

TRADOC PAMPHLET 525-200-1

BATTLE COMMAND



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US ARMY BATTLE DYNAMIC CONCEPT

1 DECEMBER 1994

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FOREWORD

Battle Command is about decisive victory—dominating battle space—whether it be some future Desert Storm or Fuentes Camino. Speed, space and time define battle space. We dominate speed, space, and time by achieving and sustaining a high tempo of operations, overwhelming lethality, and superior survivability—all of which we must view in terms of executing, mounting, and recovering from operations simultaneously.

Battle Command is founded in history. It has always been the commander's job and responsibility. But modern information age capabilities promise to provide revolutionary means to the commander that will change how Battle Command is performed. Thus Battle Command is evolving. By learning from history, understanding our current capabilities, having the insight to visualize the future as it needs to be, and integrating the best from these perspectives we are our Vision of Battle Command.

In the World of the 21st Century the quantum competitive advantage will derive from quantity, quality, and usability of information. The force of the 20th Century derived its architecture from 20th Century Industrial Age concepts of command and control. The architecture of the Army for the 21st Century, must derive from a far more robust, more versatile concept of information based Battle Command. The high ground is information. The future force must be organized around information—the creation and sharing of knowledge followed by unified action based on that knowledge which will allow commanders to apply power effectively. Battle Command will be based on real-time, shared, situational awareness—not the same map sheet, but the same map—yet able to function in a less mature, less sophisticated joint or combined environment.

To achieve this we must also equip our commanders with the intellectual foundation, the requisite experience, and the continuous opportunity to gain useful experience in both the art and the means of Battle Command under these new and revolutionary conditions. Our commanders must possess the versatility and agility that will be required to be successful on tomorrow's battlefields, whether the enemy is an opposing army or the forces of nature.

It is information-based Battle Command that will give us ascendancy and freedom of action—for decisive results—in 21st Century war and operations other than war.

1 December 1994

Military Operations
BATTLE COMMAND
BATTLE DYNAMIC CONCEPT

Summary. This concept serves as the basis for developing doctrine, leader development, organizations, and materiel changes focused on soldiers (DTLOMS) requirements and solutions for command of combat forces in battle and operations other than war. It provides the framework to describe battle command and required capabilities prescribed for a Force Projection Army.

Applicability. The concept applies to all TRADOC activities which develop DTLOM requirements.

Suggested improvements. The proponent of this pamphlet is the Deputy Chief of Staff for Combat Developments. Send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) through channels to Commander, TRADOC, ATTN: ATCD-BP, Fort Monroe, VA 23651-5000. Suggestions may also be submitted using DA Form 1045 (Army Ideas for Excellence Program (AIEP) Proposal).

Contents

	Paragraph	Page		Paragraph	Page
Chapter 1					
Introduction			Commander's Responsibilities.....	3-4	8
Purpose	1-1	2	Planning and Executing the Fight.....	3-5	10
Scope	1-2	2	Future Army Battle Command Systems.....	3-6	11
References	1-3	2	Chapter 4		
Explanation of abbreviations and terms	1-4	2	Summary		13
Chapter 2			Chapter 5		
Overview			Implications		
Introduction.....	2-1	2	Doctrine.....	5-1	14
Desired Outcome	2-2	2	Training	5-2	14
Chapter 3			Leader Development	5-3	14
Concept			Organizations	5-4	14
What is Battle Command.....	3-1	2	Materiel.....	5-5	15
Future Army.....	3-2	5	Soldiers	5-6	15
Future Battlefield.....	3-3	6	Glossary		15

"The ability to move information rapidly and to process it will likely change the way we command military operations. It will greatly influence force organization, command procedures, and staff systems... Maneuver, combat support (CS), and combat service support (CSS) leaders, horizontally linked by common information, will, for the first time, have a means to visualize how they will execute

in harmony, integrated by a shared vision of the battlespace. Individual soldiers will be empowered for independent action because of enhanced situational awareness, digital control, and a common view of what needs to be done."

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Dist	Special
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Chapter 1 Introduction

1-1. **Purpose.** This operational concept describes command of combat forces in battle and operations other than war (OOTW). It serves as the conceptual underpinning for work in one of the areas where military affairs are changing markedly, battle command. The purpose of this concept is to foster greater understanding of the fundamentals of battle command and the supporting staff functions and processes to better focus future efforts in research, experimentation, and training. These efforts will continuously examine all aspects of battle command to develop ways to make the exercise of command more effective. All means will be considered: doctrine, training, leader development, organization, materiel, and soldiers (DTLOMS) with special emphasis given to information age technology. Information age technology may provide commanders a comprehensive view of the situation, reduce uncertainty, and provide the means to more clearly and rapidly transmit intent and orders.

"Man for man, one division is as good as another. They vary only in the skill and leadership of their commanders."

General Omar N. Bradley

1-2. **Scope.** This concept has implications for all commanders, but is primarily focused on tactical and operational commanders at brigade and above.

1-3. References.

- a. FM 100-5 (Operations).
- b. TRADOC Pam 525-5 (Force XXI Operations).
- c. TRADOC Vision of Future Battle, 23 Sep 93.
- d. Concept for Information Operations (To be published).
- e. FM 100-6 (Information Operations) (To be published).

1-4. **Explanation of abbreviations and terms.** Abbreviations and special terms used in this pamphlet are explained in the glossary.

Chapter 2 Overview

2-1. Introduction.

"In my own mind, we are at the beginning of a

revolution in the way we will command soldiers and tactical units in battle...I am convinced we are in a transition in battle command now with information age technology as significant as back in the 1920's when we went from flag sets to wireless radios to combined arms to upbeat tempo."

General Frederick M. Franks Jr.

a. The uncertain strategic environment in which commanders now operate has significant implications. The National Military Strategy focuses on regional conflicts and crisis response, power projection from a continental United States (CONUS) base, and joint operations. Today's Army faces a wide variety of threats characterized by greater ambiguity and uncertainty. The proliferation of technology makes each adversary potentially more lethal than before. Uncertainty and a wide variety of threats make it difficult to prepare for or predict the type of contingencies our forces will face. Commanders will operate in environments which span the continuum of military operations. In war or operations other than war, the nation expects success. The commander is the key.

b. The smaller military will force tougher choices for the National Command Authority on the types, quantities, and sizes of contingency responses. Commanders must be flexible as they are likely to be required to mix and match forces in unprecedented ways to meet the challenges of future operations. As situations develop and national military responses evolve, commanders at every level will be required to deal with a broader scope of responsibilities, while maintaining war winning proficiency.

2-2. **Desired outcome.** The nation has a clear criteria for success of military operations: Within the operational environment, employ all means available to accomplish any given mission—decisively and at the least cost—across the full range of possible operations in war and operations other than war.

