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OPERATIONAL PRINCIPLES:
THE OPERATIONAL ART OF ERWIN ROMMEL AND BERNARD MONTGOMERY

A thesis presented to the Faculty of the US Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE

by

T.L. MCMAHON, MAJ, USA
B.A., Washington College, 1965

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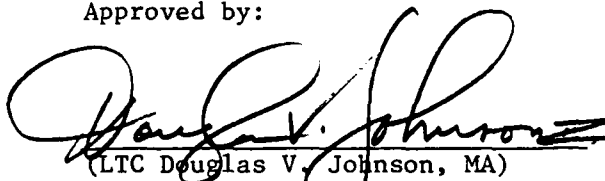
MASTER OF MILITARY ART AND SCIENCE


THESIS APPROVAL PAGE

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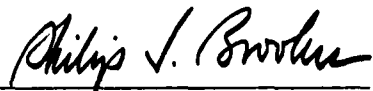
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ABSTRACT

OPERATIONAL PRINCIPLES: THE OPERATIONAL ART OF ERWIN ROMMEL AND BERNARD MONTGOMERY; by Major T.L. McMahon, USA, 140 pages.

This study focuses on the operational level of war -- that level which links tactics to strategy. The study seeks to identify and define principles applicable to the operational level of war. If valid, those principles ought to guide and/or govern the conduct of war at the operational level. Also, understanding of operational principles and the theoretical foundations of the operational level of war can assist US Army commanders and staff officers in preparation for and conduct of war at that level.

Selected campaigns and battles conducted by Erwin Rommel and Bernard Montgomery during World War II are analyzed. The objective of the analyses is to determine what each commander considered as guides in making battlefield decisions. The research is not limited, however, to specific campaigns and battles. A description of each commander is offered; that is, his experiences and the evolution of his military thought. The prevailing German and British military doctrines are also reviewed. Interestingly, the criteria each commander used in making battlefield decisions -- his operational principles -- are apparent by understanding the man and the doctrine; the campaign and battle analyses serve to substantiate those principles.

(In addition to the historical analysis described in the preceding paragraph, the study focuses on the theoretical foundations of the operational level of war. The theoretical model is used to define the operational level of war, and may be of more consequence in the study of this level of war than the historical examples.)

While Rommel and Montgomery represented different styles of war-fighting, maneuver and attrition respectively, they demonstrated a remarkable commonality in battlefield decision-making. Differences in some cases are differences in degree or emphasis. Other more apparent differences are attributable to the tactical abilities of forces, their assigned strategic objectives, and their respective styles of war-fighting. Apparently the operational level of war can accommodate a broad range of war-fighting styles and instruments.

The implications for the US Army derived from this study cover a wide range of subjects. Some involve organization, training, and preparation of operational-level commanders and staff officers. Most important is the development of an army which can successfully fight the campaigns and battles in future war.

ACKNOWLEDGMENTS

I wish to express my gratitude to those who contributed to this study.

To Lieutenant Colonel Doug Johnson, who patiently listened to wild theoretical schemes and encouraged me to make some sense of them.

To Major Roger Cirillo, who filled my arms with books and my head with ideas.

To Doctor Bob Epstein, a stern taskmaster, who sincerely reviewed and critiqued my continuing work.

To Mister Jim Schneider, who threw theories back at me as fast as I could throw theories at him.

Finally, to my wife and son, who gave up more than anyone else so that this study could be completed.

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CHAPTER 1

DEFINITION OF THE PROBLEM

Background

The 1982 edition of Field Manual 100-5, Operations, represents an attempt to elevate, qualitatively and quantitatively, the battle perspective of the United States Army. The Field Manual introduces the doctrine of AirLand Battle, acknowledges and defines the operational level of war, and identifies corps' and echelons above corps as the principal operational-level planning and executing headquarters. The Field Manual and associated Army publications define the strategic and tactical levels of war, and describe the operational level of war as the physical and intellectual link between the two. Given the new-found prominence (for the US Army, at least) of the operational art, the effort to establish operational-level doctrine is critical and necessary. Field Manual 100-5 and Field Circular 100-15, Corps Operations, have properly introduced that doctrine.

The Preface to Field Manual 100-5 describes the purpose and function of the manual:

FM 100-5 explains how the Army must conduct campaigns and battles in order to win. It describes US Army operational doctrine involving maneuver, firepower, and movement; combined arms warfare; and cooperative actions with sister services and allies. It emphasizes tactical flexibility and speed as well as mission orders, initiative among subordinates, and the spirit of the offense. Specific operational details (techniques and procedures) appear in other field manuals and regulations.¹

In order to accomplish its stated purpose, the Field Manual

describes the US Army and how it fights. The Field Manual introduces, and/or restates and defines combat fundamentals, operational concepts, levels of war, combat imperatives, and the principles of war. The key concepts included in the Field Manual are: establishment of Air-Land Battle as the Army's basic operational concept; acknowledgment and definition of the operational level of war; presentation and description of operational concepts and combat imperatives; and the expanded definition and statement of applicability of the principles of war. These concepts, taken together, serve to elevate the battle perspective of the US Army.²

While Field Manual 100-5 is intended to be the Army's capstone manual for the conduct of combat operations, Field Circular 100-15, Corps Operations, is a subsidiary publication intending to specify operational details (techniques and procedures) for corps-level combat operations. The purpose of the Field Circular is to provide doctrine for corps operations. It describes how US Army corps are organized and how they fight. The Field Circular promotes the corps as the Army's principal operational-level planning and executing agency, and prescribes how the corps commander and his staff should conduct operational-level campaigns and battles.³

The purpose of the foregoing, brief review of the key concepts contained in Field Manual 100-5 and Field Circular 100-15 is to establish a doctrinally current and correct starting point for this study. Those publications represent the whole of the US Army's doctrine pertaining to the operational level of war. In that regard, the review serves to introduce not only US Army operational-level

doctrine, but also the shortcomings associated with that doctrine.

Problem Statement and Research Questions

The shortcomings, or problems, associated with the US Army's operational-level doctrine may be categorized as either practical or theoretical. In the former case, the practical, shortcomings may be derived from an analysis of US Army doctrinal publications -- Field Manual 100-5 and Field Circular 100-15. Those shortcomings may be considered symptoms. The theoretical shortcomings may be considered causes; that is, the failure to answer, or even consider, the theoretical questions results in practical shortcomings.

At the practical level, problems associated with the US Army's development and presentation of operational-level doctrine are:

- Only recent acknowledgment of and discussion concerning the operational art.
- Promulgation of AirLand Battle doctrine.
- Adoption, acceptance, and assimilation of AirLand Battle doctrine as an operational concept.
- Establishment of an operational concept or doctrine projecting beyond current resources.
- Establishment of operational-level doctrine to be planned and executed by unpracticed headquarters (commanders and staffs).
- Organizing, equipping, and training a force capable of conducting a maneuver style of war.

A likely answer to the shortcomings noted above may be that resolutions will occur with the passing of time as doctrine developers, commanders, and staff officers are exposed to and become familiar

with the operational concepts. That form of resolution, however, may only be temporary as it will be directed toward temporary, localized, environmentally-dependent operational issues.

The task of the operational-level headquarters is to plan and execute campaigns and battles in accordance with AirLand Battle doctrine. Available evidence suggests that there are few, if any, command and staff organizations which are practiced in or capable of planning or fighting at the operational level.

The more significant shortcoming is the lack of a foundation for that level of war. The identification of principles applicable to the operational level of war may aid and guide commanders and staff officers in their planning and execution efforts. In that manner, resolution of the theoretical shortcoming (identification of principles) serves to resolve the practical shortcoming (unpracticed commanders, staff officers, and forces).

The principles of war, introduced into US Army doctrine in War Department Training Regulation 10-5 in 1921 and included, with modification, in the most recent edition of Field Manual 100-5, may be applicable to the operational level of war as they are applicable to the strategic and tactical levels of war.⁴ The applicability of the nine principles to all levels of war is a function of their general and abstract nature. They provide no definitive guide for the employment and sustainment of operational-level forces, or planning and executing operational-level campaigns and battles.

In contrast, techniques and procedures serve as guides for planning and execution, but are limited in scope, environmentally

dependent, and too restrictive to be applied as principles for the operational level of war.

There is a need, therefore, to identify and define principles applicable to the operational level of war. That body of principles should be less abstract than the principles of war, yet more environmentally independent than techniques or procedures. The principles should guide and govern the conduct of war at the operational level. The purpose of this study is to identify and define that body of operational principles.

The problem, simply stated, is to identify and define principles applicable to the operational level of war. A variety of subsidiary issues, or research questions, are associated with that problem statement. Those issues are:

- Definition of the operational level of war.
- Definition of operational principle.
- Selection of a methodology to identify operational principles.
- Application of operational principles to US Army operational concepts and doctrines.

Methodology

The method to be used in this study is a form of historical research, campaign and battle analysis. Applying that process to this study, the purpose of the critical analysis is to determine the discrete battlefield events which constituted a particular campaign or battle, and to determine what, if any, operational principles served as causes for those events.

The battles and campaigns of two operational-level commanders, Erwin Rommel and Bernard Montgomery, will be reviewed in this study. The objective of that review and analysis is to identify the decision-making criteria each commander used in formulating courses of action and in judging courses of action available to him in combat. Decision-making criteria can be found by examining primary sources such as Montgomery's Memoirs of Field-Marshal Montgomery and Rommel's Rommel Papers. Examination of additional primary sources and secondary sources should provide evidence of each commander's decision-making criteria, and the development of those criteria. Evidence of combat decision-making criteria and evidence of the development of those criteria in each commander will support the proposition that those criteria might legitimately be considered principles.

The war-fighting styles, doctrines, tactical abilities, and organizations of the forces Rommel and Montgomery commanded in battle must also be reviewed and analyzed. It may be assumed that Rommel and Montgomery represented different war-fighting styles and commanded forces with different tactical abilities. If a commonality of decision-making criteria exists between the two commanders, given their apparent differences in conducting war, then the argument for operational principles is strengthened. In addition, implications concerning the US Army's intended style of war-fighting in the future may be drawn.

Definition of Terms

The definition of terms is critical to this study. The selection of a particular definition for the terms listed below estab-

lishes a common frame of reference for examination of operational principles. In addition, definitions can either broaden or limit the scope of the study. Most importantly, the definitions provide a direction to the study. The definitions, then, state what the objective of the study ought to be by establishing what an operational principle is.

The following definitions of terms will apply to this study:

- criteria: Standards on which a decision or judgment may be based; basis of discrimination.

- decision-making: The act of deciding, choosing, or selecting a course of action by giving judgment.

- doctrine: Doctrine should be considered on two levels. First, doctrine includes all that is authoritative and taught. At that level, doctrine would include theories concerning the nature of war, directions concerning how an infantry division conducts operations, and instructions concerning the operation of a military rifle, for example. From another perspective, doctrine is derived from principles and concepts, and, in turn, is the practical basis for techniques and procedures. In that case, doctrine describes how the Army conducts operations in terms of combat, combat support, and combat service support functions, command and control, and integration of units and weapons systems. As a result, doctrine establishes common fighting techniques. The latter definition offered here is the preferred definition. The place doctrine occupies on the spectrum of doctrinal (broad definition) content is described in Chapter 2.

- operational level of war: The operational level of war

involves the application of forms of maneuver at the appropriate level (normally echelons above corps and corps) to destroy the physical and/or mental cohesion of the enemy. The operational level of war is the physical and intellectual link between the strategic and tactical levels of war. It concerns planning and conduct of campaigns to achieve the ends of a specified theater strategy. It concerns the defeat of an enemy force in a specified time and place through the orchestration of simultaneous and sequential tactical actions. Those tactical actions may be conducted by any or all subordinate combat, combat support, and combat service support organizations. In general, actions at the operational level seek to direct friendly strength against enemy weakness. The objective of those tactical actions, the operational objective, may be: the enemy's combat, combat support, or combat service support organizations; the linkages within and between those organizations -- the system; or the plans governing the employment of those organizations.

- operational principle: An elementary proposition, formulated on the basis of conclusive tests, evidence, or experience, which is considered essential to success at the operational level of war. Chapter 2, Operational Principles and the Theoretical Model, includes an expanded definition of operational principle.

- strategic level of war: Military strategy employs the armed forces of a nation to secure objectives of national policy by applying force or the threat of force. Military strategy sets the fundamental conditions for operations.⁵

- tactical level of war: The tactical level of war involves

the maneuver of force against force, or force away from force, the fires of force against force, and other actions designed to win an engagement. Actions at the tactical level of war are normally conducted by corps' and subordinate units. Actions at this level should be designed to support the operational objectives of the superior operational-level headquarters.

- technique (procedure): Method of performance of any act, especially the methods used by troops and commanders in performing assigned tasks. Technique refers to the basic methods of using equipment and personnel.

Assumptions

The following assumptions are made:

- That principles applicable to the operational level of war may be discovered through analysis of the campaigns and battles conducted by operational-level commanders. The review of prevailing war-fighting styles, doctrines, and organizations will assist that process of discovery.
- That Erwin Rommel and Bernard Montgomery were operational-level commanders.
- That an operational principle does not have to be universally applied. That is, it is not an element of proof that an operational principle was used by both commanders in all combat situations.
- That different techniques and procedures may be used in support of the same operational principle.

Limitations and Scope

The methodology, definitions, and assumptions described in

this chapter generally define the scope of the study. The selection of only two operational-level commanders also adds a limitation to the study.

Similar studies, now underway, are designed to examine the conduct of battle by other operational-level commanders. To complete the process, the campaigns and battles of operational-level commanders representing a variety of environments and levels of conflict must be examined. This study is a portion of that larger examination.

Having identified and defined operational principles peculiar to Erwin Rommel and Bernard Montgomery, the logical conclusion will be the statement of implications for the US Army. Ideally, the conclusion will be a set of defined operational principles to be used by proper commanders and staffs for planning in the operational arena. Additional implications concerning concept development, command and control, force structure, and doctrinal, training, organizational, and materiel requirements may also be derived.

The objective of the study, then, is to continue the critical and necessary task of developing operational-level doctrine by providing a body of operational principles as the foundation of that doctrine. That foundation should serve more than a pedagogical purpose. It should have application to the planning and conduct of campaigns and battles at the operational-level headquarters. And, if consistently and correctly applied, those operational principles should lead to winning those campaigns and battles.

Organization of the Study

This study follows a normal progression from introduction

to discussion to conclusions, with some exceptions noted below.

The intent of this chapter, in addition to introduction of the subject, is to state the problem, describe the process to be used to resolve the problem, and indicate the importance of resolving the problem.

The following chapter, Operational Principles and the Theoretical Model, expands the definition of operational principle offered in this chapter. The chapter explores the ancillary issue of the nature of operational principles in theory. While that subject is not critical to the study of two operational-level commanders, it assists the process of the study by more precisely defining the operational level of war and operational principles applicable to it.

In Chapter 3, The Operational Principles of Erwin Rommel, Rommel's campaigning in North Africa from February 1941 to February 1942 is reviewed. A brief review of his military life and a review of German doctrine are used to introduce the chapter. The process of combining the man, the doctrine, and his battles should provide the most complete course for identifying operational principles. Chapter 4, The Operational Principles of Bernard Montgomery, uses the same organization and process described above. Selected campaigns and battles conducted by Montgomery in Northwest Europe during 1944 and 1945 are reviewed.

The study concludes with a comparison and contrast of the operational principles of Erwin Rommel and Bernard Montgomery. A single set of operational principles applicable to the US Army is presented and described. Finally, a variety of issues pertinent to the

US Army and its efforts to prepare for and conduct operational-level war are addressed. The basis for the discussion of implications is the result of reviewing the war-fighting styles, doctrines, and campaigns and battles of Erwin Rommel and Bernard Montgomery.

ENDNOTES CHAPTER 1

1. US Army, Field Manual 100-5, Operations, (1982), p. i.
2. Ibid., Chapters 2 and 7.
3. US Army, Field Circular 100-15, Corps Operations, p. i., Chapters 4, 5, and 6.
4. John W. Campbell, "Evolution of a Doctrine: The Principles of War", Marine Corps Gazette, May, 1970.
5. Field Manual 100-5, Operations, p. 2-3.

CHAPTER 2

OPERATIONAL PRINCIPLES AND THE THEORETICAL MODEL

Introduction

In Chapter 1 an operational principle was defined as "an elementary proposition, formulated on the basis of conclusive tests, evidence, or experience, which is considered essential to success at the operational level of war."¹ (The operational level of war concerns the planning and conduct of battles and campaigns to achieve the ends of specified theater strategy, and to defeat an enemy force through the orchestration of simultaneous and sequential tactical actions.)² The purpose of this chapter is to expand that definition of an operational principle by describing the nature and functions of operational principles in the context of the spectrum of doctrinal content.

The spectrum of doctrinal content concerns the organization of what may be termed war on paper; that is, what is written and studied about war. The spectrum ranges from theoretical foundations, or theories of war, to reviews of battles, or lessons learned from war. If there are operational principles, separate and distinct from tactical techniques and procedures, they must occupy some position on that spectrum. The definition of operational principles can be expanded, therefore, by identifying the position those principles occupy on the spectrum of doctrinal content, and describing the relationships between the operational principles and the other elements on the spectrum.

The Theoretical Model

A theoretical model is a useful tool for describing the spectrum of doctrinal content. The model can be used to describe operational principles and their relationships to other elements of the spectrum (model). The model is more than a mere taxonomy. In addition to the ordering, distinguishing, and naming of type groups within a subject field (in this case the subject field is war), the model allows relationships to be described, and hypotheses concerning those relationships to be presented.

Explanation of The Model

The theoretical model shown at Figure 1 depicts the spectrum of doctrinal content and shows the position occupied by operational principles. A theory of war serves as the foundation, or start point, for the other elements of the model. That theory is developed through study of history (including, but not limited to military history), experience, analysis, and synthesis. General principles of war are similarly developed through study of history, experience, analysis, and synthesis. Principles applicable to the strategic, operational, and tactical levels of war are subordinate to principles of war in general. These war-fighting principles serve to translate the abstract theory and principles of war into the more concrete doctrines, techniques, and procedures. Lessons learned from battles and campaigns actually fought (in accordance with doctrine, techniques, and procedures) can influence changes to specifics applied to the model. That is, a lesson learned from a particular battle, for example, might cause a change in a partic-

ular doctrine, with subsequent changes in specific techniques and procedures. The notion of temporal-spatial-epistemological proximity plays a role here. The lesson will be more readily applied to those elements at the lower end of the model.

The model, from theory to lessons learned, moves from the abstract to the concrete, or from the "why" to the "what" to the "how". In the context of this study, the purpose of operational principles is to provide the "what", or the translation from the abstract "why" to the more concrete "how". That purpose is fulfilled by an order, guide, or rational basis for the development of operational-level doctrine, while remaining consistent with (or, at least not contradicting) the principles of war.

The notion of consistency, or congruency, is an important one. Both vertical and horizontal congruency are assumed in the theoretical model. Congruency must exist between the theory of war, the principles of war, operational principles, operational doctrine, and operational techniques and procedures. If operational lessons learned are not consistent with the other operational elements, the contradiction must be addressed; a change may be required in operational doctrine, techniques, or procedures. Horizontal congruency requires that operational principles be consistent with the principles of military strategy, and that tactical principles be consistent with operational principles. The requirement for horizontal congruency among the war-fighting principles can be met by maintaining vertical congruency with the principles of war.

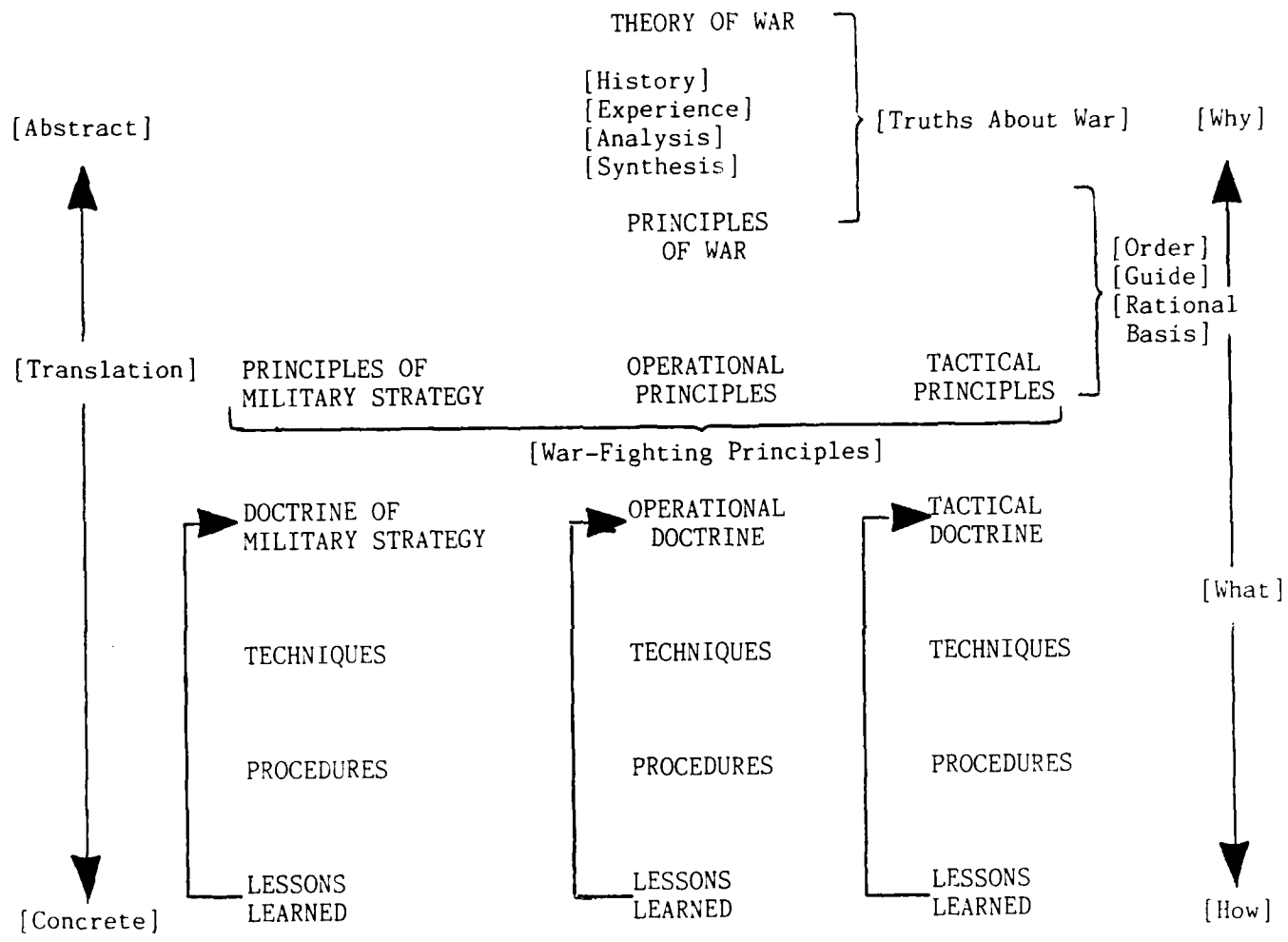


Figure 1
Theoretical Model of War on Paper

Conclusion

Additional elements of proof of an operational principle are imposed by the model. To be considered an operational principle, the "candidate" must be consistent with, or not contradict, the principles of war. The principle to be proven must not be a particular operational doctrine, technique, or procedure, but rather must serve as a rational basis for the development of operational doctrine, techniques, and procedures. An operational principle must also be distinct from, but consistent with, the principles of military strategy and tactical principles.

