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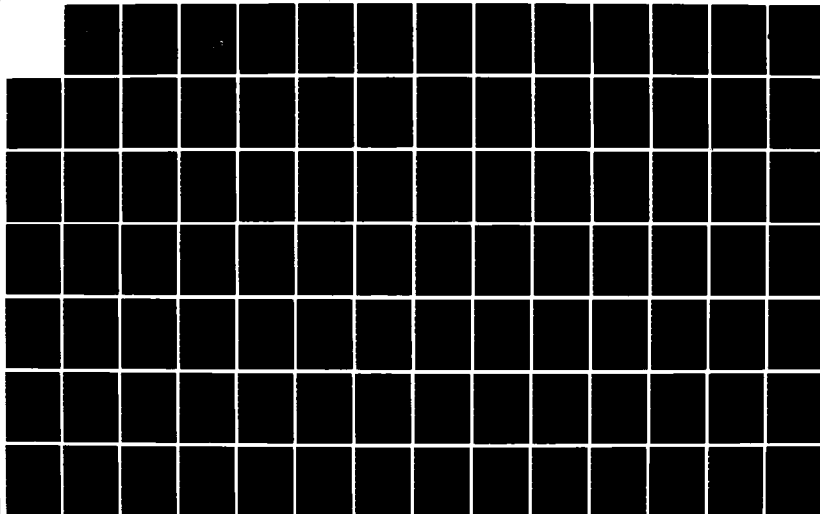
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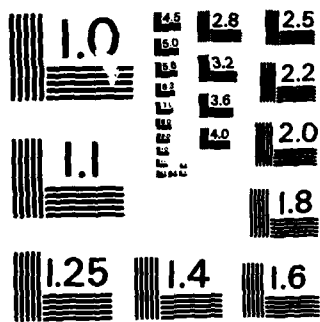
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UNITED STATES ARMY AIRBORNE FORCES:
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1990-2000.

A thesis presented to the faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE

by

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JOEL J. SNOW, MAJ, USA
B.S., United States Military Academy, 1969
M.B.A., James Madison University, 1980

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20. ABSTRACT

This study critically analyzes the future roles of United States Army airborne forces as an instrument of national security policy during the period 1990-2000. A key to that analysis is the relationship of the strategic roles of airborne forces to requirements of those forces at the operational and tactical levels of war.

Conducted from a doctrinal perspective, the study examines the historical basis for the American use of airborne forces. That examination reveals an American tradition of using airborne forces in tactical (versus operational or strategic) roles. The author shows that that tradition will likely influence the future American use of its airborne forces.

After describing the strategic, operational, and tactical nature of future conflicts during the target period (1990-2000), a feasible set of roles and missions for US Army airborne forces is presented. Each of the three levels of war is discussed, with emphasis on the operational level. Four illustrative scenarios are used: high-intensity conflict in Europe (operational role), high-intensity conflict in Europe (tactical role), mid- to high-intensity conflict in the Middle East (operational role), and low-intensity conflict in North Africa (strategic role).

To facilitate the potential of airborne forces producing operationally significant battlefield victories, a set of prescriptive requirements for the future is offered. The author stresses a balance between the three elements of the paradigm used -- "soldiers," "weapons," and "doctrine."

The analysis reveals that, assigned the proper missions and adequately resourced, United States Army airborne forces can effectively serve as an instrument of national security policy during the period 1990-2000.

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THESIS APPROVAL PAGE

Name of candidate Joel Jenkins Snow, Major, Infantry

Title of thesis: US Army Airborne Forces: An Instrument of Land Power, 1990-2000.

Approved by:

Johnny R. Hubbard, Thesis Committee Chairman
(COL J.R. Hubbard, MA)

H. Wass de Czege, Member, Graduate Faculty
(COL H. Wass de Czege, MPA)

Stanley H. Genega, USA War College Fellow
(LTC S.G. Genega, MS)

Gilbert A. Bernabe, Member, Graduate Faculty
(MAJ G.A. Bernabe, Ph.D.)

Accepted this 26th day of April 1984 by Philip J. Brooks,
Director, Graduate Degree Programs.

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ABSTRACT

UNITED STATES ARMY AIRBORNE FORCES: AN INSTRUMENT OF LAND POWER, 1990-2000; by Major Joel J. Snow, USA, 168 pages.

This study critically analyzes the future roles of United States Army airborne forces as an instrument of national security policy during the period 1990-2000. A key to that analysis is the relationship of the strategic roles of airborne forces to requirements of those forces at the operational and tactical levels of war.

Conducted from a doctrinal perspective, the study examines the historical basis for the American use of airborne forces. That examination reveals an American tradition of using airborne forces in tactical (versus operational or strategic) roles. The author shows that that tradition will likely influence the future American use of its airborne forces.

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CHAPTER 1

INTRODUCTION

Background

The most recent version of the United States Army's Field Manual 100-5, Operations, represents a potential quantum jump in the US Army's appreciation of the fact that "War is simply the continuation of policy by other means." Decidedly Clausewitzian in nature, this "mother ship" of US Army doctrine is intended to set the tone for follow-on manuals which will guide doctrine, tactics, organization, and equipment development in the future. That manual has enjoyed popular support and acceptance throughout the Army, partly due to its attempt to draw a balance between the offense and defense--a balance that was (mistakenly) perceived as missing from the 1976 version of the same manual. The AirLand Battle doctrine contained in FM 100-5 is intended to be applicable to all scenarios which the US Army may face in the foreseeable future. It is no coincidence that that doctrine was designed to be as useful on low-intensity, "relatively unsophisticated" battlefields as on the "central battlefield" of Europe.

Concurrent with the development of the AirLand Battle doctrine were discussions about a force structure that would allow execution of that doctrine. Those discussions are continuing. Recently, major interest has been shown in the re-introduction of "light forces" into the US Army force structure. Because of the renewed interest in such "light forces" and the US Army's capability to fight in scenarios outside the "central battlefield" of Europe, an analysis of the future uses of airborne forces is appropriate.

Purpose

This thesis will deal with one element of the US Army force structure--airborne forces--and the role of those forces in United States military strategy for the next decade. Specifically, the purpose of this thesis is to critically analyze the future role of US Army airborne forces as an instrument of national security policy during the period 1990-2000.

Perspective

A key to the analysis that follows is the relationship of the strategic role of airborne forces to the requirements of those forces at the operational and tactical levels of war. The reason for the importance of that relationship (or linkage) is the traditional role of US

airborne forces as "America's strategic reserve." Strategic considerations are of critical importance in analyzing future roles, missions, organization and equipment requirements for airborne forces.

According to FM 100-5, "Military strategy sets the fundamental conditions for operations."² Our airborne forces are unique "...in that they provide the nation with a flexible force that can be deployed strategically and inserted rapidly anywhere in the world as either a deterrent or as a strike force."³ Some strategists consider the commitment of airborne forces as a means of conveying a "...purpose...[that] is more political than military."⁴ According to Brigadier General Peter J. Boylan, current Assistant Division Commander of the 82d Airborne Division, "The credibility of the (airborne) force must be closely tied to the adversary's perception of political will and not necessarily to a mere military capability."⁵

Nathan Bedford Forrest is credited with saying that "getting there firstest with the mostest" is critical in war. This idea highlights the necessity for not only deploying rapidly, but also arriving in an objective area with enough force to get the job done. A key task of this thesis is to analyze what an airborne force must be able to do once on the ground, at the operational and tactical levels, in order to credibly serve either as a deterrent force or, if deterrence fails, to function tactically as the

first step in an escalating commitment of US forces. The changing strategic, social, and technological world has taken us beyond the time when a mere battalion-sized airborne drop can be depended upon to adequately influence other nations of the world. The analysis of the future strategic and operational/tactical environments contained in this study points out the merit of Jeffrey Record's statement that "The days are gone when a handful of Western troops armed with a few Maxim guns could awe and subdue the non-industrialized regions of the world."⁶ Credibility requirements of the future will, even more so than today, require an "index of effectiveness beyond glory."⁷

This analysis will be concerned with the period 1990-2000. The intent is not to slight the critically important role of US Army airborne forces during the remainder of this decade. Their role as part of the Central Command (CENTCOM) is expected to change very little in the short term (1983-1989). My intent is to break new ground, to overcome years of institutional inertia and to facilitate the process of adapting early to the strategic and operational requirements of the next decade. By adapting early to changes which the future holds, airborne forces can become proactive in serving US security interests. This stands in contrast to their current role as a reactive, "fire brigade" force.

Definitions

Before proceeding, it is useful to provide the reader with specific definitions of several terms that will be used throughout this paper. These include "airborne forces" and the strategic, operational, and tactical levels of war. First, "airborne forces" refers specifically to US Army airborne divisions and corps. Although the US Army currently has only one airborne division and one airborne corps headquarters (the 82d Airborne Division and XVIII Airborne Corps based at Fort Bragg, North Carolina), the assumption will not be made that such a limitation will apply to the future. While it is also recognized that there are smaller airborne and special forces units deployed in overseas theatres, this thesis will not address those units although some of its findings may be applicable to them.⁸ In addition, for the purpose of this paper, the two US Army Ranger battalions and Special Forces units are not included in the term "airborne forces." However, the capabilities of the traditional airborne forces, rangers, and special forces are often complementary. This can be especially true when considering contingency force operations.⁹

Referring again to FM 100-5, Operations, the broad divisions of activity in preparing for and conducting war are spoken of as the "levels of war." These levels of war and the different perspectives provided by analyzing war

from each of them are especially useful when considering airborne forces. This is true because such forces have been used in the past to accomplish missions at each of the three levels of war and the potential exists for the same to occur in the future. In order to illustrate this point without detracting from the following chapter, only a quick review of World War II examples of the use of airborne forces will be provided as each level of war is defined.

The tactical level of war "encompasses specific techniques smaller units use to win battles...[as well as] the movement and positioning of forces on the battlefield in relation to the enemy."¹⁰ Examples of the tactical use of airborne forces include the Allied landings in both Africa and Normandy wherein they were used to delay enemy counter-attacks against Allied amphibious landings on the beaches. The Russians dropped three airborne brigades into seven drop zones in the Cherkassy-Kiev area in September 1943 to establish bridgeheads across the Dnjepr River in advance of ground forces.¹¹ Operation Market-Garden in September 1944 was a similar tactical use of airborne forces by American and British forces. The common characteristic of these airborne operations was that the airborne forces facilitated the landings or the advance of friendly ground forces by seizing key terrain. The main effort was being made by the ground troops.

The operational level of war is less well-defined. FM 100-5 describes it as the theory of larger unit operations and states that it involves planning and conducting campaigns.¹² A less useful definition sometimes heard is that the operational level of war refers to operations conducted by corps and echelons above corps. Edward N. Luttwak, in his article "The Operational Level of War," provides an interesting explanation of why this level of war is inadequately defined in Anglo-Saxon military terminology.¹³ According to Luttwak, the American relative advantage in material resources which it and its allies have enjoyed in its past wars has resulted in an attrition orientation toward warfare. The US has never been faced with a materially superior enemy and the requirement to develop a "relational-maneuver" style of war. The circumstance of material inferiority causes military thinkers to both think about and practice war in operational terms in order to avoid such bloody stalemates as were experienced on the tactical battlefields of World War I.¹⁴ On the other hand, the US is currently in just such a predicament vis a vis the Soviet Union. In the same manner that the Germans developed the blitzkrieg as an alternative to the materialschlacht by which they learned they could not win in World War I, the US is in the process of developing a style of war ("relational-maneuver") which will allow it to compete with the materially superior Soviet

Union. As it does so, the operational level of war will become increasingly better defined and applied. This is, of course, an imperative since the "relational-maneuver" style of war, while it offers a higher potential payoff than attrition, also increases vulnerability to catastrophic failure if not conducted correctly. The reason for this is obvious--such a style is more risky. Whereas the conservative, attrition style against a superior enemy will guarantee eventual loss, an improperly executed "relational-maneuver" approach offers a quick, devastating loss of forces since those forces committed to offensive actions run the risk of being isolated and defeated in detail. This phenomenon is significant to an analysis of the use of airborne forces since airborne forces are strategically and operationally mobile, and they provide a maneuver capability in the third dimension. The potential for the use of airborne forces in a "relational-maneuver" style of war is higher than in an attrition style because of those characteristics. The Germans were the only ones to use airborne forces operationally during World War II. They did so on two occasions--the invasions of Holland in May 1940 and Crete in 1941. In the Holland operation, airborne forces were used to isolate the city of Amsterdam, capture the airport at Rotterdam, and to secure bridges for German armor formations to cross. The tasks of German airborne forces in the Crete invasion were to secure airfields and a

harbor to be used by follow-on, heavier forces. In both cases, the success of the entire operation depended upon the success of the airborne assaults. In addition, the distances between the airborne forces and the ground, follow-on forces were much greater than the distances involved in the tactical missions discussed above.

The strategic level of war refers to the employment of the armed forces of a nation, either through the application or the threat of force, in order to secure the objectives of national policy. This is the sense in which General Boylan speaks of "a strategy of pre-emptive power projection"¹⁵ in order to convey a political intent. Airborne forces were not used strategically in World War II by either side, although the Allies planned an airborne operation into the Kassel-Fritzlar-Hofgeismar area of Central Germany from which a decisive three-corps, ten-division offensive could have been launched against the Ruhr. This would have been an independent operation with the goal of denying the enemy the use of the industrial capacity of the Ruhr region. This was in fact a strategic aim of Allied ground operations following the breakout from the Normandy beachhead. Although airborne forces were never committed in a strategic role, the mere fact of the existence of the First Allied Airborne Army, ready for use anywhere in the European theatre, had a strategic impact on the German leadership since they were required to maintain

mobile forces in reserve to react to the potential commitment of that Airborne Army.

The Road Ahead

The history of airborne forces and operations is both interesting and well-documented, especially the history of American, German, Soviet, and British airborne forces during World War II. Because so much has been written about that era, this writer has not attempted to re-plow that ground. Extensive use will be made of secondary sources in Chapter Two in order to understand how past airborne operations, doctrine, and personalities have affected current and near-term airborne roles, missions, organizations, and doctrine -- to include the operational concept and organization for "Airborne Division 86."¹⁶ Through this historical analysis, clues to future roles, missions, doctrine, and organization of US airborne forces for the period 1990-2000 have been deduced. In addition to the historical experiences of American, British, German, and Soviet airborne forces, current Soviet operational concepts for the use of airborne forces have been analyzed in order to discern potential applications of those concepts to US Army airborne forces in the future.

Chapter Three includes the critical task of determining the nature of future conflict. While there is no crystal ball with which to predict the future, prudent

use is made of such recent studies as "Strategic Requirements for the Army in the Year 2000" by Dr. William J. Taylor and Robert Kupperman, Edward Luttwak's "Historical Analysis and Projection for Army 2000," and other available efforts to gaze into the future of warfare, to include future technology. Projected changes in both the strategic environment and operational requirements during the period 1990-2000 will be addressed. The resulting synthesis provides insights into the nature of future battlefields, as well as the roles of and requirements for airborne forces on those battlefields.

Chapter Four provides an analysis of potential roles of airborne forces in four likely scenarios. The scenarios used are drawn from the discussion in Chapter Two, The Future of War. The scenarios include the use of airborne forces in both a deep attack (operational) role and a shallow (tactical) role in a mid- to high-intensity conflict in Europe, a CENTCOM-related scenario, and a low-intensity conflict scenario in a Third World region. For each scenario the strategic implications as well as the operational/tactical levels of war are considered, again emphasizing the linkage of those levels of war.

Chapter Five provides a discussion of the conceptual, doctrinal, organizational, and equipment requirements for airborne forces during the period under consideration. A final chapter, Conclusions and

Recommendations, provides this writer's answer to the question of the proper role of US Army airborne forces as an instrument of national security policy during the period 1990-2000 and specific recommendations on how to organize, equip, and train those forces.

Onward

In the recent past the US Army and the National Command Authority have come to look upon airborne forces as the nation's "strategic reserve"--ready on short notice to go anywhere in the world in order to preserve or restore peace. The deterrent value of such a strategically mobile asset is apparent. The question is "What must airborne forces be able to do if committed?" This thesis will answer that question by analyzing how airborne forces can contribute to modern warfare once committed; the strategic, operational, and tactical requirements which must be met in order to allow them to make that contribution; and what those airborne forces should look like during the period 1990-2000.

FOOTNOTES

¹ Karl von Clausewitz, On War , ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), p. 7.

² Department of the Army, Field Manual 100-5, Operations , 20 August, 1982, p. 2-3. For a detailed discussion of the relationship of national strategy, military strategy, and military operations, see Colonel William O. Staudenmaier's article "Strategic Concepts for the 1980's" Military Review , April and May, 1982.

³ Peter J. Boylan (Col), "Power Projection, Risk, and the Light Force," Military Review , LXII, No. 5 (May, 1982), 68.

⁴ Ibid., p. 69.

⁵ Ibid.

⁶ Jeffrey Record, The Rapid Deployment Force and US Military Intervention in the Persian Gulf (Cambridge, MA: Institute for Foreign Policy Analysis, Inc., 1981), p. 24.

⁷ Roger A. Beaumont, "Airborne: Life Cycle of a Military Subculture," Military Review, LI, No. 6 (June, 1971), 60.

* The US Army, in addition to the 82d Airborne Division and XVIII Airborne Corps headquarters, also has an airborne battalion combat team in Italy, an airborne rifle company in Alaska, and Special Forces battalions/detachments in Panama, Germany, and Korea.

⁸ For an excellent analysis of the complementary capabilities of airborne, ranger, and special forces units, see "Roles and Missions of Airborne, Ranger, and Special Forces in Contingency Operations," by Major Charles D. McMillin, MMAS thesis prepared at the Command and General Staff College, Fort Leavenworth, KS in 1979.

¹⁰ FM 100-5, p. 2-3.

¹¹ Otto Heilbrunn, Warfare in the Enemy's Rear (New York: Praeger, 1963), p. 130.

¹² FM 100-5, p. 2-3.

13 Edward N. Luttwak, "The Operational Level of War,"
International Security, 5, No. 3 (Winter, 1980/81), pp.
61-79.

14 Ibid., p. 62.

15 Boylan, loc. cit.

16 Representative of the sources used are: Out of the
Blue by James Huston, Paratroops by F. O. Miksche, By Air To
Battle by the British Air Ministry, and
Parachutists--Airborne Landings by LTG (USSR) I. I. Lisov.
See Bibliography.

CHAPTER 2

HISTORY OF AIRBORNE FORCES

Introduction

The use of airborne forces is a relatively new dimension in the conduct of warfare. The speed with which the use of airborne forces raced to the forefront of events in World War II and into the imagination of the combatants on both sides of the conflict had an unparalleled impact not only on the course of events during that war, but also on military affairs after the war's end. The influence of this dramatically new concept has continued up to the present and, as will be shown, will continue well into the future.

