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**The Operational Commander
and
Dealing With Uncertainty**

**A Monograph
by
Major Terry A. Wolff
Armor**

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ABSTRACT

THE OPERATIONAL COMMANDER AND DEALING WITH UNCERTAINTY by Major Terry A. Wolff, USA, 58 pages.

During war leadership is the supreme test of a commander. Leaders at all levels attempt to accomplish their missions while preserving their men. The nature of offensive operations places an additional strain on leaders and entails a certain amount of uncertainty. As the level of command increases, the leader's control over the unit's destiny remains tied to the outcome of engagements and battles. As the U.S. Army transitions from a defensive-oriented doctrine based on the Soviet threat in Europe to contingency operations requiring an offensive capability, the operational commander's degree of uncertainty will only rise.

This monograph seeks to determine how the operational commander handles the uncertainty that accompanies offensive operations. My methodology includes a review of uncertainty as it applies to the operational level of war. First, I will examine the theoretical and practical perspective regarding what scholars have claimed about military uncertainty. Next, I shall use General William T. Sherman's march through the South during 1864-1865 and then the World War II North Africa campaign of Field Marshal Erwin Rommel to provide evidence describing how these men handled uncertainty. The campaigns of these great commanders shall be analyzed using five criteria that include vision, strength of will and determination, character, intellect, and development of the staff.

This paper suggests that the above mentioned criteria begin to define the leadership philosophy and climate that the commander alone creates to help himself and those around him handle uncertainty. The monograph concludes that operational commanders never eliminate uncertainty present in offensive operations. Rather, they learn to control the problem through experience, vision, will and determination, character, intellect, staff development, and the power of their personality.

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I. INTRODUCTION

More than any other factor, superior leadership determines the successful outcome of campaigns. . . . This quality reaches equal if not greater significance at the operational level of war where it must be viewed as a center of gravity - the quintessence from which all else flows, the soul that lends wings to the commander's grand design.'

To win on the battlefield, the commander at the operational level must synchronize all of his combat multipliers to focus combat power decisively at multiple places at different times. How well he does depends on his ability to clearly articulate an end state and determine the necessary ways in consonance with the available means. When a discrepancy between ways and means occurs a degree of risk results. Accompanying risk throughout all aspects of military operations is a degree of uncertainty.

The ability of a commander to handle this uncertainty separates great leaders from also-rans. In *Masters of the Art of Command*, Martin Blumenson questions, "What makes one man a great leader, another just a name on the rubbish heap of history?"² In Colonel Wallace Franz's, "Intellectual Preparation For War" article in a 1983 *Art of War Quarterly* he asked, "How do we prepare American commanders of large units to face the tempo and uncertainty of modern, high-intensity mobile war?"³ The answer to these questions - the ability to deal with battlefield uncertainty - is the genesis of this study.

In *On War*, the military philosopher, Carl von Clausewitz, tells us that "War is the realm of uncertainty."⁴ Therefore, the

operational commander deals daily with situations full of the unknown. Our own AirLand Battle doctrine articulated in FM 100-5, *Operations*, claims that "the most essential element of combat power is competent and confident leadership" and that "they (leaders) must act with courage and conviction in the uncertainty and confusion of battle."⁵

During war, leadership remains the supreme test of a commander. Leaders at all levels attempt to accomplish their missions while preserving their troops. The nature of offensive operations places an additional strain on leaders and entails a certain amount of risk and uncertainty. As the level of command rises, the leader's control over the unit's destiny remains tied to the outcome of engagements and battles.

As the U.S. Army transitions from a defensive-oriented doctrine based on the Soviet threat in Europe to contingency operations requiring an offensive capability, the operational commander's degree of uncertainty will only rise. Increases in speed, tempo, and intensity will further complicate future war.

This monograph seeks to determine how the operational commander handles the uncertainty that accompanies offensive operations. To accomplish this task, I will first present a theoretical and practical perspective regarding what scholars have claimed about military uncertainty.

Next, I shall use the campaigns of two great operational commanders to provide evidence describing how these men handled uncertainty. We will study General William T. Sherman's march through the South during 1864-1865. Next, I will assess the World War II North Africa campaign of Field Marshal Erwin

Rommel.

I intend to briefly introduce and highlight the campaign of each commander. Using my criteria for analysis, I shall examine how these accomplished leaders handled uncertainty during offensive operations. The criteria include vision, strength of will and determination, character, intellect, and the development of a staff.

My conclusion describes how two great commanders controlled uncertainty during wartime. As implications are explored, they shall suggest changes for the U.S. Army's senior leadership doctrine, as well as the philosophy that underwrites "AirLand Battle Future".

Before moving into the theoretical perspectives, I must define a few terms and provide a better understanding of the exact nature of my criteria. The selected criteria did not come from a single document. As I reviewed what past and current authors wrote about uncertainty, I realized that no individual adequately described the characteristics that encompassed the essence of a commander's execution of operational art. I reviewed a wealth of historical and contemporary literature in hopes that someone had covered the host of options.

I selected five criteria that describe the attributes the operational commander under study required to handle uncertainty. The criteria have been defined in the following manner. First, does the commander have vision? This represents that sixth sense - the Clausewitzian inner eye regarding the operation. Furthermore, is that vision defined and articulated to the staff and subordinate commanders?

Secondly, does the commander possess strength of will and determination? These characteristics help the commander transfer his vision downward throughout the command. Indirectly, they help commanders and subordinates deal with the unexpected in the course of changing situations and circumstances. The essence of strength and will can best be summarized from the School of Advanced Military Studies (SAMS) *Theoretical Paper Number 3* written by James Schneider:

Will is the engine of all action. Will is the raw power that drives the shadow of an idea into the light of reality. Determination is a desire to act that springs from sound judgment. Tenacity is determination over time. Obstinacy is a will to act in light of poor or faulty judgment.⁶

Thirdly, does the commander have character? Does the leader exhibit boldness, imagination, and creativity both before and during the campaign? Clausewitz claimed, "The higher up the chain of command, the greater is the need for boldness to be supported by a reflective mind, so that boldness does not degenerate into purposeless bursts of blind passion."⁷ Additionally, the commander must possess an imagination to help develop thoughts and ideas which move beyond the constraints of doctrine. Finally, does the operational commander respond to war as a creative environment? Can he slip these bonds and become a master of his own actions? Mitchell Zais, quoting Socrates, claimed that "the general . . . must have imagination to originate plans and the practical sense . . . to carry them through."⁸

Intellect constitutes my fourth criterion. Many scholars contend that the commander should possess intellectual capabilities to master his profession as well as his culture. Furthermore, he must have the intellectual curiosity regarding things technical, analytical, and professional. I prefer to avoid the belief that the operational commander must be a military or academic scholar. Academic prowess often fails to translate into the ability to assess situations and then make critical and timely decisions. The key, as General Sir Archibald Wavell contended in his "Generals and Generalship" lectures at Trinity College in 1939, was "common sense, knowledge of what is and what is not possible. It must be based on a really sound knowledge of the mechanism of war." Obviously, application rather than God-given talent or schooling remains the key.

The last criterion is the staff. Has the commander built and developed a competent staff? This organization should not mirror the leader. More importantly, it must cover the commander's blind spots. Jim Schneider characterized the staff as the commander's alter ego.¹⁰ The leader's ability to recognize his limitations, to select the proper personnel, and to weld them into an effective organization are the marks of a successful leader.

In this paper I will analyze how two operational commanders handled uncertainty using their memoirs, papers, and other biographical material. As a note of caution, this monograph shall provide only a brief historical review as detailed accounts of these campaigns remain available elsewhere.

II. THEORETICAL and PRACTICAL PERSPECTIVES

The problem of war, and of leadership, is that if your soldiers are brought to acknowledge the necessity of achieving their objectives or dying in an effort, so are the enemy's. It is that which calls forth the leaders's ability to deal with the unforeseen, "the contingent element inseparable from the waging of war which gives to that activity both its difficulty and grandeur". "Whimsy, the irrational or unpredictable event or circumstance, Fortuna" these are the things that are not susceptible to computer analysis, these are what makes war an art, and therefore leadership an art as well."

The study of uncertainty has occasionally been a topic of classical and contemporary military theorists and scholars. Most often this discussion centers on the attributes of the commander or summaries about operations.¹² To provide an historical flavor about uncertainty, we will review what Sun Tzu, Maurice de Saxe, Jomini, Clausewitz, and Freytag-Loringhoven said about the subject. I will then provide a more contemporary perspective by looking at the thoughts of the British lecturer, General Sir Archibald Wavell, German General Lothar Rendulic, and SAMS theorist James Schneider.

The ancient philosopher, Sun Tzu, did not directly address uncertainty in his *Art of War*. He focused on the general's qualities which included wisdom, sincerity, humanity, courage, and strictness.¹³ Sun Tzu claimed that wisdom helped the leader recognize changing circumstances, while courage enabled bold action.¹⁴ These qualities helped the general handle uncertainty as well. Sun Tzu claimed, "It is the business of a general to be serene and inscrutable, impartial, and self-controlled."¹⁵

In *My Reveries Upon the Art of War*, Maurice de Saxe asserted that a general must possess courage, intelligence, and health.¹⁶ As Saxe discussed generalship, he alluded to how the commander must deal with uncertainty. He must:

... possess a talent for sudden and appropriate improvisation. He should be able to penetrate the minds of other men, while remaining impenetrable himself. He should be endowed with the capacity of being prepared for everything, with activity accompanied by judgment, with skill to make a proper decision on all occasions, and with exactness of discernment.¹⁷

Saxe, as a representative of 18th Century warfare, conceptualized the impact of uncertainty on military operations.

