Without the Proper Culture:

Why Our Army Cannot Practice Maneuver Warfare

by Major Donald E. Vandergriff

The doctrine which emerged from this perception of great lethality stressed what the French called the bataille conduite, or the "methodical battle." By this term they meant a rigidly controlled operation in which all units and weapons were carefully marshaled and then employed in combat. The French favored a step-by-step battle, with units obediently moving between phase lines and adhering to strictly scheduled timetables. Such methods, they believed, were essential for the coherent employment of the enormous amounts of men and material demanded by modern combat. A hastily prepared, impulsive fight was doomed to failure. The focus of decision-making was best kept at higher command levels, because centralized control was necessary to coordinate the actions of numerous subordinate units.

Robert Doughty, Seeds of Disaster, p. 4-5

The U.S. Army's future doctrine, outlined in the dramatic documents, TRADOC Pamphlet 525-5, Force XXI Operations, and Army Vision 2010, envisions small, highly digitized, combined arms task forces operating over vast distances while maintaining flanks and gaps with surveillance equipment/personnel, such as satellites, sensors, and Special Operations teams. Inter-vehicular Information Systems (IVIS) and applique computer systems will establish information bridges between these well-balanced teams. This will enable independent thinking commanders at all levels to view their own units and the enemy in excruciating detail. They will provide U.S. forces a decided edge. Agile commanders will stay inside the enemy's decision cycle by controlling and shaping events throughout the entire battlefield. At our choice, we can then strike the enemy's centers of gravity with precision weapons. The writers of 525-5 and Army 2010 state this with great confidence.¹

There are two sides to the argument over the use of future information technology. On one side are the technocrats (hereafter known as technos); on the other, the maneuverists (let's call them the reformists). The technos theorize that they will see and control the entire battlefield with their sensors, fiber optics, and "thinking" weapons. They will take away what von Clausewitz called "friction." The big fear among many reformists — independent thinking officers and NCOs — is that this 'finger-tip' control of information will enable high-level commanders to control every action, thus stifling initiative. They feel this way because it is what they know; they and others experience similar control in today's Army bureaucracy.²

The reformists agree that, while advancing technology is good, we must practice maneuver warfare. We must use technology to enhance improved human factors, such as innovative doctrine and new unit organizations. They admit that technology will speed the observation-orientation-decision-action cycle (the OODA loop)³ in the hands of experienced leaders. Many reformists maintain that the U.S. Army should practice

German-style maneuver warfare, encompassing fancy terms like *Auftragstaktik* (mission tactics), *Schwerpunkt* (the point of energy or decisive action against an enemy), and *Commander's Intent* (what the commander deems decisive in form of avoiding enemy strengths and attacking his weaknesses).⁴

Most reformists fail to look beyond the intellectual ring associated with using these terms. They must study in depth the type of institution an army must have before it can even begin stating these terms in their correct cultural context. After examining the German military culture as the Germans wrote about it and practiced it daily, they will then understand why these practices cannot take place in our Army. The U.S. Army cannot exercise the type of warfare defined by the pre-World War II German Army because our Army does not possess a military culture that embraces the type of foundation needed to nurture the kinds of soldiers/leaders maneuver warfare calls for.⁵

The reformists state that the writers of 525-5 and Army 2010 could learn much by comparing their situation today with the dilemmas facing the Germans in late 1914 through 1917 and the subsequent development of the panzer division and doctrine for its employment from 1919 to 1939.⁶ In both cases, the prevailing offensive doctrine called for massive barrages preceding linear waves of infantry slogging forward to occupy what was destroyed by the artillery. These methodical sequential actions were controlled by senior officers making decisions far removed from the events taking place. Thus, by the time an actual decision was made and found its way back to the unit that was awaiting these orders, sometimes stalled in execution, events had drastically changed. When the unit finally went forward again with its now hours-old commander's orders, it did so with often disastrous results.⁷

In comparison, future brigade, division, corps, and theater commanders will have the means to gather up-to-date information regarding what is going on down at the platoon, and even crew level. There will be the ever-present temptation to control each aspect of the operation in the name of "synchronization." This dilemma, in itself, though mentally and physically opposite to what the Germans were facing in World War I, can have an even more devastating effect if our current cultural trends continue. Our military culture advocates the kind of environment similar to that of the French Army between 1914-1940. This culture does not nurture the type of independence needed when the IVIS or applique bridges with "higher" fail, as they will at inopportune times due to enemy action or mechanical wear and tear.

