

20 July 1985
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Dear Huba

Thank you for sending me the draft of the latest version of 100-5. I am writing directly to you as the chief architect of the doctrine embodied in 100-5. Please make a few copies of this letter and send one to each of the following: Gens Richardson, Vuono, Mahaffey and Thurman.

You and the many others involved have produced a sound and much needed operational doctrine for the Army. You and the small inner band such as Sinnreich and Holder will be long remembered and I'm sure amply rewarded for your splendid work. But the greatest reward for those who work on fighting doctrine will come in the form of future successful operations by the U.S. Army.

I would be out of character if I were not to comment on your draft.

In your "memorandum for reviewers" you make some points which need to be made to the whole Army. I hope the High Command will find a way to do that. As you say in that memorandum some of the pendulums were (inevitably) pushed too far. It is in the nature of our Army to do that. The sheer vigor and exuberance of the officer Corps makes it vulnerable to over-doing whatever lies at hand. It is not only prudent but possible to be "for" maneuver without being "against" firepower. This is a pendulum that needs to be pushed back and promptly. It is possible to be "for" the offense without being "against" the defense. Along this line I must say that I believe you have the same problem with CONTROL. Your draft pushes the case too hard against control. I understand the motive - over-control is bad - it stifles initiative. But control is not bad it is the very tool which brings cohesion to all tactical and operational ventures. Oh yes, I know that there is another tool - the commanders concept (his intent) but control is a user friendly function which lies at the heart of our business. We weaken the concept of control at our peril. Consider:

- Control is the tool we use to synchronize the various combat functions on behalf of the commanders concept
- Control is the tool by which the functional commanders comply with the concept
 - boundaries and objectives control maneuver
 - Tactical and technical fire direction control Firepower and Fire Support
 - Rules of Engagement, and air space management geometry controls air defense
 - etc etc.

Handwritten. The Maxwell R. Thurman Papers. Box: VCSA, Incoming Correspondence A-J. Folder: Incoming Correspondence "C," 1933-1935. U.S. Army Military History Institute, Carlisle Barracks, PA.

- Control and control measures increase as we proceed down from the operational levels to the tactical levels. Synchronization is primarily a tactical function. To the extent that the Corps own and operates units and assets which must be synchronized with divisional operations to that same extent, one could say that the Corps is a tactical echelon.
- Most of the working Army is at the lower Tactical (and technical) echelons.
- Yes - we are all against over-control. We have here the unavoidable problem of good judgement and balance. Human endeavors and pendulums are more comfortable and effective when they operate close to the center.
- The term "independent" operations is frequently used in the discussion on control. I would suggest that is the wrong idea and the wrong word. Below the theatre commander or the commander of a raid or special operation few commanders are "independent" nor should they be. By putting judicious limits on the degrees of control we do not create "independent" commanders. They are instead very much constrained on where they go and what they do - constrained by the overriding intent and concept of their next higher commander. The freedom they need is the freedom of method - the how but not the what. The reason I dwell on this point is that it reminds me of the oft mentioned "Islands of combat" in early doctrinal concepts. These "islands" can be part of a successful operation if they take place at our initiative within our concept and thus when taken together are mutually interactive and supporting. But "islands of combat" which occur within the framework of the enemy's concept are merely symptoms of disaster. Again it is a matter of cohesion which requires effective control.

There are two other subjects which I only mention for future consideration. Both are so fundamental as to be inappropriate for the current version of 100-5. They may be inappropriate for any version but they bother me by their absence in our doctrinal literature.

- The first is the impact on operations and tactics of the increasingly vertical integration (read centralization if you will) of certain critical battlefield functions viz tactical air support, air defense, Intelligence/EW - Maintenance & Supply - and even firesupport for Deep Attack, SEAD and counter C³. If any of these vertical systems break down the result could be catastrophic. For example if a deep maneuvering Army brigade (or even division) outruns its communications links and the vertical integration of the functional systems is broken then the commander may not receive (will surely not receive) critical timely intelligence, air defense, Fire Support - Air Support - SEAD - EW - etc etc. Where does this appear in our doctrine? Where should it appear?
- The last subject is the impact of weapons on tactics and operations. 100-5 is weapons-free. Consider the Air Force. Air Force doctrine is an articulation of the central control of flying machines for the execution of close support, interdiction, counter air and mobility support. No airplanes! - no doctrine! In our case no JSTARS - no JTACMS - or no MLRS - no

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deep attack by fire etc. Does this enormous impact of technology on our organization and tactics - even our operations - have no place in our doctrine?

Thank you for giving me the opportunity to comment.

respectfully

Bill DePuy

'Tribute to the Men Who Fight'

The Rise and Fall of an American Army. Capt. Shelby Stanton. Presidio Press, 31 Pamaron Way, Novato, Calif. 94947. 448 pages; index; bibliography; maps; photographs; \$22.50.

By Gen. William E. DePuy
U.S. Army, retired

The title of this excellent book is somewhat misleading. Capt. Stanton, a former paratrooper and Green Beret and an emerging historian of eminence, has written by far the best book yet published about U.S. soldiers and Marines in combat in Vietnam.

The larger political and operational issues are woven around his description of 82 specific and separate operations as a parallel but secondary theme. Central to that theme, however, is the transformation of the actual war on the ground from the level of counterinsurgency to the clash of great national armies as both North Vietnam and the United States, respectively, massively reinforced the Vietcong and the government of South Vietnam.

His word pictures of the violent encounters of that war are clear, evocative and authentic. Although framed in their operational context, the battles are described in terms of the soldiers who fought them. Those men will recognize the battles in all their sadness and terror, as well as in the overpowering feelings of elation and triumph which crown victorious engagements.

Capt. Stanton greatly admires the style and aggressiveness of certain elite units. He bluntly notes, however, the marginal performance of others which were thrown together too quickly and were indifferently led.

Without fully developing the issue, Capt. Stanton nonetheless explains the operational objectives established in 1966, which were all classically related to the counterinsurgency effort and conspicuously ignored the implications of the major deployment to the south of the North Vietnamese army.

For example, the mid-1966 goals were attrition of the Vietcong and the North Vietnamese army equal to the replacement capability, elimination of base areas, opening of roads, securing the population, pacifying priority areas, and defending bases, cities and food production.

The attainment of the counterinsurgency objectives was, of course, entirely contingent on the defeat of the enemy's main forces. Couched as it was in terms of attrition and devoid of any real chances of success, this futile application of force lay at the heart of the Vietnam tragedy and the squandering of the U.S. Army.

Against this background, the author traces the growing frustration of the troops and the Saigon command as the North Vietnamese army and Vietcong main forces made increasing use of the cross-border sanctuaries to meter their losses and stay in the game. Capt. Stanton notes the decline in effectiveness of the Army as it was consumed by the longest of all American wars. But in doing so, he is careful to note the continuing willingness of the soldiers and Marines to fight as long as they were well led.

From *Army* 35, no. 12 (December 1985): 100.

This book is, at bottom, a tribute to the men who fight at the platoon, company and battalion levels. It is not a tribute to the high command in terms of operational wisdom, nor to the overall management of U.S. military resources. Capt. Stanton's final paragraph conveys his net assessment.

The United States Soldiers and Marines in Vietnam fought through some of the most difficult terrain in the world and won some of the toughest encounters in American military history. However, they fought without benefit of the country's larger military machine programmed for their support in case of war. The Reserves and National Guard were notably absent in the Vietnam conflict. The magnificent courage and fighting spirit of the thousands of riflemen, aircraft and armor crewmen, cannoneers, engineers, signalmen and service personnel could not overcome the fatal handicaps of faulty campaign strategy, incomplete wartime preparation, and the tardy superficial attempts at Vietnamization. An entire American Army was sacrificed on the battlefield of Vietnam. When the war was finally over, the United States military had to build a new volunteer Army from the smallest shreds of its tattered remnants.

We must hear more from this young and very promising military writer and historian.

Soviet War Ways: Sizing Up a Potential Foe

Soviet Airland Battle Tactics. Lt. Col. William P. Baxter, U.S. Army retired. Presidio Press, 31 Pamaron Way, Novato, Calif. 94947. 304 pages; illustrations; notes; index; \$18.95.

By Gen. William E. DePuy
U.S. Army retired

This is a most important book to military professionals of all ranks. Col. Baxter carefully, clearly and perceptively lays out the framework of Soviet military thought. He does not presume to teach us to think like Russians, but rather to teach us how they think about the same problems of modern military science with which the West is also struggling. Although there are similarities, it is the differences which stand out.

If war should occur between the United States and the USSR, the respective military leaders and their highly professional and high-performance forces will go at one another in quite different ways. Which system will best withstand the passage of arms remains for the future to reveal.

The author, wisely, does not pass judgment on this ultimate question, nor does he plunge directly into such contemporary issues as echelonment and deep attack, broad front versus narrow breakthrough attacks or the likelihood of either a chemical or a nuclear onslaught. His technique is to lead us through the hierarchy of laws, principles, priorities and interdependencies of Soviet military science and their basic philosophy of war:

It is sufficient to understand that these laws and principles . . . are expressions of the Soviet perceptions of the fundamental factors that decide the course and outcome of war. They are . . . imbedded in all of the branches of Soviet military science and in the logic of the Soviet military mind. Understanding their content and meaning is fundamental to understanding Soviet military theory and practice.

This is heavy stuff, but it is undoubtedly correct and indisputably important.

Starting with the strategic views of the communist party on war—when, where and why—he proceeds down through military science to military art at the operational and tactical levels. It is at these levels—the theory and practice of engaging in combat—that the differences in approach become vivid.

In the Army today, there is great emphasis on operational art—the bridge between strategy and tactics. Important as this may be, the Soviets plainly and simply assign this duty as a normal “function of command” above division level. It is above division where flexibility appears in the Soviet system, and conversely at division and below where it is conspicuous by its absence.

With this as a starting point, the author zeroes in on what would seem to be the critical differences.

The U.S. Army stakes its success on the flexibility and initiative of its individual leaders and soldiers.

Colonel General Biryukov makes the statement that although qualitative factors such as morale and individual bravery and the capabilities of individual weapons can be significant to the outcome of a single

battle, in the end, 'the law breaks its way through a heap of accidents.' He holds that while individuals may defy the odds in single instances, the weight of the laws of war will prevail in the end.

The Soviets believe in management, as opposed to individual leadership.

The Soviet perception is that a vast and complex endeavor such as modern war cannot be understood or directed by the entrepreneurial skill of an individual, no matter how talented or brave. The scale of violence demands a managerial approach to armed conflict that is based upon the dispassionate analysis of data and the application of proven and tested procedures.

Attrition, the dirtiest word in current U.S. Army doctrine, is warmly embraced by the Soviet Army.

The purpose of this resource-intensive, actuarial approach to tactics is to ensure that the enemy war machine will run out of forces before the Soviet Army. In World War II . . . the Red Army deliberately exploited its numerical superiority to 'bleed white' the technically superior *Wehrmacht*. Soviet tactics are designed to take casualties in order to cause casualties.

U.S. doctrine emphasizes agility, with maneuver taking priority over firepower.

In the offense, *udar*, shock, exploits massive violence to degrade the combat effectiveness of the enemy by affecting his psychology as well as physically destroying his combat forces.

It is only fair to say, however, that both the United States and the USSR emphasize maneuver at the operational level. At the tactical level (divisions and below), there is a clear divergence where the Soviets tend strongly to firepower. Perhaps one could say that the generals shoot, while the marshals maneuver.

There is a palpable distaste among the current crop of Army doctrinal gurus for automated decision making. They fear the baleful effect of computers and other automated systems on the mental agility of the U.S. force, which should be the product of the commander's mind. A good commander, so it goes, will do the unexpected—use initiative—and stay one step ahead of his opponent's decision making.

Col. Baxter describes an entirely different point of view:

The Soviet Army. . . seeks to reduce the physical [mental?] pressure on commanders by performing complex spacetime analyses and correlation of forces computations electronically in a process described as concept-algorithm-decision. . . .

The critical part in this process is the algorithm. . . . The structure of the algorithms is a form of logic. . . . The mathematical expressions that define the values of the various elements are derived from what the Soviet Army refers to as collective wisdom: a combination of historical experience, professional judgment, and experimental data. . . . Many of the calculations are performed by computers, and the ultimate goal appears to be to automate the entire process. . . .

. . . The practical results of this system are that it likely inhibits the few really brilliant tacticians, reinforces the mediocre and poor tacticians, and supports the average tacticians. This outcome is certainly compatible with the Soviet view of man as a collective animal. . . .

Soviet battalions and regiments do not have operations and intelligence staffs, in contradistinction to their U.S. counterparts. It is said that the battalion and regimental chiefs of staff assist with these duties, but that the commander subsumes both functions in his own responsibilities.

The strong indication, however, is that these tactical echelons are expected mainly to do what they are told to do by the division level, where such staffs first appear. The inescapable conclusion is that planning and tactical initiatives come down from the army and division levels, and the role of the lower tactical echelons is to "execute" the ensuing orders.

The American system pushes these functions and flexibilities down to a much lower level.

Control is regarded as a mixed blessing by the U.S. Army. Too much control rules out initiative at lower echelons and is judged to be a negative influence on the prospects of success.

On the other hand, much of the U.S. Army operates much of the time under the closest control—for example, the artillery and air defense systems—as well as the whole set of control requirements inherent in the concept of synchronization (concentrating the action of all units and all weapons in time and space to achieve bursts of combat intensity).

The Soviets, on the other hand, clearly embrace strong control measures throughout the tactical echelons. These differences may be more or less than meets the eye. On this point, the Americans may practice more control than they wish to admit and the Russians somewhat less.

Col. Baxter has provided a basis for us to focus on these various and deep-seated differences in philosophy, style, organization and procedures which will surely have a profound effect on the conduct and outcome of battle should the two giants of the twentieth century meet on the field of battle.

It is highly likely that both sides assume the superiority of their own stance and system; however, once the fighting starts, both sides will scramble to adjust to the cruel lessons of the battlefield. High-flown concepts will give way to the grim practicalities.

Human beings do learn, mostly from failure. This learning process usually starts first—and moves more quickly—at the forward edge of the battlefield. Surviving armies locked in combat often begin to resemble one another as the realities sink in—just as U.S. armored forces patterned themselves after the German *panzer* formations.

Both sides would do well to climb down from their theoretical towers and contemplate the possibility that the opposing system may have some merit and embody some wisdom worth considering. It is fervently hoped that we do and they do not.

VIETNAM: What We Might Have Done and Why We Didn't Do It

By Gen. William E. DePuy
U.S. Army retired

A maze of conflicting forces, practices and states of mind at the highest political and military levels caused the United States to drift through its longest war without a concept of operations that responded adequately to the escalation of the struggle by North Vietnam.

Operation plans should, in the best of all possible worlds, pursue military objectives which coincide with strategic goals. In this usage and for working purposes, political and strategic goals are basically synonymous. In the case of Vietnam, the strategic goal was to prevent the spread of Communist power in Asia—the political goal was to preserve the territorial and political integrity of South Vietnam. This matching of political goals and military objectives is a difficult and sometimes delicate business. Since the advent of nuclear weapons, and especially since the American nuclear advantage disappeared, the political goals established in the several wars which have actually occurred have been localized.

For example, in Korea after Gen. Douglas MacArthur's ill-fated sally to the Yalu River, we settled for the preservation of the territorial and political integrity of South Korea. In that war, there was a period in which military operational objectives diverged from the original political goal. This divergence caused enormous confusion and contention—not to mention the dismissal of Gen. MacArthur—some of which persists to this day. In such cases, the definition of winning—of victory—arises. There are those who still, incredibly, believe we failed in Korea.

In the Falklands, the British confined their political and operational objectives to the reconquest of the islands. They did not seek the defeat and surrender of Argentina on the mainland.

In Grenada, we did not go after Cuba, the incubus of the problem.

In these cases, the political and military objectives were tailored to each other and to the practicalities. In NATO, the political objective is to defend Western Europe. Agreement on how that should be done operationally may not extend beyond the confines of deterrence in the minds of several of the NATO partners.

In Vietnam, the same difficult questions arose and continue to trouble the minds of many military as well as political leaders. At first, the operation was defined as counterinsurgency which was clearly defensive and clearly consistent with the political aim. But counterinsurgency was too narrow a focus to cope with the arrival of the North Vietnamese army in the south. As in the case of Korea (which also adjoined China) our military and political leaders became divided

over the questions of ways and means of coping with this very large military threat to the U.S. political objective.

There are those who believed that we were in a clear and simple war with North Vietnam and that the defeat of Hanoi by military operations north of the 17th parallel was essential. And it is just here that the relationship between political objectives and military operations was never resolved. For instance, if we had invaded North Vietnam, what would have been the political goal?

In World War II, we pursued a policy of unconditional surrender—the destruction of Hitler's Germany and the utter defeat of Japan. Would such a goal have been appropriate for North Vietnam? Could the government of South Vietnam have then extended its control into the defeated North and been able to cope with the world's most experienced and tested revolutionaries? Would measures short of total defeat have been politically logical? Would China have intervened in a replay of the Korean War? Would the American public have supported such political goals and the enormous operational cost?

We will never know the answers to those questions because the U.S. government was far from adopting such extreme courses of action and even spurned a number of more modest proposals which tried to avoid these monumental uncertainties while offering some hope for success.

In his book *The 25-Year War: America's Military Role in Vietnam*, Gen. Bruce Palmer Jr. reports that:

Almost from the beginning General Westmoreland had sought authority to conduct operations into the panhandle of Laos to cut and physically block the numerous infiltration trails and waterways comprising the Ho Chi Minh Trail. Significantly, both Ambassadors [Henry Cabot] Lodge and [Ellsworth] Bunker strongly supported such operations.

In *A Soldier Reports*, Gen. William C. Westmoreland explained:

From the first I contemplated moving into Laos to cut and block the infiltration routes of the Ho Chi Minh Trail, and in 1966 and 1967 my staff prepared detailed plans for such an operation. I recognized that blocking the trail would require at least a corps-size force of three divisions, and I would be unable for a long time to spare that many troops from the critical fight within South Vietnam.

Gen. Palmer resumes the story:

Ironically, when in 1968 there were forces available, the political climate at home would not permit such a move.

Palmer also related:

Still another proposal, developed in detail by the U.S. Army staff under General [Harold K.] Johnson, encompassed a regional development project for Southeast Asia. . . . this plan proposed a major road construction project, improving Route 9 (which runs south of and parallel to the DMZ [demilitarized zone] from the South Vietnamese coast to the Laotian border), and extending the road across the Laotian panhandle to hook up with a highway in Thailand. Allied engineers, including contingents from any willing Western European ally, were to be protected by allied combat troops, thereby constituting an antiinfiltration screen of sorts.

It is interesting that Gen. Johnson wrapped his proposal in the ambience of counterinsurgency doctrine. In the same area, Gen. Westmoreland reported:

I continued for long to hope for an international force to man a line below the DMZ and across the Laos panhandle. One proposal that Deputy Ambassador Alexis Johnson and I worked out was that this be staged [sic] as a regional development project, with engineers extending Route 9 across the panhandle to the border with Thailand. To provide protection for the road construction, combat troops would be deployed, thereby

providing an antiinfiltration screen. Yet after a first flurry of interest . . . in late 1964, officials in Washington never evidenced any more enthusiasm for it.

Let us remember that the Ho Chi Minh Trail, that ancient land route between the Red River Delta in the north and the Mekong Delta in the south, which carried porters and bicycles in 1963 and 1964, became a multiple truck route by 1966. By the time the whole North Vietnamese army came south in 1975 with over 20 divisions for the final battle, the so-called trail was also the continuous conveyor of tracked combat vehicles including medium tanks, heavy ammunition trucks, and air defense weapons and was paralleled by a gasoline and diesel fuel pipeline.

Without belaboring these proposals further, let us consider what might have been had any of the operational plans to block this major line of communication (LOC) been adopted and aggressively pursued.

- The North Vietnamese army's massive deployment to the South might have been stopped in, say, 1966 or 1967.
- Very hard and prolonged fighting might have occurred along the cordon south of the DMZ and across the panhandle of Laos. Perhaps six to eight U.S. divisions would have been drawn into the battle—a force not dissimilar to the one which defended along the 38th parallel in Korea in 1952. Supported by tactical air, such a force should have been adequate even if the North Vietnamese army moved against it with maximum force. To deploy such a force in 1965 and 1966 would have required mobilization and a major national effort. Otherwise, as Gens. Palmer and Westmoreland have said, it was not until 1968 that we had such a capability. Of course, South Vietnamese forces would have been used in the cordon as Korean forces were used along the 38th parallel. But the bulk of the burden would have been borne by U.S. forces. It is entirely possible that even larger U.S. forces would prove to be necessary.
- The air war against the North Vietnamese army and the naval blockade would have been a proactive campaign to support the operational concept of isolating the southern battlefield. Air and naval operations against the North would have been designed to physically disarm the North Vietnamese army rather than as punitive retaliation designed to persuade them to give up their wicked ways.
- Offensive maneuver into the southern regions of Laos and North Vietnam would have been permitted and encouraged but occupation would not.
- A small number of U.S. divisions could have assisted the Army of the Republic of Vietnam (ARVN) in the destruction of the Vietcong main force and those elements of the North Vietnamese army which had reached the South in 1964 and 1965.
- A pacification effort at the level and effectiveness finally achieved under the prompting of Ambassador Robert W. Komer, who headed a pacification program called CORDS (Civil Operations and Revolutionary Development Support), 1967-68, and was succeeded by William E. Colby, might well have succeeded against an unreinforced, unreconstituted and isolated Vietcong political military structure.
- The political objective—to preserve the territorial and political integrity of South Vietnam—would not have been changed.

Whatever the reader may think of all this, the fact remains that neither this nor any other comparable operations plan was ever adopted. After Tet, President Lyndon B. Johnson wanted the war liquidated; later, President Richard M. Nixon wanted only to salvage the international position of the United States.

The interesting issue to consider is why we did not adopt such a plan *before* 1968—before the Tet offensive. The remainder and more important part of this article deals with that question, one of profound relevance to our future.

Before we launch a cold and heartless analysis of our decision-making process, we owe a warm and heartfelt salute to the men who fought the battles. It is slowly dawning on this country that their soldiers, sailors, Marines and airmen fought just as well, just as nobly and bravely as any of their predecessors in the long history of American arms.