Chapter 3 Concept

3-1. What is battle command.

"We must not be captured by our current command post fixations, large tactical staffs, nor our current programs to essentially make more efficient a worn-out C2 engine. I have stopped using command and control—not because I like to invent new terms, but because it has too much

excess intellectual baggage that I find gets in the way of discussing the art of command. We must be captured by a vision of battle command..."

General Frederick M. Franks Jr.

a. **Battle command.** Battle command is the art of battle decision making, leading, and motivating soldiers and their organizations into action to accomplish missions at least cost to soldiers. It begins in the training a commander provides for his command and it ends with the successful redeployment and recovery of the command in preparation for its next operation. It includes visualizing the current state and desired future states and then deciding how to get from one to the other at least cost to the soldier. These decisions include assigning missions, prioritizing and allocating resources, selecting the critical time and place to act, and knowing how and when to make adjustments during the fight. In addition to deciding, battle command includes leading and motivating the unit toward the desired end. This leadership must be up front. Leaders must be with soldiers. They must feel the pain and pride, then decide on the best course of action to achieve the mission at least cost to soldiers. Being up front allows leaders to know the unit so well that their intuition will be better informed when making tough calls.

(1) Battle commanders must be fundamentally competent leaders who have developed an intuitive sense for battle through repetitive experiences at multiple echelons. What differentiates current and future battle command from the timeless challenges is the scope, intensity, and tempo of contemporary and future operations brought on by the lethality, precision, and range of modern weapons coupled with the timeliness and accuracy of information provided by information age systems and sensors. Commanders at all levels require the means to optimally utilize timely battle space information, thereby making more informed decisions consistently faster than the enemy. The ability to make and communicate these decisions before the enemy will provide the commander the means to create a tempo to which the enemy cannot react.

(2) Future operations will span war and operations other than war. Technology which provides an abundance of real time information in one situation must be adapted to meet the needs in more ambiguous, less certain threat situations. Sensors which work in one environment may be ineffective in another. The integration of human intelligence will remain important as low technology forces confront the advanced technology of the U.S. military. The increasing complexities of joint, combined, and interagency operations will place unparalleled demands on

commanders. Battle command under these conditions is predominately an art form with some incorporation of elements of scientific analysis, control, and direction. Thus the experienced commander must evince an intuitive feel for what direction to take and a knack for blending the process and product of command to achieve success.

b. **The elements of battle command.** Battle command incorporates two vital components—the ability to decide and the ability to lead. Both components demand skill, wisdom, experience, and courage, always moral and often physical.

(1) For the commander, knowing if to decide, then when and what to decide is a sophisticated art. Decision brings with it the cost of committing resources, foreclosing options, incurring risk, and revealing intentions to the enemy. Uncertainty and chance will always bedevil decision making.

(2) The commander cannot, indeed should not, attempt to know everything. However, he must know that which is important. The battle command system must provide him a solid base of information from which he can pick and choose what he needs. The commander—and this is a challenge—must glean the information he knows to be vital from what is available and provided by others. He bears the personal responsibility for defining the critical information, friendly or enemy, that he must have.

(3) The commander cannot be a prisoner of a command post. He must retain access to the information he needs to command wherever he is on the battlefield. Battle command demands that leaders position themselves where they can best command without depriving themselves of the ability to respond to changing situations. The commander must be able to go where he can best assess the operation and risks and make the necessary adjustments.

"The successful commander in battle is at the critical place at the critical time."

General Bruce C. Clarke

(4) Despite the freedom for the commander to roam the battlefield and see things first hand, his full understanding of events is often gleaned from the reports of others. The effective commander is adept at mastering the propensity for his subordinates, peers, and seniors to report willingly that which is critical and to do so in an accurate and timely manner. He must then discipline himself to react appropriately.

(5) Battle command demands that the commander retain his objectivity when making decisions

and not be swayed by the passions of the moment. The successful commander requires a balanced detachment from the unimportant, with an instinctive recognition of what is important and what requires his direct involvement. The commander cannot attempt to address personally every action. Knowing what requires his attention and what can be handled by his staff and subordinate commanders is key to time management and a decentralized command environment.

(6) Leadership is taking responsibility for decisions made. Commanders will be compelled to act without all the relevant information and must be prepared to deal with the consequences thereof. The lack of available information does not invalidate the responsibility of command. Forces, when put in motion, are not easily reversed. The difficulty is normally proportional to the size of the units. After forces have been put in motion, the commander must provide the strength and will to follow through with the choices and the wisdom to know when they must be changed and further decisions made.

(7) The two elements of battle command (decision making and leadership) are tightly interwoven. They integrate leading, guiding and motivating with the knowledge to establish and define the limits of control throughout the course of a mission.

(8) FM 100-5 states the four elements of combat power as: leadership, maneuver, firepower, and protection. The last three are the sinew and muscles of war, as J.F.C. Fuller said; "there are three essential elements of fighting—how to guard, how to hit, and how to move." Leadership is the integrating element, the one that synchronizes the other three. It is the one that acts authoritatively in its higher embodiment—command. Battle command in the information age affords us the opportunity to take the triad of maneuver, firepower, and protection to higher levels of synchronization. Traditionally the legs of this triad have been interdependent; the more protection, the less firepower and maneuver, etc. This is no longer true. The prescient commander can create opportunities to reinforce one with the others; if he has a complete understanding of the battlefield and if he can effectively direct all of his means to purposeful action. Battle command is the nucleus around which the other three elements of combat power can evolve.

c. Intuition. Even in the best of circumstances the commander is unlikely to have perfect knowledge of the situation. Battle commanders must often bridge the gap between what they know at the time of the decision with a feel for, or intuitive sense of, the battle. Intuition is the

ability to demonstrate immediate cognition without evident rational thought and inference. It is in fact born from the range of experiences and reflections upon similar occurrences by the commander in the course of his development as a leader. Intuition is the insight that rapidly dismisses the impractical solution and moves to the feasible course of action. Intuition complements the commander's vision, creativity, confidence, warrior spirit, communication and interpersonal skills that are necessary for the successful accomplishment of the mission. In battle it appears as a sensing; knowing what the enemy is about to do and playing that propensity against him. The Germans describe it as "fingerspitzengefuehl" (literally, a heightened sense of touch). For Americans it is the much less formal "savvy" demonstrated by the commander who by combat experience, training, and study—or any combination of the three—reads the battlefield and does the right thing, faster more accurately and more decisively than the enemy.

d. Command. Command—the art of motivating and directing soldiers and organizations to accomplish a mission—must be supported by the means to regulate the forces to achieve the commander's intent.