In his book, *The Art of War*, Henri Jomini recognized that uncertainty was an integral part of warfare. To prevent uncertainty from dominating, it required addressing before the battle. Jomini subscribed to the belief that the general must possess the "right stuff" that included:

**a high morale courage, capable of great resolution
... a physical courage which takes no account of danger. ... his knowledge should be thorough, and he should be perfectly grounded in the principles at the base of the art of war.¹⁸**

When fog and friction overcame military genius, simplicity of maneuver and detailed reconnaissance provided solutions to battlefield uncertainty. Jomini embraced the belief that self study of the:

Correct theories, founded upon right principles, sustained by actual events of wars and added to

accurate military history, will form a true school of instruction of generals."

Thus, he believed that good generalship and a well drilled army with high morale could begin to control the uncertainty found on the Napoleonic battlefield.

In *On War*, Carl von Clausewitz addressed the concept of uncertainty with a style and manner not found in the writing of other military philosophers. He devoted his entire first book to the nature of war specifically discussing generalship, friction, and the uncertainty of war.

Clausewitz argued that the commander's genius was required to deal with the intricacies of war. He believed that friction dominated conflict and made simple things difficult, but also "distinguished real war from war on paper."²⁰ He contended:

An understanding of friction is a large part of that much-admired sense of warfare which a good general is supposed to possess. . . The good general must know friction in order to overcome it whenever possible, and in order not to expect a standard of achievement in his operations which this very friction makes impossible.²¹

Overcoming friction remained the job of a good commander - the general. He needed to possess coup d'oeil and determination. These traits, which included physical and moral courage and boldness, were necessary to confront the confusion of war.²² Intellect served as the common thread to help the

commander deal with the unknown. Clausewitz claimed:

What this task requires in the way of higher intellectual gifts is a sense of unity and a power of judgment raised to a marvelous pitch of vision, which easily grasps and dismisses a thousand remote possibilities which an ordinary mind would labor to identify and wear itself out in so doing.²³

The commander's intuition and determination provided the mental agility that offered the clarity and insight necessary to overcome hesitation and doubt.

Furthermore, Clausewitz argued that danger, exertion, chance, and uncertainty comprised the climate of war.²⁴ As we focused on uncertainty, we were told:

War is the realm of uncertainty; three-quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty. A sensitive and discriminating judgment is called for; a skilled intelligence to scent out the truth.²⁵

Finally, Clausewitz claimed that presence of mind "is nothing but an increased capacity of dealing with the unexpected." ²⁶ Therefore, special abilities allowed the commander to handle uncertainty through the creative application of one's own theory of war.

In 1911, Major General Baron von Freytag-Loringhoven published a book entitled *The Power of Personality in War*. The author presented his thoughts interspersed with Moltke's interpretation of Clausewitz. Dealing with uncertainty was discussed at great length. The author told the battlefield leader that "It is useless to wait for the situation to clear up entirely. He must remember that the weightiest decisions are generally

made in the fog of uncertainty."²⁷ More importantly, Moltke was quoted as saying:

That from the opening of a campaign everything is uncertain, except what the leader himself has of will and energy. An inner urge, his own initiative, provide the only means for penetrating the fog of war, and controlling events. The sense of this initiative has always been present in every great leader.²⁸

Von Freytag-Loringhoven argued that sound and disciplined decision-making held the key to dealing with uncertainty. Interpreting Moltke, he claimed:

Successive acts of war are not premeditated acts; they are spontaneous, dictated by military intuition. The problem is in every special case to discover the situation, in spite of the fog of uncertainty; to evaluate correctly what is known and to estimate what is unknown; to reach a decision quickly, and then carry it out powerfully and unhesitatingly.²⁹

The author acknowledged the Clausewitzian notion that coup d'oeil and determination were required to navigate the dense fog of war. He also claimed that Napoleon "always realized the uncertainties of war; but he overcame these difficulties arising from them by remaining always master of his own decisions."³⁰

The insights of the classical theorists undoubtedly influenced subsequent thinkers such as General Sir Archibald Wavell, Lothar Rendulic, and James Schnitzer. Examining the writings of these men helps paint a modern perspective grounded in the age of mechanization. Their ideas reflect an updated view on uncertainty.

In his 1939 lectures before Trinity College, General Sir

Archibald Wavell discussed generalship. He talked about the general's need for a robust mind to stand the shocks of war. He stated:

Now the mind of the general in war is buried, not merely for 48 hours but for days and weeks in the mud and sand of unreliable information and uncertain factors, and may at any time receive, from an unsuspected move of the enemy, an unforeseen accident, or a treacherous turn in the weather, a bump equivalent to a drop of at least a hundred feet on to something hard. Delicate mechanism is of little use in war; and this applies to the mind of the commander as well as to his body.³¹

Wavell argued that the environment of battle remained full of confusion and that this represented the fog and friction of war. Only with a robust mind conditioned by training could the general stand the uncertainty and strain of battle.

General Wavell felt that physical and moral courage laid the foundation necessary to handle the unknown produced in battle. In his lecture, the general quoted Voltaire's praises of Marlborough: "that calm courage in the midst of tumult, that serenity of soul in danger, which is the greatest gift of nature for command."³² Thus the leader should possess a calming influence to counteract the excitement and adrenalin produced during the chaotic climate of battle.

In *The Command Decision*, German General Lothar Rendulic discussed decision-making in war using his World War II division command experiences on the Russian Front. The author acknowledged that decision-making was a crucial aspect of commanding. Rendulic believed that making decisions was

simplified if the commander made the bolder decision, took the initiative, and possessed the "longer breath" or will power.³³

Like Clausewitz, Rendulic recognized that the pressure on the decision-maker increased in combat. The commander had to possess creative skill, analytical perception, and intuition.³⁴ These abilities helped the commander wrestle with uncertainty and outlast his opponent.

When SAMS theorist Jim Schneider discussed his interpretation of Clausewitz's thoughts on uncertainty, he agreed with the notion that war, because of the element of chance and uncertainty, was full of the unknown. He argued that boldness offered the commander the opportunity to overcome the fog and uncertainty of war. Schneider contended:

If war is indeed like a game of cards, there is a characteristic that especially favors the gambler. This quality is boldness. Boldness is the quality to choose, in light of sound judgment, a course of action that will bring the greatest payoff in its success.³⁵

After reviewing what the classical and contemporary theorists have said about uncertainty, I believe that the picture remains very convoluted. The theorists do not uniformly agree on how to combat the effects of uncertainty on the mind of the commander. This lack of consensus reflects just how dynamic war remains to this day. Learning to deal with the unknown before it degrades the commander's decision-making capability remains a skill that operational commanders must develop. Reviewing the actions of Sherman and Rommel should provide some specific insight regarding how these operational commanders handled and controlled uncertainty.

III. THE CAMPAIGNS OF GENERAL WILLIAM T. SHERMAN

The 1864-65 campaigns of Major General William Sherman are a unique study of an operational commander making decisions in the face of uncertainty. I shall provide a thorough assessment of Sherman's generalship after briefly summarizing his campaign.

AN OVERVIEW

On the 18th of March, 1864, General Sherman relieved General Grant and took command of the Military Division of Mississippi, which incorporated the Departments of the Ohio, Cumberland, Tennessee, and Arkansas.³⁶ By the end of March, Sherman had conferred with his subordinate commanders and developed plans to strike south into the heart of the Confederacy. In early April, Sherman began a dialog with General Grant regarding the direction for upcoming operations in the Western Theater.

Sherman's command consisted of The Army of the Cumberland, composed of three corps and commanded by Major General George H. Thomas; three corps of the Army of Tennessee commanded by Major General James B. McPherson; and the Army of Ohio, consisting of roughly two divisions and commanded by Major General John M. Schofield.³⁷ Sherman's 110,000 man army was opposed by the 43,000 man Confederate Army commanded by General Joseph E. Johnston.³⁸

Sherman planned to maneuver his three armies southward towards Atlanta to force General Johnston into a decisive battle (See maps Appendix A). Johnston hoped to avoid action by withdrawing southward to wear down Sherman's forces, whose

line of communication (LOC) increased daily. Despite the engagements on the 18th of May at Cossville, on the 27th of June at Kenesaw Mountain, and on the 20th of July at Peachtree Creek, Sherman reached the gates of Atlanta without defeating Johnston's Army.

On the 22d of July, Sherman began cutting the railroads leading out of Atlanta. Lieutenant General John B. Hood, who replaced Johnston, contested these actions." Hood's counterattacks were costly to the Confederate Army which withdrew into the prepared defenses of Atlanta. As siege operations began, Sherman concurrently developed plans to move his three armies west of the city to cut the last remaining railroad. On the 26th of August, these actions forced Hood to move south and abandon Atlanta, which surrendered on the 3d of September."

During a short operational pause, Sherman and Grant again engaged in discussions regarding future operations. During the same period, Hood moved his army west, then, northward in an attempt to cut Sherman's single railroad LOC. Initially, Sherman followed Hood, but still could not force him to battle. The Confederates finally moved west to prepare for an attack on the Union logistical depot at Nashville (Sherman's rear).