That their labors and sacrifices were not crowned with victory was entirely beyond their control. It is to these fighting men that the establishment owes an apology and to these men that the country owes an immense debt of respect. These Americans answered their country's call to arms issued with all the authority of the U.S. government backed by those democratic procedures and precedents which gave that call both force and substance.

Let us now turn to the forces and practices, and states of mind, operating at the highest political and military levels which caused us to drift through our longest war without a concept of operations that responded adequately to the escalation of the war by the North Vietnamese army in 1964. In the mid-1960s, those influences which conspired against the adoption of such a plan may be grouped within the following topics:

The strong focus on counterinsurgency; the ambiguity of intelligence; the symmetry of our response—reaction; gradualism and retaliation; and weaknesses in the high command.

The Strong Focus on Counterinsurgency. The Kennedy Administration, shaken by the Bay of Pigs and threatened by Soviet Premier Nikita Khrushchev with wars of National Liberation, reached for a new initiative in foreign policy. Counterinsurgency (CI) emerged as their response. If, after all, insurgency was the problem, then counterinsurgency must be the answer.

In the broadest sense, that may be true; but, in application, counterinsurgency tends to focus on a narrower base. In the early days, it was largely a reactive concept. Guerrillas were to be defeated, subversion was to be eliminated and nations were to be built somehow along the lines of the American model—unobjectionable, certainly, even if a bit dreamy and self-centered. One of the interesting things about CI was that there was a role for almost every governmental agency in Washington.

A sense of movement was created as these agencies were admonished to get cracking. It is easy to issue orders *in* Washington. By 1962, Washington was awash in committees, seminars, study groups and visiting professors. Counterinsurgency was very much in style. For two years, no briefing on progress failed to include the proud description of a U.S. Army Engineer team which built a much-needed road in Ecuador between the peasant farmers and their market. This bit of good work seemed to resonate beautifully with the self-image of America on the march, providing a practical Yankee antidote against subversion and insurgency in the Third World.

We now know that profound and subtle political issues lie at the heart of counterinsurgency. But in 1962 the program was more grossly defined as a combination of functions and activities in which we excelled—building roads, setting up medical clinics, distributing surplus farm commodities, broadcasting anticommunist arguments and training local armies in the use of U.S. weapons. The political issues were simply assigned to the State Department on a functional basis. In short, the political issues were external to our massive structure for counterinsurgency.

In retrospect, these illusions are amusing, but there was a darker side. The theory of counterinsurgency was one thing, but the reality of Vietnam was quite another. By that, I mean that there was a huge gap between the diagnosis of causes and the reality of Vietnam. This gap persisted for years. Its traces can still be seen. In accordance with counterinsurgency doctrine,

the root causes of insurgency were economic and political at the grass roots (hamlet) level. The illusion, therefore, was that remedies were to be found solely in the performance of the South Vietnamese government.

So our attention and action was focused upon that new and clearly struggling government. When things went badly, which was often, we sought the causes in Saigon. By 1963, we were so unhappy with Vietnamese government performance that we supported the ouster of President Ngo Dinh Diem (and his unintended murder) by a cabal of inept generals.

The problem, of course, was much larger and more difficult even than the admitted weakness of the government of South Vietnam. The mother cell which fed the insurgency was in Hanoi. The Politburo in North Vietnam, consisting of the world's toughest and most experienced revolutionaries, had launched a massive effort to liberate South Vietnam under the guise of a homegrown insurgency. Thousands of trained political agents and military leaders had infiltrated into the south. Arms and ammunition were being delivered by coastal trawler. The Laotian trails were traversed by carrying parties.

The National Liberation Front (NLF) had been established under the control and direction of Hanoi. But emphasis on the North Vietnamese involvement was unwelcome. Emphasis on the military dimensions of the war ran counter to the newly conventional wisdom. The pendulum had been given a mighty push.

If you were "for" counterinsurgency, you were "against" conventional military thinking. Military operational plans were regarded at best as unnecessary and at worst reactionary, unenlightened and stupid.

"The old generals don't understand the problem," it was said. Guerrilla war is not susceptible to conventional solutions—ARVN was organized by the U.S. military for the wrong war under outmoded concepts—we should be fighting guerrillas with guerrillas, or so went the discussions in Washington.

But while these debates went on, a combination of Vietcong skill and North Vietnamese escalation of effort, coupled with the sheer weakness of the government of Vietnam and its army, led to near collapse in late 1964 and early 1965, forestalled only by the emergency deployment of U.S. forces.

U.S. forces were deployed slowly and tentatively at first, with numerous and nervous restrictions on their employment. The very first ground forces (Marines at Danang and the 173rd Airborne Brigade at Bien Hoa) were sent to defend the airfields from which retaliation air strikes against North Vietnam were being launched. By late 1965 and throughout 1966, the inflow of U.S. troops accelerated. By this time the 1st Cavalry Division, with great valor, had fought the North Vietnamese army in the Ia Drang campaign, and the Marines had met a North Vietnamese army division south of the DMZ. It is interesting to note the missions which U.S. forces were expected to perform. At Honolulu on 1 July, 1966, Secretary of Defense Robert S. McNamara outlined six major operational goals:

- Eliminate 40 to 50 percent of all Vietcong/North Vietnamese army base areas in South Vietnam.
- Open 50 percent of all the main roads and railways in South Vietnam.
- Pacify the four priority areas specified in the joint U.S./South Vietnam directive AB 141 (Saigon, central Mekong Delta, Danang area, Qui Nhon area).
- Secure 60 percent of the South Vietnamese population.
- Defend the military bases, the political and population centers, and the main food-producing areas under government of Vietnam control.

- By the end of 1966, Vietcong/North Vietnamese army forces were to be attrited at a rate at least equal to their replacement capacity.

The first five were classical counterinsurgency goals. But these objectives were patently beyond reach without defeating the rapidly growing Vietcong/North Vietnamese main forces. This problem was addressed tangentially by the sixth mission.

One could say that these missions taken together amounted to placing our priorities on setting the dinner table while the kitchen was on fire. Under this strategic guidance, MACV (Military Assistance Command Vietnam) went to the only possible course of action—defend what needed defending and go after the main forces of the enemy with aggressive search and destroy operations. But “search and destroy,” starting in 1966, lost its only hope for decisive results when both the Vietcong and North Vietnamese divisional and regimental formations moved their bases into Cambodia, Laos and the North Vietnamese panhandle north of the DMZ. These were facts which Washington was loath to accept.

Mr. McNamara expected a level of attrition which would put a ceiling on the strength of combined Vietcong main force and North Vietnamese army elements; but aggressive U.S. operations were frustrated by the withdrawal of their quarry to sanctuary where he reconstituted, retrained and reentered South Vietnam only when he was ready for battle and could afford another round of losses.

By controlling those losses, he put the attrition goals beyond reach. By the time the sanctuaries were attacked in 1970, the U.S. force was in the midst of its massive withdrawal.

When Gen. Westmoreland first suggested deployment of the 1st Cavalry Division to the Bolovens Plateau in Laos to sever the Ho Chi Minh Trail in conjunction with operations of the 3rd Marine Division inside South Vietnam, his proposal was apparently regarded as an inappropriate expansion of the war. It was not in harmony with perceptions in Washington, including the focus there on counterinsurgency.

Additionally, the State Department was deeply entrenched against violations of the Geneva Accords. This first great diplomatic initiative of the Kennedy Administration in Southeast Asia declared the neutrality of Laos (and Cambodia). Never mind that the North Vietnamese had never withdrawn their army from Laos.

We had dutifully extracted our 500-man Special Forces detachment, the White Star Team originally deployed under the legendary Col. Arthur D. (Bull) Simons; but 6,000 North Vietnamese remained illegally and quietly behind to stiffen the feeble Pathet Lao and, more importantly, to protect the Ho Chi Minh Trail. The Administration knew about the 6,000, but ignored them on behalf of diplomatic progress; furthermore, the embassy in Laos valiantly resisted any serious operations by the United States from South Vietnam against the trail. Presumably, its motive was to maintain a precarious status quo and avoid the widening of the war. The Chinese were already building mysterious roads in northern Laos.

On these crucial issues, the Administration voted with the embassy in Vientiane and not with the military command in Saigon or with the Joint Chiefs of Staff (JCS). Later, efforts from within Laos to encroach upon the trail from the west with U.S.-supported irregular forces never penetrated to pay dirt. This effort of limited effectiveness was also used as an argument against ground attack against the North Vietnamese LOC launched from South Vietnam.

Whatever the reasons, the Ho Chi Minh Trail was never severed on the ground until the short-lived attempt in 1971 by ARVN in ill-fated operation Lamson 719. By then, the United States was in the midst of its withdrawal.



Consequently, the enemy's main access to South Vietnam remained open and operative throughout the war. Efforts to stop the flow by air interdiction constitute a whole fascinating and separate story. Suffice it to say that the effort did not succeed.

The great power of counterinsurgency on the minds of decision makers arose out of its obvious importance. It dealt with security and social progress at the lowest levels—levels where the people lived and worked. Under the aegis of Ambassadors Komer and Colby, the CI effort reached high levels of effectiveness. Its baleful influence on sound military planning stemmed from the persistent misconception that CI could do it alone. This view was just as specious and unrealistic as the opposing notion that CI was irrelevant in the presence of a gigantic clash of national armies.

Before leaving the subject of CI and its impact on U.S. operational planning, it is worth mentioning that the U.S. effort also foundered on the political track. The ultimate measure of effectiveness of the whole U.S. effort simply has to be an assessment of the comparative national political strength of the South Vietnamese government and the North Vietnamese regime.

This subject is so vast and complex as to deserve a whole shelf of books but, against the bottom line, we never quite induced the growth of a strong independent government of South Vietnam. It was a shaky structure girded and propped by a pervasive American presence.

An external American ignition harness extended to every level. The power generator lay outside the machine itself. When it was withdrawn, the spark plugs no longer fired. It is difficult for this democracy of ours to deal with the political dimensions of insurgency. The kinds of measures and risks that need to be taken—the arbitrary (and often undemocratic) controls which may be required—do not go down well back here at home where the value system is unique and to a large extent nonexportable.

Our Congress is in a continuous state of dither and shock over the vaguest suggestion that we are selecting, installing and supporting strong leaders; yet, when we do not, the other side does. At least, by now we should recognize that we may be reasonably competent in the economic and military fields and even have something to offer on the plane of counterterror, but in the center ring—the political heart of the matter—we are self-constrained by our own history and political processes and are, therefore, vulnerable to failure.

The Ambiguity of Intelligence. The second great inhibition on sound operational planning was the ambiguity of our intelligence on the capabilities and intentions of the North Vietnamese government. It was not so much a failure of intelligence collection as it was a product of the natural limitations of the whole process of analyzing and extrapolating from that vast base of information.

A dramatic example of the problem is presented by Mr. McNamara's famous statement in 1965 that the Vietcong were only consuming 15 tons of war materiel each day. This amounts to about three truck loads or 1/20th of the load of a 300-ton trawler. The impact of that statement (assuming that the computation was roughly correct) was devastating. In one blow, it implied that:

- North Vietnamese logistics support of the insurgency was insignificant.
- It would be impossible to shut off such a trickle.
- It would not be worth trying.
- The Ho Chi Minh Trail was not all that important.
- The real problem was the performance of the government of South Vietnam.

What was missing, of course, was a future projection. Nothing in that statement dealt with a strategic appraisal of North Vietnamese intentions or capabilities. We now know through Stanley Karnow's account in *Vietnam: A History*, that the decision to move the North Vietnamese army into the battle was made after a commission from Hanoi visited the south in 1963 and reported that the Vietcong structure was too weak to prevail unassisted. The decision to modernize the Ho Chi Minh Trail was taken at the same time.

But the doctrine of counterinsurgency, coupled with the two-source rule on validation of intelligence data and the inability (or unwillingness) to project, made it seem grossly inappropriate to widen the military effort against future and as yet unconfirmed threats.

When the decision was made to deploy U.S. troops into South Vietnam, it was not to counter the North Vietnamese army because the United States did not yet clearly perceive the future implications of the first reports of unit movements down the trail. Instead, we deployed to prevent a collapse of the government of Vietnam in the face of Vietcong main force attacks. Those attacks at the end of 1964 and the first half of 1965 at Binh Gia, Binh Ba and Dong Xouai demoralized the South Vietnamese and prompted Gen. Westmoreland to give the government of Vietnam and its army a life expectancy of no more than six months unless the United States stepped in to help.

At the time, there was only one enemy division-sized combat element in South Vietnam—the 9th, north of Saigon. It was responsible for the ARVN defeats at Binh Gia, Dong Xouai and later at Song Be and Dau Tieng. The 1st and 2nd Vietcong regiments in Quang Ngai were responsible for Binh Ba.

In the remainder of the country, there were dozens of district battalions, a few provincial regiments and increasing numbers of active guerrillas. But the Vietcong main force establishment did not seem all that formidable against the prospect of U.S. intervention. Indeed, if that had been the extent of the threat, the U.S. deployments through the end of 1966 would no doubt have been enough. Certainly, Washington hoped they would be enough.

But looming over the initial concept of rescuing ARVN from the Vietcong was the first wave of the North Vietnamese army moving south. The large-unit war was forced and initiated by North Vietnam—not by the United States—despite the conventional wisdom which persists to this day. In fact, in 1964—well before the first U.S. combat units were deployed—the first three North Vietnamese army regiments entered South Vietnam.

Thereafter, the rate of deployment of the two forces measured in divisions and regiments/brigades was roughly parallel. This fact was never conveyed to the American people. To the contrary, the impression here at home surely was that we were deploying our Army to fight the Vietcong guerrillas—farmers by day, warriors by night, etc.

Early estimates of North Vietnamese army deployment were not welcome in Washington. That was a problem this country did not want and did not need and a problem for which we had no viable operational concept. We disliked the idea of an enlarged ground war so much that we resorted to air attack in an effort to scare them off: retaliation for their temerity—retaliation that did not work.

The 1st Cavalry Division arrived in 1965 to take on the Vietcong main force only to find itself in the Chu Pong/Ia Drang region repelling an invasion by three North Vietnamese regiments. When it turned its attention to the populated area of Binh Dinh Province in operation Masher/White Wing, lo and behold, it encountered first a regiment and later a whole North Vietnamese army division. The 3rd Marine Division, which desperately wanted to test the counterinsurgency theories of Lt. Gen. Victor H. Krulak, commander, Fleet Marine Force Pacific,

and a former special assistant for counterinsurgency on the Joint Staff, soon found itself drawn to the area of the DMZ to engage the intruding North Vietnamese army.

The U.S. 4th Infantry Division arrived in the Central Highlands in 1966 only to spend its entire tour on the Cambodian border ejecting North Vietnamese army regiments and divisions in some of the most brutal and gallant battles of the whole war.

So, while we started our deployment against the Vietcong main forces, we were quickly drawn into quite another set of problems, none of which was forecast accurately and none of which was received joyfully in Washington or Saigon. We were in a bigger war than we had anticipated or for which we were militarily or politically prepared.

Against this massive misperception, the hullabaloo over the “uncounted enemy” (the Vietcong Self-Defense Force) raised by CBS in *60 Minutes* more properly should have been viewed as a trivial pursuit. After all, the real southern Vietcong were defeated via Tet. It was the North Vietnamese army which thereafter made the difference—not just the North Vietnamese army divisions, of which there were many, but also the integration of North Vietnamese army replacements and units in the Vietcong military/political structure to reconstitute the local threat so badly damaged during Tet and through the Komer-Colby pacification effort.

The ambiguity of intelligence in any situation which revolves around the *intentions* of our opponents is not confined to Vietnam or to the past. We are equally at sea about the operational intentions of the Soviet Union, Cuba or Nicaragua in Central America. Long-range intentions? Perhaps! Short-term or mid-term? No!

When Alexander M. Haig suggested going to the source (of problems in Central America), the Cubans may or may not have been frightened, but he scared the pants off the U.S. Congress. The ambiguity of intelligence, engineered by our opponents, is a major deterrent to early and effective operational planning—not to mention early action.

The Symmetry of Our Response—Reaction. The third great set of inhibitions on sound operational planning may be lumped under the doctrine of symmetry.

Whatever the Vietcong and North Vietnamese did, we also undertook to do. When they organized a sophisticated insurgency, we organized a sophisticated response—counterinsurgency. When they reinforced the main force war with North Vietnamese army units, we reinforced ARVN. When the North Vietnamese army began its border incursions, we reinforced the border.

We engaged the enemy on ground of his choosing. We won battles—even campaigns—but at enormous costs in time, treasured lives and political tolerance in the United States.

By opposing the enemy at every level—by organizing as a mirror image, leaving the option of fighting or evading to him—by honoring the political sanctity of his cross-border sanctuaries until too late, we engineered ourselves into a war of attrition in which the enemy largely controlled the tempo of operations. By leaving the gate to North Vietnam open, we permitted him to reconstitute his losses at will even at the local force level.

Perhaps the most illuminating and awesome story which came out of the war in this last respect was written by Lt. Gen. Tran Van Tra, the long-time senior military commander in COSVN (Central Office of South Vietnam). COSVN, as the putative instrument of the National Liberation Front, was the political and military headquarters for the southern half of South Vietnam. It coincided roughly with III and IV ARVN Corps areas. It contained two-thirds of the population of South Vietnam.

Tran Van Tra was in disfavor in Hanoi after Tet; after all, he had lost the military battle with horrendous and, in the case of the Vietcong, irreplaceable losses. The fact that he had won the

political war in Washington only became clear to Hanoi much later. The Politburo took credit for that windfall but retained its skepticism about Tran Van Tra. When the final attack was mounted in 1975 against Saigon, Tra was relegated to deputy status under the Supreme Commander, North Vietnamese Gen. Van Tien Dung whose book *Our Great Spring Victory* scarcely bothers to acknowledge the role of the Vietcong in the final outcome.

In any event, Tra wrote a book which slipped out before Hanoi banned its publication and confiscated extant copies (and, now we are told, executed the publisher—Ha Man Nhai—in 1983). In this book, Tra, the senior general in the south, describes how he personally supervised the deployment of the North Vietnamese army 320th Regiment to Long An Province and its integration into the Vietcong provincial structure.

To do this, he *walked* from COSVN headquarters on the Tay Ninh Province-Cambodian border to Long An, south of Saigon, with a small bodyguard. When he arrived, he explained the mission of the regiment to its officers and soldiers on the ground. He explained the tactics of the 3rd Brigade of the U.S. 9th Infantry Division and how they might be countered. He supervised the integration of the battalions of the regiment into the local forces at district level and the positioning of companies within the villages.

Here we have the incredible picture of the senior Vietcong commander spending the better part of a month reconstituting the military political structure of Long An Province, which is the southern gateway to Saigon. That he found it necessary is a tribute to the pacification effort and the Tet victory (United States and ARVN). That he was willing to do it personally is testimony to the strength of the revolutionary doctrine of our formidable opponents.

Because of the reconstitution and resurgence of the Vietcong structure in the Delta, not one of the three ARVN divisions there was able to reinforce Saigon during the final battle in 1975. So the war of attrition—the symmetrical reaction to enemy strength and structure—was hopeless from the beginning. By controlling the tempo, the enemy could “manage” attrition within limits consistent with his resources. By his access to North Vietnam via the Ho Chi Minh Trail, he could reinforce and reconstitute as necessary.

Basing my calculations on information in Capt. Shelby L. Stanton’s excellent book, *The Rise and Fall of an American Army*, and on Gen. Westmoreland’s report in 1969, it seems that U.S. combat formations distributed their efforts roughly as follows until the main U.S. withdrawal began: 40 percent in area support of pacification, 30 percent against the reinforced main force war (North Vietnam army reinforced) and 30 percent against North Vietnamese army border incursions.

Thus, it can be seen that 60 percent of the U.S. large-unit effort was devoted to a reactive response to North Vietnamese army forces already embedded deeply in South Vietnam (the reinforced main force war) and to direct defense of the DMZ and the Laotian and Cambodian borders. There were unending and repetitious campaigns against North Vietnamese army forces who controlled the tempo of the war and disengaged at will. Sixty percent of the U.S. ground forces in South Vietnam in 1969 equates to approximately seven divisions, which could have fought more efficiently astride the Ho Chi Minh Trail along the DMZ and into Laos. The remaining four divisions would have been available to assist the ARVN in conducting the main force war in the south, the chief difference being that the North Vietnamese would be forced to accept decisive combat or change their objectives—a potentially war-winning scheme.

Gradualism and Retaliation. But, having engineered itself into a corner in respect to the ground war, the United States turned to the air war as its last and only advantage; the only asymmetrical

effort of the war—the only part of the overall military operational plan with potential leverage. It produced mixed results.

Interdiction of the Ho Chi Minh Trail was unable to stop movement, although it exacted an enormous price in resources, effort and time on both sides. As in Korea and in Italy in World War II, we placed higher hopes on the effectiveness of air interdiction than the actual results would bear out. This is a recurring American misjudgment.

The retaliatory campaign against the war-making potential of North Vietnam undertaken by the Nixon Administration was within an eyelash of success in 1972 when a bombing halt may have snatched defeat from the jaws of victory. And bombing halts were endemic. They happened so often and for such dubious purposes that one must look for the reason deep in the psyche of the U.S. government in Washington. The only possible conclusion is that we are addicted to a form of gradualism which has been self-defeating. Gradualism is the fourth influence which worked against the formulation and execution of a sustained and consistent operation which had any chance of achieving U.S. strategic objectives.

Gradualism is the son of flexible response, and flexible response is the child of nuclear deterrence. To the extent that gradualism reflects a prudent policy of nuclear avoidance, it is a necessary dimension of twentieth-century policy. But to the extent it reflects a particular American arrogance of power and a false reading of the depth of our opponents' convictions, it is a sure loser.

At the heart of the retaliatory air campaign—which was gradualism writ large—lay an assumption that some finite level of pain inflicted on our enemies would impel them to reverse course. Some level of damage to fuel storage tanks, bridges, thermal electric generating plants and harbor loading facilities would convince them that they should renounce their goal of liberating South Vietnam from what they regarded as the most recent colonial power—the United States and its puppet regime.

