

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE (DD-MM-YYYY) 19-12-2000	2. REPORT TYPE Monograph	3. DATES COVERED (From - To) 01-07-2000 to 19-12-2000
---	-----------------------------	--

4. TITLE AND SUBTITLE Morale as a Principle of War	5a. CONTRACT NUMBER
	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S) MAJ David W. Burwell	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) School of Advanced Military Studies (SAMS) Command and General Staff College (CGSC) Fort Leavenworth, KS 66027	8. PERFORMING ORGANIZATION REPORT NUMBER
--	--

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) CGSC Fort Leavenworth, KS 66027	10. SPONSOR/MONITOR'S ACRONYM(S) SAMS
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for public release; distribution is unlimited.

13. SUPPLEMENTARY NOTES

14. ABSTRACT
See attached abstract

20011005 167

15. SUBJECT TERMS
Morale, Principles of War

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Unlimited	18. NUMBER OF PAGES 50	19a. NAME OF RESPONSIBLE PERSON MAJ David W. Burwell
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED			19b. TELEPHONE NUMBER (include area code) 913-651-6963

MORALE AS A PRINCIPLE OF WAR

A Monograph
by
Major David W. Burwell
U.S. Army



School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

First Term AY 00-01

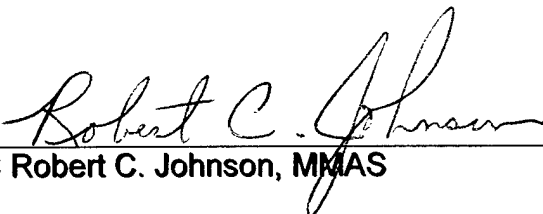
SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

Major David W. Burwell

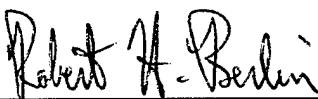
Title of Monograph: Morale as a Principal of War

Approved by:



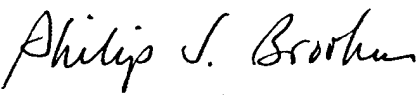
LTC Robert C. Johnson, MMAS

Monograph Director



Robert H. Berlin, Ph.D.

Professor and Director Academic
Affairs, School of Advanced
Military Studies



Philip J. Brookes, Ph.D.

Director, Graduate Degree
Program

Accepted this 15th Day of December 2000

ABSTRACT

MORALE AS A PRINCIPLE OF WAR by MAJ David W. Burwell, USA, 50 pages.

For the twenty-first century Army to successfully operate in the dispersed and isolated battlefield of the future, soldiers must be highly committed, well trained, and led to successfully transition, without pause, across the full spectrum of operations. The fundamental principle that will make this all possible is creating and maintaining a high state of morale. In spite of the fundamental need for high morale, the U.S. Army's current principles of war do not include the maintenance of morale.

Morale has been and always will be an important principle to the overall success of the Army. The twenty-first century Army operating in an uncertain and often unpredictable future security environment magnifies the importance of soldier morale. The importance is so profound that "morale" should be a principle of war.

This monograph explains why "morale" should be included in the U.S. Army's current principles of war. An analysis of the evolution of the principles of war, along with an in-depth historical analysis of three classical theorists, Clausewitz, Fuller and Marshall, establish morale as a viable candidate to be a U.S. Army principle of war. Subsequently, four additional reasons are offered that magnify the importance of morale to the Army, now, and in the future. The four areas explored are the increasing lethality and dispersion on the battlefield, force projection, cultural shift in the Army, and physical versus human dimension.

This monograph concludes that the inclusion of "morale" into the principles of war is both historically warranted and relevant based on current trends. Additionally, both practical and doctrinal applications are suggested that would be necessitated by the inclusion of morale as a principle of war.

TABLE OF CONTENTS

I. INTRODUCTION.....	1
Methodology.....	2
Morale.....	3
II. PRINCIPLES OF WAR.....	6
Characteristics of the Principles of War.....	6
Joint Warfare of the Armed Force of the United States	6
FM 3.0 Operations, (DRAG EDITION).....	6
British Defense Doctrine.....	7
Evolution of the Principles of War.....	7
III. CLASSICAL THEORISTS.....	12
Clausewitz.....	12
J.F.C. Fuller	15
S.L.A. Marshall	17
General Patton	20
FM 3.0 Operations (DRAG EDITION) Review	23
IV. ANALYSIS.....	26
1997/98 Draft of FM 100-5, Operations	26
The Need to Include Morale as a Principle of War.....	29
Lethality and Isolation on the Battlefield.....	30
Force Projection Army.....	33
Cultural Shift in the Army.....	35
Physical Dimension Versus the Moral Dimension.....	37
V. CONCLUSIONS.....	40
ENDNOTES.....	44
BIBLIOGRAPHY.....	48

I. INTRODUCTION

The future international security environment, the Army's Title Ten responsibilities, and the National Military Strategy are some of the factors that have driven the Army Chief of Staff, General Shinseki, to begin transforming the force to maintain its dominance in the twenty-first century. The future international security environment provides the most significant impetus to change the Army.

Some of the characteristics of the future international security environment are the proliferations of weapons of mass destruction (WMD), failing nation-states, rapidly increasing urban populations, and increasing asymmetric threats are a few dynamics of the future security environment. The characteristics these dynamics present to U.S. forces are numerous and rapidly evolving. Moreover, there are increasingly stark differences between U.S. armed forces and the anticipated opponents of the future.

The U.S. Army has modern, well-equipped forces, abides by international law, and however has limited public support when U.S. vital interests are not at stake.¹ This lack of support could generate significant political and moral constraints. Conversely, potential adversaries of the U.S. military are small, lightly and archaically equipped, unwilling to conform to international laws and are above all fully committed to their cause.² The potential adversaries of the future along with the future security environment are guiding General Shinseki in his effort to transform the Army—the endstate of this transformation is the objective force.³

The Objective Force must be able to perform disaster relief one day, small-scale contingency the next, and then transition to full-scale warfare without pause.⁴ According to General Shinseki the Objective Force requires the following characteristics to operate as a full spectrum force: responsiveness, deployability, agility, versatility, lethality, survivability and sustainability.⁵

The means to generate the characteristics of the Objective Force are technological and informational advancements along with the Army's most precious resource--its soldiers. Technological and informational advancements have enabled units to be smaller yet more lethal, mobile and survivable across greater distances. The effect of this increased capability is that soldiers are in fact more isolated

on the battlefield due to increased dispersion. This dispersion also significantly diminishes the impact of the commander on the battlefield. The dispersion, coupled with the diminishing impact of the commander, significantly reduces the cohesive element needed on the battlefield. The reduction of cohesion strikes directly at the morale of the Army's most precious resource—the soldier.

It is no surprise that the American soldier is the key component to success both in peace and across the full spectrum of war. As General Shinseki posits: “the commitment of our soldiers has been and will always be the heart and soul of our Army's readiness.”⁶ The cornerstone to the commitment of U.S. Army soldiers lies in providing them with a strong physical, mental and moral foundation that will enable them to act decisively while conducting full spectrum operations in the complex environment they surely will face.⁷ The fundamental importance of the soldier to successful Army operations clearly articulates the inherent importance of the individual soldier's morale.

In order for the Objective Force to successfully operate in the dispersed and isolated battlefield of the future, soldiers must be highly committed, well trained, and led to successfully transition, without pause, across the full spectrum of operations. The fundamental principle that will make this all possible is creating and maintaining a high state of morale. In spite of the fundamental need for high morale in the Objective Force, the U.S. Army's current principles of war do not include the maintenance of morale.⁸

Morale has been and always will be an important principle to the overall success of the Army. The Objective Force operating in the uncertain and often unpredictable future security environment magnifies the importance of soldier morale. The importance is so profound that morale should be a principle of war.

METHODOLOGY

This monograph establishes morale as a principle of war in four ways. First the review of the characteristics of the principles of war combined with a historical analysis of their evolution establishes the basis for further evaluation. The end result of this analysis yields the criteria the author used to evaluate morale as a principle of war.

Second this monograph shows that morale as a viable principle of war in the form of two arguments. An in-depth historical analysis of the classical theorists, Clausewitz, J.F. C. Fuller and S.L.A. Marshall, sets the foundation for the first argument for morale as a principle of war. The comments of World War II hero General Patton further establish morale as a fundamental element of successful operations. The second argument is a doctrinal review of *FM 3.0, Operations (DRAG)*. This review establishes morale as a bedrock principle of U.S. Army doctrine. The conclusion of this historical analysis establishes morale's ability to meet the established evaluation criteria.

Third, the author explores additional reasons for considering morale as a principle of war. First an analysis of the 1997-98 *FM 100-5, Operations*, re-write effort to establish a historical precedence for morale as a principle of war. This analysis determines if the reasons for not including morale as a principle of war during this effort remain valid today. Second, this section analyzes four factors that magnify the importance of making morale a principle of war: lethality and isolation on the battlefield; force projection Army; cultural shift within the Army; and physical versus the human dimension of warfare.

Finally, this monograph will conclude by suggesting both doctrinal and practical applications of morale as a principle of war.

MORALE

In order to put forth recommendations about how to implement morale doctrinally as well as in practice, it is necessary to define and understand morale. The *Webster Dictionary* offers a good initial definition. It defines morale as: "the state of the spirits of an individual or group as shown by confidence, cheerfulness, discipline and willingness to perform assigned tasks."⁹ However, this definition is too generic for useful military application.

John Baynes, in his account of the 2d Scottish Rifles in World War I, offers a more encompassing definition of morale.

High morale is the most important quality of a soldier. It is a quality of mind and spirit which combines courage, self-discipline, and endurance. It springs from infinitely varying and sometimes contradictory sources, but is easily recognizable, having as its hall-marks cheerfulness and unselfishness. In time of peace good morale is developed by sound training and the fostering of esprit de corps. In time of war it manifests itself in the soldier's absolute determination to do his duty to the best of his ability in any circumstances. At its highest peak it is seen as an individual's readiness to accept his fate willingly even to the point of death, and to refuse all roads that lead to safety at the price of conscience.¹⁰

Baynes' definition articulates the fundamental importance of morale to a military unit: the ability of the soldier to place the mission ahead of his own personal concerns, even when death may result.

Additionally, Doctor Schneider, a faculty member at the School of Advanced Military Studies, provides a good macro explanation of morale and the impacts of its loss. He writes, "Morale can be viewed as the magnitude of will within the army. Will is the engine of all action. A demoralized army cannot act in a positive fashion. Fear contributes most to the corrosion of will."¹¹ Doctor Schneider's explanation of morale establishes that morale is a dynamic mental state. Moreover morale is always in a state of flux and therefore its continuous care is paramount.

According to *FM 22-100, Leadership*, morale is the human dimension's most important intangible element. It's a measure of how people feel about themselves, their team and their leaders. High morale comes from good leadership, shared hardship and mutual respect.¹² Though this definition accurately depicts the aspects of morale, it does not define the fundamental importance of morale as articulated by Baynes.

The varied definitions of morale indicate that the understanding of morale is anything but universal. Arguably there are many factors that influence the morale of an individual or a unit. Baynes suggests that the indicators of good morale during peacetime are cheerfulness, behavior (conversely no chronic behavior problems), and good treatment accorded to visitors. The wartime indicators of morale include cheerfulness, health (comprised of good field hygiene and low sick call rates), willingness to patrol and victory in battle. Cheerfulness, physical courage, esprit de corps and endurance personify morale.¹³

Doctor Knowlton, states in his article, *Morale, Crucial, but what is it?* that the indicators of morale that military authors use are military courtesy, the appearance of the troops and their equipment, absent without leave (AWOL) rates, numbers of courts-martials, and other disciplinary actions. Knowlton also suggests that morale is often characterized as comprising courage, discipline, self-confidence or determination to reach a goal. The determinants of morale, according to Knowlton, include leadership, pride in unit, patriotism and unit cohesiveness.¹⁴

The competing views cited above indicate the problem with the concept of morale. Universally, morale is acknowledged as the essential element of a fighting force, yet few leaders can accurately define it and less, if any, understand how to measure it. Without a clear articulation of the determinants of morale vice indicators, leaders will often attempt to fix the effect of poor morale without addressing the cause. Because man ultimately wins wars, morale of the man and his unit must be universally understood and measurable.

There is a methodology with which to measure morale. In a study, conducted by the Army Research Institute (ARI), researchers determined several facts about morale.¹⁵ The ARI study determined that morale was a sum of three major components: motivation, satisfaction and group cohesion. The methodologies to measure the three separate components of morale already exist.¹⁶ Therefore it is possible to affect morale indirectly by influencing its components.