Faced with the decision of chasing an enemy that refused to fight or conducting operations deeper into the South, Sherman decided to reinforce Nashville with Thomas's Army, cut his LOCs to Nashville, and attack southeast. On the 12th of November, Sherman began his march across Georgia with Slocum's army of two corps on the left wing, Howard's army of two corps on the

right wing, and Kilpatrick's small cavalry force operating under Sherman's direct control.⁴¹ Due to Hood's decision to march on Nashville, Sherman's movements were virtually unopposed. On the 23rd of November, Milledgeville, the capital of Georgia, fell and on the 21st of December, Savannah fell.

In early January, 1865, Sherman again entered another planning period that culminated with his February offensive into the Carolinas. The Confederate resistance remained unable to stop Sherman and the capital of South Carolina fell on 17 February, followed by most of North Carolina in March. On the 26th of April, General Johnston surrendered to Sherman at Raleigh, North Carolina.⁴²

SHERMAN AND UNCERTAINTY

General Sherman's success during 1864-65 resulted from superb plans that were matched by commanders and men who understood the general's maneuver concept. As previously mentioned, the criteria that will be used to assess Sherman's management of uncertainty includes vision, strength of will and determination, character, intellect, and use of the staff.

VISION

The execution of General Sherman's campaign revolved around two key decision-making periods. At each of these points, the commander decided on the direction and focus of the armies of the Western Theater. As these decisions were reached, a vivid dialog occurred between Generals Grant and Sherman.

The first key decision occurred in April of 1864. Sherman had to decide whether to attack towards Atlanta, to protect his

LOCs, or to attack west into Mississippi. The second major decision followed in November of 1864, when he contemplated whether to go after Hood's Confederate Army of the Tennessee, to fall back and protect his LOCs, or to begin the march towards Savannah in the hope that Hood might decide to follow and fight. In each of these instances, Sherman dealt with uncertainty by weighing the facts, selecting his course of action, convincing Grant of his decision, and then, articulating his vision to his subordinates.

By 1864, Sherman's vision was tempered by three years of conflict. He had participated in the First Battle of Bull Run as a regimental commander. After his transfer to the Western Theater, Sherman began his association with General Grant. First, he logistically supported Grant during the Fort Henry and Donelson Campaign. Then he commanded a division at Shiloh, a corps at Vicksburg, and the Army of the Tennessee - all under Grant's command. These experiences shaped Sherman's vision.

As Sherman took charge of the Western Theater of Operations in March of 1864, he immediately met with his three army commanders to decide how to initiate operations in the spring against General Johnston. According to Sherman, this commander's meeting covered possible future contingencies, resolved the distribution of supplies, and initiated several chain of command changes.⁴² Most importantly, Sherman established that he was in charge, developed a concept of maneuver with a tentative execution date, and addressed the logistical difficulties caused by a 150 mile railroad line and the shortage of rolling stock. The general recognized the tenuous nature of

his LOC and sought to reduce his logistical requirements.

Concurrently, Sherman and Grant addressed operations in the West. Grant simply told Sherman:

You, I propose to move against Johnston's army, to break it up, and to get into the interior of the enemy's country as far as you can, inflicting all the damage you can against their war resources. I do not propose to lay down for you a plan of campaign, but simply to lay down the work it is desirable to have done, and leave you free to execute it in your own way."

In response, Sherman discussed his task organization, his scheme of maneuver and objectives for each army, and his contingency operations.

In one month, Sherman resolved whether he was required to move westwards to link up with Banks, to defeat General Johnston, or to hold terrain. Most importantly, he conveyed to his force his vision of how maneuver warfare would bring the enemy to a decisive battle.

The concept remained simple. Sherman decided to attack with three armies abreast to pin the enemy with one of the armies while maneuvering with the other two. To execute this concept, the armies had to be logistically streamlined and lightened to reduce their dependence on the LOCs. Sherman provided this direction and guidance. As the campaign unfolded, he was unable to destroy the Confederate Army, but he captured Atlanta and its industrial, manufacturing, and transportation system.

The second significant decision came after Atlanta fell. Between September and early November, 1864, Sherman

attempted to define his next move in light of the Confederate effort to operate in his rear (Hood's Army and Forrest's cavalry). He developed three courses of action to strike the enemy in either a southerly, southwestwardly, or southeasterly direction.⁶ Sherman faced uncertainty due to an unpredictable enemy and a superior who expressed great concern over Hood's capabilities.

Sherman took several actions. First, he selected the objective of his operation and informed Grant of his plan. The message read:

We cannot now remain on the defensive. With twenty-five thousand infantry and the bold cavalry he has, Hood can constantly break my road. I would definitely prefer to make a wreck of the road and this country from Chattanooga to Atlanta . . . send back all my wounded and unserviceable men, and with my effective army move through Georgia, smashing things to the sea. Hood may turn into Tennessee and Kentucky, but I believe he will be forced to follow me. Instead of being on the defensive, I will be on the offensive. Instead of my guessing what he means to do, he will have to guess at my plans. The difference will be twenty-five percent.⁶

The general reorganized his force and sent Major General Thomas's Army, with sufficient reinforcements, back to protect his Nashville supply base. Next, he planned his logistical support and the destruction of the rail system and Atlanta. Finally, he convinced a skeptical Grant of his plan. He wrote:

No single army can catch Hood, and I am convinced that the best results will follow from our defeating Jeff. Davis's cherished plan of making me leave

Georgia by maneuvering . . . unless, I let go of Atlanta my force will not be equal to his.⁴⁷

What did Sherman know at this time? He realized that Hood had the initiative by threatening the Union railroad. Only by cutting this LOC and moving away from Atlanta could Sherman make Hood decide between a decisive battle or allowing Union forces to maneuver in the Southern interior. History has shown that Sherman's assessment of his enemy's capabilities was accurate. While Sherman maneuvered across Georgia, General Thomas' force defeated Hood in front of Nashville. In summarizing Sherman's visionary abilities, author B.H. Liddell Hart contended that:

The Atlanta campaign had brought Sherman's strategic mind to maturity, deepening his grasp of the truths that the way to success is strategically along the lines of least expectation, and tactically along the line of least resistance.⁴⁸

Consequently, Sherman's vision on how to defeat the Confederate Army of the Tennessee remained the product of past experiences and a well articulated maneuver concept that relied on speed, tempo, and self-sufficiency. That Sherman's maneuver columns did not physically defeat Hood seems unimportant as he set the conditions for handling the sequel that Thomas encountered.

STRENGTH OF WILL AND DETERMINATION

Sherman's will and determination were shown in numerous cases which will be the focus of this section. I hope to describe how the general transferred his vision to his subordinates.

Sherman maintained great visibility with his senior commanders. Within a week of taking command, he began inspecting units. Following this, he held a senior commanders' conference to chart the direction for the future. These periodic meetings helped achieve unity between Sherman and the army commanders. If a commander appeared incapable of executing his duties, Sherman applied the following criteria:

I wanted to succeed . . . and needed commanders who were purely and technically soldiers, men who would obey orders and execute them promptly on time: for I knew that we would have to execute some most delicate maneuvers, requiring the utmost skill, nicety, and precision."

Those commanders who failed to meet this standard were reassigned to other duties. Sherman attempted to instill his concept of maneuver warfare in his men. He expected his subordinate leaders to understand and execute his way of war.

When the fighting began, Sherman was always forward at the decisive point. Subordinates wrote of his high energy level. During battle, he averaged two to three hours of sleep daily.⁵⁰ From his memoirs, we witness numerous occasions when he assessed the situation from the front lines. A common passage reads, "I visited personally all parts of our lines nearly every day."⁵¹ He considered presence a technique of imparting his will and determination during critical periods when the outcome seemed uncertain. General Cox described Sherman's aura in battle. He related:

He had the rare faculty of being more equable under great responsibilities and scenes of great excitement. At such times his eccentricities disappeared, his grasp

of the situation was firm and clear, . . . and no momentary complication or unexpected event could move him from the purpose he had based on full study of contingencies. His mind seemed so clear, his confidence never so strong, and his spirit never so inspiring.³²

CHARACTER

There can be little doubt that Sherman exhibited boldness in the face of uncertainty. His solutions to the problems he encountered remained audacious. He seemed to possess the spirit of adventure and the willingness to take a risk. He hoped to retain the initiative and dictate his terms to the enemy. Sherman accomplished this feat when he marched on Atlanta, Savannah, and the Carolinas. He best demonstrated this talent after the fall of Atlanta, when he ignored Hood's Army to his west, split his forces to reinforce General Thomas at Nashville, cut his LOC to the north, and then, attacked towards Savannah.

Sherman displayed imagination and creativity in several ways. Immediately after taking command, he recognized the importance of his railroad LOC. To fix the system's mismanagement, he personally took control of the line and closed it to civilian traffic.³³ Later, when he determined the limitations of his railroad resupply, he developed a mobility concept that reduced railroad and supply trains at all levels, while requiring soldiers to carry more provisions.

During the campaign when logistics began to restrict maneuver, he chose to work around the problem. Maneuvering towards Johnston's force in front of Kenesaw Mountain, Sherman elected to temporarily cut his LOC to seek a decisive

battle. After departing Atlanta, the general cut his northern LOCs and moved two armies on parallel paths towards Savannah, while relying on an extensive foraging system under the control of his brigade commanders.³⁴ This supply method allowed Sherman's army to live off the land and to maintain rapid movement without being tied to the railroad.

