explained it with great care in his final report on his two years of schooling in Berlin.[5]

While the *Kriegsakademie* had a profound bearing on Wedemeyer's professional development, the personal relationships he enjoyed in Berlin were just as important. While visiting von Boetticher in Washington, he had been struck by the attaché's depth of understanding of the French Army and its doctrine. In Berlin, he found that such professionalism was a characteristic of the German general staff officer. He was impressed by the professional credentials of his classmates, all of whom were well read and thought deeply about the military issues of the day. His friends in Berlin, many of whom wound up in the opposition to Hitler by 1944, included Wessel Freitag von Loringhoven, with whom he was socially close, and Claus Graf von Stauffenberg. Major Ferdinand Jodl, the director of his staff group, was the brother of Alfred Jodl, later a general and chief of staff of the *Oberkommando der Wehrmacht*. Perhaps most important of his contacts, however, was Ludwig Beck himself, the chief of the General Staff. Building upon the introduction von Boetticher provided and his chance meeting of Beck's daughter, Wedemeyer occasionally visited Beck's home for dinner and wide-ranging discussions of strategic and military issues in Europe.

In August 1938 Wedemeyer returned to the United States and presented his report on the *Kriegsakademie* to General Malin Craig, the Army chief of staff. Craig had the paper circulated to all of the staff, but the only serious evaluation came from the chief of the War

[4]Wedemeyer summarized what he had learned about the subject in "Antitank Defense," *Field Artillery Journal* 31 (May 1941), 258–72, an article also published as "Stopping the Armored Onslaught," *Infantry Journal* 48 (May 1941), 22–31.

[5]Memorandum, Captain A. C. Wedemeyer for the Adjutant General, 3 August 1938, Subj: German General Staff School. NARA RG 165, G–2 Regional Files—Germany (6740), Washington National Records Center, Suitland, Md.

Plans Division, Brigadier General George C. Marshall.[6] When he met with Marshall, Wedemeyer discussed Germany's determination to avoid a repetition of World War I and briefed him in greater detail about German plans to increase the tempo of battle, avoid trench warfare, conduct deep turning movements directed at objectives far behind the line of contact, and use armored forces supported by tactical aviation for exploitation.

Declining an assignment at the War Department, Wedemeyer then returned to Fort Benning, where he was assigned to the 29th Infantry. In January 1940, he became executive officer of the newly formed 94th Antitank Battalion. He remained in Georgia until September 1940, when he was recalled to Washington to work in the training section of the Office of the Chief of Infantry, where he wrote antiarmor doctrine. Shortly thereafter, in May 1941, he was reassigned to the plans group of the War Plans Division of the War Department General Staff.

Experience, military schooling, influential personal relationships, professional study—each contributed to Albert Wedemeyer's eventual ability to serve the Army as a strategist. Although his career scarcely differed—until his assignment in Berlin—from that of scores of other officers in the 1920s and 1930s, he seems to have made the most of every posting. In two assignments with the 29th Infantry, Fort Benning's school regiment, he mastered the skills of an infantryman and commanded a war-strength company. In the Philippine Islands he served with the Philippine Scouts for almost three years, learning the arts of leadership and taking the opportunity to study the problems of the Far East at firsthand, a self-imposed curriculum he continued in his two years as a battalion staff officer in Tientsin. He had a rich and diverse experience of troop duty, again commanding an infantry company in Maryland and an artillery battery in Texas, and serving as executive officer of an antitank battalion at Fort Benning. In three tours of duty as an aide-de-camp, Wedemeyer had the unusual opportunity, as a very junior officer, to see how the Army functioned at much higher levels. He came to understand the Army as a system, to appreciate the high-level perspective on day-to-day operations, and to observe top flight, experienced leaders.

The two years he spent as a student at Fort Leavenworth applied

[6]Forrest C. Pogue, in *George C. Marshall: Ordeal and Hope. 1939–1942* (New York: The Viking Press, 1966), p. 141.

a polish to his already extensive understanding of the Army, its missions, its operations, and the functioning of its staffs. His attendance at the *Kriegsakademie* had a direct bearing on his eventual duties, inasmuch as Wedemeyer studied, in the years immediately preceding World War II, the battle doctrine of the nation that was to become America's chief enemy.

But his studies in Berlin were even more important because they had a more elevated focus than did his work at Fort Leavenworth. The *Kriegsakademie* assumed a thorough knowledge of minor tactics and staff procedures on the part of its students. Rather than teaching the methods of staff work, it asked its students to think through operational problems and posit solutions to them. Reaching beyond the purely operational level, the *Kriegsakademie* curriculum sought creative thought on the problems of conducting modern, mechanized, mobile warfare, both in terms of operations and in terms of the logistical arrangements necessary to support such operations. At a time when the United States Army and its air corps were developing their doctrines separately, the *Kriegsakademie* taught that operations plans must routinely provide for tactical air support.[7] At yet a higher level, the *Kriegsakademie* student learned the classical definitions of strategy—not just military strategy, but national strategy, of which military strategy was only one component.

"I was impressed with the practicality and thoroughness of the purely military work, as well as with the intellectual breadth of the curriculum," Wedemeyer said many years later of his studies in Berlin.[8] Certainly the personal contacts he enjoyed among the German officers at the *Kriegsakademie* and on the General Staff contributed to his enjoyment of the course and enriched his under-

[7]For discussion of the limitations of Army Air Corps tactical doctrine, see Kent Roberts Greenfield and Robert R. Palmer, "Origins of the Army Ground Forces General Headquarters, United States Army, 1940–1942" (Historical Section, Army Ground Forces Study No. 1, 1946), Chapter 7; Greenfield, "Army Ground Forces and the Air-Ground Battle Team Including Organic Light Aviation" (Historical Section, Army Ground Forces Study No. 35, 1948), pp. 1–8, outlines the Air Corps preference for concepts of strategic aviation as proposed by Mitchell and Douhet. See also Wesley Frank Craven and James Lea Cate, *Plans and Early Operations. January 1939 To August 1942*. THE ARMY AIR FORCES IN WORLD WAR II (Chicago: The University of Chicago Press, 1948), Vol. I, pp. 17–74 and 101–150.

[8]Quoted in Keith E. Eiler, "The Man Who Planned Victory: An Interview with Gen. Albert C. Wedemeyer," *American Heritage* 34:6 (1983), 38.

standing of the subjects he studied. To have direct access to the chief of the General Staff and to be able to approach him on a social basis was an incredible stroke of fortune for an aspiring strategist. Wedemeyer recalls that Ludwig Beck was exceptionally well informed about the European military situation, the conditions prevailing in foreign armies, and the strategic options that presented themselves to the various European powers in those years. Beck discussed such matters freely with his young guest, who admired the intellectual power of his host and his grasp of national policy issues.

Beck's influence on Wedemeyer was significant enough for the latter to comment upon it almost fifty years later, but he was also influenced by others. Not least among them was the series of able generals for whom Wedemeyer served as aide-de-camp. In some cases, they merely set the example of what a good officer should be. But in the case of Major General Stanley Embick, the example was more direct. Embick was a scholarly officer who encouraged Wedemeyer's natural bent in history and international relations. Embick's concern with Pacific strategic issues, in preference to European, also accorded with Wedemeyer's experience and service, although it clashed with his intellectual grasp of geopolitical reality that saw Europe as the place in which issues of worldwide importance would be settled.[9]

As important as all of these things were, they were still secondary influences; the man's character determined the uses he made of the opportunities that fate placed in his path. Raised to value knowledge for its own sake, and of a naturally enquiring nature, Wedemeyer was not content to take his opinions secondhand. In his early years as a soldier, he continued the reading habits established in his youth, and the influences that bore upon him through those years helped to direct his reading. It is to his reading, rather than to external influences, that one must turn to understand the intellectual preparation that Albert Wedemeyer brought with him to his job on the general staff in 1941.

[9]Embick was opposed to American involvement in European wars. See, for example, letter, Embick to Marshall, 12 April 1939, in George C. Marshall Papers, FF 36, Box 67, Marshall Library, Lexington, Virginia. Also see Mark Stoler, "From Continentalism to Globalism: General Stanley D. Embick, the Joint Strategic Survey Committee, and the Military View of National Policy during the Second World War," *Diplomatic History* 6 (Summer 1982), 303–21.

Student of Applied Strategy: The Reading Program of a Professional Officer

Professional reading undertaken as recreation was a congenial base for professional reading undertaken for its own sake. While studying at the Command and General Staff School and at the *Kriegsakademie,* Wedemeyer continued to read widely, in the latter case drawing on the excellent European libraries available to him. Now, however, his studies sharpened the focus of his reading, and he surveyed the field of strategic studies and traditional military classics. His earlier reading of history, economics, and political science gave him a thorough understanding of the contexts in which wars are fought. With such preparation, he found it easier to grasp the essence of the ideas of the major philosophers of war.

Generally speaking, it is an uncertain proposition to point to a certain book and assert that it had a specific and undeniable impact on a public figure's later work. In this case, however, it is tempting to suggest a direct connection between Wedemeyer's eventual strategic plans and his earlier reading. General Wedemeyer in 1987 emphasized a number of books that affected his work during World War II: Karl von Clausewitz, *On War;* Sun Tzu, *The Art of War;* Frederick the Great, *Instructions for his Generals;* and the works of Ardant du Picq, Colmar von der Goltz, and Sir Halford J. Mackinder. He read J. F. C. Fuller's books while a student at the *Kriegsakademie.*[10] An element common to most of those books is that they concern themselves, by and large, with strategic issues and the larger questions of how wars are won or lost. When they descend to the tactical or operational level, they do so as an extension of general principles of a strategic nature. At all events, the strategic matters were the ones to which Wedemeyer paid the most attention, because strategy interested him far more than tactics. Surveying these books, one can trace the development of many important themes in twentieth century warfare. It is also possible, using Wedemeyer's specific comments about his readings as mileposts, to chart through these books a path that finds most of the key points in the Victory Plan.

Wedemeyer's strategic education began with Clausewitz. Early

[10]In his interviews with the author during the spring and summer of 1987, Gen. Wedemeyer discussed many books, but these were the ones upon which he laid special emphasis or mentioned frequently. In discussing the books, he occasionally gave a précis of the parts that seemed most significant to him.

Grant Hall, main academic building of the Command and General Staff School at Fort Leavenworth while Wedemeyer was a student there. *(U.S. Army Collection, National Archives)*

Early construction at Fort Benning—29th Infantry Barracks, circa 1924. *(U.S. Army Collection, National Archives)*

Brig. Gen. Paul Malone, commandant of the Infantry School and Wedemeyer's early sponsor. *(U.S. Army Collection, National Archives)*

Maj. Gen. Stanley D. Embick, whom Wedemeyer served as aide-de-camp, and who encouraged his early study of strategic issues. *(Center of Military History)*

Friedrich von Boetticher *(right)*, German military attaché in Washington whose letters of introduction paved the way for Wedemeyer's talks with General Ludwig Beck, chief of the German General Staff. Here, von Boetticher presents his credentials at the War Department. *(U.S. Army Photograph)*

Capt. Albert C. Wedemeyer as a student at the *Kriegsakademie* in Berlin, 1936–1938. *(Courtesy of General A. C. Wedemeyer)*

in his career, he was impressed with the classical doctrine that "war was the continuation of politics by other means—that the ends of war were not slaughter and destruction *per se*, but the achievement of rational goals."[11] If that were so, then reliance on military strategy alone would be a mistake, and the planner had to consider the broader implications of military action. Clausewitz wrote that national policy is "the womb in which war is developed,"[12] and Wedemeyer thereby understood that strategy is the handmaiden of policy. He noted that

> strategy, properly conceived, thus seemed to me to require a transcendence of the narrowly military perspectives that the term traditionally implied. Strategy required a systematic consideration and use of all the so-called instruments of policy—political, economic, psychological, et cetera, as well as military—in pursuing national objectives. Indeed, the nonmilitary factors deserved unequivocal priority over the military, the latter to be employed only as the last resort.[13]

Many of the authors Wedemeyer studied reinforced the idea that war was a political phenomenon, reiterating Clausewitzian dicta. One of the foremost popular interpreters of Clausewitz in the last half of the nineteenth century was Lieutenant General Colmar Freiherr von der Goltz, a Prussian general staff officer whose books made Clausewitz accessible to the average serving officer. Again and again in his writings he emphasized that "war serves politics both before and after," explaining that "an end and aim that is of permanent value to the State, be it only a question of ascendancy, must be existent; and this can only arise from political considerations."[14] For von der Goltz, the key was that "without a good policy a successful war is not probable." Policy was so important, in fact, that attainment of the goals posited by that policy defined success in war.[15]

In *The Conduct of War,* arguably his most important book, von der Goltz discussed such issues in detail, repeatedly pointing out that military actions must always be regulated by the higher considerations of national objective. War cannot deviate from the political

[11]Quoted in Eiler, "The Man Who Planned Victory," p. 39.

[12]Carl von Clausewitz, *On War,* trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), Book II, Chapter 3, p. 149.

[13]Quoted in Eiler, "The Man Who Planned Victory," p. 39.

[14]Lieut. Gen. Colmar Freiherr von der Goltz, *Nation in Arms* (London: W. H. Allen, 1887), p. 117.

[15]*Ibid.*

goals, because it is after all only politics in another form. The political situation, rather than purely military considerations, should always govern the assumption of the strategic offensive or defensive, and the forms that such military actions might take.[16] The trick, as von der Goltz pointed out, was to be able to come up with the right strategy at the right time, so that the enemy could be confronted with the greatest possible strength at the critical time and place.[17] The hand-in-glove relationship between politics and military effort found its way over the years into the writings of many of the authors who considered the military problems of the twentieth century. Even a man such as J. F. C. Fuller, more directly concerned with the evolution of armored warfare, found occasion to write that "wars, it must be remembered, are means to an end, the end being peace, consequently this end largely influences their nature."[18]

The changing nature of modern war, which Wedemeyer clearly perceived and described in his report on his year in Berlin, complicated the matter. Warfare in the twentieth century lost the restraint characteristic of the previous centuries and evolved into total war. "War nowadays generally appears in its natural form," von der Goltz wrote, "as a bloody encounter of nations, in which each contending side seeks the complete defeat, or, if possible, the destruction of the enemy."[19] Von der Goltz proceeded to a discussion of total war as a characteristic of the modern age, describing future warfare as aiming at the "annihilation" and "destruction" of the enemy, so as to "reduce him to such a physical and moral state that he feels himself incapable of continuing the struggle."[20] The characteristics of such a war emphasized the need for overwhelming military power. The military resources of the nation had to be marshaled to such an extent that it could enforce a favorable peace without delay, once military victory was gained. In order to accomplish this, all military forces had to be fully ready to fight at the outbreak of the war and prepared to prosecute the war ceaselessly and untiringly until deci-

[16]Lieut. Gen. Colmar Freiherr von der Goltz, *The Conduct of War. A Short Treatise On Its Most Important Branches and Guiding Rules* (London: Kegan Paul, Trench, Truebner, 1899), pp. 2, 28–29.

[17]*Ibid.*, p. 35.

[18]J. F. C. Fuller, *On Future Warfare* (London: Sifton, Praed, 1928), p. 212.

[19]Von der Goltz, *The Conduct of War,* p. 5. On the "natural form" of warfare, see *On War,* Book I, Chapter 1, p. 75.

[20]Fuller, *The Conduct of War,* p. 8.

sive victory should completely break the organized resistance of the enemy.[21]

Obviously, such conditions argued for the strongest possible standing military force, but few nations could afford to maintain such a force. The question was one of resilience and endurance, von der Goltz wrote, for "the side which is in a position to support the strain of war the longest enjoys a great advantage."[22] Because of the enormous expense of professional armies, von der Goltz recommended the cadre army as the most efficient military organization. He cautioned, however, that the attempt to skimp forces could be dangerous. "A state is not justified in trying to defend itself with only a portion of its strength, when the existence of the whole is at stake," he warned. Economies in military preparation therefore had to be weighed against the risks incident to such economies. The national spirit could compensate for certain material deficiencies through willingness to serve and sacrifice when necessary, and von der Goltz saw the best military organization as the one that mobilized the intellectual resources of the nation, as well as the material and military.[23] Writing years later, Fuller agreed that a nation must have the will to win, as well as the ability to do so, and must make the exertions necessary to win.[24]

Transition from peace to war was therefore a complex process which, to be done efficiently, von der Goltz wrote, "is previously worked out down to the minutest detail."[25] That process of mobilization was the essential first step to war. The nation that could mobilize its forces most swiftly had an enormous advantage. Without it, surprise was impossible; with it, great economies became possible because a small, concentrated, prepared army could defeat the nation that had a larger army not yet ready to fight. The point, according to von der Goltz, was that a mobilization plan by itself was of little merit unless it were coordinated with the plan of operations the army meant to execute. The mobilization process had to concentrate the army in a position from which useful operations could begin.[26]

Not only must an army mobilize rapidly, but its plans must allow

[21] *Ibid.*, p. 21.
[22] *Ibid.*, pp. 16–17.
[23] *Ibid.*, p. 3.
[24] J. F. C. Fuller, *The Reformation of War* (London: Hutchinson, 1923), p. 22.
[25] Fuller, *The Conduct of War*, pp. 116–17.
[26] *Ibid.*

it rapidly to strike decisive blows. For a variety of reasons, as von der Goltz pointed out, haste is an essential of success. When attacked, the defender has only to hold out, while the attacker must win; the former is generally easier than the latter. The defender's advantages multiply with time. He is familiar with the theater of war and in possession of the key terrain when war begins; he has established railways and lines of communications; he is operating in his own country and has the sympathetic support of the civilian population; and the normal administrative machinery of his own nation is available to help him. "In a broad sense," von der Goltz summarized, "the defender receives the assistance of a whole nation, whilst the assailant is moving away from similar help."[27] He therefore insisted upon the necessity of moving rapidly and with surprise, utilizing the advantages swift mobilization gives an army. An army needs large forces and decisive operations, he wrote, because of the "ever-diminishing power of the strategical offensive . . . which has to be taken into account, and which invariably becomes more pronounced the longer the line becomes over which the attack advances."[28]

Modern warfare is not only complex and fast-paced, but also the stakes were much higher because national survival was at issue when nations clashed. In such circumstances, careful and elaborate planning to provide against every contingency is essential. Thousands of years earlier, Sun Tzu advised against relying on the enemy not coming. Instead, the wise general relied upon his readiness to receive the enemy by making his position unassailable.[29] Sun Tzu believed that the successful general should place his enemy in such a position that victory would elude him and perceived the ability to envision such possibilities as the highest skill of generalship. Fighting soldiers had their place in the scheme of things, but those who

[27]*Ibid.*, pp. 56–57.

[28]*Ibid.*, pp. 41–42. Modern experience indicates that von der Goltz did not appreciate the destruction modern warfare could visit upon the defender's country; with modern weapons in use, no nation would want to fight in its own territory. The general conclusion is valid, however, that the difficulties an attacker faces grow more numerous and more serious as his lines of communication grow longer.

[29]Sun Tzu, *The Art of War* (Harrisburg: Military Service Publishing Company, 1944), p. 70. Citations in text refer to this translation, an edition of which Wedemeyer read before World War II. In each case, however, the citation for the superior translation by Samuel B. Griffith is also provided. See Sun Tzu, *The Art of War,* trans. Samuel B. Griffith (London: Oxford University Press, 1963), p. 114 (Hereinafter cited as Griffith translation).

could first see the possibilities of victory were the more talented. "To see victory only when it is within the ken of the common herd is not the acme of excellence," Sun Tzu wrote, adding that "to lift an autumn leaf is no sign of great strength; to see the sun and moon is no sign of sharp sight; to hear the noise of thunder is no sign of a quick ear. What the ancients called a clever fighter is one who not only wins, but excels in winning with ease."[30] The ability to see victory before battle is fought is a talent, and that vision is translated into practice through careful planning. Planning, then, was the essential, for the successful general never sought battle without first having a plan that indicated that victory was possible.[31]

Good planning, essential for successful military operations, had the object of defeating the enemy swiftly. Sun Tzu expressed the ideal poetically. "In war," Sun Tzu said, "let your object be victory, not lengthy campaigns."[32] He warned that men tire and lose their enthusiasm for fighting if victory is long delayed. Nor can the state stand the expense and strain of a protracted campaign. Many difficulties and dangers arise when war goes purposely on; enemies arise to take advantage of the situation and "no man, however wise, will . . . be able to avert the consequences that must ensue." Thus, Sun Tzu wrote, "though we have heard of stupid haste in war, cleverness has never been associated with long delays. There is no instance of a country having been benefitted from prolonged warfare."[33]

Von der Goltz summarized with great precision the goal of military operations when he wrote that "We already know its first objective, the enemy's main army. Our first step will be to invade the theatre of war occupied by this army, seek it out, and to force it to a battle under the most favourable conditions possible."[34] The strategist cannot think simply of the battle, however, and von der Goltz returned frequently to the point that military planning must always proceed from the national objective. "An absence of clear knowledge of the object aimed at engenders a weak method of conducting war," he wrote. Moreover, it "contains the germs of future defeat." In any operation, "vagueness as to our intentions produces irreso-

[30]*Ibid.*, pp. 52–53. Griffith translation, p. 86.
[31]*Ibid.*, p. 43. Griffith translation, p. 71.
[32]*Ibid.*, p. 47. Griffith translation, p. 73.
[33]*Ibid.*, pp. 44–45. Griffith translation, p. 73.
[34]Von der Goltz, *The Conduct of War,* p. 34.

lution in our decisions and uncertainty in the orders."[35] He insisted that planners must always look beyond the war to the question of enforcing the peace, for the inability to do that raises the possibility of having to fight another war, perhaps at a disadvantage. It was of the first importance to decide what sort of political arrangements would arise after a war, and von der Goltz concluded that "the possibility of having to perform this further task must be reckoned with at the time when war is decided upon."[36]

That the accomplishment of such goals in an age of total war would be difficult was something that von der Goltz foresaw, but that Fuller articulated with particular clarity. Total war leads almost inevitably to great destruction, which is normally justified by propaganda in order to sustain a people's resolve to fight the war. Cognizant that mobilization of public sentiment in Britain was a weapon of war in World War I, Fuller recognized that, once aroused, that sentiment became virulent and difficult to satiate. He therefore insisted that the wiser course was to limit the "destructive mania" that total war engenders.[37] Victory involved the moral submission of the enemy, but an enemy should be destroyed only when that course of action was unavoidable, or when it would lead to a "profitable state of peacefulness." War to the knife, when avoidable, is criminal, because the true object of battle is rather the mental submission of the enemy than his destruction. In reviewing World War I, he identified a failure to prosecute the war for goals of peace as a potentially fatal flaw. War's devastation so unhinged the victors and so disturbed European society that a lasting peace was impossible to achieve. "The reason for this fatal dogma," Fuller wrote, "was ignorance of the true object of war, which is to establish *a more perfect peace.*"[38]

The swift attainment of a desirable peace invariably resulted from carefully planned military operations that were conducted with dispatch, economy, and focus on the essential objectives. Sun Tzu counseled great concentration on the most important goals when he wrote that "there are roads which must not be followed, armies which must not be attacked, towns which must not be be-

[35]*Ibid.*, p. 119.
[36]*Ibid.*, pp. 18–19.
[37]Fuller, *Lectures on F. S. R. III. (Operations Between Mechanized Forces)* (London: Sifton Praed, 1932), pp. 37–38.
[38]*Ibid.*, p. 36. Emphasis in original.

sieged, positions which must not be contested, commands of the sovereign which must not be obeyed."[39] Military operations conducted purely for the sake of fighting were anathema. Economy of action, like economy of movement, characterized the good general and typified the successful campaign. Sun Tzu advised not to move without some clear advantage, and not to fight unless the position was critical. Unless some specific advantage could be gained from battle, no general should fight.[40] The most insidious vice, according to Sun Tzu, was the very natural tendency of a general to dispatch troops to meet every enemy threat—to attempt to be strong everywhere. "If he sends reinforcements everywhere, he will be everywhere weak," Sun Tzu wrote.[41]

Centuries later, Frederick the Great of Prussia returned to this theme in a set of confidential instructions that he issued to his generals. Frederick had to fight with great economy, inasmuch as he was surrounded by enemies, and he taught his generals that it was invariably wrong to disperse the army.[42] "Numbers are an essential point in war," Frederick believed, and he demanded that his generals keep away from sideshows. "Always sacrifice the bagatelle and pursue the essential," he insisted.[43] Fuller discussed the same problem in a different way when he formulated the principles of war. The idea that Sun Tzu and Frederick the Great discussed is encapsulated in two of Fuller's principles: mass and objective. Fuller believed that the successful general always kept the final objective in mind and did not allow himself to be diverted by attractive, but transient, opportunities; and he always kept in hand a sufficient force to deal with that final objective.[44]

Those general principles constituted nothing new in the military art, although Fuller expressed them very clearly and concisely, drawing together disparate ideas of many of the great philosophers of war. The doctrines of mass and objective were implicit in the works of Clausewitz, and explicit in von der Goltz's gloss of Clausewitz. He repeatedly wrote about the need to pay attention to

[39]Sun Tzu, *The Art of War,* p. 69. Griffith translation, pp. 111–12.

[40]*Ibid.,* pp. 94–95. Griffith translation, pp. 79, 85.

[41]*Ibid.,* p. 60. Griffith translation, pp. 79–80.

[42]Frederick II von Hohenzollern, King of Prussia, *Instructions For His Generals* (Harrisburg: The Stackpole Company, 1944), p. 51.

[43]*Ibid.,* pp. 44, 52.

[44]In *The Reformation of War,* Fuller devoted considerable space to elaborating upon the principles of war as he saw them; see pp. 28 *et seq.*

the enemy's main army and to "fall upon the enemy's weakest point with superior force" as the first principle of the military art.[45] He conceded that small detachments of troops might hold larger bodies of the enemy in check while the enemy's main force was brought to battle, but insisted that every detachment that had no connection with the decision of the main battle was "invariably faulty." He believed that every such detachment from the main force was a blunder, for "a single battalion may turn the scale in a battle."[46]

And yet no army could possibly have enough battalions to ensure victory under all possible circumstances, for manpower is always limited. Frederick the Great, confronted with that dilemma, suggested ways to manipulate the combat power of a smaller army to cope with far larger enemies. Sheer numbers, according to Frederick, were far less important than the situation and the tactics that a general chose to use. In every age, the ingenious commander had some technique or technology available to him to overcome the limitations imposed by the size of his army.

Frederick the Great used the advantages of interior lines and superior battlefield discipline—and not a little luck—to stave off his several enemies. In the twentieth century, other possibilities suggested themselves. Foremost among them was superior mobility, which prophets of armored warfare such as Fuller believed would revolutionize battle. The smaller army that had superior mobility could still concentrate mass at the decisive place and time to engage and defeat the enemy's main body. Higher mobility would give the smaller army the critical advantage in space and time so that it could act faster than its enemy could react. Colmar von der Goltz stated the requirement in 1899, writing that a high degree of mobility was essential because movement was the "very soul" of the strategic offensive.[47] In a series of books, Fuller proceeded from that truism to demonstrate how an army could sustain mobility in the face of the enormous firepower that World War I had shown the defense to possess. In general terms, Fuller believed that the army had to design its organization and equipment with an eye to the enemy's mobility, the nature of the country in which the army was intended to fight, and the issue of command of the air. If, for example, an army enjoyed complete superiority in the air, then its mobility

[45]Fuller, *The Conduct of War,* pp. 9–10, 132, 154.
[46]*Ibid.,* pp. 10–12.
[47]Fuller, *The Conduct of War,* p. 43.

would be enhanced in proportion as the enemy's freedom of action was restricted by air attack.[48] Wedemeyer read Fuller while stationed in Berlin and emphasized in his report the same basic theme Fuller addressed: the problem of avoiding another long war of attrition by restoring mobility to the battlefield.

Fuller was convinced, moreover, that superior mobility had to have some purpose other than continuing to bludgeon the enemy on the line of contact—the bankrupt solution of the First World War. Therefore he wrote that the army should always strike strategic objectives as a way to win wars. That pointer came once again from Frederick the Great, who stressed that the foundation of an army was its belly, and that no army could function without being able to nourish itself.[49] Frederick's words rang particularly true in the case of World War I, where large armies fought great, costly, but ultimately inconclusive battles. The war finally ended because the belligerents could no longer sustain the fighting; exhaustion, rather than battle, decided the issue. The war might surely have been ended sooner and at less cost if the armies had been able to find some way to interrupt the essential supplies that sustained the divisions on the line.

