

by Maj. Wayne M. Hall

In the future, war will be strongly influenced by a continuous quest for certainty.1 Although flawless battlefield intelligence has always been the ideal, this goal has been unattainable due to limited collection assets, weather, terrain, deception and human error. In fact, Clausewitz labeled intelligence as a friction of war: "Many intelligence reports in war are contradictory, even more are false, and most are uncertain The difficulty of accurate recognition constitutes one of the most serious sources of friction in war by making things appear entirely different from what one had expected."2

The quest for certainty is motivated by several factors. First, the risk of failure caused by invalid information is high. Second, a fast paced, lethal and non-linear battlefield reinforces the requirement for accurate and timely information appropriate for making decisions. Third, modern technology in the form of sensors, computers and communications devices has enabled us to come closer than ever to the ideal. While AirLand Battle doctrine does not assume perfect knowledge, it assumes the presence of an intelligence system that can provide timely and accurate intelligence. This reliance, in turn, places a significant

amount of pressure on U.S. Army intelligence officers to provide critical input into the command and control process.

The quest for certainty on the modern battlefield will almost certainly fail. This assertion is aptly reinforced by the German World War II Gen. F.W. Mellenthin who stated, "Only in rare cases can an army obtain a complete picture of the enemy's situation before an attack is launched, even when reconnaissance has been detailed and thorough." This notion implies the need for a significant amount of flexibility to be built into plans; moreover, it implies a capabil-

ity to cope with unexpected events on the battlefield.

One of the most significant constraints that prevents "truth" from being known is that U.S. forces will be in a life and death duel against an intelligent, active foe who is attempting to protect his action from observation. When coupled with major variables such as chance, weather and terrain, an intelligent and active enemy presents a formidable obstacle in the quest for certainty.

Another constraint lies in the inherent frailty of the human mind. Generally, human beings want facts before they act. This is especially true when the stakes are high. However, predicating action on "facts" remains as fallacious today as it was 180 years ago when Clausewitz wrote. Due to our inclination to distort reality and the presence of a bright, active foe attempting to create false images in our mental constructs, the truth will never be known.

The quest for certainty will not abate with the advent of AirLand Battle doctrine. In fact, the quest will grow in intensity for three principal reasons. First, we are ultimate believers in the "magic" of technological solutions to difficult problems; therefore, our growth in technological capabilities will fuel a corresponding increase in the belief that we can know the present and the future. Second, the characteristics of AirLand Battle doctrine-maneuver, indirect approach, moral ascendency and a non-linear battlefield-imply the need to take great risks. Commanders will want to ensure that they are taking risks as opposed to gambles. Last, the doctrine implies a need to plan into the future. Yet, most of us are neither educated nor trained to deal with the future, let alone to approach the battlefield from a holistic, systems view which is a requisite for planning in the future.

Institutionally, we tend either to develop or buy bigger and more sophisticated machines to help see the future and to transform gambles into risks. After all, the United States has the most advanced technology in the world. Yet, one must ponder the possible effects of the endless technological expansion without a corresponding increase in intellectual development. That is, one must have a modicum of mental capability in order to

make anything meaningful out of what technology provides. Furthermore, technology must be focused to serve as a means to an end; technology is impotent unless it serves to further a higher purpose.

Army Intelligence is at an exciting time in its history. The Army's doctrine for executing combat operations to achieve national objectives depends on timely and accurate intelligence. Intelligence, to include technology and mental capability, provides the focus for the execution of the doctrine. Furthermore, intelligence provides assessments of what our opponents know and intend to do. Most advocates of AirLand Battle doctrine call out vigorously for understanding the principles of war and theoretical support of AirLand Battle doctrine to unleash its full potential. Thus, intel-

"The tenets of AirLand Battle doctrine . . . are dependent on timely, accurate intelligence and effective IEW operations."

ligence officers must interpret and understand the doctrine in order to gain insight into the variables of war. If intelligence officers fail to understand the meaning of AirLand Battle doctrine and its implications for Army intelligence, technological and functional knowledge will be meaningless.

The tenets of AirLand Battle doctrine (initiative, agility, synchronization and depth) are heavily dependent on timely, accurate intelligence and effective Intelligence and Electronic Warfare (IEW) operations. This relationship with IEW is applicable at all levels after allowing for differences in scope, timing, space, perspective, constraints and opponent objectives among the levels of war.