One other development reflected Sherman's creativity. During his march on Savannah and the Carolinas, he maneuvered a left and a right wing, each consisting of two corps. Each wing's direction of movement ran on two parallel routes with converging points provided by Sherman.³⁵ This technique prevented the enemy from determining Sherman's objective and from massing against him. Liddell Hart described this concept as follows:

Sherman had sought and found a solution in variability or elasticity - the choice of a line leading to alternative objectives with the power to vary his course to gain whichever the enemy left open.³⁶

INTELLECT

Sherman handled uncertainty with common sense. In March of 1864, he recognized that a unique set of problems faced him. First, he had to operate on the enemy's turf. Second, his force did not outnumber the enemy once his LOC protection was established. Next, his LOC stretched nearly 150 miles. Due to his unreliable cavalry, the Confederate cavalry under Forrest and Wheeler could operate in his rear area at will. Lastly, General Johnston had made his name as a defensive warfare expert.

Faced with these problems, Sherman developed a maneuver and logistics concept that neutralized most of the Confederate advantages. These concepts have been described in great detail and reflect Sherman's keen intellect and problem solving skills. Due to the lean nature of the staffs during the Civil War, the general's abilities seem all that more impressive as he virtually developed the concepts and trained his subordinates to single-handedly.

STAFF

Sherman developed a unique staff concept. He restricted all staffs to the barest of personnel and equipment. His forward element consisted of three aides, three inspector generals, and the heads of the special services such as artillery, engineers, ordnance, quartermaster, and medical. His chief of staff and the remainder of the staff remained in Nashville at the base of operations." During Sherman's operations in Georgia and the Carolinas, his staff experienced virtually no personnel changes, thus remaining fairly constant."

The general believed that staffs had to remain lean and austere to emphasize mobility. Sherman set the example by disallowing the establishment of any headquarter's camps." Since he did not maintain a tent or any tent furniture, his subordinates followed his lead.

I have already mentioned Sherman's emphasis on his subordinate generals. Suffice it to say that he filled high level vacancies from within his armies. Once a commander had earned his spurs as a proven fighter, he was destined for advancement. Sherman attempted to groom and promote young

aggressive generals to the forefront of his armies. He had little use for politics and seemed more concerned with effective generalship as a method to save lives.

General Sherman handled the uncertainty present on the Civil War battlefield predominately through his vision, strength of will and determination, and character. His vision seemed rooted in past experience and intellectual creativity. His strength of will and determination and character reinforced his vision, which enabled him to be at the point on the battlefield necessary to insure success. This allowed Sherman to remain in control of his own destiny. His *Memoirs* and other historical accounts do not display periods of great doubt or consternation, indicators that if present would have implied that uncertainty had gained the upper hand. Instead, Sherman's actions reflect an aggressive, confident commander who had charted the path for his campaign and, then, remained in touch with the battle to provide the required direction and minor corrections that ultimately led to his great success. As we transition to Erwin Rommel and his World War II campaign in North Africa, the same criteria will be used to assess this leader's ability to handle uncertainty.

ID. THE NORTH AFRICA CAMPAIGN OF FIELD MARSHAL ERWIN ROMMEL

In modern warfare . . . tactics are not the main thing. The decisive factor is the organization of one's resources - to maintain the momentum."

AN OVERVIEW

In December of 1940, General O'Connor's British Eighth Army destroyed ten Italian divisions, captured nearly 100,000 men, and gained most of Cyrenaica.⁶¹ Hitler decided to assist Mussolini and published Directive No. 22, which specified that the army's mission in North Africa was to "provide covering forces sufficient to render valuable service to our allies in the defense of Tripolitania."⁶² The search began for a commander who could conduct semi-independent operations, possessed the stamina for desert warfare, and had the requisite tactical skill. Erwin Rommel took command of the German Africa Corps on the 11th of February.⁶³ Ignoring his instructions from Berlin, Rommel decided to defend the Italians by attacking. He planned to turn a probing effort into a major attack to drive the British back to Egypt. His force consisted of one panzer division and two Italian corps.⁶⁴

On the 24th of March 1941, Rommel began his first offensive against a British force weakened by O'Connor's departure to Greece (See maps Appendix B).⁶⁵ By the 25th of April, Rommel's force recovered all of Cyrenaica except Tobruk. In June, the British launched their counteroffensive labelled "Battleaxe", which Rommel defeated within two days. On the 15th of August, his command was expanded and renamed "Panzer Group Africa".⁶⁶

In November, General Cunningham's Eighth Army initiated Operation Crusader catching Rommel by surprise. Rommel's subsequent actions stopped the initial British advance. However, due to his deteriorating supply situation and the

exhaustion of his men, he retreated back across Cyrenaica. By the end of the year, Rommel's men occupied their original defensive positions in the vicinity of El Aghella.

Rommel shored up his supply situation and launched his second offensive on the 21st of January 1942. In the first six weeks, the British were pushed back to positions twenty-five miles west of Tobruk. On the 26th of May, after a two month pause, Panzer Army Africa began the Gazala offensive that concluded with the capture of Tobruk on the 20th of June.

Rommel pursued the British Army into Egypt and to a victory at Merse Matruh. These actions left his force desperately short of personnel, equipment, and supplies. In early July, these problems contributed to his defeat during the First Battle of Alamein.

In August of 1942, Churchill appointed General Montgomery to command the British Eighth Army. Concurrently, Rommel received critically needed equipment and reinforcements. On the 30th of August, during an attack on the southern flank of the Eighth Army (Battle of Alam Halfa), the Germans were repulsed and forced to withdraw.

Once Montgomery gained the quantitative and qualitative superiority necessary for air and ground success, he launched his own offensive on the 24th of October, 1942. Beginning with the Second Battle of Alamein, Rommel lost the initiative and any hope of massing the necessary reinforcements and supplies to stymie the British offensive. His three month retreat westward covered 1500 miles and ended in Tunisia.

ROMMEL AND UNCERTAINTY

Rommel, Rommel, Rommel, Rommel . . . what else matters but beating him.⁶⁷

Rommel's desert victories occurred as he strung tactical successes together to form successive operations. His intuitive sense of the battlefield, command presence, and maneuver concept enabled him to temporarily control logistical and command difficulties. These methods helped Rommel handle his own uncertainty, while creating enormous uncertainty in the mind of the opposing commander.

VISION

We will look at uncertainty and Rommel's vision from several standpoints. First, I shall chart its evolution as a product of past experiences. Next, I will determine whether Rommel had the sort of vision we saw Sherman exhibit. Finally, I shall look at his maneuver concept as vision.

Rommel's vision was a product of his past experience. In World War I, he commanded a company and a battalion, fought in numerous theaters, and received awards for bravery. While an instructor at the Potsdam School of Infantry, he described his World War I techniques in a book entitled *Infantry Attacks*⁶⁸

In 1940, after commanding Hitler's bodyguard, he led the 7th Panzer Division during their attack on France. In *The Trail of the Fox*, David Irving described Rommel's brand of warfare:

His technique was to push forward boldly, ignoring the risk to flanks and rear, calculating . . . the shock to enemy morale would more than offset the risk. His division poked like a long forefinger straight through the enemy line, sometimes advancing so fast that it became detached from Kluge's Fourth Army - and

continued to race along its throughway on its own, with only the most tenuous connection in the rear to its logistical support."

During World War II, Rommel merely modified his World War I infantry tactics and applied them to armored warfare. He recognized that speed and tempo equaled success, but required logistical risk.

Rommel lacked the opportunity Sherman possessed in shaping his vision. Where Sherman had the freedom to select his ways and means, Rommel only controlled the maneuver portion (ways) of this equation. Therefore, his maneuver concept needed to provide a method to control uncertainty.

What about the short term vision or intuition that helped Rommel survive through two major offensives, many battles and two years in the theater? We can address this issue by looking at how Rommel intended to fight and certain actions during the course of the campaign.

Arriving in North Africa, Rommel adapted his 7th Panzer Division maneuver concept to a grander scale to "obtain material attrition and the destruction of the organic cohesion of the opposing army."⁷⁰ He employed his Italian infantry to attack frontally and tie down the British infantry, while the German Africa Corps and Italian Motorized Corps attempted to outflank and destroy the British armor forces before driving deep into their rear area. Regarding desert warfare Rommel argued:

There can be no conservatism in thought or action, no relying on tradition or resting on the laurels of previous victory. Speed of judgment, and action to create changing situations and surprises for the enemy faster than he can react never making dispositions in

advance, these are the fundamentals of desert tactics.⁷¹

Rommel launched his first offensive to regain Cyrenaica with a three pronged attack against an enemy who outnumbered his force. Within twelve days, he arrived on the Egyptian frontier. Uncertainty may have been in Rommel's mind, but his writings portray a supremely confident man. He wrote:

The experience which I gained during this advance through Cyrenaica formed the main foundations for my later operations. I had made heavy demands throughout the action, far more than precedent permitted, and had thus created my own standards.⁷²

Rommel repeatedly relied on experience as the foundations for his vision.