(1) Command, however, and the decision making and problem solving that come with it are not done in isolation. The commander's staff and subordinates assist in developing, modifying and improving the initial versions of plausible courses of action and in development of future courses of action for events that most likely are not yet totally clear.

(2) Battle commanders must be flexible enough to respond to changing situations and to anticipate the demands of and solutions to future operations. Battle commanders must train themselves and their soldiers and units so that they are prepared for whatever missions they are assigned. These commanders must be able to visualize the future, formulate concepts, allocate means and direct the necessary missions required to achieve victory.

(3) Commanders make estimates of future operations and assessments of the current situation to determine their own intent and formulate the concept of the operation. The prioritization of actions and considerations for the acceptable degree of risk guides the commander in determining the amount of control he can, and should, delegate to others to synchronize actions across the area of operations. Command without freedom of action to subordinates denies their initiative and lessens the ability of the battle commander to employ all of his resources to their fullest potential.

e. Control. Control is inherent in battle command. Control is monitoring the status of organizational activities, identifying deviations from commander's intent, and regulating the forces and means toward an intended aim. Commanders acquire and apply means to accomplish their intent. Ultimately, commanders provide methods to measure, report, and correct performance. Control serves its purpose by allowing the commander the freedom to operate, delegate authority, and lead from any critical point on the battlefield while synchronizing actions throughout his area of operation. Control derives from understanding the commander's intent, implementing good standing operating procedures (SOPs), training units and soldiers prior to battle, rehearsing, using graphic control measures specific to the situation, and maintaining continuous dialog between commanders at all levels. Proper control ensures all operations are synchronized and sustained throughout their duration. The process of controlling an organization is directed towards ensuring that all of the pieces pull together, adjusting as the situation dictates, but never losing sight of the intended end state and purpose of the mission—the commander's intent. Battle command systems must support the ability of the commander to adjust plans for future operations, even while focusing on the current fight. Skilled staffs work within the commander's intent to direct and control units and allocate the means to support that intent.

f. Battle command integration. Commanders at strategic, operational, and tactical levels must integrate their efforts to achieve success as defined by the National Command Authority. The strategic commander develops a theater campaign plan to meet the strategic goals, and to direct his subordinate operational commanders. Operational level commanders employ military forces to attain objectives within a theater through the design, organization, integration, and conduct of theater strategies, campaigns, major operations, and battles. At the tactical level, commanders plan and execute battles at division, corps, or army level while engagements are fought by combat formations of brigade and below. A single, unifying concept of operations synchronizes actions at each level. From that concept is derived the intent, directives, and necessary means that provide the freedom of action for subordinate commanders to achieve their respective objectives. Operations throughout the battlefield must support the concept of the next higher commander. Whether actions are to occur simultaneously or sequentially, the intent is to destroy or disrupt the enemy's key capabilities and functions and exploit the resulting advantage before the enemy can react.

3-2. Future Army. The consequences of the strategic environment, diverse future missions, downsizing and

reduced resources challenges the Army to develop leaders who can handle increasing levels of complexity. There are a number of characteristics we should expect in our future army which bear on the battle command.

a. Recruit, develop, and retain quality people. Soldiers are the key to the Army's warfighting ability. Sophisticated weapons and technologies are no better than the skill with which leaders and soldiers employ them against the enemy. The Army requires people with the qualities to handle increased complexity and lethality of the modern battlefield. As the Army becomes smaller, keeping the right people is imperative.

"Man is the foremost instrument of combat."

Ardant du Picq
Battle Studies, 1880

b. Grow leaders to meet challenges of the future. No peacetime duty is more important for leaders than continued professional development. Self study of the profession, its doctrine, and of the world in which we will have to practice our profession is one pillar of that preparation. Attendance at professional military educational institutions is the second pillar that provides the future commander both institutional knowledge of his profession and cross fertilization of ideas between himself and his peers. Challenging assignments in a variety of locations and positions that provide the leader with the experience necessary to meet the challenges of the future world is the third pillar. Professional development produces commanders with high personal character, firm willpower, and professional ability. These commanders, in turn, imbue their commands with their ethics, ideas, desire, energy, and methods. No other element is more important to developing combat power than the quality of leadership in units and the commander as the driving force behind that leadership.

"In no other profession are the penalties for employing untrained personnel so appalling or so irrevocable as in the military."

General Douglas MacArthur

c. Conduct tough, realistic training. Leaders have the responsibility to train subordinates, it is perhaps their most solemn responsibility. Continual, demanding and relevant training is intrinsic to success on the battlefield. Increasing pressure for economy and efficiency may reduce the number, duration, frequency, and resolution of field exercises and Combat Training Center (CTC) rotations. This will necessitate greater reliance on simulations and present commanders with a greater challenge to produce realistic operating conditions. Global, distributed simulations will facilitate more

frequent and diverse joint and combined exercises in a variety of geographic locations. It is through high resolution, quality, challenging and relevant training that the commander conditions himself and his command for the battle and thus sets the stage for success.

d. Maintain the technological edge. America has a major strength in its technology. Appropriately applied to our doctrinal needs, technology affords a significant advantage to our soldiers, one that enables the generation of overwhelming and decisive combat power while minimizing the risk to the force. We must exploit the technology which gives us a significant increase in lethality, offers major improvements for protection of our forces, exploits one or more key vulnerabilities of a potential adversary, and offers a capability which will present an adversary with multiple, unanticipated problems simultaneously. Additionally, we must anticipate how technological advancements will affect future doctrine.

e. Evolve doctrine. Doctrine will continue to evolve to reflect the changing conditions of future military operations. As our Army's missions and requirements change, so will our doctrine. As technology evolves, we must be prepared to incorporate it in appropriate ways to improve the effectiveness of our commanders. Our commanders must be able to think innovatively—not prescriptively—drawing from experience, creating new ideas, and incorporating both to produce doctrine that is relevant, achievable, acceptable, and adaptable.

f. Operate as part of a joint, combined, coalition or interagency force. The Army will not operate alone. Operations involving Army forces will always be joint. The nature of conflict in regional crises may often involve coalitions that could be different from familiar, long-standing alliance structures. The Army frequently will be operating in an interagency environment alongside other institutions of the U.S. government or non-governmental organizations—not only when the military is the prime strategic option, as it is in war, but when other agencies are the preferred option and the military assists with forces. The Army must be prepared to conduct a variety of operations that integrate warfighting and operations other than war with a variety of governmental and nongovernmental agencies, sister services, and the forces of other nations. The implications of this challenge are significant and encompass considerations of these fundamentals for the employment of the Army across the full range of military operations; joint, combined, coalition, and interagency.