For the purposes of this monograph, the definition of morale is a combination of those already offered. Morale is a measure of how people feel about themselves, their team and their leaders. High morale comes from good leadership, shared hardship and mutual respect. At its zenith, morale enables a soldier to place accomplishment of the mission above his own personal needs, even when death is eminent. Will is the expression of the quantity of morale. Morale's components are cohesion, motivation, and satisfaction.

In order to assess morale as a potential principle of war it is important to understand the definition and origins of the principles of war, and to analyze their evolution since their introduction into U.S. Army doctrine.

II. PRINCIPLES OF WAR

The various characteristics of the principles of war provide a doctrinal basis to establish the criteria for development of a principle of war. The historical analysis of the origins and evolution of the principles of war will redefine the doctrinally established evaluation criteria. The end result of the historical analysis will be the evaluation criteria with which to judge the validity of morale as a principle of war. To gain a better understanding of the principles of war it is important to have a clear understanding of the term.

CHARACTERISTICS OF THE PRINCIPLES OF WAR

JOINT WARFARE OF THE ARMED FORCE OF THE UNITED STATES

The principles of war represent the best efforts of military thinkers to identify those aspects of warfare that are universally true and relevant. In all cases, the principles are applied broadly, avoiding literal or dogmatic construction, and with due regard for the unique characteristics of joint warfare.¹⁷

FM 3.0 OPERATIONS, (DRAG EDITION), 15 JUNE 2000

The nine principles of war provide general guidance for conducting war and operations other than war at the strategic, operational and tactical levels. The principles are the enduring bedrock of Army doctrine. The principles of war have stood the tests of analysis, experimentation and practice. The principles of war are not a checklist nor do they apply in the same way to every situation. The principles of war summarize the characteristics of successful Army operations. Their greatest value lies in the

education of the military professional. Applied to the study of past campaigns, major operations, battles, and engagements, the principles of war are powerful tools for analysis.¹⁸

BRITISH DEFENSE DOCTRINE

The study of history reveals that certain broad precepts influence the conduct of war. These principles have proved to be enduring, despite changes in technology, which have affected the application of the principles of war without detracting from their general validity. Principles of war form part of the conceptual component of all military doctrine. Additionally, they inform the conduct of operations throughout the spectrum of conflict. British principles are placed in a logical order based on the relationship between the topics and the act of engaging the enemy. They represent two components. First are the crucial considerations prior to the engagement. Second is the guide to the way in which the engagement should be conducted and sustained.¹⁹

The American and British characteristics of the principles of war suggest the doctrinal evaluation criteria to determine if certain elements of war are worthy of becoming principles of war. The first criterion is that the principles of war characterize the elements of success in warfare. The second is that they have stood the test of time, they are immutable. The third is that principles of war are the bedrock of doctrine. The fourth is that principles of war have universal application. However, a historical analysis of the evolution of the principles of war redefines the doctrinal evaluation criteria.

EVOLUTION OF THE PRINCIPLES OF WAR

The conceptualization of the principles of war, as we know them, began around the time of the Napoleonic era. Though Napoleon never captured his principles in the form of the written word, he never the less believed they existed.²⁰ A study of his campaigns reveals what Fuller believes are Napoleon's principles. They are:

- Reliance on the offensive
- Trust in speed to economize time

- Effect strategic surprise
- Concentrating superiority of force on the battlefield at the decisive point of attack
- Protection²¹

From Fuller's analysis of Napoleonic Warfare, the roots to five of the U.S. Army's current nine principles of war—offense, maneuver, surprise, mass, and security are found.

Two classical theorists of the Napoleonic era, Clausewitz and Jomini, distilled different principles from their reflection of Napoleon's campaigns. Though Clausewitz stated there were no hard and fast principles of war, a review of his writings, specifically, *On War*, demonstrates that he understood the value of certain truths in warfare. As he stated, "The value laid in the application of the principles to guide those who were well organized, open-minded and familiar with the nature of war."²² Hence, principles of war had broad general application, but were not a steadfast rule. Clausewitz's principles of strategic planning are:

- First principle is act with the utmost concentration
- Second principle is act with the utmost speed. No halt or detour must be permitted without good cause.²³

From Clausewitz's principles of strategy the foundations of the principles of mass and maneuver are found.

J.F.C Fuller suggests that had Clausewitz attempted to derive principles from his initial statement that "war is nothing but a duel on an extensive scale," Clausewitz would have established seven principles: (1) the maintenance of aim; (2) security of action; (3) mobility of action; (4) offensive power; (5) economy of force; (6) concentration of force; (7) surprise.²⁴ To his credit, Clausewitz acknowledged the importance of these elements throughout *On War*, he simply did not codify them as a group of principles. A fact that Jomini was quick to identify, in response to Clausewitz's criticism of Jomini's perceived strict adherence to principles.²⁵

Though often criticized for a pure scientific, somewhat mechanical, approach to war, Jomini clearly understood the art of war. Jomini believed there existed a small number of fundamental principles of war, which could not be deviated from without severe danger and application of which normally

guaranteed success. “The maxims of application which are derived from those principles are also small in number and if they are found sometimes modified according to circumstances, they can nevertheless serve in general as a compass to the chief of an army to guide him in the task.”²⁶ In short, Jomini believed that the principles of war were characteristics of successful battles. Moreover the application was based on the situation at hand. Jomini states that there is but one basic principle, conceptualized by four maxims:

- To throw by strategic movements the mass of an army, successively, upon the decisive points of a theater of war, and also upon the communications of the enemy as much as possible without compromising one’s own.
- To maneuver to engage fractions of the hostile army with the bulk of one’s forces.
- On the battlefield, to throw the mass of the forces upon the decisive point, or upon that portion of the hostile line which it is of the first importance to overthrow.
- To so arrange that these masses shall not only be thrown upon the decisive point, but that they shall engage at the proper times and with ample energy.²⁷

Jomini and Clausewitz initiated the beginnings of the principles of war. Their theory clearly establishes the roots to several of the current U.S. principles of war, specifically--mass, maneuver, concentration, objective and surprise. However the actual compilation of a list of principles did not take form until the beginning of the twentieth century by J.F. C. Fuller.

J.F.C. Fuller’s efforts before, during and after World War I had the most profound impact on the actual compilation of a list of principles of war. Other authors had previously cited many of the principles that Fuller espoused in his published list, however, it was Fuller that synthesized the first list. John Alger, in his book, *Quest for Victory*, writes, “unquestionably the most influential contributor to the modern concept of “principles of war” was J.F.C. Fuller in the twentieth century.”²⁸ In 1916, Fuller enumerated eleven principles of war, eight strategic and three tactical. The strategic principles were the objective, offensive, mass, economy of force, movement, surprise, security and cooperation. The tactical principles were demoralization [loss of morale](emphasis added), endurance and shock.²⁹ In 1920 the British War Department published Fuller’s list of the eight strategic principles of war in their *Field Service Regulations (FSR), Vol. II.*³⁰

It is important to note that the acceptance of the notion that the principles of war were immutable was not universally accepted among British military thinkers of the time. Sir Frederick Maurice, professor of military studies at the University of London, captures this fact. Maurice wrote, "the general conclusion...is that there are not fixed laws and rules of the art of war, and that even its principles are fluid and require constant re-examination in the light of changes which time brings."³¹ The debate over the validity of the eternal application of the principles of war eventually found the list removed from the British *FSR*'s during the 1930's and the principles were not established as a list until General Montgomery reestablished them in the late 1940's.

Nonetheless, the impact of the established list of principles of war found their way into American lexicon in 1921 with the publication of *Training Regulation (TR) 10-5 Doctrines, Principles and Methods*. The principles listed in *TR 10-5* were mass, economy of force, movement, surprise, security, simplicity and cooperation.³² Except for the addition of simplicity, the principles of war listed in *TR 10-5* are identical to Fuller's original list of eight to include the order they are listed. Colonel Naylor, at the General Service School, Fort Leavenworth, suggested that simplicity, be added to Fuller's list after witnessing the French way of doing business during World War I. Moreover, Naylor believed that Napoleon sought simple tactical solutions.³³

The concept of the immutable nature of the principles of war continued with the printing of *TR 10-5*. Though the regulation contained no definition of any of the principles, it did include a brief paragraph describing the application of the principles. *TR 10-5* stated:

These principles are immutable. Their application varies with the situation, the fundamentals of which are time, space or distance, terrain, weather, relative strength, including the physical and disciplinary factors, such as numbers, morale, communication, supply, and armament. Their proper application constitutes the true measure of military art, and it is the duty of all officers to acquire their true meaning by study, particularly the study of history, by reflection, and by practice, not only in purely military work, but in administration and business operations.³⁴

The debate that took place in Britain over the immutability of the principles of war also occurred within the U.S. military circle. The division of thought was significant enough that the list of principles was removed in form from U.S. training regulations until 1949. Since 1949 to the present, the list of

principles has changed very little.³⁵ However, the definition and application of these few highly regarded characteristics of war has changed and some quite significantly.³⁶

An analysis of the evolution of the principles of war suggests that the claim that the principles are immutable is unfounded. At the time that a given body of theorists synthesized a given list of principles, there was in existence a certain set of conditions. These conditions included the technology, culture, government and the military at that given time and place. The principles conceived at that time were immutable then and only then. Bob Leonard, in his book, *The Principles of War for the Information Age*, had this to say about the immutability of the principles of war,

“It is disturbing that, in a display of the grossest pedantry, we persist within the American armed forces in our insistence upon the immutability and applicability of these principles, which were developed many years ago. Even when these truisms are demonstrably inaccurate, military officers cling to them beyond all reason—choosing more often to reinterpret reality than to modify these ideas. There are compelling reasons to revise the principles of war. The historical record is clear: The principles are neither unchanging nor universally accepted.”³⁷

General George S. Patton concurred with the belief in immutable concept of a set of principles. He stated, “There is but one principle of war, that is to destroy the enemy, all other principles are derived from the specific time and place.”³⁸

Moreover there is a more fundamental issue that spills from the assumption that the principles of war are immutable. The principles were conceived as a guide, designed to provide a clearer understanding of warfare. In fact principles are nothing more than a subset of theory. Theory by definition is a professionally justified, reliable system of beliefs about the nature of war. Theory is not immutable, and to suggest otherwise is unjustifiable. It follows that the same line of reasoning applies to a subset of theory--the principles of war.

The analysis of the evolution of the principles of war enables the revision of the characteristics a given element of war must possess to be considered a principle of war. A given element must meet two criteria. First, the element must provide a part of or be the bedrock of doctrine. Second, the element must be a fundamental characteristic of successful operations. An analysis of classical theorists and a review of *FM 3.0, Operations*, determined that morale meets these redefined evaluation criteria.

III. CLASSICAL THEORISTS

If systemic study of the past is taken away, only personal experience, hearsay, and intuition remain. Military History may be an inadequate tool for commanders to rely on, but a better one has yet to be designed.

Van Crevald³⁹

As previously discussed it is imperative to show that morale possesses the element of timelessness with regard to successful military operations. At this juncture it can safely be asserted that there is no known battle that was won by a force that had also suffered moral disintegration.⁴⁰ From this departure point there still remains an unanswered question: Was the possession of a high state of morale decisive to the overall victory? Since morale is an intangible quality, the answer to this question will, by its very nature, be somewhat subjective. To determine whether moral is decisive to victory, this monograph will compare the viewpoints of several classical military theorists to illustrate the relationship between morale and decision.

CLAUSEWITZ

Carl Von Clausewitz captures the significance of morale in his classical writing *On War*, written at the conclusion of the Napoleonic Wars in the early 1800's. To Clausewitz the objective of war is the imposition of your will on your opponent. Written perhaps another way, the objective of war is the disintegration of your enemies will, so that you can impose yours upon him. The way to achieve your objective is the destruction of your enemy's army through battle. The implications of such an objective, to any army commander, are intuitively clear: the continued maintenance of morale is a primary consideration.

In his first chapter Clausewitz establishes three dominant tendencies of war and what they relate to:

- Primordial violence, hatred and enmity related to the people.
- The play of chance and probability within which the creative spirit is free to roam related to the Commander and his Army.
- The element of subordination as an instrument of policy, related to the Government.

According to Clausewitz a theory of war must include all three aspects.⁴¹ "To do otherwise is pure folly."⁴²

Clausewitz posits that there are four elements that make up the climate of war: danger, exertion, uncertainty, and chance.⁴³ Uncertainty and chance best relate to Clausewitz's notion of fog and friction on the battlefield. Clausewitz's study of the great battles and his own personal involvement in the Napoleonic Wars, developed his belief in the immensity that fog and friction play on the outcome of the battlefield. The global applicability of the decisiveness of morale stems from the magnitude that fog and friction play in war.