It turns out, of course, that we never reached that level of damage. Oh yes, we hurt them enough so that they sought a cease-fire but never enough to persuade them that they should abandon their cause. The disproportion between the goals of a 30-year war and the loss of storage tanks defines our misconception.

Aerial bombing often seems to infuriate rather than intimidate. In any event, the only sensible goal for aerial bombardment is to disarm the enemy; that is, to make it impossible for him to carry on. We were probably close on several occasions but not close enough. By the time we turned the strike aircraft loose in force in 1972, it was to punish, not to win, and even that level of effort with its resultant visible damage aroused a high level of squeamishness among decision makers and put demonstrators in the streets.

We reached a point where the price we had to pay internally was thought to be higher even than the benefits of bombing. So we settled for a level of effort which amounted to covering fire for our withdrawal.

The fact is that gradualism, particularly as expressed in air retaliation, is so easy to start and so easy to stop that it is entirely episodic and is thus substituted for operational planning. It is conducive to a mode of playing it by ear—of being hazy about goals and objectives—everything is *ad hoc* and sometimes linked to the six o'clock news.

If anyone thinks these tendencies were restricted to the Vietnam drama, he does not know Washington. Furthermore, those of us in uniform must ask whether we are a counterweight to these tendencies or a party to the misapplication of power. Does our enthusiasm, pride and can-do spirit make us peculiarly vulnerable to any proposal to apply our forces, however incrementally?

There are a few more things which need to be said on this complex subject which bring us out of the past into the equally difficult present and the murky future.

The fixation on counterinsurgency, the ambiguity of intelligence, the strong tendency toward symmetry (reaction) and the built-in bias toward gradualism are reasons but are not, by themselves, valid excuses for the failure of the military establishment to operate effectively within the decision process in Washington.

Weaknesses in the High Command. It is widely known that the command structure for the Vietnam war was badly fragmented. Early in the war, certainly by the end of 1966, the JCS and CINCPAC (commander in chief, Pacific) had lost effective control over the ground war and the associated pacification effort.

Actual control moved along an axis from the White House to Saigon. A series of powerful ambassadors—ministers plenipotentiary of the President—in Saigon, Bangkok and Vientiane, coupled with the unusually strong influence of Mr. Komer, who moved from the White House to Saigon to preside over the interdepartmental counterinsurgency effort, had the effect of shunting the JCS and CINCPAC off the main line.

At the same time, the second echelons of the State and Defense departments (William Bundy—assistant secretary of defense for international security affairs, 1961-64; assistant secretary of state for Far Eastern affairs, 1964-69—and John T. McNaughton—assistant secretary of defense for international security affairs, 1964-67) accumulated enormous power over policy decisions which shaped our national response to the escalating war. Eventually, the JCS was reduced to the level of passing Saigon requests for reinforcement to the services for action.

The air war was handled through an entirely separate mechanism. CINCPAC retained control of the air war through the twin agencies of the Pacific Fleet and the Pacific Air Forces, both also headquartered in Hawaii. CINCPAC dealt with the White House via the chairman of the JCS, who was supported by the J-3 (director, operations) of the Joint Staff. This three-way channel concerned itself with the level of the air effort, rules of engagement and selection of targets—both target categories and often specific sensitive individual targets.

The air operation was punctuated by a series of bombing halts related to diplomatic moves, truces, cease-fires and later negotiations. The air war, as a consequence of all these influences, was spasmodic.

Certainly, the inability of the uniformed military establishment to deal effectively with the conflicting perceptions of the war which pervaded Washington in the critical years can be attributed in part to this fragmented and weakened structure.

For example, according to Gen. Palmer, the JCS proposed a strategic plan in 1965 which called for comprehensive air and naval action against North Vietnam, air and ground action against the Ho Chi Minh Trail in Vietnam and Laos to stop the southward movement of North Vietnamese forces and supplies, a campaign in South Vietnam to defeat the Vietcong and measures to keep China out of the war or to cope with her should she intervene. The JCS pressed this plan upon the Administration, but without success.

The Administration did not want a large war—did not want the associated necessity for mobilizing the reserves and undoubtedly considered the JCS plan as a gross overreaction to a situation described in entirely different terms—an internal insurgency—by other government agencies. In short, the White House view of the war was widely at variance with that of the Joint Chiefs and remained so until it was too late, politically, to move to a higher plane of effort, risk, cost and sacrifice.

A JCS overshadowed at the seat of government, reduced to the housekeeping chores of the air war and frozen out of ground war operations was not able to perform the expected wartime role of the senior military agency in Washington. As a consequence, we fought our longest and surely most complex war without a strong central military authority or an effective and integrated military chain of command all the way from the President through the JCS to the unified commands and the operational forces. Furthermore, there was not an agreed and well considered national strategy upon which sound operational planning could be based.

At this point, we have nearly fulfilled the promise in the title of this article. We have described what we might have done and a number of reasons why we did not do it. But this treatment would be incomplete were it not to touch upon the current effort of Senators Sam Nunn (D-Ga.) and Barry M. Goldwater (R-Ariz.) to overhaul the top echelons of the defense establishment.

The 645-page report prepared for the senators by the staff of the Armed Services Committee strongly suggests that many of the weaknesses in the command structure which surfaced in Vietnam were not unique to that time and circumstance but were, and are, systemic by nature.

If this is true, and much evidence is presented in the staff report, then the great risk is that any weaknesses in the JCS system that led to its inability to communicate sound operational advice to the nation's leaders during the Vietnam war may reduce its effectiveness in conveying sound organizational advice in the face of a strong attack on the military structure today.

The staff report also contains 12 specific recommendations. Some of those proposals, like the one which strengthens the role and authority of the chairman, are clearly on the right track. Others, like the one which creates an assistant secretary of defense for strategic planning, transfers a classic military function to a civilian agency and thereby weakens the military structure.

In any event, there have been extensive hearings, more will take place, and there will be continuing debates on all these issues. As each proposal comes up for consideration, it would be useful to ask whether it would have made a difference in Vietnam had it been in place at that time.

Would all of the proposals taken together have increased the effectiveness of the armed forces and their operations? Would they have produced a strong, competent, persuasive and respected military voice in Washington? Would they have provided a professional military basis for the development of high-quality strategic and operational plans which were in harmony with political objectives? Would the senior military agency in Washington have been solidly inside the process of planning and operational direction of U.S. forces?

These questions suggest the framework for a set of standards against which the Nunn-Goldwater, or any other, proposals may be judged. We are very unlikely to find more legitimate or better standards.

Finally, the Vietnam experience tells us that the linkage between the President, his secretary of defense and the chairman of the JCS must be tight, continuous and trustful. In the absence of these conditions, no amount of new legislation will help this country solve the problems of high command.

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STATEMENT BY

GENERAL WILLIAM E. DePUY (RET)

BEFORE THE

SUBCOMMITTEE ON INVESTIGATIONS

OF THE

COMMITTEE ON ARMED SERVICES

HOUSE OF REPRESENTATIVES

4 MARCH 1986

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Provided by William E. DePuy, Jr.

Mr. Chairman, Members of the Committee. Thank you for the opportunity to testify during your review of defense organization.

My views are based on long service in the Army and in joint assignments and on my personal study of certain issues. To summarize—my service included:

- Battalion command of Infantry in France and Germany in World War II.
- Command of the First Infantry Division in Vietnam - 1966-67.
- J-3 of the joint command in Vietnam 1964-65.
- Special assistant to the chairman JCS and service on the Joint Staff 1967-68.
- Assistant Vice Chief of Staff U.S. Army (1969-73)—an office created to interface between the Secretariat and the Army General Staff in respect to Army program control and development.
- Command of the U.S. Army Training and Doctrine Command 1973-77 involving:
 - Weapons requirements, organization and tactical doctrine - in short the Army's architectural agency—constantly reorganizing tactical units around new weapons.
 - Training the cadre for the new organizations - the Officer and NCO school system.
 - Training all Army recruits.
 - Army Air Force joint doctrinal development.
 - U.S. Army - German Army—doctrinal cooperation.
- Since retirement I have written extensively on military subjects and most recently about problems in the chain of command during the Vietnam War.

In this statement I will address just four issues raised by the various studies and legislative proposals for reorganization of the Department of Defense:

- The chain of command.
- Composition and Functions of the JCS.
- Authority of the Unified Commanders.
- Service functions and organizations.

THE CHAIN OF COMMAND

I observed, first hand, the baleful effects which can be associated with the fragmented and confused chain of command during the Vietnam War.

By the end of 1966 the JCS and CINCPAC were frozen out of the chain of Command for the ground war and associated Pacification activities. That part of the war was controlled along an axis from the White House to Saigon. The JCS was reduced to the mechanical function of sending troop requests from Saigon to the Services for action after White House decisions.

The air was controlled along an axis from the White House to the chairman of the JCS to CINCPAC and thence to the Commanders of the Pacific Air Forces and the Pacific Fleet. The J-3 of the Joint Staff performed housekeeping chores over the target lists.

At no time during the long years of the Vietnam war was there a comprehensive and integrated operations plan based upon an explicit strategy to achieve the political objectives of the war.

From that national experience I draw the conclusion that civilian (political) control of military forces and military operations must be exercised through the JCS as the senior military echelon in a coherent and continuous military chain of command.

I perceive not the slightest threat to civilian control of the military in this country. However, if that control is exercised improperly or haphazardly there is a very large threat to the successful prosecution of military operations.

Civilian control can be most effectively exercised from the top down by the President the NSC and the Secretary of Defense through the instrument and agency of the JCS represented by a chairman with increased power and authority and backed up by a strong and competent joint staff and other essential joint agencies.

All the major issues of War and Peace, of political and military objectives and the allocation of National Resources should be resolved under the aegis of the President and his chief civilian agencies as part of a front-end process which should always precede the use of military force. The JCS as the top military echelon should participate, through its chairman, in these critical deliberations. Thereafter detailed military planning and prosecution of operations are military functions which can only be performed properly by or through the senior military echelon in Washington.

Planning and operations are a closed-loop process. The JCS must take into account not only the requirements of the combatant unified commanders, but also the capabilities of the Services and the actual progress of the war. No other agency can perform this function.

The exercise of command goes far beyond policy into complex technical controls. One day at the Joint Deployment Agency at the Headquarters of the Readiness Command would convince any fair observer of the truth of this assertion. And that is just one small but vital compartment in the vast apparatus of joint military command.

So, that chain of command must pass through the chairman of the JCS. It should not be an option of the Secretary of Defense to do otherwise. If special operations require special channels so be it, but in all cases planning and execution must be controlled through the JCS (CJCS).

FUNCTIONS AND COMPOSITION OF THE JCS

I agree with the provisions of the proposed legislation which strengthen the power and authority of the chairman. Nonetheless I believe that much of his effectiveness will depend upon his close and continuous consultation with the service chiefs.

I also favor strengthening the chairmans role so that the JCS can be more effective in an area which is seldom discussed but lies close to the heart of their joint mission. I refer to the resolution of doctrinal, procedural and technical problems which arise between the services in the areas of

Intelligence, EW, Air Defense, Deep Attack and Fire Support not to mention General Communications and Logistics.

I would like to see it made unmistakably clear that the JCS are both authorized and will be held accountable for the development of joint doctrine, tactics techniques and procedures in all those areas and the development of joint requirements for the necessary technical means to support those procedures. Here I mean hardware requirements particularly cross-service communications, and joint data processing systems. The opportunity for progress along these service interfaces is endless and the operational rewards are great. Up to now the JCS has found it difficult to be effective in such a role. Generals Wickham and Gabriel have taken laudable initiatives in this area but the function needs a home in the JCS. It cannot be left entirely to voluntary auspices because some decisions may be difficult for certain of the services while nonetheless necessary.

The JCS has a marvelous instrument for the refinement of joint doctrine and procedures in the READINESS COMMAND — an instrument not well enough used.

Obviously the Joint Staff must play a key role in these matters requiring that staff to be both operationally and technically competent. This means that the joint staff must be expanded to embrace a number of joint agencies. The 400 man ceiling is not compatible with this idea. Qualifications for the Joint Staff should go beyond operational skills and should remain open for a vast array of technical experts as well.

A Vice or Deputy chairman is needed to reinforce the chairman. It would probably be a mistake to make him the full time Director of the Joint Staff — another officer can perform those duties at the rank of Lt. General. The Vice Chairman should be free to travel and thus help represent the CINC's and he will soon be buried in other essential duties. Mr. Packard wants him to co-chair the JRMB.

AUTHORITY OF THE UNIFIED COMMANDERS (CINC's)

The CINC's should be able to organize their commands operationally as they see fit. On the support side however, their authority must be constrained and adjudicated. I would like to see the JCS act as referee.

Certainly the CINC's should have the authority to approve/disapprove key personnel proposed for assignment to their headquarters and as component commanders. Probably the CINC's should be required to render an evaluation to the JCS of the performance of these key subordinates. They should be authorized to relieve poor performers. Surely, too the CINC's should have authority in critical logistical matters such as the positioning of supplies and war reserves in their areas of operation. Again the JCS should referee as between the CINC's and the Services.

The REDCOM commander who supervises the Joint Deployment agency should have specific responsibilities for overseeing the mobilization process and its linkage with the deployment process.

The question of an "operational force" budget is a difficult issue. On the one hand the CINC's clearly need some contingency funds to give them operational flexibility and quick reaction. It is conceivable that they should have control of joint exercise funds. But the great danger is that the small operational and support staffs of the CINC's will be sucked into the vortex of the PPBS.

This should be left primarily to the Services with the CINCs represented by the chairman in the Program process and by occasional pleas to the DRB. Let the CINCs enter the fray on the basis of management by exception.

In time of war or national emergency the CINCs must be able to concentrate on operational matters. In time of War, more than ever, the CINCs will be utterly dependent upon the Services to provide viable combat forces and adequate support. This leads me to my last point which is the necessity to protect the vital function performed by the Services.

SERVICE FUNCTIONS AND ORGANIZATIONS

To some extent the services have been made the villains in this reorganization exercise. It seems as though being "for" increased effectiveness at the joint level has produced a reciprocal mind-set which is "against" the services. This is a very dangerous tendency which must be rejected for one very powerful reason. It is the services who produce the high quality fighting forces which this nation needs to win battles, campaigns and wars. No other echelon or agency can produce such forces. That the CINCs employ those forces does not change this fact in the slightest.

The Ranger battalions that seized the airfield in Grenada were organized, manned, trained equipped and motivated by the U.S. Army. It was the U.S. Navy that produced the team which intercepted the hijackers over the Mediterranean.

Divisions, Wings and Battle Groups are produced by the services. The integration of tactics and technology within these basic combat elements is a (the main) service function. On the other hand the number of divisions wings and battle groups to be produced should be determined above the service level by a process in which the JCS plays a central role.

The provisions of the draft law which deals with internal service organization does not seem to recognize this central function of the services. By reducing and dispersing the military General staff and combining it with civilians under the direction of assistant secretaries, we run a high risk of destroying the very instrument which performs the most demanding and difficult function of the department.

Let me explain that function and relate it to Army staff organization. The Army is required by law, tradition and necessity to organize train, man, motivate, equip and support combatant forces (Corps, Divisions, Brigades, Battalions and Companies of all arms) which are turned over to Unified Commanders for operations. The Army therefore is a design and production organization. The process is called Force Development or sometimes Combat Development.

In either case it is a dynamic highly technical and complex undertaking. It is a military process which can only be performed by professional military organizations. It is dynamic because it is the process by which new technology is brought into the force. It is the process by which units are organized around new weapons and their support. It is the process by which tactics and technology are combined and finely tuned.

The second largest Army command in the U.S. (TRADOC) performs this architectural design function. The largest command in the Army (FORSCOM) produces units according to that design and brings them to a high state of readiness and performance — ready to be sent to the CINC's for operations in war.

Over this process — inspiring and managing it—is the Army General staff assisted and controlled by the Secretariat. The proposed organization seems to assume that the service role is a static support function. Nothing could be farther from the truth. Designing and producing combined arms divisions and constantly modernizing, reorganizing and training them is the central Army function. It is the basis for requirements for manpower by skill and by grade. It is the basis for hardware system requirements and thus is the genesis of the R&D function. Its internal and external support is the driving force behind logistics procedures and organization. Force development programs lead the budget process.

This function which proceeds within the long but evolving continuum of tactical and operational doctrine must be performed by the Army's professional military staff. The Chief of Staff must preside over it under the direction and with the support of the Secretary.

Giving the Chief of Staff two Deputy Chiefs of Staff to preside over operations and plans which are to be primarily joint functions is to shunt him onto a siding while turning over the heart of his enormously important duties to Assistant Secretaries of the Army. That is a formula for disaster.

Let us retain the current system but for "ops and plans" let us substitute "Force Development".

In summary I strongly recommend that:

- The chain of Command always run through the chairman of the JCS who is backed up by the other chiefs, the Joint Staff, joint agencies and commands.
- A strengthened JCS (a strengthened Chairman, Vice Chairman and staff) be held accountable for developing joint doctrine, procedures and systems which solve Service interface problems in the major combat function such as Intelligence EW, Air Defense, Deep Attack Fire Support and logistics.
- The CINCs' authority be increased but that the unified commands should not be sucked into the vortex of the PPBS at the expense of their operational duties and that REDCOM, especially, should be exploited in the area of Joint Doctrine.
- The Services be protected against reorganization back-lash so they can continue to perform the Force Development function of designing and producing fighting forces of high motivation and high performance.

4 April 86

[John Wickham
Chief of Staff
U.S. Army]

Dear John

Pardon my use of pen and yellow paper. Thank you for your note about my testimony on defense reorganization.

I spent two happy days in mid-March visiting your splendid 7th Light Division. They showed me some training and I had a chance to talk with dozens of officers, NCO's and soldiers. There most of the officers assembled in the Post Theatre to listen to this old soldier speak about the value of artillery and Tac Air to Light Infantry and about "the last 100 yards" where almost all Light Infantry casualties are taken. I pointed out in this last respect that Rommel in WWI the Israelis and the Vietcong had techniques for getting through the last 100 yards which we could well emulate.

My impressions of the division were upbeat. Spirit is high—leadership is excellent—at all levels. The effort to capitalize on the worth and ingenuity of the individual is impressive.

You may be very proud of your first Light Division.

Without detracting from my high opinion of the 7th I want to pass on a concern which developed as I talked to division personnel at all levels.

I asked dozens of individuals to describe the battles for which they were preparing. Their answers lead me to believe that there is considerable confusion on this score. I believe they need some help - and because they are very much your division that help probably must come from you.

By the way there wasn't a whiff of disloyalty to you or the Army hierarchy. There was no cynicism or double-talk. There is uncertainty about what they will be asked to do and that uncertainty leads to waste-motion.

The division takes it as given—given by you—that their mission is to prepare for Low Intensity Warfare as a first priority and for mid- to high-intensity second. The problem is that they do not know exactly what they are to do in LIW. I suspect this confusion is not confined to the 7th Division.

As a consequence they are loyally trying to carve out a niche which generally lies at the nexus where Ranger techniques, anti-guerrilla warfare and deep raids come together. At the other end of their mission (mid intensity war) they see the NTC as a guide.

4 April 1986

The kinds of LIW scenarios they use for training lack realism—that is, it is hard to visualize just where in the world they might be required—or where they would contribute to operational or strategic goals.

We may go to El Salvador to help fight guerrillas but I hope not. Peru, Venezuela etc are no more attractive or likely.

The fact is the 7th is more apt to be fighting the Nicaraguan, Libyan Iranian or ??? national armies. The kind of training needed for that kind of LOW/MID intensity warfare is the kind of training I would think they should be undertaking. But first they must be helped to understand their most likely tasks. I suspect we may have to disarm Nicaragua some day and the 7th will be needed. It won't be LIW. Someday they may be sent to seize Wheelers field in Libya or stop the Revolutionary Guards on the approaches to Kuwait City.

You can see what concerns me. These military tasks require much more than Ranger techniques. I would be happy to talk to you further if you wish and at your convenience.

In any event my only motivation is to see your light division prosper and to see those fine young men fully prepared for the tough fighting which lies ahead.

Warmly and respectfully

Bill

The Army War and the Proper Way in Vietnam

By Gen. William E. DePuy
U.S. Army retired

The Army and Vietnam. Andrew F. Krepinevich Jr. The Johns Hopkins University Press, 701 W. 40th St., Suite 275, Baltimore, Md. 21211. 318 pages; abbreviations and acronyms table; notes; index; photographs; \$26.50.

A well-written and thoroughly researched book, *The Army and Vietnam* is organized around the single cause to which the author attributes our national failure in Vietnam.

To jump ahead, the villain in the piece turns out to be the “concept” of the U.S. Army for fighting wars. This concept is described as an ineradicable fixation of the Army on European-type war—a prodigious consumption of resources to avoid the spillage of American blood—and to borrow from the demonology of the military reform movement a strong preference for firepower and attrition.

The author then lays out the theoretical anatomy of an insurgency and explains what he believes to be the preferred methods for defeating such a threat.

It will come as no surprise to find that the Army way and the proper way are described as two entirely different matters.

Having thus set the stage, the book traces the war through the advisory years (1954-1965), the years of intervention (1965-1968) and the years of withdrawal (1968-1973).

Each step of the way, the efforts of an enlightened minority to follow the proper path of counterinsurgency are said to be defeated by an Army which turns unerringly to its cherished and deeply embedded concept.

Along the way, we encounter all the old familiar faces.

The chiefs of the Military Advisory Assistance Group in the early years are shown to have been preparing the new South Vietnamese Army (ARVN—Army of the Republic of Vietnam) to repel an invasion across the 17th parallel along the lines of our earlier experience in Korea and in full accord with the concept.

According to the book, Gen. Paul Harkins, the first commanding general, U.S. Military Assistance Command, Vietnam, believed so fervently in the concept, that he could not imagine failure and proclaimed victories everywhere—even at Ap Bac in January 1963 where then-adviser Lt. Col. John Paul Vann began to build his reputation as a realist by proclaiming a defeat.

The often described and much lauded CIA program which implanted Special Forces teams on counterinsurgency operations in Montagnard villages around Ban Me Thuot was abruptly terminated when, the book explains, the U.S. Army repossessed its Special Forces and sent them off to the borders in connection with the main force war and in line with the concept.

From *Army* 36, no. 9 (September 1986): 77-78.