g. Define and explain rules of engagement. Rules of engagement (ROE) specify the circumstances and

limitations under which forces begin, or continue, combat with the enemy. ROE may change over the duration of a campaign. A force-projection Army will tend to face a wide array of ROE. For example, ROE during Operations Just Cause, Desert Shield, Desert Storm, Provide Comfort and Hurricane Andrew relief operations were widely diverse and within each operation changed over time. The commander's understanding of his own mission, his higher commander's intent and his ability to establish clear ROE decrease the chance of unnecessary violence or disruptions to the civilian population. Commanders must build good training programs that reinforce the practice of following the rules of engagement in war and operations other than war, while at the same time enabling them with an astute sense of when conditions have altered to such a degree that a change of the rules of engagement is in order.

h. Understand media impact. The news media has increasingly important impacts on the conduct of operations and therefore the execution of battle command. The media serve as a conduit of information, not only to the American public, but also to the rest of the world. The media have the capability to create opinions, generate or erode civilian support, risk operational security, enable or forfeit surprise, and otherwise help or hinder ongoing missions. Dramatic visual footage can rapidly influence the public, and therefore political opinion, so that the parameters of battle and operations other than war may suddenly alter with no prior indication to the commander in the field. The higher the echelon of command, the more likely the impact of media coverage.

3-3. Future battlefield. The dynamics of the future battlefield will enhance the effects of battlefield tempo. Battle command requires the mental agility and discipline to make timely decisions to modify the tempo of their own and the enemy's activities to decisively defeat the enemy at the selected time and place.

"It is in the minds of the commanders that the issue of battle is really decided."

B.H. Liddel Hart

Thoughts on War, 1944

a. Agility. The ability of friendly forces to act faster than the enemy is a prerequisite for seizing and holding the initiative. It is as much a mental as a physical quality. Agility of the commander is primarily a mental process. The agility of a unit is largely dependent upon physical processes. Units must be physically and psychologically capable of responding rapidly to changing requirements. Formations at every level must be capable of shifting the main effort with minimum delay and least possible necessity for reconfiguration and coordination. Agility is

demonstrated by rapidly shifting combat power, formation alignments, and missions. It is achieved through sound battle command. It is enhanced by effective training before and between operations.

b. Friction. The accumulation of chance errors, unexpected difficulties, enemy actions, and the confusion of battle impedes both sides. To overcome it, leaders must continuously read the battlefield, decide quickly, and act without hesitation. They must be prepared to risk commitment without complete information, recognizing that waiting for such information will invariably forfeit the opportunity to act.

"First reckon, then risk."

Field Marshal Count Helmuth von Moltke

c. Battle space. New doctrine introduces the notion of battle space—the use of the entire battlefield to apply combat power to affect the enemy; not only the physical volume of breadth, depth, and height but the operational dimensions of time, tempo, depth, and synchronization. Commanders must seek to dominate the enemy in a given battle space through a comprehensive understanding of geography and terrain, available intelligence collection assets, and available weapons. Commanders must integrate other Services', nations', and agencies' assets with their own and apply their effects toward an intended purpose.

(1) The battlefield of the future will be characterized by fast moving forces and unprecedented lethality. Tactical mobility is increasing. Distances between engaged forces are increasing. The range, precision, and lethality of direct and indirect weapons are increasing. The ability to sense larger areas of the battlefield accurately is improving. All of these factors increase the commander's battle space. In fact, logistically, a commander's battle space may have threads all the way back to the CONUS sustaining base.

(2) Battle space is more than the physical volume that expands or contracts in relation to the ability to acquire and engage the enemy. It reflects the vision of the commander who seeks to dominate the enemy and protect his own force. It is not constrained by operational graphics nor dictated by higher headquarters. It is the commander's personal view of how to take on and defeat the enemy. The commander can still expect great ambiguity, significant gaps between his organic units and along his lines of communication, space which he may not control, and significant expenditures of energy to set the conditions for battle. These conditions will bring fresh dimensions which challenge the commander.

d. Tempo. Tempo is the measure of time between and the sustained frequency of militarily significant events. Commanders seek to dictate the pace of events in the battle space to the enemy and thus gain and maintain the initiative. Tempo is a vital element of modern war since events are frequently news and can quickly condition strategic will to see the operation through to the end. Future battles will have an increased tempo of operations which requires the commander to be able to move his forces rapidly, destroy the enemy quickly, and reset for subsequent operations before the enemy can recover or respond. Commanders can expect protracted, highly stressful, continuous operations. This future battlefield requires commanders who can bring order out of chaos.

(1) Tempo is not synonymous with speed. Sometimes we wish to increase our own tempo and slow the enemy's. Other times we may wish to slow our operations and induce the enemy to hasten his. On the battlefield the commander who can master time will spare his forces and defeat the enemy. Sometimes we "go slow now to go fast later."

"In military operations, time is everything."

Duke of Wellington
30 June 1800

(2) Time has always been a dimension of combat. Today time is more important than ever before. We speak of "real-time" intelligence. Synchronization—in which time, along with effect is an implicit sub-element—is one of the Army's doctrinal tenets. Force projection is done over time. Time is referred to as the fourth dimension, but in today's battles perhaps it is the first.

(3) The commander who dominates the time dimension controls the physical dimension as well. Duration, sequencing, and tempo are all temporal characteristics of warfare. Duration of military operations can be short or long, either used to maximum benefit. Sequencing sets up the conditions for mounting effects. Lines of operation can be developed in time as well as space, coming together at the right moment so that from the perspective of the enemy the impacts are simultaneous throughout his depth. Tempo sets up the rhythm of combat. It is not just another word for speed. We vary our own tempo purposefully and want to control the enemy's so that we can achieve victory as rapidly as possible and at least cost to our soldiers.

"No victory is possible unless the commander be energetic, eager for responsibilities and bold under-takings; unless he possess and can impart

to all the resolute will of seeing the thing through; unless he be capable of exerting a personal action composed of will, judgment, and freedom of mind in the midst of danger."

Marshal Ferdinand Foch
Precepts, 1919

3-4. Commander's responsibilities. The commander's responsibilities do not start with the battle, they start the day he assumes command. His force of will must permeate the unit. He must provide the vision which focuses his organization on the most likely missions it will be assigned. He must develop training programs and execute training which prepares his unit and soldiers for those missions and develops in them a will to win and a winning attitude. Ultimately the commander must build cohesive teams which possess the will to win and which are adequately flexible and agile to successfully execute during war and operations other than war. During operations the commander is personally responsible for formulating the single unifying concept for a mission, knowing when and what decisions are required, and, finally, having the will to direct and motivate the force to execute his decisions to a purposeful end. The commander is also responsible for establishing the criteria for success, identifying the decisive event and creating the conditions to keep the decisive event decisive. The commander assembles personnel, equipment and information in order to facilitate these command responsibilities.