There are, no doubt, other models which can satisfactorily depict the spectrum of doctrinal content. The objective of this study, and this chapter in particular, however, is neither to determine which model of war on paper is correct, nor to prove or disprove a specific hypothesis associated with the theoretical model. The objective of the study is to identify and define specific operational principles applicable to the operational level of war. The objective of this chapter is to aid that process of identification and definition by specifying the nature of operational principles in general.

The definition of an operational principle, and the theoretical model presented in this chapter, serve as elements of proof for specific operational principles. What is identified as an operational principle through analyses of campaigns and battles must meet the necessary and sufficient conditions of operational principles in general. Meeting that criterion, the specific principle must fit into (be consistent with) the theoretical model; that is, the principle must fulfill the purpose

specified by the model. The logical proof of an operational principle is represented by the following equation:

Given: a = specific principle identified through analysis.
b = definition of an operational principle in general.
c = theoretical model.
x = operational principle.

If: $b + c = x$

And: $a = b + c$

Then: $a = x$

ENDNOTES CHAPTER 2

1. Chapter 1, this study, p. 8.
2. Ibid., p. 7.

CHAPTER 3

THE OPERATIONAL PRINCIPLES OF ERWIN ROMMEL

fox/fäks/n, pl.-es:...3: a clever, crafty man; a sly fellow
[the foxes live by their wits and rely on fraud - J.H.Hartwell]

Introduction

Erwin Rommel -- the Desert Fox. The name leads to the conjuring of romantic images of a tragic man -- a military genius doomed to support the misguided aspirations of an evil system. Numerous biographies, even the propaganda ministry of Hitler's Germany, have added to the myth of Rommel. It could be easily stated that the intent of this study is to look beyond the myth and the man in order to identify the operational principles of Erwin Rommel. The man must be considered to a certain extent, however. The highly personal act of decision-making is a major consideration in the identification of the principles which guide a man's conduct. So, this study must include at least a brief presentation of the personality and psychology of Erwin Rommel.

This chapter focuses more specifically on Erwin Rommel during his first year in North Africa (February 1941 to February 1942). Obviously, major operations -- actions in direct opposition to Bernard Montgomery and actions in Tunisia in late 1942 -- are not included in the initial twelve months of campaigning in North Africa. His actions as a division commander in France are also excluded. The first year in North Africa represented a culmination of lessons learned and a

demonstration of those lessons at the operational level. The foundation of Rommel's decision-making, his principles, had been developed prior to February 1941. His experiences as a platoon leader and company commander in World War I, his experiences as a commander and instructor during the inter-war years, and his experiences as a division commander in 1940 helped to shape his actions in North Africa.

Critics may argue that Rommel's North African campaign can be simply described in one sentence: Rommel attacked across North Africa twice, retreated twice, lost, and left. When reviewing the first year alone in North Africa, the campaigning is certainly more complex than the preceding sentence indicates. In North Africa, Rommel was the commander of a multi-division, multi-national force. In that sub-theater, he commanded and operated at the operational level. His battles and campaigns were inextricably linked to German strategy, and, in fact, to Allied strategy as well. More importantly, in the context of the operational level of war, North Africa serves as a stage for examining Rommel as a battle stage manager. As a battle stage manager, Rommel planned and fought his battles and major operations to achieve the ends of his overall campaign plan. In turn, the campaign plan was developed and executed to support the theater strategy, and eventually German military strategy.

This notion of strategic linkage -- battles and campaigns developed, staged, and executed in order to achieve the ends of higher strategy -- is an important one. Given the role Rommel played in North Africa, many questions arise concerning strategic linkage: Did Rommel conduct his campaigns with proper consideration of higher strategy,

— for example? That question and others will be considered later in this chapter.

The cynic among Rommel's critics might argue: If the US Army is planning to fight outnumbered and win, why study Rommel? After all, he lost! The reasons for analyzing Rommel's battles and campaigns in North Africa, in addition to those given above, are to determine why he lost and why he won when he won.

In order to conduct a more complete analysis of Rommel's North African campaign, the chapter begins with a brief review of Rommel's life and German pre-war doctrine. These sections set the stage for Rommel in North Africa. Following those reviews, Rommel's battles and campaigns in North Africa from February 1941 to February 1942 will be described and analyzed. The chapter continues with a discussion of the human dimension of command at the operational level of war. The concluding sections of the chapter will address the reasons for Rommel's successes and failures in North Africa, and recapitulate the operational principles of Erwin Rommel.

Erwin Rommel - Man and General

It has become obvious during the research on the operational principles of a specific commander, Rommel in this case, that pure mechanical analyses of battles and campaigns is not enough. The process of developing, selecting, and executing a course of action involves more than force comparison, terrain consideration, and selection of an objective. This is especially true at the operational level of war. The process of deciding and acting is also affected by the personality, psychology, and character of the man who decides

and acts. For that reason, it is appropriate to present a brief biographical sketch of Erwin Rommel here.

The purpose of this sketch is only to identify issues pertinent to Rommel's operational decision-making. It is not an essay on the life of Rommel, but a consideration of the man who was an operational commander. Therefore the direction of this section is to highlight the development of Rommel's character and values -- in other words, his principles.

Early Life

There is not much concerning Rommel's early life which would have indicated success in war. His considered deficiencies, in retrospect, offer some clues to his behavior as a general in the German Army. Desmond Young in Rommel The Desert Fox characterizes the young Rommel as "lazy", "inattentive", and "indifferent".² Kenneth Macksey concludes in Rommel: Battles And Campaigns the "(being blocked in the intellectual sphere) injected (him) with a discernible grudge against authority, a diffidence when dealing with 'enlightened individuals'".³ At any rate, his father prodded him to enter the army as an officer cadet as a less intellectual and more disciplined alternative to a career in engineering.⁴ It is interesting to note that although young Rommel was embarking on a career that would distinguish him, he was far removed in education and environment from the aristocratic Prussian officer class. The picture of Lieutenant Rommel⁶ prior to World War I was: a good regimental officer; quiet, serious, and efficient; and a developing common sense with a streak of stubbornness in him.⁷

World War I

The lessons Rommel learned during World War I were to characterize his approach to war-fighting throughout his life. During the war he commanded units ranging from small reconnaissance patrols to ablietungs (detachments) of up to seven companies.⁸ His experiences ranged from an initial war of movement and maneuver in France and Belgium in 1914 to trench warfare in France during the next year. In his book Infanterie Greift An (Infantry Attacks)⁹, Rommel recounts the lessons learned in France and Belgium. The lessons were both personal and tactical. They may be summarized as follows:

- Action decides the issue; he who acts first can impose his will on the other. ("He wins who fires first and can deliver the heaviest fire.")¹⁰
- Momentum must be maintained to carry through to the objective (and to overcome the enemy's resistance).¹¹
- Firepower must be available to the forward units.¹²
- Reconnaissance must be planned in detail and conducted in a thorough manner.¹³
- Infantry-artillery liaison must be maintained at all times.¹⁴
- Given the lethality of modern weapons (artillery), actions must be taken to increase protection (prepared positions, dispersed command posts, and covered and concealed routes).¹⁵
- Main forces may bypass points of local resistance. Other detachments can reduce those positions.¹⁶
- Concerning command, the will and the personal example of the leader are required to command and control his forces.¹⁷

◦ Deceiving the enemy helps to ensure the success of the attack.¹⁸

Rommel was wounded twice during fighting in France. His account of the first incident provides some significant clues to his personality and developing sense of war-fighting:

Once again we rushed the enemy in the bushes ahead of us. A little group of my former recruits came with me through the underbrush. Again the enemy fired madly. Finally, scarcely twenty paces ahead I saw five Frenchmen firing from the standing position. Instantly my gun was at my shoulder. Two Frenchmen, standing one behind the other, dropped to the ground as my rifle cracked. I was still faced by three of them. Apparently my men sought shelter behind me and couldn't help me. I fired again. The rifle misfired. I quickly opened the magazine and found it empty. The nearness of the enemy left no time for re-loading, nor was any shelter close at hand. There was no use thinking of escape. The bayonet was my only hope. ... Even with odds of three to one against me, I had complete confidence in the weapon and my ability. As I rushed forward, the enemy fired. Struck, I went head over heels and wound up a few paces in front of the enemy. A bullet, entering sideways, had shattered my upper left leg; ... I tried to close the wound with my right hand and, at the same time, to roll behind an oak. For many minutes I lay there between the two fronts. Finally my men broke through the bushes and the enemy retreated.¹⁹

In October 1916, Rommel was assigned as a company commander in the Württemberg Mountain Battalion. Action in France, Rumania, and Italy followed until reassignment to Germany in December 1917. During the maneuver-type campaigning in Rumania and Italy, Rommel continued to develop his war-fighting skills and his personality as a commander. The significant lessons he learned during that time were:

◦ Reconnaissance must be active particularly when the troops are resting.²⁰

◦ Deception and diversion of the enemy assist a successful envelopment.²¹

- The resolve of the commander and the infusion of will among the troops help decide the issue.²²
- Bluff, bravado, surprise attack, and rapid pursuit lead to "easy victories" (many captured enemy with few friendly losses).²³
- The exploitation of sudden successes, even when it means disobeying orders, can lead to greater successes.²⁴
- Leading troops to the limits of human endurance so as to take the enemy by surprise can lead to success in battle. This notion must be coupled with a consideration for the soldier's suffering.²⁵

Kenneth Macksey in Rommel: Battles And Campaigns is generally critical of Rommel. His treatment of Rommel's actions in Rumania and Italy portrays Rommel as overly ambitious (the motivation for the Pour le Merite), excessive in the expenditure of men and materiel, and obsessed with the desire to achieve his personal objectives. Nonetheless, Macksey acknowledges the importance of relentless pursuit, surprise, protection through movement, speed of attack, and the demoralizing effect of maneuver upon the unsuspecting enemy that Rommel stresses in Infanterie Greift An.²⁶

Inter-War Years

The inter-war years allowed Rommel to refine in theory and practice the lessons learned in World War I. As an instructor at the Infantry School in Dresden and as the author of Infanterie Greift An, Rommel committed himself to the study of his profession. As the commander of the 3d Battalion of the 17th Infantry Regiment (Goslar Jägers), he trained an elite unit. During this period, however, he was neither selected for General Staff training, nor attendance at

the War Academy.²⁷

Rommel was, however, in favor in Hitler's court. Perhaps because he was not a member of the Prussian "military aristocracy", he was afforded many opportunities -- and he took advantage of those opportunities. He was assigned to positions of increasing responsibility within the army Hitler was creating. During the actions in Czechoslovakia and Poland he commanded Hitler's headquarters battalion and escort. His attention was focused on the new kind of warfare -- the employment of fast-moving tank units, assault troops, and the use of dive bombers in close support. Rommel was learning new techniques, but the old lessons still applied.²⁸

The mutual admiration between Rommel and Hitler led to Rommel's assignment as *commander of the 7th Panzer Division* in February 1940. How did Rommel intend to apply his lessons learned to mobile, tank warfare? David Irving in The Trail Of The Fox provides the answer:

Before Rommel returned that evening to his new division, he called on his publisher in Potsdam and collected ten copies of Infanterie Greift An, for his subordinates to read. This was one clue on how he proposed to use his tanks in the coming battles - adventurously, like an infantry commander on a storm troop operation. Years later, one corps commander, ... Schweppenburg, recalled a second clue - a snatch of playful conversation he overheard ... Rommel asked Rudolf Schmidt - who had been his commanding officer in the 13th Infantry Regiment - in a loud stage whisper, 'Tell me, General, what's the best way to command a panzer division?'

Schmidt growled back: 'You'll find there are always two possible decisions open to you. Take the bolder one - it's always best.'²⁹

France 1940

Rommel participated in the blitzkrieg campaign in France and Belgium in 1940. His significant battlefield accomplishments

have been recorded in many books. More pertinent to this study, however, is the development and refinement of principles which guided his actions in the North African campaigns. Those refinements of lessons learned are highlighted as follows:

- Concerning the importance of offensive action, Rommel wrote:

I have found again and again that in encounter actions, the day goes to the side that is the first to plaster its opponent with fire. The man who lies low and awaits developments usually comes off second best.³⁰

and,

... in tank attacks especially, the action of opening fire immediately into the area which the enemy is believed to be holding, instead of waiting until several of one's own tanks have been hit, usually decides the issue.³¹

- Rommel's notions concerning command and control were refined during operations in France and Belgium. He wrote:

A tight combat control west of the Meuse, and flexibility to meet the changing situation, were only made possible by the fact that the divisional commander with his signal troop kept on the move and was able to give his orders direct to his regiment commanders in the front line. (Encoded wireless was too time-consuming. Continuous wireless contact was maintained with division headquarters in the rear. Twice daily operations updates were transmitted to the rear.) This method of command proved extremely effective.³²

and,

The employment of a Gefechtsstaffel (battle staff) aided (the) method of command and control. Gefechtsstaffel: (battle-staff) small headquarters group consisting of signals troops and a small combat team together with appropriate vehicles (including a wireless lorry) which always accompanied (Rommel) in action.³³

- The notion of momentum, developed in World War I and practiced here, was, according to Rommel, the notion of a continuous thrust

straight through to the objective in one stride with a tank-leading spearhead. The infantry (foot and truck-borne) followed up the tank attack. With neighbor divisions to the rear, artillery was planned to protect the flanks with heavy concentrations against flank routes and counterattacking forces. Routes were planned to bypass built-up areas. Rommel's intent was to ride with the lead panzer regiment (25th Panzer Regiment) in order to direct the attack from up forward, and to direct the artillery and the dive bombers at the decisive moment. To simplify wireless transmissions, Rommel employed the "thrust line" with reference points. This facilitated coordination with division headquarters in the rear, sub-units, and fire support. That coordination facilitated the rapid advance of the attack.³⁴

◦ Rommel employed specific techniques in command and control in order to maintain the rapid advances. The technique of "thrust line", his method and location of command, and sign-posting the communications routes are examples.³⁵

Rommel's successes in France, ending with the capture of Cherbourg in June 1940, were significant accomplishments. However, there were some reservations among the praise (much of the praise, self-generated) which followed. Rommel's corps and army commanders warned that he was too prone to act on impulse. They also noted that he downplayed the roles played by other divisions and the Luftwaffe. In fact, they commented that he impeded the advance of his neighbor divisions by using all available bridging to support his division's advance.³⁶

In Summary

After 49 years, one war, and the opening campaign of another behind him, what can be said of Erwin Rommel? He was, at least, a tactical expert. Some may claim he reached his zenith as a tactical division commander. He was experienced in rapid, maneuver warfare as a division commander. As a division commander, he gained experience in commanding a large combined arms force. His ideas on command and control, logistics, and combat techniques were, to his mind, correct. He demonstrated impatience with those who did not keep pace with him or his plans. In France, as in World War I, he outran his support echelons and broke contact with his follow-on forces. He pushed himself and his troops to extremes. His notions of surprise, deception, and relentless pursuit were reaffirmed in France in 1940. In summary, his actions, his psychology, and his character were compatible with the prevailing German notions concerning war-fighting.

German Doctrine

A review of German doctrine prior to World War II may be a useful aid in identifying the operational principles of Erwin Rommel. The relationship between operational principles and doctrine was described in Chapter 2. The relationship described in the theoretical model was a direct one and was based on consistency, or congruency. In the model, doctrine was developed, or deduced, from the war-fighting principles. A reverse, inductive process can be used to substantiate the operational principles demonstrated by Rommel in his battles and campaigns. In that regard, the doctrine provides the shape and boundaries for Rommel's decision-making and actions. A review of German

doctrine may also help explain differences between Rommel and Bernard Montgomery, especially when compared to British pre-war doctrine.

(That comparison is made in Chapter 5.)

In 1933, the German Field Service Regulations were published as Truppenführung (Troop Leading).³⁷ While the publication preceded Rommel's actions in North Africa by more than eight years, the text remained the basic war-fighting manual for the German Army. Omissions regarding the employment of large armored forces, which were developed during those intervening years, are obvious. However, the techniques and methodologies described in the text were easily adaptable to large-scale tank warfare.

Truppenführung probably represents more than the narrow definition of doctrine given in Chapter 1 (doctrine establishes common fighting techniques³⁸). A philosophy for war-fighting and principles for the conduct of operations were also presented, along with instructions on how to perform specific combat actions. In a sense, then, Truppenführung was the German Army's "capstone" manual prior to World War II. Similarities between Truppenführung and the US Army's current "capstone" manual, Field Manual 100-5, Operations, are obvious and noteworthy. Implications regarding similarities between the two texts, and the preparation for and conduct of battle, will be addressed in Chapter 5.

Part I of Truppenführung includes 724 major numbered paragraphs categorized in thirteen major sections. The categories range from war organization and leadership to instructions on specific combat actions and the affairs of billeting and quartering. The point worth

recalling later in this chapter is how Erwin Rommel applied these doctrinal notions to his planning and conduct of battles and campaigns. Extracts from the text are provided in order to create a sense of the doctrine which influenced Rommel.

In the Introduction to Truppenführung, the nature of war and the role of the leader are addressed:

The conduct of war is an art, depending upon free creative activity, scientifically grounded. It makes the highest demands on the personality.³⁹

War is the severest test of spiritual and bodily strength. In war, character outweighs intellect. Many stand forth on the field of battle who in peace would remain unnoticed.⁴⁰

The officer is a leader and a teacher. Besides his knowledge of men and his sense of justice he must be distinguished by his superior knowledge and experience, his earnestness, his self-control and high courage.⁴¹

The example and personal conduct of officers and non-commissioned officers are of decisive influence on the troops. The officer who in the face of the enemy is cold-blooded, decisive and courageous inspires his troops onward. The officer must likewise find the way to the hearts of his subordinates and gain their trust through an understanding of their feelings and thoughts and through never ceasing care for their needs.⁴²

The first demand in war is decisive action. Everyone, the highest commander and the most junior soldier must be aware that omissions and neglects incriminate him more severely than the mistake of choice of means.⁴³

The concept of combined arms is introduced in the section entitled "War Organization -- Troop Distribution". In that section, the technique of attaching units of the air arm (reconnaissance, attack, and bombing squadrons) is given authoritative approval. The notion of combined arms within the division organization, making it capable of independent operations, is presented.⁴⁴

The treatment of leadership in Truppenführung is far-ranging. It deals with the personal qualities of the leader as well as the requirements for the preparation and transmission of combat orders, instructions on the maintenance of situation maps, and directions concerning the proper location of the commander and his staff.⁴⁵

The following extracts from that section highlight its major points:

Great successes presume boldness and daring preceded by good judgment.⁴⁶

We never have at our disposal all the desired forces for the decisive action. He who will secure everywhere or who fixes forces in secondary tasks acts contrary to the fundamental.⁴⁷

Time and space must be quickly estimated, favorable situations quickly recognized and decisively exploited. Every advantage over the enemy increases our own freedom of action.⁴⁸

Surprise of the enemy is a decisive factor in success. Actions based on surprise are only of great success when we do not permit the enemy to take adequate counter measures.⁴⁹

The mission and the situation form the basis for action.

The mission designates the objective to be attained. The leader must never forget his mission. A mission which indicates several tasks easily diverts from the main objective.⁵⁰

The decision arises from the mission and the situation. Should the mission no longer suffice as the fundamental of conduct or is it changed by events, the decision must take these considerations into account. He who changes his mission or does not execute the one given must report his actions at once and assumes all responsibility for the consequences. He must always keep in mind the whole situation.⁵¹

The attack is launched in order to defeat the enemy. The attacker has the initiative. Superiority of leadership and of troops show to the best advantage in the attack. Success does not always come to superiority of numbers.⁵²

Pursuit reaps the fruits of victory. It strives to destroy the enemy, which destruction was not possible in the preceding engagement. Only a thorough-going relentless pursuit, which prevents the enemy from gaining time to rest and recuperate, saves ourselves sacrifices necessitated if we permit the enemy

to force another decisive engagement.⁵³

The defense waits for the opponent. The defender seeks to prescribe the battle terrain.⁵⁴

A decisive victory can only be gained by an offensive return.⁵⁵

Orders may bind only in so far as they correspond to the situation and its conditions.⁵⁶

(In the order) the general intention is expressed, the end to be achieved is especially stressed. ... the main instructions are given, the immediate conduct of the engagement is left to subordinate commanders. In such a way is the order fully executed.⁵⁷

The personal effect of the commander on the troops is of great importance. He must be near the fighting troops.⁵⁸

The division commander belongs with the troops.⁵⁹

(The commander) belongs early on the field of battle and at the decisive area.⁶⁰

During an advance the division commander with his small staff is well forward.⁶¹

The section dealing with reconnaissance emphasizes that the results form the most important basis for the decision and utilization of the force. The notions of air reconnaissance and air-ground interface are addressed. Reconnaissance of all types (air, ground, mobile, and fixed outposts) is discussed. Detailed missions and roles for all types of reconnaissance are provided.⁶²

Section VI, "Attack", presents a lengthy description of how to organize and plan an attack. Frontal, flanking, and enveloping attacks are described. The notion of penetration to deeper objectives (with requisite sustaining forces) is introduced. The cooperation of arms, with organizational directions to ensure cooperation, is stressed. (It is clear that the tank arm is more than a supporting

arm of the infantry in this section.) The major points of this section, eliminating the specific instructions and directions, are summarized as follows:

- Identify the objective and the main effort.
- Decide how to attack. Flank and enveloping attacks are most efficient.
- Organize the force ensuring cooperation of arms.
- Change the main effort as conditions require.
- Seek to destroy the enemy through decisive (offensive) action.⁶³

The text continues with detailed descriptions of pursuit, defense, and special combat and support operations. However, the sense of German pre-war doctrine has already been shown by the extracts and highlights.

It should be obvious that Erwin Rommel's experiences and personal qualities were compatible with the philosophy, if not some of the specific directions, presented in Truppenführung. In the sense that he was a leader of character and will, that he was infused with the offensive spirit, and that he was practiced in combined arms operations, he was not alone among German generals. How his personality and the doctrine he carried with him influenced his operations in North Africa is the issue.

Campaigning in North Africa - February 1941 to February 1942

As stated in the introduction to this chapter, Rommel's campaigns in North Africa provide a suitable point of focus for identifying the operational principles which guided his decisions

and actions. In North Africa, the man, with his war-fighting philosophy and experience, coincided with the situation, the theater, forces, and mission. By February 1941, Rommel's notions of war-fighting had been developed and reprovén. Operations in North Africa provided him the opportunity to apply those lessons learned on a grand scale.