Ruminating upon that problem, Fuller and others concluded that warfare of the future would be fought over large areas, rather than on more or less rigid lines.[50] Fuller believed that the fighting typical of the Great War was archaic. He suggested the simile of the boxer, who wears himself out trying to batter the strong arms of his opponent, while he might more profitably strike the other man in the head. Fuller expressed the idea more prosaically when he described the correct way to win a war in terms of delivering a "pistol shot to the brain" of the enemy's army, rather than fighting the great, expensive, dangerous battles typical of World War I.[51] What, then, should be the objective of military operations—an objective that would satisfy the description of the enemy's "brain"?

The proper objective was almost always the enemy's command structure and his lines of communications. Fuller's reply to Frederick the Great's observation about an army's needs was that the wise commander should destroy the other army's logistics. The decisive

[48]Fuller, *Lectures on FSR III,* p. 72.

[49]Frederick the Great, *Instructions For His Generals,* p. 34.

[50]Fuller, *Lectures on FSR III,* p. 356.

[51]Fuller, *On Future Warfare,* pp. 93 *et seq.* Fuller expressed the same point in various ways elsewhere in his writings as well.

point, he believed, was always "that point in an army, generally the rear, from which its line of communications to its supply base runs."[52] While, therefore, the object of all military operations must be the enemy's main body, technology had changed the way to achieve that goal. No longer were great decisive battles to be fought out on the line of contact, although Fuller agreed that battle was important in order to hold the enemy in place, reduce his mobility, and constrict his freedom of action, so that the critical attacks directed against his rear could prove successful.[53]

Traditionally organized armies could never conduct the operations Fuller described because they were too large and too ponderous. The modern army had to exploit the advances that changes in civil society had wrought, particularly those changes in science, industry, and engineering that intimately affected the nature of weapons.[54] The great failure of armies in 1914 was that they imperfectly assessed and applied the technological advances with which they were confronted. The slaughter that followed was the direct result of the failure to appreciate that an army must keep pace with the progress of industry. "The war we had prepared for," Fuller eventually concluded, "was a phantom, a will o' the wisp, which literally led us off the highway of progress. . . ."[55] In solving the problem, he rejected the conventional wisdom of the orthodox military mind that World War I proved conclusively the superiority of the defense; that the offense could never again overcome the inherent advantages of the defense; and that future warfare would necessarily be positional. If soldiers failed to recognize the changes that technology had wrought in war, they would again prepare to fight the wrong sort of war. In short, Fuller believed that the great lesson of World War I was that mobility was essential and that the power of defensive fire could be overcome by combining mobility with armored protection.

The revolution in technology provided the answer. Fuller wrote that weapons change tactics, organization, and the training of armies. Whatever changes might arise, however, the first necessity was always to develop mobility through "protected offensive power," a consideration to which all other tactical functions were subordi-

[52]Fuller, *Lectures on FSR III,* p. 85.
[53]*Ibid.*
[54]Fuller, *On Future Warfare,* p. 224.
[55]*Ibid.,* p. 114.

nate.[56] "Protected offensive power" lay at the heart of the matter. The rifle and the machine gun created the conditions that dominated World War I. In the face of the modern bullet it was impossible for the cavalry and dismounted infantry to conduct the kinds of operations that Fuller described as being decisive. Once pinned down by deadly rifle fire, formations were decimated by even deadlier artillery barrages. Technology produced the answer: the tank.

Armor defeated the bullet[57] and gave the army the mobility it needed to win a war that ranged over great land areas. The tank of World War I was designed to accompany the infantry and overcome the obstacles the infantry faced, but that tank was an immature weapon. Fuller, by contrast, envisioned fast, lightly armed and lightly armored vehicles to be used in exploitation of an enemy's immediate tactical defeat. His concept strongly resembled the conduct of war at sea, and he believed that tank formations could achieve decisive strategic results when properly organized and employed.[58] Other forces might have many missions, but the armored force was purely offensive in nature. The arms that supported the tanks—the infantry, engineers, signal troops, and artillery—had to be similarly mounted if they were to be of any use.[59]

The experience of the First World War demonstrated, moreover, that ground forces could no longer operate independently. Fuller believed deeply in joint operations and thought that advances in the capabilities of one of the armed forces significantly affected the operations of the others. Modern soldiers had to learn to think of the combined use of the three services, rather than of their individual employment. That meant one could not consider the army without thinking of the air force, or about the impact of science and industry on civil life and politics. Genius lay in fitting all of those factors together.[60] He saw immediate application for air power in the conduct of future warfare.

The air force, Fuller argued, "is the thunderbolt of future war." The soldier's task was to determine the correct targets so that the power of an air force could be used to help deliver the knockout blow.[61] If mobility were the key to success in war, then one should

[56]*Ibid.*, p. 224.
[57]Fuller, *Lectures on FSR III*, p. 39 *et passim.*
[58]Fuller, *On Future Warfare*, pp. 8–10, and Chapter I.
[59]*Ibid.*, pp. 251–52, 370, *et passim.*
[60]*Ibid.*, pp. 144–45.
[61]*Ibid.*, p. 223.

attempt to reduce the enemy's mobility as the corollary, and in that task air forces could excel. Even a modern mechanized army, Fuller said, was vulnerable because it was "a slow-moving horde" when compared to the speed of airplanes, especially vulnerable because it had to be supplied by hundreds of vehicles tied to roads and railways.[62] The second important function of air power was scouting. Fuller emphasized the reconnaissance role of airplanes, particularly their ability to find enemy tanks, so enabling friendly armor to attack them. Without the airplane, the tank was blind, according to Fuller, and he deduced that cooperation between tanks and airplanes would be characteristic of future wars and far more significant than cooperation between tanks and infantry.[63]

Future warfare, as Fuller described it, would be fast-paced, with the consequence that its practitioners would have increasingly little time available to make decisions. Fuller believed that the mobile forces he described had to be used in a much less structured way because a fixed plan could never survive in such a flexible, rapidly developing situation.[64] Time was therefore the decisive factor in warfare. To conserve time was a goal to be attained through thorough preparation, not only in tactical training and well-exercised troops, but also through a thorough knowledge of the enemy and the conditions under which the army had to fight.

Fuller believed that audacity won wars, but that success was founded upon sound information and a psychological grasp of the enemy's intentions.[65] Frederick the Great wrote that "war is not an affair of chance," but of preparation, although ill fortune can confound a general's prudence.[66] Audacity, then, should always proceed from a cold appreciation of the circumstances of battle. Thus the general had to know his enemy and the country in which he fought.

Sun Tzu wrote that "what enables the wise sovereign and the good general to strike and conquer, and to achieve things beyond the reach of ordinary men, is *foreknowledge*."[67] That meant that the general had to know the enemy as well as himself: "If you know the

[62]*Ibid.*, p. 328.
[63]Fuller, *On Future Warfare*, p. 25.
[64]Fuller, *Lectures on FSR III*, pp. 44–45.
[65]*Ibid.*, p. 87.
[66]Frederick the Great, *Instructions to His Generals*, pp. 66, 96.
[67]Sun Tzu, *The Art of War*, p. 81. Emphasis in original. Griffith translation, p. 144.

enemy and yourself, you need not fear the result of a hundred battles. If you know yourself, but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle."[68] Significantly, Sun Tzu warned against entering into alliances until well acquainted with the neighboring country's plans, lest the allies work at cross purposes.[69] Frederick the Great advised the general to know the enemy's country as thoroughly as possible. For Frederick, that injunction included understanding the enemy terrain, population, and economy. Without such a careful study of the enemy, a general can never understand what the enemy is capable of doing. Frederick always believed it important for the general "not to think so much about what he wishes to do as about what his enemy will do," so as never to underestimate the enemy.[70] Clausewitz, as interpreted by von der Goltz, reiterated those ideas, the latter writing that "our own plan of strategical concentration must take into consideration that of the enemy."[71]

The ultimate question was where military operations should be conducted in order to produce decisive results. Both the United States Navy and many senior Army officers believed in the 1930s that the interests of the United States lay in the Pacific, where Japan had emerged as the chief prospective enemy. The American conquest of the Philippines in 1898 and the Japanese defeat of the Russians in 1905 placed the two new great powers in potential opposition. The spokesmen of the isolationist movement were particularly eloquent in their arguments that the country should take no part in European wars. When he chanced to read the works of Sir Halford J. Mackinder, however, Wedemeyer considered favorably arguments to the contrary.

Mackinder was a geographer who was the first director of the London School of Economics. His thesis was that there was a "world island" consisting of eastern Europe and central Asia that constituted the "heartland," a land power growing in importance and ascendancy over the "maritime lands" of the other continents. Mackinder reasoned that the military importance of navies was in decline and that the maritime powers could not compete with the

[68]*Ibid.*, p. 51. Griffith translation, p. 84.
[69]*Ibid.*, p. 65. Griffith translation, p. 88.
[70]Frederick the Great, *Instructions to His Generals*, pp. 24, 33, 47, *et passim.*
[71]Von der Goltz, *The Conduct of War*, pp. 126–27.

potential economic and industrial development of Asia, particularly Siberia.

As a result, he believed, only those military and political actions directly affecting the "heartland" could be decisive in world history. After the Treaty of Versailles, Mackinder urged that the United States and the United Kingdom accept the task of assuring the balance between the great powers that were attempting to dominate the heartland. Mackinder further opined that the political chaos attendant upon a lost war and political revolution in Central Europe would inevitably lead to dictatorship and war.[72] The consequences of war and its attendant political instability were so great that, for Mackinder, the critical theater of any war was always strongly influenced by considerations of heartland. By implication, any nation's strategy would definitely involve the heartland.

Albert Wedemeyer's professional reading gave him an excellent foundation in strategic thought. He preferred study of the strategic level of war to that of the tactical and early concluded that military strategy was only a part—and not necessarily the most important part—of national strategy. He accepted that war arose from political causes and had always to be conducted with the ultimate political goal in mind and that a war must be concluded with a peace that could be enforced. Clear understanding of the national policy was thus for Wedemeyer the precondition of successful strategic planning. While he never studied mobilization planning *per se,* his professional reading offered a comprehensive survey of the chief problems of mobilization and strategic planning.

Wedemeyer's reading, both classic and modern, offered a description of modern war that almost always inclines toward total war and encompasses all aspects of society. In order to fight such a war in which national survival may be at stake, the military forces must be fully prepared to prosecute the war aggressively and unceasingly until its conclusion. The expense of modern armies made it necessary to find ways in which to employ smaller armies to meet such a goal, however, and to plan for a nation's rapid and efficient transi-

[72]Sir Halford John Mackinder, *The Scope and Methods of Geography and the Geographical Pivot of History* (London: The Royal Geographical Society, 1969 reprints of papers given in 1902 and 1904); and *Democratic Ideals and Reality. A Study in the Politics of Reconstruction* (New York: Henry Holt and Company, 1942 reprint of 1919 edition). "Round World and the Winning of the Peace," in *Foreign Affairs* 21 (1943), 595–605 is an exceptional summary of Mackinder's thought.

tion from peace to war. Mobilization therefore was of the first importance for any army, as was the preparedness generated by careful and thoughtful military planning. Wars had to be fought and concluded quickly, in order to avoid the vagaries of chance, and they had to be fought efficiently. Effective warfare boiled down to directing military effort against the main objective, eschewing side issues and military filibustering.

The principal objective of any army was the main body of the enemy's army, but the experience of World War I taught Wedemeyer that the way in which the enemy should be brought to battle was through deep attacks to destroy his command, logistics, and communications, rather than through great pitched battles between more or less equally balanced forces. Rapid advances in technology gave armies the tools with which to conduct mobile warfare of that sort, and the serious students of mobile warfare described the use of the tank and the airplane to accomplish those ends.

Of critical importance were intelligence and careful study of the enemy, his capabilities, intentions, territories, and the probable theater of operations. Equally important were the goals and intentions of one's allies. Finally, there was the emerging and persuasive idea that the theater in which decisive operations might be conducted was the Eurasian land mass, where the struggle for control of the heartland was going on.

What is to be made of this recitation of key points from the books to which Wedemeyer acknowledged intellectual debts? However attractive it may be to conclude that he gleaned these specific concepts when he read them, the question can only remain an open one, possible—even probable—but unproven. What is certain is that Wedemeyer's professional reading was in some measure responsible for developing what Clausewitz termed the educated judgment of the mature soldier. Without that educated judgment, Wedemeyer would have been incapable of carrying through the planning tasks assigned to him in 1941.

The good counsel of his careful professional reading, when combined with the experience of his diverse assignments and formal professional schooling, gave Albert Wedemeyer an unusually good preparation for the job he came to hold. All of General George Marshall's officers in the War Plans Division were bright, intelligent, dedicated, and capable men, no one of whom stands out more than the others. In Wedemeyer, however, chance had delivered a difficult

planning task to the man whose combination of intellect, education, and experience made him almost perfectly suited to draft the mobilization estimate for national defense forces that in 1941 were wholly inadequate for global military action.

CHAPTER 2
The Requirement

"The Army used to have all the time in the world and no money; now we've got all the money and no time."

General George C. Marshall
January 1942

When Albert Wedemeyer took up his duties on the War Department General Staff on 26 April 1941,[1] he found an extraordinarily tense situation in which public opinion and domestic politics dramatically affected military planning. The German artillery barrage that fell on Polish positions on the morning of 1 September 1939 had shattered more than the uneasy peace that Edward Hallett Carr termed the "Twenty Years' Crisis."[2] Thousands of miles away in the United States it had also shattered any residual possibility of a consensus on foreign policy and aggravated old and acrimonious debates about America's role in European wars.

As the nation entered the summer of 1941, it was precariously balanced on the edge of impending political crisis. The international situation was grim and public fears and apprehensions inflamed domestic politics. At issue was the role of the United States in the world. Isolationists saw the country as a regional power with regional interests. President Franklin Roosevelt, on the other hand, conceived of the United States as a world power with attendant great power responsibilities. Until the country resolved that debate, it could not react with common cause to the emergency created by German aggression.

By 1941 most Americans were beginning to realize that the country would have to face another war, although most still hoped to avoid it. Public sentiment favored rearming the United States,

[1]Master Personnel List, Arrivals and Departures, War Plans Division. USACMH Historical Services Division file HRC 321, War Plans Division, 228.03.

[2]Edward Hallett Carr, *The Twenty Years' Crisis 1919–1939. An Introduction to the Study of International Relations* (New York: Harper, 1964 reprint of 1939 edition).

particularly after the fall of France in 1940, but even though more than 80 percent of the people expected to be involved in war, a like number still opposed any immediate American entry into the fighting. Despite considerable shifts in public opinion because of the increasingly dangerous international situation, Americans still hoped for peace and did not welcome the suggestion, particularly from public officials, that the United States should fight in Europe's latest war.[3] Government officials had to shape their policy toward the warring powers, taking account of that great public sensitivity. It was thus politically dangerous to speak too definitely about national policy, particularly as applied to the European crisis.

The United States Army, a prospective instrument of national policy, had no voice in the diplomatic and political decisions that eventually led the nation into the war, but quite naturally took an enlightened interest in them. Indeed, the political context in which the Army had to operate, quite as much as contemporary military realities, shaped the kinds of decisions it could make about preparing itself for war. The plain fact was that the armed forces could not prepare for the future unless they had some idea what the future held. But at a time when substantive military plans and preparations were most needed, conflicting signals and contradictory public statements hamstrung military planners. In the end, they could only assume what the national policy might be and guess at the intentions of their own government. The commander in chief was unable, for excellent political reasons, to tell his Army and Navy staffs to prepare for the global war he foresaw. Lacking specific guidance, military and naval staff officers made informed surmises, often based upon what they read in the newspapers, about the direction the country would take politically and diplomatically, as well as militarily, in the months ahead. Military planners worked without clear, unambiguous direction.

There was good reason for this, if that direction involved preparation for another European war. The electorate had been disappointed by the "War to End Wars," the ineptitude of the League of Nations, and the general failure of collective security.[4] The effects

[3]See Thomas A. Bailey, *The Man in the Street* (New York: Macmillan, 1964 reprint of 1948 edition), and other works cited in the bibliography.

[4]On American attitudes and influences on those attitudes, see Robert Dallek, *Franklin D. Roosevelt and American Foreign Policy, 1932–1945* (New York: Oxford University Press, 1979); Eric Larrabee, *Commander in Chief. Franklin Delano Roosevelt, His Lieutenants, and Their War* (New York: Harper, 1987).

of the Great Depression exacerbated voters' disinterest in European problems and concentrated their concerns on domestic issues. Americans generally resisted the notion that the government should spend money in the interests of an activist foreign policy, rather than on needed social programs. Isolationist spokesmen argued volubly and persuasively that America had no legitimate interests to pursue in Europe, holding that her former allies had cold-bloodedly exploited America's idealism to involve the nation in their last war. The United States, they believed, had been drawn into the war chiefly through the machinations of the clever propagandists of England and France and in the interests of the rapacious international bankers and munitions makers. Socialist rhetoric of the decades of the 1920s and 1930s reinforced the latter point, finding a particularly receptive audience among the working classes upon which the burden of military service was most likely to fall.[5]

Regardless of the reasons for American participation in the world war, many Americans came to believe that it had been a horrible mistake. They coupled that belief with a growing pacifist sentiment fueled by the literature and cinema of the interwar period, both of which were rife with pacifism and depicted war as a pointless horror. The emotional impact of popular literature and drama thus gained a measure of acceptance for the isolationist arguments that could never have been attained through logic alone.[6]

Domestic politics of the interwar years reflected such themes, and many Americans believed that strict neutrality offered the United States the best insurance against exploitation by belligerents. In Congress in 1934, the Nye Committee began to probe the question of the relationship between manufacturers of armaments and war. Even granting that the drive for profits by the "merchants of death" did not increase the risk of war, legislators were persuaded by the argument that it was trade with the warring nations that had eventually brought the country into the First World War. Responding to that conclusion, they passed the Neutrality Act in 1935. That legislation prohibited the sale of military materiel to any belligerent power, and the Congress was so satisfied with the stance that it

[5]See Wayne Cole, *Roosevelt and the Isolationists* (Omaha: University of Nebraska Press, 1983).

[6]See Robert Wohl, *The Generation of 1914* (Cambridge: Harvard University Press, 1979).

renewed and extended the act in 1935, 1936, and 1937. Public revulsion to war as an instrument of national policy found a dramatic expression in 1937, when Congress considered the "Ludlow Resolution for a National Referendum on a Declaration of War." Had it passed, the Ludlow Resolution would have prevented even the Congress from declaring war and required that the question be put to the nation in the form of a national referendum—except in response to a direct attack.[7]

In such an atmosphere, arguments for a purely hemispheric national defense appealed to Americans on several grounds. They conformed to the country's traditional bias against a large, standing, professional army; they justified opposition to public spending for defense; and they coincided with isolationist contentions that the United States had no vital interests to protect outside of the Americas.[8]

The rise of the fascist dictatorships in Germany and Italy sounded a clear danger signal to the president, but he found that the nation did not generally share his alarm. Roosevelt believed that the continued existence of Great Britain as a world power was in the interests of the United States, and that the aggressive foreign policies of Italy and Germany threatened Great Britain. He also believed that the nation should do what was morally right, not just what its self-interest dictated.[9] Accordingly, he took every opportunity to express his support for the European democracies, although such support remained a personal matter, unconfirmed by the Congress and bereft of practical measures to aid those nations. Still, the president's views, taken together with the outbreak of war in Europe in September 1939, frightened many Americans and lowered the isolationist-interventionist argument from the realms of philosophy to those of immediate politics.

Determined men took up the argument on each side of the issue. Many Americans believed that war was an epidemic disease of distinctly European origin, against which the Neutrality Act and similar isolationist actions were the best remedy. All agreed that

[7]See Helmuth C. Engelbrecht and Frank C. Hanighen, *Merchants of Death* (New York: Garland, 1934).

[8]On American opposition to the standing military and overseas warfare, see Walter Millis, *Arms and Men: A Study in American Military History* (New York: G. P. Putnam, 1956)

[9]See William L. Langer and S. Everett Gleason, *The Challenge to Isolation: The World Crisis of 1937–1940 and American Foreign Policy* (New York: Harper, 1964 reprint of 1952 edition).

quarantine was the answer, but opinions differed about whom to place in quarantine. Isolationists wanted to quarantine the United States, in order to protect it from the source of infection. Roosevelt wanted to place the aggressor nations in quarantine, so as to protect all law-abiding nations. When he suggested that idea in a speech in Chicago in October 1937, however, the press, much in line with national sentiment, rejected it.[10]

President Roosevelt thus faced the dual problem of convincing a skeptical electorate that America should intervene in a European war and of building up, almost from scratch, the military wherewithal to make such an intervention possible. Roosevelt was fortunate enough, however, to find staunch political allies who shared his point of view and who were willing to help him transform his goals into realities. One of those was the man he chose to be his secretary of war.

Henry L. Stimson, a prominent Republican and former secretary of state and secretary of war, believed the United States could be attacked by the fascists at almost any moment. American safety depended in large part on the security of the two peace-loving nations in Europe, Britain and France. Only one course of action, he believed, could save western civilization and guarantee American welfare. That course was actively to aid Britain and France. Stimson considered that the continued existence of Great Britain was essential to the security of the United States because it was British naval power that secured the Atlantic frontier. Should Britain be overcome by Germany, her fleet could no longer fulfill that function; worse, the fleet might even fall into German hands. It was, therefore, not just a matter of taking the course of right and honor in international affairs, although he firmly believed that the nation could not and should not pursue peace in preference to right. So Stimson also had his eye on the maintenance of British military power.[11]

The fall of France in May 1940 made the international situation more desperate. Americans regarded France fondly and saw the

[10]Dorothy Berg, "Notes on Roosevelt's 'Quarantine' Speech," *Political Science Quarterly* 72:3 (1957), 405–33; John McVickar Haight, Jr., "Roosevelt and the Aftermath of the Quarantine Speech," *Review of Politics* 24:2 (1962), 233–59; and Travis B. Jacobs, "Roosevelt's 'Quarantine Speech,'" *Historian* 24:4 (1962), 483–502.

[11]Letter, H. L. Stimson to Editor, *New York Times,* 6 March 1939. On Stimson's viewpoint, see Henry L. Stimson, with McGeorge Bundy, *On Active Service in Peace and War* (New York: Harper, 1947).

French armed forces as among the most powerful in the world.[12] When French arms collapsed, the reaction in the United States was both dramatic and immediate.[13] With so strong a bulwark gone, there was almost unanimous agreement that the United States had to build a powerful Army and Navy—and Congress hurriedly appropriated the funds to do so. At that point, however, agreement ceased and the isolationist-interventionist debate was renewed in all its old vigor. Isolationists agreed that a powerful military was necessary for the United States to secure the western hemisphere against the belligerents. Still, the European war, however it might affect the Americas, was only another European war in which America's interests were not engaged. Interventionists knew that the British needed American help more now than ever and insisted that the war against Hitler was, or ought to be, an American war. When, on 19 June 1940, President Roosevelt appointed Stimson to be secretary of war, he both underscored the bipartisan nature of the national emergency and tacitly announced his intention of helping the British and French.

Upon taking office, Stimson immediately began to prepare the Army for the war he foresaw. He thought it necessary immediately to increase military appropriations and to install a system of universal military training. Very little time was available to build up the Army and the national spirit. To secure some of that time, Stimson argued on behalf of sustaining the British fleet. After his confirmation as secretary of war, and after repeal of the Neutrality Act, Stimson began immediately to implement that program. With the energetic cooperation of Treasury Secretary Henry Morgenthau, Jr., Stimson presided over extensive sales of American military equipment to the British as the War Department took on the task of supplying the armies arrayed against Hitler. Throughout the late summer and fall of 1940 Assistant Secretary (later Under Secretary) of War Robert Patterson administered procurement of weapons and munitions for Britain at the same time that he regulated purchases for the growing United States Army.

[12]The French Army was indeed powerful in 1940, and it had been assiduously preparing for twenty years to fight Germany. That it lost the war was not the result of deficiencies in military strength, but in the French doctrine for battle. See Robert A. Doughty, *The Seeds of Disaster. The Development of French Army Doctrine 1919–1939* (Hamden, Conn.: Archon Books, 1985).

[13]On the shifting of views in 1940, see Waldo Heinrichs, *Threshold of War: Franklin D. Roosevelt and American Entry into World War II* (New York: Oxford University Press, 1988).

Eventually the British reached the limits of their financial resources and had no more foreign exchange with which to buy materiel of war—this despite the most creative financial arrangements that Secretary Morgenthau could devise. Roosevelt, undeterred by such problems, announced on 17 December 1940 his "determination to insure all-out aid to Great Britain," and on 29 December made his famous "Arsenal of Democracy" speech. Two months later, after great public debate, the Congress passed the Lend Lease Act, which gave the president the authority to supply defense materiel to such governments as he deemed vital to the defense of the United States. Although the government eventually spent much more, the act initially authorized $7 billion for lend lease. Stimson called this a "declaration of economic war."

Indeed, by December 1940, Stimson believed that the country would eventually be at war in Europe. After a meeting with Secretary of the Navy Frank Knox, General Marshall, and Admiral Harold Stark on the 16th, he confided to his diary that "there was basic agreement among us all. . . . All four agreed that this emergency could hardly be passed over without this country being drawn into the war eventually."[14] The nation's foreign policy certainly pointed in that direction, as the president moved the nation, if not closer to an alliance with Britain and France, certainly further away from neutrality.

Roosevelt's executive policy commitments to cooperate with the British began as early as January of 1938, when he permitted Anglo-American naval conversations. Although he gave no guidance or explicit approval, the president also permitted the War and Navy Departments to write new war plans—the RAINBOW plans—that envisioned war against the Axis powers. American officers conducted further discussions in London in August and September of 1940, and the work of that Anglo-American Standardization Committee established closer ties and the habit of consultation that culminated in American-British Staff Conversations in 1941, and the subsequent exchange of liaison officers.[15] The secret but informal American-British (ABC) conversations conducted between the British and American staffs between January and March of 1941

[14]Stimson, *On Active Service in Peace and War,* p. 366.

[15]See Marvin A. Kreidberg and Merton G. Henry, *History of Military Mobilization in the United States Army 1775–1945* (Washington: Department of the Army Pamphlet No. 20–212, June 1955), pp. 560–61, for a useful summary of these actions.

went further still. It was in those conversations that American military authorities agreed that Germany was the primary enemy in case of American intervention and that any eventual coalition would direct its efforts mainly against Germany with the goal of unconditional surrender. As a corollary, the United States necessarily accepted the fact that it would have to contain the Japanese, should a two-front war develop, until the principal enemy was defeated. Such a strategy was the only one that could guarantee the survival of Great Britain, a cornerstone of Roosevelt's policy.[16]

In the months that followed March of 1941, the United States began to look less and less like a neutral power. The sale of surplus infantry weapons to England in June of 1940 was the modest prelude to the "destroyer deal" of September 1940. The Battle of the Atlantic had claimed many British escort vessels, and the Royal Navy was desperately looking for enough warships to shepherd convoys to English ports. If it was in American interests that the Germans not win control of the Atlantic, then the United States had only two choices: give material aid to the British or take an active part in the antisubmarine patrols. Roosevelt decided to do both.

On 3 September he concluded the deal through which the British got fifty old destroyers of the *Clemson* and similar classes, obsolescent if not actually obsolete, in return for 99-year leases for bases on six British Atlantic possessions. Those old flush-decked, four stack warships had been built between 1917 and 1921, and the Navy had already begun retiring them from active service in 1929. Replying to his congressional critics, President Roosevelt explained that he had given away ships valued at only $4,000 or $5,000 each, all of them destined for the scrapheap. In return, he had obtained naval and air bases in Newfoundland, Bermuda, the Bahamas, Jamaica, St. Lucia, Trinidad, and British Guiana. He made the deal more palatable by suggesting that those bases made it possible for the Navy and Air Corps to do an effective job of ensuring defense of the western hemisphere. Critics had long argued that modern ships and modern weapons made it impossible for the United States to enforce the Monroe Doctrine unless it had the bases to operate farther out into the ocean. The destroyer deal solved that problem.

[16]On American intentions and early cooperation with the British, see Kent Roberts Greenfield, *American Strategy in World War II: A Reconsideration* (Baltimore: The Johns Hopkins University Press, 1963), p. 5, and other works cited in the bibliography.

The president confided to Congress that the possible German response should not enter into the decision about the destroyers for bases deal, because, as he explained to Senator David I. Walsch, a Massachusetts Democrat who chaired the Naval Affairs Committee and opposed the deal,

> In regard to German retaliation, I think you can rest quietly on that score. If Germany, at the conclusion of this war or before that, wants to fight us, Germany will do so on any number of trumped-up charges. . . . I am absolutely certain that this particular deal will not get us into war and, incidentally, that we are not going into war anyway unless Germany wishes to attack us.[17]

Germany certainly had plenty of opportunity to make such an attack, for the president shortly authorized the Navy to extend its patrols into the war zone in what he called "neutrality patrols." Increasingly, American warships involved themselves in belligerent affairs, to the point of escorting convoys out of American waters and firing on attackers.

