The AirLand Battle: Understanding the concept, Communicating to win

by Maj. Gen. Clarence E. McKnight, Jr.

History has taught us that full utilization of combat power is necessary to achieve victory on the battlefield. The AirLand Battle Concept developed within the framework of the Army 86 studies provides a concept of deep attack and use of all available acquisition, targeting and weapons systems to win on the battlefield of the 1980's. The Signal soldier must first understand the meaning of that concept and, second, must address means of providing the communications needed to support the concept.

As the Signal Center commander, I am the tactical communications combat developer for the Army. Combat developments represents the process of analyzing communications requirements on future battlefields, developing new operational concepts, preparing requirements for new equipment and modernizing organizational structures for Table of Organization and Equipment (TOE) units. It is a world where 1983 is "now" and the year 2000 is but tomorrow. Combat developments are often dictated by the long lead planning needed to bring new ideas and new generations of technology to the forces in the field. Yet, looking to the future, I have provided a basic guidance to maintain a fundamental and basic understanding of the needs of the Army in the field and to have those needs drive combat developments. Further, I have reminded the developers of the need to temper technology with rational and reasoned application. In so doing, I find that while new concepts and doctrine may be forthcoming to meet future battlefield needs, these concepts will be based on some very tried and tested fundamental principles of Army communications. One such principle that shapes current thinking has been familiar to Signal officers for many years. Communications must be provided: with accuracy, with speed, with simplicity.

Although that appears rather straightforward, it's rather profound. These principles get at the heart of the need to achieve mobility, to support technology on the battlefield, but to avoid over-complexity. In essence, even while attempting to come to an understanding of how to apply the latest technologies of satellites and of data transmission, the basics of Signal communications apply.

In a similar manner, the Army community is re-examining concepts for combat in order to find the best means to meet the challenge of modern, well-equipped hostile forces that use Soviet-style operations and tactics. Such forces must be faced either against the Warsaw Pact in Central Europe or from the large aggregations of mechanized forces in the Middle East or the threat facing South Korea. The combat doctrine being developed for the 1980s, like the communications principles, is not new. This combat concept is based on the fundamental principles of war. It re-focuses on the reason for application of the combat forces to win and it merges that purpose with the emerging technologies of the modern battlefield to provide guidance for the 1980s and into the 1990s. The essentials can be found in General Donn A. Starry's "Extending the Battlefield" (*Military Review*, March 1981). Because of the importance of such thinking at this critical time in our history, I am reaching out to each reader to present this concept — The AirLand Battle — and to explain it first in terms of what it means to "how we fight" and second, what it means to the communicator.

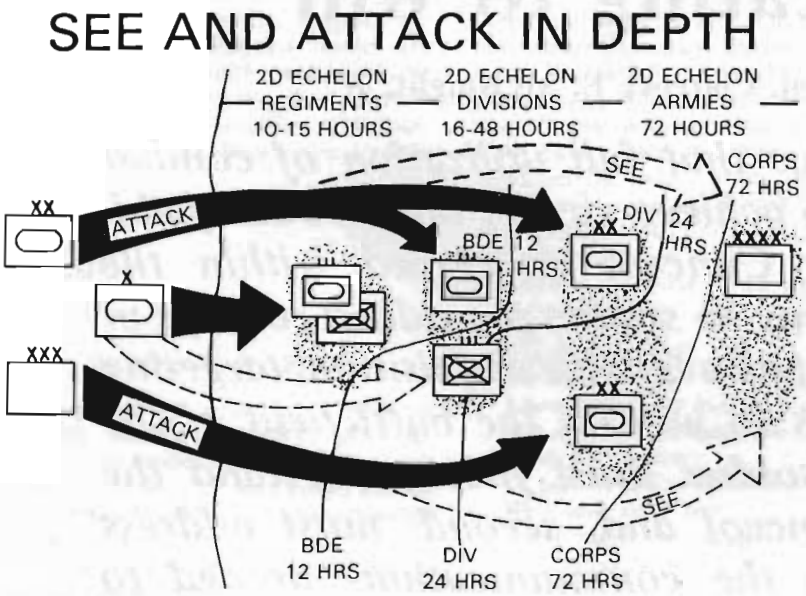

Figure 1.