"The criterion by which a commander judges the soundness of his own decision is whether it will further the intentions of the higher commander."

FM 100-5 Operations, 1944

a. Deciding.

(1) Understanding the higher commander's intent. In order to decide, the battle commander must understand what is happening on the battlefield and the consequences of his decisions. He must understand the commander's intent two levels up and the intent of his immediate senior commander. He must understand the battle from the perspective of the subordinate commanders who must execute his decisions and the units adjacent to him. This thorough understanding of intent, up and down, left and right, is what produces the nested intent and unity of effort critical to success.

(2) Visualizing future state. The commander's estimate is the procedure whereby a commander decides how to best accomplish the assigned mission. It is a thorough consideration of mission, enemy, troops, terrain

and weather, and time available (METT-T) and other relevant factors. The commander's estimate is a look to the future to develop the relevant information to allow him to visualize how to best employ the available means to accomplish the next mission. Once the commander has the necessary information, he must possess the creativity and intuition to visualize accurately the future state through a sequence of activities and events, over time, which lead to the desired end state. Connectivity must exist between current operations and the future plan. While a portion of this future state may be dictated by a higher level commander's intent, the battle commander must possess the ability to envision his organization's future state within its battle space.

(3) Assessing the outcome of current operations.

The commander's assessment is a procedure whereby he anticipates the probable outcome of the ongoing current operation. The energies of the commander will be directed at taking his forces from current operations successfully into future operations. As he interacts with his and other commanders and staffs, what he hears and sees will cause him to make the necessary adjustments to current operations to successfully achieve the desired end state. He must tailor his organization and the battle command systems to ensure that the information he needs to conduct his command assessment is continuously available and timely. Commanders must have access to this critical information throughout the organization's operation from home base to the area of operations and back to home station.

(4) Identifying enemy courses of action. The commander must decide what the enemy's most probable and dangerous courses of action will be. He focuses intelligence systems to continuously analyze the information he requires on enemy capabilities. He decides which enemy courses of action to consider in his and the battle staff's wargaming efforts. The staff can then postulate enemy intentions to be considered by the commander during the estimate process.

(5) Articulating clear intent. The commander's intent is a concise expression of the commander's vision of the operation which focuses all subordinates on a common goal. The purpose of the intent is to describe what must be accomplished and why. It is the commander's statement of the end state and its purpose. Each subordinate commander's intent must be framed within the context of the commander's intent two echelons up. Intentions must be nested vertically and horizontally to achieve a common end state throughout the command.

(6) Formulating concept. The concept is the commander's visualization of the operation of the total

organization. It is a concise portrayal of how the elements of the command will operate together to accomplish their responsibilities and missions. The concept includes an overall scheme of operations, the necessary interfaces and coordination, the sequences from one phase to the next, the commander's priorities and the risks he is willing to take. It must, in conjunction with the commander's intent, enable subordinates to act in the absence of orders.

(7) Determining the commander's critical information requirements (CCIR). Commanders must determine and specify which critical items of information they need in order to understand the flow of the operation. The commander focuses the command to give him the information needed to refine his assessment driven by time and/or event. The information must be accurate and timely. The staff must know what information is available from external organizations and what information is important to get to the commander. In coalition operations liaison teams are frequently required to ensure the flow of critical information to the commander. Whatever factors are present, the commander must ensure that his critical information needs are met. As an operation proceeds the commander must regularly examine his CCIR to discard those no longer relevant and to add new ones as required.

(8) Making decisions at each level. Types of decisions made by commanders at the strategic, operational, and tactical level vary with the level of command. Regardless, commanders at all levels provide the intent, the concept, and then resource the requirements. Strategic and theater commanders principally allocate the means for subordinate commanders to accomplish the mission. The means allocated fall into four categories: fires, maneuver forces, terrain, and the combat multipliers. While operational level commanders may allocate means, their primary focus is on committing the available force into the battle space. In so doing, the operational level (and even the higher tactical level) commander sets the conditions for decisive outcomes. He must decide on the size and commitment of reserves, determine when to exploit success, and maintain the security of the force to ensure the ability to fight the subsequent battles and successfully complete the campaign. The tactical commander's decisions are focused on execution of a specific mission or plan which engages the enemy within his battle space with his allocated forces within the intent and plan of the commander two levels up. The commander must decide such things as when to shift the main effort, when to change priorities, when to reinforce, when to request additional forces or when to disengage. It is imperative that the commander determine which decisions may be made by designated subordinates. Typical decisions

retained by the commander are changes in intent, mission, concept of the operation, priorities (e.g., main effort, fires), commitment of his reserve, or a major reallocation of means, and requests to his commander for additional means.

(9) Considering current and future operations concurrently. The commander must have the capability to quickly conduct an assessment of current operations while remaining focused on future missions. The battle staff provides the commander the freedom to focus on current operations as required with the assurance that a dedicated battle staff is concurrently examining alternative concepts for future operations.

"The teams and staffs through which the modern commander absorbs information and exercises his authority must be a beautifully interlocked, smooth-working mechanism. Ideally, the whole should be practically a single mind."

General Dwight D. Eisenhower

The commander must assure the organization is tailored to provide depth to the decision making process during battle and have a plan for succession of command and continuity of operations. Battle Command systems must be flexible, robust, and tailorable to be capable of providing to the commander the critical information which allows him to do these functions concurrently.

(10) Communicating orders. During combat, commanders should issue orders and intent face-to-face whenever possible. Orders are best understood overlooking the terrain on which the operation is to be conducted. If that is not possible, terrain replicas are helpful to a thorough understanding of the order. When an order affects the entire command or multiple members of the command, it is essential that the commander move forward to conduct an orders group. The orders group consists of executing and supporting commanders, key staff officers and non-commissioned officers (NCOs) and the commander. When time or transportation are not available, commanders may issue orders electronically. Transmission of orders via radio, fax or computer should be followed up with a personal meeting to ensure clear understanding of the intent and the orders as soon as circumstances permit.

b. Leading—the human dimension of battle command.

"Battlefield leadership at all levels is an element of combat power. It is difficult to measure, but nonetheless is present and a decisive contributor to victory in battle."

General Frederick M. Franks, Jr.

Leadership is taking responsibility for decisions; being loyal to subordinates; inspiring and directing assigned forces and resources toward a purposeful end; establishing a teamwork climate that engenders success; demonstrating moral and physical courage in the face of adversity; providing the vision that both focuses and anticipates future courses of action.