Pre-World War II Airborne History

The concept for the use of air-delivered forces originated well before World War II. For centuries military men have thought about and written about the idea of airborne warfare. The Greeks are credited with fables about flying men conducting surprise attacks in the rear of their enemies. The Chinese, according to old Peking records, designed a workable parachute. More certain is the fact that in the fifteenth century Leonardo da Vinci designed and

tested a parachute. The launching of the first practical balloons in the 1780's caused the idea of the vertical envelopment to take on a degree of respectability it had not enjoyed before that date. It is reported that Napoleon considered using balloons instead of ships to carry an invasion force to England. The material impracticality of undertaking such a large-scale airborne operation at that time is obvious.¹ But that did not stop military minds from considering the possibilities. Even Benjamin Franklin was fascinated with the idea of balloon-borne forces. His quote, dated 1784, indicates that fascination:

Where is the Prince who can afford so to cover his country with troops for its defense, as that ten thousand men descending from the clouds, might not, in many places, do an infinite amount of mischief before a force could be brought together to repel them?²

The first suggested use of airborne operations in modern warfare was a plan conceived by Brigadier General William (Billy) Mitchell. Then a colonel and commander of the US Army Air Corps in France during World War I, Mitchell devised a proposal in October 1918 for capturing the fortress city of Metz by parachuting from Allied bombers a large portion (approximately 10,000 men) of the First US Division. Assisting Mitchell in preparing this plan was a Lieutenant Colonel Lewis H. Brereton--later destined to command the First Allied Airborne Army in World War II. The

plan was shelved by General "Black Jack" Pershing, Commanding General of the American Expeditionary Force, because it used too many resources and was too novel to risk at that point in the war. The realities of too few and inappropriate types of aircraft (bombers versus troop carriers), too few parachute-trained men, and inadequate communication means to control the troops once they were on the ground dictated the abandonment of Mitchell's plan.

Interest in the possibilities of airborne warfare continued after World War I, particularly in the German and Russian armies. The Soviet Army led the way in encouraging interest in the potential of this new idea in warfare. In 1930 the Red Army dropped a lieutenant and eight soldiers with equipment into the Moscow area during their maneuvers that year. In 1933 a complete battalion was parachuted from TB-3 four-engined transports in the Ukraine. In Kiev in 1936 they dropped over 5000 parachute troops in view of foreign military attaches.²

The reaction to this Soviet demonstration of airborne capability by both the British and American military establishments was not enthusiastic, to say the least. The Germans, on the other hand, quickly and energetically took up the idea of airborne warfare as a complementary method of speeding up the armored thrusts of the blitzkrieg style of war which they were developing. The Germans, as a result of their keen interest in this new

approach to warfare, soon took the lead in the development of airborne forces. The Fallschirmjaeger were placed under command of the Luftwaffe. This arrangement accommodated the greatest amount of progress in techniques and conceptual development of their use with the least amount of inter-service friction and argument during the inter-war period.⁴

The German World War II Airborne Experience

It is no surprise that the Germans first used airborne troops in conducting major combat operations. In describing German airborne operations, it is important to realize that airborne forces' operations in areas under enemy control can be categorized into three groupings (not discussed will be operations in areas under friendly control). The three groupings are coup de main (or "commando") operations, tactical assignments, and operational assignments.⁵

The German assault against Fort Eben Emael on May 10, 1940 is the arch-typical airborne coup de main of World War II. This assault was intended to aid the main purpose of the Germans in the Maastricht area--the capturing intact of bridges at Vroenhoven and Veldwezelt. By landing only 80 troops in gliders directly onto the superstructure of Fort Eben Emael, the Germans eliminated the possibility of enemy flank fire during the subsequent attack of the two

key bridges across the Albert Canal by von Kluge's 4th Army (consisting of two army corps). The subsequent airdrop of an estimated 500 men between the bridges and the garrison responsible for destroying those bridges (the barracks at Lamaeken) prevented the Belgians from effectively counterattacking. As a result, in a matter of hours the Germans had crossed the Belgian border despite its many fortifications. Essentially a raid, the Fort Eben Emael assault was a key to the success of the larger operation.⁶

Although not the preferred use of its airborne forces, the Germans did assign tactical missions to their Fallschirmjaeger. (The rationale for German dislike of such assignments for its airborne troops will be discussed later.) Such assignments facilitate either the landing or the advance of friendly ground troops or block the retreat of enemy forces, usually by seizing key points in the enemy's rear. Used in this manner, "...airborne action...will succeed only when it is linked with other action."⁷ Given such a mission as this, the effort of the airborne troops is subsidiary, while the main effort is made by the ground troops. In addition to the examples of the tactical application of airborne forces given in Chapter One, one additional example of this type action is the German operation in April 1941 at the Isthmus of Corinth. In this action a German paratroop regiment was assigned the

mission of keeping the bridge from the Greek mainland to the Peloponnesus open for German ground troops as well as preventing the escape of British troops to Crete and Egypt. An excellent account of this operation is contained in Captain Ferdinand O. Miksche's Paratroops.⁸

The preferred German application of airborne troops was in an operational mode. The descriptions of the German operations discussed earlier--Holland and Crete--are both interesting and instructive but not essential to the purposes of this paper.⁹ The essential points to be gained from a discussion of the German operational use of airborne forces are 1) the Germans were the only ones to carry out airborne missions of an operational character during World War II and 2) the rationale for this type mission being the preferred method of employing those forces. One reason for the first point is the definition of the "operational assignments" category. That is to say, in an operational assignment, the airborne effort is the decisive one, at least in the opening stage, and, if it fails, the battle is lost.¹⁰ This is true since in an operational role, the distance between the ground troops and the airborne troops is extended (beyond that when airborne troops are committed to a shallower, tactical role) and reinforcements for the airborne forces are not quickly available. Furthermore, the pre-1939 operational role given airborne troops under official German doctrine prior to the

start of the war consisted of numerically weak paratroop forces seizing vital airports or other critical locations in order to force a foothold for subsequent airlanding of troops and heavier equipment. In such a role the paratroops played the essentially operational part by : 1)Utilizing the moments of tactical and strategic surprise (tactical--the mode of action, timing, targets, etc; strategic--Holland, Crete); 2)Disrupting the enemy's rear which could in itself lead to success; and 3)The "vertical envelopment" was the key operational element of the attack.¹¹ Given such a role, any follow-up units would be simply tactically exploiting the operational success already gained by the airborne troops. The similarity between the German doctrine for the use of airborne troops and the American doctrine that came later is striking.

The second point, the rationale for German preference for the operational role, is explained by General Kurt Student, Chief of German Parachute Troops, in the following excerpt:

I could not develop a liking for the raider tactic. In spite of the required boldness I did not perceive it as a fully satisfactory task for a soldier and a whole branch of troops. Also, the chances of returning to their own lines seemed to me to be too small. In most cases only captivity would remain or even the treatment as a saboteur or even spy. Such prospects are bound to undermine the morale of the best force. Good troops bear casualties in combat. But they have to be able to figure a real chance of a happy return.

The limited tactical employment, too, did not seem to me to correspond to the character and potential of airborne troops. My opinion about this youngest branch went very much further from the beginning. I saw my task in developing the parachute and air-landing troops gradually into an instrument of operational, even battle-deciding significance.¹²

Additionally, the Fallschirmjaeger were Luftwaffe troops. Seeking a broader role than mere tactical facilitators (seizing defiles, bridges, and similar terrain features to speed tank thrusts), the Luftwaffe saw in their airborne troops the potential for an equivalent to the German Army's panzers--a third-dimensional blitzkrieg.

In carrying out their airborne operations the Germans adopted what was to become called the "oil-spot" method (sometimes referred to as the "ink-blot" scheme). This method called for many drops and no pre-determined main effort. Perimeters were formed around the drop zones. From there combat operations were conducted and the perimeters were expanded. Once a given perimeter showed marked success, it was designated as the main effort and follow-on troops were brought on until that perimeter expanded to absorb the other less successful perimeters. A more detailed discussion of this operational concept is found in Maurice Tugwell's Airborne To Battle.¹³ The German airborne invasion of Crete in May 1941 made use of four "oil-spots"--the airfields at Maleme, Retimo, and Herakleion and the capital city of Canea. Despite heavy losses, the

operational success of the invasion validated the worth of the operational concept just described.

Reactions to German Successes

It is ironical that the operation that spelled the end for German airborne operations on a major scale motivated both the British and American forces to devote greater energy to the formation of their fledgling airborne forces.¹⁴ For the British, the effort was largely one of copying and improvising upon known German precedents. The crash program of raising and training airborne troops after the Germans demonstrated the viability of airborne warfare on Crete resulted in a continual shortage of aircraft to carry the increasing numbers of men and associated equipment. The result was a British-inspired development of gliders and techniques for using them throughout the remainder of the war.

The Japanese, Italians, and Russians made only feeble efforts at developing their airborne forces. Japan used its airborne forces successfully at Menado airfield and the Palembang oilfields in 1942, but they failed to follow-up on those successes. The Italians never advanced their airborne forces beyond the 1940 level of two under-strength divisions. Likewise, the Red Army attempted only minimal airborne operations throughout the war, most

notably the 1943 brigade-sized drops into the Cherkassy-Kiev area.

The American Airborne Experience

For the Americans, on the other hand, the German success at Crete served as a spark for the effort that was already underway. In fact, from a technical perspective the Americans went far beyond what the Germans had accomplished. The development of a single airborne test platoon in 1940 into several divisions of highly motivated, physically tough and fiercely aggressive American paratroopers by 1944 is a cornerstone of the American airborne legend. That story has been superbly recorded by others so a recapitulation of it will not be attempted here.¹⁵ Instead, the conceptual basis for the use of that splendid force will be analyzed with the intent of determining how that conceptual basis was translated into reality both during and after World War II.

Although much has been written about the technical developments associated with American airborne forces prior to and during World War II (such as the development of aircraft specifically designed to deliver airborne forces, constant improvements in navigational and jumping techniques, and the evolution of the parachute itself), very little has been written about the development of the operational concept for the use of those forces. James A. Huston's Out of the Blue contains the best coverage of

this area but even it is somewhat superficial. Huston's book is based primarily on the study he conducted while assigned to the Office of the Chief of Military History, Department of the Army. Because the operational level of war, as was pointed out in Chapter One, is not part of the American military tradition, one would not expect the US Army's official history to adequately address the issue of the operational concept for such a relatively new method of warfare as the airborne. It does not.¹⁶

The obvious question at this point is -- What was the US Army doctrine for the employment of its airborne forces during World War II? Field Manual 31-30, Tactics and Techniques for Airborne Troops was originally published in May 1942, one year after the establishment of the Parachute School at Fort Benning, Georgia. This was also one year after the German airborne invasion of Crete (20 May 1941). This document provided a concept for airborne troops being used as the spearhead of a vertical envelopment or the advance guard element of air-landing or other troops. By seizing airfields or other suitable landing areas for gliders, the parachute troops were expected to provide secure airheads for follow-on reinforcement troops.¹⁷ This concept is easily recognizable as a carbon copy of the German "oil-spot" tactics and the operational role for airborne troops preferred by the Germans. The same manual, however, continued by listing a series of possible

objectives for airborne troops: river and canal crossings, defiles, destruction of enemy supply and communication locations, and so on. This listing of potential targets and the nature of those targets oriented the reader toward a tactical role for the airborne. There was no clear preference given in this doctrinal manual for either of the two types of missions offered.

The choice was made in the crucible of war. Based on the experiences of US airborne operations in North Africa, Sicily, and Italy, another attempt was made by the US Army to define its doctrine for airborne forces with the publication of War Department Training Circular Number 113, dated 9 October 1943. In this document another listing of possible missions for airborne troops was presented. This listing generally paralleled the listing of the 1942 edition of FM 31-30. No mention was made, however, of the concept of airborne forces seizing airfields and serving as the spearhead for follow-on forces (an operational role). Apparently, references to such an operational concept were deleted due to the insistence by senior airborne commanders that the airborne division should be committed as a whole rather than piecemeal into separated drop zones. Chief among proponents of adherence to the principle of mass was Major General Matthew B. Ridgeway, Commander of the 82d Airborne Division.¹⁸ The orientation toward purely tactical roles for airborne forces was reinforced by this

training circular's insistence that "Airborne troops should not be employed unless they can be supported by other ground or naval forces within approximately three days, or unless they can be withdrawn after their mission has been accomplished."¹⁹ This limitation on the use of airborne forces, accepted as doctrine in 1943, effectively ruled out operational roles for US airborne forces throughout the remainder of the war. Subsequent doctrinal manuals continued the precedent set by Training Circular 113.²⁰

The effect of the doctrinal decision to limit the use of airborne forces to tactical roles (although it was perhaps made unconsciously) was significant. Throughout the remainder of World War II, the US and its Allies did not attempt an operation in which their airborne forces played other than a tactical role. The airborne component of the Allied invasion of Normandy involved airborne forces isolating the amphibious beaches by blocking German re-inforcements of those beaches and by engaging enemy forces retreating from the beaches. In OPERATION MARKET, the airborne component of OPERATION MARKET-GARDEN, Allied airborne forces were to seize bridges across the Maas, Waal, and Rhine rivers to facilitate the rapid crossing of those obstacles by ground forces. The final major Allied airborne operation of the war, OPERATION VARSITY, was a tactical assault within range of friendly artillery support for the purpose of seizing high ground east of the Rhine River and

blocking German re-inforcements approaching the bridgeheads along the Rhine.

There were, however, proponents of an operational role for Allied airborne forces. Prior to the Normandy invasion, Generals Henry H. Arnold and George C. Marshall recommended that General Eisenhower consider a "strategic" airborne invasion of France as part of OPERATION OVERLORD. They suggested establishing a large airhead in the vicinity of Evreux, northeast of Paris, from which offensive operations could be launched. This would have in effect opened another front in France. General Eisenhower, of course, chose the more conservative approach of using airborne operations during the invasion "...as an immediate tactical rather than a long-range strategical adjunct of landing operations."²¹ This is not surprising when one considers that General Eisenhower expressed his feelings in 1943 that "...I do not believe in the airborne division."²² His papers contain no evidence that he changed his mind in this matter before June 1944.

After the War

The discussion of the proper role of airborne forces did not end with V-E Day. The image of eliteness earned by the American paratrooper during the war served to insure the airborne forces would not simply fade away after the war.²³ As has been pointed out by Roger A. Beaumont,

the airborne became a dominant post-war influence in the US Army.²⁴ The airborne commanders of the European Theatre--Generals Ridgeway, Gavin, and Taylor--became leading figures in the US Army after the war. As they rose in authority, their views on things military, especially concerning the use of airborne forces, were respected as valid military theory. Their writings insured the issue of operational and strategic roles for the airborne would remain alive during the 1950's and 1960's. Lieutenant General (Retired) James M. Gavin was perhaps the most outspoken proponent of an operational role for airborne forces. In his book Airborne Warfare he stressed the principle that "They (airborne forces) must be employed where their action would be decisive , and not scattered about for local tactical gains."²⁵ General Maxwell D. Taylor, while US Ambassador to the Republic of Vietnam in 1965, included in his preface to Rendezvous With Destiny (by Leonard Rapport and Arthur Northwood, Jr.) a reference to the elite nature of the US airborne divisions and their role as a "strategic reserve for employment worldwide."²⁶

The 1970's saw the US Army turn its collective attention toward the central battlefield of Europe. For over a decade the issue of the proper roles of airborne forces has sat on the doctrinal "back burner." Discussions of the use of those forces have centered primarily on

tactical employment of the airborne in a strategic, "fire brigade" mode. Following chapters will investigate whether other (to include operational) roles will exist in the future.

FOOTNOTES

¹ John S. Weeks, The Airborne Soldier (Dorset, England: Blandford Press, 1982), p. 11.

² James A. Huston, Out of the Blue: US Army Airborne Operations in World War II (West Lafayette, Indiana: Purdue University Press, 1972), p. viii.

³ John Weeks, The Airborne Soldier (Dorset, England: Blandford Press, 1982), pp. 18-19.

⁴ Ibid., p. 20.

⁵ Otto Heilbrunn, Warfare in the Enemy's Rear (New York: Frederick A. Praeger Co., 1963), p. 127.

⁶ For a detailed account of the Fort Eben Emael raid, see German Airborne Troops: 1936-1945 by Roger Edwards (Garden City, NJ: Doubleday, 1974).

⁷ Ferdinand Otto Miksche, Paratroops (New York: Random House, 1943), p. 57.

* Ibid., pp. 40-42.

9 For further discussions of these operational applications of airborne forces, the following references are recommended: Paratroops by F. O. Miksche, Warfare in the Enemy's Rear by Otto Heilbrunn, German Airborne Troops: 1936-1945 by Roger Edwards, and German Parachute Forces by Brian L. Davis. See Bibliography.

10 Heilbrunn, loc. cit., p. 128.

11 Edward N. Luttwak, "Paper Number 9: The German Army of the Second World War--The Parachute Troops," Historical Analysis and Projection for Army 2000, March 1, 1983. This paper was prepared by Mr. Luttwak under contract for US Army Training and Doctrine Command (Contract No. DABT-58-82-C-0055). Here Luttwak cites A. von Hove, "Achtung Fallschirmjaeger," p. 43 and F. von der Heydte, "Die Fallschirmtruppe Im Zweiten Weltkrieg," p. 181.

12 Professor Dr. Freiherr von der Heydte, "Die Fallschirmtruppe Im Zweiten Weltkrieg," in Bilanz des Zweiten Weltkrieges, (Oldenburg/Hamburg, 1953), p. 181.

13 Maurice Tugwell, Airborne To Battle: History of Airborne Warfare 1918-1971 (London: William Kimber Co.,

Ltd, 1971), p. 84. Additionally, Department of the Army Pamphlet 20-232, Airborne Operations: A German Appraisal, October 1951, contains an excellent discussion of the "oil-spot tactics" as well as conflicting German viewpoints on designating the main effort at the beginning of an operation.

14 Because of the heavy German losses suffered on Crete (estimated at 4000), Hitler forbade subsequent large German airborne assaults. Instead, from that time until the end of the war German paratroop units were used as elite infantry, often as "fine brigade" reserves.

15 A large number of available sources address the history of American airborne forces. The following are recommended: Out of the Blue by James A. Huston, Paratrooper by Gerard M. Devlin, Night Drop by S. L. A. Marshall, Six Armies in Europe (Chapter Two) by John Keegan, and Rendezvous With Destiny: A History of the 101st Airborne Division by Leonard Rapport and Arthur Northwood, Jr. See Bibliography.

16 In a discussion with Dr. Huston at Fort Leavenworth, Kansas on 18 October 1983, Dr. Huston appeared unfamiliar with the term "operational level of war." He was very comfortable, however, with the more traditional tactical and

strategic levels of war. He pointed out in his lecture the same night that "We never used airborne forces in accordance with the doctrine--to secure airfields for a buildup by air. We always used them to secure bridges, beaches, to reinforce, et cetera."

17 War Department Field Manual 31-30, Tactics and Techniques of Airborne Troops , 20 May 1941, paragraphs 41 and 42.

18 Huston, loc. cit., p. 55 referencing a letter from the CG 82d Airborne Division to CINC Allied Forces, dated 27 November 1943, Subject: Summary of Principles Covering Use of Airborne Division, (In AGF records 353/6 (A/B)).

19 War Department Training Circular Number 113, Employment of Airborne and Troop Carrier Forces , 9 October 1943, paragraph 4.d., p. 2.

20 US Army Field Manual 100-5, Operations , dated 15 June 1944 contained the same listing of possible missions for airborne forces as Training Circular Number 113, except that it deleted the reference to airborne forces acting as a "constant threat by their mere presence in the theater of operations thereby causing the enemy to disperse his forces over a wide area in order to protect vital installations."