So it was, also, with the Marines. The author tells how the 3rd Marine Division assigned rifle squads to reinforce and support Vietnamese Popular Force platoons around Danang. This program, built around combined action platoons (CAPs), was a centerpiece of the Marine counterinsurgency effort. It was well publicized as the way to go; but as you have now been conditioned to expect, the Army high command in Saigon, driven by its concept, ordered the 3rd Marine Division to the demilitarized zone to fight intruding North Vietnamese divisions.

When seven full Army divisions were deployed in Vietnam, the book says that they marched happily off into the jungles and mountains and to the remote borders seeking combat with the Vietcong and the North Vietnamese main forces in accordance with their understanding of the concept. This, according to the author, left the South Vietnamese population exposed, first to the local guerrillas, and then to the massive Tet offensive.

Gen. Maxwell Taylor is portrayed as a Trojan horse in the Kennedy camp. His urbane manner and intellectual credentials, coupled with his concept of flexible response, led the President to believe that Gen. Taylor was the man to turn the military establishment toward counterinsurgency. After he had been placed in a series of powerful positions, however, it was revealed that he, too, was a solid supporter of the concept. Flexible response, it turns out, was not counterinsurgency but was merely another name for conventional limited war.

There is a one-dimensional flavor to all this which is disquieting. The effort to force all the rich and perverse experience of that long ever-changing war and all the dimensions of our collective failure through the single gate of the Army concept on a go/no-go basis just does not fly. There are too many other aspects which do not and will not submit to such a simple formula.

For example, the author's description of insurgency does not accommodate the reality of North Vietnamese involvement, its incredible revolutionary leaders and the intervention by its formidable army. The views of the senior Vietcong and North Vietnamese army leaders are now available. There was contention between them, and they suffered major reverses. They were close to defeat on more than one occasion. There is nothing simple or inevitable about the way the war developed.

Except for a brief discussion of the abortive attempt in 1965 to create a combined U.S.-Vietnamese command, little is said about the daunting weakness of the government of South Vietnam and the resulting softness of all its enterprises. Having said that, though, we now know more about the political constraints inherent to our own system of government which limits the extent and effectiveness of any effort by us to control the actions of another country at the political level. We see those constraints in action every day with respect to Central America.

The most disturbing aspect of the argument developed in this book is the clear and inescapable implication that we should have been able to throw off the concept and to use U.S. combat troops directly in counterinsurgency operations in the highly populated enclaves or along the so-called demographic frontier.

There are those of us (and I believe we are many) who have drawn opposite conclusions from our experience and study of the war in Vietnam.

We hold that the proper, indeed the only, role for U.S. combat forces is to isolate the insurgent battleground from outside intervention.

This we failed to do in Vietnam, but we should have done it and we will be faced with the problem again and again. Assuming that it can be done, and it has been done (the British did it in Borneo, for example), then the U.S. involvement in counterinsurgency proper should involve only a small, select, fully empowered team of real experts to manage the U.S. assistance program

and to advise and assist the local government in counterinsurgency operations by its own agencies and forces.

If such a government cannot be found or helped—we do not say created—then the chances for success are slender or worse. The harder we try and the more we Americanize the effort, the more likely it is that we will fail. Such are the politics and psychological difficulties in such a situation.

If this opposing point of view has any merit whatsoever, then it tells us several things:

- U.S. combat forces were not and are not the preferred or proper instrument for counterinsurgency operations amongst the people. Short of genocide or relocation, as in Afghanistan, foreign armies have a record of failure in such operations for the most obvious political reasons.
- The instinct of the U.S. Army in Vietnam to go after the Vietcong main forces and the North Vietnamese in the back country was correct. It was not that some abstract doctrine was in error; it was rather the failure to isolate the battlefield operationally.
- A superbly researched book is flawed by the doubtful premise around which it is organized.

Troop A at Ap Tau O

By Gen. William E. DePuy
U.S. Army retired

Outnumbered by the 272nd Regiment of the elite 9th Vietcong Division, a small but heavily armed and determined unit of the 4th Cavalry defeated its foes in one of the most gallant stands of the Vietnam war.

When the tanks and armored cavalry vehicles of Troop A rumbled out of the Phu Loi base on 8 June, 1966, the troopers did not know that before the day was out they would have fought and won an epic battle of the Vietnam war.

The 1st Infantry Division which sent Troop A north toward the Cambodian border did not realize that this day would usher in a long-sought showdown with its chief antagonist—the 9th Vietcong (VC) Division.

The 272nd Regiment of that 9th Division could not imagine that it was being sent to its first substantial defeat.

The reasons Troop A went north on that hot and steamy day are buried deep in the larger drama then unfolding in the southern half of South Vietnam.

In 1966, Saigon—the Pearl of the Orient—lay on the boundary between two worlds. To the south lies one of the largest rice bowls in Asia—the vast delta of the Mekong River.

Covered by a sheet of water during the southwest monsoon and etched by the roads, paddy banks and the muddy fingers of that great river, this rich land supports over half the population of South Vietnam.

In its hamlets and towns already divided by family, sect and the reticence of the peasant culture, the virus of Asian communist insurgency ran deep and strong. Here the war of national liberation took its purest course, and until late in the war neither U.S. nor North Vietnamese forces played any decisive role.

North of Saigon was another matter. The area dominated by the economic power and security forces of the South Vietnamese government reached no more than 25 miles from the edge of the city.

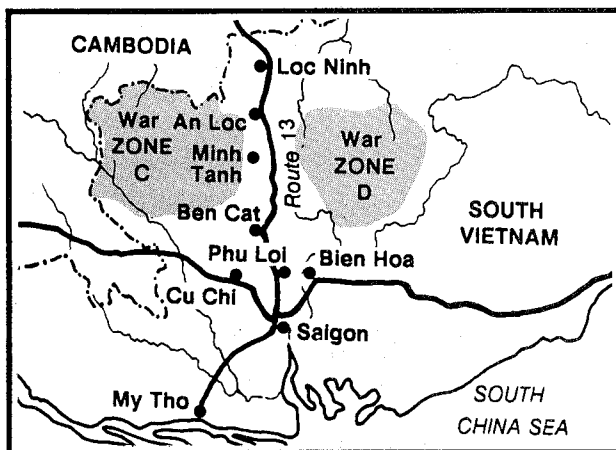
There it faded into a no-man's-land of ruined hamlets, abandoned fields and beleaguered outposts. The great jungle to the north was encroaching on these transient works of man.

Stretching away to the Cambodian border and far beyond, this green sea of vegetation provided an enormous hiding place for the insurgents and the best covered approaches to the capital of Saigon.

Within it could be found the headquarters of the National Liberation Front (NLF), bases and training areas for the main forces of the VC, and the logistic support structure for the expanding

war and staging areas for the North Vietnamese Army (NVA) which, in 1966, was in the early stages of its massive intervention.

National Route 13 northbound from Saigon pierced the center of this huge arc of Vietcong territory. Built to serve the French rubber plantations in Binh Long province, Route 13 was the sole commercial artery in the area and the only access to An Loc, the fortified provincial capital, and the two beleaguered district towns of Loc Ninh and Chon Thanh.



An Loc was the scene of the largest tank battle of the war in 1972, and Loc Ninh was the headquarters of Gen. Van Tien Dung who commanded five North Vietnamese Army corps during the final attack against Saigon in 1975.

For 50 miles east and west of Route 13, the VC reigned supreme. The attitude of Saigon to this general area was conveyed by its designation as a war zone.

Since the resumption of the Indo-China war in 1958, the VC had diligently built their combat forces—guerrilla squads and platoons in the villages, local force battalions at district and province level, and main force regiments and divisions under regional control.

The 9th VC Division was the pride of the NLF and the overlord of the war zones. In 1964 and 1965, it had inflicted humiliating losses on the Army of the Republic of Vietnam (ARVN). These shattering defeats did much toward bringing U.S. ground forces into the war.

By 1966, the 9th VC Division was riding high. Its three Vietcong regiments had been joined by a fourth—the 101st North Vietnamese.

By June of 1966, the U.S. 1st Division was nearing its first anniversary in Vietnam. As at Cantigny, France, and El Guettar, Tunisia (both in World War II), it was learning a new kind of war. The mission was simple enough—to find, engage and destroy the enemy's main force units which were pulverizing the Army of the Republic of Vietnam. That meant the 9th VC Division.

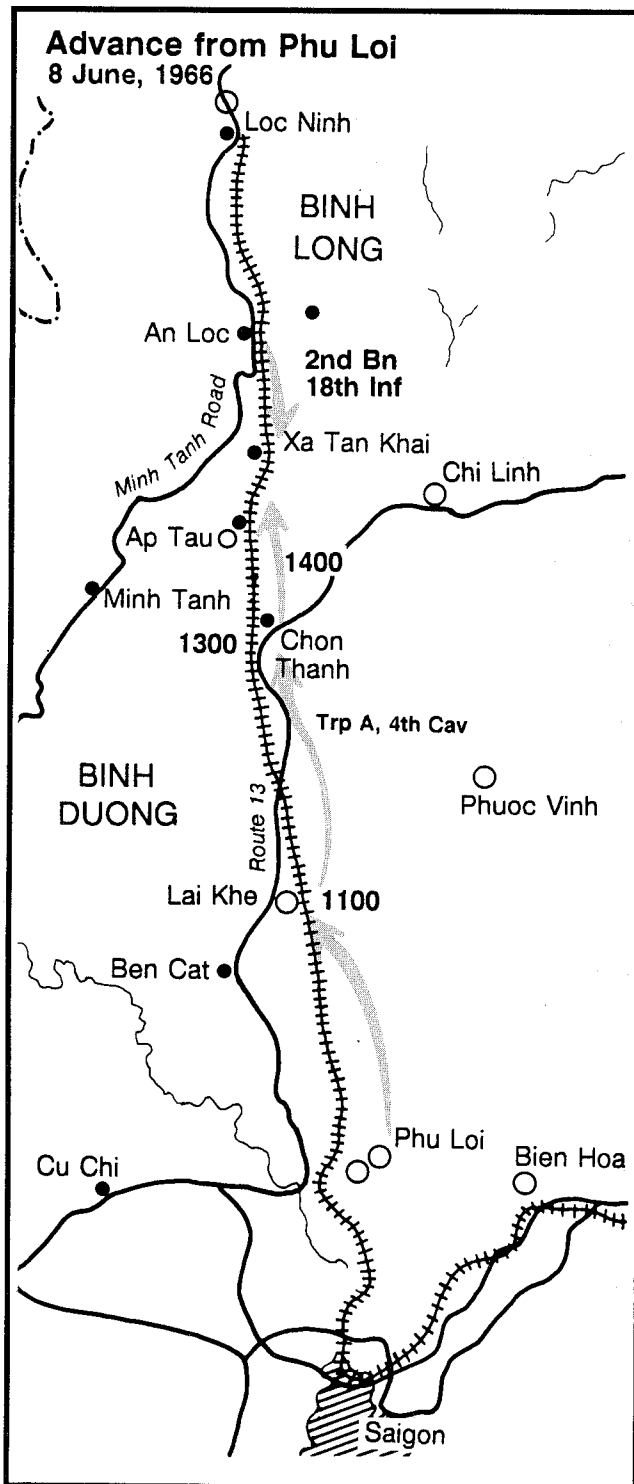
The method was straightforward as well—to conduct intensive reconnaissance, surveillance and intelligence operations to find the 9th VC Division and, after finding it, to pile on both troops and firepower.

The VC, however, preferred to fight only when they thought they would win; otherwise they refused combat and faded away. Battles occurred when the VC were trapped or thought they were falling upon a small isolated unit which they could quickly destroy. The only answer to these tactics was rapid support and reinforcement any time the VC gave battle.

In 1966, there were seven large battles and innumerable skirmishes between the 1st U.S. and 9th VC divisions as this deadly game was played out on a field of 5,000 square miles.

In May, a Special Forces team out of Loc Ninh found on the body of a VC lieutenant a map and plan indicating that the 9th Division planned a campaign in Binh Long province in June.

The 1st Division sent infantry battalions and artillery to An Loc and Loc Ninh. Patrolling revealed nothing. The battalions were withdrawn.



In late May, the 5th ARVN Division reported that 9th VC Division troops had deployed to Binh Long. U.S. battalions were returned to Loc Ninh and Quan Loi (near An Loc) while another was positioned at Minh Thanh.

A contact occurred near Loc Ninh, and the decision was made to move cavalry and medium artillery into the Binh Long area in anticipation of a long, tough campaign. The operation was named El Paso. The heavier artillery could move only by road, and it fell upon Troop A, 1st Squadron, 4th Cavalry, to lead the parade.

Capt. Ralph Sturgis, commanding Troop A, was alerted on 6 June for a move on the 8th. He called back his detached 3rd Platoon and ordered intensive preparation. Capt. Sturgis decided the mission was important when a truckload of tracks and treads and other repair parts suddenly arrived from squadron.

When Lt. Joseph R. Lake and his 3rd Platoon rolled into the cavalry base at Phu Loi, he saw a high level of activity in the troop maintenance area and noted that the troopers needed no urging to put their vehicles in shape for battle. Treads were replaced,

→ U.S. forces
○ Air base

new antennae mounted, additional sandbags added under crew stations and ammunition checked.

On 8 June, Troop A operated 41 armored vehicles. Nine were M48 tanks with 90-mm guns, 29 were M113 armored cavalry assault vehicles (ACAVs) of which two were radar vehicles and two more were flame-throwing tracks, plus an armored recovery vehicle and two engineer dozer tanks. Each platoon had three M48 tanks and seven ACAVs. The platoons sometimes had tank dozers and flame-throwing ACAVs attached.

Experience taught the troopers to seek self-sufficiency on the battlefield. They knew they would be reinforced if they started a battle, but they also knew the reinforcements might be slow in coming. Thus they carried an astounding load of ammunition.

The main weapon on the ACAV was a .50-caliber machine gun protected by steel plate shields which swiveled with the gun. For these, 2,000 rounds of ammunition were stowed.

On the left rear deck was a shielded M60 7.62-mm machine gun for which 7,500 rounds were stowed. The M79 40-mm grenade launcher was provided with 90 rounds. Besides the grenadier and two gunners, the other two members of the crew were the driver and an ammunition handler. The entire floor of the ACAV was covered with ammunition boxes—in some places two deep.

The M48A3 tanks stowed 1,050 rounds of .50 caliber, 6,000 rounds of 7.62 mm for the coaxial machine gun, and 62 rounds for the main gun—primarily high explosive and canister. With 73 machine guns and nine tank cannons plus two flame-throwing vehicles, Troop A was a formidable fighting machine.

Early on 8 June, Troop A left Phu Loi en route to An Loc with a refueling stop scheduled at Lai Khe—the base of the 1st Division's 3rd Brigade. To avoid mines, Capt. Sturgis stayed away from main roads choosing dirt tracks and even an old railway road bed. Even so, ten kilometers out of Phu Loi the lead tank hit a mine. The damaged track was trussed and the tank returned to Phu Loi with an ACAV as escort.

Arriving at Lai Khe at 11 A.M., Troop A refueled, ate some combat rations and moved on. The 2nd Battalion, 18th Infantry (2/18), commanded by Lt. Col. Herbert J. McChrystal Jr. and standing by helicopters at the Lai Khe air strip, was the prime reaction force if Troop A became engaged. Soon after Troop A left Lai Khe, 2/18 was lifted to An Loc—closer to the most likely engagement area.

The 3rd Brigade air liaison officer, Capt. Richard Wetzel, flew over the column in an O-1 Bird Dog aircraft acting as a forward air controller. Capt. Wetzel was in communication with the Bien Hoa fighter base and both 1st Squadron and Troop A, 4th Cavalry.

Supporting artillery was in place at An Loc, and the South Vietnamese 155-mm artillery at Chon Thanh had been brought into the fire request loop. From Lai Khe to An Loc, South Vietnamese road security was to be provided by 5th ARVN Division.

The cavalry squadron commander, Lt. Col. Leonard L. (Lee) Lewane, flew over the column in an OH-13 observation helicopter. He vectored the lead tank along a cross-country course parallel to Route 13 to avoid further mining mishaps.

Col. Lewane was a striking commander—close-shaven head, open face, strong physique, flashing eyes and energy oozing out of every pore. Since the legendary Bvt. Maj. Gen. Ranald S. Mackenzie who, as a colonel, led the regiment against the Apaches, Kiowas, Comanches, Arapahos and Cheyennes in the frontier wars, there had not been a more valiant and dashing leader of the 4th Cavalry—the best regular Army cavalry regiment in the Indian campaigns. (The 7th Cavalry was better known after the Little Big Horn, but the 4th was not envious.)

The order of march was 3rd Platoon plus one flame track (Lt. Lake), troop headquarters (Capt. Sturgis in his command track, 1st Sgt. Pepe in a radar track and one flame thrower); 2nd Platoon (Lt. David Kinkead); 1st Platoon with one dozer tank (Lt. Louis L. Boualt), followed by the troop executive officer, Lt. Ronald Copes, and the trail party with an armored vehicle-launched bridge, the maintenance track and an M88 retriever.

It was the habit of the cavalry to ride on top of its vehicles whenever possible. The cavalry feared mines more than enemy fire, and the heat inside was nearly unbearable, running a minimum and humid 110 degrees.

The column reached Chon Thanh around 1 P.M. From there northward, it was necessary to move on Route 13.

Most large trees had been cleared back from the road 100 feet or more by wood cutters in the charcoal business, but secondary growth touched the shoulders in many places.

There were a few cleared areas scattered along the route. The country was generally low and wet with water in deep ditches along most of the road.

Beyond Chon Thanh, the ARVN security force was nowhere to be seen. Civilian traffic had disappeared totally.

Lt. Lake remembers that suddenly the whole atmosphere became tense and ominous. Some of his scouts reported seeing figures lashed to the tree tops.

Radio reports of furtive movement and brief sightings rippled over the troop net. Lt. Kinkead says that there were reports of sniping, and one trooper was hit in the arm. The cavalrymen began to slip down behind their weapons.

Shortly after 2 P.M., the lead tank of the 3rd Platoon approached the railroad crossing and a mine exploded, taking off the right track and sending up a column of black smoke.

It was standard practice in the 4th Cavalry to "herringbone" upon contact: alternate vehicles faced outward at 45-degree angles. Lt. Lake's lead tank reported the mine and that his tank was disabled and under heavy fire. His scouts reported heavy contact and a higher open space on the east side of the highway.

Lt. Lake tore off his armored vehicle crewman's helmet with the earphones which had kept out the sounds of battle. He immediately realized that his platoon was under intense fire by a variety of weapons.

The 3rd Platoon began to jockey toward the cleared area while engaging the charging VC with every available weapon.

The VC commander of the 272nd had deployed his regiment with the skill and cunning to be expected of a veteran of many battles. He knew about the plans for the American move up Route 13 from VC agents embedded in the ARVN units ordered to provide road security.

Whether he knew it would be armored cavalry is not clear. He moved into the attack position after dark on the 7th. His troops dug foxholes along the old rail bed. The ambush area was at the maximum range of the artillery at Chon Thanh and An Loc.

The foot and trigger of the "L"-shaped ambush was occupied by the 272nd's reconnaissance company. The long axis was organized with three battalions abreast—1st, 2nd and 3rd, from north to south.

The position extended from the railroad crossing almost to the bridge at Ap Tau O—about three kilometers—just the length of a cavalry troop moving with 75-meter intervals between vehicles.

When the reconnaissance company opened fire, it was the signal to the three battalions to assault the column. The numerical odds were nine to one—135 men in Troop A, 1,200 in the 272nd Regiment.

When the battle opened, Lt. Lake's 3rd Platoon had been stopped exactly where the 272nd's 1st Battalion wanted them—in the first kilometer south of the crossing. Thus, the VC attack carried in among the armored vehicles.

The fact that Lt. Lake's scouts reported the open area to the east saved his platoon. Nonetheless, it was touch and go for the first 30 minutes.

The lead tank could not move. VC attempting to climb aboard were shot off by ACAVs moving to the nearby clearing. This tank fought the entire engagement in its exposed position.

Sgt. Joseph Listle who commanded that tank quickly noticed the devastating effect of canister rounds on the VC who were exceedingly numerous in his vicinity. He reported this encouraging fact to Lt. Lake.

As the 3rd Platoon jockeyed into the clearing shooting VC off their companion vehicles, they acquired a little fighting room. The VC must have anticipated such a move, though, because the 3rd Platoon was immediately hit by an intense 80-mm mortar barrage.

Lt. Lake's platoon sergeant, Richard Lanham, was firing his tank-mounted .50-caliber machine gun at the surging VC when the link chute jammed. PFC Avery G. Smith then went out on the rear deck with an M79 grenade launcher to hold off the VC while Sgt. Lanham leaned over the side to clear the chute.

The intrepid PFC Smith kept the VC away from his sergeant and then saved his life by shielding Lanham from a mortar round which fell on the tank. PFC Smith was awarded the Distinguished Service Cross posthumously.

To add to his other difficulties, Lt. Lake's ACAV backed into a wet ditch and stuck there. He worried that he would be an ineffective platoon leader while stuck in the mud, so he ran to the nearest vehicle which contained Sgt. Merle Slater's mortar squad.

Lt. Lake climbed in and, using the radio, regained control of his platoon. Sgt. Slater then politely told him he was standing on the body of PFC Pendergraft, who had been the best mortar man in the troop.

During this time, 3rd Platoon also lost Sgt. Rummel, the leader of the scout section.

Lt. Lake called him the best sergeant he had ever known—always a leader.

While Lt. Lake was fighting for his life, Capt. Sturgis ordered Lt. David Kinkead's 2nd Platoon to move north and link up with Lt. Lake. 2nd Platoon moved rapidly, hosing down the west side of the road with their machine guns as they moved.

As he approached 3rd Platoon, Lt. Kinkead saw some room on the east side of the clearing to which Lt. Lake had repaired under great pressure and with some disorganization.

Part of 2nd Platoon went in on the east while part intermingled with 3rd Platoon where they clearly needed help. Within moments, 2nd Platoon was also fully engaged.

Just after sending Lt. Kinkead forward, Capt. Sturgis, accompanied by the vehicle of 1st Sgt. Pepe and a "Zippo" flame thrower vehicle, was hit broadside by a 75-mm recoilless rifle round.