The Germans countered their dilemma by pushing tactical decision-making down to the lowest level throughout the ranks of their entire army, thus creating tactical flexibility. Ironically, this is the very same type of agility actually needed on the future high-tempo battlefield and called for by the writers of 525-5 and Army 2010. Tomorrow's forces will be far more dispersed, smaller, and more potent. The Germans' reaction was revolutionary in concept and only came about because

they possessed a military culture which allowed change. They dramatically reversed the then-current practices in military discipline and decision-making. They had already started the reversal under the reforms of Field Marshal Helmuth von Moltke during the German Wars of Unification with the introduction of *Auftragstaktik*. ¹²

These changes came about through the observations of *junior* officers of a totally new concept of warfare which had evolved on the Eastern front in Russia (the Brusilov Offensive in 1916), at Riga in the Baltic States (von Hutier's seizure of Riga in 1917), and in Italy (the Caporetto offensive in 1917). Called "Hutier" or "infiltration" tactics, the new combined arms operations overcame technology, the overabundance of men and supplies of the Allies, and antiquated over-control, factors that had eliminated battlefield mobility and operational envelopment.¹³

Our current culture, in contrast, stifles subordinate decision-making. This despite technology fieldings which allow units to disperse at heretofore incredible distances to avoid precision strikes and thus often physically separates the junior leaders from their controlling superiors. Like the French doctrine developed between World War I and II, our doctrine advocates the use of massive firepower, calling for a strictly controlled battlefield outlined by detailed graphics. For example, both the divisional and corps graphics in Desert Storm, and our emphasis on teaching checklists and lock-step procedures at our branch schools and combat training centers, confirm this fact. ¹⁴

Our peacetime military environment, which tacitly practices "zero-defects" based on our corporate "up-or-out" system, certainly reinforces the point. Officers are forced to compete with one another to continually get the right jobs and must possess courtier skills to get those right jobs to then get promoted.

Moreover, our personnel system stresses the importance of the individual, versus the institution. We have built our entire Army around an individual personnel system, versus a unit system.

These negative practices will result in defeat on tomorrow's battlefield. For example, imagine a subordinate suddenly faced with the need to act independently because his links to higher have been cut; he may not act because he has not acted autonomously in peacetime. ¹⁵ Transfer this individual example to an isolated combined arms task force or company team. The future unit possesses more firepower and mobility than we have ever seen before, power enough to change the tide of a battle or even a campaign. Instead, awaiting guidance and orders, its commander and subordinates suddenly grind to a halt instead of exploiting a fleeting opportunity presented by the enemy. ¹⁶

Recent rotations at the National Training Center confirm these observations with numerous examples of companies and battalions coming to a complete stop in the midst of an attack. Leaders of these units and higher have become more concerned with crossing the line of departure in the right formation than moving rapidly to exploit a perceived enemy weakness. When communications are lost with higher, units stop, or when a situation changes with the enemy gaining surprise, attacks stall. We have become a checklist Army, but officers are not to blame. This is what has been expected of them in their daily dealings within the bureaucracy, habits which easily transfer to how they operate in the field.¹⁷

In contrast to our technological approach at solving prospective tactical problems, the victories the Germans achieved in the Spring of 1918, during their *Peace Offensive*, were not

made possible by any secret weapon, but by an adoption of new combined arms tactics merged with unprecedented application of leadership and its inherent responsibilities. For the first time in World War I, the stalemate of positional warfare was broken. Their culture had been practicing the principles of *Commander's Intent, Schwerpunkt*, and *Auftragstaktik* as the foundation for combined arms operations for a quarter of a century prior to the First World War, so it was easy to decentralize even more.¹⁸

Before continuing this exploration of the of the two cultures further, we must define maneuver warfare and its three components: *Commander's Intent, Schwerpunkt*, and *Auftragstaktik*, to truly highlight the inability of our culture to employ these theories. While explaining each term, we must compare the way the Germans defined and practiced it to the way we attempt to define the terms in our attrition-oriented culture. The maneuver warfare army focuses on the enemy and his disruption. Instead of smashing and bludgeoning, it penetrates and infiltrates, goes around, gets behind, and isolates enemy units. If maneuver warfare is executed well, it can paralyze the enemy force, shattering its cohesion, and render it unable to keep up with rapidly unfolding events. The events that rapidly unfold are violent and deadly, inflicting desperation.¹⁹