Fog and friction can have an overwhelming impact on the psychological aspects-- the human dimension--in battle. Throughout, *On War*, Clausewitz continually reminds the reader of the overwhelming impact that fog and friction have on the battlefield and ultimately the commander and his army. The noise, terror and uncertainty, and mutilated bodies have profound impact on the unseasoned soldier. It is the exceptional soldier who is able to maintain his decisiveness in the fray of action.⁴⁴

Friction in war makes everything difficult.⁴⁵ As Von Moltke stated and often echoed in our current Army, a plan is good only until you make contact with the enemy. Unforeseen events, changes to the plan, impacts of terrain, weather changes, and finally soldier actions are but a few of the frictional elements present in war.

Clausewitz wrote, "Countless minor incidents – the kind you can never really foresee – combine to lower the general level of performance, so that one always falls far short of the intended goal. Iron will power can overcome the friction, it pulverizes every obstacle...the proud spirits firm will dominate the art of war as an obelisk dominates the town square on which all roads converge."⁴⁶ The presence of fog and friction on the battlefield are the conditions that give the credence to the overwhelming importance of morale.

To Clausewitz the moral elements are among the most important in war.⁴⁷ The concept of the moral element is difficult to measure and is perhaps even more difficult to ensure the force possess it; however leaders must not turn a blind-eye to it simply because it is an emotional state. Unfortunately, the difficulty in measuring the moral element has perhaps driven commanders to holistically focus on the

material aspect of warfare, an error Clausewitz was keen to warn against. To rely simply on the materialistic factors of war, in the analysis of warfare, would condemn in advance anyone applying such a manner of analysis.⁴⁸

In keeping with his importance of morale, Clausewitz writes that the lack of morale or the loss thereof, is usually the main factor for defeat in battle.⁴⁹ In light of this, in order to achieve Clausewitz's ultimate aim of warfare – the destruction of the enemy army, the commander should make the destruction of the enemy's morale the main objective of his action.⁵⁰

Clausewitz provides only three factors that lead to victory.

- Enemies greater loss of material strength
- His loss of morale
- His open admission of the above by giving up his intentions.⁵¹

Consequently, victory can be attained either through destruction of material or the disintegration of morale

There are three basic conclusions to be drawn on Clausewitz's position on morale, or what he referred to as the moral domain. The first is the over-arching importance of morale at the beginning of the nineteenth century, which suggests that morale has a timeless application. The second is that in spite of the massive technological advancements present in modern battle, the fog and friction that placated Clausewitz's theory of war is just as much a factor today as it was then. To Clausewitz, morale, coupled with leadership, cohesion and discipline provides the iron-will to overcome the fog and friction present on the battlefield. This also suggests the unquestionable importance of morale today. The third conclusion is that the physical dimension and the moral dimension are inseparable. As Clausewitz succinctly states, "the effects of physical and psychological factors form an organic whole, which unlike the metal alloy are inseparable by chemical process. In formulating any rule concerning physical factors, the theorist must bear in mind the part that moral factors may play in it...one might say that the physical seem little more than the wooden hilt, while moral factors are the precious metal, the real weapon, the finely-honed blade."⁵²

J.F.C. FULLER

*To keep on repeating like a mantra yogi, that the moral to the physical is three to one, and to do nothing is about as helpful as saying that the moon is made of green cheese.*⁵³

J.F.C. Fuller

J.F.C. Fuller, noted theorist on the mechanization of warfare in the 1920s and 30s, also contributed a significant amount of theory on the nature of war. This theory on warfare is perhaps best exemplified by his writings contained in *The Foundations in the Science of Warfare*, printed in 1926. Fuller posits three spheres of warfare, based on the threefold order of man.⁵⁴ The spheres of warfare are the mental, physical and moral. It is important at this stage to understand that Fuller's use of the word moral encompasses the current meaning of morale.⁵⁵ The moral sphere, to which he gives Clausewitz great credit for acknowledging is, as Fuller states, all-important in war.⁵⁶ More importantly, Fuller suggests that many (leaders) incorrectly consider the moral sphere to be a separate entity divorced from the other two spheres of war. The moral domain is intertwined with the physical and mental. It links the will of the general to the action of the soldier.⁵⁷ This link between will and action is the foundation with which Fuller articulates the pre-eminent importance of morale to the fighting force.

The moral sphere is comprised of three forces: fear, morale and courage. The sum of these forces equates to will. Will provides the direction to movement. But it should be noted that this movement could be, in Clausewitzian terms, positive or negative. If the movement is aligned with the commander's intent, there is positive movement. Conversely, movement not in accordance with the commander's intent is negative. So what forces vector movement in a given direction?

The tension between fear and morale provides this direction. Fear, understandably, if uncontrolled unhinges the will and consequently paralyzes the soldier's reason. As Fuller states, "isolation, the dread of the unknown and the unexpected, may so unhinge the soldiers' morale that some incident, quite unrelated to the imagined danger, may detonate his fear into panic, and by severing his will from his reason, for a period reduce him to an irrational state."⁵⁸ The realm of fear is comprised of two forces: physical and moral. Moral fear is controlled by courage through reason and physical fear is controlled

through the belief that the soldier has the capability to inflict greater danger on his opponent.⁵⁹ Because of the negative effect of fear, one must wonder how to control or mitigate this corrosive force?

Fuller establishes morale as the controlling force of fear. He states, "By controlling fear, morale enables the will to execute the dictates of reason."⁶⁰ Thus, the pre-eminence of morale is established. Not only is morale fundamental to the control of fear, but as, Fuller suggests, should be the objective of warfare.⁶¹ Fuller does not suggest that fear should be eliminated, to the contrary. He suggests that the moral force be of such sufficient ardor to place fear in check. With these two forces in stasis, courage can provide movement to the will of the soldier. Fuller provides a model of the relationship between the leader and the led, which has relevance for modern forces and doctrine.

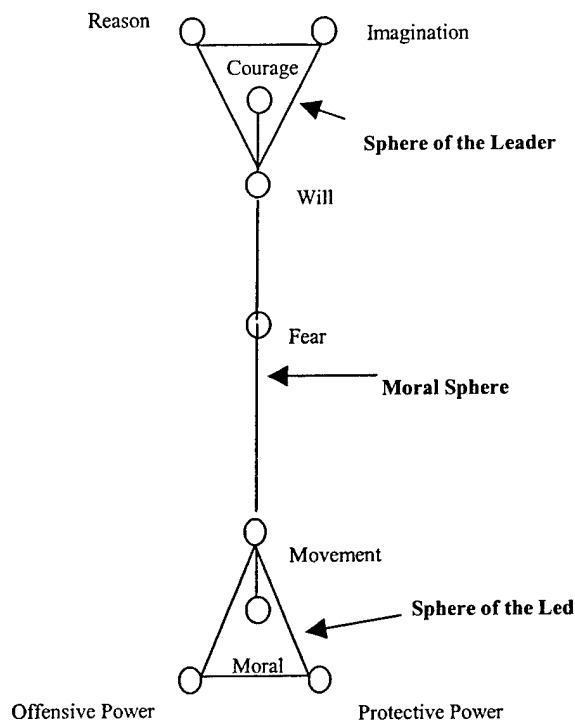


Figure 1.⁶²

Fuller establishes the framework of the moral sphere as it relates to the leader and the led. In this model, see figure 1, the commander through reason, imagination and courage invokes his will upon his

soldiers. The soldiers acting from the other end of the spectrum utilize offensive power and protective power to generate movement. The straight line between the commander and the soldiers represents the moral sphere of war. In the middle of the moral sphere is fear. Fear acts against both the commander and the soldier. Therefore the sum of the forces characterized by the leaders will and the soldiers' ability to generate movement must exceed the force of fear.

This model suggests two important concepts for today: First, the impact on the system if the commander's ability to invoke his will is degraded by another factor, like isolation and dispersion on the battlefield (a topic to be discussed in chapter 4); Second, the establishment of two components of the moral dimension--the leader and the led. This concept is contrary to current doctrine. Specifically, the moral dimension is only articulated within leadership doctrinal manuals and divorced from the tactical ones.⁶³ This segregation is contrary to the co-dependant relationship between the physical factors of war and the moral. As Fuller states: "...Because they base their ideas on a division between the moral and the physical spheres of war. No such division exists, any more than it does in man himself."⁶⁴

Morale to Fuller was the fundamental attribute necessary for decisive action in combat. If one could associate a military task to morale, it is to block the force of fear. Moreover, the creation of morale in peacetime is as equally important as its preservation in war. Succinctly expressed by Fuller,

We talk a great deal about morale and the will to win; yet of all virtues they are the least susceptible to talk and the most to action. Moral force is not like electrical energy; it cannot be stored up in batteries and sold by the kilowatt or any other commercial measurement.⁶⁵

S.L.A. MARSHALL

Brigadier General S.L.A. Marshall, the historian for the European Theater of War, during WWII, came to his conclusions about morale through his analysis of tactical units shortly after their involvement in battle. Marshall's inquiry seems to have been driven by a mental model that suggested the objective

(ends) of combat is the destruction of the enemy forces. The means to achieve this was through overwhelming firepower.

Firepower was comprised of both the material and human dimension. It is at this juncture that Marshall, through his accounting of battles fought, found a dilemma in achieving maximum firepower. He suggested that the U.S. Army had holistically placed its reliance on the material aspect to achieve firepower. Marshall had witnessed materialistically inferior forces defeat materialistically superior foes and concluded that only the human dimension could account for this phenomenon.

The U.S Army's wholly material approach to achieving dominant firepower ignored the mutually dependent variable of the human dimension. "But so strong was the influence with the machine upon our thinking, both inside and outside the military establishment, that as the new Army took shape, the infantry became relatively the most slighted of all the branches...the effects were almost catastrophic [emphasis added]."⁶⁶ Moreover, Marshall posits, the one fundamental truth of warfare: "No nation on earth possesses such limitless resources that it can maintain itself in a state of perfect readiness to engage in war immediately and decisively and win a total victory soon after the outbreak without destroying its own economy, pauperizing its own people and promoting interior disorder. War must always start with imperfect instruments."⁶⁷

Given these two conditions, the sole focus on material and the inevitable imperfect instruments at the outset of war, gives credence to the overwhelming importance of morale in the armed forces. As Marshall suggests, "in the course of war we learned anew that man is supreme that is the soldier who fights and wins battles. The fighting means using a weapon, and it is the heart of man that controls its use."⁶⁸ At the conclusion of World War II, Marshall suggested that this lesson had already been forgotten. The Korean War proved him correct and it was a lesson that cost U.S forces dearly.⁶⁹

Marshall offers three essentials of combat moral incentive:

- Knowledge of the National cause and maximum knowledge of the forfeits in the battle which is being fought.
- Faith in the power of the company and the higher tactical commands power.
- The above must be combined with the confidence in leadership and with the

acceptance of the basic philosophy governing human relationships within an army.⁷⁰

To Marshall, the moral incentives provide the energy that feeds the man's will. If a soldier possesses it, he will defeat his own personal fears. But if the soldier is lost in fear it is because all moral incentive is gone.⁷¹ However, Marshall also points out that morale in combat is not a steady force but a rapidly oscillating wave whose variations are both immeasurable and unpredictable.⁷²

The duality of morale, its decisiveness and wavering magnitude lead Marshall to focus on the maintenance of morale. Morale to Marshall was:

...the thinking of the Army. It is the whole complex body of an army's thought: The way it feels about the soil and about the people from which it springs. The way that it feels about their cause and their politics...the way that it feels about its friends and allies, as well as its enemies. About its commanders.... Life and death. God and the devil. Wherever the soldier may be and whatever he is doing, his morale is still the product of his whole thought.⁷³

In short, morale is a collective human emotion. In general concepts, Marshall suggests that cohesion, communication, and leadership are the keys to maintaining and preserving morale.

Cohesion emerged as a fundamental aspect of morale after Marshall witnessed the results of the Army's replacement policy implemented during World War II. Individual replacements were sent forward to the front to fill empty foxholes. The new soldier, though in the midst of fellow U.S. soldiers, still felt mentally alone. The impact of no mental bond with his fellow soldiers rendered the soldier combat ineffective.⁷⁴ Marshall states the fundamental truth about the moral support provided by fellow soldiers close by, "for it is that way with any fighting man. His fellows first sustain him primarily and by his weapons secondarily."⁷⁵ Ultimately, as Marshall found, the man in the middle of combat fights for his buddies on his left and right. "Buddies" imply cohesion. Without this bond, self-preservation was the only instinct governing the action of the mentally alone soldier. Mentally alone, fear overpowers the soldier. The induced fear invokes the natural instinct of self-preservation and the soldier suffers from mental paralysis or panic. Regardless of the effect, the soldier was rendered combat ineffective. Aside

from the presence of fellow soldiers, Marshall identified another way to overcome the mental solitude found on the battlefield.