How does good intelligence contribute to the AirLand Battle tenet of initiative? Initiative should, in most cases, be guided by intelligence. Moreover, IEW operations can tell the commander when he has attained the initiative. All operations must be permeated with the offensive spirit inherent in AirLand Battle doctrine.

This spirit, then, must be harnessed by the commander's intent and scheme of maneuver. IEW operations cannot be reactive; they must be offensively oriented and active. In this regard, retired Gen. William DePuy states. "Detecting the mass and movement of the main force is interesting . . . and important. Constructing a winning battle concept of operations around that information is decisive."4 Intelligence should be used to create, develop or shape situations complementary to the friendly commander's intent and scheme of maneuver. When being focused by AirLand Battle doctrine, IEW operations must accomplish more than situation and target development;5 the intelligence officer must actively advise the commander on the effects of threat, terrain, weather, EW, deception and OPSEC upon various courses of action under consideration. The intelligence officer must teach commanders and operators how IEW can be used either to destroy or defeat enemy forces; IEW cannot be construed merely as a means of passive information gathering or protection.

IEW contributes to the tenet of initiative by helping to differentiate between concepts of gamble and risk. Taking independent action, for example, in the absence of accurate information could be considered a gamble, which could jeopardize the unit and the intent of the higher commander.

Initiative falls into the psychological domain of war; it is a mental construct influenced by both physical experience and mental images. Physical experience, for example, involves sudden, unexpected attacks on an important enemy center of gravity. These create mental images in the minds of enemy commanders and soldiers. The influence on the mental outlook of enemy commanders and soldiers links with seizing and retaining the initiative. IEW operations are the most important part of constructing mental images; they provide direction, sources for focusing attacks and indicants of effect.

Agility, a second key tenet of Air-Land Battle doctrine, has several IEW related functions or activities. First, we must know the enemy decision cycle. Second, the enemy's definition of combat power must be understood. Third, the enemy situation must be developed extensively and updated continuously to identify exploitable vulnerabilities. This knowledge and understanding will enable us to influence the enemy's decision cycle faster than he can affect ours. Fourth, the intelligence system must provide information to the friendly commander on the effectiveness of manipulating the enemy's decision cycle. Furthermore, the intelligence system must continue to identify vulnerabilities for possible attack or manipulation. Fifth, the intelligence officer has to understand the characteristics of the U.S. Army's combined arms team and how the synergistic effects of combat can affect, either physically or mentally, the enemy's decision cycle. Physical influence, for example, could be destruction of a command post; mental influence could be the manipulation of the enemy commander's thought processes in order to make him react rather than act.

Overall, intelligence assists in the effort to assure the commander's capability to **synchronize** combat power. The IEW activities directly related to synchronization include: electronic warfare, intelligence support to OPSEC and deception, intelligence support to C³CM, collection planning and dissemination, targeting and intelligence preparation of the battlefield (IPB). Substandard performances in any of these areas could result in a corresponding decrease in the effectiveness of synchronization.

To achieve the synchronization necessary to maximize our combined arms operations, enemy intelligence collection and efforts to generate combat power must be denied or manipulated to present false images. The IEW system identifies where the combined arms team can strike to achieve the greatest effect, and helps to identify windows of opportunity to inflict the greatest degree of damage on enemy forces. These "windows" must be correlated with the old maxim: march divided: strike united. That is, the points of enemy vulnerability and the time that the vulnerability exists must be relative to the time necessary to coalesce combined arms combat power and the protection of the combat power we are trying to synchronize.

AirLand Battle doctrine is predicated on disrupting, delaying or destroying enemy second echelon forces. Because Soviet theoretical underpinnings revolve around the notion of depth, and because AirLand Battle doctrine identifies the way we intend to fight the Soviets, the tenet of depth is particularly apropos for the U.S. Army.

While the Soviet use of battle array enechelon in Central Europe is somewhat contentious, we can assume they will keep forces in some form of echelon to provide commanders with operational flexibility. Thus, we must defeat their capability to strike deep into our operational rear with air, maneuver and fire support. This aspect of the doctrine is directed at an enemy who knows our intentions and will anticipate our efforts to separate his mass and defeat his fragmented forces.