Strategic Setting [Map 1]

When Italy entered the war in 1940, following the collapse of France, there was no German intention of becoming involved in Italy's North African conflict. During the autumn and early winter of 1941, however, Italian reverses at the hands of the British in North Africa threatened the Fascist regime and, thereby, the Axis coalition.⁶⁴

It is instructive to review Rommel's view of the North African mission:

In view of the highly critical situation with our Italian allies, two German divisions - one light and one panzer - were to be sent to Libya to their help. I was to take command of the German Afrika Korps and was to move off as soon as possible to Libya to reconnoitre the ground.

The middle of February would see the arrival of the first German troops in Africa; the movement of the 5th Light Division would be complete by mid-April and of the 15th Panzer Division at the end of May.

The basic condition for providing this help was that the Italian government should agree to undertake the defence of Tripolitania in the Gulf of Sirte area ... in order to secure the necessary space for the employment of the German Luftwaffe in Africa. This represented a departure from the previous Italian plan, which would have been limited to holding the Tripoli defence line. The Italian motorized forces in North Africa were to be placed under my command, while I myself was to be subordinate to Marshal Graziani. (Graziani was the commander of the Italian High Command in North Africa. He was replaced by General Garibaldi within days following Rommel's arrival.)⁶⁵

Initially, then, Rommel's mission was the defense of Tripolitania. Forces for the conduct of that mission included: two German

divisions and the Italian Ariete Division. The German divisions -- one light with a panzer regiment, and one panzer -- had not yet completed their arrival by the time Rommel made his opening moves. The Ariete Division included approximately 60 tanks of obsolete design.⁶⁶

Opening Moves

Rommel described his scheme for defending Tripolitania as follows:

Its main features were - not a step farther back, powerful Luftwaffe support and every available man to be thrown in for the defence of the Sirte sector, including the first German contingents as soon as they landed. It was my belief that if the British could detect no opposition they would probably continue their advance, but if they saw that they were going to have to fight another battle they would not simply attack - which would have been the proper course - but would first wait to build up supplies. With the time thus gained I hoped to build up our own strength until we were eventually strong enough to withstand the enemy attack.⁶⁷

The first clash between German and British forces (both reconnaissance elements) in North Africa occurred on 24 February 1941.⁶⁸ The movement of units of the 5th Light Division to the east continued. The object of that movement was to secure better defensible terrain. By 4 March 1941, elements of the 5th Light Division had secured the defile through which the British would have to attack in the vicinity of Mugtaa. As a result of the operations against Mugtaa, Rommel concluded that the British would not attack; in fact, the British were withdrawing to the east at that time.⁶⁹ Shortly after 15 March 1941, the Italian Brescia Division arrived in line at Mugtaa and the 5th Light Division was freed for mobile employment.⁷⁰

In little more than a month, Rommel had extended the defense

line more than 300 miles east from Tripoli, his supply terminal. On 19 March 1941 in Berlin, Rommel received a restated mission. He commented on that meeting:

The C.-in-C. of the Army (von Brauchitsch) informed me there was no intention of striking a decisive blow in Africa in the near future, and that for the present I could expect no reinforcements. After the arrival of the 15th Panzer Division at the end of May, I was to attack and destroy the enemy round Agedabia. Benghazi might perhaps be taken. I pointed out that we could not just take Benghazi, but would have to occupy the whole of Cyrenaica, as the Benghazi area could not be held by itself. ... The momentary British weakness in North Africa should have been exploited with the utmost energy, in order to gain the initiative once and for all for ourselves.⁷¹

Thus, the stage was set for major operations in North Africa. Von Brauchitsch had given Rommel, the ultimate opportunist, the opportunity to exceed specific orders.

The Raid Across Cyrenaica - March/April 1941 [Map 2]

Operations in Cyrenaica in the early spring of 1941 may be called appropriately a raid. The operations were carried out with dazzling speed and directed behind the front lines of the enemy. In less than three weeks, Rommel's forces advanced by various routes more than 400 miles, and secured territory previously held by the British. British plans to avoid decisive engagements and planned withdrawals played no small part in the success of the German/Italian advance.⁷²

On 23 March 1941, reconnaissance reports indicated that the British were thinning out their forward defenses in the vicinity of El Agheila. The attack by the 3d Reconnaissance Battalion the following day was successful. In rapid succession, the German/Italian force captured Mersa el Brega (31 March), Agedabia (2 April), Benghazi (3

April), El Mechili and Derna (8 April). On 9 April 1941, the forces under Rommel's command faced the perimeter defenses of Tobruk -- more than 400 miles from the start point of the raid.⁷³

By mid-May 1941, the German/Italian forces had failed in at least two attempts to seize Tobruk, but had pushed eastward into Egypt. East of Tobruk, Rommel was intent on establishing defenses at Bardia, Sollum, and the Halfaya Pass. He wanted to prevent the success of a British attack from the east designed to relieve the Tobruk garrison.⁷⁴

Operation Battleaxe - June 1941 [Map 3]

Following an unsuccessful counterattack on 15 May 1941 (Operation Brevity⁷⁵), the British summer offensive began with Operation Battleaxe on 15 June 1941. Originally, Battleaxe was designed to destroy Rommel's forces and gain a decisive victory in North Africa.⁷⁶ The plan called for a conventional "left hook" through the desert aimed at Sidi Azeiz combined with a heavy tank and infantry assault against the fortified Halfaya Pass.⁷⁷

The three-day battle was not a British success. Intercepts of British wireless communications alerted Rommel to the impending attack and he made his plans accordingly.⁷⁸ The fortified defensive positions at Halfaya Pass prevented the British from opening that route. British forces on the left wing had not reached their objectives. Rommel planned to concentrate both German divisions (the 5th Light and the 15th Panzer) suddenly in one focus against the British main tank forces south of Fort Capuzzo, then move the 5th Light Division to the east and north in the direction of Halfaya Pass, cutting the British off from their supply bases.⁷⁹

Rommel's counter-action were generally successful. The British sensed the danger in being cut off from their supporting bases and beat a hasty retreat. However, failure to coordinate the movements between the 5th Light and the 15th Panzer Divisions prevented complete destruction of the British forces south of Fort Capuzzo.⁸⁰

Operation Crusader - November 1941 [Map 4]

Changes in the Axis command structure had taken place during the summer of 1941. Rommel was appointed commander of Panzer Gruppe Afrika in July 1941. The Africa Corps with two panzer divisions and two motorized divisions, and four Italian infantry divisions were under his command. An Italian motorized corps (two divisions) was also available to him.⁸¹

During the summer and autumn of 1941, both the Axis and the Allied forces were engaged in a race in North Africa. The race was in the arena of logistics build-up. The finish lines were different: for Rommel the objective was defeating the garrison defending Tobruk; for Cunningham (commander of the 8th Army) the objectives were destruction of the Axis armor in battle, raising the seige of Tobruk, and eliminating the Axis garrisons at Bardia and the Halfaya Pass.⁸²

Rommel planned his attack on Tobruk for 20 November 1941. The refurbished British 8th Army began its attack, Operation Crusader, on 18 November 1941 using excellent counter-reconnaissance and counter-surveillance measures.⁸³ Initially, the British attack did not sway Rommel from his plan to attack Tobruk. With that plan still in the offing, the German forces were split. The British reaction to the German dispositions was to split their own attacking forces. On 20

November 1941, the Africa Corps began concentrating against the dispersed attackers. As an example, the 15th Panzer Division overwhelmed the British 4th Armored Brigade at Gabr Saleh. Rommel's major concern was to prevent the link-up between forces breaking out from Tobruk and forces attacking north and west from Sidi Rezegh. The link-up was prevented on 21 November 1941. The Tobruk forces could not continue their movement without coordinated movement from the south by the 7th Armored Division. The 7th was engaged with the Africa Corps at Sidi Rezegh. Maneuvers and attacks by German and Italian armored divisions on 22 and 23 November 1941 were directed against the British 7th Armored Division in the vicinity of Sidi Rezegh. Also on 23 November 1941, the New Zealand Division moving along the Via Balbia to the west was repelled.⁸⁴

Believing that a decisive victory had been won and that only ineffective remnants of the British force were attempting to evacuate, Rommel chose a daring course of action. He opted to relieve the besieged Sollum front, and, with the bulk of his mobile forces, to strike at the British line of supply in Egypt.⁸⁵ [Map 5] The British forces, now in Rommel's rear, did not withdraw. In fact, they began to reconstitute and prepared to continue their offensive.⁸⁶

Retreat From Cyrenaica - December 1941/January 1942 [Map 6]

Rommel's return to Tobruk following the unsuccessful raid into Egypt did not allow him to regain the initiative. He was deprived of reinforcements, and was faced by an enemy whose strength and skill were growing. Accordingly, Rommel began the withdrawal of the Africa Corps on 6 December 1941 to the Gazala Line. The Italians were strengthening

the existing defenses there.⁸⁷

The threat of British attacks from the south to his rear and supply lines prompted Rommel to continue his retreat, eventually to El Agheila. He established a defense line there on 10 January 1942. Numerous rearguard and spoiling actions against the advancing British and British resupply difficulties allowed Rommel to arrive at El Agheila with the bulk of his mobile force. Resupply through Benghazi and Tripoli expanded the tank strength of Panzer Gruppe Afrika during and following the retreat.⁸⁸

Counterstroke to the Gazala Line - January/February 1942 [Map 7]

On 20 January 1942, Rommel launched his counterstroke to the Gazala Line. He initiated a three-pronged attack from Mersa el Brega with the revitalized Africa Corps making an outflanking attack in the south. Again, as a year before, British garrisons were rapidly evacuated because of the threat of outflanking or enveloping forces. Benghazi, with stores of ammunition, arms, and materiel, was in Rommel's hands by 29 January 1942. Two mixed combat groups (less the Africa Corps and the Italian Motorized Corps) began the race to the east. By 6 February 1942 Axis forces were at the Gazala Line. The majority of the British had managed to evacuate before being cut off, however. While defenses were being prepared at Gazala, the German-Italian mobile forces were deployed behind the front for use in a mobile role.⁸⁹

Lessons Learned and Applied

The preceding section was devoted to brief descriptions of Rommel's major operations in North Africa from February 1941 to February 1942. By February 1942 he had moved his army back and forth (and back again)

almost his entire assigned theater of operations. In moving, in attacking, in defending and retreating, he made countless decisions. The preceding section describes what he did. This section describes why he did what he did.

As discussed earlier, Rommel arrived in North Africa having already learned lessons from war. He arrived with a firm personality and character which were compatible with German war-fighting doctrine. What was his view of his mission in North Africa? Following his initial moves on 5 March 1941, he said:

We're going to advance to the Nile. Then we'll make a right turn and win it all back again!⁹⁰

On 9 March 1941 he wrote:

My first objective will be the reconquest of Cyrenaica; my second, northern Egypt and the Suez Canal.⁹¹

Rommel's notion of mission and objective is important. His plans, orders, and actions were directed toward the missions and objectives he discussed in early March 1941. His role as a battle stage manager was to place and direct his forces in such a way as to secure those operational (and strategic) objectives.

Rommel commented on the defeat of Graziani's army by the British in late 1940/early 1941. His comments on maneuver and mobility were to be applied throughout the North African campaign:

In the North African desert, non-motorized troops are of practically no value against a motorized enemy, since the enemy has the chance in almost every position of making the action fluid by a turning movement round the south. Non-motorized formations, which can only be used against a modern army defensively and in prepared positions, will disturb him very little in such an operation. In mobile warfare, the advantage lies, as a rule, with the side which is subject to the least tactical restraint on account of its non-motorized troops. It follows then that the

disadvantage of the Italian Army vis-a-vis the British was that the greater part of it was non-motorized.⁹²

The notion of momentum and the importance of time and speed were lessons he had learned in World War I, and again in 1940. During the raid through Cyrenaica, Rommel stressed these notions again:

The sole criterion for a commander in carrying out a given order must be the time he is allowed for it, and he must use all his powers of execution to fulfill the task within that time.⁹³

Rommel wrote, "the experience which I gained during this advance through Cyrenaica formed the main foundation for my later operations."⁹⁴ What were those experiences? What were the lessons learned? Among them are: place heavy demands on subordinates and demand performance; take the enemy by surprise using an unsuspected route; and destabilize the enemy by making a rapid, surprise movement to his rear.⁹⁵

The notion of weighting the main effort was demonstrated during the continuing battles (Brevity, Battleaxe, and Crusader) on the Libyan-Egyptian frontier. The grouping of mobile, armored forces and directing that combined force against elements of a dispersed attacking force was successful. That grouping was made more effective by limiting the enemy's options with fortified positions strongly held by non-motorized forces -- Bardia and the Halfaya Pass, for example.

Perhaps the most significant lesson applied by Rommel during that first year in North Africa was the notion of exploiting opportunities presented to him. He certainly had a key role in creating those opportunities, of course. Given his experiences, forces, and knowledge of the enemy's doctrine and procedures, he was well equipped to create and exploit opportunities. In one instance, the raid into Egypt following

Operation Crusader, he failed. In the other major operations, he was able to first create, then take advantage of opportunities. Both the retreat from Cyrenaica and the subsequent counterstrike to the Gazala Line serve as excellent examples. Through deception, maneuver, and surprise, Rommel stage-managed local battles in such a way as to create local advantage. These local battles supported his operational intent -- retreating, in one case; attacking, in the other.

The Operational Commander

It is important to depart from the mechanical analysis of battles and campaigns and consider the human dimension at the operational level. If the operational level of war requires a different way of thinking, as some military theorists argue, then the operational commander must be discussed. Something of Rommel's personality and character is already known from the discussion of his life earlier in this chapter. What facets of his personality and character contributed to success and defeat in North Africa?

Kenneth Macksey in Rommel: Battles And Campaigns takes the critical approach. He contends that Rommel, for the most part, was not an effective operational commander. As an example, he writes:

It is, indeed, almost incredible to read about Rommel's exploits at the time of the frontier raid: the catalog of his narrow shaves and flukey escapades, as he raced about the battlefield from one unit to another, frequently driving among the British, produced a legend of invincibility more in tune with a dashing young subaltern from a boy's journal than a mature army commander.⁹⁶

That view can be compared with the views of Hans-Henning Holtzendorff, one of Rommel's regimental commanders in North Africa. Holtzendorff characterized Rommel as bold and strong-willed.⁹⁷ More

to the point, Holtzendorff credits Rommel with the ability to plan and conduct surprise, mobile, flexible operations.⁹⁸

The arguments can be put to one side. The issue here is vision; specifically, vision beyond the tactical level of war. Assuredly, Rommel's vision included the tactical battle, but it included the operational and strategic as well. That vision must be aided by anticipatory thinking -- a process of synthesis, not mechanical analysis. Given Rommel's plans and intentions, it is absurd to conclude that he was merely a tactical commander.

Success and Failure

The following question may be fairly asked: Given Rommel's tactical acumen, operational vision, forces, and a sometimes irresolute enemy, why did he lose? The simple answer is that he could not match the British in replenishment of men and materiel. His was not the major theater in higher German strategy. The invasion and planned conquest of Russia, beginning in June 1941, took precedence. Allied interdiction of his resupply pipeline reduced his available stores even more.⁹⁹ But, the answer is more complex than that.

Prior to Germany's entry into the North African theater, the British were able to monitor all high-level "enigma" wireless communications.¹⁰⁰ Although sometimes misread or misinterpreted, the messages decoded through "Ultra" gave the British foreknowledge of Rommel's major operations in North Africa. The British also knew beforehand the status of Rommel's logistics before their planned operations. It is all the more remarkable, therefore, that Rommel won major battles at all.

The question has only been partially answered. Besides resupply

inferiority and the "Ultra" intercepts, other factors led to Rommel's eventual defeat in North Africa. The notion of strategic linkage, introduced earlier in this chapter, applies here. Rommel as the battle manager correctly linked battles to his operational objectives. The raid across Cyrenaica, the raid into Egypt, and the retreat from Cyrenaica serve as examples. However, he most often failed to consider his operational capabilities and limitations in terms of higher strategy. To be sure, he had his own vision of higher strategy -- the drive to the Suez Canal and the oilfields to the east. His operational goals were linked to that view of strategy. The fact that his strategic view was not the same as German higher strategy doomed his campaign in North Africa to failure.

The concept of strategy is closely tied to logistics. Operational depth is determined by the length and width of the strategic resupply pipeline. In other words, Rommel's maneuvering X number of kilometers to secure an operational goal required X number of tons of resupply. If the resupply cannot support the operational objective, then either a more limited objective is selected, or, if not, the original aim will fail. This notion of operational sustainment is another reason for Rommel's eventual defeat in North Africa.

Interestingly, Rommel felt the frustration resulting from the lack of strategic linkage and operational sustainment. His remarks recognized the symptoms if not the disease:

The reason for giving up the pursuit is almost always the quartermaster's difficulty in spanning the lengthened supply routes with his available transport. As the commander usually pays great attention to his quartermaster and allows the latter's estimate of the supply possibilities to determine his strategic

plan, it has become the habit for quartermaster staffs to complain at every difficulty, instead of getting on with the job and using their powers of improvisation, which indeed are frequently nil. But generally the commander meekly accepts the situation and shapes his actions accordingly.¹⁰¹

and,

If quartermasters and civilian officials are left to take their own time over the organization of supplies, everything is bound to be very slow. Quartermasters often tend to work by theory and base all their calculations upon precedent, being satisfied if their performance comes up to the standards which this sets. This can lead to frightful disasters when there is a man on the other side who carries out his plans with greater drive and thus speed. In this situation the commander must be ruthless in his demands for an all-out effort. ... If he once allows himself to be satisfied with anything less than an all-out effort, he gives up the race at the starting-post and will sooner or later be taught a bitter lesson by his faster-moving enemy and be forced to jettison all his fixed ideas.¹⁰²

and, finally,

When, after a great victory which has brought the destruction of the enemy, the pursuit is abandoned on the quartermaster's advice, history almost invariably finds the decision to be wrong and points to the tremendous chances which have been missed,¹⁰³

Knowing the reasons for his eventual defeat and the disadvantages he had to overcome, what were the reasons for Rommel's successes in North Africa? Hans-Henning Holtzendorff proposes the major reasons for Rommel's success: Rommel's personality; the British approach to war-fighting; and the nature of the theater.¹⁰⁴

Holtzendorff argues that Rommel's personality was especially fitted for conducting war under the conditions which existed in North Africa. Rommel's boldness, strong will, and employment of surprise and innovation are given as proof. Holtzendorff notes Rommel's ability to correctly estimate the mentality of the enemy commander and knowledge of the British way of fighting.

The British method of waging war, viewed by Rommel, was mechanical and inflexible. Rommel, according to Holtzendorff, took advantage of the opportunities presented by the methodical, predictable British approach.¹⁰⁵

Finally, the nature of the theater of war in North Africa was well-suited for Rommel's personality and methods of war-fighting.¹⁰⁶ The desert provided ideal terrain for rapid, mobile operations, and the employment of large panzer and motorized units as complete organizations. There was little requirement for time-consuming infantry and engineer preparation prior to a decisive panzer attack. The resulting accelerated tempo of the battlefield favored the bold commander -- Erwin Rommel.¹⁰⁷

Operational Principles

The information required to identify Rommel's operational principles has been presented throughout this chapter. His ideas on war-fighting, and something of his personality and character are already known. The doctrine he operated within and his operations have been discussed. The purpose of this section is to distill that information into a set of operational principles which guided Rommel's actions and decisions.

In that distilling process, care must be taken not to confuse techniques and procedures with operational principles. Otherwise, the result may be a long list of situationally-dependent "tricks of the trade". Those battlefield-specific techniques and procedures might not apply except where the specific battlefield situation is duplicated.

If the operational principles presented here are closely aligned with the principles of war, that is not an argument against them. In fact, according to the theoretical model described in Chapter 2, operational principles should be consistent with the principles of war. The test for congruency is a part, therefore, of the distilling process.

A set of possible major categories of operational principles was compiled during research. The purpose of selecting major categories, as they became evident during research, was to focus the research process. Also, the categories allow an organized presentation of Rommel's operational principles, and will aid the comparison with Bernard Montgomery. The categories are:

- Combined Arms
- Offensive Action
- Momentum
- Command and Control - Decision-making
- Risk
- Strategic Linkage
- Operational Sustainment
- Reinforcement of Success - Exploitation of Opportunity

The operational principles of Erwin Rommel, organized into those major categories, are:

Combined Arms

- Use the air arm (or other long-range fire support) to disrupt the enemy in time and space.
- Use non-mobile forces, where best suited, to deny enemy

options; use mobile forces, in large groupings, against the enemy's dispersed mobile forces.

- Plan to reduce the effect of the enemy's combined arms force; plan to create multiple combined arms effects for which the enemy is neither physically nor mentally prepared.

- Air-ground cooperation is imperative. Air reconnaissance, long-range bombing, and close support are required for a successful ground plan.

- Tanks protect the infantry by destroying anti-infantry weapons and positions; infantry protects tanks by destroying anti-tank weapons and positions.

- Maneuver-fire support coordination is a must for successful operations. Planning and liaison must be coordinated at all levels.

- Organize forces so as to produce the maximum amount of cooperation among the arms.

Offensive Action

- Offensive action (attack or counterattack) decides the issue.
- Attack to a depth beyond the enemy's reserves to reach the operational goal.

- "He wins who fires first and can deliver the heaviest fire."¹⁰⁸

- The enemy's sustaining base is a proper operational objective. Attack it and the enemy's ability to continue the fight is greatly reduced.

- Flanking and enveloping attacks threaten the enemy, attack his will, and cause him to pause. The pause creates further opportunity to attack.

Momentum

- Keep moving at the greatest possible speed to the objective (and beyond it if the circumstances dictate).
- Do not limit the counterattack to reducing enemy forces in the main area of battle. Continue the counterattack into the enemy rear.
- Time is the critical element of mission accomplishment. Speed is the critical element in accomplishing the mission in the prescribed time.
- It is allowable to bypass points of local resistance. Follow-on detachments can reduce these. The main force must continue to its assigned objectives.
- Demand and continue to accept nothing less than all-out performance from subordinate commanders and the staff when conducting high-tempo operations.

Command and Control - Decision-making

- Lead well forward.
- Consider the enemy's mentality and war-fighting methods when making decisions.
- Locate the small command and signal element at the decisive place.
- Look beyond merely countering the enemy's plan for today.
- Use simple techniques to facilitate rapid transmission of orders.

Risk

- Make decisions in order to reduce the greater risk.

- Risk may be reduced through surprise and speed of operations.
- Logistics risk may be reduced by seizing logistics centers, ports, and airfields. (This action sustains momentum.)
- Risk disobeying higher orders when favorable opportunities arise.
- Bluff, daring, and bold action confuse the enemy and, thereby, reduce risk.

Strategic Linkage (Note that Rommel failed here.)