Communication was one of the keys to overcoming the emptiness inherent on the battlefield. It is also an enabler for the cohesive element of morale. Specifically, Marshall noted the emptiness generated by initial contact with the enemy. Up to the point of contact, the soldier was still comforted by the visual presence of his fellow soldiers. However, once contact was made, everyone hit the ground, and the soldier found himself in mental isolation. The key to re-establishing the comfort given by visual presence of fellow soldiers was through communication. The first thing the leader should do after contact was to re-establish communication. Moreover, Marshall linked communication to thinking initiative. As Marshall suggests, if a soldier takes initiative, without communicating his intent, his action is of little value, and can in fact have dire psychological impacts on those who do not understand his actions. However, if the soldier communicates his intent before action, the unit can act in a concentric manner—this is thinking initiative, and is critical to the successful action of the unit.⁷⁶ Marshall succinctly summarizes the importance of communication, “it is by virtue of the spoken word rather than by sight of any other medium that men in combat gather courage from the knowledge that others are supporting them. Battle morale comes from unity more than from all else and it will rise or fall in the measure that unity is felt by the ranks.”⁷⁷

GENERAL GEORGE S. PATTON

General George S. Patton Jr. clearly understood the primacy of morale and its influence on the outcome of battle. In a letter to General McNair he wrote:

There is regrettable and widespread belief among civilians and in the Army that we will win this war through material. In my opinion we will only win this war through blood, sacrifice, and high courage. In order to get willing fighters we must develop the highest possible Esprit de Corps. Therefore, the removal of distinctive badges and insignia from the uniform is highly detrimental. To die willingly, as many of us must, we must have tremendous pride not only in our nation and in ourselves but in the unit in which we serve....It is of vital moment to our ultimate victory.⁷⁸

To the end of his life Patton argued against the stupidity of repressing the single most effective means of keeping morale high--distinctive badges--which induced esprit de corps.⁷⁹

To Patton the cornerstone of morale was founded in discipline and leadership. Discipline enabled a man to overcome his fears and leadership provided the direction for his action. Patton suggests that because a soldier is first a citizen, then a soldier, discipline is needed to replace the unknown inhibitions that have guided him throughout his civilian existence.⁸⁰ As Patton suggests, in order for a man to be a good soldier he must have discipline, self-respect, pride in his unit and his country, a high sense of duty and obligation to his comrades and to his superiors, and self-confidence born of demonstrated ability.⁸¹ In Patton's mind, Discipline fostered all the other characteristics that the soldier needed. Figure 2, depicts Patton's mental model of the primacy of discipline.

Discipline → produces **self-respect** → produces **Pride** → produces **sense of duty and obligation** to his comrades = The Sum total along with weapons training produces the greatest virtue, **self-confidence**.⁸²

Figure 2.

A comparison of the classical theorists and a military leader suggests two conclusions. The first conclusion is that the fundamental importance of morale as a precursor to battle was universally held.⁸³ The second conclusion is that morale, as an element of warfare from the nineteenth century was immutable. The remaining characteristic to be proven is that morale is a bedrock principle of U.S. Army doctrine.

FIELD MANUAL 3.0 OPERATIONS (DRAG) EDITION

*Achieving moral dominance over our enemy, that is the basis of our doctrine*⁸⁴
General Shinseki

FM 3.0 Operations is the Army's keystone doctrine for full spectrum operations.⁸⁵ As already defined the principles of war are the bedrock of U.S. Army doctrine. A review of *FM 3.0, Operations*, reveals the

very principles that underscore it. Put another way, by reverse engineering *FM 3.0, Operations*, it can be determined what principles of war influenced *FM 3.0, Operations*.

The review of *FM 3.0, Operations*, revealed that morale is a fundamental element of U.S. Army doctrine. Perhaps more importantly, the application of U.S. Army doctrine, as expressed in *FM 3.0, Operations*, requires combat units to already be in possession of a high state of morale and to maintain it. The chapters within *FM 3.0, Operations*, that best demonstrates morale as a fundamental principle are chapters one through four and seven. Three sections in chapter one articulate the primacy of morale, they are: the Operational Environment, Training for Full Spectrum Operations, and Soldiers and Leadership.

Of the six components within the operational environment, three directly link to morale. The three components are the land combat, technology, and information dimensions. "The land combat dimension involves destroying or defeating enemy forces...this reduces the enemy's effectiveness or will to fight."⁸⁶ It is not a far reach to suggest that a potential U.S. enemy will have the same objective. This implies that the preservation of will (measurement of morale, see chapter one) is inherent in land combat operations. Similarly, operations in the information dimension are conducted to affect an adversary's will to resist.⁸⁷ This identifies the inherent need for U.S. forces to maintain morale. The technology dimension highlights the primacy of man over material. "The skill of the soldiers coupled with leadership decides the outcome of battles..."⁸⁸ Since the soldier is the key linchpin to U.S. Army's success, then there is a fundamental need for high levels of morale.

In the section, Training for Full Spectrum Operations, the fundamental importance of possessing morale is expressed. "Every commander, soldier and unit must be trained and ready to deploy, fight and win."⁸⁹ A soldier that is ready implies a myriad of factors. Regardless of the complete list of factors, it goes without further proof that a ready soldier includes one who is motivated and committed to the mission for which he is about to undertake. This constitutes a soldier possessing high morale.

The third section on the Soldier and Leadership further establishes the primacy of the soldier. It establishes the characteristics and requirements of a U.S. Army soldier--all of which inherently require

high levels of morale. According to *FM 3.0, Operations*, the soldier is the most important to success in battle. *FM 3.0, Operations*, states, “ Success in battle depends on sound doctrine, competent leadership, effective weaponry, equipment and organizations; well-trained, quality soldiers and units. The most important is the soldier.”⁹⁰ Well-trained, quality soldiers further supports the prerequisite for highly motivated, committed soldiers--soldiers possessing high morale. The characteristic’s required of the soldier also support the notion of high morale. The characteristics of the soldier required by *FM 3.0, Operations* all relate directly to the possession of morale. Specifically, *FM 3.0 Operations*, states:

- The character and competence combined with warrior ethos comprise the foundation for a trained and ready Army.
- Soldiers must be able to conduct successfully tasks while operating alone or in small groups.
- Soldiers must possess will and determination which facilitates effective organizations.
- Motivation gives soldiers the will to accomplish the mission.⁹¹

The requirements and characteristics described in *FM 3.0, Operations*, clearly articulate the inherent requirements for a high state of morale.

Chapter two of *FM 3.0, Operations*, describes the soldiers operational environment. “Land combat is repetitive and continuous and characterized by high degrees of uncertainty.”⁹² High degrees of uncertainty produce the fog and friction that Clausewitz articulated in *On War*. As noted in chapter two of this monograph, the fundamental way to overcome the fear and danger associated with the fog and friction of war is with resolute leadership and soldiers possessing a superior level of morale.

Chapter three of *FM 3.0, Operations*, describes the attributes of strategic responsiveness. Of the seven attributes cited, four rely on the morale of the soldier. The four attributes are agility, versatility, lethality and sustainability. Agility requires “leaders and soldiers that are mentally and physically able to transition within or between types of operations without loss of momentum.”⁹³ The maintenance of momentum requires a soldier capable of continuously overcoming the resultant fatigue and inherent danger associated with battle. The attribute of versatility requires the tailoring of forces, and rapid re-organization of units to maximize combat power.⁹⁴ This rapid re-organization tears at the cohesive nature required of a unit in combat. One of the surest ways to offset this dynamic is through individual

soldiers steeped in high morale. The attribute of lethality requires the generation of maximum combat power and the attribute of sustainability requires the preservation of combat power.⁹⁵ The generation and sustainment of combat power includes the human dimension of which high morale is a prerequisite (see Chapter 4).

Chapter four of *FM 3.0, Operations*, articulates the foundations of full spectrum operations and provides the most convincing evidence that the possession and maintenance of morale is a fundamental principle. The evidence is best revealed within the elements of combat power and the tenets of Army operations.

Combat power is the ability to fight.⁹⁶ The elements comprising combat power are maneuver, firepower, leadership, protection, and information. Of these elements leadership is the most essential dynamic of combat power.⁹⁷ Leaders, not just officers, are chartered with the responsibility to provide purpose, direction and motivation in all operations. The ability to motivate and instill high morale is so profound that it often makes the difference between success and failure.⁹⁸ Moreover, one element of combat power--protection--closely resembles the concept of maintenance of morale. As *FM 3.0, Operations*, states, "Hostile environments can sap soldier strength and morale far more than enemy action."⁹⁹

The tenets of Army operations provide ample evidence that morale is a bedrock principle of U.S. Army doctrine. The tenets of Army operations are essential to victory. The tenets build on the principles of war, absence of their application courts defeat.¹⁰⁰ The tenets of Army operations are initiative, agility, synchronization, versatility, and depth. The characteristic of initiative requires a soldier to "be a self-starter, to act when there is no clear instructions or when the situation changes."¹⁰¹ Moreover, to retain the initiative, "leaders...push soldiers and systems to their limit."¹⁰² As S.L.A. Marshall articulated and discussed in chapter two of this monograph, a soldier must be a self-starter, operate decisively off of commander's intent alone, and possess a high level of morale.

The tenet of agility also necessitates a high state of morale. *FM 3.0, Operations*, states, “agility springs from trained and disciplined forces; it requires the subordinate to act to achieve the commander’s intent and fight through any obstacle to accomplish the mission.”¹⁰³

Synchronization indirectly suggests a prerequisite for high morale. On today’s battlefield synchronization occurs over extended space. Therefore, commanders are reliant on individual soldiers to act in accordance with commander’s guidance.¹⁰⁴ The need for independent action, as described above, places a heavy reliance on high morale within the individual soldier.

The final tenet versatility also establishes morale as a fundamental principle. Versatility depends on adaptive leaders, competent and dedicated soldiers...and detailed planning.”¹⁰⁵

Chapter seven of *FM 3.0, Operations*, is the primary focus of Army doctrine—offensive operations. *FM 3.0, Operations*, states, “offensive operations are the commanders ultimate way to impose his will on the enemy. It is the most decisive type of military action.”¹⁰⁶ The characteristic’s of offensive action, surprise, concentration, tempo and audacity, all rely on a force embodied with a high state of morale, Specifically *FM 3.0, Operations*, states:

- Surprise...boldness and force of the attack helps to achieve surprise.
- Concentration...massing forces rapidly along converging lines.
- Tempo...attackers execute violently the attacker shifts combat power rapidly
- Audacity... commanders achieve audacity through violent application of combat power.
- Audacity inspires soldiers to overcome adversity and danger.¹⁰⁷

The violent, bold and rapid action required to achieve the spirit of offensive action is clearly predicated on a force that is well-disciplined, highly trained, well led and above all in possession of a high state of morale.

The review of *FM 3.0, Operations*, clearly reveals that the possession and maintenance of morale is a bedrock principle of the U.S. Army doctrine. Most notably, the tenets of Army operations, elements of combat power, and the characteristics of offensive operations are all predicated on the existence and preservation of morale.

IV. ANALYSIS

1997-98 DRAFT OF FM 100-5, OPERATIONS

In 1996 the revision of *FM 100-5, Operations*, began. An analysis of this effort will review historical precedence established when morale was considered to be a principle of war during that effort. This brief analysis will answer the question are the reasons for the exclusion of morale as a principle of war in 1997 valid today?

In 1996 efforts began to update the current version of *FM 100-5, Operations* dated 1993. Subsequently in 1997, the first three draft versions of *FM 100-5, Operations*, dated January, March and April of 1997, contained an updated version of the current principles of war. Two changes were initially incorporated into the principles of war.

First, the principles of war were going to be referred to as principles of operations. Changing the name to principles of operations facilitated the union of the principles of war and the principles of peacekeeping contained in the 1993 version of *FM 100-5, Operations*. The name change was done to encompass the broader range of operations that the Army was becoming involved with, better known as military operations other than war (MOOTW).

Second, two new principles of war were considered for addition to the 1993 *FM 100-5, Operations* manual. Specifically, morale and exploitation were added to the current list of nine. However, by the fourth draft of *FM 100-5, Operations*, in the summer of 1997, morale and exploitation were dropped from the list and the original principles of war remained intact. The reasons for not including morale in the principles of war contained in the 1993 *FM 100-5, Operations*, are of great value to this study. Specifically, why was morale initially added to the current list of nine and then subsequently removed? Morale was initially added to the current list of principles because of the overwhelming historical evidence that supported morale's inclusion.