(1) Contribution to combat power. Professional competence, personality, and the will of the commander represents a significant part of any unit's combat power. Combat power is the product of military forces and their will to fight. When will is lacking, so is combat power; when will is strong, it multiplies the effectiveness of military forces. Leaders are the main source of will. They inspire their soldiers with the desire to win and the conviction that winning is possible, the desire to accomplish the mission and to persevere in the face of all difficulties. Once the force is engaged, superior combat power derives from the courage, competence and versatility of the soldiers and their leaders, the excellence and appropriateness of their training, the capability of their equipment, the soundness of their combined arms doctrine, and above all the quality of their leadership.

(2) Character. Leaders are first soldiers; they must know and understand their subordinates. They must share their soldiers concerns, feel their pain, understand their pride. They must act with courage, conviction, and tenacity in the uncertainty and confusion of battle. Through example, commanders must imbue their soldiers with a sense of higher purpose and a commitment to the values of military service. Leaders build trust and teamwork. When the going is tough, a respected leader—one who is recognized as an individual of high ethical standards, courage, compassion, and conviction—can carry the unit and its soldiers on to victory. That distinction in the eyes of soldiers must be earned; it cannot be superficial. Soldiers will invariably take the measure of their leaders and allow themselves to be led accordingly. Commanders must provide the example that fosters the trust and confidence necessary for success on the battlefield.

(3) Purpose. Commanders must ensure their soldiers understand why they are engaged in a particular operation or course of action and how it supports and is essential to national or international interests. Once soldiers believe their mission is right, they will do all they can to follow their leaders and accomplish the mission.

(4) Staff support. The commander uses rigorous, realistic training to mold and shape his organization. To assist him in this process he forms his battle staff, a small group of highly trained people selected

by the commander. They assist him in anticipating the outcome of the current operation and developing the concept for the follow-on mission. They understand, and can apply, a commonly understood doctrine in executing missions. Battle staffs must be organized to ensure the command process is sustained, especially when the commander must rest or in the event he becomes a battle casualty. The battle staff must also understand what information the commander deems important to him in making decisions and get it to him accurately and in time.

(a) Staffs cannot be overly focused on process. It is the product of staff work that serves the needs of the commander. The commander cannot labor through mountains of unsynthesized information and conduct a meaningful analysis. Staff work must assist him toward that end.

(b) Form is less important than substance. Too little form leads to confusion and chaos, and too much serves only to burden, not enlighten, the commander. The staff must be an extension of the commander, see things as he does, and share his responsibility for the mission so he can reach the critical decisions with the best possible information and lead from where he can best affect the action.

(5) Taking care of soldiers. Taking care of soldiers, leaders and their families is a key role of the commander. Preparing the force requires a balanced, comprehensive approach to meeting needs: intellectual, physical, social and spiritual. Commanders must recognize that soldiers, leaders and families have different and unique needs before, during and after battle. Understanding this supports commanders' assessments and influences their vision. Education is a key component. Formal, institutional systems must be available to educate and inform soldiers and their families on organizational roles and missions, training programs, and deployments.

3-5. Planning and executing the fight. While techniques and procedures may vary, executing and planning the fight are continuous and concurrent activities at each level. Commanders use their assessment of current operations and their estimate of future operations to guide them and their subordinates in planning, preparing, and executing an operation successfully.

a. The commander is key to conceptualizing, planning, preparing, and executing operations at each level of command; this is his personal responsibility. The battle commander does not participate in the process—he drives it. From the initial intelligence preparation, through the course of action development, to the actual

issuance of orders and directives, the personal role of the commander is central. The role of the staff is defined and focused by the direction provided by the commander.

b. When there is time available before an operation begins, the commander and staff follow a deliberate process. The commander makes an estimate, formulates a concept, and presents it to the staff, who follow a detailed mission planning sequence which results in a detailed operations plan or order. However, once battle is joined, time is limited and often precludes formal command and staff process. Abbreviated processes derived from the deliberate process are necessary. The commander works from his assessment of the current operation to formulate concepts for future operations and to make necessary adjustments in the current operation. The staff abbreviates the deliberate decision making process. During battle the abbreviated process is the norm. Commanders may provide more detailed and specific guidance during the fight, eliminating certain steps in the formal process completely. The chief of staff, or executive officer, must organize to take advantage of the time available to prepare the force with the necessary orders and means to accomplish the mission in consonance with the commander's concept. Streamlining processes which permit commanders and staffs to shorten the time between receipt of orders and issuing their order to subordinates is essential. Commanders issue fragmentary and warning orders announcing as much information about the next operation as is feasible in order to provide subordinate commanders time to begin preparation and reconnaissance. As time and information permit, orders groups should be assembled, orders issued, and briefbacks from each subordinate commander conducted. Wargaming continues after issuance of the order as does personal reconnaissance and commander preparation for battle. Wargaming generates branches and sequels which are essential for rapid response to changes in situation. Detailed rehearsals and pre-combat checks must be conducted at all levels. During operations many of the above steps are concurrent. To an outsider, it may appear that experienced commanders and staffs are omitting key steps, but in reality their intellectual assessment is continuing concurrently, and many shorthand procedures are being used.

c. Concept formulation, planning, and preparation are concurrent and parallel actions during the execution of an operation. Commanders and battle staffs must constantly assess where they are in relation to the ongoing operation, and estimate what the posture of the force is in relation to future operations. The commander and the battle staff's estimates of the future are running all the time. Staff officers begin their estimate of future operations by assuming current operations (unless

otherwise directed) will go as planned. This concurrent process of the running estimate by the battle staff is key to keeping the commander armed with viable options. The commander must dominate the enemy and set the terms for battle; he must never be without options. This continuous process permits the commander to make timely decisions consistent with his vision of the intended outcome of the battle and with the posture required for future operations.

d. Effective tactical decision making by calm, competent, confident commanders during battle facilitates synchronized operations. Orders need to be simple, timely, and about right. The planning process starts with a clear articulation of the commander's vision. This process must be streamlined and continuous. Suitable, feasible concepts disseminated early provide soldiers and unit leaders maximum time to prepare for engagements. Supervision of the preparation and execution of battle must include aggressive coordination, deconfliction, and integration of plans at each level, both vertically and horizontally.

e. As information becomes available and is refined, the commander's visualization of the consequences and circumstances to be produced and how activities must be sequenced to produce them expands the concept of mission analysis and initiates the synchronization effort by the staff. Battle synchronization starts with the commander's concept of the operation. It is refined through the wargaming process by the commander and staff. It does not stem from endless course of action drills by the staff. The effort to achieve synchronization is a continuous process from which flows subsequent orders to subordinate units. A dynamic battlefield environment requires that the execution of a plan be constantly adjusted to unfolding battlefield events and the parallel development of branches and sequels to that plan.

f. The wargaming process helps to determine what decisions the commander must make when, identifies the critical information needed to make the decisions, their source and delivery means, and when the information is required by the commander. The information deemed critical by the commander to see and understand the battlefield and to make critical decisions drives the intelligence and reconnaissance efforts of the command. Without the commander's personal involvement, the process does not function properly.

