

OFFICE OF THE COMMANDING GENERAL



3/8/90
1 March 1990

MEMO TO: TRADOC Commanders and Key Staff Officers

SUBJECT: ALB-F: An Evolving Concept

1. General Foss wrote the attached paper to provide his current thinking reference ALB-F. You may reproduce/disseminate it as you wish.
2. The CG has many views which go much deeper than those stated in this paper, but it is a good beginning/introduction/chapter 1.

Attachment
ALB-F: An Evolving
Concept


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Executive Officer

AIRLAND BATTLE-FUTURE: AN EVOLVING CONCEPT

The Army must respond to trends that cause change and must harness new capabilities that enable change. This response requires revision of warfighting concepts when appropriate. AirLand Battle has served the Army for the past decade and its tenets will carry the Army into the 21st century. However, as we examine current and projected trends, certain conclusions are reached that appear to be worthy for development of a new concept for future warfare. This paper describes that evolving concept.

Dealing with Change

We are in a period of great change -- coming from many directions and of many dimensions. The critical challenge for the Army is how to deal with this change.

TRADOC has to look into the future, assess these changes, develop a warfighting concept, and then determine wartime needs and structure. We can then work our way back to the present.

Trends

As we look to the future, analysis of the trends helps us to make our way into the future without getting bogged down in day-to-day reaction to change.

Causes of Change

Our National Military Strategy consists of: deterrence through strength; forward defense, flexible response; coalition warfare; and regional contingencies. This strategy has been consistent for many years and will very probably remain consistent into the next decade, but we expect a shift of emphasis and importance to a greater or lesser extent in components of the strategy. For example, Forward Defense will remain a tenant but certainly the number of forward deployed forces will be greatly reduced.

The probability of global war/major conventional war is low, but the probability of regional conflict is high. Some mid-intensity conflict could occur but conflict will most likely occur in low-intensity environments. The spread of challenges in low-intensity conflict is broadening and taking on more dimensions.

The number of forces world-wide is generally on a downward trend. Demographics show that there are less military-age personnel available in the U.S. and in Western Europe. The size of forces in some nations is also being reduced because of the cost of maintaining modern armies. Arms control negotiations appear headed for early success which will eliminate the great asymmetries that exist in conventional arms between the Alliances. These factors will result in a much lower density of forces on the battlefield.

Harnessing New Capabilities

Technological advances will enable conceptual change. Improvements in technology will provide much greater fidelity of intelligence and target acquisition sensors. Weapons systems will be more lethal and accurate at much greater ranges. Concurrently, the complexity and cost of systems will rise. Increased cost will result in fewer numbers of systems entering inventories.

Conclusions of Trends in the Mid-90's

There are three principal conclusions which can be drawn from these trends.

Non-Linear Warfare

First, clearly we are headed into another era of non-linear warfare. Arms control agreements, lower demographics, and the rising costs of modern armies will reduce the density of forces on the battlefield. Even on the densest battlefield, concentration of forces necessary to reach an operational objective would leave great gaps between forces and create a non-linear battlefield.

Knowing Where The Enemy Is

Second, we are entering an era where we can know where the enemy is and where he is going almost all of the time based upon improvements in intelligence sensor and processing technology. This is a near revolutionary conclusion.

Long Range Lethality

Third, we are at a point where improvements in weapons system technology, coupled to improvements in target acquisition capabilities, will give us the capacity to engage enemy forces at long range (in excess of 100km), with very accurate and very lethal weapons.

Evolving Ideas

These conclusions are of sufficient change to require us to think about fighting in a different manner, because we will be able to do things that we cannot do now. These include:

Using sensors rather than forces to locate, track, and acquire the enemy.

Attacking enemy forces at long range with air or surface assets. At times, the enemy also may be engaged with maneuver units, in combination with whatever fires are required to defeat him. Long range engagement capabilities will extend the battle area to 100km or more.

Since fewer forces will be available they should not be positioned along a FEBA where they can be targeted and fixed. Available forces must be dispersed back from such a line and then when required, quickly mass and move forward, based upon accurate intelligence information, to the desired battle area in sufficient strength. We can avoid a grinding attrition battle by grabbing the initiative and forcing the pace of action through long range fires or with maneuver and supporting fires. The forces to be engaged and employed will be quickly task organized for the battle at hand.

These ideas indicate we can have forces that can: be dispersed; mass and move quickly; fight short, intense, highly synchronized battles; redisperse; and reconstitute.

Force Implications

We have considered some changes which are necessary in order to implement these ideas. This work is still evolving and no conclusive answers are available, but these are some of the points that are being addressed:

We must make our maneuver forces more agile. We must design agility into the maneuver force. Those forces must be able to move rapidly to build up combat power quickly.

A strong, simple concept of command must be developed to enable rapid decisionmaking and issuance of orders. Maneuver commanders must have the freedom of action to use their initiative on the non-linear battlefield. Yet, when required we must be able to closely synchronize a battle. A reliable, mobile communications system must support the command and control system.

The requirement to rapidly tailor forces for diverse missions across the operational continuum demands that there be enough of the right mix of maneuver, combat support, and

combat service support forces for the battle. We are looking at ways to improve our ability to tailor these forces.

Investing in the Future

The Army must invest in the right technology in order to have the systems necessary for ALB-F. Investment should concentrate on the right mix of reliable, accurate intelligence and target acquisition systems and reconnaissance capabilities; command and control systems; highly lethal long range fire capabilities; and agile, lethal close combat maneuver systems.