- Ensure that operational goals are consistent with strategic objectives.
- Ensure that operational goals are within strategic means.
- Do not revise strategic objectives to be consistent with operational goals and methods.

Operational Sustainment (Note that Rommel failed here too.)

- Consider logistics requirements for achieving operational goals.
- Consider the depth of operational objectives in terms of sustainment.
- Consider the planned time of operations in terms of sustainment.
- Selection of proper objectives can mitigate initial logistics restraints.

Reinforcement of Success - Exploitation of Opportunity

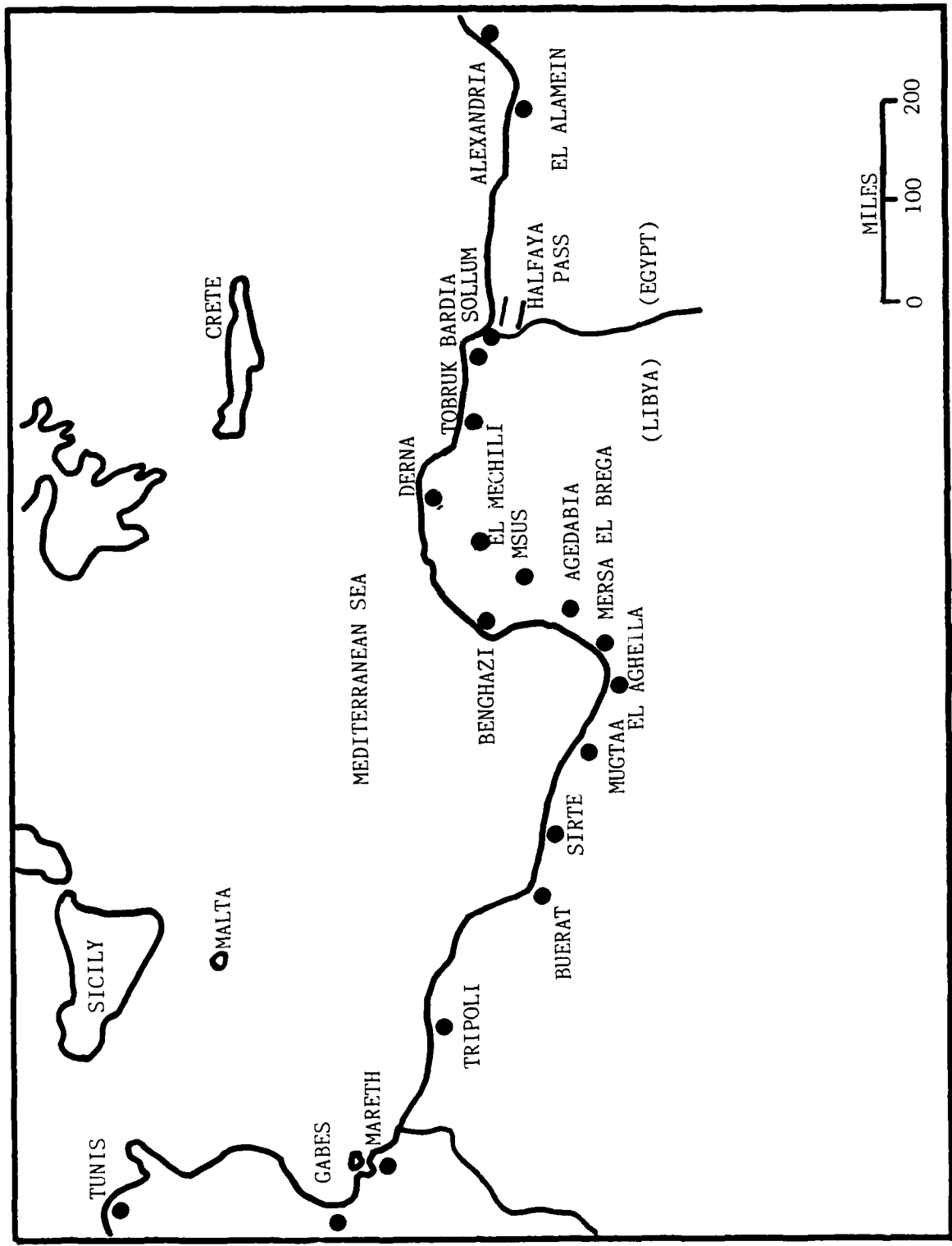
- The enemy's sound estimate of our possible actions is a main ingredient for our success; his estimate allows opportunities

to be created; once created, take full advantage of them.

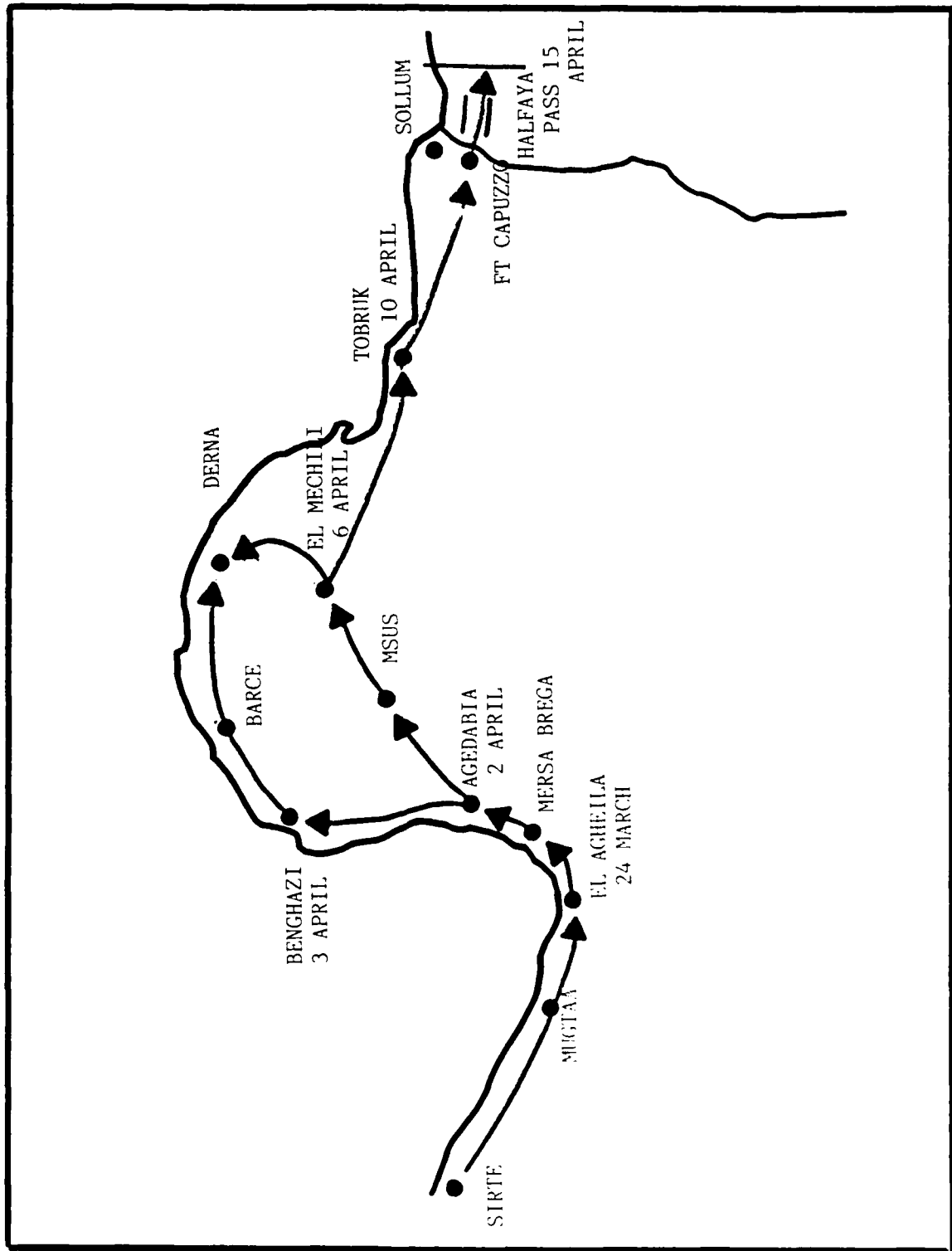
- A pause in enemy thinking or action creates an opportunity to be taken advantage of.

- Do not stop pursuit because planned time or distance has been reached; continue with the successful action to deeper goals.

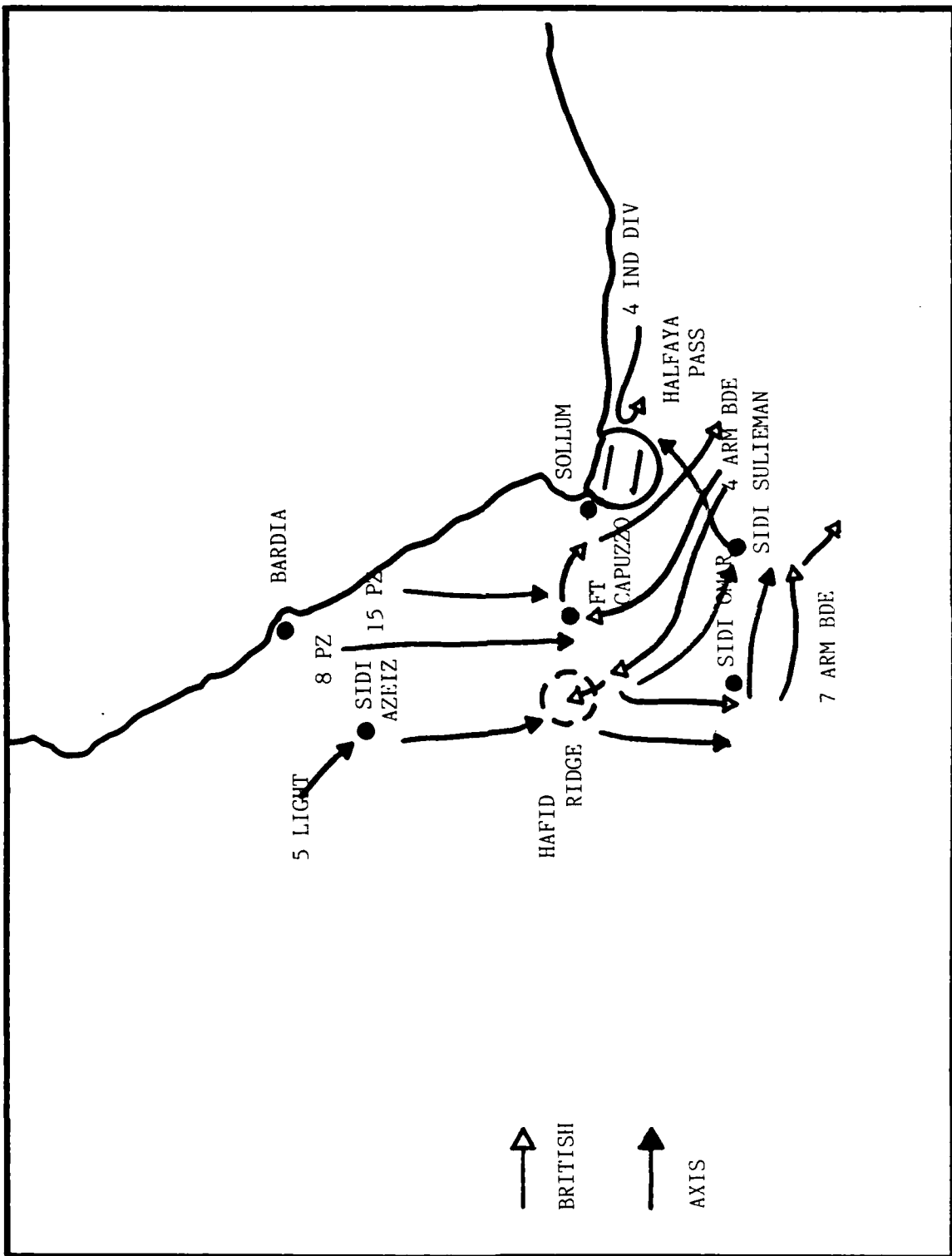
- Maintain the integrity of the main force in order to achieve the higher end.