Field Manual 71-30, Employment of Airborne Forces , dated July 1947, went even further in limiting the role of airborne forces by stating, "As a rule, airborne forces are not employed independently but are used in close coordination with other ground, sea, and air forces." (Paragraph 11.a.).

21 Letter, General Eisenhower to General Marshall, dated 19 February 1944 (OPD 381, Case 217). Note the use of the term "strategical" versus "operational." The same was true of General Marshall's letter of 10 February 1944 to General Eisenhower.

22 Huston, loc. cit., p. 166 referencing a personal letter from General Eisenhower to General Marshall, 20 September 1943 (Contained in Misc Exec File, Book 12, Case 80. Extracts in CPS 91/1, 19 October 1943. ABC 322, 23 September 1943).

23 Roger A. Beaumont, "Airborne: Life Cycle of A Military Subculture," Military Review , LI, No. 6 (June, 1971), 53.

24 Ibid., 54.

25 LTG (Ret) James M. Gavin, Airborne Warfare ,
(Washington, DC: Infantry Journal Press, 1947), p. 35.

26 Preface by General Taylor to Rendezvous With
Destiny by Leonard Rapport and Arthur Northwood, Jr.,
(Greenville, Texas: 101st Airborne Division Association,
1948 (1965 edition)).

CHAPTER 3

THE NATURE OF FUTURE CONFLICT

Introduction

The United States Army, as have other armies, has always had the problem of preparing for the "next war" by using its experiences of the "last war." This is not a startling observation. It is one that has been made many times in the past.¹ But the problem is one of utmost importance and one that becomes more serious as we move further into an age of rapidly changing technology and a strategic environment that is changing equally fast.

As was pointed out in Chapter One, the most recent version of Field Manual 100-5, Operations, attempts to draw a balance between the "Europe first--most demanding mission" orientation of the 1976 version and a variety of new threats to American security. These new threats are arising out of a strategic environment that is quite different from that of World War II. The authors of this new Field Manual 100-5 attempt to prevent the US Army from preparing to re-fight the Second World War.

This chapter will deal with the subject of the nature of conflict during the period 1990-2000. Projected

changes in the strategic environment in which the US Army will be expected to function will be described. Operational requirements during that period will also be discussed. The analysis of those two areas is intended to provide insights into the nature of future battlefields and thereby assist the reader in understanding the roles airborne forces might play on those future battlefields and the requirements which must be met in order to allow them to successfully execute those roles.

The Strategic Environment

An increasing number of analysts and well-informed government officials have begun to speak and write about the need for a United States military strategy that is relevant to the strategic environment of the Year 2000. This group calls for a military strategy that will strike a better balance than the one that currently exists between the US commitment to its European NATO allies (based on a NATO versus Warsaw Pact scenario) and more likely US contingency operations in Third World areas. One recent example of speakers and writers on this subject is Senator Sam Nunn (D-Ga). In an April 1983 address sponsored by Georgetown University's Center for Strategic and International Studies, Senator Nunn presented three alternatives for meeting US global military commitments in the future. The first two, which he described as unrealistic, were to cut back on the

defense of US vital interests abroad ("Do we write off Europe, or the Persian Gulf, or Northwest Asia?") and to spend huge additional funds for additional forces. The third alternative, according to the senator, is to change our military strategy.² Martin Blumenson addressed the same issue as long ago as 1979 in his criticism of our 1976 version of FM 100-5.³ These are only two examples of a growing number of non-military critics of a US military strategy that has for over a decade been infatuated with the "central, decisive battlefield" of Europe.

Why is there such a growing concern with this issue? One key reason is the set of findings in the Global 2000 Report commissioned by President Jimmy Carter in 1977 and published in 1980 and 1981 by the US Government Printing Office.⁴ This report indicated a significantly changed world environment--strategically, socially, and technologically--in the Year 2000.

The demographic trends described in the report alone are cause for grave concern. The projected exponential growth rates of the lesser developed countries (LDC's) are expected to account for 92% of the increase in world population by the Year 2000. (The world is expected to have over 55% more people by the Year 2000 than it did in 1975--6.4 billion versus 4 billion). The growing over-population in those areas, coupled with a lack of productivity to feed and employ such masses, may cause the

LDC's to be extremely unstable. Increased urbanization and internal migration within LDC's will add to the destabilization. In addition to likely internal conflicts within the LDC's and conflicts between the LDC's, the destabilization will offer increased opportunities for Soviet adventurism throughout the Third World. In order to protect American interests in those areas, the United States must be prepared to intervene when necessary. One analyst has pointed out that "The battlefield (of the future) may not be the plains of Europe, but, rather, the jungles, mountains, or cities of some lesser developed country."⁵ The probability that a "changing locus of conflict"⁶ will exist in the future demands that a re-evaluation of US military strategy be made. Additionally, as the incidence of instability increases in LDC's, the US Army may find it necessary to strategically deploy units to respond to more than one such incident simultaneously.

Social trends are not the only aspects of the future strategic environment that require analysis. The fact that the Soviet Union has reached a strategic nuclear parity (if not superiority) with the United States is of paramount importance.⁷ This situation alone--a Soviet capability to dominate the Free World unless the US and its allies take continual steps with adequate strategic programs of their own to prevent such domination--insures that we will be faced with a strategic environment of friction between the

superpowers well into the future. While not at war, one cannot describe such a situation as peace. Perhaps this middleground between war and peace which the future holds for us is best described as "The Age of Friction." The only certainty is that the friction will continue.

Despite a continued superpower confrontation, the world is becoming increasingly multi-polar. As regional power centers become stronger and grow in number (based on such criteria as religious ties--example, Islamic fundamentalism; ethnic backgrounds--example, the Palestinian homeland issue; economic cartels--example, the Organization of Petroleum Exporting Countries; and so on) the United States will face even greater challenges in retaining international stability. The prospect of nuclear proliferation in such an environment provides its own set of dangers to future US security.

This discussion of the changing strategic environment that will likely face the US in the 1990-2000 period provides only a glimpse of some of the considerations which must be taken into account in evaluating how American armed forces should be structured to meet our nation's security needs of the future.* The important point is that the world is changing and the pace of change will increase in the future. As those changes occur, US military strategy must keep pace. Alternative national and military strategies that fail to keep pace with new realities of the

world environment will fail to serve the nation.⁹ In the worst case, they provide a disservice rather than a service. And, as was pointed out earlier, "Strategy sets the fundamental condition for operations."¹⁰

The Operational and Tactical Environment: Mid- to High-Intensity

The nature of the high intensity battlefield of the period 1990-2000 (and the 21st Century) is not known with certainty; but it is expected to be filled with highly sophisticated weapons systems of lethality, ranges, and capabilities far beyond what we know today. Air defense systems are expected to affect the use of aerial systems as they currently exist. The devastation and intensity at the locus of battle will make the "fog of war" a physical reality instead of a mere meta-physical abstraction. Target acquisition, surveillance and reconnaissance systems will make long stand-off ranges of weapons the norm. Since no single weapons system is expected to dominate the battlefield, an integration of many systems, arms, and services will be required for success. The expected proliferation of nuclear, chemical and biological weapons makes early and wide-spread use of those weapons likely on that high-intensity battlefield.¹¹

Does this rule out a role for airborne forces; indeed, for all "light forces," on the mid- and

high-intensity battlefield of the 1990's? Certainly not. In fact, light forces are better suited than heavier forces for some missions on that battlefield (especially in Europe). According to a study conducted for the US Army by Edward N. Luttwak, Inc., the missions on the mid- to high-intensity battlefield fall into three major categories: (1) Those best performed by heavy forces; (2) Those which both heavy and light forces can perform; and (3) Those missions that are best performed by light forces. Type missions for each of these categories are:

Missions Best Performed By Heavy Forces

- + Penetration of "hard" fronts.
- + Rapid encirclement of enemy force concentrations.
- + Ground seizure of decisive terrain points or sectors, given a "dense" front.

Missions Which Both Heavy and Light Forces Can Perform (But in which the heavy force could be out-performed)

- + Urbanized warfare.
- + Warfare in "medium" mountains (through which mechanized forces can move).
- + Warfare in heavily wooded areas (or "close terrain").
- + "Expeditionary" warfare in large theaters with low force densities.
- + Coup de main operations.

Missions For Which Heavy Forces Are Entirely

Unsuited

- + Long-range rapid deployment by air.
- + Low-intensity conflict.
- + Warfare in extremes of untraffickability

(examples: Arctic tundra, marshlands, high and/or sharply-contoured mountains).

+ Warfare in extreme terrain compartmentalization
(examples: dense/higher/harder urbanized areas and dense forests, including jungles). 12

One point about the third category should be made. To target heavier, more expensive forces toward the types of missions shown would be an obvious mis-use of resources. Light forces, less expensive to equip, would also not require forward basing. This would represent an additional savings in infra-structure funds (for barracks, support organizations, dependent care facilities, and so on). The total resources saved by using light forces for roles in which they would be better suited than heavy forces would, in turn, provide additional opportunities for force structure in those areas where heavier forces can do a better job.

The second category above is the one that potentially allows the most flexibility to a commander at

the operational level of war. In those cases, the operational commander may find it preferable to use light forces rather than heavy forces in order to free the more maneuverable heavy forces to support his operational plan. Examples of this might be to use the heavier forces to conduct a counter-attack or to conduct a deep attack using maneuver in accordance with AirLand Battle doctrine.

Consideration is being given now to application of the concept of combined arms from a more doctrinally mature viewpoint -- in the same way we combine various combat arms to create a combined arms task force, we can also combine different types of units (tank, mechanized infantry, and light infantry brigades and divisions) to fight the mid- to high-intensity war. In this manner, the commander at the operational level can tailor his forces to better support his operational scheme of maneuver. One example of this is the "heavy/light concept" described by Lieutenant General Jack Galvin (current VII Corps Commander) in his article by that name.¹³ In that article, LTG Galvin pointed out the application of the concept to the European, mid- to high-intensity environment as well as to contingency operations. A paradigm under which US Army force structure planners could apply this "mixed" unit concept to Europe has been developed by Majors James M. Dubik and James Montano in an unpublished article entitled "FM 100-5, Conceptual Models, and Force Design."¹⁴ These ideas lend

credibility to the concept of using light forces (to include airborne forces) in scenarios other than contingency operations and low-intensity conflict roles.

But where does this leave airborne forces in the mid- to high-intensity environment? The term "AirLand Battle" itself provides a clue. The battlefield of the future will not be two-dimensional. The third dimension -- the "air" of the AirLand Battle -- will be more important than ever before. Airborne forces can and should be a part of that dimension. The use of airborne forces will allow the operational commander to exploit the non-linear character of the battlefield. There are two ways to attack the enemy's rear using airborne forces -- infiltrate using small aircraft formations or mass combat power to "blow a hole" in the enemy's air defenses. The non-linear nature of the battlefield will make infiltration an easier task than if the battlefield were linear. If the deep battle action is important enough to the commander's operational plan, he will be willing to mass enough combat power to penetrate the enemy's air defenses. In this manner a sizeable airborne force can be placed in the enemy's rear -- a force large enough so that it cannot be ignored. If that airborne force has the mobility once on the ground to take offensive action, it could be expected to force an "operational pause"¹⁵ in an enemy offensive by causing him to consolidate his now threatened rear. This type of scenario

will be discussed in more detail in Chapter Four.

Low-Intensity Conflict

One previously mentioned category of conflict among nations that is expected to take on greater significance for the United States in the future is that of low-intensity conflict (LIC). Low-intensity conflicts are expected to occur more frequently in the lesser-developed countries than in the more industrialized nations. Because the United States, as a global power, has interests around the world, it must be prepared (both politically and militarily) to deal with such conflicts.¹⁶ This preparation involves re-evaluating US military capabilities to insure the ability exists to respond to LIC threats. This suggests, again, a conscious effort is required to break the mold of enchantment with what is considered the least-likely conflict scenario for American forces--high-intensity conflict with Soviet and Warsaw Pact forces in Europe. This does not mean that the high-intensity (most critical) threat should be ignored. On the contrary, the consequences of such a conflict are so great that that scenario will always take first priority in our defense planning. It does mean that that scenario should not monopolize our planning efforts to the exclusion of most-likely low-intensity scenarios.

To define "low-intensity conflict" is not an easy task. One working definition developed by Robert H. Kupperman is:

Low-intensity warfare is the military recourse of nations and organizations to limited force or the threat of force to achieve political objectives without the full-scale commitment of resources and will that characterizes nation-state wars of survival or conquest. Typically, low-intensity conflict involves relatively small numbers of participants from all sides in relation to the importance of the political objectives at stake; these are always highly leveraged, usually asymmetrical, forms of political action. Low-intensity conflict (whether conducted by the U.S. or by others) can include coercive diplomacy, police functions, psychological operations, insurgency, guerrilla warfare, terrorism, and military/paramilitary deployments with limited goals. While the intensity may be low the duration may be very long. Because unconventional tactics are often used, success in low-intensity conflict is seldom that of conventional victory by force of arms; success often is measured only by avoidance of certain outcomes or by attitudinal changes in a target group. Low-intensity operations are not confined to overseas but may be necessary within the U.S. in response to civil disorder or terrorism. The U.S. Army engages in low-intensity conflict as a major mission in support of U.S. global interests and with the support of the U.S. population.¹⁷

Having defined the term low-intensity conflict, it is useful to discuss the US Army's roles in those types of conflict. Any number of low-intensity warfare scenarios can be developed depending upon the imagination of the analyst. Three popular ones are an American intervention in Central

America, covert American assistance to a friendly African country (an Internal Defense and Development-type operation), and the use of regular Army units to restore order in a major American city.¹⁸ While these scenarios are quite different, they do share a number of common factors such as overriding political considerations to respond to the situation quickly, uncertain intelligence about the area of the conflict, potentially inappropriate military forces available to handle the problem and inadequate logistical capability to maintain a military presence in an alien atmosphere (both in the area of the conflict and amid uncertain political priorities in the US government).¹⁹

These factors are all significant to the US Army as it fashions its units to serve in low-intensity situations in the future--whether those forces are "light infantry" divisions, special operating forces, or airborne forces.

The demographic trends pointed out in the discussion of the future strategic environment also provide possible insights into operational and tactical considerations for the low-intensity battlefield. There is a high possibility that lesser developed countries may channel large portions of their population increases into their armies in order to deal with both internal and external instability. It is useful to speculate on the capabilities of those armies (from both the weaponry and personnel perspectives). Given

economic and industrial realities in the Third World, it would seem reasonable that such armies would not be equipped across the board with the latest in technologically sophisticated weapons. However, it is becoming easier for LDC's to purchase effective, cheap individual weapons from any number of countries. In addition, LDC's will continue to buy limited quantities of certain technologically advanced "special purpose" weaponry such as air defense missilery and anti-tank missiles (One need only look at the British experience in the Falkland Islands in 1982 to realize the impact only a handful of relatively cheap "state of the art" weapons in the hands of Third World combatants can have on the ability of a major power to quickly resolve an armed conflict with minimal loss of lives.) Any tactical or operational plan involving LDC's cannot take for granted the fact that the whole world is in the missile age and that the individual soldier of the LDC will be well-armed. Additionally, the LDC soldier can be expected to be familiar with physical hardship and will be willing to undergo the rigors of combat for long periods.²⁰ The political reality that our government may not be willing to use all the sophisticated lethality at its disposal (to limit collateral damage and civilian casualties) may force the American soldier to fight at a significant strategic and tactical disadvantage and for longer periods of time than he might prefer. To overcome these disadvantages when facing

combat against LDC armies, the US Army must be able to adapt its methods to defeat an enemy other than the Soviets.

Conclusion

Perhaps the key point to be made at this time is a restatement of a point made by Robert W. Komer (former Undersecretary of Defense for Plans) that US forces are capable of fighting in the future in the same manner in which they are sized, configured, equipped, and trained today.²¹ In a similar vein Robert H. Kupperman said:

Only at the end of the 1980s are the American Congress and public likely to realize fully the significance for U.S. national security interests of the slow but steady Soviet geostrategic gains during the decade. Then, America will turn to a period of "interventionism," supported by a public willingness to sacrifice for defense, to preserve aggressively U.S. vital interests abroad--only to find that the decisions not taken in the early-to-mid 1980s on Army doctrine and, more especially, weapons systems will constrain mission capabilities. By then it may be too late to reconfigure the Army's organization and training, or tailor the needed technology for a non-NATO environment.²²

The political bravery required to undertake such a reconfiguring of the US Army as the future requires will be immense. The dilemma facing the nation's leaders (political and military) is significant since it may require: (1) a diversion of resources already committed to NATO toward shaping, equipping and training a force prepared for

low-intensity conflict roles; and (2) modification of those forces remaining in Europe in order to fight a European war "smarter" (using an operational approach incorporating maneuver, offensive actions, and the use of airborne forces). The choices will be difficult ones but they must be made. To paraphrase Bobby Knight, the Indiana University basketball coach, "We must not only have the will to win, we must have the will to prepare to win." The soldiers who will be called upon to fight on the future battlefields deserve that the tough choices be made now. The welfare and security of the nation demand it.

FOOTNOTES

¹ One example of this is Martin Blumenson's article "Some Second Thoughts on the Army's Blueprint for Future Land Warfare," National Guard, Volume 33 (March-April, 1979), pp. 18-20.

² Senator Nunn's remarks were reported by the Army Times in an article entitled "Nunn Calls For Overhaul of Strategy," (April 18, 1983), pp. 23-24.

³ Blumenson, loc. cit., p. 20.

⁴ The Global 2000 Report to the President, Superintendent of Documents, US Government Printing Office, Washington, DC: Volumes I and II--1980; Volume III--1981. Other sources indicate similar findings. For example, see The Future of Conflict in the 1980's by William J. Taylor and Steven A. Maaranen (eds.) (Lexington, MA: Lexington Books, 1983) for a series of articles on this subject by James R. Schlesinger, Robert Komer, Robert S. Leiken, and others.

5 James G. Wilcox (LTC), "Military Implications of the 'Global 2000 Report'," Military Review , LXI, No. 8 (August, 1981), pp. 30-38. Lieutenant Colonel Wilcox's article also analyzes population age structure, international migration, and urbanization in lesser-developed countries. Other sources also indicate similar predictions of low-intensity conflicts in areas of the world outside Europe. For example, see Taylor and Maaranen, Ibid.

6 Wilcox, Ibid., p. 37.

7 Robert H. Kupperman and Associates, Inc., Low Intensity Conflict , Vol. 1--Main Report, p. 2. Contract Number DABT 60-83-C-0002 for the US Army Training and Doctrine Command; June 30, 1983.

8 There are a number of excellent open sources that address these issues in greater depth. Some of them are:

Strategic Requirements For The Army To The Year 2000 , Center for Strategic and International Studies, Georgetown University, October, 1982.

Low Intensity Conflict by Robert H. Kupperman and Associates, Inc.; Contract Number DABT 60-83-C-0002 for the US Army Training and Doctrine Command; June 30, 1983.

"Strategy Process and Principles: Back to the Basics," by LTC Dennis M. Drew, Air University Review, (May-June, 1980), pp. 38-45.

"Strategic Concepts for the 1980's," by COL William O. Staudenmaier, Military Review; Part One--March, 1982, pp. 36-50; Part Two--April, 1982, pp. 38-59.