In January of 1942, Rommel began his second offensive and advanced over 100 miles in seven days.⁷³ His vision for this January offensive paralleled the first. Four days before the attack began Rommel wrote the following to his wife:

The situation is developed to our advantage and I'm full of plans that I don't say anything round here. They'd think me crazy. But I'm not; I simply see a bit further than they do. But you know me. I work out my plans early each morning, and how often during the past year and in France, have they been put into effect within a matter of hours? That's how it should be and is going to be, in the future.⁷⁴

In summary, a well developed offensive maneuver concept helped Rommel provide vision for his subordinates and men. He recognized that plans rarely survived first contact with the enemy. In order to control the uncertainty of battle, he

maintained the initiative as long as possible to preclude a war of attrition and materiel which he could not win.

STRENGTH OF WILL AND DETERMINATION

Rommel reinforced his vision through incredible displays of will and determination. In this section, I shall discuss three ways these characteristics helped Rommel handle uncertainty. These include presence, sharing the danger, and maintaining the boss's confidence.

Because Rommel knew that battlefield uncertainty could be overcome by the leader's presence, he felt that his place was at the front. He had the uncanny knack of determining the decisive point on the battlefield. His presence there helped him impart his will on his leaders and soldiers through the energy of his personality. The following is a common passage from his papers.

As the situation was rather confused I spent the next day at the front again. It is of the utmost importance to the commander to have a good knowledge of the battlefield and of his own and his enemy's positions on the ground. . . . This is particularly the case when a situation develops, the outcome of which cannot be estimated. Then the commander must go up to see for himself; reports received second-hand rarely give the information he needs for his decisions.⁷⁵

In his notes regarding the commander's role, he wrote:

Accurate execution of plans of the commander is of highest importance. It is a mistake to assume that every officer will make all that there is to be made out of his situation; most of them soon succumb to a certain inertia . . . The commander must be the prime mover of the battle and the troops must always have to reckon with his appearance.⁷⁶

During offensive operations, when the situation was critical, Rommel could be found at the head of his panzer forces. Quite often he virtually took command of the leading elements himself. For example, in May of 1942, Rommel launched his Gazala attack to seize Tobruk and to destroy the British Army by pinning it against the sea. In the first phase of the operation, Rommel led a two corps attack.⁷ When the initial attack stalled, he directed the critical supply column through a gap in the friendly and enemy lines.⁸ Finally, on the 11th of June, during the breakout from the Cauldron, Rommel again commanded the main attack.

The field marshal also showed strength of will by sharing the dangers with his soldiers. Rommel felt that "The commander must have contact with his men. He must be capable of feeling and thinking with them."⁹ In *Rommel as Military Commander*, Ronald Lewin wrote the following about Rommel and hardship.

Auster to himself, he demanded austerity from his staff, and the self-abnegation he exercised throughout his career was taken for granted by his entourage. They, too, had to live hard: Rommel was merciless . . . Von Mellenthin says that "between Rommel and his troops was that mutual understanding which cannot be explained and analyzed, but which is the gift of the gods. The Africa Corps followed Rommel wherever he led, however hard he drove them . . . the men knew that Rommel was the last man to spare Rommel."¹⁰

There remains another reason for Rommel's ability to muster the requisite strength and will. He had Hitler's confidence. The field marshal ignored orders which did not suite him because of his direct access to Hitler.

While other German generals were sacked for failing to adhere to Hitler's instructions, Rommel remained the "teflon" general. For instance, as Rommel prepared for his May of 1942 Gazala attack, word came from Hitler, "Tell Rommel that I admire him."⁸¹

CHARACTER

Rommel displayed boldness, imagination, and creativity throughout his military career, but particularly in his campaign in North Africa. The general knew that he could never match the British tank for tank, so bold offensive action full of daring thrusts and envelopments had to suffice.

Rommel's boldness and his *fingerspitzengefühl* (feel for the battlefield) created uncertainty for the enemy. To the enemy's disadvantage the field marshal remained adept in controlling this dynamic situation. Rommel clearly understood the impact of shattering the enemy's morale.

Yet, it seems important to recognize that he knew the difference between boldness, risk taking, and gambles. In *The Rommel Papers*, he claimed:

It is my experience that bold decisions give the best promise for success. But, one must differentiate between strategical or tactical boldness and a military gamble. A bold operation is one in which success is not a certainty but which in case of failure leaves one with sufficient forces in hand to cope with whatever situation may arise. A gamble, on the other hand, is an operation which can lead either to victory or to complete destruction of one's force. Situations can arise when even a gamble may be justified-as, for instance, when in the normal course of events defeat is merely a matter of time, when the gaining of time

is therefore pointless and the only chance lies in an operation of great risk.⁵²

Rommel used bold offensive operations to overcome the materiel superiority of the British. Perhaps the best example occurred during the Gazala attack, when outnumbered by fifty percent, Rommel elected to mass his armor and outflank the British forces to seize Tobruk. David Irving, quoting Rommel's Chief of Staff, General Alfred Gause, claimed:

His decision to send his Army's entire tank strength on an outflanking move around the southern end (of the British lines) was one of exceptional daring, particularly since his supply lines would also have to go around that flank. But if he lost this battle, he stood to lose all Africa.⁵³

Rommel's offensive operations reflected his imagination and creativity. He rarely planned beyond the initial engagement, preferring to maintain the speed and tempo of the battle. In *The Art of Winning Wars*, Colonel James Mrazek wrote:

Rommel shunned military formalism. He made no fixed plans beyond those intended for the initial clash; thereafter, he tailored his tactics to meet specific situations as they arose. He was a lightning-fast decision-maker physically maintaining a pace that matched his active mentality. In a forbidding sea of sand he operated in a free environment.⁵⁴

Rommel sought to move beyond the bounds of tradition. He recognized that a desert environment remained much different than Europe. In his writings about the desert warfare, he claimed the desert provided "the only theatre where the principles of motorized and tank warfare, as they had been

taught theoretically before the war, could be applied to the fullest and further developed."⁶⁵

INTELLECT

Rommel's intellectual skills were reflected in the development of his maneuver concept and his appraisal of the logistical situation. In both cases, the field marshal's ideas seem full of innovation.

Rommel's maneuver concept, as previously mentioned, was the product of the German armor concept applied to the desert. In *The German Army 1933-1945*, Matthew Cooper claimed:

He (Rommel) understood that victory for the armoured force lay in the art of concentrating strength at one point, forcing a breakthrough, rolling up and securing the flanks on either side, and then penetrating like lightning, before the enemy has time to react, deep into his rear.⁶⁶

The field marshal's thoughts on desert warfare remain as valid today as fifty years ago. Regarding Rommel's ability to adapt to new situations, General Westphal, his operations officer in North Africa, claimed:

All who worked with him were constantly astounded at the rapidity with which he summed up the most complex situations and came to the heart of the matter.⁶⁷

Upon arriving in theater, Rommel fully realized the constrained nature of his North Africa operations. He could neither solve his supply problem or the command and control arrangements. The field marshal did not ignore his supply

situation. He claimed:

The only influence which the Panzer Army Command could exercise on the supply question was the production of a priority list . . . showing the order in which material stored in Italy should be brought to Africa - if at all.⁹⁹

Throughout *The Rommel Papers*, we find discussions of logistical issues, needs, and wants. Rommel knew logistics controlled his ability to gain a decisive victory, but he refused to allow them to dominate his scheme of maneuver. He wrote:

The best thing is for the commander himself to have a clear picture of the real potentialities of his supply organization and to base all his demands on his own estimate. This will force the supply staffs to develop their initiative, and though they may grumble, they will as a result produce many times what they would have done left to themselves.⁹⁹

Rommel was not a gifted intellectual. However, he possessed the ability to recognize and solve complex problems. When matters remained beyond his control in North Africa, such as the logistical situation, the command and control arrangements, and the allotment of air power, he attempted to compensate with innovative schemes of maneuver.

STAFF

Rommel's staff went through a unique transformation during his North Africa campaign. He inherited a small staff and, during the first offensive, determined which of these men met the grade. The exceptionally talented survivors formed the nucleus of a staff that performed a yeoman's job in light of the field marshal's desire to operate from the front.

During the first year, Rommel built a solid, competent team with a workable command post concept. David Irving described Rommel's concept:

He liked to leave a fixed operations staff in the rear in permanent contact with his Italian superiors and with the lower echelons, and then drive off by himself with a small command staff in a few open cars followed by mobile radio trucks to keep him in touch with the operations staff and combat units.⁹⁰

The men who made this concept work included great German leaders such as General Gause, Colonel Westphal, Lieutenant Colonel von Mellethin, and Colonel Bayerlein. This group of talented officers often replaced senior German leaders lost in battle.

Due to Rommel's habit of charging off with the leading divisions, his staff had unprecedented power and responsibility. Often Rommel remained out of contact with his staff. For example, during his first attack into Cyrenaica, he was out of contact for several days. During the British Crusader attack in November 1941, Rommel moved forward with the counterattack force. The British penetrated the Italian defenses and, since Rommel could not be reached, Westphal recalled the panzer division making the main attack.⁹¹ Finally, during Gazala, Rommel remained out of contact during parts of each phase of the battle.

Rommel's staff understood their commander's method of operation and worked diligently to cover his blind spots. They gave Rommel the freedom to use his intuition and lead his army from the front. Likewise, they handled uncertainty that was the

product of strained feelings between Rommel's German and Italian superiors.