We must be intimately familiar with the enemy's doctrine, weapons systems and organization to support the

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concept of depth. However, the enemy's intentions and thought processes will forecast his actions and his reactions. Enemy efforts to influence the friendly commander's decision cycle through rear area operations require anticipation. Conversely, friendly actions to control the enemy's use of depth and to maintain the enemy commander's decision cycle suggest that depth is a multi-faceted concept. That is, depth is relative to both enemy and friendly intentions. We must thwart their intentions to achieve operational victory through depth; moreover, we must attack deep to disrupt their tempo and to seize the initiative. IEW operations, if planned correctly, will provide the type of information needed to fight the enemy using the concept

To operate against echelons of divisions, armies, fronts and TVDs, friendly forces must be able to see deep and strike deep. During the 1950s and 1960s, efforts to see deep were inhibited by inadequate technology. But, due to advances in technology in the 1970s and 1980s and through access

to both joint and national collection assets, we now have the capability to see deep, albeit not with the desired assurance of quality or quantity. The importance of seeing deep is attested to by the current TRADOC commander, Gen. William R. Richardson who states: "The key . . . is the emergence of a wide range of surveillance and target acquisition sensors which can



move intelligence in near real time to the tactical commander for his use. These sensors . . . serve as the basis for attacking enemy follow-on forces with artillery, BAI, attack helicopters, irregular forces and the nonlethal weapons of jamming and deception."⁷

The seeing deep requirement imbedded in AirLand Battle doctrine has several important implications for the intelligence officer. These implications include:

- Knowing the characteristics of collection systems regarding continuous coverage assets.
- Appreciating the need for rapid, complete all-source analysis of collected information.
- Appreciating the criticality of rapid dissemination of pertinent information which expedites and improves decision making.
- Understanding the relationships between seeing deep, commander's intent and focused combat power of the combined arms team.
- Understanding the relationships between seeing deep, commander's intent, mass, maneuver, surprise, speed, secrecy, deception and OPSEC.

Deep attack is another important concept imbedded within the doctrine. Deep attack against the Soviets "complements the central concept of operations. It is neither a side show nor an optional activity without importance to the outcome of battle. It is an inseparable part of a unified plan of operation." Deep attack cannot be

conducted with any degree of reliability without accurate and timely intelligence. One author states, "The deep battle is based on a thorough IPB, the availability of timely intelligence from organic and higher level intelligence sources, the identification of high value targets, and the synchronization of organic and supporting attack means." Deep attack is predicated on an extensive relationship with intelligence that:

- Provides a thorough knowledge of the enemy including an assessment of his intentions.
- Enables the commander to see the battlefield in the dimensions espoused by AirLand Battle doctrine.
- Focuses intelligence collection and analysis efforts to support the commander's intent.
- Realizes and capitalizes on the relationship between deep attack and synchronization. The deep attack, whether maneuver, air or artillery, must be timed effectively, i.e., with some other portion of the commander's intent or at a critical point in the enemy's decision cycle.

The deep attack also figures prominently in the psychological domain of war. In this respect, the intelligence system's capability to see deep is necessary to understand the effect of deep attack on the enemy decision cycle, tempo and momentum. Both commanders and intelligence officers must realize the importance of seeing deep and deep attack in the interactive mental contrast with the opposing commander for control of

initiative, tempo and momentum. Additionally, the deep attack has a significant effect on the minds of enemy commanders and soldiers. Such an attack, if placed and timed correctly, will position a formidable force in his rear area.

Intelligence is also closely related to several combat imperatives articulated in FM 100-5, **Operations**. **Unity of effort** is a combat imperative that has several broad meanings. FM 100-5 states: "Unity of effort requires that the commander and his staff see the battlefield realistically. To do this they must continuously study their resources, the enemy and the terrain from a perspective that extends from the unit's rear boundary to the forward edge of its area of interest." 10

Commander's intent is of critical importance to this imperative; IEW operations are focused and, in fact, placed within the rubric of the commander's intent. Priority intelligence requirements (PIR), for example, must be directly identified and focused on by the commander's intent. Deception and force must be used to secure the force and create combat power effects. The commander's intent must be based on accurate and timely intelligence that is not distorted by the proclivity for human intellects to mirror image; otherwise, the intent could be based on false assumptions about an enemy imbued with "our" values.