THE CONCEPT — THE AIRLAND BATTLE

During the past three years, the Army has focused on the battlefield of the 1980s and the need to effectively apply combat power. Driving the effort was the realization that the purpose of military operations is not to avert defeat but rather to win the conflict. All elements contributing to combat power, including new technology, force modernization and total integration of the combat power of the Army with that of other services is necessary to achieve that goal. The AirLand Battle is the heart of the effort. First, there is renewed emphasis on the role of chemical, nuclear and electronic warfare, considering them not only as weapons against which we must defend and develop protection, but also as offensive weapons for our use to reinforce the prospect of winning. This leads to the idea of an "integrated battlefield" (combining conventional, chemical, nuclear and electronic warfare weapons). Second, there is a careful evaluation of the tactics of Warsaw Pact type forces and, in particular, the impact of the second echelon forces. For winning on the battlefield, the commander must be able to see deep and he must delay, disrupt and destroy second echelon forces to create opportunities for decisive maneuver. This "Deep Attack" principle identifies the "extended battlefield." Together, the integrated and extended battlefield became the AirLand Battle Concept. The potential enemy (to include all forces utilizing a Soviet style strategy) embraces two fundamental concepts:

The use of mass, momentum and continuous combat to collapse defense.

The institution of surprise to prevent the defense from completing defense preparations.

The use of these strategies allows the enemy to keep a significant portion of his force out of the first echelon combat with freedom to commit at the moment of his choice. The AirLand Battle Concept with its emphasis on action well beyond the first echelon will allow us to bring early offensive action against the enemy by land and by air to gain control of the battle on our terms. To accomplish this combat initiative, the US forces must have the following:

Sensor/surveillance systems capable of providing timely information to prevent surprise attack in peacetime and to provide targeting/surveillance information in wartime.

Delivery systems — dual capable (nuclear and conventional), with sufficient range, accuracy and lethality to deal with enemy follow-on echelons.

Command control sufficient to integrate intelligence and targeting information with the maneuver of the force.

The concept requires the defense force to see deep and begin early to strike, disrupt and delay follow-on echelons. The friendly commander then must move fast against the assault echelons and prevent them from reaching objectives. Finally, the defense must finish the first fight against the assault and follow-on echelons so as to go on the attack.

Figure 1 shows quite clearly the nature of the extended battlefield. The commanders at brigade, division and corps attack and fight elements within range of their weapons and at the same time look to the second echelons with all available sensor and intelligence resources. Weapons from other services and from higher echelons are applied to hostile second echelons to disrupt, delay and destroy. In keeping with the concept of the integrated battlefield, all weapon systems are prepared for employment and used to win.

The key to the success is the close integration and unity of the various combat forces involved in the AirLand Battle and the coordination of all phases of the battle. A battle scenario looking at those enemy forces who are 72 hours away from joining the close-in battle (Fig 2) would see the corps commander developing a well laid out plan for use of intelligence assets and available strike and acquisition means to be applied in deep interdiction against the available window for offensive action. He would initiate interdiction against high payoff targets, those whose loss can be expected to contribute to substantial degradation of an important battlefield function and will lead to achievement of the commander's goals.

The wide range of surveillance and target acquisition sensors and improved command, control and communications capabilities that are being introduced on the battlefield throughout the 1980s will give the commander the capability to execute the plan.