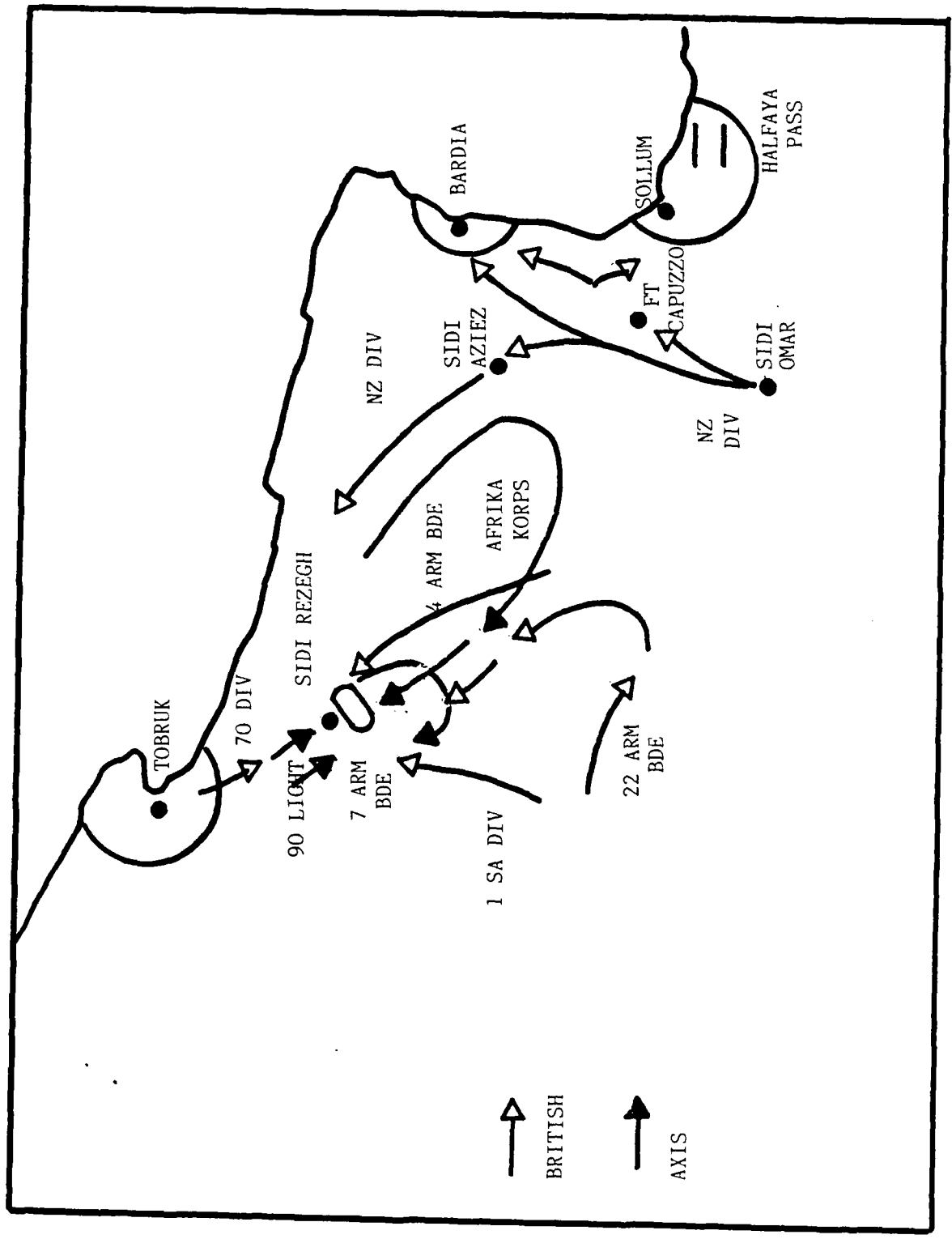
MAP 1 -- THE STRATEGIC SETTING



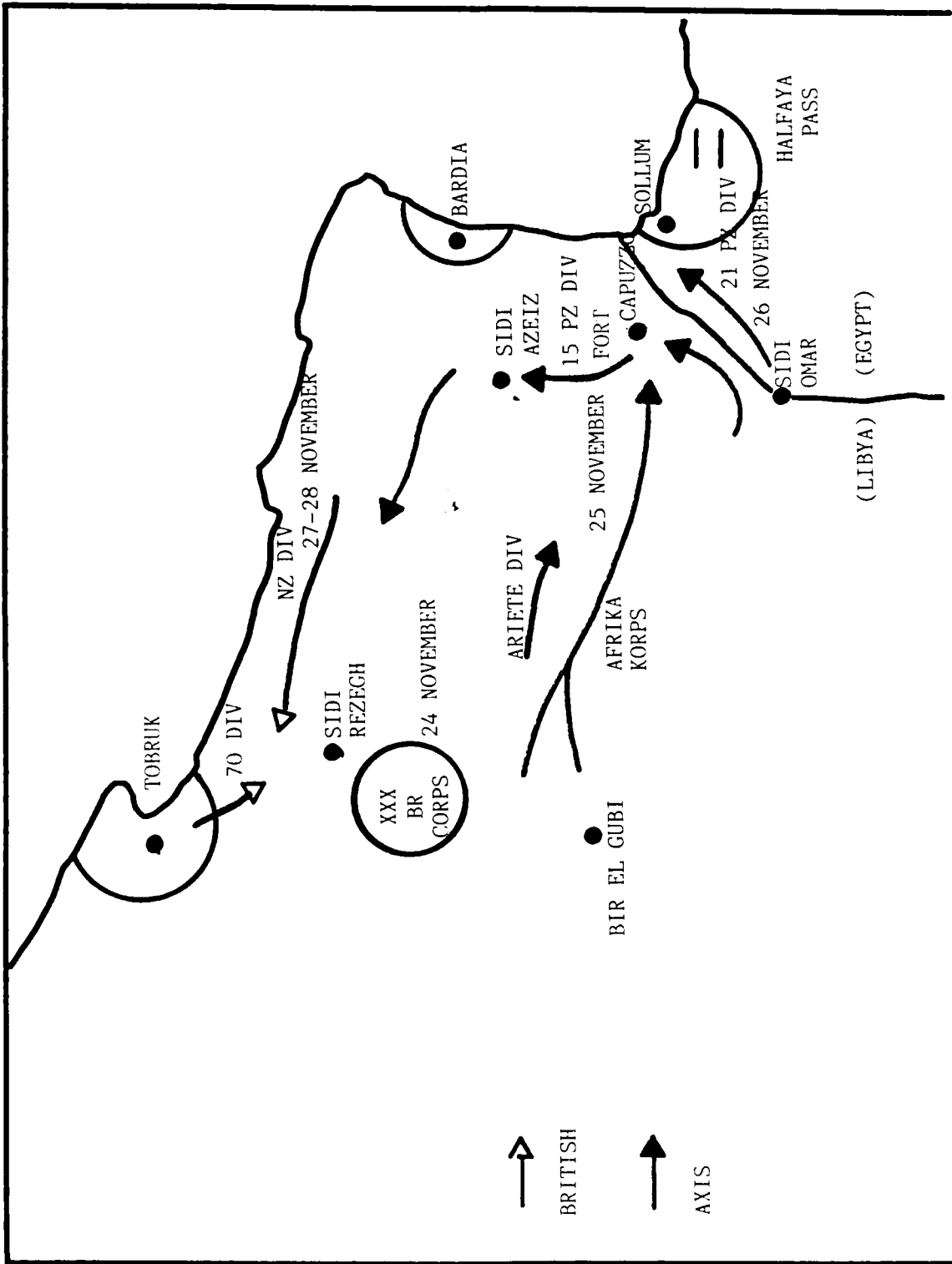
MAP 2 -- THE RAID ACROSS CYRENAICA



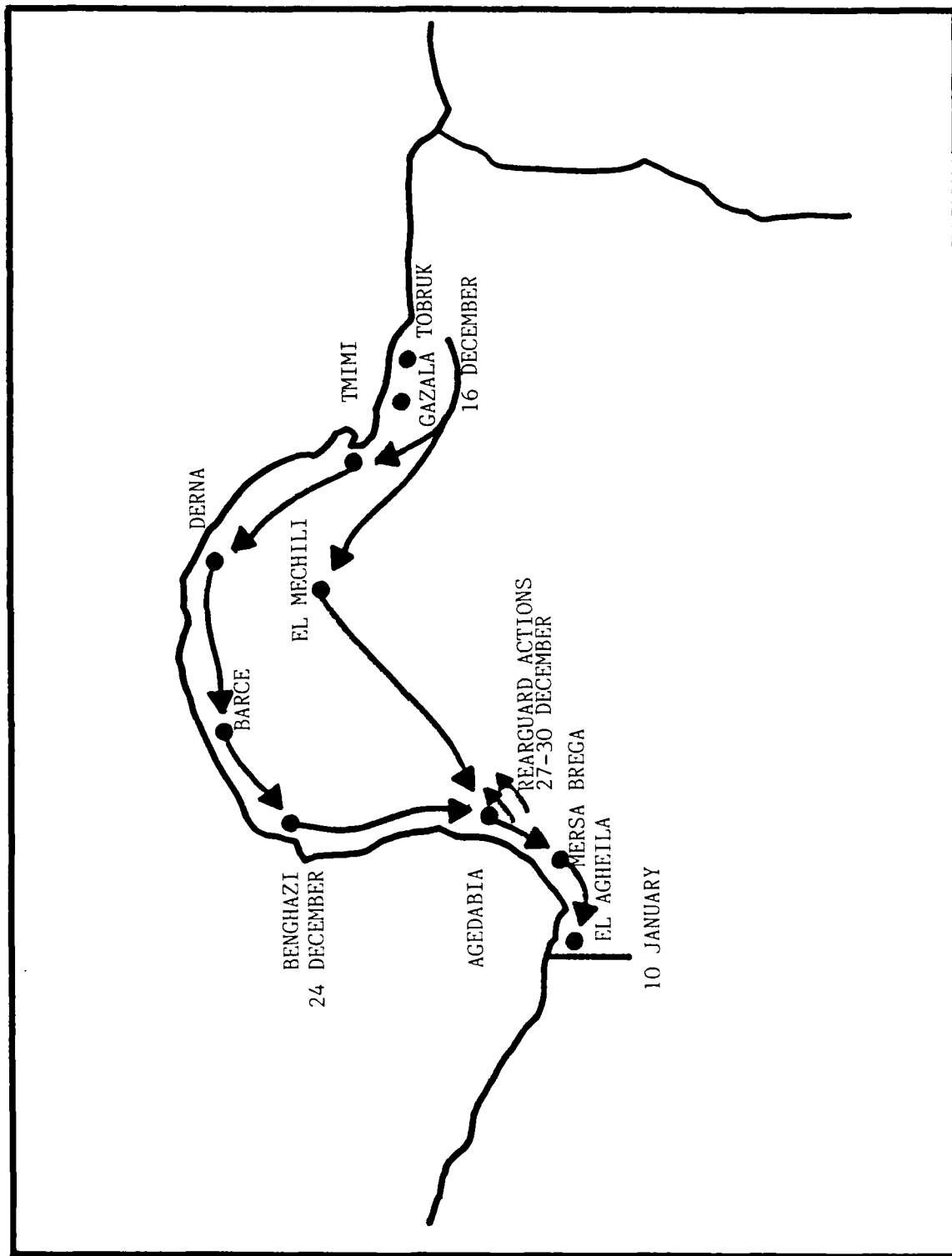
MAP 3 -- OPERATION BATTLEAXE



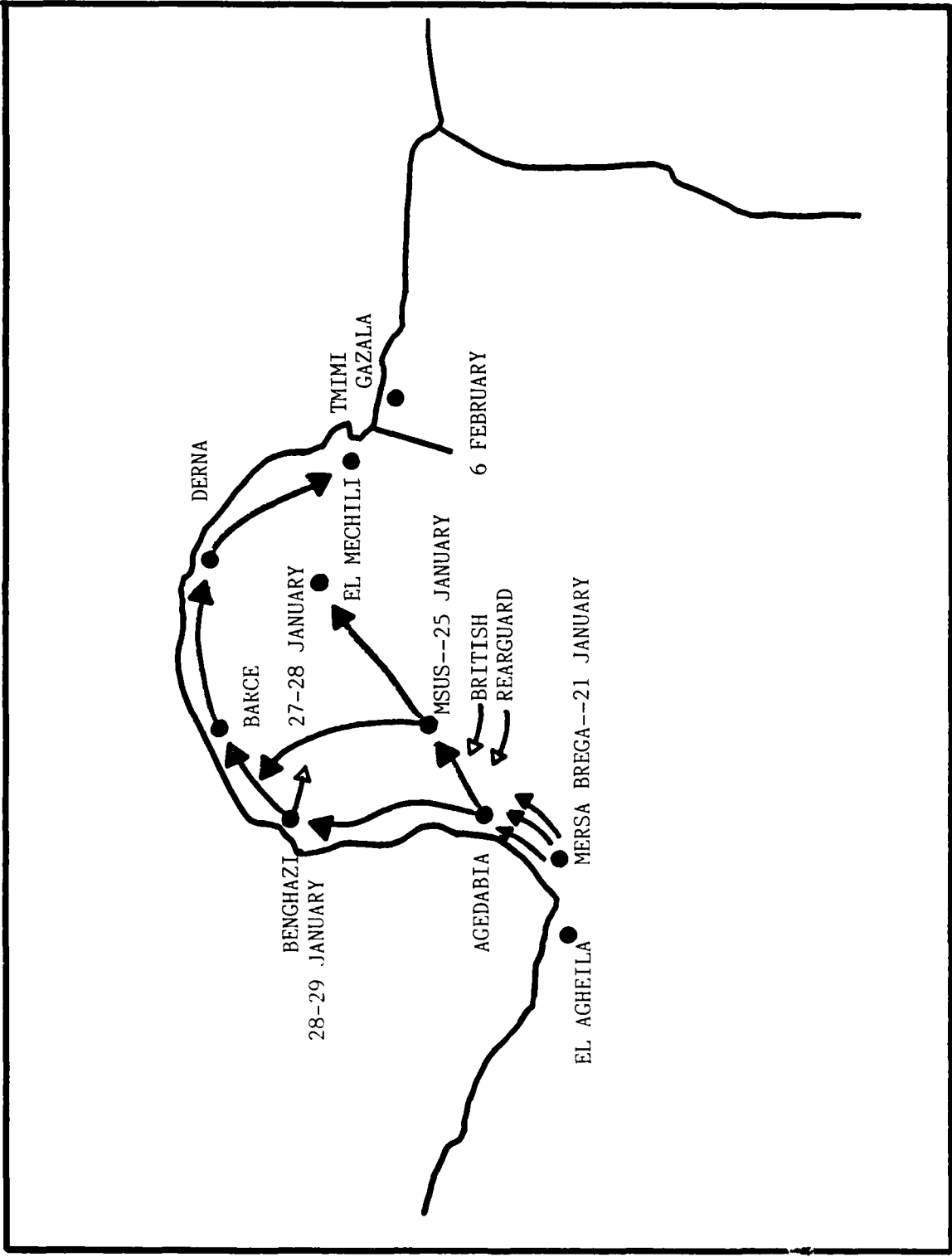
MAP 4 -- OPERATION CRUSADER



MAP 5 -- THE RAID INTO EGYPT



MAP 6 -- RETREAT FROM CYRENAICA



MAP 7 -- COUNTERSTROKE TO THE GAZALA LINE

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CHAPTER 4

THE OPERATIONAL PRINCIPLES OF BERNARD MONTGOMERY

And so our battlefields are becoming rather complicated. And in all these complications we tend to lose sight of those real essentials in the art of making war -- which are themselves so very simple.

Every officer must be clear in his own mind about the basic fundamentals -- the things that really matter if you want to win your battles -- ... On this broad and solid foundation he will have to build up his military philosophy...¹

Introduction

Gaining insight into Bernard Montgomery's military philosophy can be either a simple or a complicated process. If the researcher chooses to, he can be caught up in the never-ending controversy surrounding Montgomery's personality and generalship. It is a controversy, evidently, which allows no neutral parties. It is also a controversy which has not much to do with this study. The simple path to discovering Montgomery's military philosophy -- more specifically, his principles concerning the operational art -- requires an objective approach.

Unfortunately, even supposed unequivocal reviews of battles and campaigns in official histories reflect the prejudices of the authors. There are many obvious difficulties involved in reconstructing a great battle from many after-the-fact accounts. If something must be believed about Montgomery's military philosophy, then let

it be what he has written. That is the course taken in this chapter. Montgomery's personality and motivations aside, he wrote about his war-fighting fundamentals with sparkling clarity. He wrote instructions, pamphlets, and training manuals from the time he was a staff officer in World War I to the time he was the senior Allied general in the field in World War II.² The sum of that work is his notion of how war, including the operational level, should be fought. In fact, that work shows the development and evolution of his war-fighting principles.

The brief sketch of Montgomery's life in this chapter, therefore, has not much to do with his life out of uniform. That section focuses on his life as a military leader and trainer. It traces a rough chronology of his military career, but stresses what he thought and wrote about war-fighting. It is an important step, but not the only step, in establishing what his operational principles were.

Another step in establishing Montgomery's war-fighting principles is the battle and campaign review. In this case, three major operations in Northwest Europe will be reviewed. They are Operation Goodwood, Operation Market-Garden, and operations in the Ardennes following the German counter-offensive in December 1944.

In the section entitled "Generalship", some of the controversial issues surrounding Montgomery will be addressed, but only to the extent that they assist the process of identifying and defining his operational principles.

The chapter concludes with a restatement of the operational principles of Bernard Montgomery. The first step toward that

conclusion is to look at the man and his experiences.

Bernard Montgomery - Leader and Trainer

In the previous chapter, the controversy surrounding Erwin Rommel and the question of his success or failure was introduced and discussed. That controversy is a polite, academic exercise compared to the controversy which surrounds Bernard Montgomery and his generalship. It is not a question of ultimate success or failure -- he was on the winning side -- but, rather, a question of how he won. The generalship of Bernard Montgomery has been argued, pro and con, on the personal, military, and political levels. The object here is not to resolve the continuing controversy; that is, to conclude that he was or was not a great general. The object here is to determine what his principles of war-fighting were. The question of Montgomery's generalship is relevant, but in a descriptive sense, not in a prescriptive sense.

Early Life³

In many ways Montgomery's early life was similar to Erwin Rommel's. He, like Rommel was undisciplined, inattentive to school-work, and did not live up to his parents' expectations. There was no significant military tradition in his family. He entered the Royal Military Academy, Sandhurst in 1906, and was posted to the 1st Battalion, Royal Warwickshire Regiment in 1908. There was not much about his early life, including his early years in the army, which would have indicated his later successes on the battlefield.

World War I

Bernard Montgomery entered the war as a platoon commander

in the Royal Warwickshires. When the war ended he was a temporary lieutenant colonel serving as the chief of staff of a division.⁴ From June 1914 to November 1918 he served in various positions, primarily as a staff officer, from platoon through corps level.⁵ He did not have the continuous experience in leading troops in battle that Erwin Rommel had, but from a different perspective he was able to draw his own conclusions about war-fighting.⁶

He did not view the war from a lofty strategic vantage point, however. His daily concerns were those of the battalion and regiment. He participated in the bloody battles of World War I (the Somme in 1916 and Passchendaele in 1917); yet it was only in retrospect that he viewed those battles as costing too much for little or no strategic value.⁷ The lessons he learned were not only the soldier-craft lessons of platoon and company command, but also the lessons of the staff officer, the chief of staff, and the larger-unit commander. Among those lessons were:

- The staff must be the servants of the troops.⁸
- A good staff officer must serve his commander.⁹
- Without clear and specific orders, a largely volunteer army could not be expected to conduct demanding operations.¹⁰
- Offensive operations must be planned on a sound tactical understanding. The troops must know how to execute the plan.¹¹
- If troops are well trained, and are given limited, realistic, and identifiable objectives, then with the full weight of artillery at the point of the main attack, there is almost nothing the enemy can do to preserve his defense.¹²

- The tools of war, including men, should not be wasted. They may be used (even to the extent of appalling casualties), but the tools should be used to some legitimate end.¹³

- The success of an attack should be exploited. This requires appropriate reserves.¹⁴

- There must be a plan for battle; troops must be trained to accomplish the plan.¹⁵

- The commander must have some sense of the battle, before and during the battle.¹⁶

Rather than write a book for publication recounting his exploits in World War I, Bernard Montgomery wrote orders and instructions during the war. The instructions he wrote included: "Instructions for the Training of Divisions for Offensive Action"¹⁷; "Instructions for the Defensive"¹⁸; "Instructions for the Offensive"¹⁹; "Instructions for Advance in the Event of Enemy Withdrawal".²⁰ These instructions were detailed recapitulations of the tactical doctrine used, or to be used, by the units to which he was assigned. They were written while he was a staff officer at regiment, brigade, division, and corps. They served as training and operations standards during the war, and as training standards for the units he commanded during the inter-war years.

Inter-War Years

During the period 1918 to 1939, Bernard Montgomery had the opportunity to study and master his chosen craft -- war-fighting. He was first a student at Staff College, Camberley²¹, then a Brigade-Major in Ireland.²² Later he was a brigade and division staff officer,

and an instructor at the staff colleges at Camberley and Quetta.²³

Prior to World War II, he commanded at every level from company to corps. All of those experiences, added to his feeling that "many things seemed wrong" during the planning and conduct of operations in World War I²⁴, and his sense "that the profession of arms was a life-study"²⁵, combined to make Bernard Montgomery the man he was when Britain entered World War II.

The inter-war period provided ample opportunity for Montgomery to reflect on lessons learned during World War I. It is, perhaps, ironic that he, on the side of the victors, saw the need for change and improvement, while Erwin Rommel, on the side of the defeated enemy, saw little else than affirmation of his lessons learned. At any rate, using his war-time "Instructions" initially, Montgomery set out to train the units he commanded and the students attending the staff colleges.

He described his training philosophy as follows:

You will notice that I use the word "normal" a great deal. I am a great believer in giving people a "normal" to work on. My methods are as follows:

- a) I first enunciate the principles of the phase of war, or operation, that is to be done.
- b) Then give normal methods, based on the principles.
- c) Then work out a concrete case, showing how the principles are applied in practice on the ground. This may, or may not necessitate a departure from the "normal". But it makes no difference.

I think "normal" methods are a great aid as people then start on a definite basis instead of groping in the dark.²⁶

Nigel Hamilton remarks in his Montgomery biography that "This determination to keep things simple would be one of his (Montgomery's) chief claims to greatness in the ensuing war."²⁷

During those years, Montgomery began to refine and develop his concepts for fighting a modern war. The following examples are illustrative:

All through history, from the days of the great phalanx of the Roman Legion, the master law of tactics remains unchanged; this Law is that to achieve success you must be superior at the point where you intend to strike the decisive blow.²⁸

If the start (of a battle, operation, or campaign) is a bad one - either through a bad plan, faulty dispositions, or loss of time when time is very precious... - then the battle can be pulled out of the fire only by the gallantry of the troops and they are bound to suffer heavy casualties in the process...²⁹

Although information may be lacking or incomplete, he (the commander) must still make a plan and begin to force his will on the enemy... If he has no plan he will find that he is being made to conform gradually to the enemy's plan.³⁰

A modern commander must be willing to command the front-line units himself; to gauge for himself the intentions of the enemy and to adopt his own clear-cut plan for meeting or attacking that enemy, disposing his own forces in well-trained mobile formations ready to adopt a genuine tactical plan.³¹

(T)he fundamental method of modern command which a divisional commander must adopt (is)...the coordination of his forward troops with both divisional artillery and his main body of troops. Once in contact with the enemy on a wide front, the commander must take control of the battle..., looking ahead to decide the ground on which he would choose to fight...³²

In school and in training these and other fundamentals were put to the test. In North Africa, Montgomery's fundamentals were put to the test of battle from the summer of 1942 to the spring of 1943.

Victory in North Africa - Lessons Learned

In December 1942, Bernard Montgomery, then commanding the

Eighth Army, prepared and distributed a pamphlet entitled "Some Brief Notes For Senior Officers On The Conduct Of Battle".³³ It was, in Montgomery's mind, the Eighth Army's "How to Fight" manual. The fundamentals and procedures he described in that pamphlet are highlighted here:

- The basic fundamental for success in battle is: a thorough understanding of battle by the commander in order to organize and conduct training for battle.³⁴

- Morale and fighting spirit are all-important factors in success.³⁵

- Pursue the object of the battle plan relentlessly.³⁶

- Retain or seize the initiative.³⁷

- Air-ground cooperation is required for the success of the land battle.³⁸

- The essence of modern tactical methods is: concentration of effort, cooperation of all arms, control, simplicity, and speed of action.³⁹

- Non-mobile troops hold dominating ground as pivots or bases of action and maneuver by mobile troops.⁴⁰

- Artillery must be directed in heavy concentrations, in terms of continuous fire by many units, against the enemy at the point of main effort.⁴¹

- Successful battle operations depend on the maximum cooperation of all arms. That cooperation is most often effected through planning, rather than static organizations.⁴²

- The commander should move with his mobile and armored forces.⁴³
(Note that this was advice to subordinate, division commanders.)

In the following sections, Montgomery describes the offensive and defensive battles in detail. He describes the notion of battle stage management as the key to successful operations.⁴⁴ His emphasis regarding that notion of war-fighting was on the word "stage", not as an arena for battle, but as phases of battle. In his view the succeeding stages of battle were governed by dispositions, organization, and timing -- all factors addressed in the commander's plan and specifically trained for.⁴⁵

Following the capture of Tripoli in January 1943, Montgomery wrote and distributed another pamphlet, "Some Notes On High Command In War". The pamphlet was designed to supplement his earlier pamphlet on the conduct of battle. His idea of a "higher commander" was the commander of an army or higher organization. The pamphlet represented the mature state of his notions of war-fighting. In it he addressed issues ranging from air power to the role of the commander to the stage management of battle. The following highlights might be considered applicable to the operational level of war:

- The greatest asset of air power is its flexibility. The concentration of air power at the decisive place by the proper commander can be a battle-winning factor.⁴⁶

- Control of air power must be centralized at the highest field level being supported. Command should be exercised through air force channels.⁴⁷

- The air and ground staffs must work together at the same headquarters with complete mutual understanding.⁴⁸

- Most importantly, any operations conducted must have a good

and reasonable chance of success. The scope of operations must be limited accordingly. There must be no failures.⁴⁹

- The requisites for a commander are: quality of leadership, initiative, drive, character, ability, moral courage, resolution, determination, ability to radiate confidence, and good judgment in selecting subordinates.⁵⁰

- The higher commander must not become immersed in details. Details are the function of the staff and the chief of staff. The commander must spend a great deal of time in quiet thought and reflection, in thinking out major problems, in thinking how he will defeat the enemy.⁵¹

- A commander must never be far removed, however, from his senior administrative officer. It is vital for a commander to recognize that his administration in the rear has a direct and significant impact on the battle in the front. The commander should recognize that without the proper effort in the rear he will probably fail.⁵²

- The commander should train his staff and subordinate commanders to work on verbal orders.⁵³

- The plan of battle must be made by the commander, not his staff. After the commander has prepared and issued the plan, it becomes a matter for the staff. The commander directs his energies to ensuring that the basic fundamentals of the plan are not broken down. The commander should ensure that the basic operational aspects of the plan remain intact.⁵⁴

Among Montgomery's final words of advice to his subordinate commanders were:⁵⁵

Have a good chief of staff.

Go for simplicity in everything.

Cut out all paperwork and train your subordinates to work and act on verbal orders.

Keep a firm grip on the basic fundamentals - the things that really matter.

Avoid becoming involved in details; leave them to your staff.

Study the factor of morale...without a high morale you can achieve nothing.

In Summary

Not much attention has been paid to Montgomery's personality. If the preceding paragraphs show a man who was without fault and who was loved by all, that was not the intention. In order to make his plans and ideas work, Montgomery was, at times, insensitive, intolerant, abusive, and ruthless. At the same time, he was dedicated to his profession, clear and concise in expressing his intentions, determined to succeed, and relentless in demands for correct performance from himself and all others.

It should come as no great surprise that Montgomery's views were in line with then-current British doctrine. It is inconceivable that he would have been assigned the all-important mission of commanding the Eighth Army in Egypt if he were at odds with the current methods of war-fighting. A review of that pre-war doctrine serves as another step in establishing Montgomery's operational principles.

British Doctrine

The review of British pre-war doctrine here serves the same purpose that the review of German doctrine fulfilled in Chapter 3.

That purpose is to substantiate the operational principles demonstrated by Montgomery in his battles and campaigns. Also, this section sets the stage for the comparison between Montgomery and Erwin Rommel in Chapter 5.

If British pre-war doctrine established the style and methods for war-fighting, then an understanding of that doctrine would assist the process of discovering the war-fighting principles of Bernard Montgomery. The conclusion in this section will be an assessment of Montgomery's proclivity to plan and conduct military operations within the shape and boundaries of British doctrine in effect during World War II.

The British style and methods for fighting war (or the intended style and methods) were published in Field Service Regulations, Volume II, Operations-General, 1935 and Field Service Regulations, Volume III, Operations-Higher Formations, 1935.⁵⁶ The former volume addressed issues generally applicable to division organizations and lower units. Instructions concerning non-divisional organizations -- corps support units and air support units -- were also addressed. The latter volume dealt with, as the title indicates, the conduct of operations above the division level.

Volume II, Operations-General, "is intended as a guide to principles by which all parts of an army work in combination."⁵⁷ The introductory section establishes the general principles of cooperation by describing the functions of the various arms:

The fighting arms consist of: firstly, those whose primary role is to close with the enemy, to seize and occupy points of advantage, or to defend them; secondly, of those

whose main function is to support their action. The former include armoured troops, cavalry, and infantry; the latter, artillery, engineers, and signals.⁵⁸

The supporting arms - artillery, engineers, and signals - can obtain decisive results in battle only in combination with the other arms; while without their aid armoured troops, cavalry, and infantry have only a limited power of action.⁵⁹

Subsequent sections specify the roles and missions of the individual arms. The following extracts highlight the essential points:

Tanks are designed either to take part in mobile operations for which speed and a wide circuit of action are essential, at some sacrifice to armoured protection; or for close co-operation with infantry in the attack, for which armour is more important than speed or a wide circuit.⁶⁰

Tanks of the former type are classified as either light or medium...and are organized into mixed or light tank battalions; those of the latter are called infantry tanks and are organized into army tank battalions.⁶¹

Mixed and light tank battalions are normally organized into tank brigades. A tank brigade will usually be included with other mechanized formations in a mobile division, of which it will form the main striking portion for decisive action...⁶²

The role performed by the heavier infantry tanks is described as follows:

Army tank battalions are equipped with heavily armoured tanks which are somewhat slower than medium tanks... Army tank battalions are intended for close co-operation with infantry in the attack and counter-attack. They are required to break down wire entanglements and to destroy or neutralize machine-guns. They are a valuable aid to gaining the advantages of surprise and initial success in the attack and to maintaining its momentum. They also provide a most efficient means of countering hostile tanks.⁶³

The regulation continues by describing the roles of the other arms:

(Infantry) Practically all success in war, which is won

by the power of co-operation of all arms, must in the end be confirmed by infantry, which, by closing with the enemy, compels his withdrawal or surrender, and holds the objectives which have been secured or the points of importance which have to be protected as a base for further action.⁶⁴

(Artillery) Artillery is normally allotted as follows: horse artillery accompanies cavalry brigades; a proportion of the field artillery forms the divisional artillery; the remainder is organized into field brigades which are retained under higher commanders; medium, heavy, and super-heavy are under corps or army control, but a portion of medium artillery is sometimes allotted to divisions; anti-aircraft artillery is usually under army control.⁶⁵

...(the) flexibility of artillery fire is a factor to be exploited in the plan made to deceive the enemy enemy as to the area in which it is intended to attack.⁶⁶

To gain full advantage of its characteristics, the artillery in the field should be so organized and distributed that its main power can be rapidly applied at points where decisive blows are to be struck; and the system of command should be arranged to allow for centralization or decentralization of control according to the situation.⁶⁷

Artillery can be used with more effect and greater economy if kept under one command. Thus command of any body of artillery should be centralized under the highest commander who can exercise effective control.⁶⁸

(Air) The air force contingent with an army in the field will normally include fighter, fighter-bomber, and army co-operation squadrons... The first duty of the contingent is to create and maintain an air situation which will enable the army and the air force to work with a minimum of interference from enemy air action.⁶⁹

Successful co-operation with air force units depends on a correct appreciation and allotment of tasks, on the issue of clear and adequate orders, on good liaison and on good intercommunication.⁷⁰

The excerpts shown above are representative of the directions contained in the regulation. Roles and missions of these and other

branches are presented in much more detail. Those shown not only indicate arm-specific roles, but also demonstrate the mechanics of cooperation, an all-important notion. A separateness is implied and the interdependence of missions is clearly stated; hence, the requirement for cooperation.