Sp.4 James Dempsey was wounded while in the driver's seat. When the ACAV came to a grinding halt, Sgt. Thomas Saporito quickly pulled Sp.4 Dempsey back onto the floor and took over the driving chores himself. While Sgt. Saporito was settling into the driver's seat, another 75-mm round hit the command vehicle.

This time SFC Albert Armitage spotted the weapon and killed the crew with the .50-caliber machine gun.

Jinking from right to left to avoid another hit, Sgt. Saporito could not see another 75-mm weapon setting up to finish him off, but SFC Armitage did and swung his .50-caliber around to engage.

SFC Pearson Cole, following in a Zippo, also saw the VC. His driver gunned forward while SFC Cole aligned his flame thrower.

Before the VC could get off a round or Armitage could fire, the 75-mm crew was consumed in a stream of liquid fire. Capt. Sturgis then moved north to the laager. On the way, 1st Sgt. Pepe's ACAV was hit twice and the top kick was wounded.

In the meantime, Lt. Kinkead's arrival at Lt. Lake's position was very helpful. The combined firepower began to force the VC back to the west side of the road. Lt. Kinkead ordered his tanks to fire canister and aim low at the tree line.

Just as Capt. Sturgis came up, Lt. Kinkead's second in command, Platoon Sgt. Robert A. Jackson, was gravely wounded by a mortar round. His .50-caliber machine gun was destroyed. Capt. Sturgis, not knowing all this, asked Lt. Kinkead to go back and help 1st Sgt. Pepe.

Lt. Kinkead started back south on Route 13 when he suddenly realized his external radio might be hit, so he picked it up and placed it on the floor of the ACAV.

As he bent down, a 75-mm round hit exactly where his head had been. It rocked the vehicle up on one track and knocked him to the floor. Recovering from that shock, he pulled up beside 1st Sgt. Pepe's disabled vehicle.

The lieutenant and his medic, under fire, removed 1st Sgt. Pepe to their own vehicle while a lightly wounded trooper also made it across under his own power. They then returned to the laager.

The 1st Platoon, under Lt. Boualt, was third in line following Lt. Kinkead. About one kilometer south of the Ap Tau O bridge, the engineer dozer tank with the 1st Platoon pulled into the roadside ditch and stuck fast.

At about the same time on the southern approach to the bridge, an ACAV dropped out with mechanical trouble. Platoon Sgt. Eugene F. Blair, in a tank, radioed to Lt. Boualt that he would stay with the ACAV for security.

Shortly after 1st Platoon passed the bridge, the battle broke out up front. Lt. Boualt could hear the firing but could not raise Capt. Sturgis on the radio. Nonetheless, he decided to move toward the sound of the guns. Capt. Sturgis at that time was no doubt busy receiving 75-mm recoilless rifle rounds from the VC.

At this time, 1st Platoon was passing across the front of the 3rd Battalion of the VC 272nd Regiment. As it moved north with two tanks and six ACAVs, 1st Platoon received fire from the west to which it vigorously responded.

Soon, however, Lt. Boualt was surprised to find large numbers of VC moving parallel to his course 50 to 100 meters west of the highway. These VC were obviously more interested in moving north than in fighting. He assumed that this was the 2nd Battalion of the 272nd sidslipping north toward the troop laager which was then forming opposite the VC 1st Battalion.

The 1st Platoon was able to inflict some damage during this running gunfight, but its greatest contribution came as the stream of VC veered toward the road hot on the tail of Lt. Kinkead's platoon just then closing in the laager.

The VC presented their flank to Lt. Boualt, and he laced them with the fire of all his weapons. This flanking fire must have been galling to the VC as they turned viciously on the 1st Platoon.

As Lt. Boualt reconstructs the situation, he was about 500 to 800 meters south of the laager and generally on the hard top of the road. He was hard-pressed. One ACAV was hit and the crew evacuated. Another ACAV was totally destroyed.

The VC entered and drove off the first of these and then left it in the edge of the nearby jungle. This left the platoon with four ACAVs and two tanks, one of which promptly received a mortar round inside the turret leaving only the stunned driver alive and setting a fire in the engine compartment.

Lt. Boualt revived the driver and instructed him to back into a nearby stream to extinguish the fire. This tank remained partly under water for the remainder of the day.

Lt. Boualt describes the configuration of the troop at that time as similar to a tadpole—he was the tail. His five remaining vehicles fought it out for the remainder of the battle in that position. Around 5:30 P.M., he closed into the southern sector of the laager.

Lt. Boualt remembers that PFC Peyton, his conscientious-objector medic, ran from vehicle to vehicle patching up troopers regardless of the fact the area was crawling with VC.

When PFC Peyton observed that a group of VC were trying to kill some of his patients, he turned an idle M60 machine gun on them—telling Lt. Boualt afterward that this was a one-time deviation from his noncombatant duties.

PFC Peyton had a busy day because 1st Platoon had six troopers killed and 14 wounded out of their starting strength of 40 men.

In the laager, Lt. Lake had his own conscientious objector named Sorenson who also went from vehicle to vehicle tending the wounded of 3rd Platoon. Lt. Lake cannot figure for the life of him how Sorenson survived unless of course the source of his conscience made some special dispensation.

By 3 P.M., Troop A minus the 1st Platoon had coiled like a Texas rattler under attack and the VC were aware that it was a very dangerous adversary; however, the 272nd kept coming.

The continuous fire fight was punctuated by surges of fire and movement as the VC commanders called on their troops to try again and again to wipe out this obstinate band of Americans.

During this long fight, Col. Lewane in his helicopter and Capt. Sturgis on the ground combined with Capt. Wetzel to bring in tactical air strikes on the 272nd with enormous effect. The road and railbed provided excellent reference points for the F-4 and F-100 pilots.

Within two hours, Capt. Wetzel directed about 24 flights totaling 43 aircraft against the whole line of VC. Capt. Wetzel was a seasoned forward air controller and the Bien Hoa pilots were old hands.

Bombs, napalm and cluster bomblets blistered the area west of the road. Troop A was more than willing to share honors with the Air Force.

From the beginning of the engagement, Troop D of the 4th Cavalry, the air cavalry troop, kept relays of helicopter gunships working the enemy's flanks and rear.

With his uncanny instinct for impending battle, the division artillery commander—Col. Martin Camp—had positioned Lt. Sam Floca at Chon Thanh to ride herd on the 155-mm guns.

He was a good choice. When the fight started, the South Vietnamese battery commander refused to fire on the grounds that South Vietnamese infantry were in the area on security duty. They had, of course, long since departed.

Lt. Floca drove the 155 battery into action at gunpoint. Later when they reached their ammunition expenditure allowance, he convinced them they should continue to fire. As a result,

Lt. Gary Arnold—an artillery aerial observer—fired a number of critical missions during the heat of the battle.

The guns of the cavalry, combined with the artillery and fighters, drove the 1st and 2nd battalions of the 272nd back to the west. Col. Lewane directed 2/18 Infantry to land to the north and sweep the west side of the highway, but the closest landing zone was almost four miles north, and 2/18 arrived after the show was over.

On two occasions in the heat of the battle, Col. Lewane landed his fragile OH-13 inside the laager under heavy fire. He wanted to eyeball his troops and determine the state of their ammunition supply. He walked from vehicle to vehicle and found the troops full of fight and with plenty to shoot. His presence in the thick of battle was just what the troopers expected of their commander.

In the meantime, the 3rd Battalion of the 272nd, except for the passage of 1st Platoon across their front, must have felt left out, and that brings us to Sgt. Blair with his tank and the damaged ACAV at the bridge.

Blair and his two crews had repaired the ACAV and were about to start north to join the noisy battle up the road when elements of the VC 3rd Battalion slipping to their right opened fire from north of the bridge. Fortunately for Blair, he was separated from the VC by the stream and a wide stretch of swamp grass.

The VC began to work south on Blair's west flank. He kept them under fire with his two .50-caliber machine guns and doses of canister from the tank gun.

It then occurred to Sgt. Blair that some air support might come in handy. He called Capt. Sturgis who sent Capt. Wetzel to help, and soon the VC were treated to a heavy dose of napalm and cluster bomblets which must have been very discouraging as the VC fire dropped off sharply.

Just as Blair was feeling better about his situation, though, he spotted two VC setting up a 75-mm recoilless rifle on the hard top of Route 13. Then two more appeared with some ammunition. Blair took a dim view of this development, called for canister, traversed his main gun to the right and fired.

The VC and their gun were cleanly swept off the road. Not a bad performance for an infantry sergeant who had never fought in a tank before. When the VC broke contact, Blair had one round of main gun ammunition left.

Capt. Sturgis was also feeling better. The fight was still on, but he knew he had won it. His boss landed again, went to several fighting vehicles and checked the ammunition supply and the condition of the troopers.

Still satisfied on both counts, he agreed with Capt. Sturgis that the trail party should come forward. Capt. Sturgis called Lt. Copes on the troop net and told him to move up.

Lt. Copes had two ACAVs, two repaired tanks and the M88 recovery vehicle. Just as Lt. Copes came up to the stuck engineer dozer tank, Col. Lewane landed his OH-13 nearby.

Lt. Copes and Col. Lewane went to the dozer tank expecting to find the crew dead or missing; but to their astonishment, the hatch opened and out came four very happy engineers.

Col. Lewane remembers that he had an eerie feeling when he landed. It was too quiet. The engineers reinforced his concern when they said they had been fighting VC for over an hour. The M88 pulled the dozer out of the ditch and, as Col. Lewane took off, Lt. Copes started north.

Col. Lewane circled one time, saw the lead tank stop, saw smoke, heard a large explosion and realized Lt. Copes now had his own private war.

The driver of the lead tank, Sp.5 Hugh Oliver, was wounded by the mine and crawled up on the turret just in time to be blown off onto the road together with the tank commander, Sgt. Charles Norris, by the impact of a VC 75-mm round.

The remainder of the trail party then closed on the lead tank with all guns blazing. Sgt. Norris started to pick himself up from the roadside when he saw an automatic rifle lying nearby. He grabbed it only to find a VC on the other end. His hands had been badly burned and the VC won the tug of war.

His adversary then broke for the jungle, and Sgt. Norris ran to Lt. Copes's ACAV. He climbed into what he thought would be a safe refuge only to find a trooper inside loading M16s and handing them up to the lieutenant who was emptying them at the nearby VC.

One very unfriendly VC then ran up to Lt. Copes's vehicle and flung a grenade through the hatch. Lt. Copes, who is as courageous as he is big, flung it back and before it went off put some bullets into that brave but impertinent Vietcong.

The grenade then went off and cleared the enemy for some distance around. When the fighting subsided, Lt. Copes ordered his small army forward leaving the lead tank smoldering on the road. Lt. Copes picked up Blair and his two vehicles at the bridge, and the six armored vehicles closed the Troop A laager about 5:30 P.M. without further adventure.

The battle was over. Many troopers had shed their flak jackets, and some were stripped to the waist. The heat in the fighting vehicles with engines running, guns firing and tension running high for over three hours was indescribable.

Lt. Lake remembers that a dozen or so troopers were standing within the circle of vehicles talking and cooling off when two enemy soldiers in North Vietnamese uniforms and holding rifles popped out of a ditch just 15 feet away. Someone cut them down.

Troop A held the field of battle but the price was high. The platoons mourned their dead and evacuated their wounded. There is no exultation among soldiers at the end of such a battle. Twelve troopers were killed and 33 wounded. The engineers lost two more killed and four wounded. Troop A went into battle with 135 men and lost 51 (14 killed and 37 wounded).

The 272nd Regiment lost most of its 1st Battalion including its commander, about half of the 2nd Battalion and some of the 3rd. On 9 June, "Hanoi Hannah" offered rewards for killing or capturing any officer from Troop A, 4th Cavalry.

The Air Force delivered 13 tons of high explosive bombs, 14 tons of napalm, seven tons of fragmentation bombs and 24 canisters of cluster bomblets.

On 9 June, Troop A moved to An Loc under its own power with 40 of its original 41 armored vehicles. After Ap Tau O, the U.S. command in Saigon sent to the United States for more armored units whose utility had been established beyond any doubt.

For the battle on 8 June and two larger but not tougher battles with the 9th VC Division which followed in June and July, the 1st Squadron, 4th Cavalry was awarded the Presidential Unit Citation. The troopers of Mackenzie's old Indian fighting regiment would have understood and been proud.

One last event on 8 June tells us more about the 4th Cavalry than such awards could possibly convey.

Back at the scene of Lt. Copes's war, Sp.5 Hugh Oliver, the driver of the abandoned and smoldering tank, regained consciousness as he lay in the roadside ditch, sorely wounded and blinded in one eye. He heard VC talking all around him. He could see his tank ten feet away. Incredibly, the engine was still running.

Sp.5 Oliver crawled to the tank, climbed into the driver's compartment and drove away. As evening began to fall, troopers at the laager saw a lone battered and smoking tank drive up Route 13 and into their lines with a bloody head sticking out of the driver's hatch. They let out a cheer and sent Hugh Oliver off in a medevac chopper.

Highfield
23 May 87

Dear Max:

Dave Meade called to ask me to put down some thoughts on the question of the Fixed Regiment versus the Flexibly Organized Brigade. As usual, there are debating points on both sides of the issue. When looked at in the narrowest context, the pros and cons for each are nearly a wash. However, there are larger and deeper issues involved and I shall try to bring them forth in the (probably) rambling discussion below.

First off, we have had considerable experience with these alternatives. There should be no mystery involved. And the idea of going back to regiments, or more exactly, to Regimental Combat Teams (RCTs) evokes memories as recent as the 1950s. I use "Regiment" to make the distinction easier to handle, but there is one very large difference in the new version of the RCT — the artillery battalion is also organic. This was not done in WWII and for good reasons — more later on that.

There are some things to remember about our experiences with the alternatives. In World War II the infantry was organized on fixed lines and armor on the flexible model. Within Infantry divisions, cross-attachment was limited, normally, to the assignment of a tank platoon and a TD platoon to an infantry battalion. On rare occasions (the breakout from Normandy) tank companies were sometimes attached to battalions and whole tank battalions to a single Regiment. This happened in my Regiment during the move from Avranches via Mayenne to Le Mans.

But the tanks and tank destroyers were somewhat akin to accompanying guns a la the Civil War mode. The WWII RCT also included (on an attached basis) an engineer company, a medical collecting company, and a Direct Support artillery battalion. The most useless appendage of the regiment was its poorly trained, unintegrated cannon company (its own artillery). RCTs were almost always assigned zones of advance and sectors of defense delineated by boundaries. The

The Maxwell R. Thurman Papers. Box: CG, TRADOC, Official Letters 1987, June-July. Folder: Official Letters, July 1-10, 1987. U.S. Army Military History Institute, Carlisle Barracks, PA.

division commanders concentrated forces by narrowing boundaries at the “Schwerpunkt” and widening them in economy of force elsewhere.

The RCTs were known quantities — never changed — developed internal team work — stayed within their boundaries and slogged and slugged it out. The DS artillery was for all intents and purposes organic except it was part of a larger, highly professional, artillery organization which could exploit the full potential of the division artillery and supporting Corps battalions by concentrating all fires when desirable and necessary. Div Arty lightly influenced tactical deployment of the DS battalion, with potential concentration in mind, but the hand of Div Arty was never visible to the Infantry except when the Infantry wanted more fire. Therefore, Div Arty was a positive, not a negative, influence. Infantry battalions routinely received supporting fires from one to three battalions and in a crunch, five to ten.

The Germans used the system, now being proposed by certain groups in which the artillery was organic to the Regiment. German artillery was inferior to US artillery in quantity and in quality — especially, the quality of its tactical and technical fire direction — Thank God! In WWII US Army artillery was the most professional element on the battlefield — sometimes the only professional element.

In the armored divisions, which were drastically streamlined in 1943 after the North African experience, there were only six maneuver battalions — three tanks — three armored infantry. These six battalions, plus the armored artillery, the armored engineers, medics, and combat trains were “brigaded” flexibly into Combat Commands of which there were three. CCA and CCB were the principal combat commands. One commanded by a brigadier the other by a colonel. CCR was formed “to march the reserve.” It also was to “reconstitute” broken battalions.

The theory was that the two main combat commands would be tailored to the tactical jobs. As time went on, certain battalions became aligned with certain combat commands, all else being equal. However, when tactical circumstances required, the battalions were shifted as necessary. Usually a combat command had both tanks and armored infantry. In some divisions CCR was used habitually as a third brigade. And thus, a pattern of one tank and one Armored Inf Bn (AIB) per combat command emerged for routine work.

In Vietnam the infantry was organized under the ROAD concept. Brigades were Combat Commands. For routine work — i.e., area patrolling or even pacification, some divisions left the same set of battalions under the same brigade for long periods. Some brigades were “fixed” for

special operations — i.e., the Riverine brigade of the 9th Div and the 3rd (airmobile) brigade of the 9th under Hank Emerson, etc.

When divisions were employed offensively over long periods in highly mobile configurations, the brigade concept was extremely useful and widely used. In the First Division in battles in the Rubber plantation and along Route 13 in 1966-67, the battalions were continuously scrambled amongst the brigades purely on the basis of need and availability. The First Cav tended in the same direction during intensive operations where flexibility is absolutely required. As a stepping stone into the subsequent discussion, let it be noted that the flexibility of the brigade system is the most necessary and most often used in fast-moving, far-ranging mobile operations in which the division plays a central and active role.

In the heavy divisions — today — in Europe etc., the brigade composition tends to be more fixed than flexible, simply out of the basing mode and the relationship of the basing to the GDP. Furthermore, the sectors are wide and the brigades fight semi-independent battles. The flexible use of the brigade concept occurs mostly in large exercises, CPXs, and wargames. Nonetheless, European practice more or less fixes brigades in terms of their initial sectors and missions. There is a natural tendency also to keep brigades together because of the relationship between the Bde commander who trained them and the battalions which have partaken of his style and standards.

Something must be said about cross-attachment at Battalion level. For many years it was the pattern to put a rifle company (mech) with tank Bus to give them security at night, in fog, in forests, towns, and a capability to reduce stubborn strong points. Conversely, it was customary to put a tank company with a Mech battalion to give it punch. Furthermore, with wide sectors each battalion fought an independent battle at the outset and required a combined arms team.

The National Training center has led to a general pattern (in CONUS) of cross attaching on the 2 x 2 pattern — that is, two tank and two Mech companies in every heavy battalion. This practice is an artifact of the NTC tempo of operation. The Army in CONUS which is greatly influenced by the NTC exposure has apparently concluded that there isn't time — in the face of an OPFOR blitz — to rearrange the task organization in the middle of the NTC ordeal.

Thus we see the inadvertent emergence of “universal battalions.” Not a perfect answer for any one mission but on the average better organized for a set of operations. This recent development has profound implications for the subject of fixed versus flexible brigades.

Consider the fact that if such a system were installed Army-wide brigades would not only be fixed but would be essentially the same in balance and capability as would each battalion within them. The direct consequence of this trend would be to deny the option of selective task organization for each mission in order to be prepared, generally, for any mission. THIS IS THE CENTRAL ISSUE.

The Army would be wise to move carefully on this issue and devote to it much thought and discussion. Let us consider the conditions in which the flexible concept has great advantages:

- There will be times when a critical piece of terrain must be seized by dismounted infantry to prepare the way for an armored advance. Given the fact that Mech platoons will dismount no more than 20 men (less after casualties) it may often be necessary to use an entire infantry battalion to get the job done. The terrain may make it impossible to provide direct fire overwatch from the armored vehicles during the toughest phases of the dismounted attack.
- Conversely, it may well be undesirable to tie down any tanks in a battalion level strong point (blocking position, etc.) on a key piece of terrain too large to be held by a single rifle company.
- Correspondingly, it may be essential to mass the tanks in large numbers to effect decisive maneuver around and between these infantry held strong points.
- On the third day of the war when Soviet (Warsaw Pact) forces have achieved some unexpected but threatening advances, the defenders will be in a mad scramble. Division commanders will be grabbing battalions from sectors without penetrations and will be throwing them into brigades in critical sectors or into ad hoc counterattacks by suddenly created task forces (Kampf-Gruppen). It is inevitable. Study the German response to attacks by larger Soviet forces.
- River crossings by dismounted infantry when Bradleys acquire reactive armor and cannot swim in the assault.
- Light brigades relying on ATGM sent off to screen a dangerous flank or cover a wide area for economy of force as contrasted with brigades heavy in tanks for the decisive maneuver.

Consider that a brigade commander with all 2 x 2 battalions in a fixed brigade can redraw boundaries to create concentration but the tool of task organization — tailoring to the mission — is no longer his, ___ would it be available to a Division Commander with Fixed Brigades.

In World War II it was not only unpopular but often disastrous to move battalions from one regiment to another. It led to recriminations and reluctant compliance. The battalion of the 1st infantry attached to the 2nd infantry was given “the toughest job; the least support; the most casualties, etc., etc., etc.” It is a mental hang-up.

There are two contrasting visions of future battle extant today. I exaggerate slightly to make a point.

The first embraces the “Islands of Combat” vision of Air Land Battle 2000. Self-contained battalions and brigades scattered across the terrain commanded by new-model Lt Col’s and Col’s following the intent of their higher commander who: practice AUFTRAG — display initiative — move rapidly — operate inside the enemy’s decision cycle — win battles.

The second view starts with all that — recognizes that the cruel fighting has always been done by battalions but also believes:

- Battalions fight at places and times determined by the intent of the high commander (Divisions and Corps).
- Success depends upon whether those battles at those times and places are taking place within the context of the Blue commanders concept or the Red commanders concept, and
- whether these battalion level and brigade level battles are key sub-plots in a larger scenario or theme including to the extent possible:
 - an aggressive supportive intelligence operation which will also determine who operates inside who’s decision cycle.
 - a battlefield interdiction operation working over the enemy’s reserves and mass of maneuver including BAI and deep fire by rockets and missiles.
 - a counterfire operation which focuses on that enemy artillery which threatens the execution of the concept of operation.
 - an EW operation focused on enemy units to be destroyed at the Schwerpunkt.
 - Air Defense rules of engagement and air space management controls so intimately tuned to the “Concept” that enemy attack aviation is repeatedly led into missile ambushes and, so chastened, adopts less effective techniques of attack which increases the freedom of maneuver for our side.