Erwin Rommel handled uncertainty in a manner somewhat different than Sherman. The Field Marshal used his vision, strength of will and determination, character, intellect, and staff to enhance his control of the uncertainty found on the dynamic battlefields of North Africa. The characteristics strength of will and determination and character seemed to dominate the field marshal's efforts. Because Rommel had less overall control over the circumstances and the ability to resource war, vision seemed less important from an operational sense. Yet, Rommel's method of waging offensive battle gave his staff a more important role than Sherman's.

D. CONCLUSIONS AND FUTURE IMPLICATIONS

After reviewing the operational generalship of Sherman and Rommel, I can state that each possessed in some measure the characteristics of vision, strength of will and determination, character, intellect, and staff development. These traits remained at the heart of their ability to develop, and field a team that fought successfully during offensive operations in their respective war.

While I do not contend that these attributes completely define the requisites of operational leadership, they certainly are a start. Most importantly, my criteria begin to define the leadership philosophy and climate that the commander alone creates to help himself and those around him handle uncertainty. No where in this study do I attempt to specify a

degree or amount of these qualities or characteristics that seem necessary to handle uncertainty. This would be prescriptive and fly in the face of the power of the commander's personality, which plays such a dominant role in how his command is established.

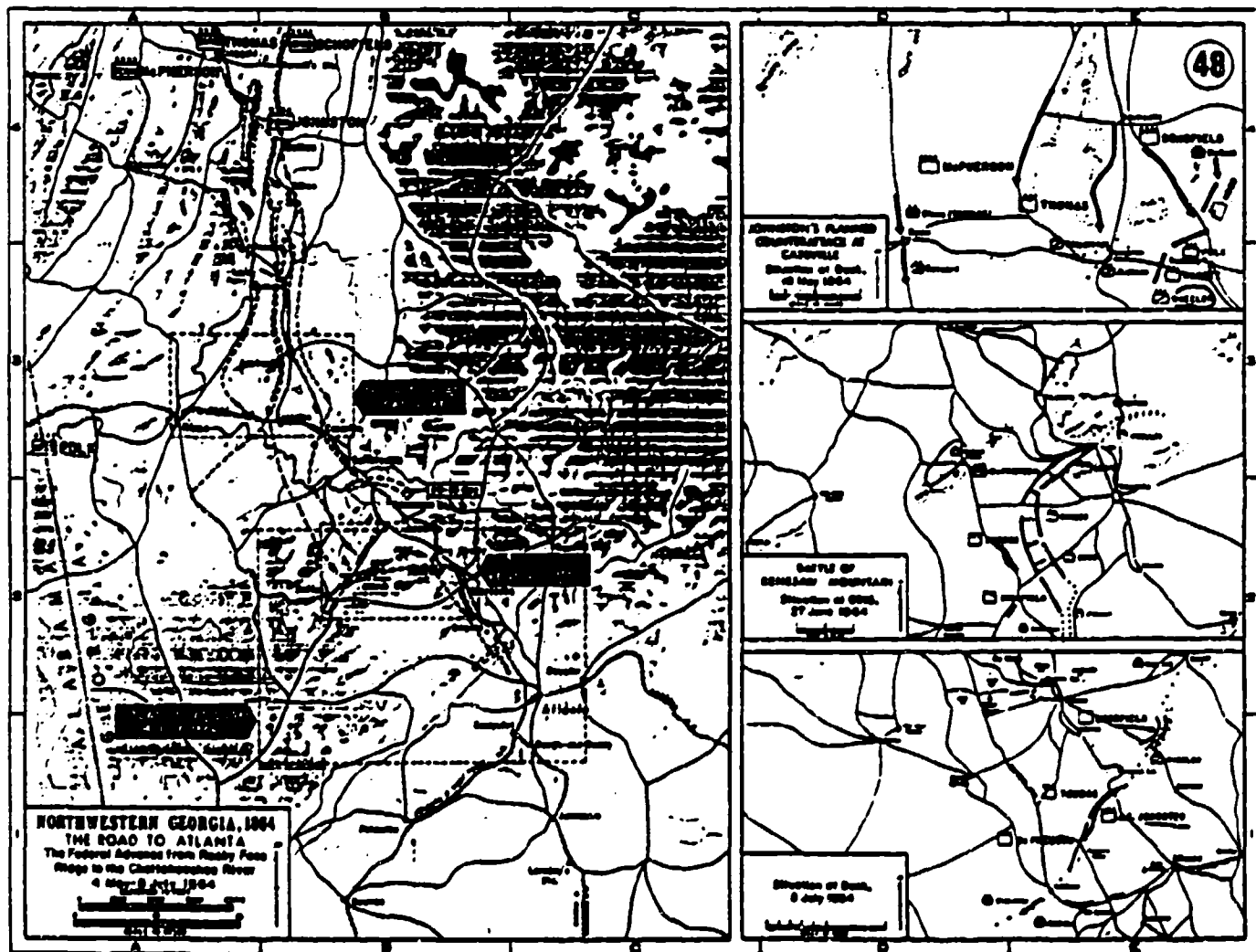
Senior leadership doctrine, contained in FM 22-103, *Leadership and Command at Senior Levels*, does not reflect accurately what is required of senior commanders in the face of uncertainty. This manual covers leadership and commandship at the division level and above. Additionally, it attempts to cover the gamut of tactical and operational leadership. As a result, it remains an amalgamation of every known leadership trait and characteristic available (see Appendix C). Consequently, we have a manual that wants to be all things to all senior officers. The result is disappointing and confusing. As a consequence, I believe that as our Army continues to study and define operational art, we must develop a separate leadership manual that focuses on the operational leader. This manual ought to be based on an historical review of what made operational level generals great commanders. When the Army undertakes an in depth study based upon the theoretical and historical examples of the past, then we as an institution can begin to thoroughly address how operational leaders should handle uncertainty. Furthermore, this study should help define how we train junior leaders to progress through positions requiring the ability to handle greater uncertainty.

The conclusion of this monograph is that operational commanders never eliminate uncertainty present in offensive operations. Rather, they learn to handle uncertainty present in operational command. Obviously, each commander deals with the issue in a manner that bears his imprint. The criteria offered in this study cannot be a template to guarantee success. They merely serve as a mark on the wall or benchmark from which further study can proceed.

What about the future? As we look to a non-linear battlefield in AirLand Battle Future, the nature of operations in terms of time, space, mass, distance, and tempo is expected to take a quantum leap. The level of uncertainty will also rise. Our transition from a defensive to offensive-oriented operations further complicates a demanding environment. Correspondingly, the decision-making requirements on leaders at the operational level will increase. Uncertainty will follow in due course and present itself in greater amounts at senior levels in the chain of command. Technological solutions in the form of command and control systems will offer cybernetic efforts to reduce the uncertainty of friendly and enemy dispositions. However, humans will remain the vital decision-makers and, since intentions cannot be discerned by technology, uncertainty shall remain a powerful force on the battlefield. Preventing paralysis in the decision-making process remains essential. FM 22-103 must address uncertainty as we transition from AirLand Battle to AirLand Battle Future.

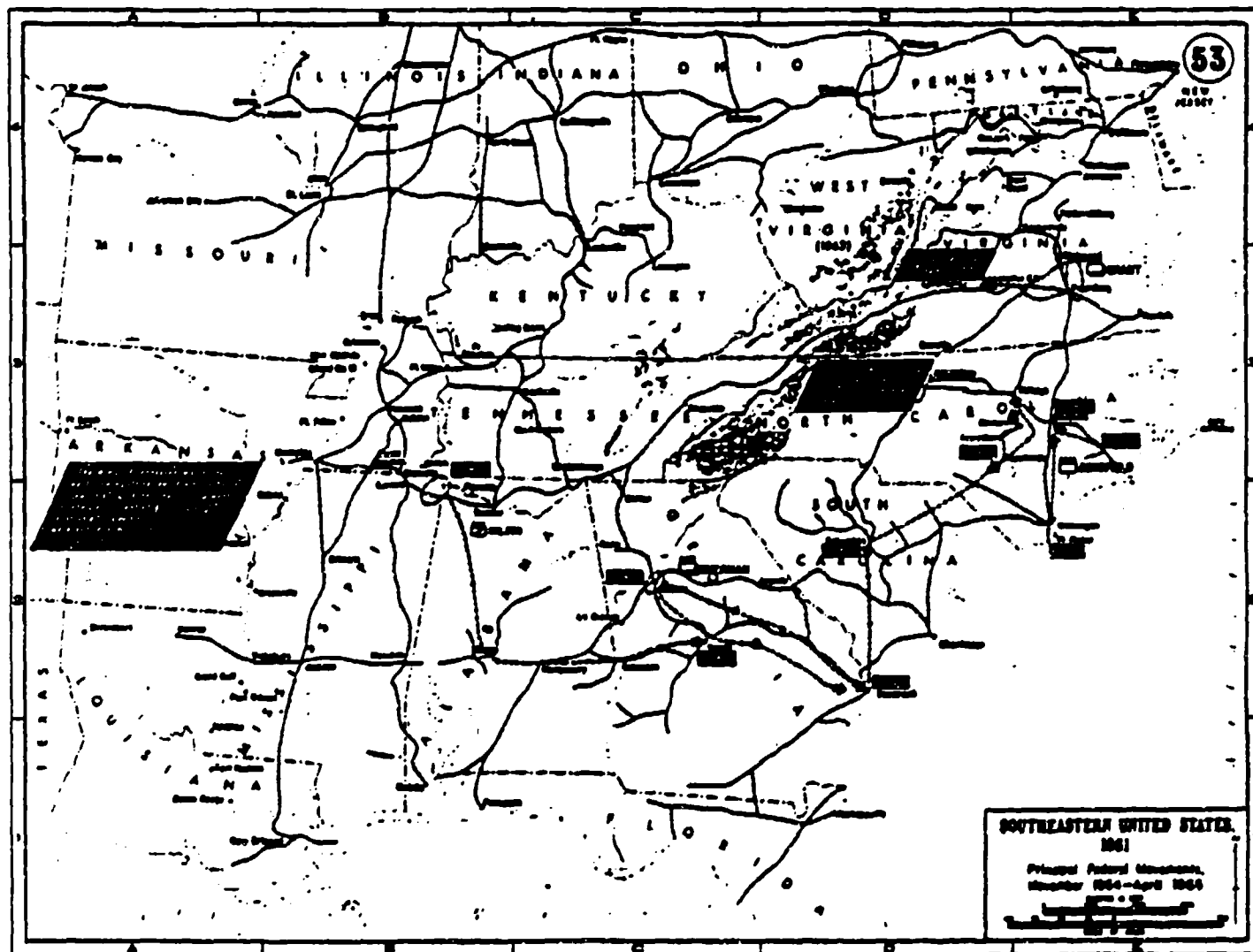
Appendix R: Maps of Sherman's Civil War Campaign