The January 1997 initial draft of *FM 100-5, Operations*, had this to say about the addition or morale as a principle of war:

The U.S. Army established its first set of fundamental principles in a 1921 training regulation. They remain valid today. Experience over the past 75 years has taught us that the list was not complete, and two principles, morale and exploitation, have been added....The principles of operations apply to the full range of actions, including those where commanders apply force selectively, and restraint and nonlethal aspects of power dominate.¹⁰⁸

Additionally, the draft had this to say about morale and its importance:

Warfare is ultimately a human endeavor that relies primarily on the fighting spirit...the morale of the soldiers and the units engaged. Leaders at every level must understand that a force's fighting spirit requires a constant attention. It must be deliberately built, actively, maintained, and constantly restored. Soldiers and units do not have an inexhaustible supply of morale. It is continually sapped by the dangers and hardships of campaigning. Fighting spirit is maintained by providing competent, confident disciplined leadership; proper tools to accomplish assigned missions; and adequate food and rest. It is restored by opportunities to recover from perilous, demanding missions. Leaders must take all necessary steps to appraise the fighting spirit of their units and take necessary steps to keep it at the highest possible level.¹⁰⁹

The introduction to the principles of war in the initial draft clearly indicates that the writing team identified the fundamental importance of morale for successful operations. In spite of the overwhelming historical evidence, which supported morale's inclusion in to the principles of war, it was ultimately dropped from the final draft.

An interview with one of the members from the writing team of the 1997-98 *FM 100-5, Operations*, rewrite efforts provided the following insights into why morale was considered and ultimately eliminated from the final draft crafted in the summer of 1998.¹¹⁰ General Hartzog, then the TRADOC commander, tasked the writing team to drop the term MOOTW from the next addition of *FM 100-5, Operations*. Since the 1993 version of *FM 100-5, Operations*, contained two sets of principles, one being the principles of war the other being principles for operations other than war, the writing team was in effect given a clean sheet to rethink the principles. The team's analysis of the principles led them to include morale as a principle of war. However, feedback from the field did not agree with the writing team's conclusions concerning morale.

The reasons given by the field for morale's exclusion were threefold.¹¹¹ First, the field stated that the principles cannot change--they are immutable. Second, the principles have served the U.S. Army well for

the last seventy-five years. Finally, the field in some instances felt that historical discussion of moral domain correlated to the present day definition of morals. An evaluation of each of the reasons cited for eliminating morale requires discussion.

The fact that the field suggested that the principles of war are immutable has already been discussed. The opinion of those who suggested this were merely wedded to the characteristics of the principles of war cited in previous versions of *FM 100-5, Operations*, their opinion was not wedded with historical evidence.

It is arguably correct that the principles of war have in fact served the U.S. Army well for the last seventy-five years. To suggest that they will continue to do so in the future is unjustifiable. As Leonard suggests, "...the profession of arms demands that the leaders do everything possible to avoid needless death. The urgency of these issues is upon us today, because the nature of warfare has changed once again. And this time, the mutation of war is far greater than anything yet witnessed by man."¹¹²

Finally, the suggestion that the historical reference to the moral domain, by classical theorists, is equal to the current concept of moral, contained in *FM 22-100, Leadership*, is simply misplaced. A cursory review of the moral domain that classical theorists often referred to suggests otherwise. As J.F.C. Fuller described, "To obey the will of a leader is a small act, but for a man to compel fear to obey his will is a great and wonderful act, and this compulsion is the magic of moral(e) [sic]."¹¹³ Clearly, the classical theorists envisioned what is presently referred to as morale.

In summary, the reasons against morale as a principle of war during the 1997-98 rewrite effort of *FM 100-5, Operations*, were not based on any sound footing, but merely opinion. In the end the writing team simply concluded that it was not worth the fight to get morale included into the principles of war. Unfortunately there is ever increasing indicators that suggest that there are factors that magnify the need to consider morale as a principle of war.

THE NEED TO INCLUDE MORALE AS A PRINCIPLE OF WAR

For centuries the primacy of morale as a fundamental precursor to successful combat operations was, unlike some of the current principles of war, immutable. Additionally morale is the only principle that a leader can safely say will be a fundamental truth in the future. Even though morale meets the evaluation criteria to be a principle of war, U.S. Army doctrine has relegated this critical principle to but a few pages in *Field Manual 22-100, Leadership*.¹¹⁴ The only logical conclusion to this paradox is that morale, within the U.S. Army, has always been considered to be something the U.S. Army had and its cultivation, maintenance, and presence is simply a given. However, there are indications that this is no longer a given condition within the U.S. Army.¹¹⁵

Given that morale meets the evaluation criteria to become a principle of war is perhaps not sufficient enough to make it so. It is certainly possible that there are other elements of war that also are eligible to become a principle of war based on the established criteria previously described. To allow the principles of war to grow into a larger set of principles could certainly void the practical usage of the principles of war--a guide to the successful completion of warfare. Therefore any addition to the current list must be of absolute criticality. So, what are the indications that the creation and maintenance of morale has reached the level of decline that it must be elevated doctrinally to be a principle of war?

There are four critical dynamics threatening the components of morale, they are: increasing lethality and isolation on the battlefield, force projection army, U.S Army's insatiable focus on the physical aspect of warfare, and the cultural change within the U.S. Army. The effects, which will be individually explored, of each of these dynamics are either directly impacting the state of morale or have the potential to on the battlefields of the future. Certainly it can safely be stated that if the components of morale are in decline or threatened, that the direct conclusion about the state of morale is equally appropriate.

LETHALITY AND ISOLATION ON THE BATTLEFIELD

*Be a man ever so accustomed to fire, experiencing it when he is alone and unobserved produces shock that is indescribable*¹¹⁶

S.L.A. Marshall

The tactical environment on the battlefield has changed significantly since the age of Napoleon. One of the most prevalent changes is the lethality of weapons systems. Not only are these systems more lethal, but they possess unprecedented ranges and accuracy. The rapid pace of technological advancements virtually guarantees that the weapons systems of tomorrow will only increase in their already devastating destructive capability, range and accuracy. This increase ensures that the battlefield of tomorrow will be a place of physical isolation, fluidity and instantaneous destruction inflicted at an unmatched pace.¹¹⁷ This lethality will place severe tension on two of morale's components--motivation and cohesion. Specifically, the motivation and cohesion of three major components of the force will be significantly affected--the combat soldiers, non-combat soldiers, and leadership.

The lethality of weapon systems has created the paradox of the empty battlefield. A dynamic created by the ever-increasing firepower of weapons and the need to survive their effects. The diminishing number of soldiers per mile of frontage over the last one hundred years is staggering. Major General Scales, one of the chief architects of the "Army After Next, and Commandant of the Army War College, confirms this new reality. "During the Civil War, there was 26,000 men per mile of front...by 1991 the Gulf War, there were 240...The new face of war, might be four or five soldiers per running mile of front or perhaps ten to fifteen soldier per square kilometer in a shifting combat zone with no fronts."¹¹⁸ This drastic reduction in soldiers per mile will have a demoralizing impact on the soldier.

First and foremost, the dispersion on the battlefield will negate the cohesive bond generated during peacetime within a platoon, company and battalion. If the future dispersion, that General Scales suggests occurs, not even platoon size elements will be able to operate cohesively, thus denying the moral support that a soldier needs to overcome his fears in the heat of battle. As previously stated, fear destroys will. The cohesion of a unit and the presence of comrades in arms counters fear. But if the cohesion and

presence of fellow soldiers is significantly reduced, the soldier must possess a high state of morale to overcome his fear and endure the horrors of war. As Ardant du Picq prophetically stated, “The size of the battlefield permits, less than ever, holding units together...many more chances are left to fate. Thus the greater necessity for the best troops who...are of the greatest fortitude.”¹¹⁹ There is yet another reason why soldiers must possess the greatest fortitude. The dispersion of soldiers also has the rather obvious impact of dispersing weapon systems: this dispersion places greater challenges on the ability to mass the effects of weapon systems.

The massing of effects requires synchronization on the battlefield. The ever increasingly dispersed weapon systems will logically increase the criticality and difficulty of synchronization. With four to five soldiers per mile of frontage, it is quite obvious that the requirement for junior soldiers and leaders to execute under their own initiative will increase exponentially. Future soldiers and junior leaders must be highly competent, well trained and possess a high state of morale. Another aspect of the increasing dispersion is the impact on leadership.

Many theorists have expressed the fundamental need for the commander to be able to instill his will upon his subordinates through his physical presence. Clausewitz so eloquently states:

As each man’s strength gives out, as it no longer responds to his will, the inertial of the whole gradually comes to rest on the commander’s will alone. The ardor of his spirit must rekindle the flame of purpose in all others; his inward fire must revive their hope. Only to the extent that he can do this will he retain his hold on his men and keep control. Once that hold is lost, when his own courage can no longer revive the courage of his men, the mass will drag him down to the brutish world where danger is shirked and shame is unknown.¹²⁰

Ardant du Picq also supports this notion, he states, “when the battle becomes hot, they (soldiers) must see their commander, know him to be near...His presence creates a belief that direction exists, that order exists.”¹²¹ Moreover, great leaders, such as General Patton, believed in the absolute necessity of the presence of the commander. He states, “commanders should routinely visit units’ two echelons below their command. The more senior the officer the greater value to the morale of the troops. If there is

danger eminent the greater the value of his visit.”¹²² However, the dynamics of the future battlefield will greatly impede the ability of the commander to instill his will on his subordinates.

Currently battalion and brigade commanders still have direct access to those they command. But as General Scales suggests, “the ability of battalion and brigade commanders to access their troops will disappear at the company and platoon level.”¹²³ This dynamic creates a true paradox for the commanders of the future. So how can the Army overcome this dilemma? Using the model presented in chapter three, figure 1, by J.F.C Fuller, the answer is clear. It is a combination of the commander’s will and the soldier’s morale that overcomes fear and generates action. If the commander’s ability to will the movement he desires is decreased, the morale of the soldier must be increased, thus generating sufficient motivation to invoke action. Leadership and combat soldiers are not the only element strained by the increased dispersion and lethality of the battlefield. The support or non-combat soldiers, normally associated with the “rear” of the linear battlefield will also feel the impacts of the ever-increasing lethality of the battlefield. So much so that it may represent an Achilles heel (critical vulnerability) to the U.S. Army, if not properly addressed.

The linear battlefield of yesteryear no longer exists. The new operational environment is now non-contiguous. This coupled with the ever-increasing range and lethality of weapons systems and the enormous array of sensors that can detect vehicle movement or heat signatures, makes the notion of the “rear area or combat free zone” invalid. Therefore soldiers, who in past conflicts, who rarely had to deal with the danger, associated with the forward edge of the battlefield, are no longer safe. The effect of long-range weapon systems quite possibly will have a greater psychological impact on support soldiers than direct contact with enemy soldiers. Perhaps the best historical reference to the effects of this psychological impact can be found in WWI. In 1915 the German Army began a campaign to bomb London. The effects on the mentally unprepared were paralyzing. “There was instances of panic in London, and widespread absenteeism in the munitions plants for a time.”¹²⁴ The cause of this psychological stress is founded in the mere fact that the impending danger will be unknown. Death and

destruction will simply just occur with no warning. As du Picq succinctly stated, "There is more need than ever today for protecting the supporting forces."¹²⁵ The impact on the motivation of a combat service support (CSS) soldier could create complete disintegration within the effected service support arena--hence a potential critical vulnerability of the U.S. Army. So how can the Army protect this potentially critical vulnerability?

The cavalier answer to the problem is through proper leadership and training. However, the systemic responsibilities of a CSS soldier during peacetime are vast. The CSS soldier routinely spends most of his time performing his administrative duties. If he is lucky, he fires his individual weapon twice a year, engages in field exercises maybe one or twice a year, in short he is not being mentally prepared for the rigors and horror of combat. Because of the non-contiguous battlefield, the CSS soldier needs the same mental preparation as a combat soldier, perhaps even more. To do otherwise, as S.L.A. Marshall suggests, and the CSS soldier enters the testing experience of his lifetime almost as a total stranger.¹²⁶ Moreover, the CSS soldiers must possess the same rigor within the moral dimension as the combat soldier. Therefore there is a critical shortfall in the morale of our combat service support soldier.