Soon after the patrols began on 16 April 1941, an undeclared naval war began to develop. As American warships ranged farther out into the Atlantic, they began to come into contact with units of the German navy. Inevitably, errors in identification occurred, for the U.S. Navy continued to use destroyers of the same class as those transferred to England. Just after Labor Day a German submarine fired at, but missed, the destroyer *Greer.* The president responded by giving the Navy orders to "shoot on sight." On 17 October the destroyer *Kearny,* patrolling in the North Atlantic war zone, was hit by a torpedo but did not sink. Finally, at the end of October, the destroyer *Reuben James* was sunk. Cool heads prevailed, both in Washington and in Berlin, but Americans were fighting and dying in the North Atlantic.

Still, many of the president's commitments remained tacit, and he gave no explicit guidance to the military staffs. As the crisis developed, military planners continued to know little more about the nation's ultimate goals than did the public. Having no instructions to the contrary, they continued to work on the assumption that national policy aimed at defense of the western hemisphere, not participation in a global war. Such a set of circumstances severely

[17]Letter, F. D. Roosevelt to Sen. David I. Walsh, 22 August 1940, in Elliott Roosevelt (ed.), *F. D. R. His Personal Letters. 1928–1945* (New York: Duell, Sloan and Pearce, 1950), Vol. 2, pp. 1056–57.

limited the utility of the work the staffs could do. But if the political situation limited the range of options available to staff planners, the sorry state of the Army limited them even more.

The Military in 1941

The condition of the armed forces provides a reasonably accurate means to assess the direction of public policy between 1919 and 1939, since the government should logically authorize appropriations to build an army and a navy proportionate to the tasks set by the political leadership of the nation.[18] Seen from that perspective, it is clear that the United States neither expected nor desired foreign military adventures, because the military was simply not up to the task. In fact, the Army of the interwar years was one of the least capable in the history of the United States, lacking even the ability to wage a limited, counterguerrilla war, as it had done in the Philippines at the turn of the century and on the frontier after the Civil War.[19] General Peyton C. March, Chief of Staff of the Army at the end of World War I, went so far as to declare that the United States had voluntarily made itself even weaker than the Versailles Treaty had made Germany and spoke of the nation as being militarily "impotent."[20]

On paper, of course, the nation had a sufficiently strong Army. The National Defense Act of 4 June 1920 set out a method for mobilizing an Army of the United States from regular and reserve components, as well as from conscripted manpower. In time of peace, it provided for an Army of nine regular divisions, eighteen National Guard divisions, and twenty-seven Organized Reserve divisions, all organized into nine corps area commands subordinate to three field armies. The regulars were expected to train the reserve component formations in their corps areas, but were so constituted that they formed complete military units that could respond immediately in a military emergency. It was, however, one

[18]For a discussion of the relationship between public policy and the structure of military institutions, see Allan R. Millett and Williamson Murray (eds.), *Military Effectiveness* (Winchester, Mass.: Unwin Hyam, 1988), 3 vols. Volume 2 deals with the interwar period.

[19]This is the judgment of Russell F. Weigley, in *History of the United States Army* (New York: Macmillan, 1967), pp. 402–03.

[20]Peyton C. March, *The Nation at War* (Garden City, N. J.: Doubleday, 1932), p. 341 *et seq.*

thing to design such a force, but another thing entirely to execute the design.

In the interests of budgetary restraint, Congress almost immediately began to pare down military appropriations and reduced the regular force to less than 140,000 by 1927. The Army had to declare surplus and discharge many regular officers, and it never organized the regular divisions the 1920 act envisioned. Congress also authorized little money for drill pay, so the National Guard never exceeded a strength of around 200,000, about half of the force authorized in 1920. For reservists, the picture was even more bleak. The Enlisted Reserve Corps was so small as to be insignificant, and the 100,000 officers in the Officers' Reserve Corps rarely trained because money was lacking.[21]

Even had Congress agreed to support Britain and France when war broke out, it is doubtful that much could have been done to help in any practical way. In 1939 the United States Army was still a tiny force of 187,893 men, of whom only 13,039 were officers. By the standards of force in being, even little Belgium with its seventeen divisions and 650,000 men under arms was a more desirable ally.[22] Nor could the United States have offered much in the way of military materiel in 1939, since the existing defense industrial base was minuscule.[23]

Interventionists, justifiably disappointed with the military means at hand, found that the corpus of strategic war plans offered

[21]For an assessment of 1920 National Defense Act by one of its principal authors, see John McAuley Palmer, *America in Arms* (New Haven: Yale University Press, 1941).

[22]Marvin A. Kreidberg and Merton G. Henry, *History of Military Mobilization in the United States Army 1775–1945* (Washington: Department of the Army Pamphlet No. 20–212, June 1955), p. 549. There are various sources of comparative strength figures for the armies involved in World War II. See memorandum, "Mobilization and Military Expenditures 1939–1940," in Center of Military History Historical Services Branch file Misc 370.01, Mobilization Experiences.

[23]For discussions of the industrial base and considerations of industrial and economic mobilization for war, see: Byron Fairchild and Jonathan Grossman, *The Army and Industrial Manpower,* UNITED STATES ARMY IN WORLD WAR II (Washington, D. C.: Office of the Chief of Military History, 1959); Richard M. Leighton and Robert W. Coakley, *Global Logistics and Strategy 1940–1943,* UNITED STATES ARMY IN WORLD WAR II (Washington, D. C.: Office of the Chief of Military History, 1955); R. Elberton Smith, *The Army and Economic Mobilization,* UNITED STATES ARMY IN WORLD WAR II (Washington: Office of the Chief of Military History, 1959); Kreidberg and Henry, *History of Military Mobilization;* and David F. Trask (ed.), "Historical Survey of U. S. Mobilization: Eight Topical Studies of the Twentieth Century" (Washington, D. C.: U. S. Army Center of Military History, n.d., typescript).

even less reassurance. Lacking the force to execute them, American military plans could hardly be anything more than theoretical constructs. The great wars of the previous seventy-five years had taught European armies that operational plans and mobilization plans had to be integrated very carefully, because speed of mobilization offered the opportunity to begin military operations with a distinct advantage.[24] Americans were innocent of such considerations, however, because the nation's favorable geographical position made rapid mobilization unnecessary. Were the United States to become involved in a major international war, the Navy could control the broad ocean frontiers to hold off an enemy long enough for the Army to accumulate the men and materiel it needed to prosecute the war on the ground. American planners also lacked the sense of urgency that drove Europeans to elaborate mobilization plans because the United States had a remarkably limited range of potential enemies, most of them rather feeble by European standards.

The upshot of America's favorable strategic position in the world was that American mobilization planning, like American strategic planning in general, did not have to be very complex in the years before World War II. Americans tended to think of strategy in purely military terms—Clausewitz was not generally read, even among soldiers, until well into the twentieth century. Furthermore, the Allied victory over the Central Powers in 1918 left the United States with no prospective enemy except Japan. American war plans of the 1920s and 1930s, then, tended to be highly theoretical, with the exception of the "Orange" plans that considered war with Japan. The general staff drafted the remainder of its plans with military factors uppermost in their minds and in the absence of any real threat against which to weigh alternatives. In many ways, war plans were really just a set of strategic exercises for planners. In addition, the only realistic war plan, Plan Orange against Japan, was almost exclusively a Navy operation that required little from the Army except defense of the Philippines.[25]

[24]There is a vast literature on this subject. For a sampling, begin with Gerhard Ritter, *The Schlieffen Plan: Critique of a Myth* (London: Oswald Wolff, 1958); and Hajo Holborn, "The Prusso-German School: Moltke and the Rise of the General Staff" in Peter Paret (ed.), *Makers of Modern Strategy from Machiavelli to the Nuclear Age* (Princeton: Princeton University Press, 1986).

[25]On the restricted scope of American prewar planning and narrow definition of strategy, see: Maurice Matloff, "The American Approach to War, 1919–1945," in Michael Howard (ed.), *The Theory and Practice of War* (London: Cassell, 1965), pp. 213–43, and the same author's "Prewar Military Plans and Preparations, 1939–

By late 1939 the Joint Planning Committee of the Joint Army Navy Board began to revise all of the old "color" plans. The committee authored five major planning directives, each of which considered different military and political problems. The military staffs began to write plans in response to those directives, eventually producing the five RAINBOW plans, four of which still concerned themselves largely with defense of the western hemisphere. RAINBOW 5, while concerned with preventing violations of the Monroe Doctrine, was also an aggressive defensive plan that extended American security frontiers far beyond the continental limits of the United States and envisioned sending task forces overseas to cooperate with Britain and France in a war against Germany and Italy.[26]

While planning had improved, the Army still lacked forces to execute any of the RAINBOW options. Between late 1939 and early 1941, however, Congress authorized the Army to make serious preparations for war. In May 1940, the Army was permitted to expand its regular strength to 375,000 through the medium of voluntary enlistments. But the service could not attract enough young men, and the scarcity of volunteers led the Congress on 27 August 1940 to pass a joint resolution authorizing the president to call up the National Guard and Organized Reserves. On 16 September, Congress also passed the Selective Training and Service Act with surprisingly little opposition. At the same time, the Army organized an Officer Candidate School system, began construction of training camps, and procured the supplies and equipment it would need for expansion.[27]

1941," in *United States Naval Institute Proceedings,* 79 (July, 1953), 741–48; Ray S. Cline, *Washington Command Post: The Operations Division,* UNITED STATES ARMY IN WORLD WAR II (Washington, D.C.: Office of the Chief of Military History, 1951), pp. 34–37; Louis Morton, "Germany First: The Basic Concept of Allied Strategy in World War II," in Kent Roberts Greenfield (ed.), *Command Decisions* (Washington, D. C.: Chief of Military History, 1984), pp. 10–47; Russell F. Weigley, *The American Way of War. A History of United States Strategy and Policy* (Bloomington: Indiana University Press, 1977).

[26]Louis Morton discusses the development of the RAINBOW series of plans in "Germany First: The Basic Concept of Allied Strategy in World War II," in Kent Roberts Greenfield (ed.), *Command Decisions* (Washington, D.C.: Office of the Chief of Military History, 1984). Also see Kreidberg and Henry, *History of Military Mobilization,* p. 558.

[27]For summaries of this, see Stimson, *On Active Service,* pp. 346–55. Also see the collected reports of General George C. Marshall: *Report on the Army. July 1, 1939 to June 30, 1943.* Biennial Reports of General George C. Marshall, Chief of Staff of the United States Army to The Secretary of War (Washington: The Infantry Journal, 1943), which covers the period of mobilization.

Despite the undeniable progress, General George C. Marshall, the Army chief of staff, still regarded the whole situation as unsatisfactory. Marshall had seen the chaos that resulted when the Army tried to mobilize for World War I and was determined that nothing of the like was going to happen again. While the Army was getting more money and had been given permission to expand in size, Marshall worried that the development of the force was proceeding in a helter-skelter, almost frenzied fashion. Above all, he wanted a clear, orderly plan for the Army to follow in the months ahead.[28]

The Army might seem to have had just such a plan in the Protective Mobilization Plan and its supporting Industrial Mobilization Plan of 1939. The Industrial Mobilization Plan had received considerable attention in the Office of the Assistant Secretary of War, chiefly because the Army had known for many years that it would have to procure its equipment after a war started. Few defense industries functioned in time of peace, and the small Army of the 1920s and 1930s could only own a limited amount of equipment. Further, the general strategic plans through the late 1930s primarily envisioned a naval war against Japan. Since the Army would have little part in such a war, the general staff tended to think of economic mobilization as being of much more interest than strategic plans.[29]

However good the Industrial Mobilization Plan was—and it had its deficiencies—the entire scheme was a dead letter by 1941. The Protective Mobilization Plan (PMP) was seriously outdated and unable to provide any more than the most general framework for building a large army. The plan provided for a moderate, balanced force consisting of a nucleus of 80,000 Regular Army soldiers and 180,000 National Guardsmen on the first day of mobilization, to be augmented within a month by 300,000 to 400,000 volunteers. By the 240th day of mobilization, the Army was to reach a programmed size of 1,150,000 men, while the Industrial Mobilization Plan was to provide full equipment and support for such an Army.[30]

[28]Forrest C. Pogue, *George C. Marshall: Ordeal and Hope. 1939–1942* (New York: The Viking Press, 1966), p. 139.

[29]Weigley, *American Way of War,* p. 208. The only significant Army role in War Plan Orange was in the Philippines, where the Army maintained only one Regular Army infantry division and a small Air Corps contingent. Within the Philippine Division, there was only one U.S. infantry regiment; the remaining regiments were Philippine Scouts.

[30]Stetson Conn, "Highlights of Mobilization," pp. 1–5. Also, Matloff and Snell, *Strategic Planning for Coalition Warfare 1941–1942,* chapter 2.

The Army of the PMP of 1939 was intended for defense of the territory of the United States, for which purpose it was perfectly adequate.[31] By the beginning of 1941, however, Marshall could already foresee that the country required a very large ground army if, as appeared likely, the United States went to war with the Axis.[32] An army mobilization premised on hemispheric defense would never be adequate for the task Marshall saw looming ahead.

By 1941, the Protective Mobilization Plan was so disjointed that it could no longer be implemented as a coherent plan. The PMP assumed an "M-Day," a day on which hostilities would begin and on which all of the provisions of the plan would begin to work. But such a specific demarcation between peace and war never came, and the War Department implemented the PMP in bits and pieces throughout 1940 and 1941. Selective use of the plan threw into disarray all of the careful calculations about allocation of equipment, personnel, and money. The United States approached national defense on an *ad hoc* basis, for the PMP had never visualized the possibility of peacetime mobilization.[33]

The PMP, for example, called for induction of reservists on M-Day. As of M-Day, the nation would presumably be at war, and there could be no objection to calling up men established in their professions. Turmoil in the civilian economy was the necessary concomitant of a nation at war, hence acceptable. It was not acceptable, however, to call up the same professional men in time of peace. Consequently, there was no way to put the manpower provisions of the Protective Mobilization Plan into effect from 1939 through 1941.

The president's decisions after declaring a state of national emergency on 8 September 1939 had equally damaging impacts on the PMP. During 1940, Roosevelt insisted the Army Air Corps be expanded at the expense of the Army ground forces. Simultaneously, sales of military equipment to Britain and France, and the president's insistence that rearming of American forces not interfere with the Lend Lease program, made it very difficult to

[31]Kreidberg and Henry, *History of Military Mobilization,* pp. 480, 486.

[32]Pogue, *Marshall,* p. 144.

[33]Memorandum, Brig. Gen. Edwin W. Chamberlain, 7 June 1945, "History of Mobilization," (typescript, 50 pp.), George C. Marshall Papers, box 77, folder 1, George C. Marshall Library, Lexington, Virginia, p. 1. Chamberlain served in the War Department G–3.

equip new units and train them with proper weaponry, even if they could be raised.[34]

Other flaws in the PMP appeared once the general staff began to analyze the plan in the light of then-current mobilization needs. By May of 1940, the Army was already discussing expanding the force beyond the PMP limits. Yet the existing mobilization plan did not provide for enough physical installations to house and train, nor did it include enough service units to support, such a larger army.[35] To compound the problem, in the fall of that year, President Roosevelt seriously considered a decrease in the size of the Army, in the interests of other priorities.[36] Not only did the Army appear to be growing beyond the size the PMP envisioned, but it was also in grave danger of shrinking to less than PMP size by December 1941. No mobilization plan could survive such wild swings of direction, even if it had been written with the contemporary contingency in mind, as the PMP had not. The consequence was that the Army needed new planning to take account of the political and military circumstances that affected the course of public policy.

Marshall Orders a New Plan

By the spring of 1941, General Marshall was convinced that the time for improvisation was past. While he was not certain what the future might hold for the United States, he knew that existing plans and organizations would not suffice if war came. The Protective Mobilization Plan of 1939 could not cope with the existing problems, and the demands of Lend Lease had totally disrupted the Army's procurement programs. Before expanding the Army, Marshall wanted clear, well-defined requirements with which to work. Consequently, he asked his staff for a "more clear-cut strategic estimate of our situation" upon which to base the expansion program.[37]

[34]Memorandum, Franklin D. Roosevelt to Secretary of War Harry K. Woodring and Chief of Staff, 24 May 1940, *F.D.R. His Personal Letters,* Vol. II, pp. 1030–31. FDR was concerned that American rearmament not be carried out at the expense of the immediate needs of Britain and France.

[35]Kreidberg and Henry, *History of Military Mobilization,* pp. 567–73.

[36]*Ibid.,* p. 624.

[37]Pogue, *Marshall,* p. 140.

He gave the task to Brigadier General Leonard T. Gerow, chief of the War Plans Division (WPD), the chief of staff's planning agency with the specific duty to formulate long-range strategic plans. WPD drafted and distributed such plans to other Army agencies, which then implemented them. It also represented the Army in joint Army-Navy planning board sessions and, in time of war, was intended to become the nucleus of the General Headquarters of the Army, working directly for the chief of staff.[38] The WPD had just begun to work on the problem when other inquiries enlarged the task. Under Secretary of War Robert Patterson, responsible for Army procurement as well as for managing Lend Lease, was concerned about sufficient industrial production to meet both needs. He had, however, no clear idea of how much was enough, nor how large the Army was likely to become. On 18 April 1941, he asked Secretary of War Stimson for guidance and, through the G–4 of the Army, forwarded his inquiry to the general staff. How much production was necessary to ensure victory if the United States went to war, he wondered, keeping in mind "probable enemies, and friends and theaters of operations"?[39] Patterson's question was one with which officers on the staff of the G–4 and War Plans Division had particular sympathy. On the basis of long years of reviewing industrial mobilization plans, Army staffers understood that industrial production was intimately related to organization and, by extension,

[38]Duties of War Plans Division are set forth in Army Regulation 10–15, 18 August 1936, Section I, 12. For elaboration, see Memorandum, Colonel Ward, Secretary of the General Staff, for the Assistant Secretary of War, 8 November 1940, copy filed with War Plans Division Memorandum, 24 October 1936, Subj: Duties of WPD of the War Department General Staff in War, NARA RG 165, File WPD 1199–211. Also see the introduction to Reel 18, Gp. M–1080, General Correspondence of the War Plans Division (WPD), January 1921–March 1942, in NARA RG 165. On 23 March 1942 Gen. Marshall reorganized the headquarters and redesignated the WPD the Operations Division (OPD). In peacetime, the WPD had additional functions: it prepared studies for use at international conferences on limitation of armaments; it established and armed inland and coastal fortifications; and it ran practice maneuvers. For a thorough discussion of WPD duties, see Cline, *Washington Command Post.*

[39]Memorandum, Under Secretary of War Patterson to Secretary of War Stimson, 18 April 1941, Subj: Ultimate Munitions Production Essential to the Safety of America. NARA RG 165, File WPD 4494 and 4321–12. Pogue, *Marshall,* p. 140. Existing goals for production of munitions were neither sufficiently precise nor sufficiently long range to suit the needs of Patterson, the G–4, and the Office of Production Management. The intermediate goals had been established for munitions to support an army of 2 million men at once and an ultimate force of 4 million (Munitions Program of 30 June 1940). But the end was not in sight, and procurement planners needed some sort of final target with which to work.

to tactics. They also knew that accurate estimates of needs would result in more efficient production of war materiel. Ten thousand tanks could be produced almost as quickly as four thousand, for example, if industry were given definite requirements for the higher figure before factories laid out their production lines.[40]

Almost immediately, President Roosevelt asked a similar question. On 9 July he sent a request to the secretaries of war and the Navy, asking them jointly to determine the ultimate production requirements for the United States to defeat all of its potential enemies, if it should go to war.[41] On 30 August, he repeated his request, adding the requirement that the estimates include Lend Lease in calculating production requirements. He also asked for the final answer by 10 September.[42] Roosevelt's requirement reached the desks of War Plans Division and swallowed up the questions raised by Under Secretary of War Patterson and General Marshall.

These high-level requests stimulated discussion of the materiel question that had been percolating about War Plans Division for some time. As early as May, Lieutenant Colonel C. W. Bundy had suggested that the programming of armaments production was so basic to all American war planning that key decisions had to be reached at once. "Confusion will reign," Bundy wrote, "until an agency for formulating a policy based on all strategic plans is designated."[43] General Gerow, chief of War Plans Division, agreed with Colonel Bundy and forwarded Bundy's recommendation both to General Marshall and to Marshall's opposite number on the Navy staff in early June.[44] When, therefore, the president's request for

[40]For example, an internal WPD memorandum prepared for, but never submitted to, the Chief of Staff expressed those concerns. See Memorandum, Gerow for Chief of Staff, 10 August 1941, Subj: Evaluation of Modern Combat Forces. NARA RG 165, File WPD 3674–52.

[41]Letter, President to The Secretary of War, 9 July 1941. Entry 234, Box 498, Director of SS & P, G–4. NARA RG 165, Numerical File 1921—March 1942, Document #33473.

[42]Memorandum, President for the Secretary of War, 30 August 1941. NARA RG 165, Entry 234, Box 498, Director of SS & P, G–4 Numerical File 1921—March 1942, Document #33473.

[43]Memorandum, Lieut. Col. C. W. Bundy for Acting Assistant Chief of Staff, War Plans Division, 20 May 1941, Subj: Coordination of Planning and Supply. NARA RG 165, File WPD 4321–12.

[44]Memorandum, Acting Assistant Chief of Staff War Plans Division, for Chief of Staff, 7 June 1941, Subj: Ultimate Munitions Production Essential to the Safety of America. NARA RG 165, File WPD 4494. Also see Memorandum, Gen. Gerow for Director, War Plans Division, OpNav, 27 May 1941. NARA RG 165, File WPD 4321–12.

information arrived at the War Department, a similar staff action was already in progress.

Marshall was satisfied to combine all of the tasks and directed the WPD to make a rough, strategic estimate that would include the nation's munitions requirements, not only for its own forces, but also for the almost insatiable demands of Lend Lease:

> We are continually receiving suggestions as to increases and changes in armament, bombers, etc., along with suggestions of a more far-reaching nature. To provide a base of departure for meeting these proposals we should have a more clearcut strategic estimate of our situation from a ground, air, and naval viewpoint. With such an estimate kept up to date, the various organizational, tactical and strategical questions which are constantly arising could be answered with more consistency than at present. . . .
>
> Please contact other divisions of the WDGS and take the necessary steps to have an estimate prepared to be submitted to me in the rough. It should be brief.[45]

There was a problem of balance, from Marshall's point of view. "We must not create the situation that a year from now possible shortages will exist and we will find it necessary to say that we were sorry that we did not anticipate the true situation."[46] By the same token, Marshall did not want to forward impossible demands to the Office of Production Management. He warned WPD that "We must not get a pile of stuff which is not only obsolescent but blocks other things more essential."[47]

The guidance was sufficiently explicit, and the rest of the general staff was fully prepared to help WPD with the project. The only problem that remained was to find the right planner to do the job in the brief time available. Eventually, the task fell to an obscure infantry major by the name of Albert Wedemeyer.

[45]Quoted in Watson, *Chief of Staff: Prewar Plans and Preparations,* pp. 335–36; also see Kreidberg and Henry, *History of Military Mobilization,* p. 620.

[46]Quoted in Watson, *Chief of Staff: Prewar Plans and Preparations,* p. 336.

[47]*Ibid.*

CHAPTER 3
Strategic Estimates

"It would be difficult to exaggerate Wedemeyer's impact as a strategic planner during 1941–1943."

D. Clayton James

"I was just one of Gerow's soldiers."

A. C. Wedemeyer

By early May of 1941, Albert Wedemeyer had familiarized himself thoroughly with the ongoing work in War Plans Division. Recently assigned to WPD from the Office of the Chief of Infantry, he had spent most of the intervening weeks in careful study of all of the current war plans. None of them, he noted, was a strategic plan with the comprehensive scope typical of the European war plans. Even the new RAINBOW plans, dramatic steps forward from the old "color" plans, were actually contingencies that allowed the United States to respond to foreign aggression and then to react only in a purely military way.

When General Marshall's initial directive arrived at the War Plans Division for action, Brigadier General H. J. Maloney, temporarily acting as chief of WPD, assigned the task of implementing it to Wedemeyer. Wedemeyer began to study the production problem, discussing it with the various staff sections and circulating requests for basic information.[1] Initial planning produced a draft strategic estimate upon which WPD meant to base its production estimate.[2] Brigadier General Leonard T. Gerow, chief of War Plans Division, was not satisfied, however, believing that the draft needed further

[1]Memorandum, Acting Assistant Chief of Staff, War Plans Division, for Assistant Chiefs of Staff G–1, G–2, G–3, and G–4, 3 June 1941, began discussion on the strategic aspects of the production problem. Wedemeyer evidently delivered the memorandum to each section and discussed the project with the relevant officers. NARA RG 165, File WPD 4510.

[2]Memorandum, Assistant Chief of Staff, WPD, for Chief of Staff, 29 August 1941, Subj: Strategic Estimate. NARA RG 165, File WPD 4510.

work. At that point, Marshall received President Roosevelt's letter of 9 July that had a "galvanic" effect on the War Department.[3]

Realizing that the previous planning work had a new urgency and an expanded scope, Gerow summoned Wedemeyer to his office in the Munitions Building and explained the revised assignment. Whereas he previously had to estimate requirements to support the Army's expansion in 1941 and 1942, Wedemeyer now had to calculate the nation's total production requirements for the defeat of the "potential enemies" of the United States. Furthermore, he had about ninety days to do the job. It was, as Wedemeyer later observed, a stupendous task. A simple estimate of the amount of materiel the Army would require was insufficient; he also had to estimate the type, quantity, and priority of that production in consonance with agreed strategy.[4] When President Roosevelt ordered the War Department to consider the production estimates necessary to support Lend Lease, as well as to equip the armed forces of the United States, he introduced a factor that might have no solution, for the Russian and British demands were voracious. The impact on existing mobilization plans would be considerable, for Roosevelt believed that American "munitions power" delivered to the Allies was one way to ensure the defeat of the Axis.[5] The problem was in determining where to begin.

In order to give Wedemeyer some quiet in which to puzzle out the problem, Gerow assigned him a private office with his own secretary—unheard-of perquisites for a mere major on duty at the War Department. Counterbalancing the convenience of the private office was the room's proximity to the offices of Generals Marshall and Gerow. Through the next months, both the chief of staff and the chief of WPD sustained a lively interest in what Wedemeyer was doing. This involved a daily meeting at 0800 in the chief of staff's office, at which Wedemeyer, General Gerow, Colonel Thomas

[3]Mark S. Watson, *Chief of Staff: Prewar Plans and Preparations,* UNITED STATES ARMY IN WORLD WAR II (Washington, D.C.: Historical Division, United States Army, 1950). See Chapter 11, in which he summarizes the scope and procedures employed in devising the Victory Plan and, most importantly, outlines in detail the sequence of directives and orders that lay behind the Victory Plan.

[4]Much of the discussion of the background of the plan is drawn from Albert Wedemeyer's memoir, *Wedemeyer Reports!* (New York: Henry Holt & Company, 1958); and Eiler, "The Man Who Planned Victory: An Interview With Gen. Albert C. Wedemeyer."

[5]Memorandum, Roosevelt for the Secretary of War, August 30, 1941. NARA RG 165, Entry 234, Box 498, Director of SS & P, G–4, Numerical File 1921—March 1942, Document #33473.

Handy of WPD, Brigadier General Brehon Somervell of the Services of Supply, and Major General Henry Arnold of the Army Air Corps discussed progress with Marshall. Wedemeyer immersed himself in his work, particularly after Marshall had him assigned quarters at Fort Myer. Wedemeyer and Marshall took the opportunity of the morning walk to Marshall's sedan, and the subsequent drive to their offices, to discuss the maturing plan. The chief of staff respected the abilities and opinions of the WPD staff—many of whom he had selected himself—and remembered Wedemeyer's abilities as revealed in his excellent report on attendance at the German war college. He trusted men to do the jobs they were assigned and was open to differences of opinion. Wedemeyer recalled that the working atmosphere was wonderful:

> General Marshall stopped and looked at me. He said, "Wedemeyer (he never called me by my nickname—King and Arnold both called me Al), don't you ever fail to give me the benefit of your thinking and your experience. You would be doing me a disservice if you did otherwise." If he had asked me to jump into Niagara Falls after that I would have done so for him. I felt that here was a man—a great man—giving me that latitude and being so fair about it.[6]

It goes without saying that Wedemeyer had a lot of help. Because he was the chief planner, his name became associated with all aspects of what became known as the Victory Plan. In fact, the job would have overwhelmed one man, and Wedemeyer parceled out aspects of the problem to other officers in WPD and elsewhere in the War Department staff. While many men worked on the Victory Plan, however, they worked under Wedemeyer's guidance, and it was always Wedemeyer who designed the work and at whose desk the final product took shape. Wedemeyer's role should not be underestimated, regardless of the work done by other men. War Plans Division had an average strength of only forty-three officers in the summer of 1941,[7] of which only six were working in the Joint Policy and Plans Section of the Plans Group,[8] responsible for the Victory Plan and similar documents. Each of those men had his own full work load as the Army prepared for war, as WPD handled

[6]Deskis Interview, transcription of tape 4, session 4, p. 14.