The following section of Volume III sets the guidelines for "Command and Control of Troops in Battle" and "The Elements of Tactics". The following excerpt is offered as the principal element of command:

In any tactical operation, great or small, it is the duty of every commander, whatever the size of his command, to define clearly to himself the object which he seeks to attain and thereafter to allow nothing to distract him from it.⁷¹

In that same section the following concepts are defined and presented as tactical principles: surprise, mobility (speed and time), concentration, economy, security, cooperation, and offensive action.⁷²

Prescriptive instructions concerning orders are included in the sections "Orders and Instructions" and "Orders, General Principles". The British method of command is easily identifiable here. The object of operations orders is to bring about the course of action in accordance with the commander's intent and to ensure the cooperation of all arms and services.⁷³ Orders must contain only the information essential to subordinates to carry out assigned tasks; specific prescription should be avoided. As a general principle, the commander should state clearly the object to be attained; actual methods to attain that object will be given to ensure cooperation of effort, but not to interfere with the initiative of subordinates.⁷⁴ An additional important instruction is:

A formal order will never be departed from in either letter or spirit so long as the officer who issued it is present, or there is time to report to him and await a reply without losing an opportunity or endangering the force.⁷⁵

That restrictive direction is seemingly eased by the conditional language which follows. A subordinate may change an order if circumstances require; in fact, a subordinate commander is held responsible if he does not depart from an order when circumstances require. He must report immediately when he departs from given orders.⁷⁶

The attack, in general, and the conduct of the attack are described in excruciating detail in the manual. General principles governing the attack are:⁷⁷

- The object is to bring superior firepower against the enemy's main firepower.
- Organize the attack in depth (to facilitate exploitation and to counter defense in depth).
- Control and supervision of the attack is a major concern of the commander.
- A successful attack requires reconnaissance and preparation.
- The principal business of the commander is to apply the firepower he controls against the enemy's firepower.

The conduct of the attack is described as taking place in specified phases. The initial phase of the attack, or the attack preparation, following an encounter or contact with the enemy, is devoted to reconnaissance and the preparation and issue of orders for the attack proper.⁷⁸ The attack proper is phased with initial, extension, and subsequent stages.⁷⁹ In order to ensure further progress,

reserves may be committed to exploit. The decision to exploit or consolidate is described as follows:

Whether or not a subordinate commander should push forward beyond the line given him as his final objective must depend upon the instructions which he has received, his knowledge of the superior commander's intentions, the situation to his right and left and his tactical judgment as to the value of the ground to the front. Generally speaking, a bold decision should be taken unless it will lead to dangerous isolation.⁸⁰

The remaining section of note in Volume II address the roles of the various arms in the attack. Those roles parallel the doctrinal roles assigned in earlier sections of the manual. Of interest are:

Armored Units:⁸¹

- Army tank battalions may be used in the attack initially or in subsequent stages.
- The objectives will be limited due to the requirement for protection by infantry.

Infantry:⁸²

- Organize the attack in depth; that is, establish a reserve. Men held up should not be reinforced with additional men; either the attack should be pressed at other points where progress is still possible, or additional firepower should be provided.⁸³

Artillery:⁸⁴

- Plan maximum firepower against the most important points.
- The initial stage is to be conducted in accordance with a timed program.
- During initial stages, control should be centralized; later stages require more decentralized control.

Air:⁸⁵

- Local air superiority is required over the area of attack.

Volume III, Operations-Higher Formations of the 1935 regulations establishes the doctrinal ways and means of fighting war above the division level. Early on in that volume, the notion of cooperation is emphasized:

Whatever may be the form of war in which the army is employed, the closest possible co-operation between the army and the air force, between ground and air action, is always essential. The army may be required to seize and hold bases from which the air force will operate - to attack enemy forces or communications - while the air force will be required to co-operate in all undertakings of the army.⁸⁶

The following principles of war are described:

- Objective. All effort must be directed toward attaining the aim.⁸⁷

The objective must be within the means of the force that can be made available to secure it, and must be that best calculated to further the favourable conclusion of the operation or of the campaign or of the war.⁸⁸

- Concentration of Effort. This includes physical, moral, and material means.⁸⁹

- Offensive Action. Victory cannot be won by defense alone; offensive action should be undertaken, not rashly, but within available means and when circumstances are favorable.⁹⁰

- Surprise.⁹¹

- Mobility. The meaning here is to move and act more rapidly than the enemy.⁹²

The aim of maneuver, as described in the manual, is to cut the enemy force from its bases. Such a maneuver against the opponent's

lines of communication will cause him to surrender or to fight at a disadvantage. While interception of the enemy line of communication is usually decisive, the attacker must consider the danger of exposing his own lines of communication.⁹³

Two methods of fighting the offensive battle in open warfare are described. Attack on a broad front with a rapid advance and ensuing envelopment can be decisive if successful. However, all forces are committed and the only influence on the battle is the commander's original decision. An alternative method is to attack on the entire front with a part of the force, maintaining the largest possible general reserve. The reserve is then committed against exposed weak points. The problems for the commander are determining the decisive place and time, and ensuring the rapid movement of the reserve.⁹⁴

Administration of the rear is addressed in the manual. The aim is to allow an orderly, two-way flow of men, materiel, and munitions.⁹⁵

The instructions concerning command and control of higher formations directs commanders to exercise direct personal influence, to keep in close and constant touch with fighting troops, and to be prepared to intervene personally in the conduct of battle, when necessary.⁹⁶

The offensive battle is described again in this volume; this time in more detail. The notion of the stage management of a set-piece, timed, and closely controlled battle is evident in the descriptions of the preparatory stage, the main attack, the exploitation by the reserve, and the pursuit.⁹⁷

In Firepower⁹⁸, Bidwell and Graham detail the development and evolution of the British way of fighting war. The influence of World

War I is evident in the British notions of war-fighting in 1935. A conclusion widely reached during the summer of 1916 was that only major set-piece battles for limited objectives under closely controlled conditions were effective.⁹⁹ Another conclusion reached was that common procedures were needed for the "dog-fight", or close combat, which followed the timed artillery program.¹⁰⁰ British doctrine in 1935 only partially addressed these conclusions.

British pre-war doctrine can accurately be described as firepower based. That is, mechanical power was presented as an alternative to manpower. Firepower, superior in quantity and quality, was considered to be more effective than manpower.¹⁰¹ Tactics, then, were developed to exploit the advantages of firepower. Maneuver, including that of tank formations, was limited to the range and mobility of available firepower means. The tank was a means to attack the enemy's lines of communication and to attack, therefore, the will of the enemy commander. The staged conduct of battle, based on superior firepower and with all arms cooperating, was the major characteristic of the British way of fighting.

Recalling the war-fighting notions of Bernard Montgomery, it can be fairly said that he was the embodiment of British doctrine in battle. He was the epitome of the school solution. This is no great revelation, since he was instrumental in developing and practicing the school solution throughout the inter-war period. His conduct of battle in North Africa and his commentary on those battles, described earlier in this chapter, demonstrated that he had mastered the ways and means of British war-fighting. A review of his major operations

in Northwest Europe should reveal how he applied those notions of war-fighting at the operational level.

Campaigning in Northwest Europe - July 1944 to January 1945

When Bernard Montgomery arrived in England in January 1944 to begin preparations for the invasion of Western Europe, the man and the myth surrounding him were nearly inseparable. Had not his strong will, character, and leadership forged the turning point of the war at Alam Halfa and El Alamein? Had not his resoluteness and war-fighting skills led to the defeat of Rommel in the desert, and the cascading victories in NorthAfrica, Sicily, and Italy? The man and his methods of fighting war had arrived at the time and place where history offered its chance for greatness. Bernard Montgomery was placed in *command* of all the land forces for the assault on Western Europe. This was the stuff of which legends were made.¹⁰²

But, this study does not deal with legend. It deals with fact, or, at least, tries to. Montgomery's approach to the plans for the invasion were not based on legend, but on an objective review of the problem:

My approach to the problem was based on the lessons learnt in the stern school of active battle fighting, of which the following were always to the fore in my mind:

First - It is essential to relate what is strategically desirable to what is tactically possible with the forces at your disposal.

Second - To this end it is necessary to decide the development of operations before the initial blow is delivered. There must be a direct relationship between the two.

Third - If your flanks and rear are secure, you are well placed for battle.

Fourth - Simplicity is vital in the planning of operations. Once complications are allowed to creep in, the outcome is in danger.¹⁰³

It can be assumed that Montgomery applied these "lessons learnt in active battle fighting" to all operational planning, not just the D-Day invasion of Western Europe.

Strategic Setting [Map 1]

The Allied land assault onto the beaches of Normandy began 6 June 1944. The plan for the invasion was to blast the way on shore, and obtain a good lodgement area before defenders could employ reserves to push invading forces back into the sea. Space had to be gained rapidly and objectives well inland had to be secured early on. The principal function of the air forces was to secure the invasion ring by hindering the movement of enemy reserves to the assault areas.¹⁰⁴ Briefly, that was the concept of the operation. D-Day objectives included Caen, Bayeux, and Isigny, and a continuous front between those points. What was Montgomery's intent?:

It is important to understand that, once we had secured a good footing in Normandy, my plan was to threaten to break out on the eastern flank, that is the Caen sector. By pursuing this threat relentlessly, I intended to draw the main enemy reserves, particularly his armoured divisions, into that sector and keep them there - using the British and Canadian forces under Dempsey for that purpose. Having got the main enemy strength committed on the eastern sector, my plan was to make the break-out on the western flank - using for this task the American forces under General Bradley. This break-out attack was to be launched southwards, then eastwards in a wide sweep up the Seine about Paris. I hoped that this gigantic wheel would pivot on Falaise. It aimed to cut off all the enemy forces south of the Seine, the bridges over that river having been destroyed by our air forces.¹⁰⁵

The planned objectives, in particular Caen, were not secured on D-Day. Operation Goodwood was designed to accomplish the objective

of the break-out in accordance with Montgomery's original intent for D-Day expressed above.¹⁰⁶

Operation Goodwood - July 1944 [Map 2]

Description. Montgomery's plan was in keeping with his original intent. He would threaten a break-out in the eastern sector, draw the mobile German reserves to that area, and set up the conditions for the actual break-out in the western (American) sector.¹⁰⁷ Montgomery grouped the three British armored divisions (7th, 11th, and Guards) under O'Connor's VIII Corps and planned to send them rapidly out of the Orne bridgehead to the south. The armored columns would follow a carpet of massive air bombing. The result would force the Germans to move their reserves east of the Orne prior to the planned American break-out.¹⁰⁸ Montgomery defined the task of VIII Corps as follows:

The three armoured divisions will be required to dominate the area Bourguebus-Vimont-Bretteville, and to fight and destroy the enemy. But armoured cars should push far to the south towards Falaise and spread despondency and alarm and discover the "form" (of the German defense).¹⁰⁹

The plan required that the flanks of the armored thrust be cleared and maintained secure by infantry. British I Corps and Canadian II Corps were assigned to this task, their tasks made easier by the air bombing preparation.¹¹⁰

Prior to the British attack on 18 July 1944, Rommel, commanding the German Army Group "B", had established five belts of defense south of Caen and east of the Orne River. The first belt included infantry and anti-tank; the second, an immediate panzer reserve; the third, infantry and anti-tank garrisoned in villages; next, a line of 88mm and other heavy flak guns along the Bourguebus ridge; finally,

a fifth defensive zone organized with infantry around the villages on that ridge. A tank reserve of one division and two battlegroups was held farther back.¹¹¹

The air program preceding the attack included more than 2000 Allied medium and heavy bombers.¹¹² For two hours on 18 July 1944, the air forces laid down a carpet along the flanks and the path of the armored thrust line. The armored columns moved through the forward ground secured by the infantry. Other infantry units on the right and left attacked to secure the flanks of the armored thrust.¹¹³

By the afternoon of 18 July 1944 the attack began to slow. Progress on 19 July 1944 was also slow. German infantry and anti-tank units, in addition to the gun line on the Bourguebus ridge had sufficiently withstood the air bombardment to stem the three-division armored thrust. In addition, German armored reserves were being rushed to the Caen sector from west of the Orne River.¹¹⁴

On the afternoon of 20 July 1944, heavy rains turned the battlefield south of Caen into a mud-hole. Montgomery ordered the armor to withdraw into reserve and maintained pressure on the enemy defenses with infantry. Operation Goodwood was over.¹¹⁵

Commentary. To review Operation Goodwood alone serves no purpose other than analysis of tactical actions. That is not the intent of this study, however. To gain the proper operational perspective, Goodwood must be considered in the context of its relation to the D-Day plan and the subsequent break-out in the American sector, Operation Cobra.

There is ample evidence to substantiate the Goodwood-Cobra

link.¹¹⁶ In that context, Montgomery's notion of balance is noteworthy. Montgomery defined that notion as follows:

(Operations should be) based on unbalancing the enemy while keeping well balanced myself. I planned always to make the enemy commit his reserves...in order to plug holes in his defenses.¹¹⁷

Montgomery's plan succeeded in threatening the eastern sector to the extent that seven German panzer divisions were committed there, while only two were available to counter the break-out in the western sector.¹¹⁸

Montgomery relied on the principle that command must be personal and direct. He issued his verbal orders directly to the commanders involved (Dempsey and O'Connor), and sought agreement with Bradley.¹¹⁹ Interestingly, he was much more directive with his British commanders than with Bradley.

The air bombardment which preceded the ground operations was on a never-seen-before scale. This can be likened to Montgomery's use of concentrated artillery preparations in support of other battles. Montgomery was keenly aware of the requirement for air support of ground operations, and used that support on a massive scale.

The roles assigned to armored and infantry forces in Operation Goodwood show little change from the descriptions included in "Some Brief Notes For Senior Officers On The Conduct Of Battle". The "break-in", "dog-fight", and "break-through" battles designed in North Africa were applied to this operation also.¹²⁰

At this time, however, Montgomery was elevated beyond the tactical battles faced by his division and corps commanders. He

was in a position to match the effects of tactical battles to the achievement of strategic goals -- he was an operational commander. In that role his concern for relating the strategically desirable to the tactically possible led to his conviction that a narrow front strategy directed to the north and northeast and the German industrial base in the Ruhr would lead most quickly to strategic success -- the defeat of Germany. To this end, Operation Market-Garden was conceived and executed.¹²¹

Operation Market-Garden - September 1944 [Map 3]

Description. Following the break-out and pursuit from the Normandy beaches, the Allied armies continued to push toward Germany on a broad front. The British 21st Army Group was moving to the north and northeast. The movement of the American 12th Army Group, to the right, was to the east and northeast. Montgomery intended to move as rapidly as possible before the Germans could reorganize their defenses. His army group's advance (more than 300 miles from the operating channel ports) and the advance of 12th Army Group were already overtaxing the administrative support system. The Supreme Commander, Eisenhower, was unwilling to settle for the narrow front strategy recommended by Montgomery.¹²²

Against this strategic backdrop, the 21st Army Group, with the First Allied Airborne Corps, began Operation Market-Garden on 17 September 1944. Montgomery's Operational Directive M 525, issued on 14 September 1944, outlined the concept of the operation and his intent:

4. Together with 12 Army Group, we will begin

operations designed to isolate and surround the Ruhr; we will occupy that area as we may desire. Our real objective, therefore, is to occupy the Ruhr. But on the way to it we want the ports of Antwerp and Rotterdam, since the capture of the Ruhr is merely the first stop on the northern route of advance into Germany.

5. (The intention is) to destroy all enemy west of the general line Zwolle-Deventer-Venlo-Maastricht, with a view to advancing eastwards and occupying the Ruhr.

15. The first task of the (British Second) army is to operate northwards and secure crossings over the Rhine and the Meuse in the general area Arnhem-Nijmegen-Grave. An airborne corps of three divisions is placed under command Second Army for these operations.

17. The thrust northwards to secure river crossings ... will be rapid and violent, and without regard to what is happening on the flanks.¹²³

With the 50-plus mile stroke, Montgomery foresaw splitting Holland in two, outflanking the Siegfried Line, and establishing the British army group on the northern edge of the Ruhr.¹²⁴ Montgomery very probably realized the dangers involved in the plan, but was relying on the violence and magnitude of the assault to reduce the reactions of the defenders.¹²⁵

The airborne landings at Eindhoven, Nijmegen, and Arnhem began after noon on the 17th of September 1944. XXX Corps, the principal ground force, began its advance northwards along the narrow corridor at 1445 that afternoon, supported by rolling artillery barrages and rocket firing fighter-bombers. VIII and XII Corps' began their crossings of the Meuse-Escaut Canal on the flanks of XXX Corps.¹²⁶

Germans defense along the corridor and in Nijmegen and Arnhem was sufficient not only to slow down the ground advance to the north,

but also to threaten the partially-landed British 1st Airborne Division. By coincidence the 9th and 10th SS Panzer Divisions were refitting in the Arnhem-Nijmegen area. The defenders along the corridor had to be routed out along the way to maintain the momentum of the attack. This required time-consuming ground attacks and continued defense against counterattack. The British airborne forces in Arnhem had selected landing areas more than six miles from their objective and the presence of stronger-than-expected defenses in the area prevented them from seizing their most important objective -- the bridge across the Rhine in Arnhem.¹²⁷

The circumstances cited above were exacerbated by bad weather, preventing resupply and reinforcement, faulty communications, and methodical attacks by the British ground forces.¹²⁸

As a result, despite the gallant actions of British and American airborne forces, the operation could not be brought to its planned conclusion. On 25 September 1944 the evacuation of the British airborne division to the south bank of the Rhine was conducted. The thrust to the north by the 21st Army Group was stopped at the south bank of the Rhine in Arnhem.¹²⁹

Commentary. In his Memoirs, Montgomery recounts the reasons for not gaining complete success during Operation Market-Garden:

First, the operation was not regarded at Supreme Headquarters as the spearhead of a major Allied movement... designed to isolate, and finally occupy, the Ruhr - the one objective in the West the Germans could not afford to lose.¹³⁰

(Here Montgomery addressed the notions of strategic linkage, both conceptually and physically, and operational depth or sustainment.)

Second. The airborne forces at Arnhem were dropped too far away from the vital objective - the bridge.¹³¹

(The selection of drop zones was made to avoid casualties during the airborne assault.¹³²)

Third. The weather.¹³³

(The worsening weather prevented timely resupply and reinforcement of the airborne forces, reduced their limited capability even further, and heightened the need for rapid link-up by ground forces. As a result, the deep thrust lacked sufficient power to fracture the German defense.)

Fourth. The 2d SS Panzer Corps was refitting in the Arnhem area. ... We knew it was there. But were wrong in supposing that it could not fight effectively...¹³⁴

(Here Montgomery accepted risk. The chance for success was not assured, but the object to be gained -- a decisive blow directly threatening the Ruhr -- was great.)

Operation Market-Garden has been commented on in many quarters. It is important to view the operation in the context of the on-going campaign in Northwest Europe. In Montgomery's view it could have led directly to the defeat of Germany by the end of the year.¹³⁵ From the view of the Supreme Commander, Eisenhower, it would not be resourced to the extent that other operations on the broad front would have to cease. That obvious conflict between strategies was, of course, decided in Eisenhower's court to Eisenhower's favor. The Germans would have yet another chance -- this time in the Ardennes.

The Battle of the Ardennes - December 1944-January 1945 [Map 4]

Description. During the late autumn of 1944, the Allies

continued to advance, although slowly, on a broad front toward the German frontier. Owing to Eisenhower's strategy, few decisive gains were made. In each case where a major operation failed it was because of Allied inability to concentrate sufficient force on the primary objective.¹³⁶ The Supreme Commander's strategy was to gain the bridgeheads on the Rhine by the end of the year. Failing that, he intended to draw the armored reserves out of Germany and destroy them in the field.¹³⁷ The failure of that strategy allowed the German defenses to remain intact and the build-up of the German strategic reserve to continue.¹³⁸ Ironically, the "attack everywhere" approach directed by Eisenhower left the Ardennes defensive sector particularly weak.¹³⁹ Those last two factors set the conditions for the battle of the Ardennes.

The German plan provided for a mid-December offensive by German armies on a 75-mile front from Monschau to Echternach. The main effort was to be in the northern Ardennes. Antwerp was the objective of the Sixth SS Panzer Army attacking in the north. The Fifth Panzer Army was to make a supporting attack in the center, while the Seventh Army in the south protected the left flank from counterattack with a line of infantry divisions.¹⁴⁰

On 16 December 1944, Montgomery's 21st Army Group was completing clearing operations north of the Ardennes. The German offensive launched that day forced Montgomery to consider its effects on the disposition of his army group. He ordered preparations for the planned battle of the Rhineland to stop, and had plans prepared to move units in order to counter threats to his southern sector.

In the vague circumstances, he stopped the planned movement of XXX Corps to the west, reorganized it with four divisions and three armored brigades, and directed reconnaissance of the Meuse River.¹⁴¹

On the night of 19 December 1944, following continued German penetrations to the west, Eisenhower instructed Montgomery to take command of the two American armies (First and Ninth) north of the salient. Montgomery reorganized the American armies to create a reserve corps (VII Corps), while retaining XXX Corps in its positions along the Meuse. He personally visited both American army commanders to give instructions.¹⁴²

The following day, the Supreme Commander directed 12th Army Group to attack the southern flank of the salient while Montgomery's 21st Army Group launched its attack against the northern shoulder. The German movement to the west continued, engaging both American and British units under Montgomery's command. VII Corps, intended as a reserve, was engaged by advancing German units.¹⁴³

By Christmas Day 1944, the German offensive had been sealed off and the actions to reduce the salient began. XXX Corps' relief of VII Corps was completed by 2 January 1945, allowing VII Corps to be used for other operations. The next day VII Corps began its thrust to Houffalize, eventually to link up with Third Army units attacking from the south. The attack by XXX Corps on the right flank of First Army began 4 January 1945. On the left, XVIII Airborne Corps launched its attack into the salient.¹⁴⁴

In order to maintain the momentum of the counterattack, now

supported by the full weight of the Allied air forces, Montgomery switched a fresh division into the lead of XXX Corps. The battle continued with the Germans giving ground slowly. On 16 January 1945, the First and Third Armies linked up in Houffalize. Eisenhower ordered control of First Army returned to 12th Army Group. Montgomery began a rapid withdrawal to the north and west to begin preparations for the battle of the Rhineland.¹⁴⁵

Commentary. Montgomery drew the following conclusions from the battle of the Ardennes:

- The German plan was an unaffordable risk. The strategic reserves the Germans created were squandered in the counter-offensive. Without resources (primarily fuel), air superiority could not be achieved; without air support, the battle plan failed. Lack of fuel also had a limiting effect on ground units moving to the west.¹⁴⁶

- Reorganization of the American armies allowed establishment of a reserve corps. VII Corps played an important role following the halt of the counter-offensive by leading the attack into the salient.¹⁴⁷

- Without the requisite resources for victory, the German attack was a poorly calculated gamble.¹⁴⁸

- The enemy had seized the initiative. The Allies had been unbalanced. Regaining balance was the first step toward regaining the initiative.¹⁴⁹

Montgomery's contribution to the battle is that he transformed what might have been a series of uncoordinated actions by out-of-contact American armies into a coherent battle plan. The early

movement of XXX Corps provided balanced Allied dispositions, and provided the necessary depth for strengthening the northern flank. It was his insistence on the withdrawal of First Army to better defensive positions to the west, and his refusal to consent to piecemeal counterattacks that prevented the Germans from penetrating or outflanking his front.¹⁵⁰ In Montgomery's words:

The first thing to do was to see the battle on the northern flank as one whole, to ensure the vital areas were held securely, and to create reserves for counter-attack.¹⁵¹

Generalship

One of the more significant issues addressed by the Montgomery controversy is the issue of generalship. Was Montgomery a great general? Was he the greatest British general since Wellington? Was he only a good or adequate general who won because of overwhelming materiel superiority? Were his failures less damaging because of that overwhelming materiel superiority? These are the questions that are asked and answered during the debate over Montgomery's generalship.