FORCE PROJECTION ARMY

With the fall of the Berlin Wall, the locations of U.S. forces have changed considerably. No longer are substantial numbers of U.S. forces stationed outside of the continental United States. The U.S Army has become, in fact, a power projection force.¹²⁷ The loss of the bipolar geopolitical environment coupled with diminishing resources with which to train and maintain a standing army has created a dynamic that threatens the morale of units. First, the loss of a clearly definable threat, e.g., the Soviet Union, has taken away the perceived mission for conventional forces. Second, the reduction in resources to maintain a standing army has placed greater reliance on reserve component forces. Moreover, active component soldiers are spending more time doing other things outside of the training environment. These factors are having an adverse impact on the morale of the force both directly and indirectly.

The loss of a tangible threat detracts from the ability of the conventional force to focus its training efforts. The current debate on how units should train to meet the potentials of full-spectrum operations exemplifies the loss of a known threat. This loss of mission focus can be detrimental to the morale of the unit. A study conducted in the 1980s by the Walter Reed Army Institute of Research, suggests this is potentially correct.

The study utilized the Combat Readiness Morale Questionnaire (CRMQ), which is frequently utilized by Israeli Defense Forces (IDF). The method used during this study was to administer the CRMQ to two U.S. armored cavalry units with similar composition and one IDF unit. Additionally, one of the U.S. units was CONUS based while the other was stationed along the eastern West German border, with a hostile environment at their front door. In other words the German based ACR had a clear mission and emphasis on realistic training was high. The selected Israeli unit was stationed in the Golan Heights with a similar potential for hostilities as the Europe based ACR unit.¹²⁸ Though it is not within the scope of this paper to describe in detail the results of the test, the conclusions drawn from the research have bearing on a force projection army that has no clear enemy and training is less than optimal.

The most significant finding from the CMRQ was that the West Germany stationed ACR and the IDF unit had very similar indicators with regard to morale. Moreover the ratings were relatively high. Conversely the ACR unit stationed in CONUS scored lower.¹²⁹ Also two conclusions, relevant to this paper, emerged from this study. First, both American samples found strong linkage between their personal morale and their sense of contribution to their nation's security. Second, the exact location of a unit, proximity to enemy positions, level of unit readiness can have a strong impact on a unit's level of morale than structural or even national characteristics.¹³⁰ These two conclusions provide ample evidence to the increasing need to elevate the importance of morale. Soldiers that spend every increasing amounts of time performing tasks not associated with war time missions, coupled with a lack of a clear enemy diminish the attribute that is so fundamental to decisive operations--morale. Moreover the drawdown of the U.S. Army in the last decade has increased the reliance on reserve component (RC) soldiers to meet

the needs of the operational environment the U.S. Army finds itself in. This reliance strikes at one of morale's components--cohesion. The increased reliance on RC soldiers means that the Army must rely on task forces that have not had the luxury of developing the cohesion generated by units that have trained together over an extended period of time.

The nature of operations over the last decade has found the U.S. Army establishing a multitude of joint task forces. Task forces, by their nature, attempt to combine needed materialistic qualities of various units, so that the combined effects of these qualities are decisive, whether it be peacekeeping or full scale war. This myopic focus on materialistic capabilities for task force development is disregarding the human dimension. As an article in Military Psychology suggests, "Because of the shift in the types of missions U.S. forces are being asked to conduct, i.e. Warfare to peacekeeping operations, task forces are being formed consisting a blend of active and reserve component personnel. Integration of these forces threatens the needed cohesion."¹³¹

The fact that task forces of the future will continue to be an integration of active and reserve component is undeniable. The Army's force structure simply demands this to be so. However, the implications on the loss of cohesion generated by this reliance cannot be forgotten nor discounted. Due to the probable loss of cohesion, the need for the maintenance of morale must be incorporated within our forces.

CULTURAL SHIFT

There are indicators within the U.S. Army that soldiers see their profession in a starkly different context than they did in years past. The reasons for this shift are certainly a combination of many factors. However, identifying the reasons has value only if the intent is to fix the problem. The real value, at this juncture, is to identify the indicators at hand and realize that they are an indication of the loss of morale within the Army. The indicators of this loss of morale are best exemplified by the trends associated within the officer corps. The specific trends are the number of command declinations at the

battalion and brigade level, officer company grade attrition, and the decrease in length of service for field grade officers, all of which exemplify a cultural shift which can be directly associated with loss in job satisfaction--a component of morale.

Perhaps the number of command declinations in the last several years represents the greatest indicator of the cultural shift within the officer ranks. Commanding for the vast majority of the officer corps at company, battalion or brigade level has always been viewed as the pinnacle assignment for an officer.¹³² There simply was no better job to have than command. However, since fiscal year (FY) 97 there has been a drastic increase in the number of command declinations, from FY 92 to FY 95 a total of six officers declined battalion or brigade command, an average of 1.5 per year. From FY 96 to FY01 a total of 203 officers declined battalion or brigade, an average of thirty-four per year.¹³³ This increase represents over a 3000% increase in the number of command declinations within the period of five years. By any statistical measurement an increase of 3000% change over five years is undeniably significant. The fact that the once esteemed job of command is now beginning to fall from favor, clearly suggests that a significant number of officers are simply not satisfied with the Army and what it has to offer.

Officer attrition associated with captains has also been on the increase since 1996. Officer attrition represents the percentage of the officer corps within a given grade, that after completion of their respective service obligation, they choose to resign their commission instead of pursuing a career in the Army. Interestingly enough, this upward trend began shortly after the completion of the drawdown. The drawdown left many units under strength. This coupled with the unforeseen increased operational tempo has had a negative impact on the force. Captain's attrition has gone from 7.2% in Fiscal Year (FY) 96, to a forecasted 13% in FY 00.¹³⁴ The increase in attrition is at levels not seen in decades and if not reversed will prevent the full manning of the force structure in FY 01.¹³⁵ The fact that the force will experience a shortfall in company grade officers highlights two concerns with regard to morale. First, it further highlights the increasing dissatisfaction company grade officers have with their professional. Second, the officer shortfall will have a second order affect on those who chose to stay in the Army. Specifically,

those officers who chose to stay within the Army will ultimately have to deal with the burden of the officer shortfall. This shortfall can only increase the job dissatisfaction of those who stay by the simple virtue of the increased workload.

The final trend, which highlights the increasing dissatisfaction of the officer corps within the U.S. Army, is the downward trend in the number of years that senior grade officers stay until retirement. Lieutenant Colonels are now retiring on the average at twenty-one years of service vice twenty-two years of service in 1998. Lieutenant Colonels are not alone in this downward trend. Colonels are also getting out faster. The average Colonel is retiring at twenty-six years of service vice twenty-eight years of service in 1998.¹³⁶ Though the decline in the number of years of service of field grade officers seems relatively insignificant, it does highlight the increasing number of officers finding dissatisfaction with their role in the Army.¹³⁷ Vastly increasing job dissatisfaction within the Army is but one of the reason why morale should be included in the principles of war. As General Shinseki has stated: “the Army is first and foremost its people.”¹³⁸ In spite of this, the Army has for the last fifty years focused solely on technical (physical) solutions to the ever-increasing complexity of the battlefield.

PHYSICAL VERSUS THE HUMAN DIMENSION

General Shinseki in his *Posture Statement for the U.S. Army FY01* clearly articulates that the “individual soldier is first and foremost the cornerstone of the Army...not machines, not technological gadgetry (emphasis added)”¹³⁹ In spite of the fundamental primacy espoused by General Shinseki, the Army has sought technological solutions for the military problems at hand.

John Kellet, in *Combat Motivation*, suggests that the reversal of the number of personnel with combat related tasks is the cause. He offers that in the Civil War 93% of the personnel had combat-related tasks, where as in the modern Army only 30% of the personnel have a combat-related task. The impact of this reversal has replaced the armed man with the manned weapon.¹⁴⁰ Nonetheless the U.S. Army has sought technological (physical) solutions and has placed little value on the human dimension.

John English, in *On Infantry*, establishes the Army's dependence on technological solutions. He states, "Incorporating the democratic model of the citizen-soldier, the Anglo-Americans further inclined toward the idea that technological solutions could be found to most military problems."¹⁴¹ At a cursory glance the unilateral focus on technological solutions may not appear misplaced. However, there is an inherent danger in this one-dimensional approach.

Focusing solely on technological applications to solve the problems associated with the increasing complexity of the battlefield ultimately ignores the primacy of the human dimension. A.J. Bacevich suggests, in *Pentomic Era*, that the leadership of the Army must realize that a unilateral technological application to military problems disrupts the sensitive balance of human factors that ultimately provides the force with the qualitative edge it needs in combat.¹⁴² Bacevich further supports this notion by stating, "Yet a review of warfare since World War II shows few instances in which technological advantages have proven decisive. Instead the record provides examples of superior technology powerless to avert defeat...By instituting reforms that denied the primacy of the individual fighting man, the Army ignored the lessons of history and courted disaster."¹⁴³ Anthony Kellet, in *Combat Motivation*,¹⁴⁴ substantiates the impending disaster that ensues when the human dimension is ignored. His gripping account of Merrill's Marauders in Burma 1944, clearly demonstrate how a superbly trained effective fighting force can virtually disintegrate when the human factors are left to fend for themselves. There is yet further doctrinal evidence of the Army's reluctance to acknowledge the fundamental importance of the human dimension.

The 1993 version of *FM 100-5, Operations*, identifies two dimensions of the combat environment--the physical and the human.¹⁴⁵ The 1997 *FM 100-5, Operations (Final Draft)*, identifies three domains of conflict--the physical, informational and moral.¹⁴⁶ The 1997 version had this to say about the moral domain:

Performance may be enhanced or degraded by conditions in the physical and informational domains but the moral domain is preeminent. The moral domain embodies the true spiritual aspect of war and the human element of battle...Moral force, combined with unit and soldier capabilities provides the strongest form of war...Though technology, doctrine, and experience improve the Army's capabilities, quality soldiers are the remaining constant that always provides the margin of victory. Therefore commanders must carefully develop and maintain morale, which must always be the forefront of their actions.¹⁴⁷

However, the 2000 *FM 3.0, Operations, (DRAG Edition)*, lists six dimensions within the operational environment--the threat, political, unified action, land combat operations, information and technology.¹⁴⁸ Of importance is the fact that the moral dimension is not included in this list. The exclusion of the moral dimension further suggests the Army's reluctance to embrace the moral dimension, and rely on the physical dimension. The importance of physical dimension cannot be refuted, for it does provide a qualitative edge to the force, however over reliance or unilateral focus on it can prove disastrous.

Military technological application, in and of itself, clearly provides the fighting force with a qualitative edge over its potential adversaries. However it cannot provide the entire qualitative edge that the force needs to be decisive. *FM 100-5, Operations*, identifies the elements of combat power: maneuver, firepower, protection and leadership. Leadership, according to *FM 100-5, Operations*, is charged with "inspiring soldiers with the will to win...provide purpose, direction, and motivation in combat."¹⁴⁹ From this stated requirement of leadership, it is clear that morale of the soldier is a critical component. Of these four elements, *FM 100-5, Operations*, states that leadership is the most essential dynamic of combat power.¹⁵⁰ Brigadier General Huba Wass de Czege, in his paper, *Understanding and Developing Combat Power*, takes the importance of leadership on combat power to the next higher level.

General Wass de Czege suggests that it is the competent leader who applies the remaining elements of combat power, maneuver, protection and firepower, and converts their sum combat potential into combat power.¹⁵¹ Succinctly, he concludes, that leadership is the component upon which all other elements depend.¹⁵² More importantly, he offers a mathematical model, which highlights the relative importance of leadership. His formula, in simplistic terms, for combat power is:

$$L(F + M + P - D)$$

L = leadership effect, F = firepower effect, M = maneuver effect, P = protection effect,
D = enemy degrading of friendly firepower, maneuver and protection effects

General Wass de Czege¹⁵³ goes on to explain that each element of combat power has a variety of variables that influence the overall quantitative sum total of each component. With regards to leadership he cites six variables, one of which, and the key to the development of combat power is: dedication, commitment and moral force.¹⁵⁴ The power of General Wass de Czege's combat power model is that it articulates the magnitude of the influence leadership has on overall combat power. Using mathematical terms, leadership is a coefficient to the overall equation. Which in simple terms means that leadership can have the ability to double, triple, quadruple, etc. a units overall combat power. General Wass de Czege accurately cites the 1982 version of *FM 100-5, Operations*, to capture the importance of leadership, "the primary function of leadership is to inspire and motivate soldiers to do difficult things in trying circumstances."¹⁵⁵ Since commitment, dedication and moral forces are the key to combat power development, it is clear that the maintenance and preservation of morale is paramount to combat power generation and is more important than the material factors of warfare.