Between 72 and 24 hours, before the enemy echelon reaches the forward line of troops (FLOT),

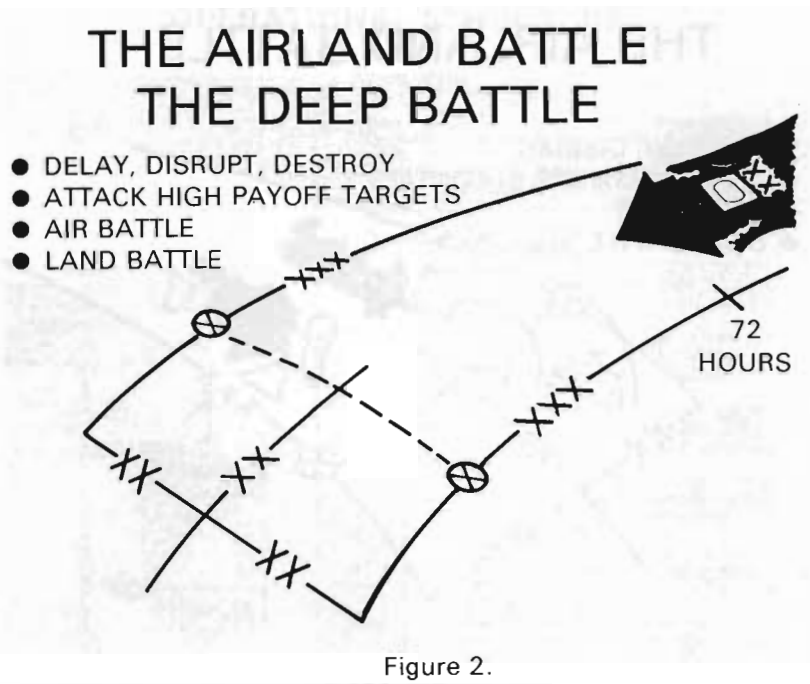

Figure 2.

options would have included use of nuclear strikes from land and air delivered weapons. The corps commander would have continued every effort to delay, disrupt and destroy the enemy to create opportunities for decisive maneuver. By 24 hours, the hostile force enters the division area (Fig 3). By now, the attacker has few movement alternatives. Real time target acquisition becomes critical. The commander must integrate the full spectrum of air and land weapons systems to continue the interdiction effort to disrupt, destroy and delay.

As the following echelons close to within 12 hours of the FLOT (Fig 4), they become the problem of the brigade commander. He is not only concerned with the delay and disruption of the follow-on echelon, but is also in control of the

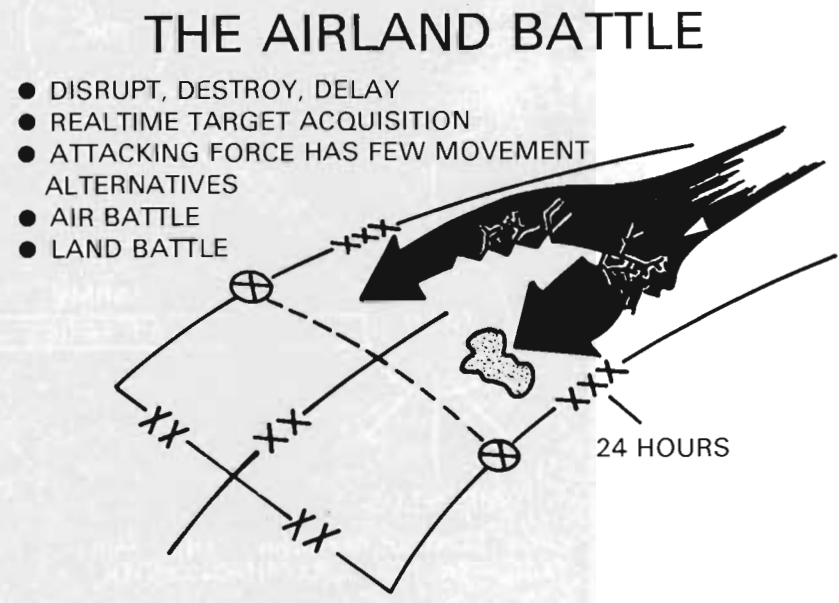

Figure 3.