Our Army has practiced maneuver warfare on occasion. In the Mexican War, Winfield Scott and a small army landed on the Mexican coast, and marched directly to the center of Mexican power, Mexico City, and captured it, ending the war. General Ulysses S. Grant was also a practitioner of maneuver warfare. He exemplified it during his campaigns against Fort Donelson, Tennessee and Vicksburg, Mississippi.²⁰

But overall, our Army must practice attrition warfare. The traditions of the individualistic and anti-militaristic attitudes of the past among our society will not allow the level of professionalism required to conduct maneuver-style warfare. The attrition form of warfare, linear and French in origin, which we employed as recently as the Gulf War, relies on fire and movement, interfacing tactics with massed supporting fires. The aim of this warfare is tying in flanks and adhering to detailed graphics, while centrally controlling every aspect of the operation to be "synchronized."²¹

This form of warfare also focuses inward on checklists and procedures, versus outwardly toward an enemy's weaknesses. Our training is focused on process, versus mission accomplishment. The same occurs in our dealings with the bureaucracy. In a bureaucracy, procedures, rules, and plans become more important than the desired outcome. By employing the bureaucratic organizational model, our culture ensures that someone is accountable to someone by the use of these measurable objective standards, thus violating the very autonomy needed to practice maneuver-style warfare. In turn, this is a very comfortable setting for the bureaucratic type to succeed. Attrition style, methodical battlefields are the kind technos and bureaucrats envision. Another important factor is that attrition warfare is easier for the public to understand when it is explained on television.²²

Several realistic factors influence our decision to adapt this simpler type of warfare. We have an inherent need to maintain close ties with the corporate side of the civilian world. This individualistic approach, enhanced by personnel policies that began, in 1946, with the results of the Doolittle Board, led to the Officer Personnel Act of 1947. That law established the primacy of the manager over the warrior. The trend continued in 1955, with the Officer Personnel Management Studies

(OPMS) and continued to the Defense Officer Personnel Act of 1980 (DOPMA), and advocated a business approach to the management and development of the officer corps (the "up-orout" system). These policies haven't favored the kind of officer who will take the time to study and understand the complexities of warfare to the level required for employing maneuver warfare. They have reinforced the corporate organization man or the modern equivalent to the courtier.²³

Economic reasons have also drawn us toward an attrition style of warfare. We possess and can produce enormous amounts of technology, arms, and munitions that make it easier for us to steamroll over our opponents. Technology allows us to fight "them" at a "safe" distance, leading the public to believe that wars can be fought with minimal casualties. This places extreme pressures on commanders to fight an enemy who is out of sight and mind, contrary to the risks of employing maneuver warfare, which mixes and closes with an enemy. We have come to rely, even wish, that "silver bullet" type weapons will save the day.²⁴

With these factors in mind, why change, ask the technos, "Our very recent track record speaks for itself." Also, a fire-power-intense doctrine is easier to teach and train to our volunteer army. Observing the linear approach to the Army's massive live-fire exercises at the NTC highlights this simplistic approach. Though maneuver warfare involves great rewards, it also takes great risks, risks that we are not willing to accept in an environment that promotes those who practice "risk aversion." ²⁵

With this larger cultural background in mind, let us explore maneuver warfare's first tenet, *Commander's Intent*. *Commander's Intent* is what keeps the maneuver warfare style of fighting from degenerating into a morass of disconnected little fights. Maneuver warfare is a style of fighting where a thousand independent minds are at work, instead of all waiting for the command of one centralized genius. ²⁶ Instead of telling his subordinates how and what to do, the commander uses his intent to give them the end result desired. It emphasizes the "why," usually focusing on an enemy weakness. *Commander's Intent* involves the only rule in maneuver warfare, the need for subordinates to know the commander's intent two levels above his own. ²⁷

The United States Army has presented several versions of *Commander's Intent* since General William DePuy's attempt to emulate the Germans in the mid-1970s. This iteration of FM 100-5 followed our experiences in Vietnam and also reflected our observations of the results of the '73 Arab-Israeli war. Most doctrinal manuals direct that commanders write their own intent, but they rarely do so due to a lack of practice at the art of war.²⁸

The present form, generated by the School of Advanced Military Studies or SAMS, is in three parts: purpose, method, and end state. First, just the organized manner speaks of its appeal to the technos' need for order. The "purpose" part is the commander repeating the mission statement or a facsimile of such. The "method," as most interpret it, is a small version of the scheme of maneuver, or how the operation is to be conducted. The "end state" is the closest component to the maneuver warfare version, but is usually stated in terms related inward, versus toward the strengths and weaknesses of the enemy.