Airland Battle 2000, Headquarters, US Army Training and Doctrine Command, 10 August 1982.

⁹ One alternative strategy is provided by Colonel William O. Staudenmaier in "Strategy for Survival," Foreign Policy, No 52, Fall 1983, pp. 22-41

¹⁰ Department of the Army, Field Manual 100-5, Operations, 20 August, 1982, p. 2-3.

¹¹ Airland Battle 2000, Headquarters, US Army Training and Doctrine Command, 10 August 1982, p. 1-2.

¹² Edward N. Luttwak, An Historical Analysis and Projection for Army 2000, Part Two: Analysis and Conclusions, March 15, 1983. This paper was prepared by Mr. Luttwak under contract for US Army Training and Doctrine Command (Contract No. DABT-58-82-C-0055); pp. 7 and 22.

13 LTG Jack Galvin, "The Heavy/Light Concept," Armed Forces Journal International , No. 7 (July, 1982).

14 Majors James M. Dubik and James Montano, unpublished article entitled "FM 100-5, Conceptual Models, and Force Design."

15 Luttwak, loc. cit., p. 41.

16 Francis J. West, Jr., "Defense and Security Beyond Europe," Defense 83 (May 1983), 20. Mr. West is Assistant Secretary of Defense for International Security Affairs.

17 Low Intensity Conflict , Prepared for the US Army Training and Doctrine Command (Contract No DABT-60-83-C-0002) by Robert H. Kupperman and Associates, Inc., June 30, 1983; Volume I, p. 21.

18 Ibid., pp. 25-28.

19 Ibid., pp. 30-31.

20 Several examples come quickly to mind. In addition to the US experience in Vietnam, the French experience in

Algeria and the current Israeli experience with Palestinian guerrillas illustrate this.

21 Robert W. Komer, "How To Prepare For Low-Intensity Conflict in the 1980's" in The Future of Conflict in the 1980's , William J. Taylor, Jr and Steven A. Maarenen (eds.), (Lexington, Mass: Lexington Books, 1983), pp. 11-23.

22 Kupperman, loc. cit., pp. 7-8.

CHAPTER 4

FUTURE ROLES OF UNITED STATES AIRBORNE FORCES

Introduction

Airborne forces possess the potential for being a key element of the United States Army force structure in serving US national security interests during the period 1990-2000. This chapter will define the proper roles of those airborne forces at each of the three levels of war -- strategic, operational, and tactical. To illustrate those roles and missions appropriate for airborne forces during the target period, four scenarios will be presented at the conclusion of this chapter.

The nature of future conflict envisioned in Chapter Three is a key to the development of the roles that will be presented here. As was pointed out earlier in this paper, no one possesses a crystal ball with which to view the future with 100% assurance of accuracy. The uncertainty involved in such an effort, however, does not excuse us from making the forecasting effort (and taking our "best shot"). The danger of not projecting future requirements far exceeds the uncertainties of the attempt. The "best shot" I have presented, and upon which this chapter is based, represents

a balanced analysis of the past as well as a reasonable and prudent projection of the important political, social, economic, and military variables that will influence the future.

The most important projection of the future for airborne forces is that all countries in which airborne forces might be used (even the poorest Third World countries) will have entered the missile age by 1990. This is not a startling revelation (or even a new one) ! but it is one that must be accepted and considered by anyone contemplating employing airborne forces during the period 1990-2000. Large airborne drops using techniques of the World War II era are a thing of the past, but airborne forces have not outlived their usefulness. They are not an anachronism. On the contrary, the nature of future conflict will make airborne forces even more valuable in the future than they have been in the past. It means that adherents of the use of airborne forces must recognize the requirements of the future and begin adapting now to those requirements. Only by doing so will the airborne prevent itself from becoming the modern version of the horse cavalry.

The Influence of History on the Future

The history of American airborne forces will have a significant influence on the way both our military and civilian leaders will think about the roles of those forces

in the future. This is natural, but we must not limit our thinking to the traditional when speculating on the employment of airborne forces in the future. Lieutenant General Lewis H. Brereton, Commander of the First Allied Airborne Army during World War II, pointed this out as early as 1947 when he said, "It would be a grave error to project previous experience in airborne operations into the future with the intention of establishing principles and methods of employment based solely on past operations." ²

But the US Army, for the most part, has committed that error. Since World War II, we have failed to envision airborne forces in other than tactical roles when considering mid- to high-intensity conflict. This failure continues today. Despite efforts of some of our key World War II airborne commanders to point out that an airborne force cannot rely completely on the advance of any ground force and that airborne forces should be focused on deeper (operational or strategic) targets, the lessons of Arnhem regarding quick linkups was learned well. That lesson has become dogma within the US Army. One needs only inspect the Operational Concept for Airborne Division 86 to realize how fear of another "bridge too far" influences today's doctrine and will likely affect future concepts.³ Although this document will be commented on in greater detail later, it is clear that its emphasis on limited objectives, precision drops, and quick linkups leads its user to consider only

tactical roles for Airborne Division 86. This mindset will safely prevent the re-occurrence of another "bridge too far." It may also limit the airborne to roles and objectives that are not "far enough." We will look later at some potential roles for the airborne that provide objectives that are "far enough" to decisively influence the action at both the strategic and operational levels.

Technology and the Airborne Method

Airborne warfare is a method, not a weapon. If the employment of airborne forces were a weapon, it would perhaps be subject to obsolescence due to changes in technology in the same way that the Maxim gun became obsolescent. As a method, however, airborne warfare can be improved upon due to technological advances in the same manner that amphibious warfare has been improved upon through technology.

If we understand this, we can overcome illogical arguments which claim that airborne forces are an anachronism and we can escape the error of limiting the horizons in our thinking about the future roles of airborne forces. By harnessing and managing technological developments, we can support any expanded roles of airborne forces that we conceptualize for the future.

Roles of US Airborne Forces Today

Before describing roles for United States airborne forces for the period 1990-2000, it is useful to have a clear understanding of the current roles of those forces. The three levels of war--strategic, operational, and tactical--are again useful in describing the roles that airborne forces play today as an instrument of national security policy.

Strategically, airborne forces are the US Army's only real strategic force. (Although an effort is underway to create other "light," strategically deployable infantry divisions, it may be some time before those divisions are established, trained, and available.) As a strategically deployable force, the airborne division and corps can be used by the National Command Authority anywhere in the world to meet contingencies in which American interests are at risk. They have the necessary combat power and organic combat service support to operate in an austere theater (without a military infrastructure) for a limited period of time. Because of this, they represent the US armed forces' most responsive forced entry capability into areas where American interests must be quickly demonstrated and protected. Moreover, the whole world knows about the 82nd Airborne Division and the XVIII Airborne Corps. The nations of the world--friend and potential foe, alike--view the actions of those units as a manifestation of US resolve when

crises arise. As an indicator of the seriousness with which the United States views political "hot spots" around the world, those forces have served in the past (and will likely serve in the future) as deterrents to conflict.

Operationally, today's airborne forces are most often thought of in connection with the Central Command (CENTCOM). Since those forces are not currently designed and equipped for sustained combat against a sophisticated enemy, they are not expected to fight for long periods without reinforcements (in both combat power and sustainment capability). Their "strike and hold" capability, however, has made them a key element in establishing lodgement areas within the CENTCOM area of responsibility.

Tactically, the organization of the US airborne division is a compromise between mid- and high-intensity warfare requirements and low-intensity warfare requirements. For the mid- and high-intensity scenarios, the airborne division is organized around a sizable anti-tank capability (a brigade of the 82d Airborne Division currently has 54 TOW systems and 99 DRAGON systems). For its low-intensity requirements, the airborne division is relatively high (when compared to other US "infantry" divisions) in number of infantrymen (a "foxhole" strength of 6996 by MTOE). This compromise in organization does, however provide the airborne division with its greatest strength -- the capability to deploy quickly over great distances and fight

immediately once on the ground. The rapid strategic deployability results in tactical surprise at the point of engagement--along with all the advantages that are accrued by that tactical surprise. The speed of deployment is enhanced by the fact that the airborne division currently requires very little outside augmentation by US Army forces. Its pre-deployment ability to tailor itself using organic resources based on the enemy threat it will likely face on the ground allows the current airborne division to meet its requirement of "wheels up, first aircraft" in eighteen hours or less. Were outside augmentation required on a large scale, especially by combat and combat support units, it is doubtful that that eighteen-hour requirement could be met.⁴

"Airborne Division 86"

Having described the current roles of US airborne forces, an analysis of the anticipated roles of those forces in the near-term future is profitable. The concept statement contained in Airborne Division 86, dated November, 1981, is insightful. According to that document,

The airborne division provides the nation with a flexible force that can be deployed strategically and inserted rapidly anywhere in the world as either a deterrent or strike force. As a general rule, after insertion, the airborne division fights as dismounted infantry, but it is not particularly suited for sustained ground combat without major augmentation.⁵

If this is true, a clear lack of vision of future requirements is evident. The emphasis on the dismounted infantry role of airborne forces once on the ground leaves the impression that such forces will be limited to a static defense of an airhead. If this is so, the greatest strength of the airborne division --its strategic mobility -- will not be capitalized upon. Once again it appears the US Army intends to use its most strategically (and potentially its most operationally) deployable combat force in tactical roles. Rather than being used as true light infantry -- relying upon surprise, tactical skill and agility, fluid and firepower-evasive rather than firepower-dependent techniques -- , it appears that it will be used essentially as regular infantry (using "attrition style" tactics) made light for air transport.⁶

The Airborne Division 86 operational concept lists a set of "specific roles and missions suitable for airborne forces." These are:

- (a) Capture one or more intermediate staging bases or forward operating bases for protracted ground/air operations.
- (b) Seize and hold via vertical envelopment vital objectives behind enemy lines until linkup with supporting forces.
- (c) Exploit the effects of nuclear or chemical weapons.
- (d) Rescue US nationals besieged overseas.
- (e) Reinforce forward-deployed forces (if augmented with transportation assets for resupply and troop movement).
- (f) Conduct rapid deployment with tailored forces to an overseas area as a deterrent (show of force).

- (g) Serve as a strategic or theater reserve.
- (h) Conduct large-scale strategic or tactical raids.
- (i) Occupy areas or reinforce units beyond the immediate reach of land forces.⁷

Annex B of Airborne Division 86 provides a hint of an expanded role for the airborne division in the AirLand Battle in that it might delay and disrupt approaching enemy forces "...in the deep battle." * The concept for how that is to be accomplished, using "temporary forward operation bases (TFOB's)," resembles the pre-World War II German operational concept for airborne forces. The idea of using mobility-oriented tactics, hit-and-run assaults from dispersed TFOB's is a promising one that should be expanded upon in future revisions of Airborne Division 86.

Future Roles

In approaching the issue (finally) of future roles of United States airborne forces, there are two divergent approaches that can be taken. The first is that which it appears the US Army is currently taking -- that the future invites no conceptual change for the use of airborne forces; the significant changes that occur will center around equipment improvements and the changes in tactics and techniques that will accrue from those equipment improvements. This is the approach presented by the Airborne Division 86 operational concept. This approach,

while not far-sighted and lacking in a clear vision of future requirements, does possess some positive points.

Chief among these are:

(1) A clear understanding of the need for lightweight, airdroppable equipment that can function rapidly once recovered on the drop zone.

(2) The need for lightweight communication equipment that is compatible with that of the heavy divisions and corps, other services (US Navy, Marine Corps, and Air Force), and the National Command Authority.

(3) A requirement for some form of ground tactical mobility to prevent the airborne infantry units from being only footmobile once on the ground.

The alternative approach is one that favors conceptual changes -- changes based on requirements that will most likely be brought on by the nature of future conflict that was described in Chapter Three. These conceptual changes will, in turn, require organizational, doctrinal, equipment, and training modifications for airborne forces. By such an approach, the requirements of the future will drive equipment design and techniques; instead of equipment modifications dictating the types of missions and roles which airborne forces will be able to accomplish.

Strategic Roles

Introduction

You will recall from Chapter Two that the United States and its Allies used airborne forces during World War II only in tactical roles. This need not be the case in the future. The United States is a world power. There is no area (or theater) of the world in which the US does not have interests. Faced with a Soviet adversary who is expected to challenge the US "on the margins," the US cannot fail to respond to such challenges when US interests are at stake.⁹ US airborne forces of the 1990's will provide a capability for responding "on the margins" with forces tailored to meet the strategic challenges this nation will face. In such circumstances, airborne forces will play both strategic and operational roles.

"Fire-Brigade" Role

In his 1978 White Paper on Defense, Robert Taft, Jr. argued for "responsive 'insertion' forces for other parts of the world" [other than Europe].¹⁰ Essentially a polemic in support of a US maritime strategy, this paper recommended huge increases in US naval and marine forces based on the argument that such forces pose a reduced threat to a "rational" US foreign policy because they do not require that US armed forces be "on the line" to serve US political interests abroad. Instead, Taft argued, they can be inserted from the neutral high seas when a policy

decision calls for them to be committed. Through such reasoning, Mr. Taft also made a case for continuation of and increases in the numbers of US airborne forces in the future. (Mr. Taft, of course, would disagree with such an assertion since he also called for elimination of "...several obsolete types of ground forces, such as paratroopers and foot infantry" 11 in this same paper.) For, much like naval and marine forces, airborne forces can be pre-positioned on the "neutral" ground of intermediate staging bases in or near a theater of potential employment, quickly committed when US foreign policy requires such commitment (by forced entry if required), or withheld from commitment altogether. Recent "Bright Star" exercises have demonstrated that for many parts of the world, intermediate staging bases can be by-passed altogether. Using long-range troop carrier aircraft and in-flight refueling, airborne forces can be employed into a theater directly (by forced-entry if necessary) from the continental United States. Airborne forces are the only US Army forces that provide such a capability on a large scale.

"Coup de Main" Role

There is one category of functions that future US Army forces may be required to perform that has received very little attention to date. That is the category of "special operations." Although, according to the official JCS definition, such operations are "Military operations

conducted by specially trained, equipped, and organized DoD forces...", not all special operations require totally specialized forces. Such is the case with coup de main operations. According to Edward N. Luttwak, the characteristics of coup de main operations are as follows:

As with any Special Operation, it is carried out inside the depth of enemy-controlled territory.

The advantages of mass and heavy-weapon availability are sacrificed to minimize visible preparations (=strategic warning to the enemy) and then transit and insertion signatures (=tactical warning to the enemy).

There is no consolidation and reinforcement pause after arrival : the forces are delivered directly into the target area if not actually upon their specific targets. All mission-essential actions are pre-assigned and command interventions are limited to unexpected contingencies.

Security is obtained psychologically, not physically : the shock of the initial surprise is sustained by the disorienting tempo of movement and action, and then further prolonged by the actual physical effects of disruptive and pre-emptive actions.

Unless the operation terminates the conflict as a whole, the coup de main force will need prompt relief, usually in the form of a link up with forces coming overland, or major air reinforcements.¹²

The significance of this type operation to this discussion is that such operations, while tactical in character, can be quite strategical in scale and offer opportunities for division size and larger formations. One recent example of

"strategic" special operations is the seizure by Soviet forces of the vital centers of Kabul, Afghanistan on the night of December 26, 1979. This operation was carried out by a composite task force built around the Soviet 105th Guards Airborne Division.¹³ A not-so-recent example occurred the night of October 16, 1944 when the German Otto Skozerny seized the vital centers of Budapest during OPERATION MARGARETHE. In each case, the psychological shock imposed by the initial surprise of the operation precluded an effective, coordinated military response by the opposing force. The strategic objectives were accomplished quickly. Such operations may prove useful to the United States in the future.

Forward Operating Base Seizure Role

Airborne forces can be called upon either at the beginning of a major war or for a more limited regional conflict to seize strategic positions on a global basis. These strategic positions might include airfields or intermediate staging bases for both US ground forces and air forces. With Honduras, we have an agreed-to access to airfields from which to project American airpower into the Caribbean area if the need arises.¹⁴ Morocco has formally agreed to allow American aircraft enroute to the Middle East to use its air bases if necessary.¹⁵ But what happens if internal political and security situations in those countries change at the beginning of a regional

hostility and those agreements become de facto invalid? While the local governments may be willing to honor its agreements, dissident groups within those countries may attempt to prevent American use of those facilities. In those cases, the United States may be forced to secure those bases itself (by forced entry if necessary). This would, of course, be done with host nation concurrence (and perhaps at their request). American airborne forces provide the means to carry out such an operation.

Geo-strategic Role

The United States is currently on its way toward institutionalizing a maritime strategy. Under the dynamic leadership of Secretary of the Navy John Lehman, the US Navy is rebuilding its conventional naval forces with the goal of having a fleet of 600 deployable ships. Even with this buildup of naval forces, security of those forces cannot be taken for granted when employed into many geographical settings. For example, to operate in the Persian Gulf during a Gulf area crisis, US sea lines of communication pass near Soviet air and naval combat reconnaissance bases in Ethiopia and South Yemen. Airborne forces provide one method of eliminating such threats to US naval forces operating in that area. In addition, airborne forces provide the capability to control land masses adjacent to key strategic straits throughout the world (such as those land areas surrounding the Strait of Hormuz).

Strategic/Theater Reserve Role

As in World War II, airborne forces can serve a useful function as either theater or strategic reserve forces. When so used, they should be targetted against objectives that are of high value to the enemy. They should not be used simply as extra infantry. To do so is to fail to use a reserve force in a way that provides a decisive effect on the action in the theater. Moreover, the threat that airborne forces can be used against high-value targets deep in the enemy's rear alone can inhibit an enemy commander in his actions. On the strategic level, causing the enemy to keep forces out of the main battle in order to respond to a potential threat to key installations in his rear area is an added dividend of possessing airborne forces.

Political Role

Airborne forces will most probably continue to be used, even during the 1990's, as a political instrument to dramatically indicate to the rest of the world the seriousness with which the United States views a potential problem anywhere around the globe. In such a role, the emphasis will continue to be on deterrence of conflict. Such actions as military show of force by quick deployment with tailored forces to an overseas area, mere

administrative movement to intermediate staging bases or forward operating bases to demonstrate national resolve, or commitment of airborne forces into a theater as an initial "trip wire" for insertion of a larger force are all examples of how US airborne forces might be used as a political instrument at the strategic level. In such cases, the purpose is more political than military.¹⁶ As a vanguard, airborne forces provide a military option that dulls the edge of a crisis -- using pre-emptive power projection to reduce risk by reducing an adversary's opportunities and options. This is further explained in the following excerpts from a letter by Major General Guy S. Meloy, a former commander of the 82d Airborne Division, to the Commander, XVIII Airborne Corps:

The accelerating pace of the development of technology insures that the application of force to achieve national ends will invite increasing risk. High degrees of mobility and firepower along with almost instantaneous global communications will make it difficult to choose military force as a viable option. Perhaps more than any other characteristic, timeliness of application becomes a critical factor in any power equation....Generally, in situations where the use of military force is considered an option, the risk involved in applying that force is minimal at the onset...Therefore, military force will probably have its greatest effect if used at the very onset of a situation....In sum, there is basis for concluding that in some circumstances, the sooner the military force option is exercised the greater the impact on the adversary will be. Further, the application of even a small force early in a crisis can have a profound effect and may well outweigh the choice of having to insert a heavier force later.¹⁷

Operational Roles

Introduction

Recently Lieutenant General (Ret) James Gavin commented that we "should not deify World War II" 18 when speculating on the proper roles of airborne forces in the future. Even when we do accept the fact that the world and the nature of conflict have changed greatly since World War II, we cannot escape the influence of that glorious period in airborne history. Lieutenant General Brereton addressed this issue in 1947. Citing the May, 1942 version of Field Manual 31-30, Tactics and Techniques of Airborne Troops which stated that airborne troops should not be employed unless they can be joined by ground forces within 3-5 days, LTG Brereton criticized what he described as a consensus of military opinion that still held to the conviction that airborne forces would operate primarily in a tactical role.¹⁹ He concluded from this that "This attitude precluded the concept of strategic [or operational] employment of airborne forces as a primary role." ²⁰ Brereton was not alone in his convictions on this matter. Other proponents of the strategic and operational use of airborne forces felt regret for failing to convince others that airborne forces had other than local tactical uses.