Source: *West Point Campaign Atlas to the American Civil War*



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Source: *West Point Campaign Atlas to the American Civil War*

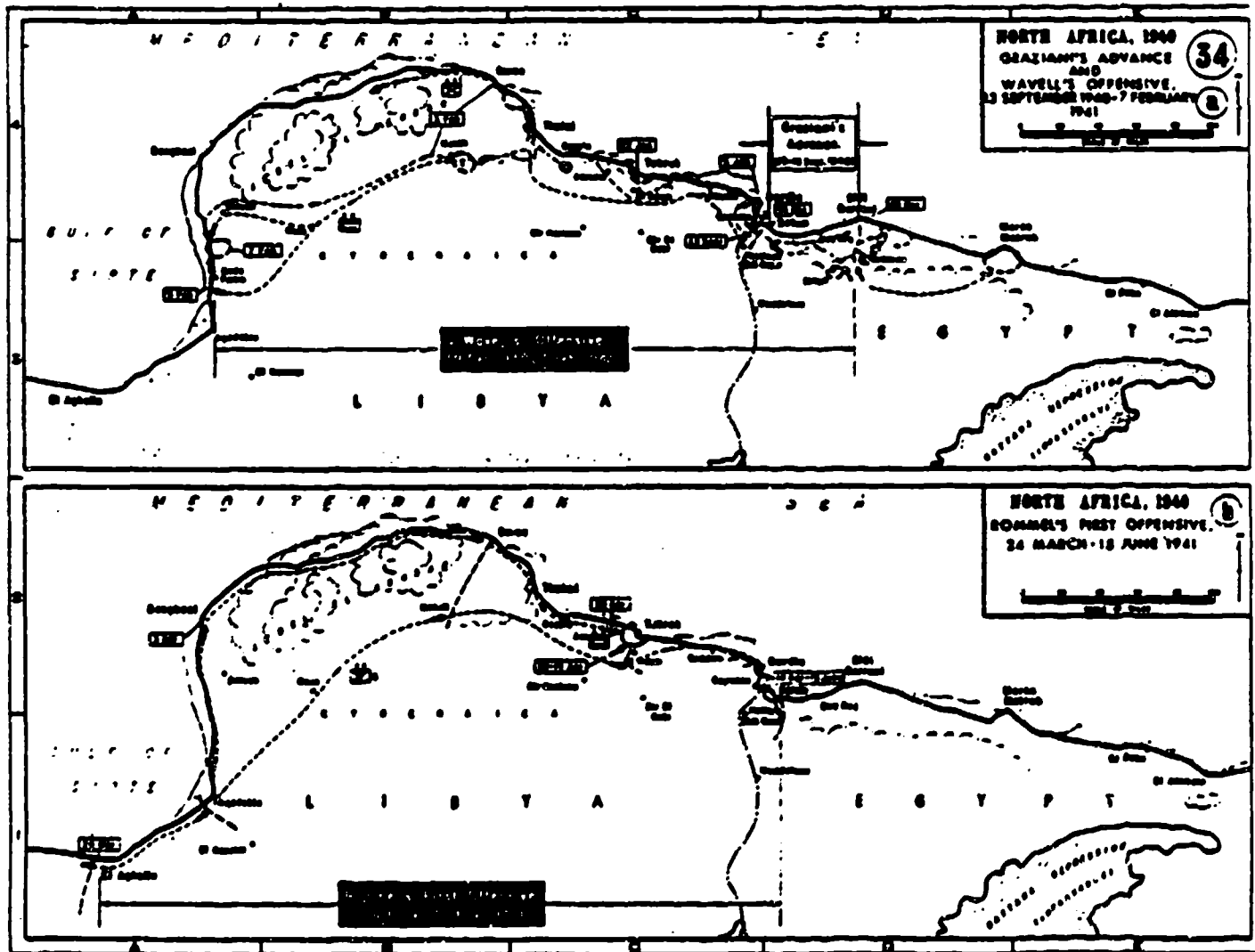


Source: West Point Text: *The War in North Africa*



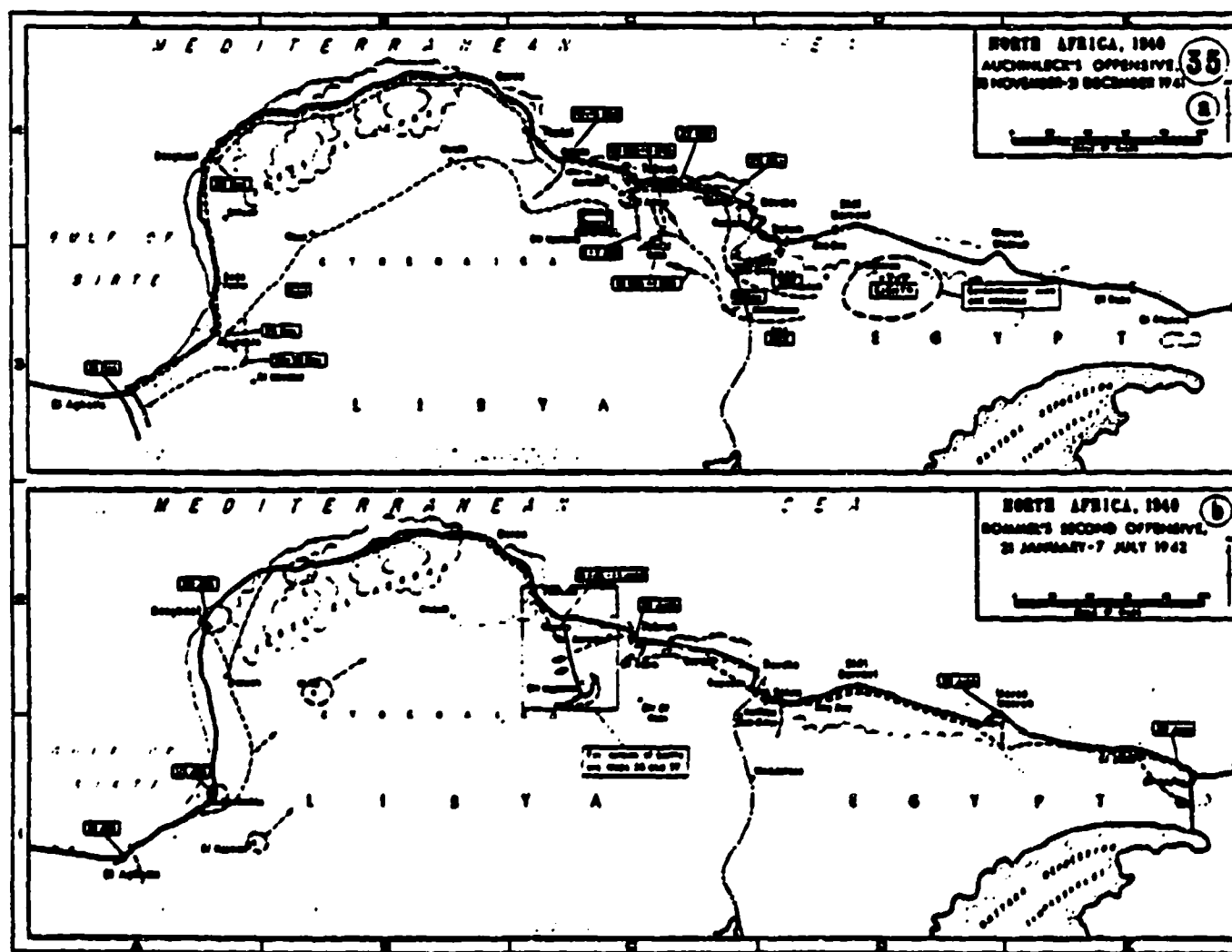
Appendix B: Maps of Rommel's Campaign of North Africa