Prior to this orderly version, *Commander's Intents* ranged from the prescribed schoolhouse length of five lines (no reason behind this decision) to as many pages as commanders felt like writing. It seemed to vary: the more egocentric the higher the

commander, the longer the intent, sometimes up to two pages (the Germans found the opposite true).²⁹

Closely related to the Commander's Intent, as a critical part of it, is the Schwerpunkt. The literal German translation is heavy point, but as applied in the German culture, and as our culture has failed to realize, there is no English-language equivalent. As the commander states his intent, he must also choose a Schwerpunkt. When the commander establishes his Schwerpunkt he determines the action that he believes will be decisive. The commander then assigns the Schwerpunkt to one of his units, and at that moment everyone else understands they must support the actions of the Schwerpunkt. The Schwerpunkt is always directed against an enemy weakness, where it is likely to succeed. If the original Schwerpunkt does not prove to be as successful as a supporting operation, the commander immediately shifts his Schwerpunkt to where success is occurring. It is decision that the commander seeks, and this likely involves risk. Schwerpunkt is about decision.³⁰

We have taken *Schwerpunkt* to mean "main effort." We have translated it in a physical sense. When it is lined up on the graphics, it is the unit that is apportioned slightly more resources; sometimes the only difference between the unit designated the main effort and other units is that the main unit receives the priority for calling for supporting fires! The commander may never get these fires because they are normally controlled at much higher levels. The "weighted effort" or "commander's priority" is the slang used for the main effort, and it does not have the philosophical meaning that *Schwerpunkt* holds with soldiers who practice maneuver warfare. Under *Schwerpunkt*, everyone understands that they must do their utmost to support the unit designated as such, while also understanding that it may switch to them if conditions favor change (called flexibility).³¹

The final maneuver warfare tenant is *Auftragstaktik*. The Prussian Army institutionalized mission tactics (*Auftragstaktik*) in 1870, the year they decisively defeated the French.³² *Auftragstaktik* implies decentralization, and it demands high initiative at the lowest level (as well as high levels of education and training). Even the individual rifleman is making independent decisions — deciding to bypass, deciding how to protect his buddy, finding the opportunity to sneak through enemy lines, all within the *Commander's Intent*, and with an explicit awareness of the *Schwerpunkt*. *High Tempo* is achieved in this way.³³

We have the hardest time relating *Auftragstaktik*, or Mission Tactics, to mission accomplishment. In our culture, it is defined in physical terms, such as assigning a specific point on the ground. Or subordinates are told what form of tactics they will choose in accomplishing their mission, "TF 3-10 AR will envelop the enemy," or "TF 3-10 AR will attack down this axis frontally." Our application of mission tactics leaves little to chance to the commanders of these powerful and mobile formations. With our process, there is a small window of error for someone to fail or make a mistake, with graphics resembling an electrical schematic.³⁴

Another way to present our confusion with mission tactics is our focus on the use of phone-book-thick "how-to" manuals and the focus on training formations. German manuals were short, well-written, and concise, leaving a lot to the imagination and innovation of their leaders. German storm units did not employ formations. There existed a mutual trust between each individual who employed the best method to support his fellow rifleman or squad leader, or tank and platoon leader.³⁵ In comparison, our individual rifleman's or tank's exact place and

specific reaction to a prescribed enemy action is the extent of mission tactics at their level.