They were concerned that their failure would jeopardize the future of the airborne method.²¹ Our challenge today is to overcome those same historical bonds.

From an operational point of view, airborne forces have usefulness beyond the CENTCOM-related scenarios in which they are most often thought of today. Given today's running debate about the necessity for the US Army adopting a "maneuver style of war," it is appropriate that we examine airborne forces for uses that maximize their potential operational mobility and maneuver capability in the third dimension.²²

"Desant" Role

The Soviet model for employing their airborne forces (or desantniki) offers potential operational roles for United States airborne forces given a mid- to high-intensity conflict in Europe. The Soviet operational desant is designed to strike deep in the enemy's rear to interdict enemy reserves or to strike second-echelon forces before those forces impact on the primary battle occurring in the main battle area. Alternate objectives of those desant forces include nuclear storage sites, major supply depots, and key communication centers. Although less glamorous than going after major combatant units, the elimination of such alternate targets does possess the potential for significantly reducing the cohesiveness (or "synchronization") of the enemy's defenses. The Soviet Army

intends to overcome one of the major drawbacks of using airborne forces in such an offensive role -- low mobility (3 miles per hour) of the airborne troops once on the ground -- by equipping those forces with the BMD (Boevaya Mashina Desantnaya). This mechanization provides several advantages:

(1) The airborne force, once delivered, is no longer limited to tactical defenses of limited areas (an airhead). They now have the capability to maneuver over larger areas within the enemy's rear in an offensive manner. Potential targets include not only pre-designated objectives but also "targets of opportunity" such as fire support, reinforcement convoys, and weakly defended combat service support installations.

(2) Ground mobility allows the drop zones to be farther away from the intended objectives than if the airborne force were only footmobile. This flexibility provides the opportunity for the relatively vulnerable troop carrier aircraft to avoid intact air defenses near ground installations of major importance. The attacking force, landing some distance from its intended objective, can then quickly drive to its objective.

(3) Ground mobility allows for the use of more dispersed drop zones, further reducing troop carrier aircraft vulnerability to enemy air defenses. The ability to assemble by driving from these smaller, dispersed drop

zones to assembly areas or directly to the objective reduces the overwhelming emphasis on mass on the drop zone that has influenced airborne tactics since North Africa and Sicily.²³

The key point of this discussion of the Soviet desant concept and the advantages of ground mobility is that such operations have the potential for decisively influencing the action, disrupting the enemy's plans, and introducing unexpected contingencies into the enemy's decision mechanism in a far more significant manner than mere tactical assaults along the FEBA. The deeper the objective of the airborne force, the higher (and more decisive) will be the potential pay-off for the friendly theater commander.

Considerations For "Deep" Operations

There are several points that should be addressed when considering airborne strikes deep in the enemy's rear. First, the commander who commits that force (normally the theater commander) is faced with the decision of what to do with that force once it has accomplished its assigned ground mission. His options are threefold: linkup with the airborne force using ground troops, extract the airborne force, or cause the airborne force to remain in the enemy's rear and fight an independent, potentially unsupported action. The third option will seldom be accepted -- it will most likely result in the airborne unit being destroyed as

an effective force. That option will be accepted only when absolutely essential and when the benefit justifies the cost of losing the airborne unit (in most cases a theater reserve asset). The first two options -- extraction and linkup -- result in using combat actions at the line of contact to supplement the airborne assault (either to linkup or to relieve enemy pressure on the airborne unit so the extraction can occur).

Secondly, the use of airborne forces deep in the enemy's rear is, of course, one example of maneuver in the deep battle when viewed in the context of AirLand Battle doctrine. Such use is as applicable to the nuclear battlefield as to the conventional battlefield.²⁴ As such, it can be offensively oriented, aimed at creating "windows of opportunity" by being closely linked with the close-in fight. It represents a proactive role for airborne forces of the first order.

Finally, the deeper the target, the less the risk of an immediate and powerful counterattack against the airborne force.²⁵ It will be equally true on the battlefield of the future. The density of combat troops decreases as one goes deeper into the enemy's rear. Therefore, once on the ground, the survival of the airborne force is increased the deeper it is committed. This presupposes, of course, that enemy air defenses have been overcome. That subject will be dealt with in the following chapter. Should the enemy force

be withdrawing or in retreat, that air defense may be significantly weakened. The exploitation and pursuit, then, make airborne assaults deep into the enemy rear even more feasible in the mid- to high-intensity combat environment. In addition, the threat of Soviet forces using nuclear weapons against an American airborne force deep in their rear (on Soviet territory) may be less than if the attacking force were in their rear rear (on German or Warsaw Pact soil).

"Vanguard" Role

The pre-World War II concept of using airborne forces as the spearhead of a vertical envelopment or vanguard of air-landing troops or other forces has found limited current application. This is true due to the forced entry capability which those forces possess. The same will be true in the foreseeable future. This, of course, refers to contingency area operations (of which CENTCOM is one subset). We now use the phrase "secure a lodgement area" to describe the concept, but the idea is essentially the same as the German used in Crete. This concept is especially likely to succeed in areas where airbases are scarce and ground defenses are scattered. Given an isolated theater, the airborne force itself may prove decisive. In many ways such airborne operations are similar to amphibious landings.²⁶ Since creation of the Rapid Deployment Joint Task Force (now CENTCOM), there has been a great deal

written about such operations. We will not re-plow that ground (other than to present one possible scenario later in this chapter). One recommended reading on the subject of airborne forces in conjunction with CENTCOM is "Roles and Missions of Airborne, Ranger, and Special Forces in Contingency Operations," a thesis prepared by Major Charles D. McMillin at Fort Leavenworth in 1979.²⁷

Tactical Roles

Introduction

The tactical nature of the roles for airborne forces spelled out in Airborne Division 86, given a mid- to high-intensity conflict environment, has already been pointed out. The pre-World War II German dislike of such limited employments has also been described.²⁸ Given a mid- to high-intensity conflict, it seems a reasonable assumption that United States airborne forces will serve as a strategic or theater reserve. If this is true, there is strong rationale for using those forces in a strategically or operationally decisive manner. Maurice Tugwell pointed out several reasons for this in Airborne To Battle when he said:

Such [airborne] operations are also expensive in terms of air effort. The risk and the expense can only be justified when the prospect of making a decisive contribution to victory is good or where some less vital aim can be achieved more efficiently than by any other method. Where the reward can only be small it

is questionable whether the airborne method should be employed at all.²⁹

Historical Roles

There may be times, however, when a theater commander may be forced to employ his airborne forces in less than battle-deciding roles (for example, to reinforce isolated ground units separated from their parent unit -- a not uncommon occurrence on the non-linear, fluid battlefield of the future; to exploit nuclear or chemical weapons effects; to seize and control critical choke points along a route of attack). In such cases, the commander has several options on how he may employ the airborne. The most obvious way of tactically employing airborne forces is to follow the precedents set by the Allies during World War II. This entails targetting the airborne force against relatively "shallow" objectives that provide immediate or near-term advantages to the ground force commander. Since the airborne force is inserted in the "near rear" of the enemy, the enemy may be able to quickly assemble his mobile combat forces in response to the airborne assault.³⁰ The requirement exists, then, to quickly relieve the airborne forces by linkup with ground forces. The ground force should be able to conduct that linkup while enroute to its ultimate objective (along its axis of advance). Otherwise,

the ground force must be diverted from its objective into an area that it might otherwise avoid.³¹ Additionally, the World War II model would have the airborne force delivered onto only a small number of large drop zones in close proximity to its objective. Considering the deadly air defenses expected along the FEBA in a high-intensity combat environment, such an employment concept would almost assure high losses of troop carrier aircraft enroute to the drop zones. Once delivered, the airborne troops would be massed on the few drop zones used. They would become both a lucrative and very vulnerable nuclear or chemical target. Given all this, such an employment scheme offers little hope for success.

Multiple Target Role

One alternative to this historical approach is the employment of airborne forces against multiple targets using dispersed drop zones. Such a tactic takes into account the realities of modern air defenses. While the element of mass (in the manner of division- and brigade-sized drop zones during World War II) is downplayed somewhat, the combat power of smaller units using sophisticated, light weapons can make up qualitatively for the resulting decrease in numbers. Such smaller units (battalions, companies and platoons), using some form of enhanced ground mobility, could significantly contribute toward the tactical success of ground force operations. The effectiveness of that small

airborne force will increase in direct relation to the decline in trafficability of the terrain into which it is inserted.

Light Infantry Role

Another approach might be to retain our airborne forces as the closest thing the US Army currently has to a true "general purpose force" by avoiding the temptation to mechanize them. They would, in effect, be light infantry. Given such a situation, current tactical methods might resign those forces to rear area protection missions. This might appear to be a reasonable mission for light infantry forces suffering from a material inadequacy to fight the traditional attrition-oriented, firepower-intensive battle we now expect our forces to fight. To fight such a battle in a high-intensity environment, airborne forces would certainly have to be "souped up" with combat power (examples are heavy artillery, air support, and additional combat engineer assets). On the other hand, airborne forces possess an elite character, an institutionalized training emphasis on individual and small-unit initiative and physical conditioning, a familiarity with austerity that comes from their relative "lightness" (the paratrooper lives out of his rucksack), and a demonstrated willingness to accept danger as an everyday circumstance (they volunteered for parachute duty). Because of this, they have great potential for capitalizing on the relative mobility

advantage a footmobile force possesses in heavily wooded and mountainous terrain. Working out of mobile operating bases in those mountainous or heavily forested areas and by applying "fire-power evasive" versus "fire-power intensive", small unit hit and run tactics against an enemy heavy force, airborne forces can contribute to the tactical battle. This contribution can be made whether the fighting takes place in Europe (where an estimated 27% of the Federal Republic of Germany is urbanized or heavily wooded³²) or in other (extra-European) areas such as the Zagros mountains of Iran. In addition, the tactical repertoire of airborne forces can be expanded to include long-range reconnaissance, sabotage, assault raids, and pre-emptive seizure of key locations such as bridges, fording sites, airstrips, and mountain passes.³³

Decisive Versus Temporary Advantage

One further comment is in order with regard to the use of airborne forces in tactical roles. During World War II, considerable resentment developed against the Allied airborne forces because they were not committed as often or for as long a period as the regular infantry.³⁴ There was resentment also by many ground commanders over the cost (in both aircraft to support them and the manpower to fill their ranks) of the airborne units. Along with this resentment came pressure to use the airborne forces, even when appropriate objectives for those forces were not

available. This may be true in the future as well. We should not use airborne forces for tactical roles just for the sake of using them. They should be used for a decisive gain rather than a mere, temporary tactical advantage.³⁵

Scenarios

To illustrate the types of roles and missions appropriate for United States Army airborne forces during the period 1990-2000, four brief scenarios will be presented. They are not intended to represent the most likely scenarios to occur in the target period. Instead, they are offered as examples to demonstrate many of the considerations that have been presented in general terms earlier in this chapter. There is, of course, no limit to the number of examples of the use of airborne forces in the future -- the possibilities are limited only by the imagination of the reader. In developing the four scenarios that will be presented here, it was useful to distinguish between the three major categories of situations in which United States military forces might be employed. These three categories are:

(1) A high-intensity war in Europe against Soviet/Warsaw Pact forces (Two scenarios are presented -- the use of airborne forces against a deep target in an operational role and the use of those same forces against a more shallow target in a tactical role).

(2) A mid- to high-intensity conflict against Soviet or Soviet-proxy forces in an area outside Europe proper (The scenario presented is a USCENTCOM-related one in which airborne forces play an operational role).

(3) A low-intensity conflict in a lesser-developed country against non-Soviet forces who are equipped partially with Soviet weapons (The scenario uses airborne forces in a strategic/political role).

Scenarios that resemble actual, recent employments of airborne forces (for example, the 1983 rescue mission into Grenada to evacuate United States nationals) have been avoided. Most of the unit after-action reports and reports of lessons learned by the many study groups commissioned to analyze the operation are still classified.

Scenario #1: High-Intensity European Conflict (Operational Role)

The setting for this scenario is a major, high-intensity conflict in Europe between the NATO Alliance countries and Soviet/Warsaw Pact forces. The Soviet Union, following a period of increasing tensions between themselves and the United States, initiates a major, non-nuclear attack across the eastern border of the Federal Republic of Germany. For the purposes of this paper, the amount of strategic warning which the NATO forces receives is not at

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LAND POWER 1990-2000(U) ARMY COMMAND AND GENERAL STAFF
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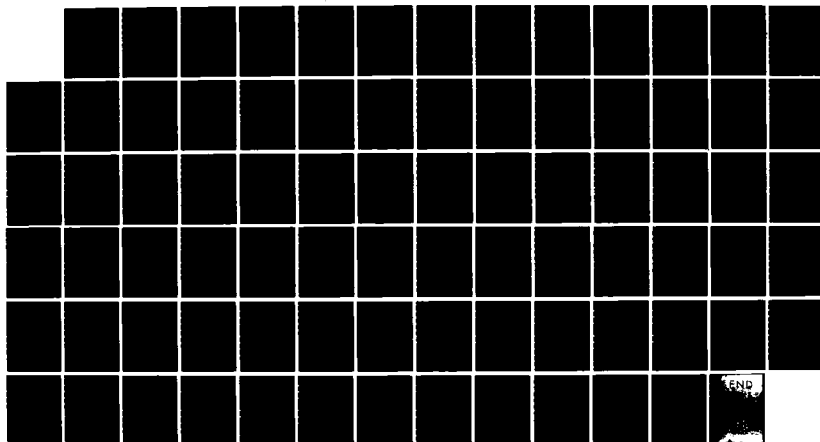
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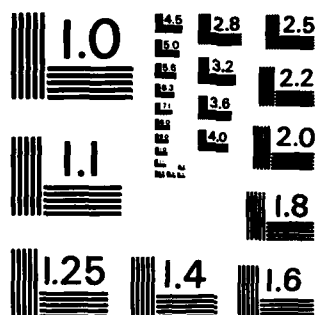
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issue. Based on its forward-defense posture and pre-combat preparations, however, NATO is able to initially delay major Soviet territorial gains. CONUS-based American military forces are rushed to Europe to reinforce NATO. Those reinforcements include US Army airborne forces and the light infantry divisions which had been in existence since the mid-1980's. Those forces are well-trained, elite units capable of immediate employment upon arrival in the theater. The airborne and light infantry forces are initially held in theater reserve.

The Commander-in-Chief, Allied Forces, Central Europe (CINCENT) is determined to prevent substantial Soviet ground gains. He knows, however, that the Soviet preponderance of forces will eventually make those gains unless he takes early, offensive actions to wrest the operational initiative from the enemy. For that reason, he requests and receives early commitment of a major portion of American airborne and light infantry forces being held in theater reserve. His operational plan calls for synchronized actions throughout the CINCENT sector. Using his air forces to interdict Soviet forces being marshalled for commitment, he directs offensive actions by his army groups to defeat the Soviet first-echelon fronts. Identifying the Central Army Group (CENTAG) as his most critical sector, the CINCENT decides to use his airborne and light infantry forces in a deep attack role designed to

delay the first-echelon combined arms army of the Soviet follow-on front threatening CENTAG. The forces available consist of two US Army airborne divisions and two US Army light infantry divisions -- along with an airborne corps headquarters and appropriate support units. His operational plan calls for the two airborne divisions to secure four airfield complexes that are located astride major Soviet lines of communications into the CENTAG sector. In addition, those airfields are situated within several large, densely wooded areas near the international border. The airfields, while relatively short and austere, provide sufficient base areas into which the two light infantry divisions are subsequently air-landed. The introduction of both the airborne divisions and the light infantry divisions is made possible through the use of fast, low-level-capable troop carrier aircraft which the United States Army and United States Air Force had jointly developed and funded during the previous decade. Known as the C-17, those aircraft provide continued sustainment of the four-division force in the enemy's rear throughout the operation. Defeat of enemy air defenses in both the initial assaults and subsequent airland missions is accomplished through the massing and orchestration of air and ground assets along the designated air corridors (This is aided by the gaps in enemy air defenses caused by the non-linearity of the battlefield in the CENTAG sector).

The result of the deep, four-division size attack into appropriate terrain in the enemy's rear is an operational pause in the Soviet forward movement of his second-echelon front. As a consequence, CENTAG is able to halt the attack of the Soviet first-echelon front before having to deal with the enemy second-echelon forces. By using his airborne and light infantry forces in a proactive manner, the CINCENT creates an operational situation which allows him to seize the initiative from the enemy. Failing to achieve the quick territorial gains he had anticipated and facing increased risks to his forces by the mobile, light forces in his rear, the Soviet commander halts his attack.

Scenario #2: High-Intensity European Conflict (Tactical Role)

The setting for this scenario is similar to that for Scenario #1 -- a high-intensity war in Europe against Soviet/Warsaw Pact forces. The CENTAG Commander anticipates a pause in the Soviet attack as a result of a CINCENT operation deep in the enemy's rear (Scenario #1). He plans to take advantage of that lull by conducting a corp-size counter-attack against the flank of the second-echelon combined arms army in his sector and regaining any ground lost during the early days of the Soviet invasion. Two major terrain features along the axis of advance of his

attacking corps, however, present impediments to the speed of the attack. He requests and receives attachment of one US airborne division to secure those two terrain features -- a critical bridge crossing site and a major densely-wooded, hilly area astride the intended axis of advance. The planned airborne assaults by two brigades of the airborne division (one brigade is to be held in ready reserve to reinforce if necessary) is timed to occur after the attacking American ground forces (one corps) have successfully penetrated the enemy line of contact. Securing each of the terrain objectives prior to the arrival of the ground forces, the airborne forces facilitate that attack by allowing the ground forces to maintain their momentum throughout the attack. Without the airborne forces assuring its security at each of the two major points of risk, the corps would have been forced to slow its momentum. Although the corps counter-attack might succeed without the employment of the airborne force, the assurance of success is increased. The key differences between the roles of the airborne forces in this and the previous scenario are (1)The airborne assaults are supplementary to the corps main effort--the ground attack by heavy forces; (2)The airborne ground objectives are "shallow" relative to the "deep" objectives in Scenario #1; (3)The linkup of the airborne force to the attacking ground unit is critical to the tactical success of the corps commander's plan; and, (4)The

employment of the airborne force is not battle-deciding, but it does provide an immediate tactical advantage to the ground force commander.