Another imperative with implications for intelligence officers is the requirement to direct friendly strengths against enemy weaknesses. To accomplish this, one must first have an in-depth knowledge of the enemy

combat system at several echelons of command. Author Edward Luttwak aptly describes this as developing a "close understanding of the inner workings of the system that is to be disrupted . . . where an understanding of its command ethos and operational propensities will be necessary."11 Second, there is a requirement for action that will deny the enemy's efforts to locate and exploit friendly weaknesses. Third, as previously discussed, the intelligence officer must know the U.S. combat system's capabilities and methods of employing the combined arms team. This knowledge would enable the officer to realistically appraise our capability to strike at enemy vulnerabilities. Fourth, this imperative connotes the strong linkage between the commander's intent and his higher commander's intent; intelligence operations help provide information that serves to guide that

Another imperative of combat, sustaining the fight, has implications for intelligence. Though more subtle than those flowing from other imperatives, they are still important. These implications include the commander's ability to "deploy forces in adequate depth and arrange for timely and continuous combat and combat service support."12 These operations will be jeopardized by the enemy's accurate perception of the U.S. Army's dependence on logistics. In this respect, we can expect the enemy to seek and destroy these assets. Thus, we can surmise enemy commanders will rely heavily on intelligence operations for their plan to work. Furthermore, we can surmise that the enemy will have effective ground and aerial intelligence assets to find, disrupt and destroy our combat, combat support and combat service support assets. This subtle relationship between enemy intelligence operations, enemy intent and combat power is critical to the friendly commander's scheme of maneuver. Friendly intelligence should identify ways to neutralize and manipulate the threat by controlling the images the enemy commander receives and, consequently, shaping his plan.

In general, intelligence implications of this imperative have not been given attention commensurate with potential impact. Once a friendly commander's efforts to move his assets to sup-





port combat operations is denied due to the effects of enemy intelligence, the importance of this imperative will be obvious. The Army must therefore emphasize intelligence support to both OPSEC and deception and actively conduct IPB in rear areas. Also, we must actively plan to conduct rear intelligence collection operations to find, neutralize or manipulate enemy intelligence collection assets. This activity must be done particularly at the division and corps levels of operation, due to their mission to sustain and maintain the tactical fight and to develop and implement operational

Another combat imperative with particular relevance for intelligence is the use of terrain and weather. The implications of this imperative affect the capability to conduct successful combat operations. The importance of weather and terrain is attested to by the following statement in FM 100-5: "Weather and terrain have more impact on battle than any other physical factor, including weapons, equipment or supplies."13 Terrain can provide a distinct advantage; the resourceful and wise commander will study and use terrain to accomplish his intent. To help the commander use the terrain, the intelligence officer must conduct detailed terrain analysis which should occur during the IPB process. Keeping in mind the tenets of AirLand Battle doctrine, the intelligence officer advises the commander how to use terrain effectively to defeat enemy forces. If coupled with aggressiveness, maneuver and offensive spirit, intelligent use of the terrain to achieve the commander's intent will offer a significant advantage.

Weather is also a significant portion of the battlefield equation. Clausewitz labeled weather as a friction of war owing to its unpredictability. The wise commander anticipates the ephemeral nature of weather and attempts to use it, in conjunction with the terrain, to satisfy his intent. Once again, when contemplating weather we must assess its significance from both perspectives.

Protect the force is an ageless prerequisite to successful combat operations. While the word protection connotes many different meanings, e.g.,
from destruction, NBC attack or encirclement, one of the most important
aspects is protection from surprise.
Surprise is critically important because
it affects both the physical and psychological domains of war. Clausewitz discusses its importance and its
dual effect: "The universal desire for
relative numerical superiority is . . . to
take the enemy by surprise. This desire
is more or less basic to all operations,

for without it superiority at the decisive point is hardly conceivable. Surprise, therefore, becomes the means to gain superiority, but because of its psychological effect should also be considered as an independent element."¹⁴

Soviet military literature is replete with emphasis on achieving tactical and operational surprise; the concept fits nicely with their goal of a short, violent, high-tempo war in Central Europe. The two key ingredients in achieving surprise—secrecy and speed—¹⁵ are important aspects of Soviet operational concepts. In this context our efforts to protect the force and prevent Soviet surprise must include extensive reconnaissance, proactive thinking, knowledge of Soviet reconnaissance, intelligence collection and deception operations.