V. CONCLUSIONS

The purpose of this monograph was to show that morale meets the criteria to be a U.S. Army principle of war. A secondary purpose was to describe other considerations that support morale as a principle of war. Morale has met and exceeded the evaluation criteria to be a principle of war. Morale is fundamental to the successful completion of warfare and it is the bedrock of U.S. Army doctrine. Additionally, morale unlike most of the other principles of war has been immutable for the last two hundred years and is likely to be so in the foreseeable future. Moreover, there are indicators, which suggest that the belief that morale is simply something U.S. forces have always had is no longer valid.

The research for this monograph suggests several applications which maybe worthy of consideration with regards to the immutable nature of morale. The recommendations for the application of morale as a

principle of war follow TRADOC's conceptual framework (doctrine, training, leadership, organizational, material, soldiers) for implementing institutional changes across the Army. Specifically, areas of consideration involve doctrine, training and leadership, and soldiers.

Doctrinally, morale needs to be included in the principles of war. The U.S. Army's fixation on the material factors of war and its apparent blind-eye to the human dimension, as exemplified by the deletion of the moral dimension in *FM 3.0 Operations*, highlights the criticality of elevating the importance of morale in U.S. doctrine. By including morale into the principles of war, the Army will formally establish the interdependence of the physical dimension with the human dimension. Furthermore, by including morale in the principles of war, the Army will establish the formal link between the doctrinal operations manual with the doctrinal leadership manual. Moreover, the research has indicated that the principles of war should not be considered as a random list, which is applied according to each individual situation.

As the British doctrinal definition of the principles of war suggests, the principles are to be considered in a particular order. Specifically, and within the context of this monograph, morale is a precursor consideration to all other principles. The historical research supports this concept. The creation and maintenance of morale has always been the "entry argument" before the successful application of the other principles of war.

Training and Leadership recommendations are interrelated. The research has shown that there is a direct correlation between high morale and a well-led force. Developing a competent officer corps both technically and tactically is critical to the creation and maintenance of morale. Technical and tactical competence in the officer corps is largely developed during an officers company grade years. Simply put, Lieutenants need to spend their three years doing Platoon Leader type jobs. Captains need to spend two years or more commanding and the majority of the remaining years on battalion/brigade staffs. To rapidly move Lieutenants from Platoon Leader jobs to fill critical shortages in battalion staffs and shuffling branch qualified captains off to fill other critical shortages is simply mortgaging our future. It is quite possible that the Army is "developing" a future officer corps that is incapable of properly leading

the force because they are technically and tactically deficient due to their lack of experience. Moreover, how the Army views company level commands needs to be reconsidered.

Because of the exponentially increasing responsibility of the company level commander, he must be more capable than ever to lead his soldiers across the dispersed battlefield. As discussed in chapter four, the ability of the battalion and brigade commanders to conduct face to face coordination with subordinates will all but disappear on the battlefield of the future; with the disappearance of this relationship so goes his ability to motivate and provide direction to his subordinates in the darkest hours of battle. The logical conclusion is that this responsibility will ultimately fall to company level commanders. That being said, the Army must cast a critical eye on the current policy that all captains will command at the company level. The force simply cannot afford commanders who do not have what it takes to command in the complex environment of the future battlefield. Moreover the realistic and focused training of the force needs to take a high precedence.

Though this recommendation for the increased importance and focus on training seems like an obvious statement of fact, it is critical to the well being of morale. This simple statement of fact speaks directly to unit cohesion, technical and tactical proficiency at the leader level and soldier confidence in himself, his unit and his leaders. No longer can the Army afford to have soldiers spending undue amounts of time doing everything but training. Virtually every major war is replete with instances where soldiers walked ten to twenty miles a day for days on end. The soldiers of yesteryear succeeded because they were trained in field craft and had endured privation. It is offered as food for thought that few soldiers today could endure these hardships. If the Army is truly committed to be "persuasive in peace and invincible in war," then realistic focused training must be the priority--not something done after the post grass is cut.

Manning the force has been an issue for several years running. Implementing the changes suggested above would certainly only exacerbate that problem. But if the U.S. Army is truly committed to our relevance and excellence in the future then the Army leadership has two options. Reduce the force structure so that critical shortages no longer exist, thus allowing company level officers to learn their

trade or increasing manning to achieve the same objective—elimination of critical shortages within the force structure.

The complex security environment, multi-polar geopolitical dynamics and the dispersion and lethality of the battlefield has precipitated a requirement to update our doctrine and our force structure. General Shinseki is tackling this problem set by transforming the Army into the Objective Force. These factors have once again placed an increased emphasis on the American soldier. He must be able to conduct disaster relief on day one, small-scale contingency operations on day two and transition to major theater of war the next, without pause. Due to these requirements the human dimension of warfare is even more critical to the successful outcome of the future battlefield. This magnified importance makes the creation and preservation of morale fundamental to the Army's success. Simply stated, the conditions and requirements of the future simply dictate that morale be an U.S. Army principle of war.

ENDNOTES

- ¹ Personal observation which is most recently exemplified by the reluctance of the NCA to commit ground forces in Kosovo
- ² Department of Defense (UK), *British Defense Doctrine*, (London, England, 1998), A-3.
- ³ Transforming the Army encompasses the efforts currently underway by General Shinseki. In his attempt to maintain relevance of the Army into the twenty-first century, General Shinseki is modifying the physical make up of the Army. Specifically, he is attempting to introduce a medium weight force that provides more protection for forces that arrive first in a hostile environment, while simultaneously reducing the weight of the heavy forces to enable rapid force projection. Once this transformation from our current legacy forces (forces designed for the cold war era) is complete, the new force will be the endstate of the transformation, referred to as the Objective force.
- ⁴ Headquarters, Department of the Army, *Army Posture Statement for FY01*, (Headquarters, Department of the Army:U.S. Government Printing Plant, Feb 99), xiii
- ⁵ *Ibid.*, 13.
- ⁶ *Ibid.* 34.
- ⁷ *Ibid.* 17.
- ⁸ Headquarters, Department of the Army, *Field Manual 3.0, Operations (DRAG)*, (Fort Leavenworth, KS, 15 June 2000), 4-11.
- ⁹ *Webster's Ninth New Collegiate Dictionary*, (Springfield, Massachusetts: Merriam-Webster Inc., 1987) 771.
- ¹⁰ John Baynes, *Morale: A Study of Men and Courage*, (Garden City Park, NY: Avery Publishing Group, 1988), 108.
- ¹¹ James Schneider, *The Theory of Operational Art, Theoretical Paper No. 3*, (Comprehensive Exam Special, Ft. Leavenworth, KS: U.S. Army Command & General Staff College), 7.
- ¹² Headquarters, Department of the Army, *FM 22-100 Leadership*, Aug 1999, 3-3.
- ¹³ Baynes, 96.
- ¹⁴ William A. Knowlton Jr., "Morale, Crucial, but What is It?", *Army*, June 1983, 35.
- ¹⁵ The Army Research Institute study on morale as sited in William Knowlton's article "*Morale, Crucial, but what is it?*", *Army*, June 83, suggests a rather detailed methodology for affecting morale.
- ¹⁶ Knowlton Jr., 35.
- ¹⁷ Headquarters, Department of Defense, *Joint Publication JP0-1*, (Washington, D.C.:U.S. Government Printing office, 1995), III-1.
- ¹⁸ *Field Manual 3.0 (DRAG Edition)*, 4-11.
- ¹⁹ Department of Defense, *British Defense Doctrine JWP0-01*, (London, England, 1998), A-1.
- ²⁰ J.F.C Fuller, *The Conduct of War 1789-1961*, (New York, NY: Da Capo Press 1992), 48.
- ²¹ *Ibid.*, 49.
- ²² Carl Von Clausewitz, *Principles of War*, (Harrisburg, PA: Stackpole Books, 1987) 365.
- ²³ Carl Von Clausewitz, *On War*, 617.
- ²⁴ J.F.C. Fuller, *The Conduct of War 1789-1961*, 70.
- ²⁵ Antoine Jomini, *The Art of War*, Contained in *Roots of Strategy Book2*, (Harrisburg, PA: Stackpole Books 1987), 436-438.
- ²⁶ *Ibid.*, 437.
- ²⁷ *Ibid.*, 461.
- ²⁸ John I. Alger, *The Quest for Victory*, (Westport, CT: Greenwood Press 1982), 106.
- ²⁹ *Ibid.*, 116.
- ³⁰ *Ibid.*, 115.
- ³¹ Maurice Frederick, *British Strategy: A Study of the Application of the Principles of War*, 47, quoted in John I. Alger, *The Quest for Victory*, (Westport, CT: Greenwood Press 1982), 125.
- ³² U.S. Army, *Training Regulation 10-5, Doctrine, Principles and Methods*, (Washington, D.C., Dec. 1921), 2.
- ³³ Alger, 140.

-
- ³⁴ U.S. Army, *Training Regulation No. 10-5, Doctrine, Principles and Methods*, 2.
- ³⁵ For a definitive explanation of the evolution of the principles of war from Napoleon to present refer to *Quest for Victory*, John I. Alger. Alger dispels the belief that the principles are immutable. Moreover they are simply a list of characteristics from which to start an analysis of a battle or to analyze a potential course of action.
- ³⁶ Mark R. Forman, "The Principles of...? Assessment of FM 100-5's principles of operations" (Monograph, School of Advance Military Studies, Fort Leavenworth, KS 1997). Forman describes the change in definition of the principles as they occurred from 1993 to 1998.
- ³⁷ Robert R. Leonard, *The Principles of War for the Information Age*, (Novato, CA: Presidio Press, 1998), 7-8.
- ³⁸ George S. Patton Jr., *War as I Knew it*, (Boston, Massachusetts: Houghton Mifflin Co, 1947)
- ³⁹ Martin Van Crevald, , *Command in War* , (Cambridge, Massachusetts: Harvard University Press, 1985), 15.
- ⁴⁰ Within the scope of this monograph I was unable to find any battle that cited such a reference. Moreover, no classical theorist or general voiced such a notion. In fact, the exact opposite is true.
- ⁴¹ Carl Von Clausewitz, *On War*, translated by Michael Howard and Peter Paret, (Princeton, NJ: Princeton University Press: 1989), 89.
- ⁴² Ibid., 89.
- ⁴³ Ibid., 104.
- ⁴⁴ Ibid., 113.
- ⁴⁵ Ibid., 119.
- ⁴⁶ Ibid., 119.
- ⁴⁷ Ibid., 184.
- ⁴⁸ Ibid., 184.
- ⁴⁹ Ibid., 231.
- ⁵⁰ Ibid., 232.
- ⁵¹ Ibid., 234.
- ⁵² Ibid., 185.
- ⁵³ J.F.C. Fuller, *The Foundations of the Science of War*, reprint, (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 1993), 143.
- ⁵⁴ Ibid., 57-58.
- ⁵⁵ Ibid., 116. Throughout his writing Fuller uses the word moral, which is not to be confused with our present day meaning of the word. Fuller states the domain of the moral sphere is the soul, ego, or heart. There is no just name for this element which shows how complex it is.
- ⁵⁶ Ibid., 115.
- ⁵⁷ Ibid., 115.
- ⁵⁸ Ibid., 121.
- ⁵⁹ Ibid., 122.
- ⁶⁰ Ibid., 121.
- ⁶¹ Ibid., 217
- ⁶² Ibid.,
- ⁶³ This is in reference to *FM 22-100, vice FM 3.0 Operations (DRAG Edition)*
- ⁶⁴ Fuller, 134.
- ⁶⁵ Ibid., 142.
- ⁶⁶ Marshall, S.L.A., *Men Against Fire*,(Gloucester, Massachusetts: Peter Smith, 1978), 15.
- ⁶⁷ Ibid., 19-20.
- ⁶⁸ Ibid., 23.
- ⁶⁹ An excellent accounting of the Korean War and the importance of morale is contained in *The Korean War*, by General Matthew Ridgway. Ridgway took control of the demoralized U.S. Forces during the Korean War. For Purposes of this paper it is interesting to note that Ridgway articulates his first and foremost priority, the reestablishment of morale and the fighting spirit in the U.S. Army, 97.
- ⁷⁰ Marshall, 165.
- ⁷¹ Ibid., 170.
- ⁷² Ibid., 179.
- ⁷³ Ibid., 158.
- ⁷⁴ Ibid., 42.