"Get your major purpose clear, take off your plate all which hinders that purpose and hold hard to all that helps it, and then go ahead with a clear conscience, courage, sincerity, and selflessness."

Field Marshal Bernard L. Montgomery

g. Battle is orchestrated chaos. This concept is key to effective command. Unexpected events will occur. Wherever possible, subordinate executing commanders should solve these so that the commander is free to focus on the broader perspective and develop options for assuring success or exploitation of unexpected opportunities.

h. An important aspect of battle command is reflected in the human dimension of war. The commander's intent relays more than just how a series of events will unfold and lead to success. When relayed in an environment of mutual trust and confidence between the commander and his subordinates, they free the commander to move about the battlefield knowing that subordinates will execute in accordance with his intent. Additionally, the commander operates with the knowledge that subordinates will accurately and promptly report both positive and negative information. Mutual trust and confidence are critical to decision making; the tempo of decentralized operations on the modern battlefield underscore their importance.

3-6. Future Army Battle Command Systems (ABCS).

The tools to implement command decisions include intelligence, communications, and computers. Technology provides the means to revolutionize the collection, transmission, and management of information. Properly applied, the technology can be developed to provide commanders near real time information on friendly unit position and status, as well as a current picture of the enemy. Coupling the friendly and enemy status into a graphical representation and delivering it via integrated digital communications and computer networks will permit commanders at every level to share a common picture of the battlefield. This near real time situational awareness can permit commanders to better control forces, synchronize efforts, and achieve decisive victory with minimal casualties. Battle command is dictated by the commander, not his supporting control systems. The responsible commander must guard against the temptation to direct the battle from afar with the feeling of superior information and decisions. The information reported and processed is only as good as the a priori decisions and concepts which designed the systems. The critical situation information is always insufficient, inadequate, and untimely. A commander on the scene understands much more and more importantly understands the human dimension of battle. The soldier's spirit and will to win are lost in the computer processed displays.

a. Impact on commanders. Fully implemented integrated battle command information systems of the future will permit the commander to access critical information from any point on the battlefield. This gives

the commander the opportunity to decrease voice traffic on key nets, communicate face-to-face with key subordinates, and be in a position to provide the critical element of combat power-leadership at the critical time and place.

(1) Coupling near real time enemy information over large areas with long range precision munitions increases the commander's battle space. This gives the commander who controls the long range weapons the capability to engage the enemy at much longer ranges than previously experienced. High payoff engagements require that the situation and the targets be developed in a manner which is linked to close and current operations which support the overall campaign.

(2) Less time will be required to formulate the picture of the battle; more time will be available to discuss the situation with key subordinates and to ensure that intent is understood and is being met. Changes in training and leader development will be necessary to prepare commanders to optimize the value of the information.

b. Commander's decision support systems. Over time in battle, especially fast tempo battle, the numbers of people who are helpful to the commander to solve problems diminishes rapidly because not all can keep up with rapidly changing information. Thus future support systems will acknowledge this and seek to harness technology to keep the few up to date and eliminate the need to keep large staffs current. The challenge of the future is not the availability of information, rather it is the proper organization and delivery of the information to the commander. This necessitates the development of systems which organize information for commanders. This does not imply filtering critical information. Work must be accomplished to prototype systems which begin to develop the commander's requirements for information. Systems must conform to commander's needs, realizing that each commander is unique and each mission is different. Information requirements change over time, Army Battle Command Systems must be tailorable to each phase of the operation. The commander must be able to "pull-down" the information he needs from any information source on the battlefield using system menus which allow rapid, personal information customizing.

c. Current command posts. As currently defined a command post (CP) is a location which provides the means for a commander to exercise control of his forces. To promote efficiency and staff coordination, the commander groups his staff elements by function. The commander is responsible for his headquarters' location, composition, and organization. Today, command posts at

brigade and higher are generally echeloned, from front to rear, into a tactical CP (TAC CP), a main CP, and a rear CP. Functions of the various command posts are:

- (1) TAC CP.
 - (a) Monitor the execution of operations
 - (b) Synchronize combat activities to sustain tempo of combat operations and adjust the plan to fit the situation
 - (c) Maintain the current operations situation
 - (d) Provide close operations situation information to the Main CP
 - (e) Monitor deep and rear operations
 - (2) Main CP.
 - (a) Execute deep operations
 - (b) Synchronize combat activities in support of deep operations
 - (c) Sustain the tempo of combat operations by ensuring a continuity of combat consumables
 - (d) Provide a focal point for the development of intelligence
 - (e) Plan future operations
 - (f) Monitor close and rear operations
 - (g) Provide situational information to higher headquarters
 - (3) Rear CP.
 - (a) Execute rear operations
 - (b) Conduct security operations in the rear
 - (c) Support the force
 - (d) Monitor current operations
 - (e) Posture force for future operations
 - (f) Provide situation information to the Main CP
- d. Future Battle Command Support Centers (BCSC).

Given the availability of a common picture of the battle at every level and across every battle operating system, the requirement for large staffs which gather and collate data for commanders will be reduced. The staff operatives that remain to support the commander will be actual players rather than just information gatherers and will, with the commander, become leader teams, perhaps called Battle Support Teams. The future vision is for agile BCSCs supporting forward for the commander's immediate needs for controlling current operations and providing the means to adjust plans for future operations. Battle commanders and their BCSCs will be linked through robust long range communications networks, thus reducing the need for frequent moves to keep up with highly mobile operations.

e. Split-based operations. Future BCSC operations will be supported by selected elements that may never deploy from home station, or operate strictly out of rear or base areas. Concepts already exist for logistics and intelligence split-based operations. Communications will be via satellite and will enhance access to critical information because less time will be tied up deploying and/or moving these key links.

Chapter 4 Summary

Command of soldiers during military operations is first and foremost a human endeavor requiring the commander to be a decision maker and a leader. The enduring principles of command have withstood the test of time. The technology is available to change the way information is collected, delivered, and presented to commanders. Technology can, and will, change the way we command. The Army is standing at the threshold of the information age revolution. Battle commanders will begin to see improvement if current investments in information hardware, software, and communications are followed. Rapid prototyping efforts to get about right solutions in the hands of battle commanders and battle staffs must be implemented to meet the needs of serving commanders. Past procurement and software development strategies have not worked. The opportunity now exists to develop systems that are responsive to the needs of the commander and reflect current technology capabilities. If we strike now and continue to experiment in a free flowing environment which permits a free exchange of ideas, we can develop battle command systems that will allow us to win the information war. The bottom line is: no matter how sophisticated technology allows our systems to become, the battle commander still makes the decisions and provides the will to win and the leadership for decisive victory.