This combat imperative relates specifically to the principle of security. While this relationship is obvious, the interactive nature of protecting the force and the principle of surprise is more obscure. Figure one shows a dynamic interplay between our efforts to secure the force while achieving surprise. The enemy, however, is doing the same thing. The resultant dynamic of interaction is an area where the advantage will be achieved by either enemy or friendly forces. One side will better protect its forces by anticipating enemy efforts to achieve surprise and will take effective countermeasures. Concurrently, one side will better achieve surprise by anticipating enemy efforts to protect its forces and use those efforts, deception and OPSEC to achieve surprise.

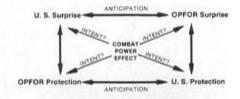


Figure 1

To protect the force, the intelligence officer must anticipate the enemy's plans to achieve surprise. Surprise is, after all, an operational principle for the Soviets. Creating the conditions for achieving surprise is relative to our capability to protect the force and to use enemy efforts to create conditions for achieving surprise. This

somewhat abstract rumination comprises the conceptual framework for using both deception and OPSEC in an active way to enable friendly forces to prevail over an intelligent and active foe.

The relationship between the commander's intent and IEW is strong under the aegis of AirLand Battle doctrine. The pressure for the intelligence officer to reduce uncertainty is stronger than ever because the commander's intent depends on the capability of the intelligence system to find the enemy and identify his intentions. The commander's intent shapes and drives intelligence collection, analysis and dissemination systems. The intelligence system is, therefore, a vital part of combat power; however, its effectiveness can only be discussed in relation to how it affects

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the commander's intent and his employment of the combined arms team.

The doctrine also suggests the need for IEW to become recognized as a member of the combined arms team. While it can only be categorized as non-lethal, IEW is essential to successful combined arms operations for two principal reasons. First, intelligence, as discussed earlier, is a must for successful operations on a high intensity battlefield. It provides the direction for the employment of combined arms power; therefore, combined arms theory cannot exclude intelligence. Second, jamming is an important aspect of combined arms power; that is, if used correctly, it can complement the other members of the combined arms team by delaying, disrupting and deceiving enemy forces. When used judiciously, it is an effective combat multiplier and offensive non-lethal weapon system.

Officers must study the theory that supports AirLand Battle doctrine. Otherwise, they will never understand

the way we intend to fight, how our discernment of it evolved, and how to use IEW operations effectively. Officers should learn theory through the study of military history and the works of theorists such as Clausewitz, Jomini and Sun Tzu. Additionally, intelligence officers have a particularly high intellectual burden to bear: They must know Soviet doctrinal theory. From such knowledge, intelligence officers must interpret and apply actual technologies to unleash the doctrine's full potential. Such an intellectual endeavor must occur both in the schools and in the field.

The nature of modern, high-intensity war-short, high tempo, maneuver oriented, lethal and surprise seekinghas increased the criticality of intelligence. However, the battlefield requires comprehensive knowledge of specific information and relationships that involve the battlefield as a whole. The intelligence officer, for example, must plan intelligence operations to support the commander's intent for deep, close and rear operations. While planning to protect exposed flanks, he must know how to achieve surprise and how it relates to enemy efforts to do the same.

Finally, the intelligence officer must understand U.S. organization, tactics, operations and equipment in order to engage in the high-level thinking that is essential to successful execution of AirLand Battle doctrine. The vulner-

abilities of an opponent are only relevant if U.S. forces have the capability to attack those vulnerabilities.

Without question, AirLand Battle doctrine cannot be implemented without timely and accurate intelligence. This relationship has been underscored by discussing the specific relationship of IEW to doctrinal tenets and combat imperatives.

The intelligence officer, like all officers, must understand the characteristics of modern war and the additional pressures it creates. We must be able to think and execute in such an environment, and we must understand the nature of war. Clearly, we must be able to out think our foe in order to fight outnumbered and win. Intelligence officers can provide much of the requisite intellectual power to out think antagonists.

Intelligence officers must know the threat intimately to be able to assist commanders to execute doctrine at both tactical and operational levels. We must comprehend the implications of understanding the threat in relation to combat imperatives and tenets of AirLand Battle doctrine.

Finally, the intelligence officer must have depth of knowledge in friendly and enemy collection and dissemination systems from the tactical through national levels. IEW operations, just like other activities on a hypothesized

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battlefield, directly relate to the activities of a lethal and capable opponent who is intent on our destruction. ★

Footnotes

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- 15. Ibid, p. 198.

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Key

Plaintext sequence keyword: WINSTON

Ciphertext sequence keyword: CHURCHILL

Repeating key in third sentence: OMDURMAN