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- The concentration of supporting fires (DS and GS arty, attack helos, CAS) in precise synchronization with key movements (attacks-counterattacks).
- The reinforcement of terrain by engineers placing or removing mines and obstacles in strict accordance with the unfolding scenario.
- The conduct of SEAD etc., etc., etc.

I see the division as a hands-on player. Thus, I tend to come down on the side of flexible organization. I would like to believe that the new-model U.S. Army will be good enough to tune-up for a succession of successful battles — several each day at Division level — producing lop-sided victories.

To achieve that standard we need to maintain the current emphasis on maneuver and add greater emphasis on the exploitation of the vertical functions (mission areas), (collateral arenas of combat).

In this context I oppose cutting loose independent brigades and battalions to go it alone on a battlefield where the enemy is trying his best to put it all together.

Also in this context I worry about any organizational step which interrupts or short-circuits the vertical supporting systems.

Finally on the artillery. I suggest — once more — that the Army consider the implications of the battle of the 2nd Bn 26th Infantry at Butgenbach at a critical early moment in the Battle of the Bulge. That battalion was supported by the division artilleries of the 1st, 2nd, and 99th divisions plus some Corps battalions. Read Charles McDonald's excellent account! Let us do nothing to diminish our ability to do that again should it be necessary.

My dear Max — as usual when you just asked for the time of day you were told how to make the whole watch. Such are the pent-up thoughts of this old soldier.

Warmly and respectfully.

Bill D.

Our Experience in Vietnam: Will We Be Beneficiaries or Victims?

By Gen. William E. DePuy
U.S. Army retired

We may never fight another war quite like the one in Southeast Asia, but it had lessons for us that could have important bearings on the outcome of future confrontations.

The end of the war, when it came, was brutal and abrupt. On 3 April, 1975, more than two years after the last American forces had withdrawn from Vietnam, Gen. Van Tien Dung, senior field commander of the North Vietnamese army (NVA), arrived at his new headquarters just west of Loc Ninh. He had been sent by Hanoi to win the final battle of the 30 years war. Fresh from his victory at Ban Me Thuot and the total defeat of Saigon forces in the center of the country, Gen. Dung had been appointed as commander of the Ho Chi Minh campaign and all communist forces in the southern half of South Vietnam. The rest of the country was already in the hands of Hanoi.

Gen. Dung motored to Loc Ninh from Ban Me Thuot along the new eastern branch of the Ho Chi Minh Trail. He was accompanied by a senior official of Group 559, a construction and transportation command chartered by Hanoi in May of 1959 (yes!—May of '59) to develop and operate a modern network of roads and waterways to move and supply large military forces. By 1975, the Ho Chi Minh Trail included 20,000 kilometers of eight-meter wide, all-weather roads, a 5,000-kilometer pipeline terminating at Loc Ninh; Group 559 operated 10,000 trucks on this enormous line of communication.

At Loc Ninh, Gen. Dung found the advance party of his campaign headquarters and elements of COSVN (Central Office South Vietnam), the B-2 Theater, and Military Region 7. All the lines of command came together at Loc Ninh. A troop of motorcycles carried officers from section to section in the widely scattered command post. Telephone cables festooned the rubber trees while scores of electric generators provided power for illumination and dozens of radios which connected Gen. Dung with the forces converging on Saigon.

Gen. Dung picked up a phone and was put through to Hanoi. He reported his arrival and discussed deployment schedules and priorities.

The North Vietnamese general was in the process of assembling five army corps comprised of 17 divisions and was backed up by a strategic reserve of at least three more NVA divisions. These corps also contained artillery and armor brigades, air defense, signal, engineer and service support units. Six specially trained sapper regiments (commandos) already lay concealed up against the defensive perimeter of the capital city.

From *Army* 37, no. 6 (June 1987): 28-41

Gen. Dung's concept of operation was simple and overwhelming. He would attack Saigon and destroy the government of South Vietnam by a concentric attack with five corps-sized forces and a strong detachment from the Delta. Map 1 depicts the major features of his plan:

I Corps (three divisions) attacking from the North to seize the Joint General staff compound and the High Command of the Army of the Republic of Vietnam (ARVN).

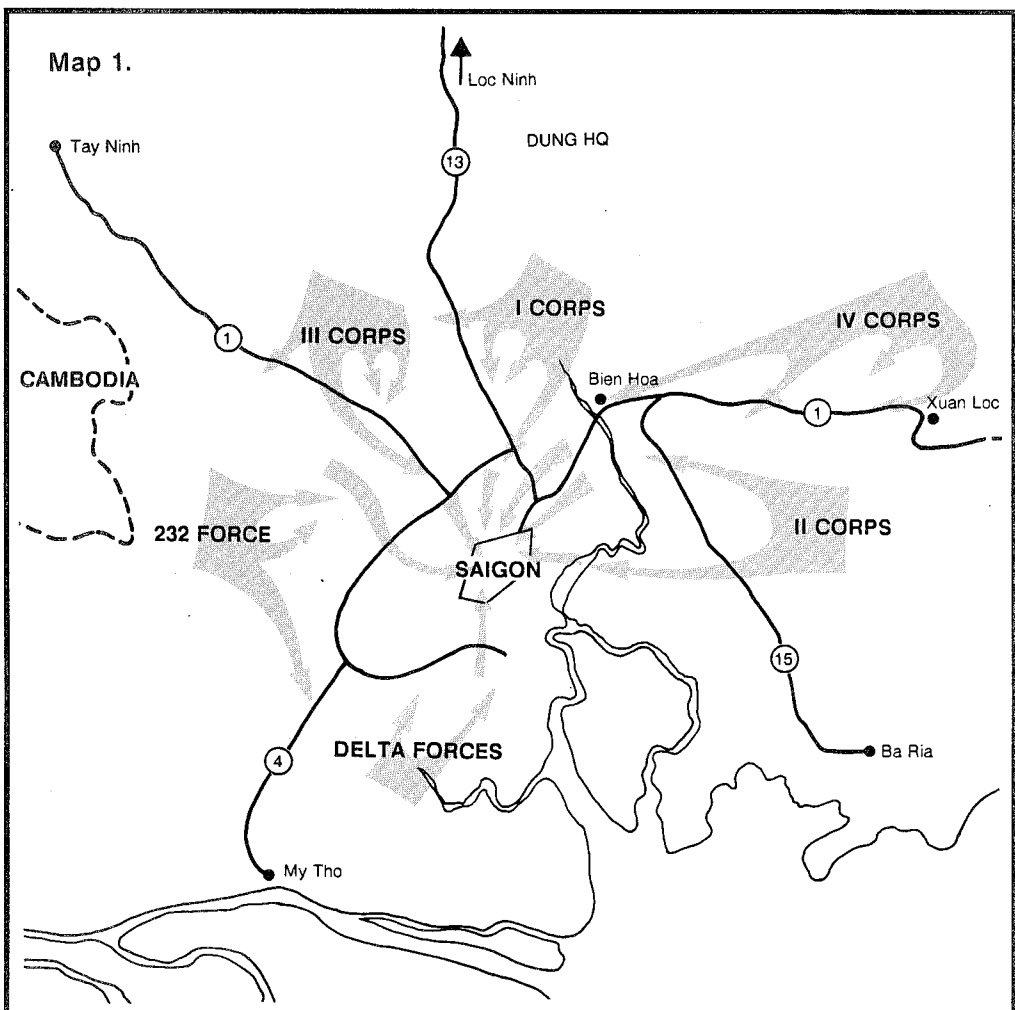
II Corps (four divisions) attacking from the southeast to seize eastern Saigon and the ports.

III Corps (three divisions) attacking from the northwest to seize Tan Son Nhut airport.

IV Corps (three divisions) attacking from the northeast to seize Bien Hoa air base, the Dong Ngai bridges and the Tu Duc Training Center.

232 Force (four divisions) attacking from the west to seize the headquarters of the Saigon Defense Command and of the national police.

Zone 8 Force (two regiments) attacking from the south to seize the southern precincts of Saigon.



When Gen. Dung arrived at Loc Ninh, III NVA Corps was on its way south (see Map 2) from its triumph in the Highlands with the 10th, 316th and 320th divisions. The 10th Division was formed from the regiments that fought the U.S. 1st Cavalry Division in the valley of the Ia Drang River and fought bitter campaigns with the U.S. 4th Division west of Kontum. The 316th Division had spent 20 years fighting in Laos. The 320th Division came from earlier battles with U.S. marines along the demilitarized zone (DMZ).

IV NVA Corps had been formed in the region of Saigon consisting of the former Viet Cong 6th and 7th divisions and the 341st NVA. This corps was sent against Xuan Loc on 9 April to clear the northeastern approaches to Saigon. The South Vietnamese government saw this battle as decisive. Half of the infantry of ARVN III Corps and 60 percent of its artillery plus marines, airborne and Ranger troops from the general reserve were thrown in. A stalemate developed. On 18 April, IV Corps sent the 341st Division around to the west of Xuan Loc along Route 1 and also ambushed the escape routes to the south. On the 20th the defenders fled, were ambushed, and Xuan Loc fell. The IV Corps proceeded west toward Bien Hoa and Long Binh.

The II NVA Corps moved south along the coast on Route 1 after its total victory over Saigon's I Corps at Da Nang. By 19 April, the II Corps with 304th, 324th and 325th NVA divisions and the 3rd Division from Military Region V had crushed resistance in its path and motored at high speed to Xuan Loc. On 20 April, II Corps turned southeast to its attack positions for the Saigon battle. (The 304th Division gained its fame by seizing strong point Isabelle at Dien Bien Phu. The 324th and 325th NVA divisions specialized in positional warfare against the U.S. marines and ARVN in the northern provinces of South Vietnam).

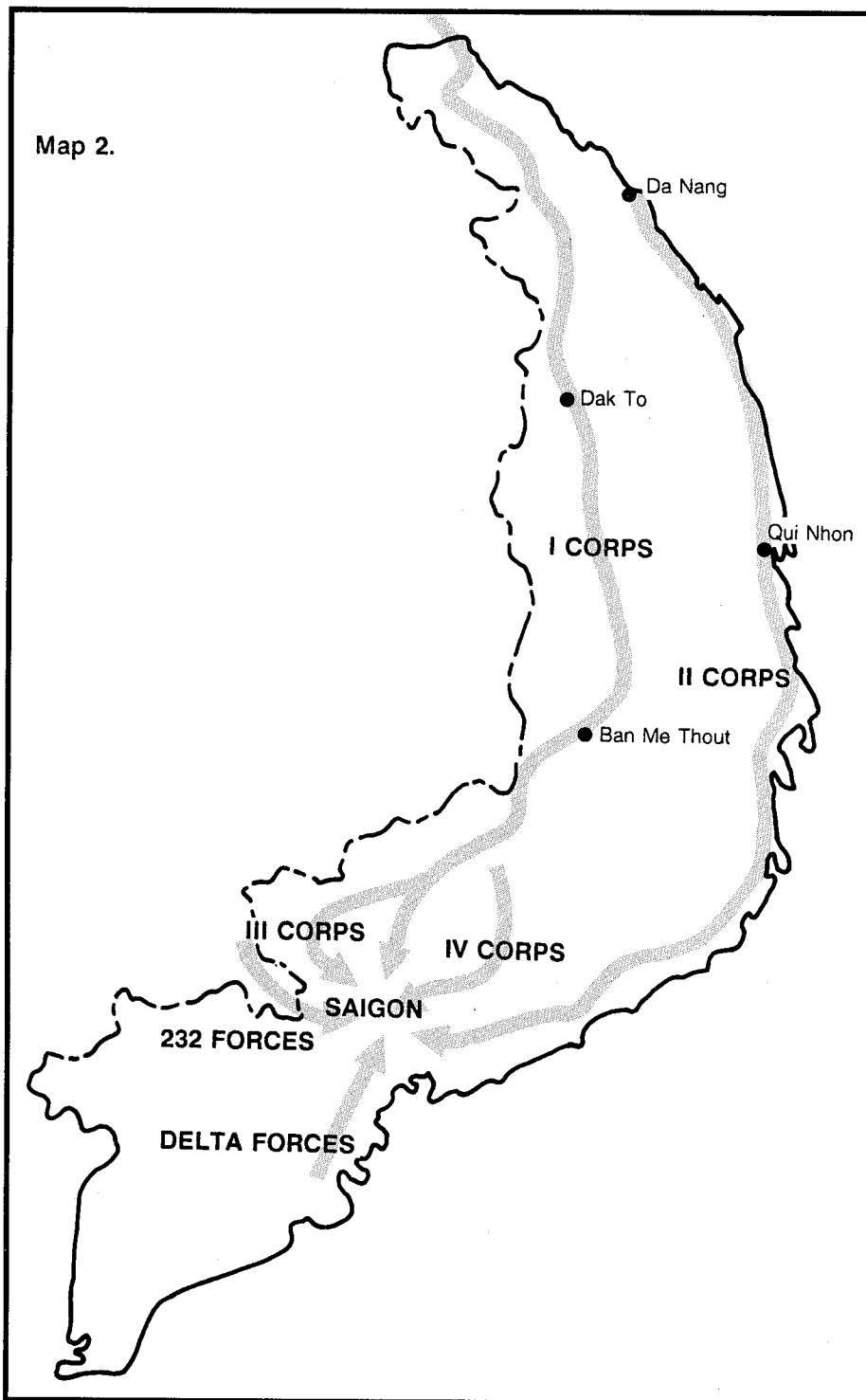
To the west of Saigon, a corps force of four divisions was deployed in the open terrain between the Parrot's Beak and the outskirts of the city. It was designated the 232 Force and was comprised of former Viet Cong divisions (9, 8, 5 and 3). The deployment, without detection, of a combined arms force of more than 30,000 men in terrain largely devoid of cover or concealment should go into the book of professional military records.

The last of the five corps came directly from North Vietnam. I NVA Corps was ordered on 25 March to make a high-speed movement from Nam Dinh in the Red River Delta to War Zone D north of Saigon. This corps made its move of 1,700 kilometers along the eastern extension of the Ho Chi Minh Trail and closed near Phouc Vinh in three weeks; Gen. Dung identifies the 312th Division with this corps. Somehow, the following additional divisions were divided between the I Corps and the strategic reserve (308, 308B, 324B, 325C, and 338). The 968th NVA Division was sent to the offshore islands; 1st NVA was in the Delta while the 2nd NVA was near Da Nang. Given the secretive nature of the NVA and its deceptive and even duplicative numbering system, there may have been a few more or even a few less than the 23 divisions here identified.

Gen. Dung launched 17 divisions against Saigon on 26 April. By 30 April, the defending 5th, 7th, 18th, 22nd and 25th ARVN divisions, together with marine, airborne and Ranger elements of the general reserve, had been encircled, destroyed or had surrendered. At 1130 on 30 April, the North Vietnamese battle flag flew over Independence Palace.

The war was over.

Certainly, this is not the kind of war the United States had in mind when it sent advisers to Vietnam in 1958 to help quell an insurgency—a war conducted by guerrillas embedded in the hamlets and villages—the so-called farmers by day and fighters by night. Even in 1965 when the decision to intervene with U.S. combat forces was made by President Lyndon B. Johnson, there was only one communist division in South Vietnam—the 9th Viet Cong (VC) near Saigon;



however, by Tet, 1968, there were nine such divisions and 36 separate regiments. In the Easter offensive of 1972, North Vietnam threw 11 of its divisions into just three battles—Quang Tri, Kontum and An Loc. By 1975, Gen. Dung had more than 20 divisions at his disposal and all of the guerrilla, local and regional communist forces in the south. The story of the war was one of continuous escalation. We were constantly surprised at the durability of the other side, and we never seemed to grasp the fact that Hanoi simply intended to win at any cost.

As we think back over that long unhappy experience, certain features and circumstances emerge which now seem key to the nature and outcome of the war and also appear likely to reappear in our future:

- We were trapped between our fear of Chinese intervention if we invaded North Vietnam and our inability to bring the war to a favorable conclusion so long as North Vietnam was able to prolong it. As in Korea, we found that war on the close approaches to one of the communist superpowers involved severe operational constraints.
- Our operational approach was to increase the pressure on the other side (size of force, intensity of operations, casualties) in the belief that it had a breaking point. But the regime in Hanoi did not break; it did not submit to our logic.
- We found it extremely difficult to operate effectively with U.S. combat forces against guerrillas who were embedded in the population of the hamlets, villages and towns.
- The very low-signature (nearly invisible) light infantry of the VC and NVA main forces were difficult to find and bring to battle.

War on the close approaches: We have fought two wars so far in the last half of the twentieth century, both in the first tier of nations along the Chinese border. Both were large but “limited” in that all available force, including nuclear, was not used. In both, the maneuver of land forces was restricted.

General of the Army Douglas MacArthur maneuvered deeply into North Korea in a manner entirely consistent with current Army doctrine; however, his approach to the border brought in 300,000 Chinese troops. Gen. MacArthur was pushed back into South Korea and the war went on for two more bloody years. Thereafter, maneuver was restricted to the vicinity of the 38th Parallel, and the war objective was narrowly defined as the defense of South Korea.

Memories of Korea carried over into the Vietnam war, which also was in a country adjacent to China. U.S. military operations north of the 17th Parallel were confined to air and naval forces. Constrained in this manner and saddled with conceptual problems from the outset, the United States never settled upon an operations plan that had any reasonable hope of achieving a favorable outcome in a realistic amount of time.

There is at least a partial parallel in NATO. When the new Army doctrine of deep maneuver was introduced to NATO, it was rejected. NATO is prepared to conduct deep attack by air and missile against follow-on forces of the Warsaw Pact; but NATO has no military concept nor political support for deep maneuver across the Inter-German boundary into Eastern Europe.

These kinds of geopolitical considerations could also be expected to bear upon operations in southwest Asia. President Carter, sorely beset by the oil and hostage crises, announced that the United States would act militarily, if necessary, to prevent the interruption of the flow of oil out of the Persian Gulf region.

To back up this policy, marines have been set afloat in adjacent waters, Diego Garcia has been transformed into a staging and support base and U.S. Army divisions have been slenderized to shorten their deployment time by reducing airlift requirements. Fast sealift has been acquired. A new unified command has been created to preside over any U.S. military action in the area.

It is obvious that we are prepared to send U.S. forces into southwest Asia, if necessary, to protect our allies there and the flow of oil.

Iran dominates the geography of the gulf. She is the primary political force in the area. Her regime is radical and authoritarian. Iran lies on the Soviet border, that is, within the Soviet security zone.

All this poses a strategic and operational dilemma for the United States. For example, if Kuwait were to be attacked by Iran, we would no doubt offer at least air support. If Iran were to launch air or missile attacks against tanker traffic, we would be sorely tempted to launch offensive operations against Iran, the source of the trouble.

In either event, would we not then face the same dilemma which constrained us in Korea and Vietnam? How could we operate effectively against Iran without drawing in the Soviet Union with all its positional advantages?

If we limited our operations against Iran to such a low level that they would not threaten the Soviet Union, how could we bring the engagement to a favorable conclusion in any reasonable period of time?

Before we set such a train in motion, we would be wise to think deeply about its final destination. Considering her most unusual government, going to war with Iran could be a thoroughly bad trip for reasons which go beyond the proximity of the Soviet Union.

War against radically authoritarian regimes: A small dedicated and ruthless oligarchy of aging Stalinist communists who were also proud Vietnamese nationalists provided the political and motivational staying power which pushed a 30-year effort to final victory against formidable opposition.

One must respect this historically unmatched performance and be willing to learn from it.

In the course of their long struggle, the victors in Vietnam suffered losses and endured hardship on a scale which has only been equaled in modern times by the Soviet Union in World War II.

This is only part of the picture. The communist armies lived in jungles, mountains, swamps and tunnels. There was no rotation, no length of tour. Their ration was a ball of rice, eaten perhaps with some manioc root, and on festive occasions a sliver of fish. They ate the fruits and berries of the jungle and made tea from jungle herbs. Throughout, they were willing to fight and to die. From 1965 through 1972, they lost more than 40 percent of their strength *each year* in combat deaths. Based on this evidence, they must be judged to be masters of motivation.

In the U.S. armed forces, motivation is left to the unit commanders. It works well, better in some units and branches than in others. The bonding between soldiers is thought to result from the longevity of their close association at the squad, platoon and company level while sharing hardships and success.

The communists gathered this same harvest over longer periods of time and under more intense conditions. And they do more. Through the three-man self-criticism and self-help cell they get into the minds behind the actions. Flagging enthusiasm, cynicism or deviation from the "line" is surfaced and treated on a group basis. Then the political officers proceed to the ethnic, national and party level.

This system extends to all collective enterprise—civilian and military—at the front and in the rear. It seems, and no doubt often is, heavy-handed. It inflicts stilted repetitious and sophomoric slogans on the troops, but it upheld them through 30 years of unequal combat.

It is a daunting thought that Islamic religious fervor may exceed the effectiveness of all these communist techniques. Soldiers convinced by their spiritual leaders that they are the men of God fighting against the legions of Satan are formidable opponents. If they are also convinced that

the gates of heaven are open to fallen warriors, then battles can be especially bloody and wars most difficult to conclude.

On the broadest political level, there can be no real contest between the motivation of a people fighting for their own survival and their own identity on their own soil, and the motivation of a distant people sending their troops to war on behalf of a foreign policy of, say, "containment." Western abhorrence of war and violence underlies the failed strategy of gradualism which stirs no response whatsoever in the breast of the radical nationalist. There is also an enormous difference in the stability of methods and objectives and the continuity of leadership between the sometimes fanatic and always autocratic regime and the rotating administrations in a Western democracy. Hanoi was dogged in its adherence to its objectives and the program for their attainment. The United States never quite achieved consensus on objectives *or* methods.

Our great and saving strength is that public opinion works its way against actions which offend it. It may take time, but errant policies or adventures ultimately are reversed or terminated.

The chief weakness is that our political process threatens a change of direction whenever administrations change. All great issues—foreign and domestic—are internalized in our electoral debate at least every four years. The "out" party organizes its campaign around "clear alternatives."

A new administration or a shift in congressional balance will often reverse or cripple foreign and military policies, no matter what promises or guarantees may have been offered to our allies by the previous administration.