Revising Organizations

There appear to be changes necessary to revise organizations to implement the ALB-F concept. The Corps will continue to be the centerpiece of the Army structure and will integrate Combat, Combat Support and Combat Service Support. The Corps will find the enemy at long ranges through aggressive use of a tiered surveillance and reconnaissance system (national, theater, Corps, division level) and respond by engaging with long range

fires. The Corps will task organize fire support and air assets to the division and its maneuver element for the maneuver fight. Some of the combat support and combat service support currently placed in the Division should be moved to the Corps to provide the Corps greater flexibility in responding to the enemy.

The Division should focus on control and synchronization, and will be "unweighted" for logistics to enable such a focus. "Unweighting" is the means for transferring most logistics and combat service support functions and overhead back to Corps or forward to brigade so that the Division will have the physical agility needed to move as well as control and synchronize the battle. A reconnaissance capability is necessary to link the sensor information about the enemy to verify the positioning of the friendly maneuver force.

The combined arms brigade will be the maneuver element. The brigade will focus on fighting. We are examining many different ideas on the composition of a combined arms brigade, and the command relationships necessary to allow the brigade to move rapidly and be effective.

In simplifying logistics we are concentrating logistics capabilities at the Corps Support Command and the Forward Support Battalion to better support the battle. The Division Support Command will synchronize logistics support between the COSCOM and the forward brigade. Automation and communications technology must be used to replace redundancy. The COSCOM will task organize to support the Corps base and committed divisions.

Summary

ALB-F work is conceptual. It applies to High, Mid and Low Intensity battlefields. Early efforts are promising but we need more analysis and assessment. We know we must have a future Armor which is lethal and agile but we must also have a balance and be better at task organization. We must have a better reconnaissance capability to link intelligence sensors and maneuver units. We need to find a better yet less costly way to do our logistical support.

The concept is flexible and appears to fit across the operational continuum, but we have not yet wrung out all of the implications. We are thinking differently about how we might fight, but our concept work is not exclusive of other notions. For example, non-linearity does not exclude linearity. We believe that a Corps organized for the

challenges and opportunities of non-linear warfare will be able to fight a non-linear battle and, if required, a linear battle, whereas a Corps organized for linear warfare, such as the current ones are, will have much more difficulty fighting a non-linear battle.

We are certain that the design requirements of a future Army (1995 and beyond) must start now so that we will have a view and guiding light of our future requirements. During this period of change we can then shape the units of the Army to meet our future force, as well as providing a focus to our new equipment needs. The greatest mistake we could make is to take our Army of the 70's and 80's into the 21st century.

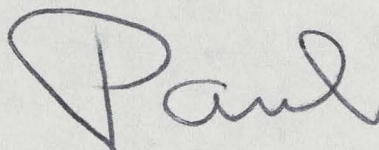
THE SCIENTIFIC ADVISOR
U.S. ARMY TRAINING AND DOCTRINE COMMAND

12 Jul 90

John,

Attached are 2 articles describing GEN Foss' thinking on AirLand Battle-Future, nonlinear warfare. I am excited by this, and believe it will become Army doctrine in a few years. Also attached is an article giving GEN Foss' Command and Control philosophy.

Thanks for the latest version of your "book." I recommend you publish it now, and add additional ideas in the 2nd Edition.

A handwritten signature in dark ink, appearing to read "Paul". The signature is stylized with a large, looped 'P' and a cursive 'aul'.

Paul J. Berenson



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY

HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
OFFICE OF THE COMMANDING GENERAL
FORT MONROE, VIRGINIA 23651-5000

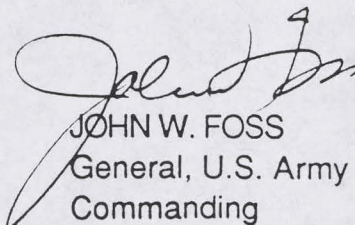
202 5120
May 1990

ATCG-P

In May 1990, General Sir Peter Inge, Commander, Northern Army Group and Commander-in-Chief, British Army of the Rhine and I participated in the Kermit Roosevelt Lecture Series. I presented the enclosed lecture to British faculty and students of the Royal College of Defence Studies, Joint Services Defence College, Army Staff College at Camberley, Royal Military Academy at Sandhurst, and the Royal Military College of Science at Shrivenham. Concurrently, General Inge spoke to American officers and cadets at the U.S. Military Academy, Armed Forces Staff College, Command and General Staff College, Army War College, and National Defense University.

This lecture series was established in 1947 to foster a closer relationship and better understanding between the Armies of the United States and the United Kingdom. The series bears the name of a remarkable man, one whose noble ideals and commitment to the defense of freedom led him to great service and great sacrifice. Son of President Theodore Roosevelt, Kermit saw action with the British and U.S. Armies in both the First and Second World Wars. He gave his life in the defense of our nation. I consider it a professional as well as personal honor to have been selected to lecture in the name of Kermit Roosevelt.

I chose as my theme for the lectures "Building a Capable Army: Today and Tomorrow." Three modules comprise the lectures: recent military operations in Panama; Combat Training Centers; and the future of the Army. Those modules serve to illustrate the Army's current capabilities and how we train to meet a wide range of missions, and provide a conceptual framework for how the U.S. Army will face the uncertain, turbulent times ahead. The British and U.S. Armies are closely linked; we share a similar world view, execute similar regional responsibilities with a similar mix of forces, and are both professional volunteer forces. This lecture series builds upon those close ties and fulfills its original intent by providing an exchange of ideas as we execute our responsibility to provide for our common defense, today and tomorrow.


JOHN W. FOSS
General, U.S. Army
Commanding