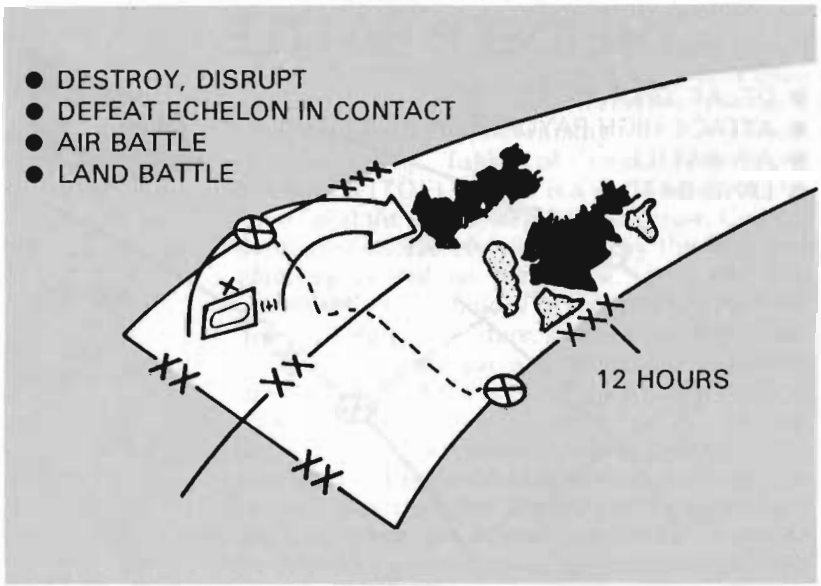

Figure 4.

FLOT. Here, combat is intense. Given the right target and if the enemy had previously used chemical weapons, our use of them could be integrated. Land aspect of the battle predominates. The efforts of deep interdiction pay the dividend at this point as the enemy assault forces are destroyed, freedom to maneuver is restored to the defender and initiative is captured from the enemy.

The effects of interdiction are:

The enemy is able to mount fewer regimented attacks.

Enemy first echelons are defeated earlier.

Friendly reserves are not needed so early.

Enemy penetrations are far less extensive.

Summarizing, the enemy's momentum can be altered by attacking high value second echelon targets, reducing enemy ability to mass and to build momentum. To do so, the commander must have a continuous flow of information from the commander for guidance to the sensors and weapons, from the sensors to target planners and from target planners to the delivery systems.

COMMUNICATIONS IMPACT

There will never be all everyone desires. Therefore, each signal commander must constantly work with G2/G3 cells and target cells to provide all we have in the priority they dictate.

The execution of the AirLand Battle Concept requires the skillful use of resources in intelligence. target acquisition and strike capability-assets beyond those organic to corps and divisions. This requires timely and responsive working relationships between the respective combat forces which emphasizes the need for a responsive communications system. The communications requirements will create some new challenges for communicators. For the present, many of the acquisition means and most of the attacking means will come from Air Forces. There will be increased needs to support coordination links between air and land operations elements and between air and land intelligence cells. This will impact corps and brigade planning and operations. Figure 5, for example, shows an excerpt from the Tactical Air Command/ TRADOC AirLand Forces Interface (ALFI)