Prudent military planners should draw the obvious conclusion that operations which span two administrations may lose their support in midstream. Very short operations like Grenada are about perfect. Long inconclusive operations like Vietnam are now known to be doomed. We may take this to be a legitimate consideration in connection with the doctrine governing operational art. It is a political refinement which is no less organic to the problem.

Embedded armies: In Vietnam, the village guerrilla and the district company or battalion were deeply embedded military forces. They lived and fought among the people. Most of their supplies and intelligence came from the people. They hid in forests and swamps or in tunnels or simply sheltered among the populace. They were effective only in their local area. However, these embedded Viet Cong forces survived in the Mekong Delta until the bitter end of the war when they arose, pinned down and then destroyed two ARVN divisions which otherwise might have joined the battle for Saigon. They were assisted in this important task by 12 to 15 main force VC/NVA regiments.

Regular military forces—especially foreign regular forces—were generally ineffective against embedded forces because they lacked local sources of information. They didn't know: "Who's who?" or "Who's where?" Lebanon is a veritable zoo of embedded factions. Sending U.S. marines into that environment to keep order was a feckless decision.

Even the Israeli army cannot cope with such problems within the humanitarian constraints imposed by its country's political system. Television is the final sanction. There are stern political limits on the conduct of military operations against embedded forces, and the problem is sure to worsen. By the year 2000, there will be 6.1 billion people in the world—4 1/2 born every second. Between 1990 and the year 2000, countries of the Third World will add 828 million people. These thickening populations will offer shelter and concealment to armed bands of every kind. A piece in *The Washington Post* of 13 January illuminated the shape of things to come and described a raid in Lebanese Tripoli against anti-Syrian factions:

The fainthearted did not come out as pro-Syrian militiamen called their names . . . but cowered in corners with their arms around their wives and children. Some ran out trustingly. Others went to hide in vegetable stalls. The more adventurous tried to flee. They were all shot. . . and nothing indicated they were fighters.

More than 200 Sunni Moslem fundamentalists, relatives and neighbors died in a Syrian sweep into the shabby, maze-like slum of Tabbaneh, a nest for religious fanatics with dreams of transforming the northern port city into an Islamic fortress for the faithful.

This is an expanding dilemma. Can you imagine U.S. troops making such a sweep? On what basis would they call out the names?

The record of modern armies against embedded forces is not encouraging. The Russians may have simply resettled most of the Afghans—removed the population in which the fighters would otherwise be embedded. Britain is credited with a huge success in Malaya. It did succeed, but it controlled the government; and the communist terrorists were ethnically Chinese, not Malayan.

The heart of prudence and cold realism suggests that U.S. combat forces should stay away from embedded forces. Any violation of this advice is almost certain to be militarily futile and politically ruinous.

Imagine the consequences of the direct intervention of U.S. combat troops in the Philippine insurgency. Nothing would be more apt to hand the whole country over to the communists and Moslems, providing for them an exclusive claim on the powerful theme of nationalism (even xenophobia).

This is not to say that the U.S. government should never try to help friendly countries faced with insurgency. U.S. intelligence, communications, training and logistic support (as in El Salvador) may well be in order as long as the magnitude and visibility of that effort does not cross the deadly threshold of "Americanization." That threshold, unfortunately, is very low.

Nearly invisible, low-signature armies: The light infantry main forces of the VC and NVA with man-portable supporting weapons were, until the last days of the war, nearly invisible as they moved, as they infested close terrain and even as they fought. They were ordinarily visible only to the light infantry, which opposed them at short range, and to air cavalry scouts at treetop level.

Against modern electro-optical sensors and airborne radars, the signatures of such forces are low. In jungle terrain, they are largely undetectable.

Conversely, it is the plan in NATO to detect and map the location of heavily mechanized Warsaw Pact forces by these same sensors and then destroy them with smart munitions. Like ours, these forces have high signatures with thousands of heat emitting vehicles and generators, tens of thousands of radios and radars emitting signals, and most of the mechanized elements detectable by moving target radars. Western armies and many of the Third World armies are asymmetrical in respect to detectability. Vietnam was instructive.

During the battle for the Highlands, Gen. Dung concentrated three divisions around Ban Me Thuot by stealth. The ARVN II Corps commander expected the blow to fall on Kontum or Pleiku and kept only one defending regiment in Ban Me Thuot. Neither air reconnaissance nor patrolling resulted in discovery of the very large force which in one violent day overran the headquarters of the 23rd Division and that key provincial capital. The proximate consequence was the loss to the government of Vietnam of the entire midsection of the country and a collapse of morale everywhere.

When the North Vietnamese launched their abortive attempt to recreate their triumph at Dien Bien Phu by surrounding Khe Sanh in 1968, the 324B and 325C NVA divisions were invisible except to Marine patrols in contact and, eventually, aerial observation of encircling trench lines.

There and against Quang Tri City and Hue during the Easter offensive, the NVA divisions fought by stealth and silent encroachment.

Efforts to find and attack these nearly invisible forces by tactical air was a very expensive proposition. If 50 percent of all enemy combat deaths are attributed to air attack (a generous allocation) the return on investment in air power was one kill for every three sorties, including those of B-52s. These low-signature armies have brought passive air defense by concealment to a high art form.

We can expect more encounters with low-signature forces taking passive measures to survive in the face of U.S. artillery and tactical air forces. Iranian revolutionary guards fall squarely in this category.

Vietnam also reveals considerable success against such forces. What sensors cannot see, human eyes at close range can discern. This function can be performed by infantry patrols but at great expense in time, trouble and casualties. The 1st Cavalry Division used its air cavalry squadron to find, define and, at least temporarily, fix these otherwise invisible forces. Thereafter the 1st Cavalry concentrated its airmobile infantry, supporting artillery and tactical air. If Army light infantry is to be effective in such engagements, it will be dependent upon air cavalry; and the Vietnam model would be superior to the tank-hunting configuration to which most cavalry now has been converted.

In the Easter offensive of 1972 after U.S. ground forces departed, the NVA went after ARVN at Quang Tri and Hue, Kontum and An Loc with 11 divisions. In all three localities, the victory of the ARVN was directly attributable to U.S. air support. Furtive targets which were so difficult to find at other times came out of the mountains and jungles and moved against the defenders in mass. Enormous targets were formed. Information on their location was accurate and in real-time. Never before in South Vietnam was tactical air power with B-52s on tactical missions so devastatingly effective. It was the airland combination that made the difference. The ARVN defenders shaped the battlefield, and the U.S. Air Force did the main killing.

The lesson is classic and should come as no surprise. Tactical air operating alone against furtive enemy forces is only marginally effective, but tactical air operating against enemy forces which are responding to the actions of friendly ground forces are crushingly effective. Remember tactical air against German divisions streaming toward the Normandy beachhead or streaming away to escape the Falaise pocket. The synergism of AirLand Battle doctrine is no myth.

We have now defined certain features of the war in Vietnam which caused this nation a great deal of pain and embarrassment. What are we to make of all this? Certainly, we have not uncovered any new principles of war; but perhaps we are warranted in suggesting a few footnotes which senior authorities, National Security Council staffers and joint planners might find useful in a cautionary way.

- If we send U.S. land forces to operate near the Soviet border, we should expect a reaction analogous to our own should Soviet forces enter Mexico. We should expect continuous escalation.
- If we are confronted with radical regimes, our options are to leave them alone entirely or resolve to disarm them at whatever cost. No set of intermediate measures can be expected to achieve useful objectives.
- We should initiate *elective* military operations only if we have a reasonable expectation that they can be quickly and favorably concluded—ideally, within the political tenure of the administration making such a decision.
- We should not send American troops to fight embedded forces.

- We should not expect to defeat low-signature forces by air attack alone. Land forces form lucrative targets for air attack.

Finally, these lessons and cautions must be applied judiciously. There are too many who are quick to describe any effort whatsoever to exercise our international responsibilities as the first step toward another Vietnam. By spreading the anathema of that unhappy experience over every future military move or option, we become the victims rather than the beneficiaries of our own experience—a Gulliver bound by his own neuroses.

There are many important areas of conflict which are not on the near-approaches to the communist giants, which may or may not have fanatic regimes (some are lunatic) and may or may not have embedded or invisible forces. Furthermore, some are midway between the superpowers; and others are within our own security zone where we have all the advantages of force size and proximity, and thus a whole variety of options are open to us.

We have already demonstrated a versatility ranging from the partial disarming attack against Libya to the mixture of restrained but apparently effective actions in support of El Salvador.

In general, however, we should remember that it is not easy to find profitable applications for military force in the narrowing maneuver space which exists between the upper sanctions of nuclear prudence and massive communist intervention and the avoidance of imprudent involvement at the lower levels of conflict in the political jungle of the Third World. It will take cool professionalism at all political and military levels. This is the true measure of operational art. It is the central challenge to our new generation of leaders.

If by some combination of unwanted developments we should find ourselves in a war near the Soviet border against a radical regime with both embedded and low-signature forces, let us not stumble unaware into old minefields—as if it is a brand new problem—as if we had never been there before—as if we had learned nothing!

W. DePuy
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23 July 1987

Lt/Gen Bradley C. Hosmer
President,
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Washington, DC 20319-600

Dear Brad:

I have been thinking about our last meeting and the discussion about the training and education of "Joint Specialists." In preparation for the next meeting I want to give you my line of thought. Even if all the decisions have been made, it is never too late (in Washington) to float a different idea. Let me explain.

Over the last several years, to my delight, the NDU has moved into the arena of "operational art." This was long overdue and is still far from complete. At each meeting for the last four or five years, I have (tediously I suspect) urged NDU to move into the collateral — and joint arenas of: intelligence, EW, air defense, deep attack counter C³ etc. Each time there has been polite skepticism on the part of NDU commandants and staff.

My proposal now is quite simply, to turn over the AFSC completely to this task as well as its current emphasis on the staff processes of joint commands.

It seems to me that the AFSC is an anomaly. In 6 months it tries to specialize in joint staff procedures while at the same time trying to fill the shoes of the service command and staff college level and assist in such ancillary duties as teaching the students how to think and write. Everyone is short-changed. It is a nearly hopeless task notwithstanding the heroic efforts of a series of devoted commandants and faculties.

The Dougherty study states that joint officer training must occur throughout the service and joint school systems. But what we will get by superimposing this mission on current curriculums is likely to be more "familiarization." In short, a mile wide and a millimeter deep.

The most logical and powerful measure of effectiveness by which joint commanders and staffs should be judged is the degree to which they generate the full potential capability of their joint forces. Therefore, the primary objective of the joint school system should be to train future joint commanders and their staffs in the techniques of full exploitation of joint capabilities in such functions and collateral missions as: Intelligence, Electronic Warfare, Air and Fire Support, Air Defense, Strategic and Tactical Mobility, Counter C³, SEAD, Mine Warfare, Deep Interdiction

Handwritten. The Maxwell R. Thurman Papers. Box: CG, TRADOC, Official Letters, 1987, July-August. Folder: CG, TRADOC, Official Letters, July 1987. U.S. Army Military History Institute, Carlisle Barracks, PA.

(FOFA), Logistic Support, Communications etc, together with the staff procedures involved in the command and control of such a complex enterprise. The fact that we are fairly good at these functions within each service does not mean we have mastered them jointly. The joint interfaces within these functions and missions are increasingly complex, both technically and operationally. Future joint commanders and staffs must be helped in this respect by the joint school system. Today, except for the special EW school, they are not.

Even though the Israeli invasion of Lebanon ended on a sour note it began with a brilliant display of the joint exploitation of almost every tool available in their tri-service force. You will recall the use of drones to activate the Syrian air defenses — the subsequent Air Defense Suppression campaign (both electronic and lethal) — the counter C³ efforts including Commando raids against major headquarters — deep air and missile attack on reserves — an intelligence operation raised to equal status with maneuver etc. Surely it gave us a glimpse into the future of joint warfare.

We must get ourselves into that mental and professional framework and it will take hard work done by professionally trained joint experts. It will not be done adequately in the Service schools — we can count on that. It is not being done at NDU. Hence, my very serious recommendation that the AFSC be thrown into the breach as a major initiative and that the NDU and ICAF be linked tightly to the effort through their operational level instruction. Perhaps in the short term an NDU (AFSC?) team could develop and present to the Service Schools a briefing on the Israeli performance at the launching of “Peace for Gallilee.” But this is a secondary thought.

So, back to the recommendation. Why not withdraw the AFSC from its role as a service C&GSC surrogate and devote it exclusively to joint training and education. Why not provide that only graduates of service C&GSC’s will attend — will come from the upper 50% of C&GSC graduates — will attend immediately after graduation from C&GSC’s — will attend for six months of intensive training in the “deep substance” of joint operations in addition to the current emphasis on joint staff procedures. This course of action would provide bone and muscle to the joint specialist educational program and give it sequence in professional military education.

Perhaps we can discuss this idea at the 8-9 September meeting.

Respectfully,

Bill DePuy

16 Aug 87

HIGHFIELD FARM
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 22025

Dear Max

I thoroughly enjoyed the "Leadership" seminar and your always entertaining remarks.

Here is my letter to Brad Hosmer. When I wrote it I was not thinking, foolishly, about service sensitivities. Instead I was trying to sell an idea.

You will be at least somewhat irritated by the two circled portions.

In a letter to Carl Vuono I tried to explain that my visualization of the required curricula is at least two levels more technical than what they are now teaching at AFSC and what I am afraid would be taught at the Service Schools.

Let me give you an example of my worry. In learning about the conduct of Joint Intelligence operations I would want the students to understand the limitations as well as the capabilities of each sensor system and the techniques and severe limitations of the current fusion process. Only then could they deal realistically with the joint effort, say, within a SW Asia Task Force etc.

On Air Space control I would like to see the alternatives fully explored and fully integrated with the air defense of our sensors and the full exploitation of our airmobility.

There is a terrible tendency at AFSC and elsewhere to limit joint explanations to the level of a command briefing in which all of the following joint and related functions work perfectly:*

- Sensor output
- Sensor management
- Fusion for targeting
- Fusion for maneuver control
- Air Defense C³I (incl ROE)
- Air Space Management
- Counter C³
- SEAD
- Comprehensive FOFA
- etc

* or, the discussions are limited to staff procedures at the Hq and the functions of the various player agencies such as the TACC (ATOC) etc.

16 August 1987

2

The fact is there are very substantial problems and deficiencies in everyone. But service sensitivity and unified command sensitivity is such that they are glossed over.

Whether AFSC under my scheme could break that sound barrier is unknown. But its worth a try.

respy. & warmly

Bill

The Future of Land Warfare. By Chris Bellamy. 342 pages. St. Martin's Press, New York, 1987. \$37.50. Reviewed by General William E. DePuy, USA Ret.

Land warfare is the most critical and interactively complex branch of modern military endeavor. Bellamy seeks to explain it and then forecast its future—an ambitious project. In order to bring the latter goal within practical reach he wisely defines the future as the not-too-distant year 2010.

The business of converting new technology into new weapons and then procuring them in significant quantities is a time-consuming process. This is not to mention the equally long time involved in learning how to operate and employ them. Thus, land forces in 2010 will greatly resemble the forces we see in 1987. Much equipment now under development and procurement will still be around. For example the still ubiquitous M113 Armored Personnel Carrier was developed in the 1950s and deployed in 1960—27 years ago. It will be around for many more years and 2010 is only 23 years away.

The scope of land warfare is so great now and is expanding so rapidly that the book has taken on somewhat of an encyclopedic character. Encyclopedias are not easy to review. However, it is the trends the author describes which provide a handle for critique. Mr. Bellamy does an excellent job of identifying the technical, tactical, and operational basis of the major trends—and this is what his book is all about.

As he deals with the various trends, Bellamy encounters forks in the road which present radically divergent possibilities. To his credit and credibility he does not force an arbitrary choice. He describes the alternatives and passes modestly on. For example, he explains that the use of nuclear weapons could lead to either *blitzkrieg* or stasis—some difference. He believes the evidence is ambiguous on this enormously important issue. The possibilities of stasis run strongly through his work. He sees long, perhaps inconclusive, wars instead of the short, sharp engagements forecast, and hoped for, by many soldiers and statesmen. He sees the ghost of stasis in chemical warfare, firepower, electronic warfare, and the tendency of armies to go to ground. He sees large manpower-intensive armies of the Third World offsetting high technology.

Bellamy starts with a dramatic presentation of three recent wars—Yom Kippur (1973), the ongoing Iran-Iraq war, and Operation Peace for Galilee in Lebanon (1982). He regards them all as portentous. Following this, he provides a discussion of military terrain around the world—a useful lesson in geography—which blends into a discussion of demography and the size of the world's land forces. He then takes the reader successfully through nuclear and chemical warfare; weapons, their platforms, and their protection; and electronic warfare, C³I, and operational art. The last chapter returns to the question of the future.

The trends are the heart of his presentation. Some are straightforward:

- The Western powers are losing the demographic race, and in the long run manpower will matter in a crowded world.

- The duel between lethality and protection continues in a rough and uneasy balance. Tanks are still useful but threatened by smart top-attack anti-armor weapons.
- Helicopter and nap-of-the-earth airmobility are in the ascendancy. That seems right, especially in connection with modern armies fighting larger, harder-to-find, and primitive (or less mechanized) forces. Airmobile firepower (attack helicopters) is now an accepted companion of heavily mechanized forces. But airmobile maneuver of necessarily light forces may not be as viable. On this controversial issue the jury, clearly, is still out.
- Manned aircraft are increasingly threatened by surface systems but continue to perform essential tasks at levels of effectiveness which other systems cannot duplicate—e.g. in terminal, intelligent engagements.
- Directed-energy weapons are threatening to current systems and tactical concepts. There is widespread unease on this score.

Some of the trends are more complex and controversial.

Bellamy sees chemical warfare as potentially decisive, although he wonders if it too might lead to stasis if both sides use it extensively. On this point he manages to avoid the sad truth that the Western armies are no longer prepared to play this game offensively. The repugnance of the whole subject has led the West into a dreamy state of self-induced disarmament. It was not the quality of allied chemical defenses that deterred Hitler from the use of chemicals; it was his apparent conviction that US and allied airpower could pour chemicals on him in enormous and unmatched quantities. Today we have defense alone and it is patently inadequate. The Soviet offensive use of chemicals could nullify almost every advantage in which the West takes comfort—air power (from unprotected bases), agility, initiative, and high performance. Chemical warfare would lead to low performance everywhere. A low-performing large force can beat a low-performing small force any day of the week.

On the doctrinal front Bellamy is very skeptical concerning—

proponents of swift, brilliant strokes or those who believe that the “attrition” form of war is some kind of a devious plot, as opposed to the only way of continuing the conflict if maneuver is impossible. Elegant theoretical structures do not necessarily clarify the brutal, horrible, sometimes (perhaps always) irrational phenomenon of war. Drawing distinctions between “attrition theory” and “maneuver theory” simply obfuscates the real nature of war. Maneuver is of value, maybe decisive value, because it increases the rate of attrition.

Just a few years ago US Army doctrine was described by many as a choice between maneuver and attrition. High technology and even firepower were often lumped with attrition and much confusion ensued. All that presumably has been corrected, but Bellamy reminds the many followers of Clausewitz that he never fell into the trap: “Clausewitz had it right. ‘War is an act of violence,’ he said, and, what is more, ‘the maximum use of force is in no way incompatible with the maximum use of the intellect.’”

Bellamy seems to understand fully the relationship between technology and tactics. Most of his book centers upon this circular relationship. The idea that tactical and operational doctrine will lead unerringly to new weapon requirements is as faulty as the reciprocal thought that every invention will change the doctrine of war. Inventions often open up new possibilities within the doctrinal context—e.g. smart munitions. Some inventions move outside the doctrinal envelope—e.g. nuclear and directed-energy weapons. Others greatly complicate the execution of preferred doctrine—e.g. electronic warfare and chemical warfare.

After a thorough review of C³I, including the broad movement toward elaborate automated information systems (and with enemy electronic warfare very much in mind), the author makes

this observation: "In the inevitable imperfect world, the military organization either has to increase its ability to process information compared with its opponent *or else* be designed to work on less information."

Here we come up against a fascinating divergence in doctrinal philosophy. In the early 1980s the US Army published a tentative look into the future labeled "Air Land Battle 2000." One of its principal features was a word picture of US battalions and brigades dispersed over a sparsely populated battlefield operating independently within the "intent" of the higher command—exercising initiative—moving inside the enemy's decision cycle—practicing *Auftragstaktik*—and generally having a ball. *This sounds like the simple option in Bellamy's formulation.*

But his description of the Israeli invasion of Lebanon offers a strikingly different picture:

At 1400 hours on 9 June . . . unmanned drones were launched over Syrian air defenses, forcing the Syrians to open up with SAMs against fake targets. . . . The Israelis also used ground-based weapons against the missile sites: probably, 175mm guns, . . . MAR 290 rocket launchers . . . and LAR 160s. . . . It is also reported that the Israelis used ground-launched anti-radiation missiles. . . . Ground-launched rockets carrying chaff were fired at Syrian radar sites. . . . In coordination with air and artillery-rocket-missile attacks, the Israelis . . . mounted a commando operation against the main command post for Syrian air defense in Lebanon. . . . It is clear . . . that one cannot talk about "land warfare" and "air warfare" as two separate things. Air was critical to the ability of ground forces to move and fight, and ground systems and forces made a passage for aircraft, as in 1973 but in a far more complex and multi-faceted way.

Here we have a picture of full synchronization of all the assets of both air and land forces. In short, the Israeli commanders generated a very large fraction of the combined potential of their forces within an intricate but powerful operation. This is the antithesis of the "island of combat" described in *AirLand Battle 2000*. To the extent that one side gains the initiative, to that same extent can he employ the full capability of his force in mutual and multiplying reinforcement. To the extent the other side has the initiative, we will be forced into "islands of combat" on the way to piecemeal defeat and failure.

Bellamy's abundant information and skilled analysis are worthy of our attention.

Concepts of Operation: The Heart of Command, the Tool of Doctrine

By Gen. William E. DePuy
U.S. Army retired

Command and control means many things to different people. To some, it evokes the image of a communication network; to others, the qualities of leadership. Increasingly, it has been described as an information exchange system. An officer who aspires to successful command must understand that behind these ingredients is a process designed to concentrate the immense combat power of an AirLand Battle force against the enemy in order to win engagements, battles, campaigns and wars. It is a process that unifies the efforts of thousands of men performing a bewildering array of battlefield functions, each one of which is utterly essential to success. This process produces unity of effort from a diversity of means.