-
- ⁷⁵ Ibid., 43.
- ⁷⁶ Ibid., 122, 135.
- ⁷⁷ Ibid., 138.
- ⁷⁸ Carlo D'Este, *Patton, A Genius for War*, (New York, NY: Harper Collins Pub, 1995), 414.
- ⁷⁹ Ibid., 414.
- ⁸⁰ Patton, George S., *War as I knew it*, (Boston, Massachusetts: Houghton Mifflin Co., 1995), 336.
- ⁸¹ Ibid., 335.
- ⁸² Ibid., 336.
- ⁸³ To gain a full appreciation for the universal application of morale the reader should also read *The Art of War* by Jomini, *Battle Studies* by Ardant du Piqu, *Defeat Into Victory* by General Slim, *The Korean War* by General Ridgway.
- ⁸⁴ Shinseki, General, Chief of Staff U.S. Army, lecture given at Ft Leavenworth KS, Marshal auditorium, 1 November 2000.
- ⁸⁵ U.S. Army, *Field Manual 3.0 (DRAG Edition)*, v.
- ⁸⁶ Ibid., 1-10.
- ⁸⁷ Ibid., 1-11.
- ⁸⁸ Ibid., 1-12.
- ⁸⁹ Ibid., 1-16.
- ⁹⁰ Ibid., 1-17.
- ⁹¹ Ibid., 1-17 to 1-18.
- ⁹² Ibid., 2-5.
- ⁹³ Ibid., 3-5.
- ⁹⁴ Ibid., 3-5.
- ⁹⁵ Ibid., 3-5.
- ⁹⁶ Ibid., 4-2.
- ⁹⁷ Ibid., 4-6.
- ⁹⁸ Ibid., 4-7.
- ⁹⁹ Ibid., 4-9.
- ¹⁰⁰ Ibid., 4-14.
- ¹⁰¹ Ibid., 4-14.
- ¹⁰² Ibid., 4-14.
- ¹⁰³ Ibid., 4-15.
- ¹⁰⁴ Ibid., 4-15.
- ¹⁰⁵ Ibid., 4-16.
- ¹⁰⁶ Ibid., 7-1.
- ¹⁰⁷ Ibid., 7-3 to 7-6.
- ¹⁰⁸ Headquarters, Department of the Army, *Field Manual 100-5, Operations – Coordinating Draft*, (Fort Leavenworth, KS, 14 January 1997), II-2-1.
- ¹⁰⁹ Ibid., II-2-6.
- ¹¹⁰ Interview conducted with Lieutenant Colonel (LTC) Michael Burke on 10 October 2000. LTC Burke was a member of the SAMS faculty at Fort Leavenworth, KS, detailed to rewrite the 1993 version of FM 100-5. LTC Burke is currently still serving with the SAMS faculty and is involved in the FM 3.0 Operations writing effort.
- ¹¹¹ The field refers to the operational commanders and General Officers who are asked to comment on a draft version of a doctrinal manual currently under revision.
- ¹¹² Leonard, *The Principles of War for the Information Age*, 4.
- ¹¹³ Fuller, *The Foundations of the Science of War*, 124.
- ¹¹⁴ Headquarters, Department of the Army, *Field Manual 22-100, Leadership*, (Washington D.C., 1999), 3-14.
- ¹¹⁵ Personal observation based on the bulk of news articles and congressional testimonies about the diminishing morale within the Army, all of which have been wildly publicized.
- ¹¹⁶ Marshall, 272.
- ¹¹⁷ Steven J. Eden, "Leadership on Future Fields: Remembering the Human Factor in War", *Military Review*, May/June 99, Vol 79, Issue 3, 35.
- ¹¹⁸ Robert Scales, MG, found at Internet cite, www.defenselink.mil/news/#news_articles, accessed 3 November 2000.

-
- ¹¹⁹ Ardant du Picq, *Battle Studies*, Contained in *Roots of Strategy Book 2*, (Harrisburg, PA: Stackpole Books 1987), 143.
- ¹²⁰ Clausewitz, *On War*, 104-105.
- ¹²¹ du Picq, 167.
- ¹²² Patton, George S., *War as I Knew it*, 354-355.
- ¹²³ Scales, 2.
- ¹²⁴ James S. Corum, *The Luftwaffe*, (Lawrence, KS: University Press of Kansas, 1997), 24.
- ¹²⁵ du Picq, 194.
- ¹²⁶ Marshall, 37.
- ¹²⁷ *FM 3.0 Operations Drag Edition 15 Jun 2000*, 4-21.
- ¹²⁸ Reuven Gal and Frederick Manning, *Morale and its Components: A Cross-National Comparison*, *Journal of Applied Social Psychology*, 17 April 87, 369.
- ¹²⁹ *Ibid.*, 377-388.
- ¹³⁰ *Ibid.*, 389-390.
- ¹³¹ David A. Mangelsdorff, *Military Psychology*, preface, Vol II, Number 1 (Mahwah, New Jersey: Lawrence Erlbaum Assoc, Publishers, 1999), 1.
- ¹³² Personal observation. This opinion is presented as a fact that few officers contest. Through out the last eighteen years I listened to countless senior officers express the opinion that command is the ultimate position for an officer. Moreover, until recently virtually every peer officer has expressed a similiar opinion.
- ¹³³ Timothy J. Maude, LTG, DSCPER, Powerpoint presentation given at AUSA conference, Washington D.C., 19 October 2000, 25.
- ¹³⁴ *Ibid.*, 4.
- ¹³⁵ *Ibid.*, 3.
- ¹³⁶ *Ibid.*, 2.
- ¹³⁷ In the article, *Army Officers Say They're Not Having Fun Anymore*, Washington Post, September 25, 2000 p 1, the author, Rowan Scarborough, quotes several studies conducted by the Army Staff and the Army Research Institute. In his article he gives rather stark statistics which highlight a variety of reasons why Army officers are dissatisfied with the job in the Army. He additionally cites a survey documenting low officer morale.
- ¹³⁸ *Army Posture Statement for FY01*, 10.
- ¹³⁹ *Ibid.*, 10.
- ¹⁴⁰ Anthony Kellett, *Combat Motivation*, (Canadian Department of Defence: Crown Printing 1982), preface viii.
- ¹⁴¹ John A. English, *On Infantry*, (Westport, CT: Praeger, 1994), 121.
- ¹⁴² A.J. Bacevich, *Pentomic Era: The U.S. Army between Korea and Vietnam*, (Washington D.C.: National Defense University Press, 1986), 156.
- ¹⁴³ *Ibid.*, 132.
- ¹⁴⁴ Kellett, 24-28.
- ¹⁴⁵ U.S. Army, *Field Manual 100-5, Operations* (Washington, DC, 1993), 14-1,
- ¹⁴⁶ U.S. Army, *Field Manual 100-5, Operations Final Draft* (Washington, D.C., 5 August 1997), 2-8.
- ¹⁴⁷ *Ibid.*, 2-10.
- ¹⁴⁸ U.S. Army, *Field Manual 3.0 (DRAG Edition)*, 1-7.
- ¹⁴⁹ U.S. Army, *Field Manual 100-5, Operations*, (Washington D.C., 1993), 2-11.
- ¹⁵⁰ *Ibid.*, 2-11.
- ¹⁵¹ Huba Wass de Czege, *Understanding and Developing Combat Power*, (Monograph, Fort Leavenworth, KS, Command and General Staff College), 8.
- ¹⁵² *Ibid.*, 10.
- ¹⁵³ *Ibid.*, 13-15.
- ¹⁵⁴ *Ibid.*, 32.
- ¹⁵⁵ *Ibid.*, 33.

BIBLIOGRAPHY:

BOOKS

- Ardant du Picq, Charles. *Battle Studies: Ancient and Modern Battle*. trans. John Greely And Robert Cotton. Harrisburg, PA. The Military Service Pub. Co. 1946.
- Alger, John I. *The Quest for Victory*. Westport, CT: Greenwood, Press. 1982.
- Baynes, John Christopher M. *Morale: a Study of Men and Courage: the Second Scottish Rifles at the Battle of Neuve Chapelle. 1915*. New York: Praeger. 1967.
- Blumenson. *The Patton Paper 1940-1945*. Boston, MA: Houghton Mifflin Co. 1974.
- Clausewitz, Carl Von. *On War*. Edited and Translated by Michael Howard and Peter Paret Princeton, New Jersey. Princeton University Press. 1976.
- Clausewitz, Carl Von. *Principles of War*. Contained in *Roots of Strategy Book 2*. Harrisburg, PA: Stackpole Books. 1987.
- Dollard, John and Horton, D. *Fear in Battle*. Washington, D.C. Infantry Journal. 1944.
- English, John A. *On Infantry*. New York, NY: Praeger Publishers. 1981.
- Este, Carlo. *A Genius for War*. New York, NY: HarperCollins Publisher. 1995.
- Fuller, J.F.C. *The Foundations of the Science of War*. Military Classic Reprint. U.S. Army Command and General Staff College Press, Ft Leavenworth, KS. 1993.
- Fuller, J.F.C. *The Conduct of War 1789-1961*. Reprint ed. Da Capo Press. 1992.
- Hacker, Carol A. *The High Cost of Low Morale and What to do about it*. Boca Raton, FL: St. Lucie Press. 1997.
- Jomini, Antoine. *Art of War*, Contained in *Roots of Strategy Book 2*. Harrisburg, PA: Stackpole books. 1987.
- Keegan, John. *The Face of Battle*. New York, NY: Viking Press. 1976.
- Kellet, Anthony. *Combat Motivation: The Behavior of Soldiers in Battle*. Boston: Kluwer-Nijhoff; Hingham, Mass. 1982.
- Leonhard, Robert R. *The Principles of War for the Information Age*. Presidio Press, CA. 1998.
- Marshall, S.L.A. *Men Against Fire*. Gloucester, Mass: Peter Smith. 1978.
- Mangelsdorff, David A. *Military Cohesion*. Mahwah, N.J.: Lawrence Erlbaum. 1999.

Moran, Lord. *The Anatomy of Courage*. Garden City Park, NY: Avery Publishing Group Inc. 1987.

Naveh, Shimon. *In Pursuit of Military Excellence*. Portland, OR: Frank Cass Publishers. 1997.

Patton, George S. *War as I knew it*. Boston, MA: Houghton Mifflin Co. 1947.

Richardson, Frank M. *Fighting Spirit: a Study of Psychological Factors in War*. New York Crane, Russak. 1978.

Ridgway, Matthew B. *The Korean War*. New York, Da Capo Press. 1967.

Sledge, E.B. *With the Old Breed*. New York: Oxford University Press. 1990.

Slim, William. *Defeat into Victory*. London: Constable. 1966.

Straub, Christopher C. *The Unit First: Keeping the Promise of Cohesion*. Washington, D.C. National Defense University Press. 1988.

Van Creveld, Martin. *Command In War*. Cambridge, Massachusetts: Harvard University Press 1985.

US DOCTRINE PUBLICATIONS

HQ, Department of the Army, *Training Regulation 10-5*. Washington D.C. 1921.

U.S. Department of the Army, *Field Manual 100-5, Operations*. Fort Monroe, VA. 1986.

U.S. Department of the Army, *Field Manual 100-5, Operations*. Fort Monroe, VA. 1993.

U.S. Department of the Army, *Field Manual 22-100, Leadership*. Fort Monroe, VA. 1999.

U.S. Department of the Army, *Field Manual 100-1, The Army*. HQ Department of the Army. 1994.

U.S. Department of the Army, *Field Manual 3-0, Operations (DRAG Edition)*. Fort Leavenworth, KS. 2000.

U.S. Department of the Army, *United States Army Posture Statement FY01*. Office of the Chief Of Staff, U.S. Army. 2000

MONOGRAPHS

Cornstubble, Brent A. *First Principles: The Foundation of Twenty-First Century Army Operations*. School of Advanced Military Studies, U.S Army Command and General Staff College, Fort Leavenworth, Kansas, 22 May 1997.

Forman, Mark R. *The Principles of?: Assessment of FM 100-5's Principles of Operations*. School of Advanced Military Studies, U.S Army Command and General Staff College, Fort Leavenworth, Kansas, 22 May 1997.

Vaughn, Thomas B. *Morale the Tenth Principle of War?* U.S. Army War College, Carlisle Barracks, PA. 1982.

ARTICLES

Eden, Steven J.. "Leadership on Future Fields: Remembering the Human Factor in War" *Military Review*. May/June 99. Vol. 79. Issue 3. 35-46.

Patch, Alexander M. "Some thoughts on Leadership" *Military Review*. Jan/Feb 97. 71-75.

Glenn, Russell W. "No More Principles of War?" *Parameters*, Spring 1998. 48-66.

Knowlton, William A. "Morale, Crucial, but What is It?" *Army*, June 1983. 35-38.