[7]Statistical Study: Officers Who Served in WPD and OPD, By Periods (1921–1945). USACMH Historical Services Division File HRC 321, War Plans Division, 228.03.

[8]Ray S. Cline, *Washington Command Post: The Operations Division,* UNITED STATES ARMY IN WORLD WAR II (Washington: Office of the Chief of Military History, 1951), chapter 4.

literally hundreds of major staff actions in the second half of 1941.[9] None could have diverted any significant amount of time to Wedemeyer's project.

Some help was available, however. Gerow provided an essential service when he assigned a "murder committee" to review and critique each edition of Wedemeyer's plan. Gerow and Wedemeyer had known each other years before in the Philippines and, respecting each other's abilities, worked easily together. The other members of the committee were officers whom Wedemeyer knew equally well and respected—Colonel (later general) Thomas T. Handy, Colonel Franklin A. Kibler, and Colonel Leven C. Allen, the latter having once been Wedemeyer's commander. Wedemeyer's work also benefited from review by Lieutenant Colonel C. W. Bundy, his immediate superior. Having raised the question of production estimates himself, Bundy also offered useful suggestions about its resolution.

Friendship notwithstanding, these men were experienced staff officers who did not spare Wedemeyer's feelings as they dissected and examined every facet of his drafts in minute and critical detail. Wedemeyer was necessarily submerged in the specific and consumed with pulling the myriad skeins of diverse strategic considerations together. His review committee, far less involved in those complexities, could take a more dispassionate and considered look at the growing estimate of production requirements. The review process proved so successful in uncovering oversights and unconscious planning lapses that the War Plans Division soon adopted it as a standard procedure throughout the war. Rank and position were irrelevant when the WPD closed the doors to scrutinize its work. The process was not for the thin-skinned, but it helped the WPD to produce exceptionally comprehensive plans.

Although Wedemeyer had all of the supervision he could possibly desire and all of the secretarial support that he needed, he found himself severely constrained as he began his work. National sensitivity about questions of war and peace meant that no hint of his work could be permitted to leak into the press. The public did not generally accept the idea that the professional soldier had the duty to plan against the most terrible contingencies and saw offensive war

[9]Papers Handled By War Plans Division (11 July 1941–21 November 1941). USACMH Historical Services Division File HRC 314.76. Chronology—War Plans Division.

plans as evidence that the United States meant to enter the war. Accordingly, although Wedemeyer had carte blanche to go anywhere and consult with anyone he felt necessary, he had to frame his questions and requests for information so as to conceal the ultimate object of his planning. Such constraints limited the value of his authority to call upon officials and agencies of the government for information and advice. It quickly became evident to Wedemeyer that he was working on the most secret of all projects then under way at the War Plans Division, and perhaps in the entire government.

The First Steps: Outlining the Problem

Objectively, the task was simply one of estimating production requirements so that the under secretary of war and the various civilian agencies charged with the task of managing procurement of war materiel would have the information they needed to cope intelligently with their duties. Seeking the assistance of historical precedents, Wedemeyer surveyed Army mobilization for World War I and found that he agreed with General Marshall's negative appraisal of the Army's transition to a war footing in 1917.

The 1917 experience illustrated for the War Department the pitfalls of general mobilization and had already provided many pointers for the general staff to ponder during the two decades after the war. For example, the War Department began to comprehend the difficulties involved in coordinating military and industrial mobilization, and in the years between the two world wars undertook the development of a series of mobilization plans that capitalized on the 1917–1918 experience.[10] Yet despite the World War I effort, which was the first modern war in which the United States attempted a full mobilization, the magnitude of the problem in 1917 still did not approach that of 1941. The nation did not become fully engaged in World War I, but War Department planners of 1941 could safely predict that every segment of society would be touched if America entered the total war developing in Europe.

[10]The War with Spain did not necessitate anything like a total mobilization. For a comprehensive survey of the American mobilization experience, see Marvin A. Kreidberg and Merton G. Henry, *History of Military Mobilization in the United States Army 1775–1945* (Washington, D. C.: Department of the Army Pamphlet No. 20–212, June 1955).

The first war did not revolutionize industry and economic institutions in the United States; industry, for example, expanded in 1917 but was never converted to a wartime economy to the extent that it would have to be in 1941. In sum, the war economy had only just begun to function when World War I ended. While lessons of the mechanics of how World War I mobilizers accomplished their tasks emerged from World War I, too much of that knowledge was inadequately preserved.[11] Furthermore, it was not until 1939–1941 that American strategic and operational plans were intertwined with mobilization plans, as had been increasingly common in Europe since the Franco-Prussian War. As he outlined the problem and created a framework to organize the information he would have to gather, Wedemeyer realized that previous American mobilizations offered him little positive guidance and that he would have to evolve his own approach to the problem.

In order to deduce the nation's ultimate production requirements, Wedemeyer concluded that the essential first task was to compute the size of the Army and Air Corps that the War Department would have to arm and equip. Size and composition of forces were functions of mission, however, and no one could estimate the size of military forces required without knowing the missions they would be ordered to execute. Missions depended upon military strategy, and in order to know the military strategy, Wedemeyer had first to know the national objective in the event of war. Moreover, planning had to allow for production requirements to support Lend Lease. In the end, he remarked, it was necessary to work like a journalist and answer the traditional questions of who, what, when, where, why, and how.[12] Wedemeyer therefore established for himself a series of questions to answer in order to accomplish his task:

1) What is the national objective of the United States?

2) What military strategy will be devised to accomplish the national objective?

[11]The government recognized in 1941 that the mobilization then under way was unique. See, for example, the comments by John J. Corson, a civil servant directly involved in the work of the War Manpower Commission, in his *Manpower for Victory. Total Mobilization for Total War* (New York: Farrar and Rinehart, 1943), pp. 277–78.

[12]General Wedemeyer discussed his basic reasoning process in his memoir, *Wedemeyer Reports!*, pp. 62–73, and elaborated on the thought process in all of the interviews previously cited.

3) What military forces must be raised in order to execute that military strategy?

4) How will those military forces be constituted, equipped, and trained?

His methodology implied that by the time he had answered the first three questions, he would have the information he needed to answer the last, which was the objective task he had been given.

It is therefore only superficially curious that Wedemeyer began to frame a logistics estimate by reviewing very broad strategic questions. On the face of it, he exceeded his brief rather considerably—asked for production totals, he instead considered matters of national policy. But if he had tried to deal solely with logistical considerations, he could not possibly have arrived at a solution approaching the comprehensive estimate the situation required.

Question One: The National Objective

"Before long," Wedemeyer later said, "I rediscovered the obvious: a journey can be charted only with a destination in mind, and *strategy* can be plotted only with goals or aims in mind." Consequently, he set out to discover the national goals in the event of war.[13] The United States had to win any war that it fought, but Wedemeyer knew from his reading that it was far more important for him to understand the sort of world America hoped to see emerge from the cataclysm of war, and what sort of peace the country was willing to enforce. If the work was to be useful, his entire study had to proceed from the correct strategic assumptions, and he was frustrated to find that the clear statements of national policy he needed were "almost as elusive as the philosopher's stone."[14]

To his surprise, Wedemeyer ascertained that the government seemed to have no mechanism whatever for considering such paramount national policy problems or for answering them system-

[13]Wedemeyer, "Memorandum on a National Strategy Council," in *Military Planning in the Twentieth Century.* Proceedings of the Eleventh Military History Symposium 1984, USAF Academy (Washington: Office of Air Force History, 1986), pp. 409–10.

[14]Eiler, "The Man Who Planned Victory," p. 40.

atically. To Wedemeyer, it appeared that few men in Washington were even conscious of the fact that "supreme issues of war and peace *required* thorough analysis in the top echelons of the national government."[15] Government planning was short-term planning, aimed at accomplishing immediate goals, of which the *ad hoc* executive decision on the destroyers-for-bases deal was typical. Long-range planning to determine war goals for a peace favorable to the national interests of the United States seemed to be no one's task. In 1941, few American leaders looked beyond the problem of militarily defeating future enemies.

At length, Wedemeyer determined that the only definitive statement of national policy that generated unanimous support was the Monroe Doctrine. But protecting the western hemisphere from European incursions, while fundamental, was still insufficient to answer his question. He needed to know the conditions the United States wanted to create, both abroad and at home, in order to ensure the future security of the nation. He read all of the material he could find on the subject and then discussed foreign policy with General Marshall and Secretary Stimson, both of whom were helpful, but neither of whom was in any position to tell Wedemeyer with any authority what the nation intended.[16]

One problem was that few government officials were willing to say publicly that the United States was committed to war against the Rome-Berlin Axis. "Needless to say," Wedemeyer later recalled, "at a time when merely discussing such things was often interpreted as plotting war, few of the harassed senior officials in Washington were in a position to offer much guidance."[17] Public opinion played an important part, not only by making government officials reticent to discuss the matter, but also by keeping the issue of war and peace terribly confused. Involvement in the war was just one aspect of a multifaceted problem. If the country took part, there was also the question of when it should enter, and on what terms. Ultimately, Wedemeyer decided that it would be best for him to write a statement of national objectives in the event of war, as he understood them, and include that statement as his first planning assumption.[18]

[15]Wedemeyer, "Memorandum on a National Strategy Council," pp. 409–10.
[16]Deskis Interview.
[17]Eiler, "The Man Who Planned Victory," p. 40.
[18]Deskis interview.

He drafted a simple list of objectives and forwarded it to Secretary Stimson for approval. The United States meant, so far as Wedemeyer could determine,

> to eliminate totalitarianism from Europe and, in the process, to be an ally of Great Britain; further, to deny the Japanese undisputed control of the western Pacific.[19]

Stimson quickly approved Wedemeyer's submission, and that statement of national objectives became the basis for all of his subsequent planning. The heart of the proposal had already been incorporated into the ABC conversations of 1941, that postulated a war in which the United States and Great Britain would fight as allies, committed first to the defeat of Germany, and then to the defeat of other enemies. The basic assumptions of the RAINBOW 5 plan also applied in a very general sense. Wedemeyer understood that by the summer of 1941 other RAINBOW options were nugatory, both because the progress of the war had rendered them improbable, and because the president and secretary of war strongly believed that general war was inevitable.[20] There was in War Plans Division also a general acceptance of Mackinder's ideas and agreement that, in any world war, the European theater would be the decisive theater.

As he began his work, then, Major Wedemeyer established the premise that the United States would, in the event of war, conduct major campaigns directed against Germany, operations that would involve the bulk of the nation's military power and constitute its main military effort. Simultaneously, lesser military forces would be allocated to ensure the security of the western hemisphere and its critical installations, and to maintain an acceptable political balance in the western Pacific.

Question Two: The Military Strategy

With this set of assumptions about the nation's ultimate objectives in a war, Wedemeyer was in a position to outline the military strategy necessary to accomplish those objectives. RAINBOW 5 sum-

[19]Interview with Gen. Wedemeyer, 24 April 1987.

[20]Interviews with General Wedemeyer on 24 April 1987, 5 May 1987, and 3 June 1987. Also see Pogue, *George C. Marshall: Ordeal and Hope 1939–1942*, pp. 157–58.

marized the requirements in general terms and provided a frame of reference for subsequent planning. According to that plan, the United States would secure the western hemisphere from attack and be prepared to send task forces to the eastern Atlantic, Africa, Mediterranean, and Europe to assist Great Britain in defeating Germany and Italy.[21] Although the mission of those task forces was the heart of the war plan, Wedemeyer wrote that

> the specific operations necessary to accomplish the defeat of the Axis powers cannot be predicted at this time. Irrespective of the scope and nature of these operations, we must prepare to fight Germany by actually coming to grips with and defeating her ground forces and definitely breaking her will to combat.[22]

It was, however, possible to resolve the critical issues of how and when the United States could bring military power to bear against the Axis.

The first consideration was the enemy's strength, dispositions, and intentions, and for that sort of intelligence data, Wedemeyer turned to the Army G–2, where Colonel Truman Smith held the position of special consultant on Germany and worked directly with Colonel Hamilton Maguire, chief of G–2's German section. Colonel Smith had been military attaché in Berlin while Wedemeyer was at the *Kriegsakademie* and had a thorough knowledge of the German army. He also had unusually well developed contacts with General Friedrich von Boetticher, the German military attaché in Washington. Boetticher freely shared actual *Luftwaffe* telegrams with Smith, a practice that continued through the middle of August 1941.[23] Drawing upon such rich data, Smith could, with confidence, sketch the situation in the German armed forces.[24] Because of his experi-

[21]Details of the RAINBOW plans are summarized in most of the standard studies of the period. See, for example, Kreidberg and Henry, *History of Military Mobilization,* pp. 557–58, 561; Kent Roberts Greenfield, *American Strategy in World War II: A Reconsideration;* and the relevant volumes in the series UNITED STATES ARMY IN WORLD WAR II, particularly Watson, *Chief of Staff: Prewar Plans and Preparations.*

[22]WPD Memorandum, Ultimate Requirements—Ground Forces, 23 August 1941. NARA RG 165, Entry 234, Box 498, Director of SS & P, G–4, Numerical File 1921–March 1942, Document #33473. This document, authored by Wedemeyer, is the first edition of the Army portion of what came to be known as the "Victory Plan." Hereinafter cited as Ultimate Requirements Study.

[23]Truman Smith Memoir, pp. 113 *et seq.* Truman Smith papers, United States Army Military History Institute, Carlisle Barracks, Pa.

[24]The flow of *Luftwaffe* telegrams, upon which Smith based so many of his conclusions about German air power, abruptly ceased on 18 August 1941, in part

ence in Germany, close ties with Germans, and frank pronouncements about the quality of the German armed forces, Smith had drawn fire from critics who regarded him as pro-German. Marshall, who had a high opinion of Smith's abilities, had to struggle to save him from dismissal. Like Marshall, Wedemeyer had absolute faith in Smith's judgment about the Germans, and the War Plans Division merged Smith's intelligence reports into periodic strategic assessments as the basis for further planning.

The WPD strategic assessment written in the late summer of 1941 and published in the fall was a thoroughly gloomy document. The G–2 identified the potential enemies of the United States as Germany, Italy, Japan, and Vichy France. Of the four, Germany was the strongest and occupied most of Colonel Smith's attention. He expected Germany to conduct strategic-offensive operations in the Russian theater and concurrently strategic-defensive operations in all other theaters. In the long run, German operations could take one of two directions: attacks on the Middle East or on England. While Germany would help Italy in containing British forces in the Mediterranean, Smith thought that the ultimate objective of German operations in that theater was either to take Gibraltar or to execute a pincer against the Suez area. Germany wanted to create favorable conditions for attacks through Turkey into the Caucasus area, coordinated with an early 1942 drive into the Ukraine. The other possibility was that Mediterranean operations were a diversion for an invasion of England. In any case, Germany wanted to discourage or postpone the entrance of the United States into the war in Europe.[25]

Colonel Smith concluded that Germany would concentrate against Russia, hoping for a quick victory over the Soviets. After those operations, Germany would seek a negotiated peace with Great Britain. In default of such a peace, Germany would then invade the British Isles or else fight to eliminate British influence from the entire Mediterranean–North African region. Due to the heavy German losses in the fighting in Russia, Smith was optimistic

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because Marshall thought it was "impolitic to continue" such a connection with von Boetticher. More importantly, however, the German foreign office learned that the Americans had been sharing that information with the British and ordered the practice stopped. See Beck, "Attaché," pp. 309–10.

[25]War Department Strategic Estimate prepared by War Plans Division, General Staff, October 1941, pp. 4–6. Strategic Estimate Vol. 1, O.P.D. Exec. #4, Item #9, NARA RG 165. Hereinafter cited as WD Strategic Estimate.

about Germany's inability to reconstitute her military forces for an invasion of England any time in the near future. For the same reasons, Germany could definitely not undertake any major offensive operations in the western hemisphere for at least a year, and then "only if she acquires large numbers of British ships, both commercial and war vessels."[26]

Italy had not the military capacity to expand her operations outside of the Mediterranean, and the G–2 predicted that the Italians would be an "increasingly uncomfortable and precarious" ally for Germany. The German war strategy, Smith wrote, "contemplates a rugged and aggressive role wholly beyond the capabilities of the mercurial, non-bellicose Italian people." But Hitler, according to the G–2 analysis, saw value in retaining an alliance with a Catholic nation and presumably hoped to use the Vatican to lend credence to the notion that Germany was engaged in a Christian, or at least anti-Communist, crusade in Russia. The G–2 believed, however, that Mussolini's regime was in imminent danger of collapse and would desert the German alliance at the first propitious opportunity.[27]

Japan, on the other hand, would become more bellicose in the western Pacific in proportion to Nazi successes in Europe.[28] G–2 analysis suggested that Japan would pursue an opportunistic role and would try to facilitate her freedom of action by ending the war in China. Intelligence analysts expected Japan to conduct strategic-offensive operations in the southern theater, striking toward the Netherlands East Indies; strategic-defensive operations in the central theater of China; and strategic-defensive operations in the northern theater of Manchuria. Although it was possible that Japan would act against the Russians in Siberia, a much more likely course of action was that Japan would expand into Dutch and British possessions in the southern Pacific. Concurrently, the G–2 warned that the Japanese were likely to occupy the Philippines and Hong Kong and make raids or feints against Hawaii, Alaska, Panama, and the west coast of the United States. The warning was timely:

[26]*Ibid.*, p. 7.

[27]*Ibid.*, pp. 9–10.

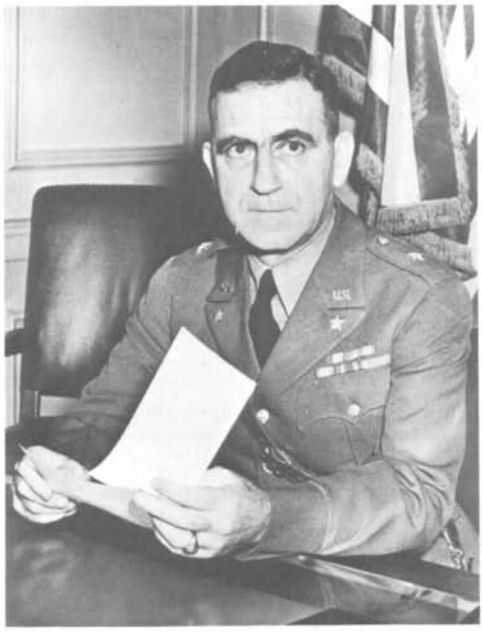
[28]For a perspective on Japanese intentions, see Carl Boyd, "The Significance of MAGIC and the Japanese Ambassador to Berlin: (I) The Formative Months Before Pearl Harbor," *Intelligence and National Security* 2:1 (January 1987), 150–169; and "The Significance of MAGIC and the Japanese Ambassador to Berlin: (II) The Crucial Months After Pearl Harbor," *Intelligence and National Security* 2:2 (April 1987), 302–319.

In the destroyers-for-bases deal, mothballed destroyers of the reserve fleet were transferred to Great Britain. *(National Archives)*

Chief of Staff George C. Marshall and Secretary of War Henry L. Stimson. *(U.S. Army Collection, National Archives)*

Under Secretary of War Robert Patterson. *(U.S. Army Collection, National Archives)*

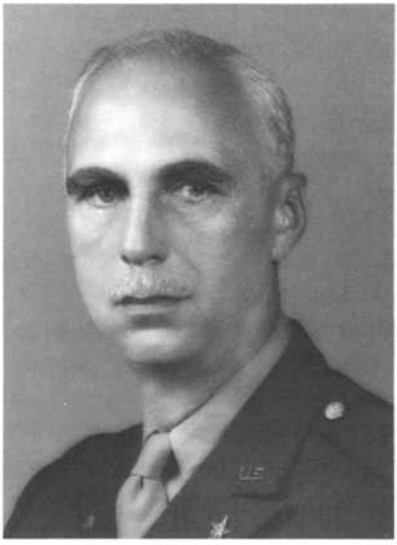
The Munitions Building, War Department General Staff, where the War Plans Division had its offices. *(U.S. Army Collection, National Archives)*



Brig. Gen. Leonard Gerow, chief of War Plans Division in 1941, selected Wedemeyer to write a production estimate in response to the Chief of Staff's directive. *(Center of Military History)*

Principal staff of the War Plans Division in November 1941. Col. Charles W. Bundy, who expressed early WPD concerns about production, is second from left; Col.Thomas T. Handy, a member of Wedemeyer's "murder committee," is second from right. *(Courtesy of the Office of the Deputy Chief of Staff for Operations and Plans)*

Clockwise from right: Col. Truman Smith, assistant G–2, War Department General Staff; General Thomas T. Handy, Deputy Chief of Staff under Marshall; and Brig. Gen. Leven C. Allen, Wedemeyer's commander in the 94th Antitank Battalion. *(Center of Military History and U.S. Army Collection, National Archives)*



Japan will not take aggressive military steps until favorable conditions for success have been created, when swift blows, timed with Axis operations in the European theater, will be struck. . . .[29]

Vichy France, the report concluded, could be disregarded almost entirely. The French would continue to pursue a policy of passive collaboration with the Axis and cooperate with Germany in economic matters. The only real French goal was to resist any attempt, not only by Germany, but also by Great Britain, to seize or use any portion of French territory or French possessions, particularly in Africa. The French could be expected to place their fleet and shipyards at Germany's disposal and cooperate militarily with the Axis in Africa. Throughout, France would take advantage of any opportunity to recover lost territory and her former position in continental Europe. French collaboration with the Axis would vary directly with Axis success, and the United States could expect Vichy France to attempt to pursue its own course if Germany's fortunes flagged.[30]

The nations confronting the Axis powers had few options. Great Britain had to remain on the strategic defensive, concentrating on winning the Battle of the Atlantic and retaining a lodgment in the Middle East. The British faced enormous risk, however, and G–2 analyses could not confidently predict victory for the United Kingdom, even with full American collaboration. British reverses in the Middle East, or a Russian collapse on that front, would enable the Germans to concentrate an overwhelming military force against England. For the British, the situation hinged on three issues: the German ability to win quickly in Russia without suffering excessive losses; the German ability to reconstitute military forces quickly after that victory; and the German ability to control the conquered regions and exploit their resources with the use of minimal forces. Having outlined such grim prospects, Smith concluded that "from a long range viewpoint, the situation is not hopeless for Great Britain, assuming the continuation of Russian resistance and/or full U.S. participation in the war."[31]

The crucial factor was the state of the Soviet Union. If fortune smiled on Russian arms, Germany might yet be prevented from achieving the early and decisive victory essential to the realization of

[29]WD Strategic Estimate, p. 12.
[30]*Ibid.*, pp. 13–14.
[31]*Ibid.*, pp. 17–19.

her military and economic objectives. But if Germany decisively defeated Russia, then Germany would extend its control over the vast expanses of central Eurasia. Within that area existed adequate natural resources, foodstuffs, and industrial potential for the Germans to create a strong, centrally planned economy, the beginnings of German domination of Mackinder's "heartland."

Economically and militarily secure within a citadel that possessed immensely strong geographical barriers, Germany could release millions of men to industry and to the exploitation of her conquests. The Axis would be virtually unaffected by even the tightest sea blockade and beyond the range of most of the existing strategic air forces. Such a situation would present the United States with the most difficult military problem imaginable, particularly if it were compounded by the catastrophe of the fall of the British Isles. In that case the nation would have lost the only remaining area in Europe from which it could conduct effective operations against Germany.

The health of Russia was therefore of paramount concern, and the Soviet situation defined the time available for the United States to act against Germany. If Russia lost the war by the end of 1941, the Germans would probably require one full year to reorganize their armed forces to conduct an invasion of the British Isles. Germany would likely also need a full year to bring sufficient order out of the chaos of the conquered territories to be able to benefit militarily and economically from them. The earliest, therefore, that the Axis could mount an invasion of England would be the spring of 1942, with the spring of 1943 a much more likely date. In the meanwhile, the United States needed to provide for the security of the western hemisphere in the event that Russia collapsed and the British suffered invasion or agreed to negotiate a peace.[32]

Such an estimate coincided with general staff assumptions about the earliest date that the United States would be able to conduct offensive operations outside the western hemisphere. For a variety of reasons, War Plans Division believed that the Army could not implement the provisions of RAINBOW 5 before about July of 1943.[33] The United States would not, for example, be able to assemble manpower, organize, and train sufficient forces to an

[32] *Ibid.*, pp. 22, 29–31, 34.

[33] *Ibid.*, p. 28. The same date is reflected in various WPD planning documents as well.

adequate standard to fight the Axis before that date. On a basic level, the Army needed time to build training facilities and housing for expansion. Manpower mobilization had to proceed cautiously to avoid calling up the skilled hands necessary to build training facilities before they built those bases. The second major limitation was industrial because, even in the fall of 1941 and even after the expansion of defense industries to support the requirements of Lend Lease, not more than 15 percent of the industrial capacity of the United States was devoted to defense. America needed time to convert industries to defense production.[34] Finally, shipping would present problems.

In the middle of 1941 virtually all of the American merchant fleet was in normal commercial service. Around 855,000 gross tons of shipping could be made available to transport an expeditionary force overseas and then sustain it in an overseas theater. The WPD estimated that amount of shipping could move not more than 50,000 men and their equipment and 90 days' supplies to a transoceanic theater. That situation would improve significantly throughout 1942. Before the United States could fight outside the hemisphere, more time would be required to assemble the necessary vessels and prepare them for military use; to build the additional shipping that war service would make necessary; and to establish adequate port facilities at points of embarkation and debarkation.[35] Wedemeyer later learned that the shipping required to transport the Army and Air Corps overseas amounted to around seven million tons, or one thousand vessels. Maintaining that force in overseas theaters required about ten million tons of shipping, or 1,500 ships. The two years required to build those ships coincided with the time the general staff estimated the Army needed to raise and train the combat divisions.[36] It also coincided with the period of maximum risk, the earliest date the general staff estimated that Germany would be able to invade Great Britain and deprive the United States of its European base.

As Wedemeyer began to plan to meet the crisis, he therefore understood that the earliest date that the United States could go to war in anything other than defense of the hemisphere was July 1943. The excellent prospects for Axis victory in Europe made it

[34]WD Strategic Estimate, pp. 28–29.
[35]*Ibid.*, pp. 25–26.
[36]*Wedemeyer Reports!*, p. 67. Also see Estimate of Army Requirements, p. 11.

urgent for America to prepare its defenses as soon as possible. The chance that England would make peace with Germany or, indeed, be defeated, raised the possibility that the United States would have to continue the war alone. Thus he had to plan for a very large, and very well equipped, American army. But before the Army could engage in any decisive combat operations on the continent of Europe, the United States needed to establish certain conditions.

Wedemeyer was acutely conscious that the United States waged any war outside the western hemisphere at a considerable disadvantage. Before the Army could engage the enemy, the Navy had to transport it to the theater of operations. Besides crossing thousands of miles of potentially dangerous ocean, the United States had to establish and maintain an adequate line of supply across the ocean. Thus his first condition was that the Axis navies had to be swept from the seas, particularly from the Atlantic Ocean and those waters contiguous to Europe itself.[37] Without the ability to transport military formations in security and to maintain the lines of supply needed to keep them in action, all other propositions became meaningless.

A powerful navy and a substantial merchant fleet were prerequisites, despite the increased fighting potential of the air arm. Air forces did not deprive naval vessels of their vital roles on the seas, but did accelerate the pace of war at sea and necessitate changes in the employment of navies. Neither could air forces effect the economic blockade of the enemy that was the concomitant of keeping sea lanes of communication open for the United States and Allied nations. A powerful navy remained essential, and planning had to allocate industrial potential and manpower with sea power in mind.[38]

Air power was equally crucial, a fact Wedemeyer came to understand early in his career. "I was always air minded," Wedemeyer remarked in 1987.[39] He was sufficiently taken with aviation to go with Nathan Twining, later a general officer in the Air Force, to take the Air Corps tests early in his career. Although he failed the flight physical, he retained a grasp unusual in a ground officer of the period of the potential for warfare in the third dimension. Both

[37]Ultimate Requirements Study, p. 1.

[38]Ultimate Requirements Study. Estimate of Army Ground Forces, prepared by WPD, GS, Sept. 1941, pp. 1–2. Folder WPD 4494–14/4494–19, NARA RG 165. Hereinafter cited as Estimate of Army Ground Forces.