Source: West Point Text: *The War in North Africa*



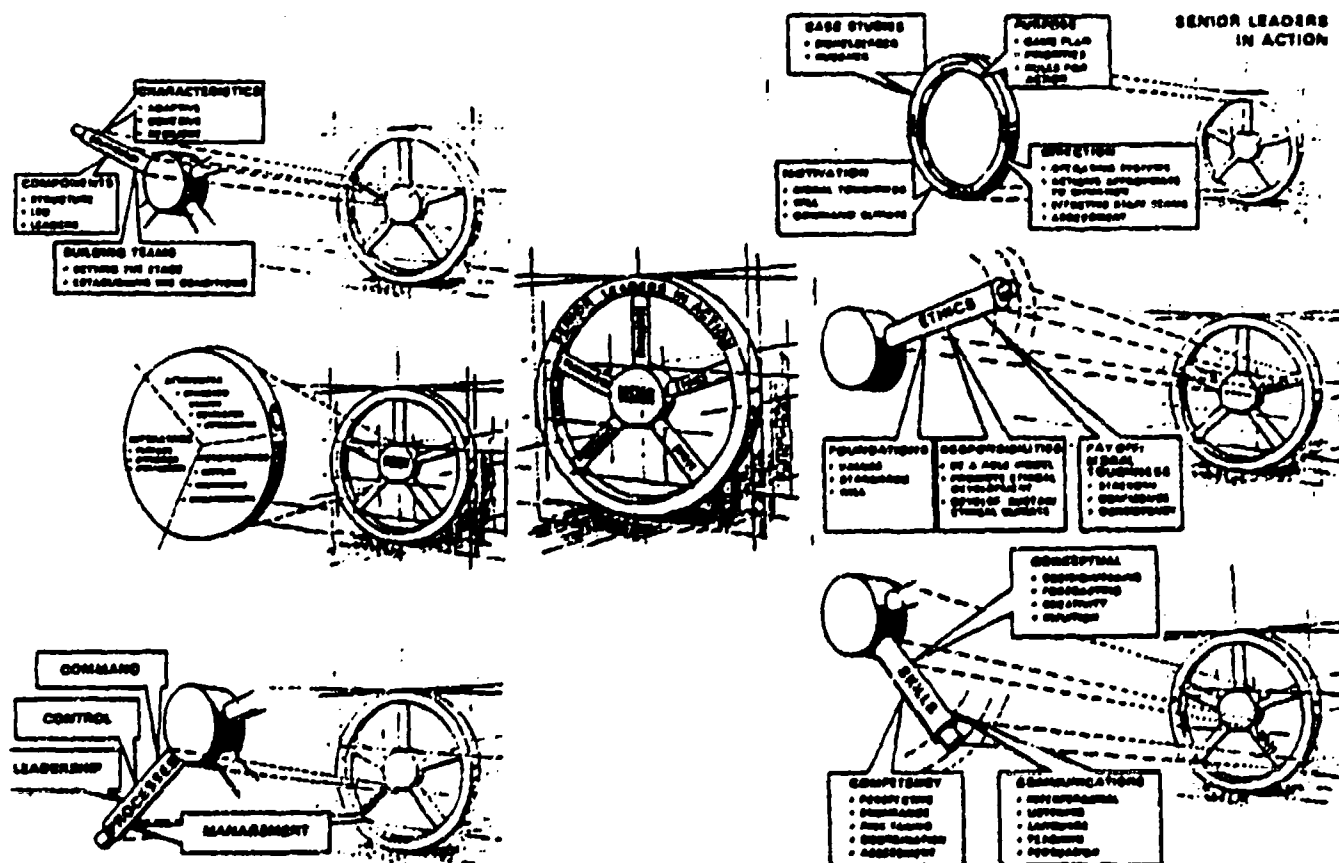
Appendix B: Maps of Rommel's Campaign of North Africa

Source: West Point Text: *The War in North Africa*



Appendix C: Field Manual 22-103 Matrix

Source: FM 22-103, *Leadership and Command at Senior Levels*



ENDNOTES

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⁸ The best historical summary regarding the true essence of generalship is found in an MMAS written by Major Mitchell M. Zeis, "Generalship and the Art of Senior Command: Historical and Scientific Perspectives," Student monograph, School of Advanced Military Studies, US Army Command and General Staff College, Fort Leavenworth, KS, 10 April 1985, p. 49.

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¹⁷ Maurice de Saxe, *My Reveries Upon the Art of War*, edited by Brigadier General Thomas R. Phillips (Harrisburg: Stackpole Books, 1985), p. 294.

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²³ Ibid., pp. 102-103.

²⁴ Ibid., p. 112.

²⁵ Ibid., p. 104.

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²⁷ Ibid., p. 103.

²⁸ Major General Baron von Freytag-Loringhoven, *The Power of Personality in War* (Berlin: Mittler & Son, 1911), pp. 83-84.

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³⁰ Ibid., p. 94.

³¹ Ibid., p. 111.

³² General Sir Archibald Wavell, "Generals and Generalship," p. 42.

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¹¹ General William T. Sherman, *Memoirs Volume II* (Westport: Greenwood, 1972), p. 5.

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¹⁷ Facts, figures, and dates regarding Sherman's operations in 1864-1865 have been taken and verified from three sources which include: Timothy H. Donovan, Roy K. Flint, Arthur V. Grant, Jr., and Gerald P. Stadler, *The American Civil War*; General William T. Sherman, *Memoirs Volume II*; and B.H. Liddell Hart, *Sherman: Soldier, Realist, American*.

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²⁹ *Ibid.*, p. 175.

²⁶ Information regarding Sherman's maneuver concept has been taken from Special Field Order, No. 120 in General William T. Sherman, *Memoirs Volume II*, pp. 174-176.

²⁷ B.H. Liddell Hart, *Sherman: Soldier, Realist, American*, p. 383.

²⁸ Information regarding General Sherman's staff has been summarized from B.H. Liddell Hart, *Sherman: Soldier, Realist, American*, p. 237 and General William T. Sherman, *Memoirs Volume II*, pp. 23, 95, and 177-178.

²⁹ The comparison of Sherman's staff during different periods of this campaign has come from General William T. Sherman, *Memoirs Volume II*, pp. 22-23 and p. 178.

³⁰ General William T. Sherman, *Memoirs Volume II*, p. 22.

³¹ Matthew Cooper, *The German Army 1933-1945* (New York: Stein and Day, 1978), p. 353.

³² Brigadier Peter Young ed., *Atlas of the Second World War* (New York: Berkley, 1974), p. 50.

³³ Matthew Cooper, *The German Army 1933-1945*, p. 354.

³⁴ Ibid., p. 355.

³⁵ General information regarding Rommel's desert campaigns can be found in a number of sources to include: Erwin Rommel's, *The Rommel Papers*; David Irving's, *The Trail of the Fox*; Correlli Barnett, *The Desert Generals*; Ronald Lewin's, *Rommel as Military Commander*; Kenneth Macksey, *Rommel's Battles and Campaigns*; Barrie Pitt's, *The Crucible of War: Western Desert 1941 and Year of Alamein 1942*; Major General F.W. Von Mellenthin's, *Panzer Battles*; and Matthew Cooper's, *The German Army 1933-1945*.

³⁶ Major Donald E. Kirkland, "Rommel's Desert Campaigns February 1941 - September 1942: A Study in Operational Level Weakness," Student monograph, School of Advanced Military Studies. US Command and General Staff College, Fort Leavenworth, KS, 21 May 1986, p. 4.

³⁷ Matthew Cooper, *The German Army 1933-1945*, p. 359.

³⁸ Ibid., p. 353.

³⁹ David Irving, *The Trail of the Fox* (New York: Avon, 1977), p. 31.

⁴⁰ Ibid., p. 53.

¹⁰ Erwin Rommel, *The Rommel Papers*, edited by B.H. Liddell Hart (New York: Harcourt, Brace, and Company, 1952), p. 199

¹¹ Ibid., p. 185.

¹² Ibid., p. 120.

¹³ Matthew Cooper, *The German Army 1933-1945*, p. 374.

¹⁴ Erwin Rommel, *The Rommel Papers*, p. 185.

¹⁵ Ibid., p. 122.

¹⁶ Ibid., p. 226.

¹⁷ David Irving, *The Trail of the Fox*, p. 201.

¹⁸ Erwin Rommel, *The Rommel Papers*, p. 201.

¹⁹ Ibid., p. 226.

²⁰ Ronald Lewin, *Rommel as Military Commander* (New York: Ballantine, 1968), p. 309.

²¹ David Irving, *The Trail of the Fox*, p. 189.

²² Erwin Rommel, *The Rommel Papers*, p. 201.

²³ David Irving, *The Trail of the Fox*, p. 195.

²⁴ Colonel James Mrazek, *The Art of Winning Wars* (New York: Walker and Company, 1968), p. 63.

²⁵ Erwin Rommel, *The Rommel Papers*, p. 197.

²⁶ Matthew Cooper, *The German Army 1933-1945*, p. 353.

²⁷ Ibid., p. 252.

²⁸ Erwin Rommel, *The Rommel Papers*, p. 267.

²⁹ Ibid., p. 97.

³⁰ David Irving, *The Trail of the Fox*, p. 123.

³¹ Erwin Rommel, *The Rommel Papers*, p. 167.

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