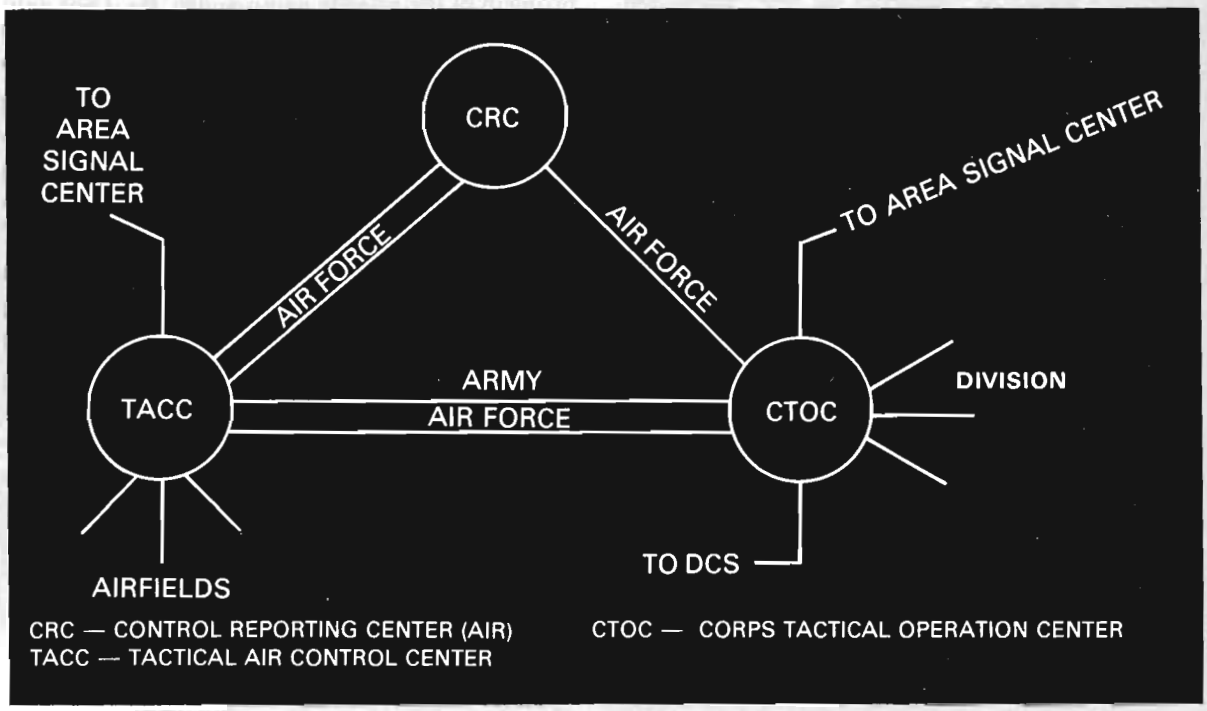

Figure 5.

doctrinal development that describes the interfaces required for tactical air and land force systems.

The circuits established over the multichannel systems take on a new criticality for the AirLand Battle. The maintenance of continuity of operations (CONOPS) during displacement or attack is vital.

There is a great deal of intelligence and targeting information available on the battlefield.

Figure 6 shows the intelligence and fire support systems that are to interface with the corps and division All Source Analysis System (ASAS). Interfaces requiring primary communications support from signal units are identified by hatched lines. It is essential that information from those systems is properly focused at the proper echelon. It will be a challenge to the tactical communicator to create the links needed to pass that information in a timely manner. Further, at each echelon, there will be a strong need to distribute targeting information and operational requirements between intelligence, fire support and operations sections. Commanders will be utilizing real and near real time sensors and will be linking target identification and location to strikes by highly mobile and responsive strike forces. This concentration on short reaction will certainly create a severe test of communications. Communications requirements will be dynamic, requiring close coordination between signal staffs and operations planners.

In looking at these requirements for communications, it is clear that the tactical communications will have to consider the total flow of information from source to consumer. For intelligence, as an example, this can mean communications support for information generated from national systems flowing through corps to the division and in some cases to the brigade. This will require close coordination and cooperation between signal units at corps and division and with signal elements organic to intelligence, maneuver and fire support units. Signal personnel at all echelons from battalion to corps must respond to the need to understand and participate in the successful conduct of the AirLand Battle Concept. In many cases, this will call for aggressive action to maintain communications continuity and to rapidly establish new communications links.

User to user links must be identified and continuity of communications maintained even as command posts move and even if primary signal communications systems are disrupted.