"Man for man, one division is as good as another. They vary only in the skill and leadership of their commanders."

General Omar N. Bradley

Chapter 5 Implications

Building Future Battle Command Systems. As previously stated, battle commanders at all levels require the means to optimally utilize timely battle space information. This will give them an advantage in decision making, communicating orders and intent, and establishing a tempo to which the enemy cannot react. The Army Battle Command System (ABCS) of the future must support the commander wherever he is on the battlefield and must support him throughout the range of force projection operations. It must provide a timely, relevant graphical picture of the friendly and enemy situation on the battlefield, and must provide access to information that enhances the commander's knowledge in a timely, flexible manner adaptable to his command style and situation. The future ABCS must provide this relevant common picture to all commanders and their battle support teams (staffs), vertically between echelons and horizontally between battlefield functional areas (BFA), while supporting the battle support team (BST) at each echelon and within each BFA. The relevant common picture must be scalable to the appropriate level of command. With this shared view of the battle space, battle commanders and their BST's will be able to concentrate effects rather than forces, enabling smaller units to be both more survivable and lethal. As this picture is developed and information is input into the system and fed up the chain of command the commander can readily develop intent and orders and rapidly distribute them to subordinates down the system. Some of the DTLOMS implications that must be considered to meet the needs of the battle commander on the information age battlefield follow.

5-1. Doctrine. Doctrine will continue to evolve. We must emphasize the role of the battle commander at each level and carefully describe the interaction of the battle commander and his BST as process and product changes during the development and application of the Army Battle Command System. With fewer investment dollars available, doctrine must drive the requirement for information technology as opposed to technology driving doctrine in an unaffordable, and perhaps unnecessary, direction. Commercial technology alternatives may be attractive but unnecessary to the accomplishment of the contemporary military mission. In the absence of a sound doctrinal and operational need technology investment may

at times be too expensive.

5-2. Training. Training in the information age environment must retain a sense of continuity, but will require integration of Battle Command Systems and computer simulation systems so that battle commanders and battle support teams are trained consistently whether in live or virtual exercises. The consequences of the expanded battlespace, covered by more effective weapons, and more accurate information will be a compression of the commander's decision cycle. Commanders and their battle support teams must be trained to understand the implications of early, as well as late, decisions.

The Combat Training Centers will play a key role in "coaching" the art of Battle Command as commanders learn about the productive friction between command and staff roles. Staffs will continue to strive for process and structure while commanders will strive to maintain their options and flexibility. Good commanders and staffs leverage and balance this friction to produce consistent excellence.

5-3. Leader development. We must design a system that lets the genius of our leaders loose on the battlefield. Once a shared relevant common view of the battle is available much of the old process of command and staff actions can be modified into a shared synthesis of information that permits anticipation of future requirements as opposed to information gathering. Both battle commanders and BST's must operate with a common view of what must be done, a doctrinal and philosophic basis for the accomplishment, and a common drive for excellence of achievement. The professional education system must be examined and modified to develop the officer who can envision the battlefield, the enemy, himself, place all of it in context of what must be accomplished, ask the right questions, demand the right information, and come to the right decision applying both knowledge and intuition. In a smaller Army, that must be expandable, we must ask ourselves how many of these agile well trained officers are necessary to fill the key command and staff positions if expansion is necessary.

5-4. Organizations. Battle support teams must be fully integrated into the Battle Command System through a shared vision of what must be accomplished, imbued with a sense of ownership, and shared responsibility for achieving decisive victory. Given the shared picture of the current situation and improved means to communicate orders and intent, it is anticipated that BST's will become smaller, more mobile, and more agile than current staffs. When each member of the BST has a clear sense of responsibility, a common view of the battlefield, and is empowered to act within the commander's intent,

traditional staff activities will change significantly. The staff's role changes from preparation of routine reports, briefings, and processes to synthesizing information and anticipating future requirements.

5-5. Materiel. Over time in battle, especially fast tempo battle, the numbers of people who are helpful to the commander to solve problems diminishes rapidly because not all can keep up with rapidly changing information. Thus future support systems will acknowledge this and seek to harness technology to keep the few up to date and eliminate the need to keep large staffs current. State-of-the-art communications, sensors, and computing systems provide the United States a technological advantage to meet these battle command requirements. To achieve the optimal return on investment, the fielding and continual upgrading of battlefield information systems and sensor suites must be integrated horizontally between BFAs and vertically between echelons. However, as echelons tend to be blurred during contemporary operations, the requirement for organizations and systems to skip traditional echelonment and communicate directly from tactical to operational or even strategic level must be recognized. As Army operations will usually be joint and often combined, data and information exchange methods and communications protocols must be interoperable with other U.S. Army, sister service, government agency, and allied systems. To share information in a combined environment may require bilingual systems or other technical means. Support for battle commanders and BST's on the move will require enhanced capabilities for voice interaction with the information processing machinery. A hands free environment must become the norm. Display technology must improve with heads up displays being a normal requirement for operations while moving and large screen flat panel displays necessary for stationary operations.

5-6. Soldiers. Battle commanders and their subordinates will be empowered by knowing where they are, where their units are, and where the enemy is. This information will permit smaller groups of individuals and units to accomplish more within the intent of the higher commander. It also places a burden on everyone to ensure they are operating within the limits of the technology so when decisions are made, the absence of one or more elements will not lead anyone to misplace or lose faith in

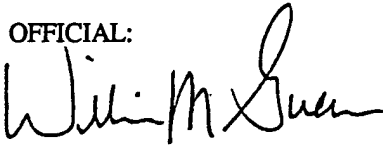
the ability of the technology to place each soldier or platform within the common picture. Shared situational awareness is a very powerful tool. Activities or actions which intentionally or unintentionally undermine that power can have disastrous effects on the entire force.

GLOSSARY

ABCS	Army Battle Command System
BCSC	Battle Command Support Center
BFA	battlefield functional area
BST	Battle Support Team
CCIR	Commander's Critical Information Requirements
CONUS	continental United States
CP	command post
CS	combat support
CSS	combat service support
CTC	Combat Training Center
DTLOMS	doctrine, training, leader development, organizations, materiel and soldiers
METT-T	mission, enemy, troops, terrain and weather, and time available
NCO	noncommissioned officer
OOTW	operations other than war
ROE	rules of engagement
SOP	standing operating procedure
TAC CP	tactical command post

FOR THE COMMANDER:

OFFICIAL:



WILLIAM M. GUERRA
Colonel, GS
Deputy Chief of Staff
for Information Management

JOHN P. HERRLING
Major General, GS
Chief of Staff

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