The issue of his personality is invariably raised during this debate. Relating anecdotes about Montgomery, and reviewing the multitude of explanations of them, serves no useful purpose here, except perhaps one. Montgomery's insensitivity and often brutal inconsiderateness for his peers and, at times, his superiors might have been a function of his single-mindedness in pursuit of his own objectives. Given that, it is questionable whether Montgomery had any idea of the furor he created.¹⁵² His sights were

set on the war and, probably, himself. He did not focus on his contemporaries in sufficient depth to recognize the effect he had on them.

Putting the argument over personality aside, the question of his generalship remains. One of the chief arguments against his war-fighting methods is that he was too cautious.¹⁵³ That perceived caution had many foundations. Montgomery's essential mission as commander of British forces in North Africa and Northwest Europe was to achieve guaranteed success with the steadily declining manpower of a small nation.¹⁵⁴ His insistence on a planned, prepared, and certain course of action may have led to some lost opportunities (although none are evident in the operations reviewed here), but did not lead to lost battles.¹⁵⁵

Linked to the notion of caution is the frequent criticism that Montgomery was unwilling to accumulate casualties, as if that were the mark of a great general. To an extent the criticism is valid. Montgomery sought to avoid casualties if there were no purpose in doing so. In the battle of the Reichswald, his forces suffered more than 15,000 casualties in one month, but gained the western bank of the Rhine. (At the same time, the American First Army suffered 24,000 casualties in the Huertgen Forest, without a discernible gain.)¹⁵⁶

Montgomery understood his mission and recognized the capability of his force. That capability existed in the doctrine and in the numbers of the force. Recognizing the outcomes, it is no wonder that Montgomery felt success must be assured.¹⁵⁷

Montgomery's obvious strengths must be considered in this discussion of generalship. He clearly demonstrated the ability to organize and control large bodies of fighting forces.¹⁵⁸ His ability to communicate effectively with troops in terms of absolute clarity had much to do with the confidence of British forces and the British civilian population.¹⁵⁹ However, it was his quality of leadership that had most to do with his success. He was the leader who taught, planned, and made decisions of importance. He set the example. He was physically fit. He was self-confident and had the ability to promote the confidence of his armies. He understood his organization and its capabilities fully. He knew how to win battles.

Operational Principles

The operational principles shown here were deduced from the the information presented throughout the chapter. Each section of the chapter addressed, in part, the operational principles of Bernard Montgomery -- the development and evolution of his notions of war-fighting, the influence of prevailing doctrine, and the decisions he made in battle.

The operational principles of Bernard Montgomery, organized into the major categories introduced in Chapter 3, are:

Combined Arms

- Air-ground cooperation is required for success in the land battle.
- Air superiority in the area of attack is required for a successful attack.

◦ Air force and army staffs should be located at the same headquarters.

◦ Mobile and non-mobile troops should be used to perform complementary tasks.

◦ The essential requirement is the cooperation of all arms. The cooperation is ensured through detailed planning.

Offensive Action

◦ Offensive action is required for victory.

◦ The defense can be used to wrest the initiative from the attacker; once gained, begin the offense.

◦ The object of all offensive action is to throw the enemy off balance and to keep him off balance.

Momentum

◦ Momentum can be maintained by keeping the enemy off balance.

◦ Switch major formations to the front of the attack to maintain momentum.

◦ Use concentrated firepower to break through the crust of enemy defenses.

Command and Control - Decision-making

◦ The commander must make the plan.

◦ The commander must not become immersed in details.

◦ Train staffs and subordinates to work and act on verbal orders.

◦ The scope of operations must be limited to that which has a good and reasonable chance of success.

- Match the objective with the capabilities of the force.
- It is imperative that the commander understand what is required to succeed in battle.
- The commander's major effort is to ensure that the basic operational aspects of the plan remain intact.
- Simplicity is vital in planning operations.

Risk

- Planning and preparation reduce uncertainty and risk.
- Do not take risks that involve unaffordable losses.

Strategic Linkage

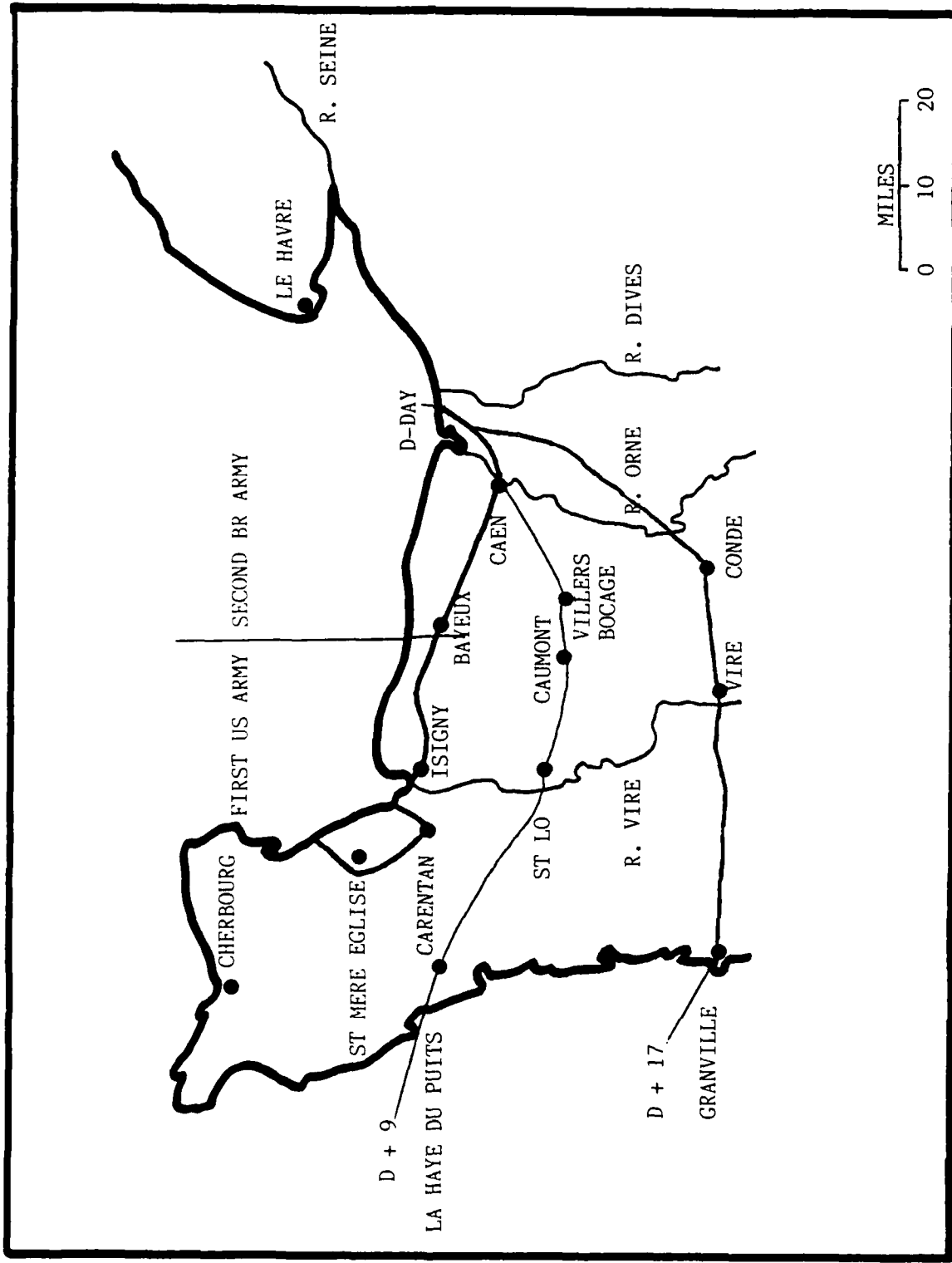
- Match the strategically desirable to what is tactically possible with the forces available.
- Decide the development of operations before the initial blow is struck.
- View the plan as one whole; not only the operation at hand, but also the operation in the context of the campaign and the war.

Operational Sustainment

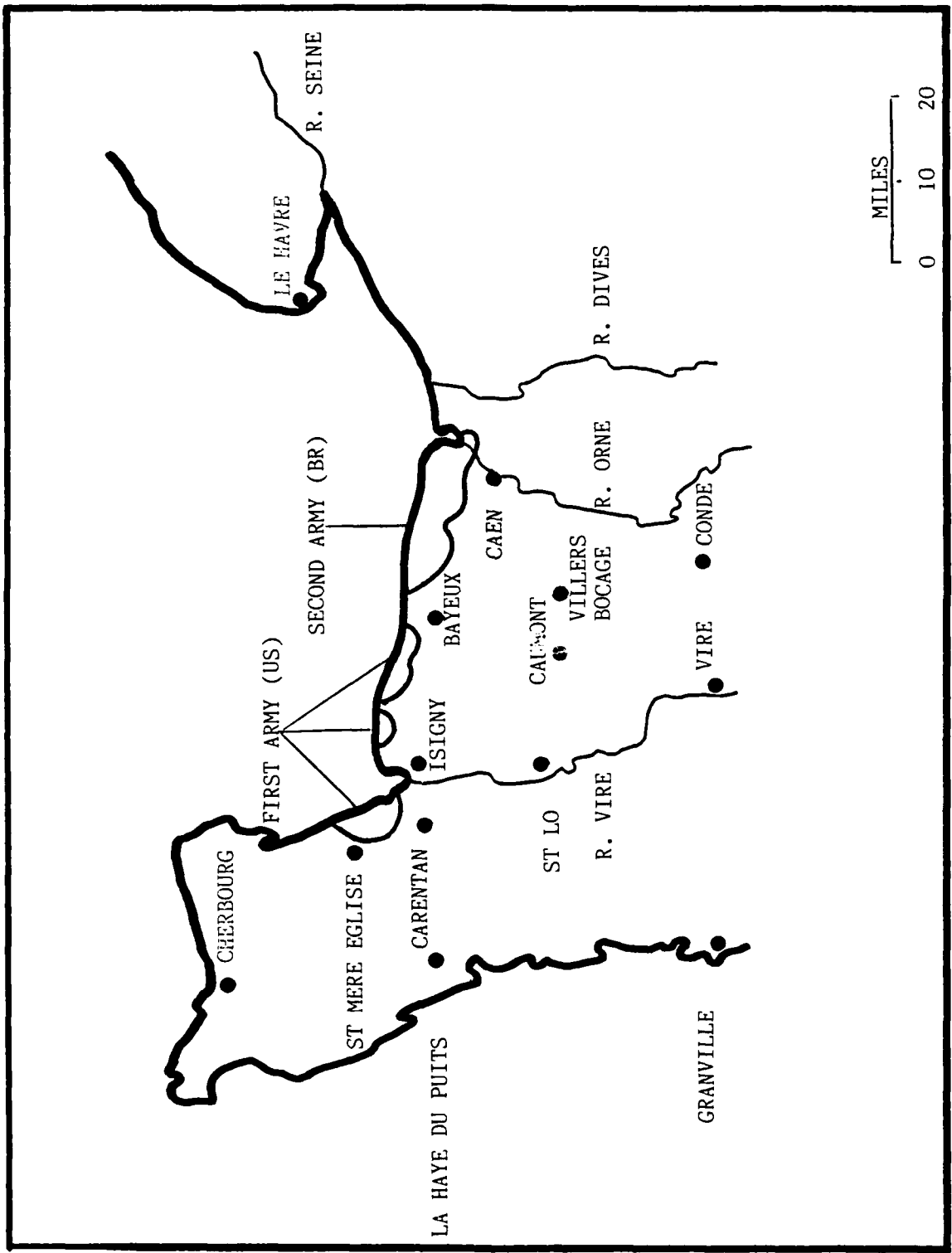
- Proper administration in the rear is required for a successful battle in the front.
- The plan must be resourced to achieve overwhelming power at the decisive point.

Reinforcement of Success - Exploitation of Opportunity

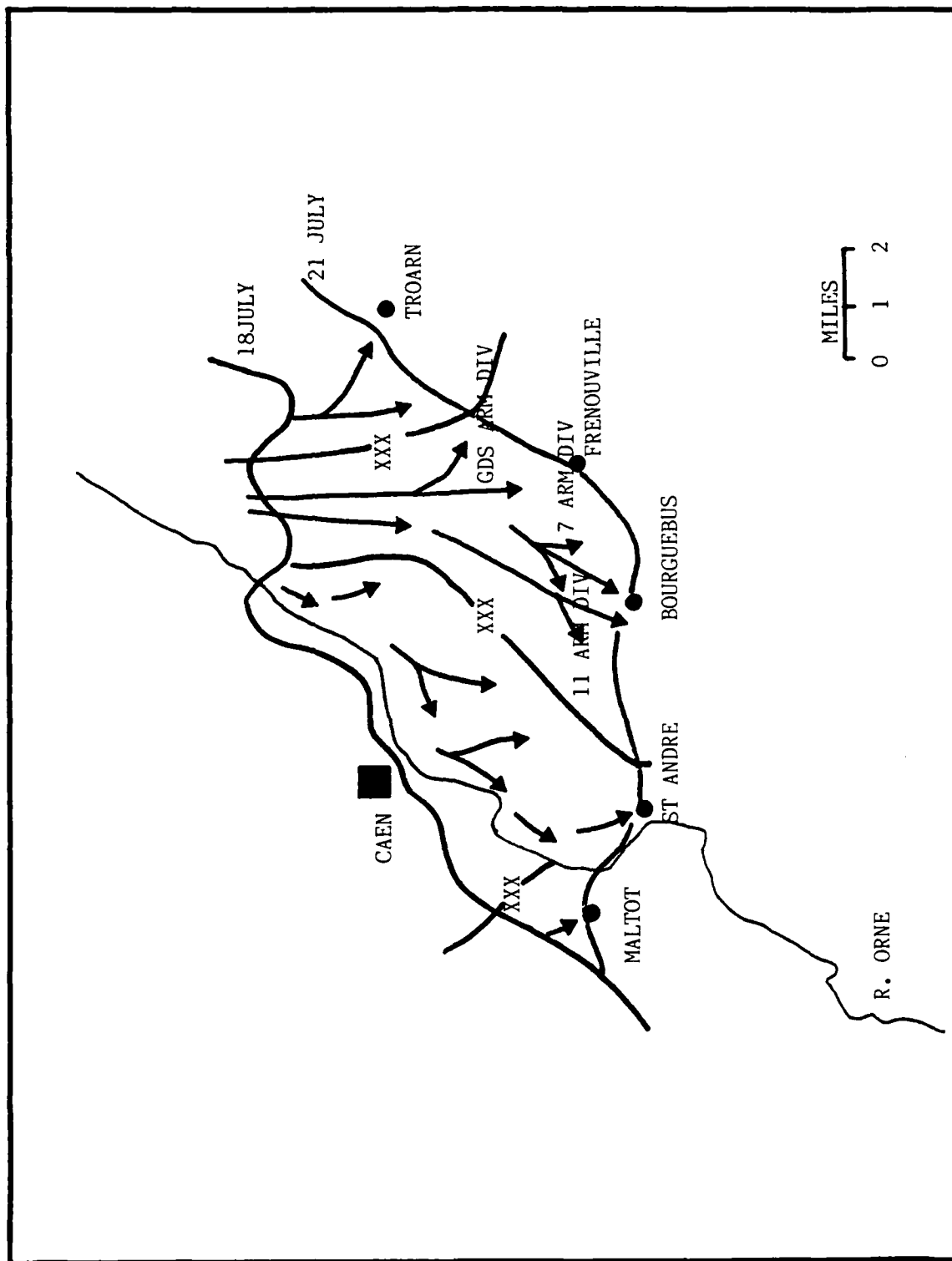
- Plan to maintain your own balance and to upset the enemy's balance; continue to press the enemy to prevent his regaining his balance.



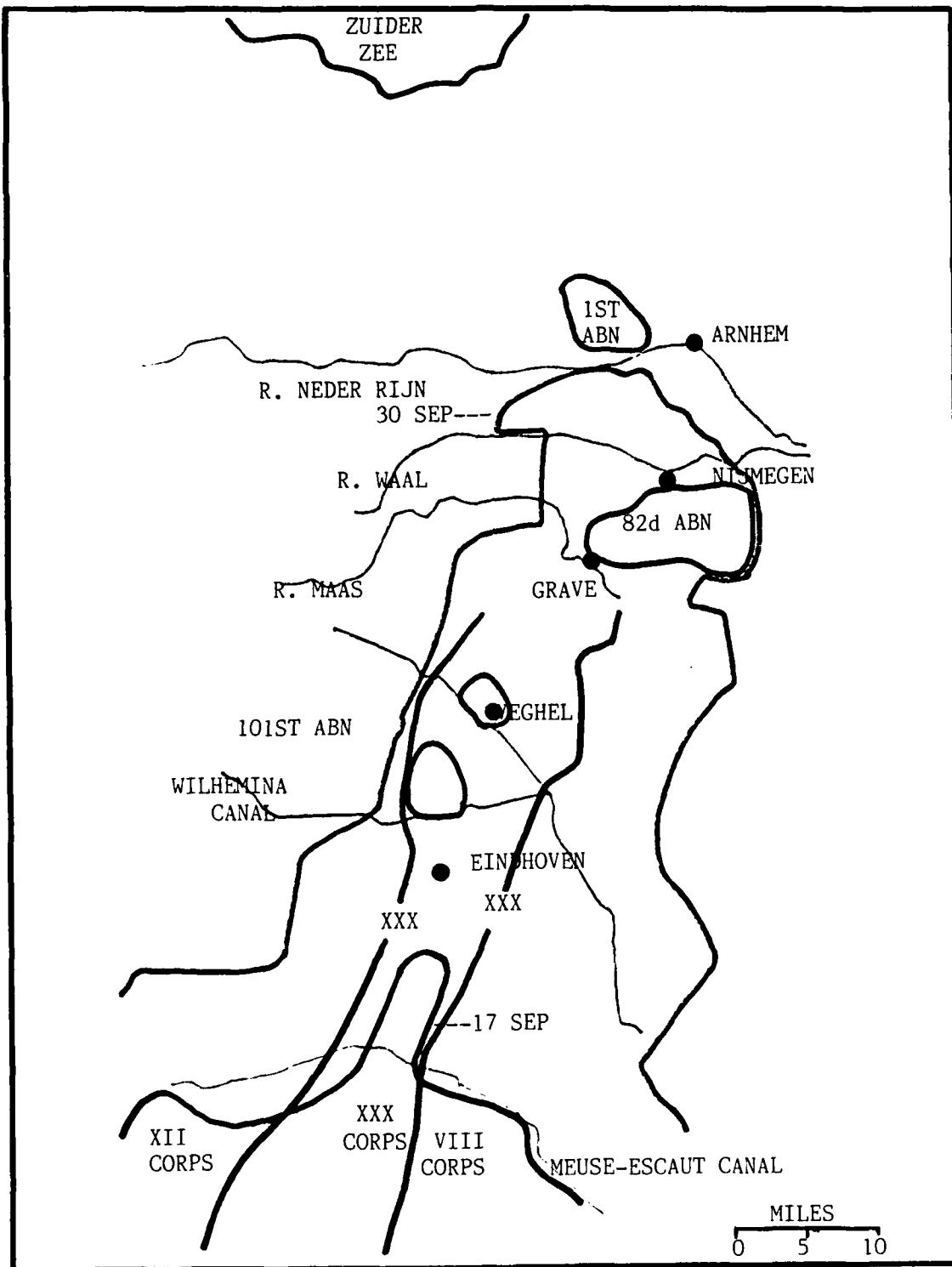
MAP 1 - STRATEGIC SETTING (THE ASSAULT PLAN)



MAP 1A - STRATEGIC SETTING (SITUATION AT THE END OF D-DAY)

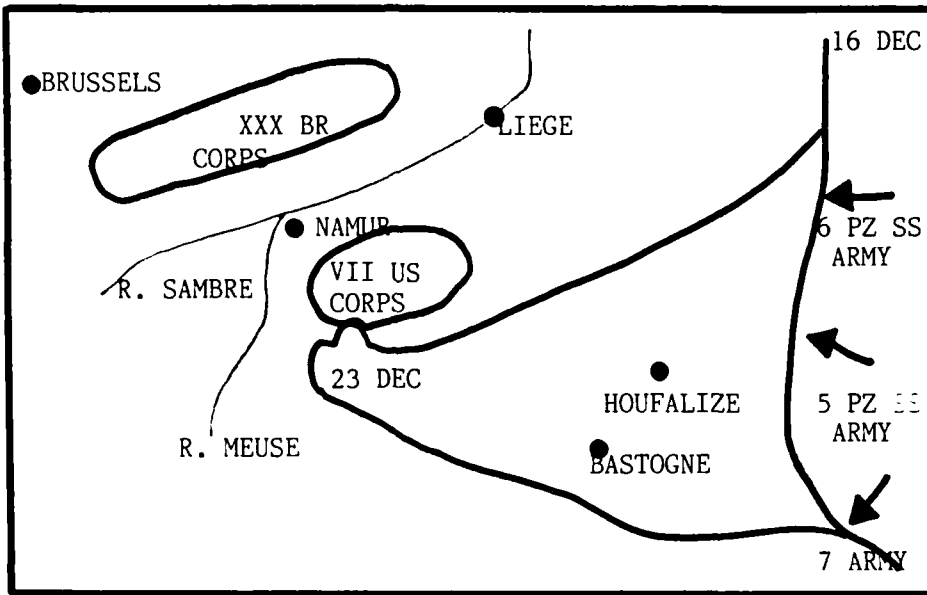


MAP 2 -- OPERATION GOODWOOD

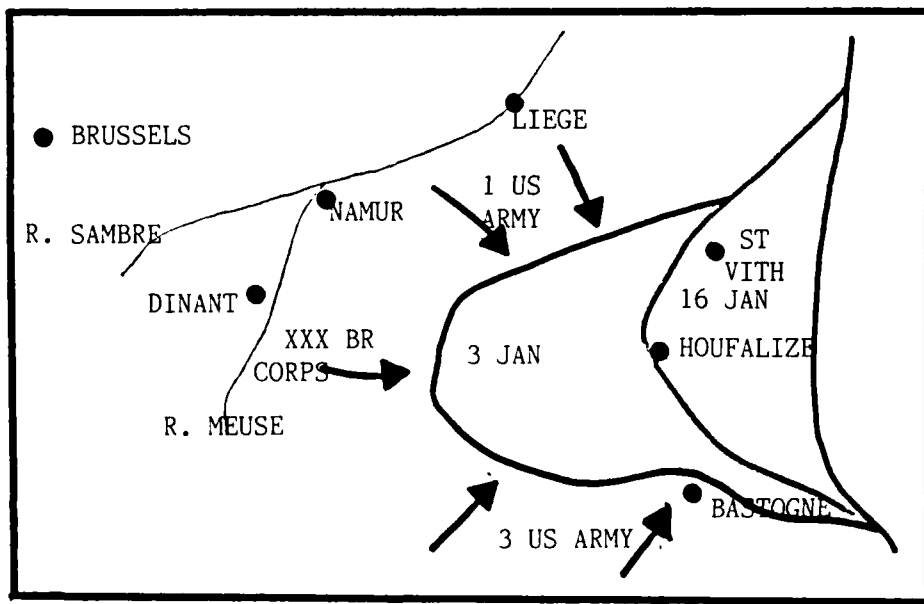


MAP 3 -- OPERATION MARKET-GARDEN

THE GERMAN ATTACK



THE ALLIED COUNTERATTACK



MAP 4 -- THE BATTLE OF THE ARDENNES

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CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

Introduction

The purpose of this study is to identify and define a body of principles applicable to the operational level of war. The operational principles of Erwin Rommel and Bernard Montgomery have been identified and described in Chapters 3 and 4. The lists of principles are long -- perhaps too long; errors may have been made in favor of presenting principles on the basis of the slightest indirect evidence. In that case, specifics of operational doctrine and operational techniques and procedures may have been included. What is clear from the research is that a remarkably common set of ideas guided both Rommel and Montgomery in their decisions concerning battle.