Scenario #3: Mid- To High-Intensity Non-European Conflict
(Operational Role)

As part of the United States Central Command (USCENTCOM), US Army airborne forces are capable of serving as a vanguard for follow-on, heavier forces during a deployment of American military forces into the CENTCOM area of responsibility. This scenario describes two potential operational employments of those airborne forces.

Iran, beset with internal political and civil unrest following the death of its religious and political leader, has suffered a series of major battlefield defeats by the Soviet-equipped Iraqi Army. Economic pressure resulting from the loss of oil revenues brought on by this protracted conflict has led to more serious civil disturbances throughout Iran. Taking advantage of the internal Iranian situation and invoking its 1921 Mutual Defense Treaty with Iran, the Soviet Union initiates an invasion of northern Iran under the cover of a major military maneuver in the Azerbaydzhanskaya SSR. The Soviet goals are to establish control of the Iranian oil fields and oil facilities along the Persian Gulf and to secure warm-water ports in that area.

The United States, under the Carter Doctrine, quickly commits its CENTCOM forces to the defense of those areas. Using airborne forces as the spear-point of its operation, the USCENTCOM Commander capitalizes on the forced entry capability of those forces to secure initial lodgement areas for heavier, follow-on forces along the Persian Gulf. United States Marine Corps forces quickly join the airborne forces and expand the initial lodgement areas, providing much-needed depth to the bridgeheads for the heavier Army forces arriving by sea. As those heavy tank and mechanized forces arrive to continue the fight, the airborne forces are designated as theater reserve. Re-positioned to airbases in neighboring Oman, Bahrain, and Saudi Arabia, those forces remain marshalled and ready for use.

Not realizing beforehand the speed with which American forces would react to its ill-advised invasion, the Soviet Union is faced with a formidable United States defense against its forces moving south. Intent, however, upon a victory, the Soviets launch a three-division attack out of western Afghanistan with the intent of turning the flank of the American forces defending the Persian Gulf port facilities. Those three divisions move with great speed to the south and west, hoping to reach the vicinity of the Strait of Hormuz before American forces can react. This is not to be, however. The CINCENTCOM, realizing the Soviet dependency upon the few roads in the eastern portion of Iran

(for both movement and re-supply), commits an airborne division to the rear of this new enemy thrust. Employed along the enemy lines of communication and working out of the mountainous areas astride those LOC's, the airborne division disrupts the new Soviet threat by making repeated, lightning attacks against Soviet combat and combat service support units traveling along the restricted road network. Faced with dwindling support, the vigor of the three-division Soviet thrust is quickly dulled.

Scenario #4: Low-Intensity Conflict (Strategic Role)

There is an unlimited number of possible scenarios available to illustrate the employment of airborne forces in low-intensity conflict roles. The failure of United States forces to retrieve American hostages from the US Embassy in Tehran (and the resulting tragedy at Desert I) led to concentration on the ability to carry out hostage rescue operations for several years. Yet hostage seizures make up only a small portion of the threats to United States security interests posed by low-intensity conflict (LIC). Likewise, future LIC missions will not be limited to repeats of our recent intervention in Grenada. In the words of Lieutenant General (Ret) James M. Gavin, we cannot expect our next LIC operation to be simply "Grenada times two" -- [a replay of Grenada but only twice as large].³⁶ The repertoire of LIC capabilities which U.S. forces must

possess must go beyond our current assumption of a friendly, supportive host country inviting us to replay our internal defense and development efforts of Vietnam. According to Robert H. Kupperman, that assumption is unrealistic for the future. Kupperman warns of a US Army requirement to accomplish simultaneously, or in concert, a wide range of LIC missions including:

sophisticated political-military analyses, overt intelligence collection, civic action, long-range surgical strikes, raids, rescues, escape and evasion, personnel snatches, counterterrorism, security assistance management, mobile training teams, interdiction, sabotage, insurgency, stay-behind forces, counter-insurgency, psychological operations, resistance formation and long-range reconnaissance, to name a few.³⁷

What follows is one scenario involving a long-range surgical raid of enough importance to qualify as strategically significant.

Following several years of relative peace in the Middle East, the radical and unpredictable Libyan government unilaterally declares all foreign vessels and aircraft transiting the Mediterranean Sea within 100 nautical miles of the Libyan coast are in violation of Libyan national waters and airspace. This immediately results in an international outcry -- yet few nations are willing to challenge Libyan claims. The United States immediately conducts a naval show of force within the Gulf of Sidra to demonstrate its support of the internationally respected

freedom of the seas in the area. Libya does not challenge the American forces. Two weeks later, however, Libyan aircraft begin harassing international airflights in the area. The United States responds by forward-basing several US Air Force tactical air squadrons at Egyptian airfields, to include AWACS aircraft. One week later a Japanese oil tanker enroute from the Suez Canal to a southern French port is attacked and sunk by a highly sophisticated, long-range surface-to-surface missile fired from the vicinity of the Libyan city of Darnah. Libya quickly announces to the world its intention to impede all oil shipments throughout the Mediterranean. A major crisis is at hand.

Through its available intelligence sources, the US determines the Libyan government possesses three missile launching sites on the outskirts of the city of Darnah. Among the actions which the American President decides upon (in addition to other actions beyond the scope of this paper) is a long-range surgical raid intended to rid Libya of this capability. With this action, according to the President, he intends to "make the punishment fit the crime." ³⁸ Since a timely response is considered critical (remember the commonalities of LIC in Chapter Three), the National Command Authority decides upon the use of a mission-tailored US airborne division to conduct the raid. The Egypt-based US Air Force aircraft and a US Navy carrier battle group effectively interdict the sizeable

Libyan air forces that can interfere with the airborne operation. With follow on US Marine Corps forces standing by to assist, the airborne division marshalls at its departure airfield in the continental United States. From there it flies directly to its target -- the three missile launching sites. The strike achieves both strategic and tactical surprise. The psychological shock imposed by the surprise of the airborne operation and the effective USAF/US Navy air interdiction effort preclude an effective, coordinated military response by the Libyan military forces. The moral effect of the parachute delivery achieves results which far surpass the number of troops involved. The "first battle," because of decisive action by the National Command Authority, is also the last battle.

Conclusion: "Plug-in" Versus Proactive Roles

We have described what airborne forces can and should do on the battlefield of the future, particularly the mid- to high-intensity battlefield. We should now analyze what airborne forces should not do on that battlefield.

Following World War II, the US Army, European Theater of Operations (ETO) established a General Board to report, based on experiences and lessons in the ETO, on the types of divisions which should be retained as part of the post-war Army. This General Board reported on the World War

II airborne division. Among its findings was an observation that the airborne divisions were assigned successive ground missions to fight as infantry divisions for extended periods once their primary missions had been accomplished. Noting the superior fighting qualities, initiative and aggressiveness of the paratroopers, the General Board also pointed out the necessity for developing greater staying power (specifically adequate artillery, anti-tank weapons, adequate mobility, and supply means) in order to allow the airborne division to conduct heavy and sustained fighting.³⁹ This will be true for the airborne division of the future (and the new light infantry divisions) if we use them only as augmentations (or "plug-ins" ⁴⁰) to heavier forces in a mid- to high-intensity environment. A plug-in role reveals a traditional, conservative, attrition-oriented attitude. If airborne (and light infantry) forces are expected to conduct a toe-to-toe fight with Soviet heavy forces, they must be heavily augmented.

In addition, using airborne units (regiments or brigades) as plug-ins to standard (non-airborne) divisions is to overload the standard division staff with planning duties for which it is not prepared. The planning of an airborne operation requires a staff that, by training and experience, is expert. For that reason, the General Board recommended that airborne units not be used as "plug-ins" to standard units. ⁴¹ In addition, to expect the standard

division commander to control the airborne unit after the airborne assault is unreasonable.

The standard division commander and staff cannot undertake the task, except from a distance, simply because they are unable to enter combat with the parachute formations by reason of their inability to jump. Even were they so qualified their main duties lie with the uncommitted ...division which is their parent unit.⁴²

The alternative is to capitalize on the surprise and speed which airborne forces accrue as a result of their lightness by using them in proactive, offensive roles such as have been described in this paper. Airborne forces should not jump into the enemy's rear and then simply defend trees by slugging it out in a fire-power duel using linear tactics. They should be targetted against objectives which allow them to take offensive action once on the ground, thereby having a decisive impact on enemy plans and supporting the friendly commander's operational plan.

FOOTNOTES

¹ For example, see the following:

Michael Hickey, Out of the Sky: History of Airborne Warfare (New York: Charles Scribner's Sons, 1979), p. 271; John Keegan, Six Armies in Normandy (New York: The Viking Press, 1982), p. 81; and, John Weeks, The Airborne Soldier (Dorset, England: Blandford Press, 1982), p. 179.

² LTG Lewis H. Brereton, "Role of Airborne Forces in Future Warfare," a speech delivered at the National War College, Washington, D.C., February 3, 1947.

³ Operational Concept For An Airborne Division , "Airborne Division 86", a document prepared by the United States Army Training and Doctrine Command, 9 November 1981.

⁴ Interview conducted with Lieutenant General Jack V. Mackmull at Fort Leavenworth, Kansas on 4 October 1983.

⁵ "Airborne Division 86", paragraph 3.a., p. 1.

⁶ Edward N. Luttwak, "Paper Number 9: The German Army of the Second World War--The Parachute Troops," Historical

Analysis and Projection for Army 2000 , March 1, 1983,

Preface.

⁷ "Airborne Division 86", paragraph 3.c.(2), p. 2.

This "missions" list for airborne forces closely parallels the list found in the 1943 edition of War Department Training Circular Number 113.

⁸ Ibid., paragraph 3.a.(1), p. B-1.

⁹ One historical example of a nation attempting to "refuse" a theater was Hitler's neglect and subsequent defeat in the North Africa theater -- a theater his major adversary deemed important. For a discussion of this, see The Campaigns In Egypt and Libya: 1940-1942 by D.W. Braddock (Aldershot, England: Gale and Polden, Ltd., 1964), p. 158.

¹⁰ Robert Taft, Jr., "White Paper on Defense: A Modern Military Strategy for the United States," (in cooperation with Senator Gary Hart); Washington, D.C., May 15, 1978; p. vi.

¹¹ Ibid., p. iii.

12 Extracted from "Selecting Near-Term Priorities for U.S. Defense Planning: Persian Gulf Contingencies," C&L Associates, 27 December 1979 for the Office of Net Assessment, OSD/DoD.

13 For a more detailed discussion of this operation, see Kenneth Allard's article "Soviet Airborne Forces and Pre-emptive Power Projection," Parameters, Vol X, No. 4 (December, 1980), 48.

14 Francis J. West, Jr., "Defense and Security Beyond Europe," Defense 83 (May, 1983), 16.

15 Ibid.

16 Colonel Peter J. Boylan, "Power Projection, Risk, and the Light Force," Military Review, LXII, No. 5 (May, 1982), 69.

17 Letter from Major General Guy S. Meloy, Commander, 82d Airborne Division, to the Commander, XVIII Airborne Corps, Subject: Concepts and Requirements Review for Airborne Forces in the Army of the 1990's, dated 22 January 1981.

18 The author had the privilege of interviewing Lieutenant General (Ret) James M. Gavin, World War II commander of the 82d Airborne Division, during his visit to Fort Leavenworth, Kansas on December 6, 1983. General Gavin made the point several times during the interview that the world is different now than it was in 1944-45 and that we must accept the differences.

19 Brereton, loc. cit., p. 10.

20 Ibid.

21 For example, in a memorandum dated 29 February 1944 from General H.H. Arnold to General George Marshall, General Arnold commented on the failure of airborne commanders to convince General Eisenhower "...that massed airborne forces are capable of being employed in an immediate strategic or long-range tactical role in addition to the immediate tactical role." (OPD 381, Case 217). Note the absence of the term "operational" in the writings and correspondence of the period.

22 For example, see "Maneuver: The Dynamic Element of Combat," by Colonel Wallace P. Franz, Military Review, LXIII, (May, 1983).

23 Further information on the Soviet desant model can be found in C.N. Donnelly's "The Soviet Desant Concept," International Defense Review , December, 1971, pp. 544-546. See also "Soviet Airborne Forces and Pre-emptive Power Projection," by CPT Kenneth Allard, Parameters , December 1980.

24 Otto Heilbrunn pointed out the value of conventional forces in the rear on the nuclear battlefield in his observation that "...a commander without forces in the enemy rear fights his battle, be it nuclear or conventional, only on half the battlefield..." Warfare In the Enemy's Rear , (New York: Frederick A. Praeger, Co., 1963), p. 208.

25 This was originally pointed out by LTG Lewis Brereton, loc. cit., p. 13.

26 Lieutenant Colonel James A. Bassett pointed out this analogy in "Airphibious Warfare," a master's degree dissertation prepared at Georgetown University, June, 1948.

27 Charles D. McMillin (MAJ), "Roles and Missions of Airborne, Ranger, and Special Forces in Contingency Operations," a student MMAS thesis prepared at Fort Leavenworth, Kansas, 1979.

28 Recall the quotation by General Kurt Student in Chapter Two recorded by Professor Dr. Freiherr von der Heydte, "Die Fallschirmtruppe In Zweiter Weltkrieg" in Bilanz des Zweiten Weltkriegs , (Oldenburg/Hamburg, 1953), p. 181.

29 Maurice Tugwell, Airborne To Battle: History of Airborne Warfare 1918-1971 , (London: William Kimber and Co., Inc., 1971), p. 292.

30 Heilbrunn, loc. cit., "The near rear was the usual battlefield of the airborne forces in World War II." p. 127.

31 Ibid., p. 134.

32 Franz Uhle-Wettler (BG-FRG), Battlefield Central Europe: Danger of Overreliance on Technology By the Armed Forces , an unpublished translation of a German text entitled Gefechtsfeld Mitteleuropa .

33 Edward N. Luttwak, Inc., An Historical Analysis and Projection for Army 2000 Part Two: Analysis and Conclusion, p. 80. The term "fire-power evasive" is attributable to Mr. Luttwak as well.

34 Tugwell, loc. cit., p. 294.

35 James M. Gavin, Airborne Warfare, (Washington: Infantry Journal Press, 1947), p. 35.

36 Interview with General Gavin at Fort Leavenworth, Kansas on 6 December 1983.

37 Robert H. Kupperman and Associates, Inc., "Low-Intensity Conflict," prepared for U.S. Army Training and Doctrine Command (Contract No. DABT-60-83-C-0002), June 30, 1983.

38 James M. Gavin, Crisis Now, (New York: Random House, 1968), p. 36.

39 Report of the General Board, U.S. Forces, European Theater of Operations, Study #17: Types of Divisions -- Post War Army, 1945; p. 15.

40 Mackmull, loc. cit.

41 Report of the General Board, loc. cit., p. 31.

42 Ibid., p. 25.

CHAPTER FIVE

FUTURE REQUIREMENTS

Introduction: A Paradigm

Before beginning a discussion of the requirements which must be met in order for United States Army airborne forces to play the roles presented in Chapter Four, it would be useful to establish a framework for that discussion. The following model, although uncomplicated and unlengthy, encompasses all the important aspects of an army.

In his article entitled "Toward A New American Approach To War," Colonel Huba Wass de Czege presented a useful paradigm for a comparative study of armies through the ages. His paradigm contained three elements -- soldiers, weapons, and doctrine -- which, according to Colonel Wass de Czege, constitute the foundation of every army.¹ The paradigm was developed in order to analyze what factors other than the genius of such great captains as Alexander, Hannibal, Genghis Khan, Julius Caesar, Frederick, and Napoleon allowed those armies to "...have fought far more effectively than their enemies and have produced ... victories out of proportion to their size...." ² For

that reason, this particular model has been chosen to analyze the future requirements for airborne troops.

Of what do each of the three elements of the selected paradigm consist? Colonel Wass de Czege's description follows:

The 'soldier' is the basic element of war. To this we have added 'weapons,' whose characteristics are constantly changing. 'Doctrine' is the body of ideas telling how men use weapons to achieve the greatest possible effect. 'Soldiers' includes organizations and personnel of all ranks--the human dimension of an army--in quantitative and qualitative as well as individual and collective terms. This element of the paradigm encompasses skills, training, discipline, motivation, and unit cohesion as well as strength of numbers and the organizational framework of an army. 'Weapons' includes all of the materiel of war--whether combat, combat support, or combat service support. 'Doctrine' includes all internalized ideas and practices associated with warfare or preparing for war. It is limited to those ideas which actually guide an army's actions and therefore, doctrine is not necessarily what is written or decreed but what is practiced.³

The triadal relationship between soldiers, weapons, and doctrine suggests a balance must be drawn between each of the three elements of the equation. The resulting harmony between new technologies (weapons) to time proven ideas about combat (doctrine) and flexible organizations of capable and well-trained men (soldiers) makes a successful army possible.⁴

Let us now apply the paradigm to the specific case of United States Army airborne forces.

Doctrine

The analysis of future roles for airborne forces presented in Chapter Four was made primarily from a doctrinal perspective. The roles and missions presented are supportive of the four basic characteristics (initiative, depth, agility, and synchronization) of the Airland Battle doctrine contained in Field Manual 100-5, Operations. The broad operational concept of early seizure of the initiative in order to throw the enemy off-balance by striking him with a powerful blow from an unexpected direction and then rapidly following up to prevent his recovery is inherent in the roles and missions for airborne forces that have been offered.

The doctrinal requirements for the employment of airborne forces fall into two major categories. They are: (1) The requirement for insuring a broad-based understanding of the ideas and practices associated with the use of airborne forces within the US Army and the unified and specified commands; and (2) A common effort in developing workable practices for the future employment of airborne forces within the joint arena, particularly in conjunction with the United States Air Force.

The roles and missions for airborne troops presented in Chapter Four are supportive of the idea of using those forces in decisive roles, not merely to provide local tactical gains. This is a natural consequence of airborne forces usually being planned for use either as theater or strategic reserve forces. The answer to the question of who should plan for and coordinate their use is quite obvious -- the theater commander and his staff.⁵

This highlights a modern-day requirement -- in order to employ airborne forces to maximum effectiveness, knowledge of the proper roles of those forces, as well as the expertise to plan airborne operations, must reside at the theater command level. But does it?

Maurice Tugwell, in Airborne To Battle, pointed out that one of the results of the airborne's elite nature during World War II was a virtual isolation of "the airborne" as a separate part of the US Army.⁶ Following the war, there gradually developed an attitude of "the airborne" versus "the rest" of the Army. The result, according to Tugwell, was that the technical and tactical thought about the use of the airborne method occurred only within the airborne community. While this may be over-stating the case, it is nevertheless true.⁷ The harm caused by this phenomenon was somewhat attenuated during the 1950's and early 1960's by the fact that World War II airborne veterans (with their experience and

technical knowledge of the airborne) were spread throughout the Army. The draw-down of airborne units that occurred in the US Army force structure during the late 1960's and early 1970's served to further reduce the pool of airborne-experienced soldiers and officers. As this occurred, fewer airborne-experienced officers and senior non-commissioned officers were assigned to joint, theater-level unified command headquarters. The result has been a decreased capacity for proper planning for the use of airborne forces at the theater command level. The institution of a regimental system within the US Army may cause even fewer soldiers to serve tours with airborne units. Those who do will likely serve multiple tours with their affiliated airborne regiment, thus being unavailable for assignment to high-level staffs. The potential exists, unless corrective actions are taken, for the advantages of the use of airborne forces going unrealized because of insufficient knowledge of those forces existing within the operational headquarters responsible for planning their use.