[39]Interview with General Wedemeyer, 24 April 1987.

from his study of the art of war and from his education in Berlin, Wedemeyer knew that an air force multiplied the value of a smaller ground force by denying mobility to the more numerous enemy. Various memorandums from the Air Corps emphasized this theme, and the language of those documents found its way into the mobilization studies. "The important influence of the air arm in modern combat," Wedemeyer wrote, "has been irrefutably established." He continued to explain that

> the degree of success attained by sea and ground forces will be determined by the effective and timely employment of air supporting units and the successful conduct of strategical missions. No major military operation in any theater will succeed without air superiority, or at least air superiority disputed.[40]

While air operations could not guarantee victory alone, without a powerful air arm defeat was likely. The second condition, as Wedemeyer saw it, was thus that "overwhelming air superiority must be accomplished."[41]

Air power was the principal weapon with which the United States could accomplish the third condition for successful military operations against the Axis. By strategic aerial bombardment, the Air Corps could attack the German industrial and economic structure and render that structure "ineffective through the continuous disruption and destruction of lines of communication, port and industrial facilities, and by the interception of raw materials."[42] Wedemeyer was familiar with the doctrine for strategic bombing as espoused by Giulio Douhet and had been in the Army throughout the debates over air power occasioned by the court-martial of General Billy Mitchell. While he did not agree that air power could single-handedly win the war, a fact recently demonstrated by the failure of the German Douhet-style aerial offensive against England, he nonetheless agreed it was the ideal instrument with which to destroy the German economy.

The next condition was physical proximity to the enemy. That meant the United States needed advanced bases from which to

[40]Estimate of Army Ground Forces, p. 1. The same phraseology is to be found in documents forwarded to the Assistant Chief of Staff, War Plans Division, from the Chief of the Air Corps, on 2 January 1942. Although submitted after Wedemeyer's basic plan had been written, it was obviously a staff paper that had already been circulated and staffed, and that had been written much earlier. Folder WPD 4494, NARA RG 165.

[41]Ultimate Requirements—Ground Forces, p. 1.

[42]*Ibid.*

operate. Not only did the country require the existing Atlantic bases in order to assure the security of the western hemisphere, but it also needed a series of bases to encircle Germany. From these forward bases, air forces could operate against the German industry and economy. Likewise, such bases offered convenient points from which to launch combined arms operations against the German "citadel" in Europe. In creating the necessary overseas stations, however, the Army had to be very careful to build only those bases that it really needed because the country could not afford to disperse its forces so greatly that they could not "make timely and effective contributions to the accomplishment of our main task, the defeat of Germany."[43] In building such bases, Wedemeyer pointed out that the provisions of RAINBOW 5 would have to govern:

> The commitment of our forces must conform to our accepted broad strategic concept of active (offensive) operations in one theater (European), and concurrently, passive (defensive) operations in the other (Pacific).[44]

Finally, Wedemeyer saw that the United States and the Allies had to weaken the enemy by overextending and dispersing his armies. Concentration of forces brought victory. If the Allies could so threaten the Axis that it had to send reinforcements in many directions, then the eventual decisive attack would inevitably succeed, because the enemy could meet it with only a portion of his total strength. Attacks on enemy supplies of fuel and materiel and, most particularly, his transportation net, contributed to this end. Deterioration of the enemy's national will on the home front might result from propaganda, subversion, deprivation of a reasonable standard of living, destruction of the fabric of the enemy's society, and the chaos and public disorder that accompany such domestic conditions. Strategic bombing, planners expected, would attack the German national will just as it attacked the German industry and economy. Civilian and economic chaos would, in turn, diminish the effectiveness of the German military forces.[45]

In sum, the United States had to adopt a military strategy that placed the bulk of American combat forces in contact with the enemy in the European theater. In order to accomplish this, the United States had to build and maintain armed forces capable of control-

[43]Ultimate Requirements Study, p. 2; Estimate of Army Requirements, p. 3.
[44]Estimate of Army Requirements, p. 3.
[45]Ultimate Requirements Study, p. 1; Estimate of Army Requirements, p. 3.

ling the sea lanes of communications in two oceans; to fight a major land, sea, and air war in one theater; and to be sufficiently strong to deter war in the other. No other nation faced the task of building up its army, navy, and air forces to such standards, to meet such global commitments. Likewise, no other power had to rely upon lines of supply tenuously stretched across oceans, the control of which was still disputed, to bases that had still, in many cases, to be won.

Question Three: The Military Forces

The size of the armed forces and the distribution of manpower within the services greatly influenced the type, amounts, and priority for production of military materiel. The conditions that the nation had to meet in order to bring the Axis to battle dictated substantial allocations to both services. Furthermore, supply lines stretching thousands of miles required extensive manpower to operate and a predetermined bulk of additional materiel, since there would always be a constant quantity in transit. Wedemeyer had to estimate the maximum possible manpower that could be raised from the population of the United States without disrupting the industrial base that would produce the essential war materiel.

Battles are won by generals who concentrate decisive mass at the critical time and place. Historically, mass meant manpower, although soldiers in the nineteenth and twentieth centuries understood that mass could also be achieved through firepower. The ability to win wars depended upon a nation's resolve to mobilize sufficient manpower to defeat its enemies. When national survival was at stake, that mobilization might know few limits. All of that notwithstanding, Wedemeyer discerned that there was a practical ceiling to the number of men who could be withdrawn from civil life and taken into the armed forces.

The high quality manpower of a nation comprised the delicate tracery of internal discipline that sustained the structure of society. If the armed forces siphoned off too many of the best trained, educated, and disciplined men, the society might collapse and, along with it, the industrial base that sustained the armed forces. Conversely, Wedemeyer could only assume that the nation would make the maximum possible effort in order to assure the swiftest possible victory. Any other course could lead to a prolonged war, during which all sorts of disruptive and potentially fatal complica-

tions could arise. "Even if a halfhearted effort were theoretically enough to win," Wedemeyer thought, it was logical that "an all-out effort would win more quickly and with less ultimate cost in lives and resources."[46] The tension between the need to preserve a certain amount of disciplined manpower in the society and the need to create the strongest possible armed forces had to be resolved before Wedemeyer could conduct any further planning.

He had to estimate the degree of internal discipline in the society before determining the amount of manpower that the armed forces could safely extract from it, considering not only experienced industrial manpower, but also police, fire, and emergency services. Wedemeyer turned to historical examples of mobilization for precedents and closeted himself in the Library of Congress, where he studied all of the major wars since the time of Gustavus Adolphus. In the course of his survey, he discovered that roughly 10 percent of the total population of any nation could be taken into the armed forces without doing serious harm to the economy and social life of the nation.

Thus Wedemeyer began his calculations by getting statistics from the relevant government agencies and from the Princeton University Demographics Center on the number of men essential to maintain industry, agriculture, and government. He also asked the Navy for its best estimates of the number of men it would need to expand to full war strength.[47] Once in possession of those figures, he made some general statements about manpower distribution.

"I stuck my neck out," Wedemeyer admitted, "and said the armed forces could use approximately ten percent of the population."[48] He believed that it was better to overestimate the needs of the military, rather than underestimate them, and noted that no one seriously questioned his figures. Working with that ratio, he calculated that the United States, with its population of around 140 million, could field a maximum military force of 14 million men, assuming that the remaining industrial and agricultural labor pool would work with maximum efficiency and that women would enter the work force as well. Somewhere between 12 and 14 million men would comprise the Army, the Army Air Corps, and the Navy

[46]Eiler, "The Man Who Planned Victory," p. 40.

[47]*Ibid.* Also see Deskis interview and author's interviews with General Wedemeyer.

[48]Interview with General Wedemeyer, 24 April 1987.

Department in a future war, with the lower figure more probable than the higher. Wedemeyer began by allocating 4 million to the Navy on the basis of that service's estimate of needs. The remaining men would go to the Army and the Air Corps, and he studied distributing that manpower intelligently between the ground army and its air arm.[49]

After his initial strategic estimate, Wedemeyer had the basic information that he needed to complete his summary of production requirements. In the event of war, he knew, the United States would have to fight in overseas theaters, concentrating first on the destruction of the Axis powers in Europe. The country would be allied with Great Britain and would continue to support the Russians with all sorts of military materiel. In order to pursue such a war, the United States had to have substantial land, sea, and air forces, while reserving sufficient skilled manpower to run defense industries and maintain the internal discipline of society.

Wedemeyer outlined those strategic requirements that had to be satisfied before the United States could fight an overseas war, requirements ranging from control of the seas to the establishment of adequate bases. Based upon those requirements, he made a rough distribution that allocated the available manpower among the armed services according to the missions that had to be undertaken. His next step was to decide how the Army's portion of that manpower should be organized. The number and types of divisions and other organizations would then allow him to compute the quantities of materiel, by type, that had to be produced.

[49]Deskis interview.

CHAPTER 4
Detailed Planning

"Our Army should be developed and designed for offensive operations."
WPD Staff Estimate, 1941

Following his gross allocation of military manpower, Wedemeyer assumed a total of approximately eight and one-half million men for the Army. General staff decisions on organization and force structure would determine the effectiveness of the Army in combat. Wedemeyer, however, could not wait for the general staff's final decisions on the matter—decisions the staff probably would not make for some months. Unless he knew the future divisional organization of the Army, his work could not progress. Logically, types and quantity of materiel and equipment depended directly on the types and numbers of divisions the Army planned to create. Wedemeyer, therefore, next began to estimate what the organization of the ground army would have to be.

At Issue: How Many Divisions?

By the summer of 1941, General George Marshall was certain that Lend Lease, backed up by U. S. air and naval operations, would not be sufficient to defeat Germany. "Large ground forces," he informed the president, "evidently will be required."[1] Although large ground forces could be created out of the manpower Wedemeyer had set aside for the Army, the primary question that remained was how to project the structure and organization of those ground forces. Recalling the maxim that military operations must be planned with enemy capabilities in mind, he computed the

[1]Marshall had held that view for some months. For his reflections on the problem, see Memorandum, George C. Marshall for President Franklin D. Roosevelt, October 14, 1941, Subj: Estimate of Ground Forces. . . . NARA RG 165, File WPD 4594.

number of Axis divisions American troops were likely to face in battle.[2]

Using the fighting potential of the German division as a unit of measure, Wedemeyer figured that the Axis could muster a grand total of 350 divisions in the summer of 1941. By 1 July 1943, he foresaw a possible increase in that number to around 500 divisions.[3]

Attrition and the manpower demands of heavy industry would absorb a proportion of the increased number of men that reached military age in Germany, but he nevertheless expected a real increase in Axis combat strength. Wedemeyer's study in Berlin and consequent current knowledge of the German army encouraged him confidently to predict that Germany could raise and maintain no more than 300 divisions, even allowing for extensive use of conscripted and imported labor, prison labor, and women in the industrial work force. On the other hand, he expected the German trend toward mechanization would continue, and that as many as 45 of those divisions would be mechanized and another 45 would be armored divisions of significantly greater combat potential than the standard infantry division. The U.S. Army, he concluded, should expect to confront 11 or 12 million Axis soldiers in the European theater, amounting to around 400 to 500 "fully equipped and splendidly trained" divisions.

To attain the overall numerical superiority of 2 to 1 normally considered necessary before undertaking offensive operations, the Allied powers would therefore have to field 700 to 900 divisions, or a force, together with appropriate supporting and service troops, of approximately 25 million men. Wedemeyer believed that it was dangerous to depend upon a maximum effort from all of the present Allied belligerents in order to raise the requisite forces. In the interests of forestalling disaster, he had to assume that the war would proceed along the lines of the worst possible case. Thus he hypothesized that, as of 1 July 1943 (the earliest date America could enter the ground war), the only effective ally in the European Theater of Operations would be Great Britain, which would have reinforced its armed forces by drawing on the Dominions and India for manpower. Russia would be effectively out of the war, although

[2]Interview with General Wedemeyer, 24 April 1987.

[3]For the entire discussion of comparative combat strengths, see Ultimate Requirements Study, pp. 2–7, and Estimate of Army Ground Forces, pp. 6–12. Projections of German military power, like appraisals of Axis intentions, derived from G–2 estimates.

far eastern Siberia would continue to resist. France would continue passive collaboration with Germany. On the positive side, he expected Japan to be decisively engaged in China and Axis military strength to be materially weakened through the economic blockade, British air and sea operations, and losses absorbed in the Russian campaign.

While Germany would be weakened until it could organize and exploit the conquered territory of the Soviet Union, and while Japan would probably pose no threat except in China, the upshot was that Great Britain was the only significant ally America could expect to have. All of the ground forces needed to defeat Germany would have to come from the United States and Great Britain, both of which had to avoid debilitating their economic and industrial base through excessive calls on manpower. The two democracies, however, could not create a ground force of 25 million soldiers. England and the Dominions were nearing the end of their reserves, and the United States was unable to raise the bulk of a 25-million-man force unaided without grave disruption of the national economy. As early as September of 1941, Wedemeyer pointed out that the United Kingdom could not provide more than one million fully equipped and well-trained troops for battle in Europe. England still had to protect her home islands and far-flung empire, as well as sustain her economic and industrial effort.[4] He therefore had to consider ways in which the smaller army America could field could still do the jobs required of it.

Lacking numbers, the smaller ground forces the United States could send overseas would have to rely upon effective use of appropriate fighting machines and air forces in order to gain victory. In any case, as J. F. C. Fuller had pointed out years earlier, mass alone did not guarantee victory; a winning army had to be properly armed and intelligently wielded, in accordance with suitable doctrine. Wedemeyer cited a relevant case that supported Fuller's contention: "Another million men in Flanders," he wrote, "would not have turned the tide of battle for France" in 1940.[5] "Allied success," according to the War Plans Division's best estimate of the situation, was "directly contingent upon the coordinated employment of *overwhelming forces*, *surprise* and *mobility*, supported by sufficient re-

[4]Memorandum, Wedemeyer for Gerow, 9 September 1941, NARA RG 165, OPD Exec. #4, Item #7.

[5]Estimate of Army Requirements, p. 8.

serves in materiel and man-power. . . ."[6] The critical task was now to devise divisional organization that would allow the United States to pit its strengths against Axis weaknesses, rather than try to match the Axis man for man.

Structure of the Division: Planning Considerations

The most important question was therefore not how many men were available for the Army, but how those men could best be organized to fight. The troop basis of the 1939 mobilization plans and the organizational premises of the most recent editions of the "color" plans provided little help because the guiding assumption of both was that the United States would be fighting a war primarily in defense of the hemisphere. Therefore those plans called for divisions that could best fight a defensive battle. Of the existing divisions in 1941, eighteen were still square divisions[7] of the type that had been used in World War I. Designed primarily for operations involving the slow, steady power of the infantry-artillery team, square divisions had been rendered obsolete by mechanization and the German application of the prewar theories of Fuller and Liddell Hart.[8]

WPD planners recognized that Americans fighting overseas would have to fight on the offensive and that force structure and equipment had to facilitate such a tactical doctrine. Mobility was characteristic of the triangular division; firepower and shock action were characteristic of the square division. Neither type division was capable of all three of those roots of offensive action. Planners thus knew that the Army would need an entirely new type of organization. Even defense had no fixed flanks in modern war, and therefore rested on the counterattack, which required maneuver and

[6]*Ibid.*, p. 7. Emphasis in original.

[7]"Square" divisions, consisting of four infantry regiments with artillery and supporting services, was the Army's organization in World War I. The "Triangular" infantry division reduced the infantry regiments to three and increased the mobility and firepower of the division.

[8]See Memorandum, Gerow for the Chief of Staff, 10 August 1941, Subj: Evaluation of Modern Combat Forces, pp. 9, 14. NARA RG 165, File WPD 3674–52. In late 1941, the Army had a total of 33 divisions: 18 square, 8 triangular, 1 motorized, 4 armored, and 2 cavalry. The 1942 Troop Basis proposed few changes in its total of 41 divisions: 18 square, 9 triangular, 6 motorized, 6 armored, and 2 cavalry. An army so designed was intended for defense.

firepower to ensure success. For all of these tasks, Wedemeyer discerned that armored forces were essential.[9]

Even before starting the plan, Wedemeyer had believed that the Army needed to be restructured radically. His professional reading, particularly in the years he spent in Berlin, had persuaded him that, the catastrophe of World War I notwithstanding, offensive action lay at the heart of victory in modern war. He, like his contemporaries at the *Kriegsakademie,* had read Fuller and accepted the need for the speed and shock action of armored forces.[10] Understanding the German doctrine for battle reinforced that belief. Although he had spent a considerable amount of time at the Command and General Staff School studying static battle, he had found that the Germans were preparing for an entirely different type of war. "The situations presented at the Kriegsakademie," he wrote in 1938, "involve war of movement, special emphasis being placed upon speed, in anticipation of the employment of mechanized and motorized forces."[11]

In his first year at the *Kriegsakademie,* every week's instruction had included two classes on the tactical use of air forces, five on tactics in general, and two on mechanized warfare in particular. In the second year, the number of hours devoted to tactics increased to six. The proportion of time dedicated to problems involving the armored division, large motorized forces, and light mechanized forces during the tactical instruction was high—a full four months out of the academic year. The student summer postings invariably involved mechanized forces as well. The German instructors supplemented the classroom lectures with trips to the tank school and excursions to the Krupp and Rheinmetall factories where armored vehicles were being made. As the *Kriegsakademie* emphasis was overwhelmingly offensive in nature, in his two years as a student in Berlin, Wedemeyer worked only three defensive situations in class, and but five situations requiring him to plan a delaying action. The remaining sixty problems were all various forms of attack. Never in his two years at the *Kriegsakademie* did he study a static defense such

[9]*Ibid.,* p. 13.

[10]Interview with General Wedemeyer, 24 April 1987. General Wedemeyer emphasized the influence of Fuller on his thinking and commented that Fuller's works were widely read and discussed among *Kriegsakademie* students.

[11]Memorandum, Captain A. C. Wedemeyer for the Adjutant General, 3 August 1938, Subj: German General Staff School, p. 12. NAR RG 165, G–2 Regional Files—Germany (6740), Box 1409 (Suitland). Hereinafter cited as *Kriegsakademie* Report.

as he had planned at Fort Leavenworth.[12] In view of his clear understanding of the German way of war, Wedemeyer knew that it would be wrong to send 1918-style divisions to fight in Europe.[13] The U.S. Army obviously required a new type of division that could cope with a very mobile German Army, which he knew was dedicated to a war of movement that sought early decisions in battle.

Ground forces had to be supplemented by tactical air power, however, as Wedemeyer also understood from his two years in Germany. *Kriegsakademie* courses had stressed that every ground maneuver plan had to include a plan for employment of tactical air power as another part of its fire support. German doctrine for the use of air power demanded that the air force first establish command of the air over the battlefield to protect ground units from hostile air attack. The second mission was to attack enemy mobilization points, assembly areas, and movement toward the battlefield, as well as rear area targets such as command posts, reserves, and artillery. The example of the German tactical operations in 1939 and 1940 only validated the importance of tactical air power in a close support role. Air superiority over the area of operations was crucial, but simply having overwhelming air power was not enough. Instead, the air and ground forces had to operate together, in an effective air-ground team.[14] One of the principal ways a smaller American ground force could fight a larger German Army was to use extensive air power because, as Wedemeyer saw, it could allow the smaller force to maneuver more quickly and see the battlefield more clearly than the enemy, to whom it could deny equivalent mobility by pinning his forces in place.[15]

A further consideration in laying out the blueprint for the new army was the theater in which it would have to fight. Wedemeyer already knew that the European theater would be the focus of American attention. From that premise, strategic considerations would directly influence questions of tactics and organization. Planners had to design divisions to operate well in western Europe, where there was scope for maneuver and where the enemy could be

[12]*Kriegsakademie* Report, pp. 7–8, 10–14, 140.

[13]Interview with General Wedemeyer, 24 April 1987. General Wedemeyer made this point in his report on attendance at the German War College and remarked that General Marshall and certain officers on the WPD staff shared his view that mechanization made old-style divisional organization obsolete.

[14]*Kriegsakademie* Report, p. 5.

[15]Interview with General Wedemeyer, 24 April 1987.

expected to have powerful and mobile air and land forces. A division tailored to fight in the Pacific, by contrast, would have far fewer vehicles and would have to worry far less about mobility. Furthermore, it would not have to be so concerned about the problem of combating enemy armor. WPD took the position, however, that if the Army possessed field forces able to win the highest intensity battle they were likely to face, then it would also be adequately prepared for operations in other theaters and against lesser foes.[16]

Wedemeyer and his colleagues carefully studied the military operations under way in Africa and Europe, which affected their thinking about the force structure an American army needed to fight in Europe. The *Blitzkrieg* against France was impressive, transforming a static front into a decisive defeat for Anglo-French forces in the course of only seventeen days. The German advances in Libya, involving broad, sweeping maneuver over vast distances and the investment of strongpoints and major fortresses such as Tobruk, likewise drew the attention of WPD planners. They noted the importance of tactical aviation in support of armored attack and realized that this new style of war required "a *major decision* on our part as to the direction of our development in equipment, organization, and tactics."[17]

Less successful operations also caught their attention. Spectacular victories in Poland, France, and North Africa did not conceal the problems the Germans faced in their amphibious operation in Norway in April of 1940, where they had to face a strong opposing fleet and air force. Nor did the utility of tactical aviation overshadow the German defeat in the Battle of Britain fought between July and September of 1940. They noted the airborne successes in Norway and Belgium, but observed that the Germans had secured Crete in May of 1941 at the cost of high casualties among their expensive parachute troops. Effective joint planning was clearly necessary to enable air, naval, and military forces to work together smoothly, particularly in high risk operations such as parachute and amphibious assaults. Furthermore, while they conceded the value of specialized divisions—cavalry, mountain, airborne, and parachute—in specialized circumstances, the men in WPD also believed that such

[16]Evaluation of Modern Combat Forces, p. 3.

[17]*Ibid.*, p. 1. Emphasis in original. This document explicitly mentions WPD review of the war; many other documents show that officers on the Army staff were watching the fighting carefully and thinking critically about what lessons might be learned from it.

units could not conduct sustained combat and should be few in number.[18]

The progress of the war in Europe left Wedemeyer and his associates with certain impressions about equipment other than tanks and airplanes, too. Antitank guns appeared to be an important countermeasure against tanks that standard infantry divisions would need. As WPD planners evaluated the Camp Forrest maneuvers of 1941, they saw conditions prevailing on European battlefields duplicated in Tennessee. Armored units surrounded, disrupted, and disorganized conventionally organized troops with astounding ease. If infantry divisions were to be able to resist armored attacks, they needed powerful antitank support, and it seemed better that the antitank guns be mounted on track laying vehicles, too, because the towed gun lacked the requisite flexibility and could not be prepared for immediate fire, both characteristics that the war showed was essential. WPD parenthetically noted that the 37-mm. antitank gun was far too light to be effective against the latest foreign tanks and stated the need for a more effective new gun. Because he had never been a weapons specialist himself, Wedemeyer accepted the opinions of War Department ordnance experts on the various weapons proposed for the new divisions.[19]

The impressive power of German tactical aviation also suggested the need for more and better antiaircraft weapons to defend mobile ground troops. Automatic weapons adaptable to a highly mobile force, including the .50-caliber machine gun and the 37-mm. antiaircraft gun, had to be organic to the division. "These weapons, for effectiveness," WPD planners wrote, "must be available in quantity."[20] Protection of the rear area command and supply installations supporting mobile forces was also important, and the heavy antiaircraft gun, preferably the new 90-mm. gun, appeared to be ideal for the purpose. Forward-looking planners, conscious of the German use of heavy *Flak* units against tanks in Africa, observed that "such guns should be so designed as to be capable of firing at either air or ground targets."[21]

Mobile war also demanded mobile logistics and services, and Wedemeyer saw the need for an enormous number of vehicles to supply the advanced elements of the force. Such vehicles had to have

[18]*Ibid.*, pp. 9–10. Also see Estimate of Army Requirements, pp. 8–10.
[19]Evaluation of Modern Combat Forces, p. 7.
[20]*Ibid.*
[21]*Ibid.*

low silhouette and high cross-country ability in order to assure a reliable channel of supply to ground troops in advanced positions. The great number of rapid fire weapons that the general staff planned for the division created the requirement for an assured flow of fuel and ammunition in order to sustain continuous battlefield mobility. Therefore logistics had to be as mobile as the combat forces, and the G–4 organization in theaters of war demanded efficient supply units with their own extensive transportation cadre.[22]

Combat support units had also to be mechanized to fight alongside armored units. WPD therefore assumed that engineer units would need cross-country vehicles to carry bridging equipment, demolition equipment, and the other engineer materiel required to promote a continuity of movement under all combat conditions. Likewise, signal troops had to be mechanized. Command and control, particularly of fast mechanized and armored units, relied on efficient signal communications. Both signal operations and signal maintenance units had to be able to keep pace with the armored task forces.[23]

Those diverse requirements seemed to imply extremely complex divisions composed of a wide variety of motorized, mechanized, and armored units. Such units would be unwieldy and difficult to train and control in battle unless WPD could devise organizational principles to simplify control. Wedemeyer found the key in an aspect of German organization that had impressed him: the *Einheit,* or "standard unit" principle.[24] Insofar as possible, the Germans built all larger formations from independent units of standard configuration that could be attached or detached at will without sacrificing tactical integrity or creating administrative or supply nightmares. The building block design allowed a corps commander continuously to reconfigure his divisions for the exact mission they encountered, but without introducing the confusion that divisional reorganization had traditionally involved. The division was no longer the standard tactical unit in the German Army,

[22]*Ibid.*, p. 8.

[23]*Ibid.*

[24]Evidently the principle of standard units was a topic of conversation in professional military circles in the late 1930s. General Wedemeyer remarked upon the German implementation of the idea in his report on attendance at the German War College, and noted that the concept was favorably regarded by officers in WPD in 1941. Interview with General Wedemeyer, 24 April 1987.

but was rather a headquarters with certain permanently assigned service units, capable of receiving, commanding, and sustaining a variety of combat elements. In doing this, the Germans eliminated the brigade echelon of command as superfluous, and the division commander directly controlled the operations of his regiments, each of which was the core of a combat team. Such an organization seemed to be ideal for an American army fighting on varied terrain, because it would make it possible to build divisions of specialized capabilities out of commonly designed regiments that could conduct similar training.[25]

The pace of modern war was also an important consideration. The tempo of mechanized warfare dramatically decreased the amount of time available to a commander to make decisions in battle. The flood of information, including battlefield intelligence, available to the commander was difficult to assimilate in the short time now available, so that he was often little better off with too much information than with too little. The *Kriegsakademie* had taught Wedemeyer that a merely adequate decision, quickly reached, was far better than a perfect one reached after the fact. To exploit fleeting opportunities in battle, then, the commander had not only to think, decide, and act quickly, but he had also to be able to manipulate his task forces quickly. Large units were difficult to handle, and the British and French experience in 1940 indicated to WPD that smaller divisions with greater organic firepower were by far the better idea. Commanders could maneuver smaller divisions more quickly, supply them more easily, and tailor them for battle with greater efficiency.

Their review of the progress of the war, the challenges facing the United States Army on a European battlefield, and the growth of military technology persuaded Wedemeyer and his colleagues in War Plans Division that the United States needed to rebuild the Army as a basically mechanized force with the armored division as the principal offensive tool. Enormous demands for manpower could be moderated only through intelligent force design and the best possible use of the most effective modern military technology.

As Wedemeyer completed his study of divisional organization, he was satisfied that the contemporary square division was obsolete because of its overreliance on manpower alone. The value of manpower had to be enhanced through mobility. Ultimately, American

[25]See Wedemeyer's comments in *Kriegsakademie* Report, pp. 141–42.

divisions would fight in the high intensity European theater, where only armored and mechanized units had real offensive utility. Fewer of those units would suffice, if their value, in turn, were multiplied by powerful tactical air forces. Organizational economy could be gained by building divisions of different types and capabilities out of standard tactical units. To meet the threat of strong enemy armored forces and air forces, which WPD planners expected to be even more powerful by 1943, divisions required massive antitank, antiaircraft artillery, and field artillery reserves for support. Highly mobile logistical and service units sustained the divisions in battle. Finally, a smaller division, vastly greater in firepower than the old square division, was the more efficient tactical tool on a modern, fast-paced battlefield.

As Wedemeyer had written in his report on study at the *Kriegsakademie,* modern reconnaissance techniques virtually precluded true surprise and made the ideal of wide envelopment almost impossible. He believed that "the ever essential *surprise element* could best be accomplished through *mobility* and *rapidity.*"[26] He therefore began to lay plans for a force that relied on speed and firepower.