The latter comment and trend is just as apparent as you advance to each higher tactical level. Our fictional TF 3-10 AR may assign a specific mission to each company/team, to include the route, axis (checkpoints and routes within), phase lines, and exact frontages that units will occupy in accomplishing its subordinate mission — all in the name of our translation of mission tactics. The only choice the company commander really has is the internal arrangement of his platoons and their vehicles (and even this may be limited with the use of target reference points directing exactly where to fire). Senior commanders will claim it is mission tactics! But, due to the short time leaders are in their positions, and due to our lack of unit cohesion, no other technique will suffice. If we left so much up to our subordinates, confusion and worse, fratricide, would result.³⁶

There are a few other terms which must be defined when comparing the two cultures. The deceptive terms are *Time* and *Trust*. Unfortunately, they have completely different meanings to both cultures.

Time is everything in war. That is why soldiers who practice maneuver warfare do not wait for orders under the *atmosphere* of the *commander's intent*. There is no time for a commander to receive perfect information about the enemy, think, decide, and act. In maneuver warfare, soldiers think, decide, and act. The maneuver warfare commander wants to act so rapidly that everything the enemy does is irrelevant by the time he does it, because by then, the commander's units are already doing something different. Simply defined, *time* is being a step ahead. A step ahead is everything. The enemy who can never catch up in *time* feels the futility of his efforts.³⁷

In our culture, time is divided in an organized manner. In some units, time equates to mission accomplishment. A small example equates to our every day control and management of soldiers. Instead of giving subordinate leaders and their soldiers missions to discharge, to prove themselves as worthy, to instill pride with the accomplishment of the mission relating to the end of the duty day, we hold accountability formations or make the leaders and soldiers waste time waiting for the end of the day. Holding small unit leaders to time lines, instead of mission accomplishment, also relates to the battlefield. These same leaders and soldiers will seize an objective and wait for orders, despite the opportunity to exploit their success. They will wait for orders partly because in peacetime, they had to request permission to leave early despite the successful completion of a mission. We like to relate our operations to rigid time schedules, versus in relation to the enemy. This translates to control and order in the bureaucratic world.33

Trust is the most important term in maneuver warfare, which depends on trust. If a tank company is part of a task force that is supporting the Schwerpunkt and suddenly reports success, but cannot get assistance out of the rest of his task force, trust now becomes the bond. Suddenly, based on numerous reports, the commander switches the Schwerpunkt to the successful company. Without waiting for orders, other companies move to support that company's success because it is now the Schwerpunkt. The other company commanders did not call to confirm with his task force commander, or question the successful company commander's request. There was trust, created in the atmosphere they operated in daily.³⁹

In our culture, the "up-or-out" system and the supporting, subjective personnel evaluation system undercuts *trust*. It has

created generations of officers who must compete for the right jobs to get promoted. Because officers are rated against their peers, and serve such short tours in a particular job, officers cannot afford to allow their subordinates to learn by making mistakes. Mistakes translate to less than perfect performance on highly inflated efficiency reports. We have still not learned to tell the difference between incompetence and mistakes. When subordinates are not allowed to learn through their mistakes, then they are not *bold* and *innovative*. Yet these latter traits will be needed on the future fluid battlefield.⁴⁰

Our personnel system has focused, in the past fifty years, on promoting and fostering the career development of the individual. It is not oriented on the development and sustainment of an Army that can fight and win wars. We have succeeded in producing several generations of officers who can claim superficial knowledge of a wide range of subjects, with mastery of none of them. This has evolved and flourished due to a large number of complex factors already touched upon and some beyond the scope of this article. As long as we retain our current approach, we must continue to rely on attrition warfare, supported by high tech wonder weapons to replace critical human factors, such as unit cohesion and a deep level of experience gained by exposure to a few jobs over time.

Today, in Army professional journals, articles often appear in which officers urge the Army to adapt the German way of war. These articles highlight the maneuver warfare terms of Commander's Intent, Schwerpunkt, and Auftragstakik. Several heated discussions have been ignited on whether the Army practices German concepts which generate high tempo. Technos have even written rebuttals to these pleas for change, specifically using the overall German defeat in World War I and II as a shallow excuse not to adapt maneuver warfare. This is the easiest way to justify keeping things the way they are, to refuse change. They fail to address the cultural reasons for not being able to adopt maneuver warfare. 41 Technos point to the doctrine spelled out in FM 100-5, Operations, dated 1993, as being an effective replacement for maneuver warfare. 42 They claim, coupled with our technological edge over the rest of the world, there is little doubt that we can transition to an advanced version of attrition warfare, information warfare. The most important question they should address concerns our real ability to change for good. Stop and think a minute after reading the section on leadership in 525-5 and Army 2010 as it applies to what they wish leaders would do on the battlefield. First ask yourself, "are these really facades for more centralized control as already exists in our daily culture? Then continue to ask if you feel they are sincere; "Does the United States Army possess and practice the culture to execute a form of warfare called for by 525-5 and Army 2010?" When one examines the focus on individualism and self promotion in today's military culture in order to survive, the answer is no.