One solution is to supplement the theater command planning staffs with qualified airborne planners. To place an airborne planning staff within each unified command is, of course, not possible. The US Army, in an age of personnel limitations, cannot afford the spaces. Nor are there enough qualified personnel, even if the billets were authorized (qualified in the sense of being experienced in

planning in the joint arena and having a full understanding of such issues as the operational level of war, in addition to being knowledgeable of the basics of airborne tactics and techniques).

The answer to this dilemma is the establishment of a United States Army Airborne Center. Such an agency would be charged with the following two purposes:

(1) Provide expert advice on the planning of airborne operations by serving as an advisory staff group to US unified and specified commands, major US Army headquarters, and other organizations as directed by the Chief of Staff of the Army; and,

(2) Serve as a single-source US Army headquarters for all matters of policy, organization, equipment, tactics, and techniques relating to airborne forces.

The primary mission of serving as an advisory staff group is one that is currently not being filled by any agency of the US Army. Besides the obvious advantage of insuring theater-level plans for the use of airborne forces are technically practical and tactically and operationally sound, the frequent contact between the members of the Airborne Center and the commands under which airborne forces might serve would assist in overcoming the de facto isolation of the airborne community that Tugwell described. Rather than being viewed as a luxury by the operational headquarters under which they would serve, airborne forces

might be more acceptable as vital, decisive elements of the theater commander's operational plans.

The second role of the proposed Airborne Center -- a single-source headquarters for policy and techniques -- would insure that the decisions regarding organization, equipment, tactics, and techniques are aligned toward supporting the real-world plans for which airborne forces are earmarked. Responsibility for airborne doctrine, training, safety, standardization, evaluation, and research and development is currently widely dispersed throughout the US Army. For example, the US Army Transportation School currently has proponency for air movement training, the Quartermaster School trains riggers, the Infantry School has responsibility for basic airborne and pathfinder training, the Air Drop Laboratories of Natick Laboratories is responsible for implementation of changes to equipment and maintenance procedures for airborne-unique equipment and other items of equipment used in airborne operations, and the Combined Arms Center at Fort Leavenworth is the leader in doctrinal and force design issues regarding airborne forces. There is no single agency responsible for integrating the entire spectrum of airborne operations, to include joint doctrine and inter-service requirements.

The intent of establishing such an agency is not to usurp the responsibilities with respect to airborne matters already vested in such organizations as those discussed

above. However, the issue is too important to allow petty oppositions based on "turf battles" between the service schools, agencies, and host installations involved to prevent the establishment of such a center. Compromises such as the now defunct TRADOC Airborne/Airlift Committee simply evade the requirement.

The second category of doctrinal requirements for the future employment of airborne forces, a common effort in developing workable practices within the joint arena, might also be realized under the auspices of the proposed Airborne Center. Since the majority of the joint doctrinal, technical, and tactical issues involve the US Air Force, it seems logical that a single US Army agency could best accomplish the required coordination. The following is a short summary of a few of the joint issues that require mutual US Army/US Air Force solutions:

(1) Troop carrier aircraft tactics, to include the size and types of formations used, must be re-evaluated. The sight of an airborne infantry brigade being delivered by 182 C-141B aircraft on one drop zone, flying in a standard, offset trail formation, would indeed be an impressive sight.⁸ It is doubtful, however, that such a long "skytrain" could survive in any but the most permissive air defense environment. A variety of alternate formations, other than the offset trail, must be developed in order to allow sizeable airborne drops to occur using small, dense

aircraft formations in a variety of enemy, terrain, and weather conditions. The stereotype of the rectangular drop zone, with all delivery aircraft approaching from one direction at one altitude, must also be re-considered (except for the most benign combat environments). One alternative is the concept of a circular drop zone over which delivery aircraft pass from many directions (and perhaps at several altitudes) with only minimal time differences between the arrivals of the separate aircraft formations. Regardless of the tactics and techniques developed, the most important point is that the aircraft crews must be well-trained in a variety of techniques and formations. Likewise, the paratroopers must be accustomed to being delivered in a variety of situations, including dense aircraft formations.

(2) The number of airdrop-qualified aircrews is also a matter of concern. To conduct the types of airborne operations described in Chapter Four, the US Air Force must be able to simultaneously airdrop more than the one airborne brigade for which it is now tasked by the Joint Chiefs of Staff to have trained crews.⁹ The airborne force required, in order to be significant at the operational level, is more on the order of two divisions. In order to fully provide for the global flexibility of US airborne forces to deploy rapidly into a hostile area, the US Air Force crews should be fully air refueling and airdrop

qualified, as well as being capable of low-level navigation in a high-threat environment. The aircraft used must be fully Instrument Flight Rules (IFR) capable and possess an all-weather delivery capability. Many of these same characteristics must be met if intra-theater airlift is to be used to provide operational mobility to the new "light" infantry divisions.

(3) As the aging C-141 and C-130 aircraft fleets begin to reach the end of their serviceable lives during the early 1990's, the US Air Force will be forced to replace those fleets. The C-17, taking advantage of today's state of the art aircraft technology, is the current proposal as a replacement. Because it is designed to use relatively austere airfields and runways as short as 3000 feet and as narrow as 90 feet¹⁰, it can significantly add to the operational mobility of airborne forces and other light forces. Such characteristics as minimum radar reflectivity, "stealth" technology, electronic counter-measures capability, and workable counters to heat seeking missiles will further enhance the role of this proposed intra-theater airlift aircraft. The doctrinal, operational, and tactical requirements must be fully considered when the C-17-type intra-theater aircraft of the future is developed. The US Army airborne community should play a leading role in that future.

(4) Once joint tactics, techniques, and procedures are developed, constant joint training must occur. Team building between the airborne commander and the troop carrier commander cannot be accomplished by simply briefing the ground tactical plan during the aircrew briefing before a given operation. The units involved in an airborne operation (airborne and airlift) must train together repeatedly. The following quotation by a noted German paratrooper is appropos:

In former times one would not require a cavalry regiment to carry out an attack when its men had only been given a short course in riding but had not been issued any horses until the night before the attack."

Earlier it was pointed out that the Airborne Center concept might facilitate the Joint Army-Air Force resolution of the issues that have been presented here. The US Air Force currently has its Airlift Center located at Pope Air Force Base -- immediately adjacent to Fort Bragg, North Carolina. That agency accomplishes for the US Air Force the functions proposed for the Airborne Center. Merely locating the Airborne Center at Fort Bragg, North Carolina would facilitate Joint Army-Air Force coordination on airborne and airlift matters. The geographic proximity of the two centers would constitute a de facto establishment of a Joint Airborne Center.

Accomplishment of the two requirements addressed above -- creation of a broad-based understanding of the proper roles of airborne forces and establishment of a common Army-Air Force effort in developing working practices for the future employment of airborne forces -- will serve to exploit the potential of the airborne method. The proposed Airborne Center can serve as an agent of change as it applies to US Army airborne forces of the future. It can be an effective and inexpensive means of increasing the fighting effectiveness of airborne forces by providing a focused direction for the equipment (weapons) and human (soldiers) components of American airborne forces.

Soldiers

According to the Wass de Czege paradigm, the "soldier" is the basic element of war. "Soldiers" includes organizations and personnel in quantitative and qualitative as well as individual and collective terms. It encompasses training, skills, discipline, motivation, and unit cohesion of an army.¹² In applying the paradigm to airborne forces, three aspects are key. They are the organization and strength of numbers of the airborne force, individual and unit training of paratroopers and their units, and the selection of personnel to serve in and lead airborne units.

In analyzing the required organization and strength of numbers of airborne forces, it is important to keep in mind the types of missions which airborne forces are expected to perform in the future. If airborne forces are to be used in the roles outlined in the previous chapter, it is hard to visualize them being organized in less than divisional formations. On the mid- to high-intensity battlefield, a single airborne brigade (or regiment) will not possess enough combat power to carry out the roles presented. In fact, for a thrust deep in the enemy's rear, several airborne divisions might be required in order to make the threat to the enemy's rear significant. Should the initial airborne assault be successful, we would want to possess the capability to reinforce that success. Airborne forces, in addition to those used in the initial assault, are required. The General Board of 1946 addressed the issue of the size required for an airborne unit. Here are its conclusions:

Required Strength in Personnel and Weapons

. The seizure and holding of an air-head requires a force much larger than a parachute regiment, even if it be reinforced. An airfield sufficiently large to land modern transport planes...is at least a mile long. This area must be protected from the direct fire of small arms and, so far as practical, from artillery fire. To accomplish this, hostile infantry and artillery must be destroyed or driven beyond the range of the landing zone. At the very least, ground observation must be denied the enemy. Even assuming that our air force has complete superiority, the dropped parachute unit must control a minimum perimeter of 18 miles, far too

large an area to be covered by the personnel of a regiment. Furthermore, a parachute unit of regimental size, unless heavily reinforced, would not have sufficient weapons with which to secure the area described above. The necessary reinforcement would increase the size of the original unit to about that of a division. However, even with personnel and weapons identical to those of a division, the reinforced parachute unit would not have the effective fire power of a division. Such a degree of effectiveness comes only after long combined training, only after each component has become familiar with all others with which it operates.¹³

To maintain only airborne brigades (or regiments) would relegate airborne forces to a completely subordinate role for use in minor operations only.

In a low-intensity conflict environment, a single airborne division may be sufficient to cope with a given conflict. A problem will arise, however, if more than one low-intensity conflict requiring the use of airborne forces occurs simultaneously. Given the strategic view of the future discussed in Chapter Three, such a situation may not be unreasonable.

In either case, the problems of providing qualified airborne replacements and/or reconstituting parts of an airborne division once committed to any scenario would lead one to consider the need for more than a single airborne division in the US Army force structure in the future. The deterrent value of airborne forces has been discussed earlier. In order to be credible as a deterrent, US

airborne forces must be strong (and big) enough to execute the full range of operational tasks presented in Chapter Four. To meet future needs, more than one airborne division is required. The answer to the question "How many?" will be provided later.

The roles and missions of airborne forces described earlier will most often place those forces in situations where they are acting independently from other friendly ground forces and, because of their relative lightness, their tactical and operational schemes will be "fire-power evasive" rather than "fire-power intensive." Although they might operate in highly compartmented (or "close") terrain, they cannot be satisfied with merely surviving under the harsh combat conditions into which they will be introduced. Because of the importance of the missions they will be assigned, they must be proactive in carrying out those missions in order to fully support the theater commander's operational plan. In addition, airborne forces must be prepared to fight in a variety of terrain in order to be strategically versatile. These characteristics of the combat environments in which they will be expected to operate demand extreme adaptability in the airborne units, the individual paratrooper, and the airborne leader. This adaptability requirement impacts greatly on the individual and unit training requirements for airborne forces, as well

as the selection process for paratroopers and airborne leaders.

Edward Luttwak, in his analysis of light forces for Army 2000, presented several characteristics of "context adaptable" (and therefore theater-versatile) light forces. The training of airborne forces must share those same characteristics. They are:

(1) Prolonged initial/individual training to high standards. The main subjects of initial training (after basic training) are basic fieldcraft or how to behave in different terrains; weapons skills on a variety of small arms; set-piece tactics instruction in order to develop a working "tactical vocabulary;" and demanding physical training.

(2) Unit training in a variety of different terrains and circumstances with the goal of developing "tactical repertoires." It is this characteristic on which airborne forces must key. A flexibility of tactical methods must be achieved if airborne troops are to be truly "elite" forces. Over-stressing one tactical capability (for example, the Airborne Anti-Armor Defense) at the expense of all other training requirements will result in a "context-specific" force. For the airborne of the future, there can be no single tactical "cookbook."

(3) Unit stability is required in order to preserve the highly-trained manpower and to permit the development of the

required tactical repertoire (as opposed to repetition of only a few tactical tasks).¹³

The selection of airborne personnel must also be keyed to the style of warfare which airborne forces are expected to execute. Because it will routinely fight outnumbered, often in independent, small-unit actions in the enemy's rear, the airborne unit must make up for materiel (firepower) inferiority by tactical ingenuity and initiative at the small-unit level. This requires a highly-trainable, intelligent paratrooper (as well as a physically fit one). The officers assigned to airborne units must be risk-takers who are comfortable with carrying out independent actions under routinely austere circumstances (such as repeatedly being on the verge of ammunition exhaustion).¹⁵ In that sense, airborne forces might be thought of as the modern counterpart of the Mangoday of Genghis Khan.¹⁶

"The parachute is, itself, the symbol of an extraordinary selection and testing process."¹⁷ This is one reason why airborne forces have long been considered as the elite forces of the US Army. There are other reasons. The high esprit of airborne units is an indicator of the fact that there is more to the airborne than mere transportation. The airborne is a state of mind.¹⁸ This aspect of airborne forces should not go untapped as the US Army endeavors to develop several "light" infantry divisions -- divisions which are intended to be America's

new breed of general purpose, elite forces. The proven value of basic airborne training as a means of selecting and testing highly-motivated soldiers should be capitalized upon to maximum effect in the development of those "light" divisions. "The ordeal of [airborne] training [goes] beyond the mere mechanics of mastering the parachute." 19 The character- and confidence-building that occurs within a young man who completes airborne training goes with him when he joins his unit. "The presence of airborne troops in a unit adds to the strength of that unit, whether it is an airborne unit or not." 20 The currently existing elite qualities of airborne forces "...should be transfused to maximum effect." 21 Consideration should be given to making each of the new US Army "light" divisions airborne divisions. The morale effects discussed above are alone justification for the minimal costs incurred. By making those "light" divisions airborne, sufficient airborne forces would be created to carry out the operational schemes discussed in the previous chapter of this analysis.22

Weapons

For the purposes of this analysis "weapons" includes all of the materiel of war -- whether combat, combat support, or combat service support. In this discussion of

the materiel requirements for airborne forces, the role of technology should be addressed at the beginning. Simply put, "New technology by itself cannot win battles or campaigns." 2# Like the US Army as a whole, airborne forces cannot afford to neglect the impact of new technologies of war and should anticipate technological change. However, they should insure that the new technologies they adopt are in harmony with both the "doctrine" and the "soldiers" elements of the airborne triad. The balance among the three elements, as well as within each element, must be appropriate to the time, environmental circumstances, and the purposes for which airborne forces are to be put.

As new tools of battle are introduced to the airborne battlefield at a quickening pace, we should be careful of two things. The first is not to overwhelm the paratroopers with modern gadgets faster than they and their leaders can assimilate those gadgets into their tactical repertoires.

The second concern is that we must avoid physically overloading the paratrooper. This applies to the larger subject of equipping the new "light" divisions as well. We cannot afford to take a "bargain basement" approach to equipping those forces. To load our light forces down with bulky equipment originally designed for our "heavy" mechanized forces ("hand-me-downs") is to defeat those light

forces before they enter battle. Along with the commitment of establishing light forces (to include airborne forces) must go a commitment toward equipping those forces with light, easily transported, technologically advanced materiel specifically designed for them. In this way the US Army can avoid the pitfall John English warned of in his book A Perspective on Infantry when he said, "It is highly unlikely, however, that a lean and hard marching infantryman can spring fully armed and ready from an army that is elsewhere rolling in fat." 24

Later we will discuss ways of assisting the paratrooper in moving his implements of war about the battlefield. We should remember, however, that the airborne soldier in the end fights with what he carries on his back. To avoid a fixation on technology and weapons, a clear notion about future roles and missions of airborne forces, as well as a forward-looking doctrine, must be kept in mind. 25

To address all the individual pieces of equipment required by airborne forces of the future would only result in a laundry list. 26 This author has chosen to limit the scope of the "weapons" element to those items which are crucial in providing airborne forces the ability to carry out the roles and missions described for them in Chapter Four. Those items can be categorized into three major headings: the airborne insertion itself, ground actions

after the insertion, and logistical support to the airborne force.

The subject of the airborne insertion was addressed briefly during the discussion of Joint Army-Air Force matters, particularly that part dealing with the C-17-type aircraft of the future. That discussion addressed the often-cited objection to airborne operations of enemy air defenses by providing one possible solution. There are other shortcomings to current airborne insertion techniques that must be dealt with. These are the vulnerability of the individual paratrooper to ground fire during descent and the reorganization and assembly that must occur on the drop zone after the airdrop. Such techniques as the night drop and the drop during adverse weather conditions serve to decrease the former while increasing the latter. There are two ways of solving these problems. The first, which the airborne community is already undertaking, is the development of low-altitude, fast-opening parachutes for equipment as well as the paratrooper. In addition to requiring less time in the air subject to receiving hostile ground fire, the dispersion of the airborne force on the drop zone is also reduced. This is the conservative, evolutionary approach that accepts little change in the traditional, established techniques of airborne insertions in the future.

There is an alternative. In a 1965 Military Review article entitled "Airborne: The Tired Revolution,"

Lieutenant Colonel Frank B. Case presented a capsule drop concept for airborne operations in which squads or platoons -- with their crew-served weapons, communication equipment, ammunition, and other essential supplies and equipment -- would be dropped together in containers. His description of the concept was:

For the best performance, the capsule should be pressurized to permit very high altitude drops. It should be built so that it could be released from an aircraft going at full speed, and the capsule should have mechanisms which permit a high rate of descent initially with late deceleration at low altitudes. It should also be equipped with glide devices, which can operate under remote or self-control, so that pinpoint delivery over long drop radii can be achieved.

...As they touched down, platoon combat teams would become operational at once, organized and fully equipped to fight.²⁷

Lieutenant Colonel Case admitted that his idea could only be implemented in a crude way in 1965. However, that is not the case today. It will become even more feasible in the 1990's. By coupling the 1983 technologies that allow the US space vehicle Challenger to return from space to the guidance system technologies of the cruise missile, the concept presented by Lieutenant Colonel Case could become reality before the 1990's. The benefits of such an insertion capability would be multiple. Again, quoting Lieutenant Colonel Case:

The drop capsule concept would eliminate the need for close formations of transports at low altitudes and low speeds during the drop process

and, as a result, would reduce aircraft vulnerability to enemy air defenses. It would eliminate the sound signature and reduce the sight signature at the drop zone, lessen the injury hazard to men during the drop, substantially eliminate the postdrop reorganization period, and go far toward eliminating the need for postdrop logistic support.²⁸

Once inserted, the airborne force must be capable of executing the operational mission for which it was committed. Remembering Nathan Bedford Forrest's adage of "getting there firstest with the mostest," the airborne force must be capable of conducting offensive, proactive, mobile actions against the enemy. Putting it another way, "Staying on the battlefield is just as important as getting to it on time." ²⁹ For some scenarios, such as the European scenarios presented in Chapter Four in which airborne forces are employed in dense terrain, foot mobility may provide the relative mobility advantage needed. On the other hand, if the operational intent were for the airborne force to "...fly over the enemy lines and bore a hole through from the far side," ³⁰ additional ground mobility might be required. For other scenarios, such as the CENTCOM scenario in which an airborne force was committed to the rear of an advancing Soviet tank column in the Persian Gulf area, foot mobility would also not be sufficient. According to Lieutenant General (Retired) James Hollingsworth's analysis of a similar scenario, "Foot

mobility is simply not adequate to cope with the mechanized mobility of Soviet forces." ³¹ The point to be made from this discussion is that since airborne forces will be called upon to execute a variety of tactical missions ("a tactical repertoire") in a variety of strategic and operational settings, their equipment (to include ground mobility) must also be flexible. It requires a variety of equipment "sets" which can be used (or not used) depending upon the strategic, operational, and tactical environment into which the airborne force is being committed.³²

Two major classes of ground mobility for airborne forces are apparent. The first would provide transportation only. A small, airdroppable, all-terrain vehicle capable of pulling a light-weight trailer on which the airborne squad would ride is one approach (A three-wheel motorcycle pulling a simple wagon-type trailer might fill the bill here). Another alternative might make use of the airdrop capsule itself as a vehicle capable of carrying men, automatic weapons, ammunition, water, and food rapidly from the drop zone to the initial assault objectives. Great speed would not be required -- 25 miles per hour on roads would provide a sufficient "operational mobility" for the airborne force to carry out its mission. A key characteristic of such a vehicle would be that it is disposable if the tactical situation required (and therefore inexpensive). Otherwise it would become a liability rather than an asset when the

"fire-power evasive" tactical style required its abandonment.