Organizing the Force: Influence of the War Plan

Thus far, Wedemeyer's calculations, although based upon a series of planning assumptions, were essentially mathematical in nature. Once he began to devise an organizational structure for the war army, however, he had to use those planning considerations subjectively. In many cases the planning reflected Wedemeyer's best estimate of the forces the Army would need to carry out the national military strategy as he understood it. Types and numbers of divisions and other organizations were the product of his judgment, and were therefore a matter of informed opinion, subject to debate among members of his "murder committee."

[26]*Ibid.,* p. 140. Emphasis in original. Wedemeyer wrote that the envelopment was the most effective form of maneuver which, "if aggressively employed deep in the hostile flank or rear, can result in a decisive victory—an annihilation of the enemy." He went on to observe that "wide envelopments are more effective than close in." Nonetheless, such wide maneuver was very difficult to arrange because of the technical intelligence means available to the field army. See pp. 91–92.

Wedemeyer did not exercise his judgment in the abstract, but in pursuit of a specific, realistic objective. No mobilization plan has inherent merit; its value accrues only insofar as it contributes to the accomplishment of a plan of operations. In this case, the provisions of the RAINBOW 5 plan gave his remaining work its structure. In broad outline, war plan RAINBOW 5 required sufficient military forces to accomplish three main objectives:

1) Enforce the Monroe Doctrine by defending the western hemisphere from foreign attack.

2) Protect U.S. possessions in the Pacific and maintain a sufficient force to deter war in the western Pacific.

3) Create task forces capable of fighting in the Americas, the Caribbean, and, in conjunction with Great Britain, in Africa, the Mediterranean and Europe.

While 14 million men were theoretically available, industrial requirements and the demands of mobilization construction reduced the figure realistically to somewhere around 12 million. A notional total of 8.5 million men had to suffice for both land forces and for air forces to execute those tasks, with only a portion of those men assigned to ground forces. The air staff sent Wedemeyer an estimate of Army Air Corps requirements that demanded around 2.1 million of the Army's share of military manpower, leaving around 6 million men for the ground army. This was still, he believed, a large enough force to satisfy the war plan's requirements.

Wedemeyer believed "that the enemy can be defeated without creating the numerical superiority" traditionally required for success in battle.[27] The key to victory lay in building efficient forces and using them effectively to achieve local force superiority. His basic plan involved creating powerful armored and mechanized task forces that could exploit this local superiority to strike violently and swiftly from well-prepared European bases to defeat the Germans in detail. Firepower, mobility, and air power would make up for manpower shortages.

Mission One: Hemispheric Defense

The first requirement was to maintain the security of the west-

[27]Estimate of Army Requirements, p. 8.

ern hemisphere, where outlying minimum garrisons would defend the sea frontiers of America in the event of the sudden collapse of the United Kingdom. Since small island bases for air and naval patrol units required very small army garrisons, Wedemeyer allocated minimal units to the army forces in Newfoundland, Greenland, Jamaica, Bermuda, Antigua, St. Lucia, Curaçao, British Guiana, Aruba, and Trinidad. He believed that a grand total of 32,144 troops of all types would be sufficient, in cooperation with the Navy and Air Corps, to sustain the Atlantic outposts. Most of the soldiers would be in the administrative, logistical, and service forces, although the bases would need military police and similar security elements as well. The only significant combat element in the Atlantic bases was drawn from the Coast Artillery Corps, which provided harbor defense guns and antiaircraft artillery protection for anchorages and airfields.[28] Atlantic bases would not require mobile combat units.

Mission Two: Defend the Outlying Possessions

Defense of the outlying possessions of the United States required greater manpower than did the defense of hemispheric bases. Hawaii was important as the principal anchorage of the United States Pacific Fleet. The terrain in the islands was rugged enough, however, to make it impractical to use mechanized units. Conventional infantry regiments were the best choices to operate in the tropics, and two triangular infantry divisions appeared to Wedemeyer sufficient to secure Hawaii.[29] To back up the divisions, he allotted two heavy artillery regiments, one battalion of parachute infantry, and one light tank battalion. Coast Artillery regiments manning the existing harbor defenses needed to be supplemented by an antiaircraft organization consisting of one aircraft warning regiment and five antiaircraft artillery regiments to protect the port

[28]The 52d Coast Artillery (Railway), for example, sent one battery of 8-inch railway rifles to help protect the harbor at Newfoundland, and another battery to Bermuda.

[29]In October 1940 the Army created the 24th Infantry Division from the old Hawaiian Division, having drawn cadres from it to create the new 25th Infantry Division in August. Both divisions were still in Hawaii in December 1941. See John B. Wilson, *Armies, Corps, Divisions and Separate Brigades.* ARMY LINEAGE SERIES (Washington, D.C.: United States Army Center of Military History, 1987).

and harbor fortifications. In all, the Army's contribution to the defense of Hawaii required only 58,696 men, including service troops.[30]

The experience of two full tours of duty in the Philippines convinced Wedemeyer that the islands were indefensible at any cost the United States was willing to pay. Both the Army and the Navy had long accepted that the Philippines were a strategic liability that could not be defended in the event of a major war involving Japan. Still, Manila Bay and Subic Bay were excellent ports, the use of which ought to be denied any potential enemy for as long as possible, and the islands provided important air bases as well. Furthermore, political considerations overrode the purely military, because the United States could ill afford simply to withdraw, thereby abandoning the Filipinos to their fate. The existing garrison sufficed to protect the critical harbors and establish the essential American "presence," and the War Department did not plan to send many additional troops to the western Pacific. Less than 25,500 men, a significant proportion of which was Philippine Scouts, manned one provisional infantry division, one horse cavalry regiment, and a seacoast artillery brigade. Wedemeyer projected strengthening the force with two heavy artillery regiments, one antiaircraft artillery regiment and one aircraft warning regiment, one light tank battalion, and one parachute infantry battalion. As with the Hawaiian Islands, light troops were best suited to fight in the Philippines.[31]

The harsh climate and forbidding terrain of Alaska also made use of mobile troops impractical. The proposed 27,000-man garrison included three conventional infantry regiments reinforced by one separate infantry battalion, one parachute infantry battalion, a light tank company, one heavy artillery battalion, and one light artillery battery. The Coast Artillery Corps again provided the principal defenses. The coastal artillery was to expand to a strength of three heavy artillery battalions for harbor defense, one aircraft warning regiment, three antiaircraft artillery regiments, and four antiaircraft batteries.[32]

Caribbean possessions were another matter. To secure Puerto Rico, a strategic garrison, Wedemeyer allotted one triangular infantry division and one parachute infantry battalion. Ports and air-

[30]The figure did not include Air Corps personnel, which were computed separately. See Ultimate Requirements Study, p. 9.

[31]*Ibid.*

[32]Ultimate Requirements Study, pp. 7–9.

fields demanded a small antiaircraft organization consisting of one aircraft warning company and two antiaircraft artillery regiments. Approximately 25,000 men sufficed for all Army missions in Puerto Rico. Panama, with the strategic canal, was more difficult for a potential enemy to reach by land and was also protected by the Navy. Total Army forces there amounted to just over 31,000 men, of whom 10,000 were infantrymen and a similar number coast artillerymen and antiaircraft gunners. Three infantry regiments, three parachute infantry battalions, one airborne battalion, and a battalion each of medium and light artillery comprised an adequate maneuver force. Coast defenses required two Coast Artillery regiments, one aircraft warning company, and four antiaircraft artillery regiments.

Mission Three: Overseas Task Forces

The conventional units Wedemeyer planned for the security missions implicit in RAINBOW 5 used around 200,000 men. Almost six million soldiers remained for the offensive portions of the war plan. Because the nation's basic strategic concept involved encircling Germany and bringing continuously greater pressure to bear through progressive military and economic constrictions, a proportion of those six million had to be diverted to establish and maintain forward bases in the European theater from which combat forces could operate. Wedemeyer foresaw American garrisons in Iceland, Scotland, Ireland, and England as likely bases from which to launch American attacks on the continent of Europe. Infantry regiments to secure the bases, antiaircraft gunners to protect harbors and airfields, and the various medical, ordnance, quartermaster, engineer, and signal units that operated the facilities consumed a total of 105,500 more soldiers. Many were from the Coast Artillery Corps. New mechanized or armored divisions were unnecessary for such garrisons.[33] After establishing the bases, about five and one- half million men were left for task forces and strategic reserves. The division slice governed distribution of the balance between ground forces and services.

Division slice was the WPD planners' term to describe the ratio between combat soldiers and the number of service troops required

[33] *Ibid.*

to sustain the former in battle. The figure was a variable that depended upon the degree of technical sophistication of military equipment and support systems. The more complex the tank, for example, the more skilled men had to be assigned to tank maintenance. The division slice was a planning figure that allowed WPD to allocate manpower between the arms and services—the "tooth-to-tail" dilemma of modern armies. Wedemeyer used the Army G–3's then-current planning data, a figure of 1:1, or one soldier in support for every soldier in the line. The resulting division slice was 30,000, which meant that each 15,000-man combat division required another 15,000 men in the services to support and sustain it.[34]

Cognizant of that need, Wedemeyer divided the ground force component of the Army into combat and service units. He allocated 3.9 million men to combat arms and 1.8 million to the services. This almost exactly reflected the division slice figure, after allowing for administrative and service troops organic to divisions, the headquarters overhead demanded by corps and army echelons, and the independent garrisons manning the outposts in the Pacific and Atlantic ocean frontiers.[35] He agreed with WPD estimates that called for one motorized division for every armored division, because armored divisions spearheaded offensive action, while motorized divisions allowed infantrymen to keep pace with armored forces and provide a highly mobile, strategic reserve in the theater. Still, numbers of conventional triangular infantry divisions were needed to pave the way in slow, difficult operations on broken terrain and, reinforced with adequate antitank units, to hold ground in the face of a hostile armored threat. Limited numbers of special purpose divisions, organized to suit the requirements of fighting in the European theater, also had to be formed. Within the general headquarters, there needed to be a reserve of antiaircraft, armor, antitank, artillery, and special purpose and miscellaneous troops.[36]

[34]*Wedemeyer Reports!*, p. 66.

[35]An excellent personnel summary is contained in Memorandum, Lt. Col. Harry Reichelderfer for Colonel Mallon (G–4), 5 September 1941, Subj: Ultimate Requirements for the Army, a document Reichelderfer prepared for his chief to summarize the contents of Wedemeyer's study. This document indicates that Wedemeyer distributed copies of his study to various staff elements for information; in this case, he asked the G–4 to determine exactly how much materiel would be required to equip the forces he proposed. NARA RG 165, File WPD 4494–4.

[36]Evaluation of Modern Combat Forces, pp. 16–21.

Working from these decisions, Wedemeyer organized task forces to fight the war. He planned two task forces for operations in the Americas and the Caribbean. Even though he thought the possibility of German or German-inspired attacks through South America was a fanciful notion, he established small forces that could deal with this potential threat. The first task force was therefore designated for Brazil, the closest nation to Africa, and therefore the most likely landing area for enemy troops. Constituted as a corps, the Brazil task force contained one triangular infantry division and one airborne division, a horse-mounted cavalry regiment, and appropriate antiaircraft and artillery units. The small corps held a total of only 77,700 troops and was to defend North America from attack from the south and preclude or minimize defections of South American nations to the Axis. The units Wedemeyer assigned to the corps reflected the terrain in which they would be expected to fight, terrain where mechanized or motorized forces could not be used effectively. Most importantly from Wedemeyer's point of view, the corps would also be a strategic reserve, a strong striking force for use in southern Europe or the African theater.[37]

The second task force was also dedicated to hemispheric defense. The Colombia-Ecuador-Peru task force consisted of one heavily reinforced triangular infantry division, totaling 34,000 men. While it could reinforce the Brazil task force if threats developed there, the division most likely would collaborate with Air Corps units to defend the Panama Canal. Wedemeyer also considered these troops part of the strategic reserve and emphasized that they had to be held ready for prompt movement to another theater.[38]

The three task forces intended to conduct the war in Europe contained the vast majority of the nation's combat power.[39] Using the division slice figure and estimating the number of special purpose divisions and conventional infantry divisions the Army

[37]Ultimate Requirements Study, p. 10.

[38]*Ibid.*

[39]*Ibid.*, pp. 11–12. Also, Estimate of Army Requirements, Tab A, pp. 1–3. All discussions of task forces, including specific troop figures, come from these documents. The two differ in detail. The earlier of the two, the Ultimate Requirements Study, reaches a smaller total of divisions; the Estimate of Army Requirements was the final paper and contained the figures submitted to the President. Aside from division totals, the two papers vary in details such as specific strength figures and nondivisional units assigned to task forces. Those differences are not significant for purposes of this discussion.

needed as opposed to armored and mechanized divisions, Wedemeyer devised a grand total of 215 divisions of all types, organized into five field armies. First, Third, and Fourth Armies were purely offensive task forces, exempt from the defensive portions of RAINBOW 5. Each army had the specific mission to train and prepare for battle in central Europe, although each also had a contingency mission. Third Army was required to be ready to fight in South and Central America and Africa, and Fourth Army was to be prepared to operate on the west coast of South America, in Alaska, and in the Hawaiian Islands if required. Second and Fifth Armies were the strategic reserve that the Army could activate as necessary.

Wedemeyer built each army around a core of nine triangular infantry divisions. The striking force of each army, however, lay in its armored and mechanized divisions. First Army had four divisions of each type, plus two mountain divisions and two airborne divisions. Third Army had two cavalry, two airborne, two armored, and two mechanized divisions. Fourth Army consisted of two armored, four mechanized, two mountain, and two airborne divisions. Each army had appropriate corps headquarters to command the divisions and sufficient organic service troops to sustain the combat units in action. To contend with strong German armored units that enjoyed close tactical air support, the U.S. forces would have powerful combat support forces under army control, including tank destroyer and antitank battalions and reserve artillery. For the same reason, Wedemeyer gave each army an elaborate antiaircraft artillery organization. The armies were similar in organization, but their strength varied from 17 to 21 divisions:

First Army

Army Hq. & Hq. Co., and Army Troops
3 Corps Headquarters & Corps Troops
2 Armored Corps Headquarters & Corps Troops
9 Triangular Infantry Divisions
4 Armored Divisions
4 Triangular Infantry Divisions (Motorized)
2 Mountain Divisions
2 Airborne Divisions
8 Separate Tank Battalions
10 Tank Destroyer Battalions
10 Antitank Battalions (Gun)
5 Parachute Infantry Battalions
2 Heavy Artillery Regiments
9 Medium & Light Artillery Battalions

12 Aircraft Warning Regiments
20 Antiaircraft Artillery Regiments
10 Mobile Antiaircraft Battalions
Service Troops

Third Army

Army Hq & Hq Co. and Army Troops
3 Corps Headquarters & Corps Troops
1 Armored Corps Headquarters & Corps Troops
1 Cavalry Corps Headquarters & Corps Troops
9 Triangular Infantry Divisions
2 Armored Divisions
2 Triangular Infantry Divisions (Motorized)
2 Airborne Divisions
2 Cavalry Divisions
5 Tank Destroyer Battalions
10 Antitank Battalions (Gun)
2 Cavalry Regiments (Horse Mounted)
5 Parachute Infantry Battalions
1 Heavy Artillery Regiment
4 Medium Artillery Battalions
3 Aircraft Warning Regiments
5 Antiaircraft Artillery Regiments
3 Mobile Antiaircraft Battalions
Service Troops

Fourth Army

Army Hq & Hq Co., and Army Troops
3 Corps Headquarters & Corps Troops
9 Triangular Infantry Divisions
2 Armored Divisions
4 Triangular Infantry Divisions (Motorized)
2 Mountain Divisions
2 Airborne Divisions
8 Separate Tank Battalions
10 Tank Destroyer Battalions
15 Antitank Battalions (Gun)
2 Parachute Infantry Battalions
4 Heavy Artillery Regiments
4 Medium Artillery Battalions
6 Aircraft Warning Regiments
15 Antiaircraft Artillery Regiments
10 Mobile Antiaircraft Battalions
Service Troops

Besides the task forces, Wedemeyer envisioned a considerable strategic reserve, a well-balanced pool of units either to reinforce and supplement existing task forces, or to create complete task forces for other missions. Unable to predict the exact military situa-

tion the United States would be facing in July of 1943, he also planned for a reserve of fully equipped units. Those units would not be created immediately, however, because their manpower was more urgently needed to construct training areas, barracks, and the like, and work the production lines that were vital to manufacture the military materiel to equip units the Army would organize immediately. The Army would call up the additional men as needed, to activate units in the strategic reserve, in accordance with developments in the international situation. The strategic reserve consisted of two armies, the Second and the Fifth:

Strategic Reserve, GHQ

2 Army Hq & Hq Cos. and Army Troops
10 Corps and Corps Troops
14 Armored Corps and Corps Troops
27 Triangular Infantry Divisions
53 Armored Divisions
51 Triangular Infantry Divisions (Mechanized)
2 Cavalry Divisions
6 Mountain Divisions
3 Airborne Divisions
115 Medium and Heavy Artillery Battalions
86 Separate Tank Battalions
290 Tank Destroyer Battalions
262 Antitank Battalions (Gun)
22 Parachute Infantry Battalions
29 Aircraft Warning Regiments
129 Antiaircraft Artillery Regiments
133 Antiaircraft Battalions (Mobile)

Recapitulation

Wedemeyer's completed calculations outlined a powerful army of 215 maneuver divisions, of which 61 were to be armored, 61 mechanized, 54 infantry triangular, 4 cavalry, 10 mountain, and 7 airborne. The remaining divisions were allotted to task forces committed to hemispheric defense and defense of outlying possessions of the United States, or were to be constituted from separate battalions in the strategic reserve.[40] When Wedemeyer submitted his

[40]Estimate of Army Requirements, p. 12 and Tab A.

study in early September, his final manpower commitments were as follows:

TOTAL ARMY FORCES	
Air Force Combat units	1,100,000
Air Force Service units	950,000
Total Air Force[41]	*2,050,000*
Military Bases and Outlying Possessions	346,217
Potential Task Forces	2,199,441
Fixed Defenses & Zone of the Interior Forces	1,200,000
Total Active Units	*3,745,658*
Units in strategic reserve to be activated when situation required	3,000,000
Total Army Ground Forces	*6,745,658*
TOTAL ARMY FORCES:	*8,795,658*

Wedemeyer then sent copies of his final Estimate of Army Requirements to each element of the War Department staff for comment. By 23 August 1941, the G–1, G–2, G–3, G–4, and Air Corps had all informally concurred in the draft. General Gerow, in turn, transmitted the document to the Assistant Chief of Staff, G–4, for action.[42] He asked the G–4 to determine the number of each of the critical and essential items necessary to equip and maintain the force Wedemeyer proposed. Without the basic strategic plan Wedemeyer had written, it would have been impossible for the G–4 to tabulate such information; with it, the task was manageable. The G–4 staff swiftly computed the equipment requirements and returned a list to Wedemeyer on the afternoon of 4 September 1941.[43]

General Marshall's original concern had been that President

[41]Air Force requirements were computed separately by Air Staff and delivered to War Plans Division; Wedemeyer was not responsible for them.

[42]Memorandum, Brig. Gen. L. T. Gerow for Assistant Chief of Staff, G–4, 23 August 1941, Subj: Ultimate Requirement for the Army. NARA RG 165, WPD File 4494–4.

[43]Memorandum, Brig. Gen. E. Reybold for Assistant Chief of Staff, WPD, 5 September 1941, Subj: Ultimate Requirements for the Army. NARA RG 165, File WPD G–4/33473.

Roosevelt's plan to supply Great Britain and Russia with military materiel would completely disorganize the Army's mobilization program. In fact, when Wedemeyer finished his work, the Army had no better understanding of production requirements to meet the needs of Lend Lease.[44] For instance, Marshall continued to argue that American forces had to be equipped before the United States shipped any significant amounts of modern weapons and munitions to the Allies.[45] However vague the Army's understanding of Lend Lease needs, its estimate of materiel established a planning basis that at least allowed planners to figure the impact of Lend Lease on American readiness. Eventually, the Army passed Lend Lease production questions to the civilian authorities, largely because the War Department staff could only guess at the needs of the British and the Russians.

The Army planning data, including estimates made by the planning section of the Air Corps, were combined as a joint study and, together with a similar estimate made by the Navy for "Victory Sea Forces," were turned over to the Joint Army and Navy Board. The Joint Board approved the basic plan and forwarded it to the civilian production agencies in the government. Although Wedemeyer's plan was frequently called the "Victory Plan," or "Victory Program," that name more properly applies to the entire production program, of which Wedemeyer's study was one of the major components, eventually administered by the Office of Production Management.[46]

[44]G–4 calculations of materiel for U.S. units followed existing and proposed Tables of Organization and Equipment. In some cases, both in ground forces and in air forces, the staff made attempts to estimate Lend Lease requirements as well. See Production Requirements. U. S. Estimates of Own Needs and Those of Foreign Nations, Critical Items Only. NARA RG 165, WPD Files 4494–5 and 4494–26.

[45]Memorandum, General George C. Marshall for President F. D. Roosevelt, 14 October 1941, Subj: Estimate of Ground Forces required (1) for immediate security of the Western Hemisphere, (2) ultimately to defeat our potential enemies. NARA RG 165, File WPD 4594.

[46]For the final, detailed production estimates, see Joint Board No. 355 (Serial 707), Army and Navy Estimate of United States Over-all Production Requirements, September 11, 1941. NARA RG 225.

CHAPTER 5
Assessments

"To war plans there can be no finality."

J. F. C. Fuller

"The Victory Program was never static."

Albert Wedemeyer

When he submitted his strategic estimate and notional troop basis to the G–4 to compute equipment, munitions, and materiel, Albert Wedemeyer had finished the job assigned him by General Gerow. The consolidated G–4 calculations then became the basis for war production management. Wedemeyer's plan itself became a part of the overall Army-Navy production estimate, collectively known as the Victory Program.

No military plan, as Field Marshal Helmuth Graf von Moltke remarked after the Franco-Prussian War, survives the first contact with the enemy.[1] True of operational plans, von Moltke's aphorism is equally true for plans to mobilize a mass army. Such plans characteristically become little more than points of departure; deviations begin with implementation. That was the case with the Victory Plan. In retrospect, it was the expected collection of successes and failures that the general staff refined to suit the needs of war, and from which WPD staffers developed subsequent plans. The Victory Plan is most important for its procedural approach to, and philosophical outlook on, strategy. Nonetheless, its accuracy in detail is of interest as a means of assessing the adequacy of the planning.

Limitations of the Plan—Total Divisions

Wedemeyer's estimate of a total of 215 maneuver divisions and

[1]In his introduction to the Prussian General Staff treatise on the War of 1870–1871.

related supporting arms and services proved to be overly ambitious for the United States to manage. The nation indeed had sufficient manpower, for the Army eventually put almost exactly the eight million men of Wedemeyer's estimate into uniform. Instead, the problem lay in the division slice figure. Wedemeyer had divided manpower between combat units and support units on the basis of the G–3 ratio of 1:1, figuring a 30,000-man division slice for each 15,000-man division. While that ratio might have been substantially correct for a World War I army that had approximately half of its total strength in ground combat soldiers, it was completely outmoded by 1941. A 1:1 proportion did not reflect the profound transformation of the battlefield caused by improved military technology that allowed Wedemeyer to plan for fewer, but more powerful, divisions to fight the war.[2]

One implication of the mechanization and modernization of warfare between 1919 and 1939 is that the significant growth in the absolute numbers of men under arms resulted in a relatively modest increase in rifle strength. Indeed, the size of the combatant ground force in the United States Army in World War II was not much greater than that fielded in World War I, although the total strength of the Army about doubled. World War II divisions were smaller than their World War I counterparts, so the 89 divisions of 1945 had only 24 percent more manpower than the 58 divisions formed or forming by 1918—and actually fewer men in combat billets.[3] Only about one-fourth of the 8-million-man Army in existence in March 1945 was combatant ground soldiers.[4] The balance was the combat service and support forces necessary to administer and sustain an increasingly technical and mechanized Army.

Accurate computation of the division slice was always a challenging exercise because of the constantly changing variables that

[2]R. R. Palmer, "Mobilization of the Ground Army" (Washington, D. C.: Historical Section—Army Ground Forces, Study No. 4, 1946), unpublished typescript, p. 2; and James S. Nanney and Terrence J. Gough, *U.S. Manpower Mobilization for World War II* (Washington, D.C.: U.S. Army Center of Military History, 1982), p. 57.

[3]Palmer, p. 1. The Army of 1918 had approximately 4 million men, with 58 combat divisions of 28,000 men each. Total combat strength of the Army was 1.6 million soldiers. The Army of 1945 had approximately 8.2 million men, with 89 combat divisions of roughly 15,000 men each. Total combat strength of the Army in 1945 was 1.3 million soldiers. The total figures include, respectively, the Army Service Forces and the Army Air Forces.

[4]*Ibid.*, pp. 17, 29.

affected it. Even before World War II, students of the military art had concluded that the more mechanized warfare became, the smaller the ratio of combat troops to support troops would become.[5] Not only did the rearward element of the Army grow steadily in relation to the combat edge, but it became increasingly specialized as well. For modern, mechanized warfare, the most appropriate index to that specialization is motor vehicles and the soldiers necessary to keep them going. In World War I, the Army had one vehicle for every 37 soldiers. By the end of World War II, the ratio was one vehicle for every 4.3 soldiers.[6] The number of soldiers devoted to vehicle maintenance and repair therefore increased proportionately, at a cost to the sharp edge of the Army. Other specialized equipment required equally unique technical skills, with the result that, by January of 1943, 788 out of every thousand soldiers in the Transportation Corps were technical specialists. At the other end of the spectrum, only 732 out of every one thousand infantrymen held actual combat skills.[7] When the United States was fighting World War II, only about 36 percent of the Army's designated skills were directly combat related.[8] Even in an infantry division, which Army regulations considered 100 percent combat, only about 76 percent of the men were actually combat troops; limit the definition of "combat" to men in companies, batteries and troops of the combat arms, and the figure drops to about 55 percent of the division.[9]

Hence the G–3's division slice planning figure was hopelessly

[5]For example, S. T. Possony, *Tomorrow's War: Its Planning, Management, and Cost* (London, 1938). For a critical discussion of the division slice concept, see "The Division Slice and Division Force" (Washington, D.C.: Office of the Chief of Military History Draft Manuscript, Project Number 38, February, 1964).

[6]Chester Wardlow, *The Transportation Corps: Responsibilities, Organization, and Operations.* UNITED STATES ARMY IN WORLD WAR II (Washington, D.C.: Office of the Chief of Military History, 1951), p. 14.

[7] R. R. Palmer, Bell I. Wiley, and William R. Keast, *The Procurement and Training of Ground Combat Troops,* UNITED STATES ARMY IN WORLD WAR II (Washington, D.C.: Office of the Chief of Military History, 1948), p. 8.

[8]"The Division Slice and Division Force," p. II–3. Also see report, "A Modern Concept of Manpower Management and Compensation for Personnel of the Uniformed Services" (Report and Recommendations for the Secretary of Defense, Defense Advisory Committee on Professional and Technical Compensation, May 1957), Vol. I, "Military Personnel."

[9]See Staff paper, RAC (ORO)-SP-180, "A Preliminary Study of Approaches to the Problem of Combat/Support Ratios within the Army Force Structure" (May 1962), Section II.

outdated in 1941.[10] By the time the War Department general staff conducted detailed planning for the European theater, it accepted a figure for a standard division slice of 40,000 men. That number was valid only in a theater of operations, however, and a theater required support by still more men located in the Zone of the Interior. Worldwide, a more realistic division slice was around 60,000 men, or double the 30,000-man slice Wedemeyer used to tally the number of divisions he could create out of the Army's share of total military manpower.[11] The gap between expectation and reality was greater than anyone anticipated and became a major concern for Lieutenant General Lesley J. McNair, commander of Army Ground Forces. McNair worked tirelessly, although ultimately unsuccessfully, to check the proliferation of administration and service units in the Army and thereby reduce the division slice. Despite his best efforts, it continued to grow until it reached a total of around 45,000 men in the services for every 15,000 in divisions, producing the phenomenon General Joseph W. Stilwell described as the "disappearing ground combat army."

The effect of using an unrealistic division slice figure was that the United States Army could produce nowhere near the 215 divisions Wedemeyer had projected in the summer of 1941. By August 1943, the Army reached its peak combat strength for World War II, fielding a total of only 90 divisions, one of which was later dismantled. Subsequent enlistments made the Army larger, but never increased its combat edge. Marshall and Wedemeyer appreciated

[10]For detailed discussion of the division slice, also see Roland G. Ruppenthal, *Logistical Support of the Armies,* UNITED STATES ARMY IN WORLD WAR II (Washington, D.C.: Office of the Chief of Military History, 1959).