SUMMARY

I stated at the beginning of the article that Combat Developments is working on some changes on the battlefield. Many of the changes in doctrine, TOE and equipment needed to support the extended battlefield are incorporated in the Army 86 Concept. Organizations defined in Division 86 and Corps 86 are designed to support the AirLand

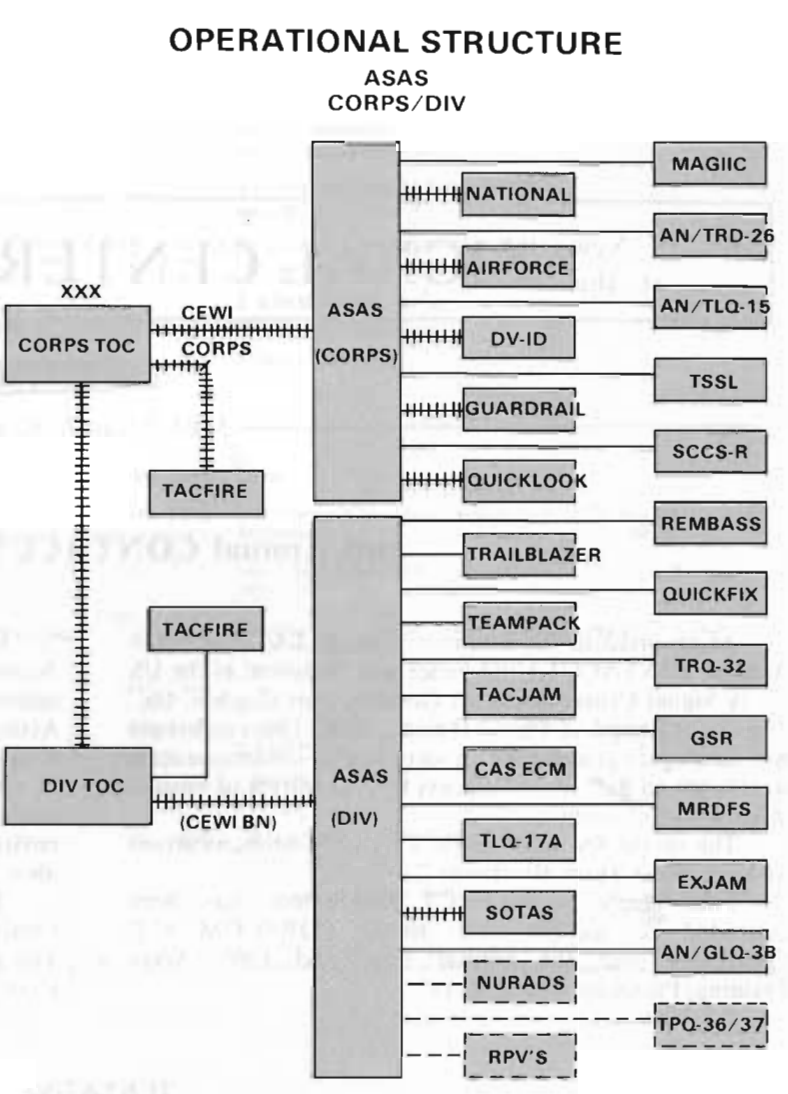

Figure 6.

Battle. You will begin to see these changes addressed in the classrooms of the Signal Center. You will see them in future articles of THE ARMY COMMUNICATOR, in revisions to doctrine in FM 11-50 and FM 11-92 and in new TOE structure. But that does take time. In the meantime, the basic principles of the integrated and extended battlefield can be put into effect and utilized now. It is time to field and learn to use this concept on the ground. Army leadership is moving to do exactly that with cooperation between TRADOC and the major Army Commands. Signal officers must be ready to support their commanders in planning communications in the support of interdiction for wartime and to support field training as the Army trains in the application of the AirLand Battle Concept.

Maj. Gen. McKnight has held numerous positions and has won numerous awards during his distinguished 29 year career. A 1952 West Point graduate, McKnight is the commander of the US Army Signal Center, Ft. Gordon, Ga.