The second class of ground mobility for airborne forces would provide a capability beyond mere transportation. Vehicles such as Light Armored Vehicles (LAV) and the Mobile Protected Weapons System (MPWS), with its long-range antitank gun, that the US Marine Corps have explored may be appropriate for airborne forces in some situations.³³ The 14-ton, two-man, light tank carrying a 75-mm cannon built by the AAI Corporation may be applicable to certain scenarios. The specifications of the vehicles are not crucial to this discussion. What is important is that the operational concept of airborne forces being an offensively-oriented, proactive element on the battlefield of the future be provided for.

The final category of the "weapons" element is logistical support for the airborne force. An analysis of logistical requirements reveals two levels of support. The most obvious is the support requirement at the tactical and operational levels. In keeping with the operational concepts previously described, the logistical systems supporting airborne forces must be highly flexible and opportunistic in nature. It must take advantage of every opportunity to "push" logistic support to the combat units. One reason for this is the air-dependent nature of airborne forces. A "pull" system characteristic of a

linear/positional scheme of combat will not meet the needs of an airborne force operating proactively in the enemy's rear. To survive in such an environment, airborne units will operate from non-permanent, mobile "bases" that are located as much on terrain considerations as on logistical efficiency considerations.³⁴

The second level of logistical support required for the employment of airborne forces is that of the national (or strategic) level. Airborne forces are not unique in this respect. In order for US military forces to be successful on the future battlefield, the national industrial and mobilization capability must be directed toward supporting those forces. A detailed discussion of this issue lies outside the province of this paper, however, it is an issue that significantly impacts on the future employment of airborne forces regardless of the scenario.

The Paradigm Revisited

This chapter has presented an analysis of the future requirements for the use of airborne forces using a paradigm containing three elements -- doctrine, soldiers, and weapons. Each element can, and should, be discussed at length in subsequent analyses of the uses of airborne

forces. The main thrust of this chapter has been to stress the importance of the balance among the three elements of the triad. By achieving a harmony between new technologies (weapons) to time proven ideas about combat (doctrine) and flexible organizations of capable and well-trained men (soldiers), United States Army airborne forces can be an effective fighting force capable of producing operationally significant battlefield victories out of proportion to their size.

FOOTNOTES

¹ Huba Wass de Czege (Col), "Toward A New American Approach To War," an unpublished article written in April, 1982.

² Ibid., p. 6.

³ Ibid., p. 7.

⁴ Ibid., p. 9.

⁵ This was not so obvious in World War II, however. In fact, in most cases in the European theater the theater commander passed control of the planning for his airborne forces to a subordinate commander--Army Group level or below. Because those subordinate commanders had a narrower perspective than the theater commander, a limited focus for the use of airborne forces occurred throughout the war in Europe. This translated into practice the doctrinal tendency toward tactical (versus operational or strategic) roles for those forces that was described in Chapter Two. Disagreement with this modus operandi by the senior airborne commanders was apparent. Lieutenant General (Ret)

James Gavin pointed this out early in his book Airborne Warfare when he referred to the need for "...direction and coordination by the highest headquarters in a theater of operations" (p. 35) as a principle for the use of airborne troops. Lieutenant General Brereton also commented on this issue while addressing the topic of troop carrier aircraft being diverted from their primary troop airlift mission to their secondary jobs of carrying supplies. According to LTG Brereton, because "...lower commands' conception of their successful operations depended invariably on the supply situation" (Brereton Diaries , p. 339), the planning for the use of airborne forces "...should be held on the Supreme Commander's level." (Ibid).

⁶ Maurice Tugwell, Airborne To Battle: History of Airborne Warfare 1918-1971 (London: William Kimber and Co., Ltd., 1971), p. 294.

⁷ Even the U. S. Army's official historian of airborne operations in World War II, James Huston, described airborne forces as a "luxury" since, in addition to other "costs" of maintaining airborne units, they used aircraft that would otherwise be used to resupply ground troops. (James Huston, "Thoughts on the American Airborne Effort in World War II," Military Review , XXXI, No. 4 (April, 1951), 14).

* According to the 82d Airborne Division Automated Airlift Planning System (AALPS) printout dated 17 December 1981, 182 C-141B aircraft are needed to airdrop a "heavy" brigade (or Division Ready Brigade (DRB)) (in addition to 54 C-141B airland sorties for non-airdroppable equipment and 17 C-130 sorties to deliver the associated Sheridan company using the Low Altitude Parachute Extraction System (LAPES) technique). Less combat capability, of course, requires few aircraft: A "medium" DRB requires 92 C-141B aircraft for airdrop and 16 C-141B's for airland; a "light" DRB requires only 26 C-141B's for airdrop and 5 C-141B's for airland. These are only planning figures. The airborne commander, once given a specific mission and enemy situation, would tailor his force to do the job. This results in changes to aircraft requirements from the figures shown above. These numbers do, however, give an appreciation for the scope of the problem when delivering large airborne formations. The use of multiple, parallel drop zones reduces the vulnerability of the delivery aircraft to enemy air defenses, but only marginally so.

* Headquarters, Military Airlift Command Briefing Point Paper, Subject: Brigade-D Airdrop Force (VOLANT RALLY), dated 6 June 1983. According to this document, MAC is tasked by the JCS to be capable of airdropping one airborne brigade using 89 C-141's. This, according to MAC, requires

102 active and 38 reserve associate crews--a total of 140 aircrews.

¹⁰ James R. Allen (Gen-USAF), "Airlift For the 80's and Beyond," Defense 83 , (July 1983), 21.

¹¹ Col Freiherr von der Heydte, "Notes on German Airborne Operations," an appendix to Department of the Army Pamphlet No. 20-232: Airborne Operations--A German Appraisal , (October 1951), p. 48.

¹² Wass de Czege, loc. cit., p. 7.

¹³ Report of the General Board , U.S. Forces, European Theater of Operations, Study #16: Organization, Equipment, and Tactical Employment of the Airborne Division, 1945; p. 25.

¹⁴ Edward N. Luttwak, Inc., An Historical Analysis and Projection for Army 2000 Part Two: Analysis and Conclusion, pp. 33-35.

¹⁵ Ibid., p. 51.

16 Nathan A. Harlew, Facing Death As A Way of Life (Tel-Aviv: Am Hassefer Publishing Ltd., 1976). In this 34-page booklet, Harlew translated the Mongolian legend of Yasotai, a Mongol leader "...who led 40 selected warriors--the 'Mangoday'--and, who, through confidence and discipline, instilled in his force the personal fortitude and absolute courage needed to penetrate directly to the heart of the enemy, scatter his battle lines, smash his formations, slaughter his leaders, and return victorious without giving any consideration to the true odds." The quotation is from the booklet's introduction by Shimon Peres.

17 Gerard M. Devlin, Paratrooper: The Saga of U.S. Army and Marine Parachute and Glider Combat Troops During World War II (New York: St. Martin's Press, 1979), p. xiii.

18 Richard W. Hobbs (LTC), "There Are Still Missions for the Airborne," Army, Vol 19, No. 5 (May 1969), 73. Hobbs' statement is "The airborne is also a state of mind."

19 Roger A. Beaumont, "Airborne: Life Cycle of a Military Subculture," Military Review, Vol 51, No. 6 (June 1971), 54.

20 James Hessman and Benjamin F. Schemmer, "The Airborne: Obsolete?" Armed Forces Journal, Vol. 106, No. 10 (9 November 1968), 13.

21 Beaumont, loc. cit., 61.

22 According to a report by the Army Times magazine (20 February 1984), the Chief of Staff of the Army told the House Armed Services Committee that current U.S. Army plans call for a total of four light infantry divisions to be created within the Army force structure in accordance with the following scheme: conversion of the 7th Infantry Division beginning during the current fiscal year; creation of a 17th division beginning in early 1985; conversion of the 25th Infantry Division and the creation of a National Guard light division during FY 86. These four light divisions, together with the current 82d Airborne Division, would then total five U.S. Army airborne divisions.

23 Wass de Czege, loc. cit., p. 8.

24 John A. English, A Perspective On Infantry (New York: Praeger Publishers, 1981), p. 290.

25 For a discussion of how to avoid the "weapons" component "outdistancing and veering away from the other

components," see the Wass de Czege article, pp. 10-12 and 16-19.

26 One such list can be found in a letter from the Commander, 82d Airborne Division, to the Commander, XVIII Airborne Corps, Subject: Concepts and Requirements Review for Airborne Forces in the Army of the 1990's, dated 22 January 1981. See Bibliography.

27 Frank B. Case (LTC), "Airborne: The Tired Revolution," Military Review, Vol 45, No. 8 (August 1965), 92.

28 Ibid., 93.

29 Jeffrey Record, The Rapid Deployment Force and U.S. Military Intervention in the Persian Gulf (Cambridge, MA: Institute for Foreign Policy Analysis, Inc., 1981), p. 26.

30 Adrian Hill, "Where Pegasus Might Fly," Royal United Services Institute Journal, Vol. 124, No. 2 (June 1979), 52.

31 James F. Hollingsworth (LTG-Ret), and MG Allan T. Wood (USMC-Ret), "The Light Armored Corps--A Strategic Necessity," Armed Forces Journal, (January 1980), 20.

32 This is true for the larger category of "light" forces as well.

33 Record, loc. cit., p. 75.

34 Luttwak, loc. cit., p. 53.

CHAPTER 6

CONCLUSION

Purpose

The purpose of this thesis has been to critically analyze the future roles of United States Army airborne forces as an instrument of national security policy during the period 1990-2000. Throughout the analysis the relationship of the strategic roles of airborne forces (as "America's strategic reserve") to the requirements of those forces at the operational and tactical levels of war have been considered.

Linkage of Strategic Roles To Operational and Tactical Roles

United States airborne forces, like the US Army as a whole, serve as instruments of deterrence. Because of their rapid strategic deployability, they have been used in the past and will continue to be used in the future for political, as well as military, purposes. In order for airborne forces to fulfill a deterrent role, the United States must be capable of projecting those forces into an objective area in sufficient strength to accomplish the

tactical and operational missions for which they are committed. For airborne forces, the rapid transition from deterrence to war-fighting is a key consideration in their organization, equipment, training, and employment techniques. For that reason, also, the linkage between the strategic roles of airborne forces and their roles at the operational and tactical levels of war are critical.

Impact of Airborne History

The history of US airborne forces is a proud one. As has been pointed out, however, the World War II tradition of employing airborne forces only in tactical roles is fixed deeply in our doctrine. Faced with a materially superior enemy (the Soviet Army), the US Army is in the process of developing a style of war that places more emphasis on offensive actions, maneuver, and the operational level of war than in the past. Airborne forces can play an important part in carrying out the AirLand Battle doctrine contained in Field Manual 100-5, Operations if both the airborne community and operational planners world-wide can break the inertia of employing airborne forces only in those traditional roles.

Impact of the Future

The rate of change in the nature of armed conflicts between nations will only increase in the future. As the

strategic, operational, and tactical environments of warfare change with an increasing speed, airborne forces must adapt equally as fast. Only by doing so can those forces remain viable instruments of violence--able to apply a full range of combat power designed to cripple and destroy enemy battlefield capabilities--throughout the entire spectrum of conflict.

Future Roles

Adherence to the use of airborne forces merely for the sake of using airborne forces cannot be justified. However, there are many roles and missions which airborne forces can perform during the target period of this analysis (1990-2000). A brief summary of those roles and missions follows.

Strategically, airborne forces are capable of fulfilling the following roles and missions:

- + Respond to Soviet (and Soviet proxy) threats to US national interests on the margins of Europe/NATO.
- + Continue to act as a "fire-brigade" in lesser developed areas of the world (for example, peace-keeping missions, evacuation of US nationals, and so on).
- + Conduct coup de main operations such as the Libyan scenarion of Chapter Four.
- + Seize and secure forward operating bases in support of US world-wide military contingency operations.

- + Control critical land areas of significant geo-strategic importance.

- + Act as a strategic reserve capable of providing a decisive military advantage when committed.

- + Demonstrate US national resolve as a deterrent to military conflict.

Operationally, airborne forces should not be limited only to employment in CENTCOM-related scenarios. The operational concepts contained in the newest doctrinal flagship manual, Field Manual 100-5, Operations, offer the potential for proactive, offensive roles for airborne forces that can significantly (and perhaps decisively) contribute to the success of the operational plan within a theater of war. In addition to providing a forced-entry capability in Southwest Asia, airborne forces can be used in the following ways:

- + In mid- to high-intensity conflicts, to strike deep in the enemy's rear to interdict enemy reserves, to delay and disrupt second-echelon forces, to disrupt enemy command and control facilities, to deny the enemy the undisrupted use of his lines of communication and logistic facilities, to destroy enemy nuclear delivery and storage sites, and to attack enemy defensive positions or offensive formations from their own rear.

+ As a spearhead of a vertical envelopment using other "light" air-landed forces which the US Army is currently adding to its force structure.

Tactically, airborne forces can be used to accomplish many of the same missions which they were assigned during World War II. In addition, the following tactical missions can be accomplished by airborne forces in the future:

+ Support the local tactical battle by attacking multiple objectives using multiple, small drop zones in the "near rear" of the enemy force.

+ Contribute to the tactical battle by being inserted into mountainous and heavily wooded areas (using small drop zones) and operating out of mobile operating bases in those areas.

+ Conduct long-range reconnaissance, sabotage, assault raids, and pre-emptive seizure of key locations such as bridges, fording sites, airstrips, and mountain passes in support of tactical engagements.

Arguments Against the Future Use of Airborne Forces

Arguments against the employment of airborne forces fall into three major categories. They are: (1) Modern air defense weaponry, (2) The number of airlift aircraft required to deploy an airborne force, and (3) The reduced fire-power capability of airborne forces caused by their

relative "lightness." Those problems should not be overlooked, but neither should they be accepted without question as precluding the future use of airborne forces.

It was pointed out in Chapter Three that every nation of the world (to include the lesser-developed countries) will have entered the missile age by the 1990's. This includes the possession of modern air defense weaponry. While this will impact significantly on future airborne methods and techniques, it will not preclude airborne forces from being employed -- even in mid- to high-intensity environments. As surface-to-air weapons have proliferated, technology and techniques to counter those weapons have also progressed. By properly massing his assets, the operational commander can effectively suppress enemy air defenses in order to employ airborne forces as part of his operational plan.

The number of airlift aircraft currently required to strategically deploy an airborne force is often cited as a reason for not using airborne forces. The numbers most often cited, however, are those required to move a "heavy" airborne brigade or airborne division. The fact is that the airborne commander tailors his force, based on the specific mission and enemy situation he will face. This normally results in significant reductions in the number of aircraft required to deploy the tailored force. If large airborne operations against deep operational objectives are

considered in the future, airlift requirements will increase. But airlift requirements will rise anyway in support of the additional "light" divisions being added to the US Army force structure. Once those light divisions have been strategically deployed (by air), they will require intra-theater airlift support in order to achieve "operational mobility" within the theater of operations. Those same intra-theater airlift aircraft will also be available to conduct deep, operationally-significant airborne operations.

Finally, airborne forces are not as fire-power capable as heavier tank and mechanized forces. That is a given as a result of their design for strategic deployability. The solution is to use them in ways in which their lightness is an advantage rather than a disadvantage. Specific missions were outlined in Chapter Four.

Prescriptive Requirements For the Future

There is no doubt that the arguments against the use of airborne forces outlined above must be considered when assigning missions to those forces. On the other hand, the prescriptive measures pointed out in Chapter Five can limit (if not eliminate) many of those problems in the future. To summarize using the paradigm of Chapter Five, those measures are:

Doctrine :

- + Provide a vehicle for creating a broad-based understanding of the ideas and practices associated with the use of airborne forces within the US Army and the unified and specified commands by establishing an Airborne Center.

- + Accomodate a common effort with the US Air Force in developing working practices for the employment of airborne forces.

- + Establish a single-source US Army headquarters for all matters of policy, organization, equipment, tactics, and techniques relating to airborne forces -- a US Army Airborne Center.

Soldiers :

- + Continue divisional-size airborne formations (versus brigade or regiments) in the US Army force structure.

- + Expand the airborne force structure to allow airborne forces to execute the full range of operational tasks presented in this analysis (Chapter Four).

- + Develop a "tactical repertoire" capability for airborne forces through intensive training, unit stability, and strenuous selection criteria for airborne soldiers and leaders.

- + Consider making each of the new US Army "light" divisions airborne divisions.

Weapons :

- + Equip airborne forces with materiel specifically designed for those forces (light, easily transported, and logistically supportable).

- + Investigate the technology required to bring into reality the "capsule drop" concept described in Chapter Five.

- + Provide airborne forces with light tactical mobility to allow them to execute proactive, offensive missions once on the ground.

- + Provide flexible logistical support to airborne forces, both at the tactical and national levels, to allow them to carry out the missions outlined above.

By fulfilling the "doctrine," "soldiers," and "weapons" requirements pointed out above, the US Army can insure that airborne forces can get the job done once on the ground -- thereby meeting Nathan Bedford Forrest's adage of not only "getting there firstest," but also arriving "with the mostest" at the operational and tactical levels of war.

Conclusion

The US Army recognizes Clausewitz's dictum that "War is simply the continuation of policy by other means." ¹ For the US Army, as an instrument of victory, this equates to the control of land in support of the political goals of the nation.² By capitalizing on the future capabilities

of its airborne forces, the US Army can increase its effectiveness in carrying out its important and unique function -- serving as the national instrument of land power. Airborne forces can make a direct and essential contribution to the achievement of victory on land. By taking the actions outlined in this analysis, US Army airborne forces can effectively serve as an instrument of national security during the period 1990-2000.

FOOTNOTES

¹ Karl von Clausewitz, On War , ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), p. 7.

² According to the first draft of Chapter I, "Land Power and the Nature of War," for the revised Field Manual 100-1, The Army (dated February 1984), the fundamental nature of the US Army is defined in terms of three tenets -- as an instrument of the will of the American people, as an instrument of violence, and as an instrument of victory.

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