[11]For summaries of the World War II experience in planning the division slice, see *Field Manual 101-10* (August 1949), pp. 99–102; *Army Service Force Manual 409* (24 March 1945); and Draft *Field Manual 101–10,* "Logistical Data for Staff Planners" (September 1946 and September 1947). Discussion of the problem is contained in Carl T. Schmit, "The Division Slice in Two World Wars," in *Military Review,* 30:7 (October 1951), pp. 51–62. The Army War College computed an even higher division slice factor of 83,000 for the World War II Army, attributing it to unexpected requirements to sustain fighting divisions in widely separated theaters and compensate for the steady flow of personnel between them and the Zone of the Interior for replacement, hospitalization, and other purposes. A second reason for the higher figure was the Army's decision to maintain comforts such as rest camps, special services, and so forth, in response to the "sociological and environmental standards created by our highly developed industrial society." See Institute of Advanced Studies, U. S. Army Combat Developments Command, "Strategic Land Force Requirements System. Final Report" (Carlisle Barracks, Pa., 28 May 1964), p. I–16.

the impact that increased military technology would have on the nature of war and planned to take advantage of firepower and air power to field a smaller army. Wedemeyer failed, however, to carry the problem through to its logical conclusion. Modern military technology had a stupendous impact on the battlefield; it had an equally significant influence on Army organization.

Limitations of the Plan—Type Divisions

Incorrect about the number of divisions the Army could field, Wedemeyer was necessarily also incorrect about the numbers of division by type:

Type Division	*1941 Estimate*	*Actual*
Armored	61	16
Mechanized	61	0
Infantry	54	66
Mountain	10	1
Cavalry	4	2
Airborne	7	5

The dramatic differences between the Victory Plan troop basis and the final shape of the Army in May of 1945 cannot properly be ascribed to errors of judgment, however.[12] The most important changes in divisional organization, division slice factor aside, came about because of logistical and tactical lessons that were unavailable to Wedemeyer in 1941.[13]

The Army did not create as many armored divisions as Wedemeyer's plan called for chiefly because General George Marshall's greatest fears about Lend Lease were realized: the needs of the British and the Russians consumed a large part of American tank production. In 1955, the Army staff calculated that Lend Lease to the USSR, France, Italy, China, Brazil, the Netherlands, Norway, and the British Empire had equipped around 101 U.S.-

[12]For data on the activation of divisions, see "Historical Resume, Division Force Structure, Active and Reserve 1935–1963" (Washington, D.C.: Office of the Chief of Military History Historical Resume; unpublished typescript, 1963); and John B. Wilson, *Armies, Corps, Divisions and Separate Brigades,* ARMY LINEAGE SERIES (Washington, D.C.: Center of Military History, United States Army, 1987).

[13]This point is discussed in Kreidberg, *History of Military Mobilization in the United States Army,* p. 624.

type divisions.[14] The United States, for example, shipped a total of 5,374 medium tanks and 1,682 light tanks to the USSR alone between June of 1941 and September 1945. While only about 20 percent of all war production eventually flowed into Lend Lease channels, that materiel was overwhelmingly heavy equipment such as tanks, artillery, and combat aircraft.[15] American industry simply could not satisfy the demands of both Army and Lend Lease for new production and for production of replacement armored vehicles. Therefore it proved impossible for the War Department to equip as many American armored divisions as the Victory Plan called for.

Wedemeyer's emphasis on armored divisions arose from his reading of Fuller and from the dramatic use the Germans had made of armor in the opening battles of the war.[16] Some Americans, however, wondered whether so many armored divisions would be tactically desirable, suggesting that they would be awkward to maneuver and very hard to support. General Marshall eventually favored a compact and powerful force maintained at full strength as the better course of action, writing in 1945 that

> The more divisions an Army commander has under his control, the more supporting troops he must maintain and the greater are his traffic and supply problems. If his divisions are fewer in number but maintained at full strength, the power for attack continues while the logistical problems are greatly simplified.[17]

Other unforeseen developments prevented the Army from forming mechanized divisions, foremost among them the shipping problem. Despite enormous strides in merchant ship construction, there remained a serious competition for space. Mechanized divisions required more shipping space, and the staff realized that ports of embarkation could ship these divisions to Europe only very gradually. Dismounted infantry divisions, on the other hand, required far less shipping space, enabling the United States to build up combat forces in the theater much faster. As with tanks, the

[14]CMH Memorandum For Record, 25 August 1955, Subj: Lend-Lease Equipment to Foreign Allied Armies Translated into Number of Divisions Equipped. CMH File Misc 400.336, Lend Lease.

[15]Department of State Protocol and Area Information Staff of the U.S.S.R. Branch (Division of Research and Reports), "Report On War Aid Furnished By the United States to the U.S.S.R. (Washington, D.C.: 28 November 1945), p. 19. CMH File Misc 400.36, Lend Lease.

[16]Interview with General Wedemeyer, 24 April 1987.

[17]War Department, *Biennial Report of The Chief of Staff of the United States Army July 1, 1943, to June 30, 1945, to The Secretary of War* (n.p.: n.d., but 1945), p. 103.

vehicles the mechanized divisions would have used were also in great demand by other nations, and Lend Lease quickly consumed much of the available production. Finally, as part of his drive to decrease the division slice, and recognizing production and shipping problems, General McNair decided to remove many vehicles from the divisions and pool them in the field armies, which could presumably manage a smaller number of vehicles more efficiently to accomplish the same tasks. Years later, Wedemeyer remarked that the battlefield would have become a hopeless traffic jam if the Army had carried out his original scheme for mechanized divisions.[18]

Despite the fact that Lend Lease proved a factor limiting the number of armored divisions that the Army could create, it too had hidden benefits for American mobilization. While the constant demands of Britain and Russia for equipment continued to vex the War Department, contracts for manufacture of materiel for Lend Lease served the purpose of establishing major military production lines well before America went to war. Industry was in general unwilling to convert to war production unless there was some sort of guarantee of sustained production. Lend Lease provided such a guarantee, and the War Department therefore found that an important segment of industry was already mobilized by 7 December 1941.

Changes in the activation programs for other type divisions were influenced by factors other than Lend Lease. Specific plans for the liberation of Europe eliminated the need for more than one mountain division, although use might have been found for them if the Allies had pursued Churchill's idea of an attack through the Balkans into central Europe. The progress of the fighting in Italy, the one theater that offered scope for employment of mountain divisions, demonstrated that standard infantry divisions fought as well as specialist troops in rough terrain.[19] After the Normandy invasion, General Dwight D. Eisenhower's SHAEF staff could find little use for airborne divisions. Neither organized nor intended to conduct sustained battle, airborne divisions had little utility after the invasion. Eisenhower retained them in the general reserve, finally using

[18]*Wedemeyer Reports!*, p. 40.

[19]On the Army's experience with mountain divisions and other light divisions in World War II, see Alexander S. Cochran, Jr., "A Perspective on the Light Division. The U. S. Army's Experience, 1942–1945" (Washington, D.C.: U.S. Army Center of Military History unpublished MS, 1984), particularly chapters 4 and 5.

them in the MARKET-GARDEN operation in the Netherlands in September 1944. Thereafter, ground forces advanced so briskly that they captured projected airborne objectives before the airborne operation could be launched, although airborne divisions were used in the crossing of the Rhine in 1945. No one could find a role for horse-mounted cavalry divisions that justified the shipping problems involved, particularly the supply of fodder and feed. Accordingly, the War Department simply scrapped one of the cavalry divisions and converted the other to an infantry division in all but name.

The progress of the war also eliminated the need for the massive antiaircraft artillery organization Wedemeyer planned for the theaters and field armies. He could not know that the strategic bombing campaign the Royal Air Force and the American numbered air forces conducted in Europe would have literally devoured the German *Luftwaffe* by mid-1944. The Army Air Forces very proficiently accomplished Wedemeyer's second condition for operations on the continent of Europe: they gained "overwhelming air superiority" by July of 1944. The consequence was that the enemy air threat did not exist to justify such a large antiaircraft artillery service in the European theater.[20]

Likewise, there was little need for the large tank destroyer force planned in 1941. In part, that was because the United States Army found other ways to deal with tanks than by fighting them with a specialized force. Tactical aviation emerged as an efficient way to kill tanks, particularly after air leaders realized that .50-caliber projectiles could penetrate the thin armor of tanks' engine compartments.[21] There was also a growing consensus in the Army that

[20]Different requirements existed in the Pacific theater. Nonetheless, the Army as a whole did not need anything approaching the vast AA organization projected in the summer of 1941.

[21]For example, tactical air power was enormously successful in the battle at Avranches. "Here was a fighter-bomber's paradise," the Air Force official history remarks. On 29 July, American airplanes destroyed 66 tanks, 204 other vehicles, and 11 guns. See Wesley Frank Craven and James Lea Cate, *Europe: Argument to V-E Day. January 1944 to May 1945*. THE ARMY AIR FORCES IN WORLD WAR II, Vol. 3 (Chicago: The University of Chicago Press, 1951, pp. 241–43. Also see research report, "The Tank vs. Tactical Air Power" (Fort Knox: The Armored School, 1952). Chapter 1 cites additional examples of the use of air power to fight armor. The operations of XIX Tactical Air Command in support of United States Third Army in the Lorraine Campaign provide a textbook case of a superb air-ground team. Fighter-bombers killed thousands of German vehicles, including

the best antitank weapon was the tank itself. Early tank destroyers were relatively lightly armored and could not exchange fire with a tank. More heavily armored tank destroyers resembled tanks so closely that the distinction between the two blurred. Eventually, the Army fielded more powerfully armed tanks than the medium M4 Sherman. Rearmed with a 76-mm. high velocity weapon, the Sherman could at least compete with modern German tanks. The General Pershing tank, introduced at the end of the war, had a 90-mm. gun and, despite maintenance problems, was the equal of the best that the Germans could offer. As a result, tank destroyers became technically and doctrinally obsolescent by the end of World War II.[22] Well before the end of the war, the Army began to reduce the number of tank destroyer battalions forming and in training.

Limitations of the Plan—Replacement Problem

Perhaps the most serious deficiency in the Victory Plan was that it made no provision for replacements. Wedemeyer's focus on the relationship between total available manpower and complete field divisions ignored the need to procure, train, and assign replacements for combat losses. The Victory Plan contains no mention of replacements, but no other staff element seems to have considered the problem either, as evidenced by the lack of an adequate replacement system at the start of World War II. Nor was there any single agency of the War Department General Staff responsible for pro-

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many tanks. See Hugh M. Cole, *The Lorraine Campaign,* UNITED STATES ARMY IN WORLD WAR II (Washington, D.C.: Historical Division, Department of the Army, 1950).

[22]Basing its recommendations on questionnaires answered by experienced combat commanders, the General Board of the European Theater of Operations overwhelmingly recommended that the tank assume the mission of the tank destroyer. See Report of the Theater General Board USFET (1945), Study No. 48, p. 50. Christopher R. Gabel, author of *Seek, Strike, and Destroy: U. S. Army Tank Destroyer in World War II* (Fort Leavenworth: Combat Studies Institute, 1985), Leavenworth paper No. 12, concludes that the tank destroyer concept was never fully realized in combat, and that the successes of the tank destroyer units came in spite of, not because of, tank destroyer doctrine. He also concludes that tank destroyer doctrine was fundamentally flawed. See p. 67. Also see research report, "Anti Tank Defense—Weapons and Doctrine (Fort Knox: The Armored School, 1952), particularly chapter 2, which discusses the opposing views on antitank doctrine. Also see Charles M. Baily, *Faint Praise: American Tanks and Tank Destroyers During World War II* (New York: Archon, 1983).

viding replacements.[23] Not until 29 January 1942 did the War Department realize that replacements presented a new problem to solve. The chief of the planning branch, G–1, wrote a memorandum recommending that "some thought should be given to the subject of establishing a rapid and direct method of supplying . . . replacements to our oversea forces."[24]

It is arguable that the basic mobilization estimate assumed that soldiers, once equipped and trained, could be used either in new units or as replacements, so further distinction was unnecessary. Furthermore, it is possible to view this as another oversight attributable to the flawed division slice figure. With a total of 215 divisions, the Army might have devised a unit replacement system, substituting or replacing one division for another on a regular cycle, thereby keeping closely knit combat units together. As mobilization progressed, however, WPD planners realized that they would be able to create far fewer divisions than Wedemeyer had expected. Administration and War Department officials interpreted that development as a manpower shortage, although such a perception was far from correct. The manpower existed; it was the flawed allocation formula that caused the shortfalls.

The Army's inability to field sufficient divisions to rotate soldiers by unit forced it to an individual replacement system. Commanders had to use every division to the utmost, partially because the continuing shipping shortage made deployment of new divisions to overseas theaters very slow. During periods of heavy combat, the regiments of an infantry division characteristically suffered about 100 percent casualties every three months. Individual replacements filled those losses, and the problem of training these new soldiers to survive in combat kept committed divisions at the point of individual training, rather than unit training, throughout the war. As a consequence, U.S. divisions, plagued by a chronically high turnover of infantry riflemen, experienced decreased combat efficiency after their first series of combat actions.[25]

Unpleasant consequences developed immediately. Unit cohesion suffered, as well-established small unit bonds disintegrated.

[23]Report of Replacement Board, Department of the Army (12 December 1947), 6 Volumes. Vol. 1, "Conclusions and Recommendations," p. 10.

[24]*Ibid.*, Vol. 2, "Replacement System—Zone of the Interior," p. 1.

[25]For a discussion of the replacement problem, see Edward J. Drea, "Unit Reconstitution—A Historical Perspective," CSI Report No. 3 (Ft. Leavenworth: Combat Studies Institute, 1 December 1983).

Veterans were slow to accept, trust, and integrate individual replacements into their teams. Infantry soldiers also quickly realized that injury was the only relief from battle. Morale declined, and combat efficiency along with morale. Cases of combat neurosis multiplied. Tired soldiers were more easily wounded, killed, and captured because their fatigue induced laxity and carelessness. "The stream of replacements," Army Ground Forces concluded in 1946, "thus flowed into somewhat leaky vessels."[26] Lieutenant General Jacob L. Devers, commanding Sixth Army Group, stated the problem more graphically when he wrote to Lieutenant General Lesley J. McNair in 1944 that

> It has been demonstrated here that divisions should not be left in the line longer than 30 to 40 days in an active theater. If you do this . . . they get careless, and there are tremendous sick rates and casualty rates. Everybody should know this. The result is that you feed replacements into a machine in the line, and it is like throwing good money after bad. Your replacement system is bound to break down, as it has done in this theater.[27]

In the end, the ground force was just large enough for the war the Army had to fight. All of the Army Ground Forces were committed to battle by May 1945. A total of 96 percent of all tactical troops was in overseas theaters. The Army dispatched the last of its new divisions from the United States in February 1945, some three months before V-E Day. No new units were training or forming at home, and only limited replacements in training remained in the United States. There was no strategic reserve of any sort and, as Army Ground Forces noted,

> This may be interpreted either as remarkably accurate planning of the minimum forces required or as a fairly narrow escape from disagreeable eventualities—winning by the skin of the teeth.[28]

The conclusion is that by 1944 the real struggle was not further manpower mobilization, but simply maintaining the 90-division Army. The Selective Service System scraped the bottom of the conscription barrel and still could not meet the need. At the time of the Battle of the Bulge, for example, reception stations were gener-

[26]R. R. Palmer, "The Mobilization of the Ground Army" (Washington, D.C.: Historical Section—Army Ground Forces, Study No. 4, 1946), p. 2.

[27]Quoted in James S. Nanney and Terrence J. Gough, *U. S. Manpower Mobilization for World War II* (Washington: U. S. Army Center of Military History, 1982), pp. 49–50.

[28]Palmer, "Mobilization of the Ground Army," p. 2.

ating around 53,000 men a month, while losses in the European theater alone were running 90,000 men a month.[29]

Thus the erroneous division slice figure of 1941 caused a series of problems, in this case probably compounded by the fact that War Plans Division did not take the replacement issue into account in its early planning. The most reasonable perspective is that the replacement system *per se* was within the purview of the Victory Plan only insofar as Wedemeyer concluded that his estimate provided enough divisions for a rational and orderly unit replacement system. The dearth of infantry replacements in the fall of 1944 is not an error attributable to his basic planning. In any event, the offsetting errors of the Victory Plan provided an answer to the problem. Eisenhower's staff found a manpower reservoir in the superfluous antiaircraft artillery and tank destroyer battalions available in the theater of operations.

Successes of the Plan—Total Army Strength

The progress of the war revealed other and similar oversights and planning errors. The Victory Plan might also be criticized for not anticipating the ammunition shortage of 1944, the general shipping shortage, and the pervasive shortage of amphibious shipping. But this recitation of the limitations of the Victory Plan is deceptive, for its flaws were neither irreparable nor, in the long run, central to its purpose. Albert Wedemeyer never expected that his estimate of Army requirements would be the final word on the subject. He was an experienced officer who understood the staff would have to modify his basic mobilization blueprint as the war unfolded. Staff officers in War Plans Division began to revise the document almost as soon as General Marshall submitted it to Secretary of War Stimson, and the unexpected outbreak of war in the Pacific forced them to make even more drastic alterations by the beginning of 1942. The plan was never static, and when discrepancies appeared, Wedemeyer and his colleagues made adjustments to allow for them.[30]

[29]*Ibid.*, p. 24. By January of 1945, 47 infantry regiments in 19 infantry divisions had lost from 100 to 200 percent of their strength in battle casualties—non-battle losses were a constant drain as well. The five hardest-hit divisions had suffered 176 percent battle casualties by May, 1945.

[30]*Wedemeyer Reports!*, p. 65.

Despite its errors in force structure, the Victory Plan, in general, was a remarkably prescient document. In 1941, Wedemeyer estimated that the Army Ground Forces and Army Air Forces would need a grand total of 8,795,658 men to fight the war. As the Army was attaining its peak strength in March of 1945, it had a total of 8,157,386 men in uniform—very nearly the figure that Wedemeyer had estimated almost four years earlier. To have calculated the total manpower utilization with such great precision is a superficially impressive achievement, although it might more properly be expressed the other way around. The Army eventually used almost exactly the amount of manpower Wedemeyer predicted because his assessment of the amount of *available* manpower was essentially correct, and the Army conceived and fought a style of war that accommodated that constraint. For purposes of production planning, the distinction is an unimportant one. The estimate was sufficient, despite its errors in numbers and types of divisions, to allow industrial planners to set up production lines for very large quantities of materiel, thereby establishing the industrial capacity the United States would need for the rest of the war.

Successes of the Plan—Operational Fit

Any assessment of the computational accuracy of the estimate is inconsequential, however, compared to the degree to which the Victory Plan served the needs of the nation's basic war plan. It complemented RAINBOW 5 because Wedemeyer had drafted his estimate in accordance with then-current operational requirements. Looking beyond the Army's needs, Wedemeyer also provided adequate manpower reserves to establish, maintain, and protect the long lines of communications necessary to support large task forces overseas. Yet he entertained no false hopes; his coldly realistic appraisal of all of the factors involved in national mobilization led him to a realistic prediction of the earliest date that America could take the offensive.

When the Army assumed the offensive, the troops had not only to be properly equipped and trained, but also properly deployed. Any mobilization plan, as Colmar von der Goltz reminded his readers before the turn of the century, is useless unless it concentrates military forces where they can be most useful. The proper image of a mobilization plan is therefore not of a medicine chest full of carefully filled and tagged bottles of military remedies for foreign

aggression, but of military white corpuscles, racing through the geographical bloodstream to the source of the dangerous infection. Wedemeyer saw the nation's mobilized strength not in armories full of combat-ready troops, but in units marshaled in assembly areas close to the enemy. The successes of the Victory Plan therefore drove home a point long ignored in American military planning. It reminded the War Department that mobilization and operations are not distinct entities, but parts of a single coherent plan. Mobilization plans, it was obvious, had always to be drafted with the operations plan in mind, invariably taking account of the circumstances peculiar to a given operational requirement.

The public uproar surrounding the leak of the plan on 4 December 1941 illustrates the degree to which the Victory Plan succeeded in answering the needs of RAINBOW 5. The details of the leak—and particularly the identity of the official who disclosed the secret—remain uncertain, but the effects are easy enough to gauge. Detailed, handwritten notes about the Victory Plan were delivered to isolationist Senator Burton K. Wheeler, who, in turn, passed them on to Chester Manly of the Chicago *Tribune*. Manly's article, variations of which also ran in the isolationist New York *Daily News* and Washington *Times Herald*, appeared under headlines of "F.D.R.'s War Plans," and explained in bold type that the "Goal is 10 Million Armed Men; Half to Fight in AEF." The articles published the timetable as well, informing their readers of a "Proposed Land Drive By July 1, 1943, to Smash Nazis." The text proceeded to outline, in knowledgeable detail, both the planning considerations and the force structure of Wedemeyer's plans. The information in Manly's article compromised the entire RAINBOW 5 war plan, since the operational considerations were the conceptual framework of the Victory Plan.[31]

Successes of the Plan—Political and Military Reality

A second major success of the Victory Plan was its accommodation of contemporary political and military realities in the United

[31]Details of the leak exist in most studies of the period. See *Wedemeyer Reports!*, chapters 2 and 3; also see Tracy B. Kittredge, "A Military Danger: The Revelation of Secret Strategic Plans," in *United States Naval Institute Proceedings*, 81 (July 1955), for an assessment of the dangers to the United States posed by the leak. The identity of the person who gave Senator Wheeler the plan remains an open

States. Despite the furor surrounding the Victory Plan leak, public sentiment had come a long way since the staunchly isolationist days of the late 1930s. However grudgingly, Americans had come to terms with the idea that the United States would play a large part in the growing world war. President Roosevelt had "led" the nation toward war, identifying the cause of Great Britain and her allies with moral good and committing the nation's wealth and industrial power to supporting the idealistic series of goals he expressed so well in his "Four Freedoms" speech and in the Atlantic Charter.

Thus as Wedemeyer wrote his plan he expected the wholehearted involvement of the entire nation in a total economic and military mobilization to defeat the Axis. A maximum effort that could end the war quickly would serve the interests of the nation best, causing the least long-term disruption of the economy and running the fewest risks for the country. Once the nation went to war, Americans would wish to pursue it as a crusade; they would reject half-measures. Wedemeyer recognized that a full mobilization made the best military sense, but he also believed that it accorded with the national character and served the national interests. The point supports the conclusion that military activity always takes place in a political context. To plan military operations without considering that context is to invite disaster. To appreciate that context accurately, as Wedemeyer did, is to devise plans that are consonant with the national character and, therefore, practical.

The plan also succeeded because it recognized and accommodated the most important contemporary developments in the military art. Wedemeyer correctly identified aviation, mechanization, and communications as lying at the heart of modern warfare. He thus designed American military forces to exploit all three technical factors, fashioning a powerful air-ground team that could fight any foreign army on even terms. Because of the example of the Spanish Civil War, the German attack on Poland, and the *Blitzkrieg* in the Low Countries and France, it is easy to suggest that Wedemeyer needed no particularly keen insight to acknowledge the lessons of mechanized warfare and incorporate them into his plan. However,

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question. Wedemeyer came under suspicion for a time, but was exonerated. An unnamed Army Air Force captain is said to have been the agent who delivered the plans to Wheeler. A recent article by Thomas Fleming asserts that President Roosevelt himself ordered the leak in order to provoke the Germans and thus provide a *casus belli*. See "The Big Leak," *American Heritage* (December 1987), 64–71.

enough senior officers, not only in the United States Army but also in other armies, failed to learn the lesson, preferring to hang on to proven and traditional, although outmoded, ways of waging war, to disprove that contention.[32] Wedemeyer served the Army and the nation so well because he not only planned the total number of men needed to prosecute the war, but also planned to organize them into divisions that could fight effectively in the actual war, not the last one.

Wedemeyer's grasp of the importance of modern technology also allowed him to plan for smaller, but more powerful, forces that generated mass through firepower and maneuver, rather than through manpower, thus accomplishing the same job as much larger armies in the past. In the process, he realized manpower economies that were important because of the large logistics organization the United States needed. Maintaining a large armed force far from American shores also required a large and powerful navy that could secure the lines of communication and maintain an effective economic blockade of the Axis. Wedemeyer worked closely with the naval staff to determine the Navy's realistic requirements. His personal relationship with then-Captain Forrest Sherman ensured a community of planning effort between the two services and pointed to a future in which the services would acknowledge that mobilization planning was a joint responsibility that one service alone could not conduct adequately.

Successes of the Plan—The Planning Process

The usual conclusion about the Victory Plan is that it did not follow the customary military planning process. Instead, according to this view, the plan began with available manpower and then distributed the military portion of that pool in consonance with the nation's military objectives. While superficially attractive, that conclusion is not precisely correct. While manpower considerations were prominent and perhaps the most obvious elements of the

[32]Thus one sees Lieutenant General Ben Lear ordering divisional maneuvers to run the full course of scheduled exercises in the Tennessee maneuvers, and disciplining Major General John S. Wood because his 4th Armored Division overran the conventional opposition in a matter of hours. Thus, also, one notes the sustained prejudice among many of the Army's senior officers toward the Armored Force.

process, Wedemeyer in fact adhered to a logically structured planning sequence that commenced with national strategy and considered manpower only in the light of the objectives to be accomplished by that strategy.

Assistant Secretary of War John J. McCloy typified the confusion about Wedemeyer's methodology. McCloy wrote to General Gerow during the late summer of 1941 to ask how it was possible that the Army could determine overall production requirements by starting with manpower questions. Gerow, concerned that the War Department secretariat might think that production alone could win the war, asked Wedemeyer to draft a reply to McCloy to explain exactly how the War Department staff conducted war planning. Gerow's response informed McCloy that "wars are won on sound strategy implemented by well-trained forces which are adequately and effectively equipped." He then elaborated, explaining that

> We must first evolve a strategic concept of how to defeat our potential enemies and then determine the major military units . . . required to carry out the strategic operations.
>
> It would be unwise to assume that we can defeat Germany by simply outproducing her. One hundred thousand airplanes would be of little value to us if these airplanes could not be used because of lack of trained personnel, lack of operating airdromes in the theater, and lack of shipping to maintain the air squadrons in the theater.[33]

Wedemeyer did not deviate from the strategic planning processes familiar to all of his colleagues in War Plans Division. It was nevertheless his awareness of the many valid wartime jobs for a limited pool of high quality manpower that distinguished Wedemeyer from other mobilization planners. Aware of the importance of Lend Lease to the war effort and conscious that the Germans both feared and respected American economic power, he took special pains to avoid disrupting the industrial work force. Analysts of the Victory Plan therefore justifiably praise him for understanding that the needs of industry were as important as the needs of the Army.

The critically important aspect of Wedemeyer's planning process was that, after settling the strategic goals of the nation, he pursued the logical, not the usual, next question. Traditionally, that follow-up question had been: "What can the Army accomplish with the forces at its disposal?" Instead, Wedemeyer asked: "What sort of

[33] *Wedemeyer Reports!*, pp. 73–74.

forces does the Army need to accomplish the national strategy?" So doing, he escaped the traditional constraints of budget and limited force structure, because he was conscious that the United States would not skimp on either if it came to war. Again, he accurately gauged the mood of the country and the intent of the political leadership to make the maximum effort of which the United States was capable. While, therefore, Wedemeyer showed an unusual concern for the proper distribution of manpower throughout American society in a total war, manpower was not really his first concern. Rather, it was one of several important concerns that had to be balanced against each other.

Wedemeyer rigorously eschewed the tantalizing but ephemeral side issues until he had answered the basic questions that gave meaning to the lesser matters. Answering or defining the larger questions automatically pulled the smaller ones into focus, so that defining American strategic goals in the event of war ultimately resulted in a usable estimate for production of war materiel. Such a complex plan did not appear overnight; in fact it was the culmination of the Army's professional education of Wedemeyer and the small group of military intellectuals who formed the nucleus of the general staff.

Successes of the Plan—Competence in Planning

George Marshall gave Wedemeyer a little over ninety days to draft his plan. In that brief period, he had to cover an enormous amount of ground, considering everything from national strategy to details of divisional organization. Wedemeyer could not possibly have educated himself in all of those diverse matters after he got his assignment. Faced with an immovable deadline, he had to rely upon his professional knowledge and judgment to write his estimate. It was here that his many years of experience, schooling, and professional study bore fruit.

For his work in War Plans Division, by far the most significant part of Wedemeyer's professional preparation was his own reading and study.[34] Certainly the Command and General Staff School taught him the details he needed to know in order to do the exacting computations of numbers and types of divisions and supporting

[34]Interview with General Wedemeyer, 24 April 1987.

units with which he ended the Victory Plan. But that was the least demanding part of the job. It was the conceptual phase of his work that required creativity, intelligence, thought, and an understanding of the many subtle influences bearing on national and military policy in the United States. Wedemeyer's professional reading over the course of his career gave him the intellectual tools—not least of which was intuitive judgment—to carry that task through.