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Notes

¹U.S. Department of the Army, *TRADOC Pamphlet 525-5: Force XXI Operations* (Headquarters, U.S. Army Training and Doctrine Command, Ft. Monroe, Va., U.S. Government Printing Office, August, 1994). This dramatic document reads like the maneuver warfare handbook. Throughout the pages, the authors at TRADOC call for an innovative, and agile officer, capable of independent, innovative thought. Also see *Army Vision 2010* (U.S. Army Training and Doctrine Command, January 1997).

²Tim Challans, LTC, U.S. Army, "Autonomy and Leadership" *Military Review*, (Fort Leavenworth, Kan.: U.S. Command and General Staff College, Jan-Feb 1996), downloaded from the Internet.

³John Boyd, Colonel, U.S. Air Force, "Patterns of Conflict," excerpts from proceedings of seminar on air antitank warfare (Columbus, Ohio: Battele Columbus Laboratories Tactical Technology Center, May 1978). Colonel Boyd was revolutionary in creating the OODA loop or Orient, Observe, Decide and Act theory, based on the ability of F-86 pilots in Korea to outfly the technologically superior MiG-17. Colonel Boyd effectively translates this experience to ground warfare.

⁴William Lind, *Maneuver Warfare Handbook*, (Boulder, Colorado: Westview Press, 1985), pp. 18-23. An abbreviated, yet precise interpretation of German tactical processes translated for U.S. military use. The author attended the Amphibious Warfare School or AWS at the height of the U.S. Marine Corps' adoption of Maneuver Warfare.

⁵Lind, p.14; Cincinnatus, *Self Destruction, The Disintegration and Decay of the United States Army During the Vietnam Era*, (New York: W.W. Norton & Company, 1981), pp.131-137. Well researched and written book about the real demise of the Army in Vietnam: its corporate and individualist officer personnel policies in promotion and development.

⁶James S. Corum, *The Roots of Blitzkrieg: Hans von Seeckt and German Military Reform,* (Lawrence, Kan.: University of Kansas Press, 1992); for a thorough analysis of the German development of new doctrine, and the organizations, technology, and personnel changes required to execute the doctrine.

⁷Timothy T. Lupfer, CPT, U.S. Army, *The Dynamics of Doctrine: The Changes in German Tactical Doctrine During the First World War*, (Fort Leavenworth, Kan.: Combat Studies Institute, U.S. Command and General Staff College, 1984), pp. 4-11. An in-depth look at the German transformation from attrition-oriented tactics to infiltration tactics; Lind, pp. 9-11.

⁸James E. Sikes, LTC, U.S. Army, "Battle Command and Beyond: Leading at the Speed of Change in the 21st Century," *Parameters*, (Carlisle Barracks, Pa.: U.S. Army War College, Spring, 1995), downloaded from the Internet; Challans, "Autonomy and Leadership."

⁹Robert A. Doughty, *The Seeds of Disaster*, (Hamden, Conn.: Archon, 1985), pp. 22-31, 39, 44-53. Frightening, yet subtle comparison between the French Army and our Army today.

¹⁰TRADOC Pamphlet, 525-5, pp. 3-1 - 3-4.

¹¹Michael Geyer, "German Strategy in the Age of Machine Warfare, 1914-1945," edited by Peter Paret in *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, (Princeton: Princeton University Press, 1986), pp. 539-542.

¹²Hajo Holborn, "The Prusso-German School: Moltke and the Rise of the General Staff" in *Modern Strategy*, p. 296.

¹³Lupfer, pp. 12-16, 34-45, 56-7.

¹⁴During one of many brigade-level After Action Reviews at the National Training Center, which the author attended, the senior observer controller used an example of how the graphics should look when doing a breaching operation and passing through the reserve. It was stated afterwards that the overlay resembled a schematic for an electrical board in a computer.