The commonality is remarkable because they represented near-opposite poles in terms of war-fighting styles, doctrines, and notions about generalship. The conclusion that both commanders shared some common guides supports the argument that such a set of guides, or war-fighting principles, exists above a particular doctrine. For example, it is noteworthy that both commanders saw the importance of combined arms and took actions to create the combined arms effects. It is less noteworthy that the means to create the combined arms effects were different. The differences in application were the result of

the doctrine each was working within.

This chapter addresses the major similarities and differences between Erwin Rommel and Bernard Montgomery. Some areas of similarity and difference -- for example, operational vision, strategic linkage, and the commander and the decisive place -- are treated separately.

The reason for the separate treatment is that the subject areas provide important implications for the US Army today. A set of principles deduced from the comparison and contrast of Rommel and Montgomery is presented and described in this chapter. The chapter concludes with a discussion of the implications for the US Army pertaining to the operational art and the style of war-fighting described in Field Manual 100-5, Operations.

Comparison and Contrast

Style of War-Fighting: Means and Ends

Erwin Rommel and Bernard Montgomery were both representative of their prevailing national military doctrines. The German doctrine emphasized rapid maneuver of greater relative strength against the perceived weak point of the enemy, the creation of tactical advantage at that point, and the exploitation of the opportunities thus gained. The German system of battle may be termed "maneuver". The British doctrine emphasized the physical degradation of the enemy through the planned application of overwhelming firepower, consolidation of tactical gains thus achieved, and the methodical repetition of that process directed toward operational and strategic objectives. That system of battle may be termed "attrition". (This does not mean that Montgomery planned and executed his battles with the notion that he

would trade casualties with the Germans. The limited British manpower pool was a significant constraint. The attrition trade-off was British bullets for German soldiers.)

The theoretical model shown at Figure 1 depicts the contrasting systems of battle represented by Rommel and Montgomery. Both styles of war-fighting required the application of resources to overcome friction. In the German maneuver style, the friction to be overcome was the inertia of a large force which had to be maneuvered. In the British firepower style, the friction to be overcome was associated with the application of sufficient firepower to penetrate the German defenses to the tactical and operational objectives. Both styles of war-fighting were necessarily oriented toward defeat of the enemy. The German style, exemplified by Rommel, sought defeat of the enemy through defeat of the enemy's will and defeat of the enemy's plan. The British style, exemplified by Montgomery, sought defeat of the enemy through the physical destruction of the enemy's forces.

The style of war-fighting may be either deliberate or evolved. That is, it may have been developed prior to war and executed in war, or it may have evolved and developed as the result of battles fought. In either case, the implications of the style of war-fighting pertain, in general, to weapons, manpower and organization, and doctrine. Specifically, the style of war-fighting influences the commander's notions of command and control, selection of objectives, duration and sustainment of battle, depth, risk, and organization of his forces.

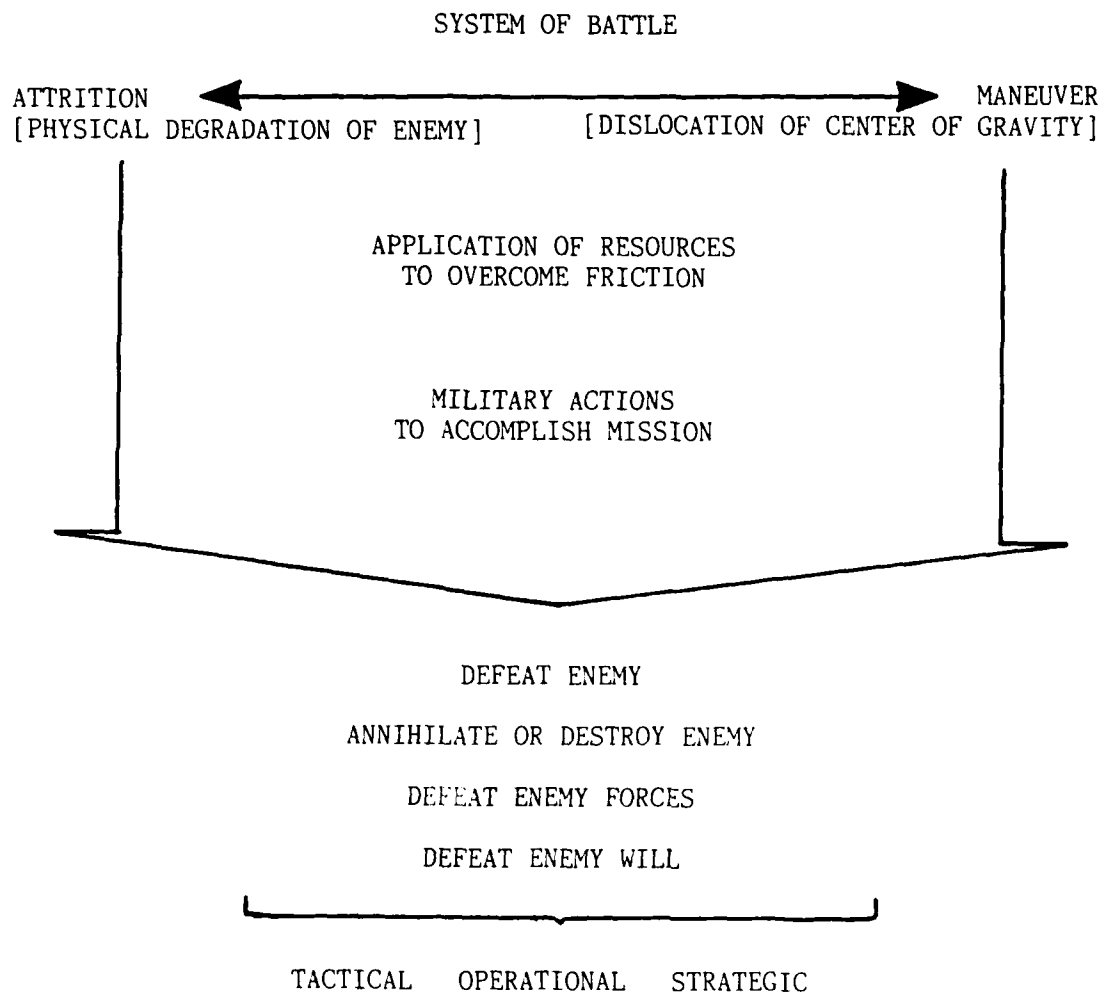


Figure 1
 Style of War-Fighting: Means and Ends

The model helps to explain the contrasting notions of generalship embodied by Rommel and Montgomery. As a maneuver-oriented battlefield commander, Rommel was an executor. He maneuvered his relatively stronger force to the proper place at the proper time. Montgomery viewed his role as that of a controller -- through preparing the plan, establishing and committing reserves, and resourcing the forces.

Another possible contrast between Rommel and Montgomery (as well as a significant implication for the US Army) is suggested by the model. That is, there is a difference in the intellectual requirements demanded by maneuver or firepower-oriented styles of war-fighting. Maneuver war-fighting requires synthesis, vision, projection, and future-thinking. The firepower style of war-fighting requires sequential, methodical, analytic thinking. Rommel's vision of North African strategic goals and Montgomery's preoccupation with the phased stages of battle underscore this difference.

Additional implications can be drawn from the model. These will be addressed later in this chapter.

Major Similarities and Differences

The discussion here is based on the premise that Rommel and Montgomery were representative of their respective national military doctrines and that those doctrines occupied different positions on the spectrum of war-fighting styles. While Rommel was representative of a maneuver-oriented system of battle and Montgomery conducted battle in accordance with a firepower-based system, there are a number of similarities among what have been presented as their operational

principles. These similarities may be based on the theoretical relationship between operational principles and the principles of war. Conversely, major differences between Rommel's and Montgomery's operational principles may be based on the different war-fighting styles they represented.

Both Rommel and Montgomery recognized the advantages of combined arms (tank, infantry, artillery, and air forces). In Rommel's case, the combined arms effects were the result of organization and planning; in Montgomery's, the effects of combined arms resulted from the detailed plan for cooperation of arms. Centralization of resources was viewed differently by the two commanders. Rommel's decentralization of artillery, for example, allowed that resource to be available to far-flung maneuvering forces. Montgomery's centralization of artillery allowed maximum firepower to be directed at the proper time and place in the battle. In both cases the organization of forces was an element of the war-fighting style and doctrine each commander employed. The commanders accommodated themselves to the organization.

German and British pre-war doctrines addressed the principle of war of offensive. Rommel's maneuver style was directed to a depth beyond the enemy's reserves to reach an operational goal. In the defense, Rommel used the counterattack to decide the battlefield issues. Similarly, Montgomery considered offensive action as a requirement for victory, and that the objective of the defense was to wrest the initiative from the attacker and begin the offense. Both commanders viewed the enemy's sustaining base as a legitimate objective -- for Rommel, rear supply systems in Egypt; for Montgomery, the Ruhr. How

to win through offensive action was a difference between Rommel and Montgomery. Rommel's solution was seizure of deep objectives, causing the forward defenses to fracture. Montgomery sought to unbalance the enemy in his forward defenses and maintain the initiative thus created. Pace and depth of offensive action represented differences in their war-fighting styles. The rapid and deep thrusts by Rommel in North Africa need only be contrasted with Montgomery's methodical, pounding offensive in Normandy to illustrate this point.

Rommel's concept of momentum was based on his ideas that speed is the most critical element of mission accomplishment and that the attack or counterattack should not be limited to arbitrary pre-battle decisions. Montgomery's concept of momentum was linked to the notion of using concentrated firepower to break through the defenses of the enemy. The idea of operational sustainment -- Rommel's failure to adequately consider it and Montgomery's concerns for it -- colored both commanders' perceptions about how far and how fast they could go.

Obviously, Rommel took greater risks than Montgomery took. The important point here may be that Montgomery did not have to take the greater risks. Their styles of war-fighting, the battlefield experiences, and the forces they were employing were factors in risk-taking. While Rommel saw opportunities which could be created by taking risks; Montgomery limited his operations to that which offered a good and reasonable chance of success.

Differences in the command and control and decision-making procedures employed by Rommel and Montgomery are evident. The style

of war-fighting for Rommel required that he lead well forward and that rapid, simple orders be issued. Montgomery's war-fighting style required detailed planning and staff action to support his operational decisions.

Where Rommel failed to properly consider the notions of strategic linkage and operational sustainment, Montgomery continually considered the relationship between the strategically desirable and the operationally possible. Rommel's failure to reconcile the operational objectives with the strategic means available to him has been offered as a primary reason for his defeat in North Africa. Montgomery's ideas concerning strategic linkage and operational sustainment were demonstrated throughout operations in Northwest Europe, particularly in his arguments for a narrow front strategy.

Both commanders would have supported the notions of reinforcing success and exploiting opportunities. The organization of forces, the prevailing doctrine, and the command and control structure which Rommel worked with facilitated rapid exploitation. Afforded time for planning and appropriate resources, Montgomery sought to unbalance the enemy, create opportunities to be exploited, perhaps both tactically and operationally, and continue to repeat the process until the enemy was beaten.

Strategic Linkage and Operational Choices

The analyses of Rommel's campaigns in North Africa and Montgomery's campaigns in Northwest Europe demonstrate the concept of strategic linkage. An important factor of that concept is the limiting effect which a military strategy can have on the operational

choices available to the commander. The operational choices available to both Rommel and Montgomery were confined to those allowed by the strategies and resourcing established by their higher commands.

Rommel's failure in North Africa was the result of a strategic concept and strategic resourcing which did not support the operational depth and goals which he attempted to achieve. The concept is evidently applicable to his offensive operations, but applies to his final defensive operations in 1942 as well. Constrained by a directed strategy of no retreat at El Alamein in 1942, Rommel could not achieve the operational depth required to protect his force from the British firepower style of warfare.

The failure of Operation Market-Garden in 1944 is also attributable to the failure to choose the appropriate operational goals in terms of strategic linkage and physical resourcing. The Allied broad front strategy allowed neither initial development of sufficient combat power at the depth attempted, nor the build-up of combat power at that depth. The continuing failure to increase, or even sustain, the deep force diminished the threat to the enemy which Montgomery envisioned.

The discussion here relates to the notion of horizontal and vertical congruency presented in Chapter 2. Operational choices, within the context of the prevailing operational doctrine, must be consistent with the prevailing military strategy and must be sufficiently resourced. In both examples -- Rommel in North Africa and Montgomery in Operation Market-Garden -- the operational choices were neither congruent with the prevailing military strategy, nor were

they sufficiently resourced. Those linkage failures, conceptual and physical, were directly responsible for the failures of both commanders' operations.

Operational Vision

The notion of operational vision -- the ability of the commander to see beyond the tactical engagement to the operational and strategic effects -- has been addressed indirectly in Chapters 3 and 4. No doubt both Rommel and Montgomery possessed that ability. The situation for both must have been frustrating, however. Rommel's forces provided the tactical ability to accomplish the operational effects he envisioned, by rapid and violent maneuver. He did not have the strategic resources to effect his operational choices. Montgomery's operational vision was evident in his announced objectives for D-Day, Operation Goodwood, and Operation Market-Garden. His armies did not achieve the objectives he envisioned -- in part, due to strategic resource limitations; but, more importantly, because of tactical inabilities. The British forces were neither organized nor trained to conduct the type of operations required to achieve the objectives established by Montgomery. A mark of his generalship was his recognition of the tactical abilities of his forces and a return to the firepower intensive operations his force was capable of.

The key element of operational vision is the ability to envision the final battle, or the effect created by the final battle. This visionary thinking is the intellectual requirement; the practical requirements must also be taken into account. Knowledge of the instrument is an important practical consideration. The commander must

make his operational choice recognizing the tactical abilities of his force. The logistics base, and the ability to command and control the operation are other practical considerations. The tactical abilities of the force, the sustaining base, and the supporting command and control systems are representative of the style of war-fighting which has been adopted by an army and supported by a nation. The great commander may be the one who properly matches his operational choices to the capabilities of his force to achieve supportable strategic goals.

Commanders and the "Decisive Place"

There is a notion of "military peripheral vision" that represents another major difference between Erwin Rommel and Bernard Montgomery. The notion of peripheral vision involves the location of the commander during the conduct of battle. If the commander leads from well to the front, as Rommel did, he can feel, sense, touch, and be touched by the battle. However, if he is too close, as some Rommel critics suggest, he can lose the operational perspective and retain only the tactical view. Bernard Montgomery, given his notion of what an operational commander ought to do, could not become involved in tactical engagements while controlling, directing, and providing resources to the overall operation. The danger in the latter case is that the commander might become too far removed from the on-going battle. While Rommel may have been at the decisive place, and, in some cases, created the decisive place, Montgomery ensured, or attempted to ensure, that appropriate force was at the decisive place.

It would be incorrect to state that the German and British

staff systems accommodated their respective commanders. Erwin Rommel and Bernard Montgomery accommodated their respective systems. Rommel had the facility to lead from the front because the German staff system and system of command and control were designed so that the commander should command from well forward. The British staff system and system of command and control dictated where Montgomery ought to be during the planning and conduct of battle.

There are implications here which relate to current US Army doctrine. These implications will be discussed later in this chapter.

The Decision-Making Process

If Erwin Rommel and Bernard Montgomery were products of different cultures and experiences, and representative of different war-fighting styles and doctrines, would they have made the same decision in similar circumstances? The answer may be yes, but for different reasons.

Their respective cultures, experiences, war-fighting styles, and doctrines prescribed Rommel's and Montgomery's battlefield decisions in terms of "how" a mission might be accomplished. In fact, the process of determining "how" was also different. As an example, consider the decision Rommel might have made if faced with Montgomery's situation in late summer 1944. He too might have made the same decisions as Montgomery setting Operation Market-Garden into motion -- decisions for the same ends, but decisions for different reasons. Rommel might have selected the thrust up the narrow approaches of Holland because they offered surprise, opposed weakness, and led to an objective of operational, if not strategic, significance. Mont-

gomery's estimate process can be assumed to have been more methodical and based on a quantitative comparison of courses of action. The decisions, however, might well have been the same.

The example suggests that some decision-making guide may be more important than the style of estimating. In this case, the guide, or principle, might be the operational significance of the objective when balanced with risk and the tactical ability of the force.

Operational Principles

The principles shown below are not so much a combination of the principles offered in Chapters 3 and 4 as they are deductions from those principles and the comparison addressed in this chapter. The process of comparing and contrasting Rommel and Montgomery was an important tool in identifying these principles. The process allowed the "what" to be easily distinguished from the "how". It is worth noting that the following principles are consistent with the principles of war.

- Create the effects of combined arms. Through the organization and application of various arms: protect separate arms, add depth to the battlefield, defeat enemy weapons and tactics, unbalance the enemy, weight and sustain the main effort, gain and maintain the initiative. The combined arms effect can also protect against the combined arms effects of enemy weapons and tactics.

- Conform operational choices to tactical abilities and strategic ends. This requires knowledge of the instrument (men, weapons, doctrine, and war-fighting style). Other requirements are: operational vision, command and control concepts to support planned operations,

and staff organizations and concepts to support planned operations. Current battles must be conducted to support future battles.

- Attack the source of the enemy's power (the enemy center of gravity). Examples of the source of the enemy's power may be the enemy logistics support system, an element of the enemy combined arms, the enemy forces, or the enemy will. Avoid the enemy's main power, or be able to overwhelm it. Protect the sources of friendly power.

- Seek, gain, and maintain the initiative.

- Accept affordable risk. Calculate the tactical abilities of the friendly force, the operational significance of the objective, the strategic effects, and the factors of speed and surprise.

- Create violence. Overwhelm the enemy, physically or mentally. Violence can be created through the direct application of combat power, or the indirect application of combat power using speed and surprise.

- Maintain flexibility. Flexibility allows the widest range of tactical and operational choices, limits the effects of enemy surprise, and allows the maintenance of initiative.

Implications

This study began with a discussion of the practical and theoretical shortcomings associated with the US Army's operational-level doctrine, AirLand Battle. The major theoretical shortcoming of that doctrine is the lack of a foundation of war-fighting principles other than the generally applicable principles of war. In Chapter 2 the nature and functions of operational principles were described. The intervening chapters and the foregoing sections of

this chapter were directed toward identifying a set of principles applicable to the operational level of war. A discussion of the application of those principles to US Army doctrine is a logical conclusion.

An issue which arises from the study of Rommel's and Montgomery's operations is the overriding importance of the notion of strategic linkage. The question which arises from the examples given is: What are the implications for an operational doctrine based on depth and maneuver when the strategic concept and the political requirements dictate no major ground movement forward or back of initial defense positions? Generally, that is the current situation in Western Europe. The US Army has established the operational-level doctrine of AirLand Battle. As a major player in any future war in Western Europe, the US Army must fight as part of a coalition. The military strategy of that coalition is forward defense. Forward defense, in practice, allows neither the operational maneuver, nor the depth required to achieve operational effects. The break in the conceptual linkage between the coalition military strategy and the US Army operational doctrine is obvious. In addition to the conceptual break, other factors -- organization, training, and equipment -- in coalition forces fail to support the US Army's doctrinal view. The study suggests that a style of war which is neither strategically nor tactically supportable is doomed to failure.

A continuing issue in the US Army is the proper location of the commander. Perhaps the underlying question involved in that issue is: What should the commander do? In the comparison of Rommel

and Montgomery two different answers were presented -- execute or control. Those answers represent differences in war-fighting styles and command and control systems. If the US Army has adopted a maneuver style of fighting war with AirLand Battle, the following questions arise:

What is the major function of the operational commander?

Does the command and control philosophy of the US Army support a maneuver style of fighting war?

Is the operational commander physically and intellectually equipped to execute and/or control AirLand Battle?

If the style of warfare is not understood, by understanding its theoretical foundations, the questions shown above cannot be answered. Or, if answered, there will be as many different answers as there are commanders and staffs. This situation underscores the importance of the practical doctrinal shortcomings presented in Chapter 1 and the theoretical model presented in Chapter 2. Given an understanding of the theoretical foundations of war, and, specifically, the operational level of war in terms of operational principles, commanders should draw some common conclusions about how to wage war. From that common base of understanding rational deviations may be made according to specific situations.

The notion of rational deviations from common theoretical understanding suggests that there ought to be some flexibility in the doctrine. Doctrinal flexibility should not be difficult to achieve in the US Army. The lack of a common doctrinal inheritance and intellectual traditions will not limit the perspectives of operational

commanders. However, contemporary and compartmented biases, and the lack of a common theoretical base may prevent a unified view of how to conduct war at the operational level. In addition, the underlying principles must be understood well enough that the doctrine may be changed early on in a war if it does not work.

The intellectual requirements for change -- even a major change as doctrine in war -- are one part of the wide range of intellectual requirements for fighting war in the maneuver style. Are commanders prepared to fight maneuver war at the operational level? Are officers with maneuver-type intellectual traits selected for operational-level command? Those traits include: insight, intuition, future-thinking, the ability to make inferential and logical leaps, and the quality of operational vision. A corollary to those traits are the traits associated with the firepower-attrition style of war. Those traits include: analytic, sequential, methodical thinking. If Soviet doctrine represents the firepower-attrition style, are US Army commanders and staffs trained and prepared to attack those exploitable traits?

Field Manual 100-5, Operations, describes a doctrine based on initiative, synchronization, agility, and depth. The doctrine is derived from a maneuver style of fighting war -- a style which is not familiar to most Army officers. The organization, training, and equipping of forces must be conducted in accordance with that doctrine. The preparation and selection of operational-level commanders and staffs must be accomplished to satisfy the requirements imposed by the style of war-fighting and the derived doctrine. The philosophy and structure of command and control systems must support

the way the US Army intends to wage war. The Field Manual has established the operational concepts for fighting war at the operational level in a maneuver style. What remains to be done is the development of an army which can fight those battles and campaigns.

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