This aspect of Wedemeyer's military career points up the fact that strategic thinkers cannot be narrow specialists who solve problems within their limited frames of reference. Narrow solutions are inherently dangerous, as Liddell Hart warned in 1929 when he noted that an officer must take the broad view of warfare in order to develop both his outlook and his judgment. "Otherwise," he wrote, "his knowledge of war will be like an inverted pyramid balanced precariously on a slender apex."[35]

The problems with which Wedemeyer had to deal involved far more than purely military considerations and could not have been solved if his education had been limited to narrowly technical or military matters. The service schools of Wedemeyer's army did not provide the sort of education he needed to function effectively in WPD. The Command and General Staff School emphasized generalized professional competence across the spectrum of staff duties, in pursuit of its mission of training officers in the combined use of all arms in division and corps. Such an education that focused on the tactics and logistics of divisions and corps qualified Wedemeyer and his peers to design, operate, and repair a military machine, but not to select its objectives. Without having paid careful attention to his own education during the two decades before World War II, Wedemeyer could not have written the Victory Plan. Competence as a planner thus emerged as much from conscientious professional study as from formal military education, a characteristic of many officers of Wedemeyer's generation.

What Was the Victory Plan?

After the United States accepted its role as a world power, it

[35]B. H. Liddell Hart, *Strategy* (New York: Praeger, 1967), p. 26. Liddell Hart first made this point in *The Decisive Wars of History: A Study in Strategy* (Boston: Little, Brown, 1929), p. 6.

could no longer rely upon a single mobilization plan that mustered the resources of the nation to defend the western hemisphere. The evolving national policy in 1941 made existing plans obsolete, leading to the hastily conceived Victory Plan. This case points out with particular clarity that no single mobilization plan can possibly serve all contingencies, especially when national policy is in the midst of change. The mission of the armed forces in 1941 changed in consonance with changes in national policy, and those changes demanded greater sophistication and flexibility in military plans. The War Department suddenly faced an international crisis that exceeded the scope of existing war plans, and the Victory Plan was one of the essential first steps in preparing the United States for a war beyond its shores. Wedemeyer's estimate demonstrates that mobilization in the modern era is a complex and dynamic process in which plans must strike many delicate and interlocking balances—among them the proper balance between conflicting domestic and military manpower priorities and the correct balance between pure manpower and materiel as means of generating combat power. It was evident to the War Plans Division that all wars in the twentieth century were not alike, nor would they necessarily break out where most convenient for the defenders. Therefore rigid plans had to give way to flexible ones that accounted for contemporary circumstances. Thus the Victory Plan superseded the Protective Mobilization Plan of 1939.

Most discussions of the Victory Plan accordingly refer to it as a mobilization plan. Secretary of War Stimson and General Marshall called it a study of production requirements for national defense, noting that the estimate of equipment had to proceed from certain strategic assumptions.[36] Wedemeyer himself insisted that the Victory Plan was neither a strategic nor a tactical plan, although strategy provided the framework for estimating production requirements.[37] What emerged from the Army's production estimate in the fall of 1941, however, was far more than a logistics plan, or even a mobilization plan. The Victory Plan was in effect a comprehensive statement of American strategy that served as a fundamental planning document in preparing the country for war.

[36]Press Conference Memorandum, Secretary of War Stimson, 11:45 a.m., 5 December 1941; and Statement by the Chief of Staff, re: leak of Victory Plan (5 December 1941); both in NARA RG 165, File WPD 4494–20.

[37]*Wedemeyer Reports!*, pp. 63–65.

The paper is remarkably concise: in only fourteen pages it lays out the strategic objectives of the United States in the event of war, states American strategic military requirements for such a war, and develops and outlines the force structure to accomplish those tasks. It was therefore far more than just a mobilization plan or a logistics estimate. Kaleidoscopic as Wedemeyer's reading throughout his career, the Victory Plan was a prism that reflected basic elements of successful military planning. It demonstrated that good planning could not be apportioned in discrete bits or exist solely as abstract calculations, but that the Army required a comprehensive plan for war, each part integrated with the provisions of every other part. In that broad approach, the Victory Plan established the model for modern strategic planning.

All of these things were significant, but the single most important fact about the Victory Plan had nothing to do with its successes and failures, with the adept planning process by means of which it was written, or with the accuracy and discernment for which it is customarily praised. Instead, the Victory Plan was important because it typified the outlook of General Marshall and the War Department General Staff, which was never occupied with purely military considerations, but wrote war plans that had a more mature focus.

The Victory Plan is evidence of the early meshing of political and military goals by the American military command structure, as demonstrated by military attention to the manpower needs of the civilian war economy; by military understanding that American economic power was itself a powerful military weapon; and by the delineation of military objectives that suited the national goals in the war. Significantly, it demonstrated that the men responsible for outlining America's strategy in the war had a firm grip on all of the elements of national strategy and that they never confused that national strategy with a purely military, and therefore subordinate, strategy. This, rather than any accounting of detailed successes and failures in what was, after all, only an initial draft and never an operational directive, represented the real genius and uniqueness of the Victory Plan. It reflected the broad consensus of American civil-military leaders on what had to be done and set the tone for future high-level planning in the War Department.

What was Wedemeyer's contribution to all of this? It would be too much to suggest that Wedemeyer propounded that complex national strategy by himself, or that he was unique in his intellectual

preparation for the job.[38] Unquestionably, his professional study over the years prepared his judgment for the demanding task he had to fulfill in the summer and fall of 1941. His long-standing preoccupation with strategic thought and his extensive background in history and economics gave Wedemeyer the sophistication to crack what proved to be a very difficult planning problem. But he did not invent the basic American strategy for war—that had been in the process of formulation well before Wedemeyer arrived at War Plans Division. Nor, in the technical area, did he conceive of the idea of mechanized and armored warfare, supported by tactical aviation, as a way of maximizing scarce manpower resources—that, clearly, he gleaned from his reading of Fuller.

Wedemeyer's essential contribution to preparing America for war was that he had an intellect, a carefully educated and prepared intellect, that could grasp the numerous and diverse strands of politics, policy, strategy, and practical military applications and, understanding them, produce a document that reflected the commonly held, but as yet unarticulated strategic vision of America's wartime leaders. When called upon to do so, he had the capacity to write a plan that took account of the contexts of the day: the restrictive and, at times, hostile domestic political environment; the mood of the nation; the condition of the armed forces; and the probable intentions of the nation's political leadership. Within that context, he had a sufficient grasp of the nature of total war to conceive of the military operations the country might be called upon to undertake and a sufficient grasp of the profession of arms to propose an efficient and effective military organization to accomplish those missions. That, and not the relative successes and failures of the plan in its various details, is the final significance of Albert C. Wedemeyer's work in writing the Victory Plan of 1941.

[38]For an assessment of American military intellectuals before World War II, see the author's "Filling the Gaps: Reevaluating Officer Education in the Inter-War Army, 1920–1940," a paper read at the 1989 Annual Conference of the American Military Institute, 14–15 April, at Lexington, Virginia.

APPENDIX
The Army Portion of the Victory Plan

Ultimate Requirements Study
Estimate of Army Ground Forces

1. The specific operations necessary to accomplish the defeat of the Axis Powers cannot be predicted at this time. Irrespective of the nature and scope of these operations, we must prepare to fight Germany by actually coming to grips with and defeating her ground forces and definitely breaking her will to combat. Such requirement establishes the necessity for powerful ground elements, flexibly organized into task forces which are equipped and trained to do their respective jobs. The Germans and their associates with between 11 and 12 million men under arms, now have approximately 300 divisions fully equipped and splendidly trained. It is estimated that they can have by 1943, a total of 400 divisions available in the European Theater.

2. The important influence of the air army in modern combat has been irrefutably established. The degree of success attained by sea and ground forces will be determined by the effective and timely employment of air supporting units and the successful conduct of strategical missions. No major military operation in any theater will succeed without air superiority, or at least air superiority disputed. The necessity for a strong sea force, consisting principally of fast cruisers, destroyers, aircraft carriers, torpedo boats and submarines, continues in spite of the increased fighting potential of the air arm. Employment of enemy air units has not yet deprived naval vessels of their vital role on the high seas, but has greatly accelerated methods and changed the technique in their equipment. It appears that the success of naval operations, assuming air support, will still be determined by sound strategic concepts and adroit leadership. A sea blockade will not accomplish an economic strangulation or military defeat of Germany. Nor will air operations alone bring victory. Air and sea forces will make important contributions but

effective and adequate ground forces must be available to close with and destroy the enemy within his citadel.

3. It is therefore imperative that we create the productive capacity to provide equipment for the following:

a. Appropriate forces distributed for the defense of the United States, outlying possessions and bases selected to facilitate the defense of the country and the Western Hemisphere.

b. Task Forces which can effectively conduct military operations, primarily in the European Theater, as well as in the Western Hemisphere and in other strategically important areas.

c. The military forces of associates and friendly Powers committed to the policy of opposing Nazi aggression. Quantities to be limited only by our own strategic requirements and the ability of the friendly Powers to use the equipment effectively.

4. A sound approach to the problem of determining appropriate military means requires careful consideration of WHERE, HOW and WHEN, they will be employed to defeat our potential enemies and to assist our associates.

a. WHERE. Accepting the premise, that we must come to grips with the enemy ground forces, our principal theater of war is Central Europe. Possible subsidiary theaters include Africa, the Near East, the Iberian Peninsula, the Scandinavian Peninsula and the Far East; however, the operations in those theaters must be so conducted as to facilitate the decisive employment of Allied forces in Central Europe.

b. HOW. The combined and carefully coordinated operations of our military forces, in collaboration with associated Powers, must accomplish the following:

(1) The surface and subsurface vessels of the Axis and associated Powers must be swept from the seas, particularly in the Atlantic and water areas contiguous to Europe.

(2) Overwhelming air superiority must be accomplished.

(3) The economic and industrial life of Germany must be rendered ineffective through the continuous disruption and destruction of lines of communication, ports and industrial facilities, and by the interception of raw materials.

(4) The combat effectiveness of the German military forces must be greatly reduced by over-extension, dispersion, shortage of materiel, including fuel, and a deterioration of the Home Front. Popular support of the war effort, by the peoples of the Axis Powers must be weakened and their confidence shattered by subver-

sive activities, propaganda, deprivation, the destruction wrought, and chaos created.

(5) Existing military bases (the British Isles and the Near East) must be maintained. Additional bases, which encircle and close in on the Nazi citadel, must be established in order to facilitate air operations designed to shatter the German industrial and economic life. Such bases may also provide feasible points of departure for the combined operations of ground and air forces. In disposing of our forces, we must guard against dispersion of means in operations that do not make timely and effective contributions to the accomplishment of our main task, the defeat of Germany.

(6) The commitment of our forces must conform to our accepted broad strategic concept of active (offensive) operations in one theater (European), and concurrently, passive (defensive) operations in the other (Pacific).

d. WHEN. The following factors with regard to the time element are important in determining the production capacity necessary to realize our national objectives:

(1) The lag between plan and execution is considerable. Past experience indicates that from eighteen months to two years are required.

(2) How many months will Germany require to defeat Russia, to reconstitute her forces subsequent to Russia's defeat and to exploit to any perceptible degree the vast resources of Russia? It is believed that Germany will occupy Russian territory west of the general line; White Sea, Moscow, Volga River, (all inclusive) by July 1, 1942, and that militarily, Russia will be substantially impotent subsequent to that date. Thereafter, Germany will "Coventry" all industrial areas, lines of communications and sources of raw materials east of the line indicated, unless a drastic Nazi treaty is accepted by Russia. Germany will probably require a full year to bring order out of chaos in the conquered areas, so that it will be *July 1, 1943*, before she will largely profit economically by her "drive to the east." The maintenance of huge armies of occupation has become unnecessary. By totally disarming the conquered people, maintaining splendidly organized intelligence and communications nets, and employing strategically located, highly mobile forces (parachute, air-borne, mechanized and motorized), Germany may control the occupied areas with relatively small forces, thus releasing the bulk of the military for other tasks. Obviously, our war effort time-table, covering the production of munitions, the creation of trained mili-

tary forces and the increase of transportation facilities (air, ground and sea), is strongly influenced by events transpiring in the Russian theater.

(3) We are confronted by two possibilities; first, a rapidly accelerated all-out effort with a view to conducting decisive, offensive operations against the enemy before he can liquidate or recoup from his struggle with Russia; second, a long drawn-out war of attrition. Under our present production schedule, we will soon have adequate military means to defend our outlying possessions and bases and to provide for the security of the Western Hemisphere, but we will not be able to provide sufficient appropriate forces for timely offensive action in the principal theater of operations. The urgency for positive action exists, particularly while the enemy is contained militarily in Russia. It would strongly contribute to the early and decisive defeat of the Axis Powers, if the Allied forces could seize and firmly establish military bases from which immediate air and subsequent ground and air operations might be undertaken.

(4) The United States is approaching its task in a logical manner, but the production of materiel must be greatly accelerated to permit its accomplishment. At present, the bulk of our production has to be devoted to the support of Great Britain and associates, rendering it impracticable for us to undertake offensive commitments. But time is of the essence and the longer we delay effective offensive operations against the Axis, the more difficult will become the attainment of victory. It is mandatory that we reach an early appreciation of our stupendous task, and gain the whole-hearted support of the entire country in the production of trained men, ships, munitions, and ample reserves. Otherwise, we will be confronted in the not distant future by a Germany strongly intrenched economically, supported by newly acquired sources of vital supplies and industries, with her military forces operating on interior lines, and in a position of hegemony in Europe which will be comparatively easy to defend and maintain.

(5) The time by which production can reach the levels defined by our national objectives is highly speculative. July 1, 1943, has been established as the earliest date on which the equipment necessary to initiate and sustain our projected operations can be provided. The ability of industry to meet this requirement is contingent upon many intangibles; however, the program can be definitely accomplished, in fact, greatly exceeded, if the industrial

potential of the country is fully exploited. The urgency of speed and the desirability of employing our present great economic and industrial advantage over our potential enemies cannot be overemphasized.

4. *Strategic Employment of Ground Forces*

a. The future alignment of Powers and their respective combat capacities cannot be accurately predicted. In order to arrive at a plausible basis from which to determine our future requirements, the following assumptions pertaining to the world situation as of *July 1, 1943*, are made:

(1) Russia is substantially impotent militarily in Europe. Resistance in Siberia, to include the Maritime Provinces, probably continuing.

(2) The Axis military strength is materially weakened through economic blockade; by losses in the Russian campaign, by British air and sea operations; by the inability to exploit quickly the extensively sabotaged Russian industries and raw materials; by lowered morale of the people.

(3) The military forces of Japan are fully involved with or contained by campaigns against a somewhat strengthened China, by the Russian forces in the Far East Maritime Provinces, or by the threat of United States-British military and economic reprisals.

(4) Great Britain and associates have increased their fighting forces by creating and equipping additional combat units.

(5) The French will probably continue their passive collaboration with Germany.

(6) Control of the Mediterranean Theater, including North Africa and the Near East, remains disputed.

(7) The United States is an active belligerent and is collaborating in an all-out effort to defeat Germany.

b. If these assumptions are correct, or even reasonably sound, on July 1, 1943, there will be no military bases remaining in Allied hands, other than the United Kingdom, possibly the northern coast of Africa and the Near East. The establishment of additional bases, for example, in the Iberian Peninsula, the Scandinavian Peninsula and Northwest Africa will be bitterly contested by the Axis. However, to bring about the ultimate defeat of Germany, those bases and others even more difficult to establish, must be available to the Allies. Obviously, carefully planned action, involving appropriate sea, air and ground units must be undertaken. Allied success is directly contingent upon the coordinated employ-

ment of *overwhelming forces, surprise* and *mobility*, supported by sufficient reserves in materiel and man-power to insure a succession of effective impulses throughout the operations.

c. Latest information pertaining to the potential industrial capacities and military strengths of the opposing Powers, (excluding the U.S.) as of July 1, 1943, indicates that the Axis Powers will have about 400 divisions available in the European-Near East Theater and the Allied Powers approximately 100 divisions. To accomplish the numerical superiority, about 2 to 1, usually considered necessary before undertaking offensive operations, the Allies would have to raise about 700 divisions. A force of 700 divisions with appropriate supporting and service troops would approximate 22 million men. If Great Britain and the United States should induct so many men for military service, added to the tremendous numbers already under arms, the economic and industrial effort, necessary to conduct the war, would be definitely imperiled.

d. It is believed that the enemy can be defeated without creating the numerical superiority indicated. Effective employment of modern air and ground fighting machines and a tight economic blockade may create conditions that will make the realization of the Allied War Aims perfectly feasible with numerically less fighting men. Another million men in Flanders would not have turned the tide of battle for France. If the French army had had sufficient tanks and planes, and quantities of antitank and antiaircraft materiel, France might have remained a dominant power in Europe. In June, 1941, when the Germans launched their invasion of Russia, they knew that their adversary was numerically superior and could maintain that superiority in spite of tremendous losses. They probably also knew that Stalin was creating a military force of great power, consisting primarily of effective modern fighting machines, and that if they delayed their "drive to the east" another year, Russia would possess armadas of air and ground machines which would not only render an offensive campaign impossible, but would make large demands upon the German military to secure her eastern frontier. The Crete campaign also presents illuminating evidence in favor of modern fighting means when opposed by superior numbers that are equipped with inappropriate means and are operating under World War I static tactical concepts. Approximately 17,000 Germans attacked and conquered the island which was defended by about 30,000 British.

e. Our broad concept, of encircling and advancing step-by-

step, with a view to closing-in on Germany, will remain sound regardless of future developments in the European situation, for it envisages the only practical way in which military and economic pressure may be brought to bear effectively against Germany. The loss of potential bases of operation, presently available, would render the accomplishment of our strategic plans extremely difficult and costly. It is important, therefore, that the Allies take effective measures to hold the United Kingdom, the Middle East, and North African areas. Also the islands off the northwestern coast of Africa should be denied to the enemy. Before undertaking operations in connection with the establishment of additional military bases, for example, in the Scandinavian Peninsula, the Iberian Peninsula, Africa and the Low Countries, a careful survey of the areas of projected operations and a thorough examination of the enemy capabilities are mandatory. The unfortunate Norway campaign of 1940 is a glaring example of a total lack of appreciation of such realities on the part of those responsible for the British expedition. The Germans employed approximately *175,000 men,* strongly supported by the Air Force, to conquer and secure their lodgement in Norway. Special Task Forces, including two mountain divisions and numerous parachute units made effective contributions to the success of the operation. Having gained a foothold, the Germans quickly established themselves in order to hold their bases and to facilitate exploitation. The British Forces despatched against Norway totalled about *24,000 men,* with no mountain troops and with inadequate air supporting units. The failure of the British Expedition is directly attributable to insufficient and inappropriate means. If and when the situation indicates the feasibility of an Allied expedition, against Norway for example, powerful and appropriate means, especially trained and equipped for the task, must be provided. Large and effective reserves must be readily available to preclude dislodgement of the initial forces and to facilitate subsequent exploitation. A careful study of Norway, including the terrain and communications net, and a survey of possible enemy capabilities, indicate the necessity for mountain, infantry foot and motorized divisions, numerous parachute, tank, antitank, antiaircraft and air-borne units. The force required for the entire operation may total several hundred thousand men. The execution of the plan would be predicated on sea and local air superiority. The size of this force may appear large. However, even though our enemy may not be strong initially in the area of projected operations, the mobility of

modern fighting means will enable him to concentrate destructive forces against us with unprecedented speed and surprise effect. The foregoing considerations apply with equal emphasis to proposed forces for other theaters of operations. Careful studies, concerning the Scandinavian Peninsula, the Iberian Peninsula, the Near East and Africa, have been made by the War Plans Division of the General Staff, and these studies made important contributions in the determination of the estimated Ground Forces (See Tab A). The enemy capabilities in those theaters in 1943 would obviously be conjecture. Task Forces consisting principally of armored and motorized divisions, must be created for possible operations in North Africa, the Middle East, France and the Low Countries. The exact strength and composition of the Task Forces, necessary to seize and maintain military bases, will be determined immediately prior to the operation. We can avoid the unfortunate disasters experienced by our potential allies in Norway, France, the Balkans and in Crete by planning now and creating quickly the production capacity necessary to equip the ground forces recommended (Tab A). We must not suffer ignominious defeat and be expelled from the bases that we elect to establish. If the premises and assumptions made earlier in this study are appropriate and sound, additional strategically located bases are vital to the splendidly conceived plans of the Air Force and finally may serve as areas of departure for the combined operations of air and ground forces. The *seizure, retention,* and *effective utilization* of these bases is predicated on the successful operations of adequate sea, air and ground forces.

5. Shipping was a bottleneck in the last war and again increased demands will be placed on all transportation facilities, particularly water, by constant troop movements and the expanded war industrial and economic effort. In order to transport and maintain effective forces in European areas, several million tons of shipping and adequate port facilities must be made available essentially for military service. To transport five million men with their modern air and mechanized equipment to European ports over a period of approximately one year would require about seven million tons of shipping or 1,000 ships. To maintain such a force in the theater of operations would require about ten million tons of shipping or 1,500 ships. But it is highly improbable that the situation in Europe will develop in such a manner as to permit or to require operations involving the movement of so large a force across the Atlantic within

the limited time of one year, even if the ship tonnage were available. The progressive building-up of large military forces in the theater will probably extend over a period of at least two years. This progressive movement would greatly reduce the demands upon maritime shipping for essentially military purposes and further would extend the period of time for the augmentation of maritime shipping now available. The realization of our present national policies may require operations in distant theaters by military forces of unprecedented strength. It would be folly to create strong fighting forces without providing the transportation to move and maintain them in the contemplated theaters of operations. The maximum possible shipbuilding capacity of our country, coordinated of course with other essential demands upon industry and raw materials, must be exploited and continued in operation for the next several years.

6. The foregoing considerations clearly indicate the importance of creating a productive capacity in this country, that will provide the most modern equipment designed to give mobility and destructive power to our striking forces. The forces that we now estimate as necessary to realize our national objectives and for which production capacity must be provided, may not be adequate or appropriate. No one can predict the situation that will confront the United States in July, 1943. We may require much larger forces than those indicated below, and correspondingly greater increased quantities of equipment. Emphasis has been placed on destructive power and mobility, with a view to offensive maneuvers in our principal theater of operations (Europe). The forces deemed necessary to accomplish the role of ground units in the supreme effort to defeat our potential enemies, total 5 Field Armies consisting of approximately 215 divisions (infantry, armored, motorized, air-borne, mountain and cavalry) with appropriate supporting and service elements. The strategic concept outlined in this paper contemplates distribution of U.S. ground forces approximately as follows: (More specific data will be found in Tab A).

Iceland	29,000
Scotland	11,000
England	41,000
Ireland	25,000
Hawaii	61,000

Puerto Rico	34,000
Panama	42,000
Alaska	29,000
Philippine Islands	25,000
Smaller Outlying Bases	32,000
Potential Task Forces	
First Army	775,000
Third Army	590,000
Fourth Army	710,000
Brazil	86,000
Colombia-Ecuador-Peru	37,000
Total	2,500,000
Strategic Reserves for which production capacity must be established but whose *activation, location,* and *training* will be determined by developments in the international situation.	3,000,000
Troops in the Zone of the Interior and Fixed Defense Units (Ground)	1,200,000
TOTAL GROUND FORCES	6,700,000

TAB A

The Ground Forces estimated as necessary to provide for the security of the U.S. outlying possessions, the Western Hemisphere and to make available appropriate forces for projected military operations follow:

1. Units organized, fully equipped and trained as soon as practicable:

a. Military Bases and Outlying Possessions.

Newfoundland	5,690
Greenland	2,531
Caribbean Bases	40,199
Puerto Rico	34,757
Panama	42,614
Hawaii	61,337
Philippines	25,397
Alaska	28,823
Iceland	28,709

Bases in British Isles	76,160
	346,217

b. Potential Task Forces

Brazil

1 Army Corps (1 Div. foot, 1 Div. Air-Borne)	42,392
2 Artillery Battalions Pack	1,804
1 Cavalry Regiment	1,591
5 Parachute Battalions	2,590
1 Antiaircraft Regiment and 2 Medium Battalions	3,619
2 Aircraft Warning Regiments	2,600
2 Tank Battalions (Light)	1,086
3 Anti-Tank Battalions	2,100
Services	28,864
Total	86,646

Colombia-Ecuador-Peru

1 Division	15,245
2 Artillery Battalions	1,400
3 Parachute Battalions	1,554
1 Antiaircraft Regiment and 2 Medium Battalions	3,619
2 Tank Battalions (Light)	1,086
1 Aircraft Warning Regiment	1,300
Services	13,035
Total	37,239

First Army

1 Army of 3 Corps of 3 Divs. ea.	242,216
2 Armored Corps of 2 Armd Div. ea.	53,556
8 Divisions (4 Mtzd, 2 Mtn, 2 Abn)	108,516
5 Parachute Bns.	2,590
13 Artillery Bns. (4 heavy, 6 (105mm), 3 75mm How Pk)	9,906
20 Antiaircraft Regts and 10 extra Bns. 37mm	46,970
11 Tank Battalions (3 Medium and 5 Light)	4,839
12 Aircraft Warning Regts	15,600

10 Tank Destroyer Bns; and 10 anti-tank Bn (Gun)	14,000
Services (Ord., QM, Sig., Engr., Med.)	278,069
Total	776,262
Third Army	
1 Army (3 Corps, 9 Divisions)	242,216
1 Armored Corps (2 Divisions)	26,778
2 Divisions Motorized	32,258
6 Artillery Battalions (Medium & Heavy)	4,300
1 Cavalry Corps and 2 H-Mecz Regiments	26,867
2 Air-Borne Divisions	20,000
5 Parachute Battalions	2,590
5 Antiaircraft Regiments and 3 Med. Bns.	12,166
3 Aircraft Warning Regiments	3,900
15 Tank Destroyers or Anti-Tank Battalions	10,500
Services	207,860
Total	589,435
Fourth Army	
1 Army (3 Corps, 9 Divisions)	242,216
1 Armored Corps (2 Divisions)	25,394
4 Divisions, Motorized	64,516
8 Artillery Battalions (Med. or Heavy)	8,800
4 Divisions (2 Mountain, 2 Air-Borne)	44,000
2 Parachute Battalions	1,036
15 Antiaircraft Regiments & 10 Med. Bns.	37,345
8 Tank Battalions (Medium or Light)	4,839
6 Aircraft Warning Regiments	7,800
25 Tank Destroyers or Anti-Tank Battalions	17,500
Services	256,413
Total	709,859
Total Task Forces	2,199,441

c. The troops considered necessary in the ground forces, i.e. *organized, fully equipped* and *trained,* for *current* and *future employment* as *security forces* in *military bases* and *outlying possessions,* and as *striking forces in any theater,* follows:

Military Bases and Outlying Possessions	346,217

Potential Task Forces	2,199,441
Total	2,545,658

2. Production capacity should be created to equip approximately 3 million for the reserve units indicated below. *Activation, location* and *training* of these units will depend upon the international situation.

a. Strategic Reserves.

2 Armies (10 Army Corps, 27 Divisions)
14 Armored Corps (53 Armored Divisions)
51 Divisions Motorized
115 Artillery Battalions (Pack Medium or Heavy)
9 Divisions (2 Cavalry, 6 Mountain, 3 Air-Borne)
22 Parachute Battalions
129 Antiaircraft Regiments and 133 Medium Battalions
86 Tank Battalions (70 Medium, 6 Light, 10 Heavy)
29 Aircraft Warning Regiments
290 Tank Destroyer Battalions
262 Anti-Tank Battalions (Gun)

Total—approximately	3,000,000

3. Ground troops required for the Zone of Interior and Fixed Defense Units 1,200,000

4. *Recapitulation of Ground Forces*

Military Bases and Outlying Possessions	346,217
Potential Task Forces	2,199,441
Zone of Interior—Fixed Defenses	1,200,000
Total	3,745,658
Units in reserve to be activated when situation requires	3,000,000
Total Army Ground Forces	6,745,658

5. Air Force requirements (details submitted in a separate study)

Air Force Combat	1,100,000
Zone of Interior Service Units	950,000
Total Air Force	2,050,000
6. Army Ground Forces	6,745,658
Army Air Forces	2,050,000
TOTAL ARMY FORCES	8,795,658

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American military preparedness in 1941 may be reviewed in Walter Millis' acclaimed *Arms and Men. A Study in American Military History* (New York: G. P. Putnam, 1956). Russell F. Weigley's surveys are more current. See his *History of the United States Army* (New York: Macmillan, 1967) and *The American Way of War: A History of*

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