¹⁵Challans, "Autonomy and Leadership."

¹⁶LTC John D. Rosenberger, U.S. Army, "Coaching the Art of Battle Command," *Military Review*, (Fort Leavenworth, Kan.: U.S. Command and General Staff College, May-June, 1996), downloaded from the Internet.

¹⁷LTC John D. Rosenberger, "The Burden Our Soldiers Bear: Observations of a Senior Trainer (OC)," Unpublished Paper (Carlisle: U.S. Army War College, 1 March 1995). The paper provides insight into the conflict caused by the Army's current personnel policies reflected in the performance of battalion commanders at the NTC; Vandergriff personal notes.

¹⁸Lupfer, pp. 12-13; 71-73.

¹⁹Lind, p. 24.

²⁰Lind. p. 4-5.

²¹U.S. Army, FM 100-5 Operations (Fort Leavenworth, Kan.: U.S. Command and General Staff College, 1993), p. 2-8: "Synchronization is the arranging of activities in time and space to mass at the decisive point." There has been debate since the 1980s, when Mr. William Lind first published the Boyd Cycle or OODA Loop in the Marine Corps Gazette, over whether individual initiative is discouraged in order to achieve synchronization.

²²Doughty, pp. 34, 56-57, 67-73, 144.

²³Dr. Donald D. Chipman, "The Military Courtier and the Illusion of Competence," *Air University Review*, (Maxwell Air Force Base, Alabama: The Air Force Air University, 1986).

²⁴Harvey M. Sapolsky and Jeremy Shapiro, "Casualties, Technology, and America's Future Wars," *Parameters*, (Carlisle Barracks, Pa.: U.S. Army War College, Summer 1996), pp. 119-127. Excellent article talking about our true vulnerabilities in a war: our concerns and our society's obsession with even small numbers of casualties.

²⁵Mark R. Grandstaff, "Making the Military American: Advertising, Reform, and the Demise of an Anti-standing Military Tradition, 1945-55," *The Journal of Military History*, (Virginia: The George Marshall Foundation and The Virginia Military Institute, April 1996), pp. 299-324. The beginning of the Army's adaptation of the Corporate Up or Out system and the effort of liberal intellects to "civilianize" the Army.

²⁶CPT Robert Bateman, "Shedding More Light on the Man in the Dark," in *Army* (Alexandria, Va.: Association of the United States Army, April 1997), p. 6.

²⁷Lind, p. 13.

 28 DePuy was the force behind FM 100-5, Operations, dated 1976, and the 'Active Defense.'

²⁹James F. Dunnigan and Raymond Macedonia, American Reforms after Vietnam to the Gulf War and Beyond, (New York: William Morrow and Company Inc., 1993), pp. 114-122.

³⁰Lind, pp. 18-19.

³¹Dunnigan, pp. 120-121; Personal Notes of MAJ Donald E. Vandergriff. The author has extensive notes from participating in 52 rotations as an observer controller, OPFOR reconnaissance commander, BLUEFOR company commander, brigade staff and assistant to a heavy brigade commander; Lind, p. 109. Personal notes downloaded from rotation 97-07.

³²Holborn, p. 296; Lind, p. 91.

³³Lind, p. 13.

³⁴Ibid, p. 94; Vandergriff personal notes from rotation 96-03 & 97-07.

³⁵German Army, Chief of Staff of the Field Army, *Manual of Position Warfare for All Arms, Part 14 The Attack in Position Warfare*, (General Headquarters, January 1918).

³⁶Jeffery N. Stowe, CPT, U.S. Army, "The Immediate Attack and the Attack of Opportunity," in *ARMOR* (Fort Knox, Ky.: U.S. Army Armor Center, March-April 1994), pp. 45-46.

³⁷Lind, p. 14.

³⁸Ibid, pp. 96, 124-125.

³⁹Ibid, p. 80.

⁴⁰Grandstaff, pp. 313-314.

⁴¹Daniel J. Hughes, "Abuses of German Military History," *Military Review*, (Fort Leavenworth, Kan.: U.S. Command and General Staff College, December 1986), pp. 67-76. Outstanding article dealing with the misinterpretations of German tactical terms in order to promote their use in our Army.

⁴²U.S. Army Field Manual 100-5, Operations (Washington, D.C.: U.S. Government Printing Office, June 1993).

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