Yes, it will use modern communications and even computers, and it will require leadership of the highest order; but at the heart of the process lies the mind of the commander. From the mind of that single person, a dominating concept of operation must emerge. That concept must be appropriate to the mission of the command and to all the circumstances that are unique to that time and that place, and that mental construct must be propagated through the minds of the whole hierarchy of subordinate leaders to animate the entire command and to concentrate its actions before the opposing commander can place a counterconcept in operation.

Concepts are cannibalistic. The better concept, based on the most recent realities, will devour the older, opposing concept based on information that has been overtaken by

events. His concept of operation is the supreme contribution of the commander to his command and to success. The absence of a powerful and dominating concept concedes the initiative to his opponent; and his other qualities of leadership, however many he may possess, and however admirable they may be, will be simply irrelevant and ineffectual. This article focuses directly on that central, seminal creative act—the starting point and cohesive theme of every successful operation.

In the summer of 1950, U.S. Eighth Army was penned into the Pusan Perimeter in Korea. It was not a shining moment in the history of American arms. Then, in the face of skepticism on the part of his advisers—*subordinates and superiors*—Gen. of the Army Douglas MacArthur launched a sweeping amphibious left hook to Inchon. X corps, led by Marines, went on to Seoul, cut the main supply route of the North Korean army and collapsed the invasion.

Inchon was an incandescent moment and a smashing victory, which sprang solely from the mind of the top commander. The experiences of a lifetime, the lonely thoughts of a superior mind and the demands of the crisis at hand combined inside Gen. MacArthur's head to produce a stroke of genius—a concept of operation so powerful and unexpected that it carried the day, the battle and that first campaign of a long disagreeable war.

The occasions on which a single brilliant idea has led to a decisive turn in military affairs are memorable: Brig. Gen. Daniel Morgan's entrapment of Lt. Col. Banastre Tarleton at Cowpens, Hannibal at Cannae, Field Marshal Fritz Erich von Manstein at Kharkov, Gen. John Churchill, Earl of Marlborough, at Blenheim. These, too, were masterpieces of the martial art. Unfortunately, the military equivalents of Michelangelo, Rembrandt and Picasso are just as rare. We find them occasionally. We do not produce them routinely.

So—what about the rest—the merely competent leaders upon whom the vast bulk of command must necessarily fall? In every battle since the beginnings of time, some natural or appointed leader of small parties or large armies faced the necessity of deciding how to proceed with the accomplishment of an assigned or assumed mission. He needed a plan, and there was just one source—his own mind, experienced or not, trained or not, brilliant or not. He either came up with a good idea, or he and they disappeared into the dust of history.

It is not difficult to perceive that this function, this seminal dimension of leadership, is the supreme contribution of every commander in every battle. Some fall short, and those battles are lost. Physical courage can rarely offset the effects of a bad plan or, even worse, of no plan at all.

At the level of a squad, a concept will be oral and brief. It might in an emergency resemble the instruction of Joshua to his Israeli tribesmen: "Observe my actions and do likewise." At the level of great armies, as in the Normandy invasion, the concept may require several pages of closely knit description. Every commander at every level must produce such a concept each time he receives a mission or an order and every time his working concept is nullified by changing circumstance. It is a demonstrated fact of life that opposing concepts cannot long coexist. The concept that prevails destroys the other. It is a zero-sum game.

This is the process we so blithely label as “seizing the initiative.” He who has the initiative must surely have seized it via the imposition of his own concept, and he who loses the initiative has seen his concept rendered useless and irrelevant by the actions of the opposing commander.

“Operating inside the enemy’s decision cycle” means neither more nor less than the seizure of initiative via a dominating concept. It could be as simple as a sudden move, say, a counterattack. Or it could be as complex as a counteroffensive. In either case, the progress of a campaign can almost always be gauged by determining where the initiative resides at each moment. The initiative is forever the product of an imposed concept—however improvised, however simple, however transmitted. Poor execution can render the most brilliant concept null and void, but the most magnificent execution can rarely offset the deadweight of a flawed concept.

The Growth of Complexity. A concept of operation is the principal tool of the commander for integrating all elements of his force in a unified effort against the enemy. This role has always been the chief contribution of a good concept, but its importance rises in direct proportion to the growth of complexity.

Increasing complexity arises from the multiplication of battlefield functions, each of which, individually, and groups of which, collectively, must be integrated into the operation of the force as a whole.

In Figure 1, the astounding and continuing growth of functions and means is laid out in three different frames of time

It is currently popular to consult the writings of Gen-Maj. Karl von Clausewitz for insights into the operational art. Indeed, Clausewitz has much to offer, but the structure of armed forces in his time was relatively simple. Foot infantry, horse cavalry and short-range artillery constituted the mass of maneuver. Troops and horses foraged on the villages and the land. Communication was by courier, and intelligence was collected by agents. By the times of Gen. George S. Patton Jr., Field Marshal Erwin Rommel and Marshal Georgy K. Zhukov, warfare had expanded into the vertical dimension while mobility, range and lethality had multiplied. To concentrate the additional functions represented on the battlefield, headquarters were larger, and their procedures were more elaborate.

Today, another tier of functions has been added. War has expanded into the fourth dimension—realm of high-tech electronics. Another increment of mobility, range and lethality has again been added. Commanders must now cope with three times the complexity that confronted Clausewitz, and he described the difficulty of operating when even the simplest action became difficult and when “friction” beset every battlefield endeavor. Of course, Clausewitz was correct. How much more correct would he be today?

With more than 30 battlefield functions now represented and the laws of friction and complexity in full operation, it is not far-fetched to fear the danger of chaos—a disintegration of effort under the sheer weight of complexity. How much more likely that descent into chaos must be when the enemy makes it one of his principal aims. We have even adopted a name for that effort: command, control and communications countermeasures (C³CM), and they are practiced by all modern armies.

Concepts—The Heart of the Command and Control (C²) Process. It is the aim of every commander to concentrate all available combat power against the enemy at just the right time and in just the right place to win battles, campaigns and wars. The integration and concentration of some 30 functions on the AirLand battlefield are the ultimate product of the C² system, and the commander’s concept of operation is the start point and the heart of that system. It is the driving central theme to which all the actions of all the elements of the force are keyed. A sound

**Figure 1. Complexity
(Growth of Battlefield Functions/Agencies)**

DAYS OF CLAUSEWITZ (Napoleonic Wars):	DAYS OF PATTON (World War II):	DAYS OF AIRLAND BATTLE (Today):
<p>MANEUVER:</p> <ul style="list-style-type: none"> • Infantry • Cavalry <p>FIRE SUPPORT:</p> <ul style="list-style-type: none"> • Tube Artillery • Congreve-type Rockets <p>ENGINEERS</p> <p>INTELLIGENCE:</p> <ul style="list-style-type: none"> • Human Intelligence (agents) • Reconnaissance <p>LOGISTICS:</p> <ul style="list-style-type: none"> • Supply • Transportation • Medical • Administration <hr/> <p>11 Functions/Agencies</p>	<p>MANEUVER:</p> <ul style="list-style-type: none"> • Infantry • Armor • Cavalry <p>FIRE SUPPORT:</p> <ul style="list-style-type: none"> • Tube Artillery (Direct support, general support, counterfire) • Rockets <p>TACTICAL AIR SUPPORT:</p> <ul style="list-style-type: none"> • Air Defense • Armed Reconnaissance • Airlift • Interdiction <p>ENGINEERS</p> <p>AIR DEFENSE (GROUND):</p> <ul style="list-style-type: none"> • Guns • Automatic Weapons <p>INTELLIGENCE:</p> <ul style="list-style-type: none"> • Human Intelligence • Signal Intelligence • Reconnaissance <p>LOGISTICS:</p> <ul style="list-style-type: none"> • Supply • Maintenance • Transportation • Medical • Administration <hr/> <p>20 Functions Agencies</p>	<p>MANEUVER:</p> <ul style="list-style-type: none"> • Infantry • Armor • Cavalry • Attack Helicopters <p>FIRE SUPPORT</p> <ul style="list-style-type: none"> • Tube Artillery • Rockets • Missiles <p>TACTICAL AIR SUPPORT:</p> <ul style="list-style-type: none"> • Air Defense • Reconnaissance • Surveillance • Airlift • Close air support • Battlefield air interdiction • Interdiction • Target acquisition <p>ENGINEERS</p> <p>AIR DEFENSE:</p> <ul style="list-style-type: none"> • Guns • Missiles • Automatic Weapons <p>INTELLIGENCE:</p> <ul style="list-style-type: none"> • Human intelligence • Communications intelligence • Electronic intelligence • Reconnaissance, surveillance and target acquisition <p>ELECTRONIC WARFARE:</p> <ul style="list-style-type: none"> • Electronic countermeasures • Electronic counter-countermeasures <p>LOGISTICS:</p> <ul style="list-style-type: none"> • Supply • Maintenance • Transportation • Medical • Administration <hr/> <p>30 Functions Agencies</p>

concept propagated through the force and elaborated at every echelon is not only the heart of the C² system, but it is also the only known antidote to disintegration and chaos.

Let us lay out the C² structure of an AirLand force and then examine the processes by which it is animated.

In Figure 2, *The C2 Matrix*, the vertical arrows depict the combat, combat support (CS), combat service support (CSS), and the tactical air support functions. Infantry, armor, cavalry and attack helicopters are subsumed under the combat heading.

The heavy arrow on the left signifies the leading role of the combat arms—the maneuver force. That force and function are first among equals because the concept for employment of the maneuver force (the scheme of maneuver) is the starting point and the central element of the commander's concept of operation, and the maneuver unit commander is also, and always, the force commander.

The vertical functions, including maneuver, execute all the physical actions that occur on the battlefield. For example: a tank moves, a howitzer fires a round, an air defense missile is launched, a bridge is built, an enemy unit is located, a radio is jammed, an attack helicopter fires, a vehicle is repaired, a part is delivered, ammunition is moved, patients are treated, replacements arrive, close air support is rendered, battlefield air interdiction is flown, aerial reconnaissance is performed, airlift of troops is completed. Air Force intelligence is transferred to the Army, and enemy radars are jammed.

It is important to understand that each vertical function is echeloned in parallel with the maneuver force and entails its own vertical integration. Each represents a function and meets the classic definition of any system—it has input, process and output. For example, the fire support system includes the input of a forward observer—the process of fire direction—the output of a round on-the-way.

Some of the vertical systems extend all the way from CONUS (continental United States) to the lowest echelons. The intelligence system extends from signals intelligence (SIGINT) support functions at the National Security Agency (NSA), Ft. Meade, Md., to the maneuver brigade and its intelligence elements. The air defense system extends from the senior Air Force officer in a theater to the Stinger crew with a maneuver battalion or company.

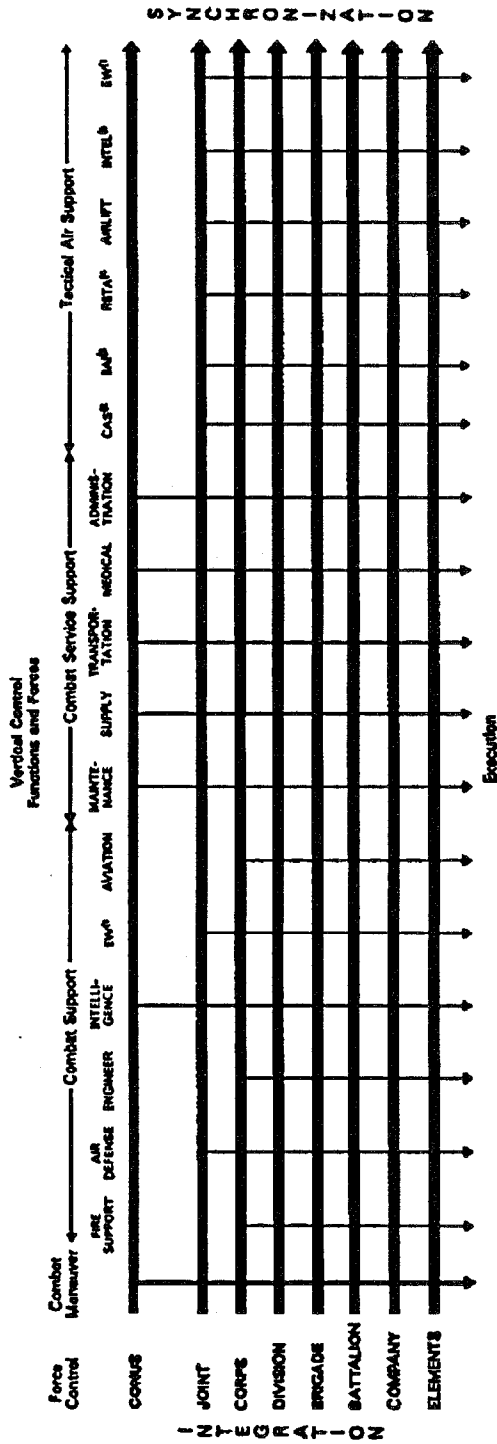
The command echelons of the maneuver force (the horizontal arrows) act as the force integrators at their respective levels. This horizontal function has two important dimensions. Each maneuver echelon develops its own scheme of maneuver (concept) and also synchronizes the supporting functions at its level within that scheme.

The integrating and synchronizing maneuver echelons start at company level and extend up through corps to the echelons above corps, which these days are almost always a joint command. At each of these echelons, the commander is given a mission by his superior, formulates a concept to execute the mission, organizes his force to execute the concept, and instructs each principal element as to the role it is to play. The vehicle for this process is the OPORD (operation order), which restates the mission, describes the enemy, states the concept, and organizes and tasks the forces.

Whether it is oral and short or written and long, the central theme of the OPORD is the commander's concept of operation. To that concept all actions are keyed, and from it all organizational arrangements derive. For example, the structure of an OPORD is as follows:

1. Situation
 - a. Enemy Forces given
 - b. Friendly Forces given
 - c. Attachments and Detachments given
2. Mission (and concept of superior commander) given

Figure 2. The C³ Matrix



EW = Electronic Warfare; CAS = Close Air Support; BAI = Battlefield Air Interdiction; BATA = Reconnaissance, Surveillance and Target Acquisition; Intel = Intelligence.

- | | |
|--|--------------------------|
| 3. Execution | |
| a. Concept of Operation | <i>created</i> |
| includes the task organization | derived from the concept |
| b. Tasking for each subordinate | derived from the concept |
| element of command, synchronization | |
| c. Instructions to reserve forces | derived from the concept |
| coordinating instructions | derived from the concept |
| (1) boundaries, objectives, phase lines, | |
| line of departure—synchronization | |
| (2) dates, times, places—synchronization | |
| 4. Administration and Logistics | support the concept |
| 5. Command and Signal instructions | support the concept |

Nested Concepts. When the top commander develops and disseminates his concept orally, by overlay and frag orders or by a written OPORD, he obliges his subordinates to conform and execute. Each successive subordinate is expected to articulate and elaborate that concept in accordance with the particular conditions of enemy, terrain and resources at his level; thus, the higher concepts are progressively tuned to local reality. This is the genius of the system—a centralization of concept, a decentralization of execution and a full exploitation of forces and opportunities. Cascading concepts carry the top commander's intentions to the lowest levels, and the nesting of those concepts traces the critical path of concentration and priorities. This is the phenomenon the Germans call the *schwerpunkt*. It is the center of gravity of the force not, as so many think, the *point* where the main effort impinges on the enemy force.

The reason the platoon is advancing upon the nose of hill 101 is because A Company must seize that prominence to protect B Company, which will attack past it to the battalion objective, which in turn will enable the brigade reserve to seize the key terrain on the objective of the division making the corps' main effort.

Although the corps commander could not direct the various platoons toward their objectives, he is content to know that their actions will derive from his concept as it cascades down through his command and as each commander, in turn, embraces and articulates that concept in one of his own, which is adapted to the unique circumstances in his zone or sector. The concepts are nested like mixing bowls in a kitchen. Each must fit within the confines of the larger and accommodate the next smaller and so on down to the squad, the tank, and the brave soldier himself, who eventually executes the corps commander's concept. The soldier has not, of course, ever met the corps commander.

Not only is the system of nested concepts the only method by which a large force can adapt to the infinite variety of situations that arise throughout its huge area of operations, but it is also the only method by which the talent and initiative of commanders and troops at every level can be engaged and exploited.

Concepts as the Tool of Doctrine. Armies spend most of their time training for war. At the heart of that training lies a body of doctrine. Its most accurate definition is that doctrine is simply the way things are done by most of the commanders most of the time. By this, we mean how the average commander would react to a particular combination of his *mission*, the *enemy* opposing him, the *terrain* over which he must operate, the composition and condition of the *troops* available to him and the *time* he has to prepare (METT-T).

Armies are usually in the process of improving or adjusting their doctrine either because they have some new insights regarding the enemy, some new ideas on how to fight more effectively,

some new weapon capabilities—or all three. The U.S. Army is in the gestation period of a relatively new doctrine that it has labeled AirLand Battle. The tactical level of this doctrine seeks to exploit the new and better weapons now available and seeks to capitalize on the high quality of its troops and its leaders. The doctrine is offensively oriented, seeks to gain and retain the initiative and expects to fight in a very deep battle zone extending into the enemy's rear areas as well as its own. It hopes to integrate (synchronize) the burgeoning number of battlefield functions with its agile and aggressive maneuver forces.

The Army's focus has simultaneously been expanded to embrace the operational level of war that involves joint forces under unified command seeking to win wars as well as battles. It is an expansive doctrine, but it is in tune with the realities of the times.

The concept of operation is the *only* way that new (or old) doctrine can find its way onto the battlefield or into the training exercise. If the battle is to be fought with agility, depth, initiative and synchronization, as current Army doctrine requires, those characteristics must be manifest in the concept. If the new doctrine is not introduced via these concepts, it will not be introduced at all. A concept of operation is simply the articulation of applied doctrine. There is no other vehicle or method for the purpose.

Classic Concepts. Weapons range, accuracy and lethality change. Vehicular speed and endurance change. Communications range and capacity change, but the classic movements of war on the ground are inevitably just variations on an ancient repertoire.

The "plays"—these schemes of maneuver—are the doctrinal templates that provide at least a starting point for the development of concepts:

In the Attack

- Penetration - At the tactical level, as in Erwin Rommel's technique of one element up and four or five back explained in *Infantry Attacks*, World War I, or at the operational level, as in Russian breakthrough operations at the Vistula and on the Oder.
- Infiltration - As by Gen. Oscar von Hutier's German army in March 1918, in Operation Michel against the British Fifth Army.
- Flanking - As in innumerable tactical examples.
- Encirclement - As in Marshal Fedor von Bock in 1941 at Vyazma (663,000 Soviet prisoners).
- Pursuit - As by Gen. George S. Patton Jr. across France in 1944.

In the Defense

- Fixed - Maginot Line, France; Siegfried Line, Germany; Bar Lev Line, Israel.
- Fortified Zone - Kursk, Russia, 1943.
- Elastic - Marshal Henri Philippe Pétain, 1917-18.
- Elastic with CATK - German Western Front, 1916-17.
- With Entrapment - Cannae, Cowpens, Stalingrad.
- Counteroffensive - El Alamein, 1942.

And numerous combinations and variations.

Unlike football, these plays must be executed over widely varying terrain. The enemy team is not restricted to a certain strength nor are there any "officials" to regulate the contest. Deception is admired. Drowning out the opposing signals is routine. Furthermore, injury is often fatal, and a loss may be the last game. Like football, however, courage under adversity is required and by none more than the higher commanders who may have long hours (sometimes days) to contemplate the possibility of the failure of their concepts. Thus a bold concept, like Inchon, is an act of prolonged courage unrelieved by the physical release available to a small-unit leader.

It is probably fair to say that current Army doctrine calls for repeated acceptance of risk on behalf of greater potential returns. It is a doctrine that would be perfectly understood and beautifully executed by commanders cut in the mold of a Gen. George S. Patton Jr. or a Gen. Matthew B. Ridgway; but there are only a few of them, and the rest of us vary widely in imagination, resolve and risk tolerance.

We do not know exactly how a concept takes form in the leader's mind. We can only assume that some mixture of urgent necessity, prior thought, strong support from an able staff, a repertoire of classic alternatives and some practice in searching and sorting combine to create a concept of operation appropriate to the occasion. We note wide individual differences in respect to the boldness of action, the innovation involved, the degree to which the commander exploits his mobility and his weapons, the cunning with which he shapes the battle and the active or passive attitudes he engenders within his command.

After a concept emerges from the commander's mind, it can be retrospectively examined in all these respects and even for its origins. Inchon certainly rose to some large extent out of Gen. MacArthur's amphibious experiences in the southwest Pacific. Marshal Fedor von Bock's envelopment of the Russians at Vyazma was simply a grand example of an operational preference routinely exhibited by the German army in 1940 and 1941. The two German attacks through the Ardennes (1940 and 1944) can be traced to their devotion to the principles of mass and surprise.

We can see at Cannae, Cowpens, Stalingrad and El Alamein the clearest demonstration of the concept of shaping a battle to the benefit of the defender and then counterattacking decisively when the conditions of the concept are fulfilled. In the Korean counteroffensive, we see the product of Gen. Ridgway's warrior spirit.

In short, we may not understand fully the cerebral process of concept formulation, but we thoroughly understand the product. Hence we try, in training and education, to pour all the necessary ingredients into the heads of our developing commanders and confront them in training with the repeated necessity of mixing and matching those ingredients.

Training and Doctrine Command (TRADOC) has undertaken an analysis of performance trend lines at the National Training Center (NTC), Ft. Irwin, Calif. That effort should produce a running profile of the commander's concepts that could be laid up against the template of AirLand Battle doctrine. The degree of match—of coincidence—might tell us much about the quality of everyday concepts, about the effectiveness of Army training and even of Army doctrine.

Dynamic Synchronization. If the commander's concept is the basis for synchronization and agility is described by the Army as an essential characteristic of a sound concept, how could it be that agility and synchronization are sometimes described as mutually exclusive?

There is a constructive way to think about the relationship between agility and synchronization. A sudden unexpected and adroit move by the Blue Force is almost certain to desynchronize the Red Force by rendering its concept and associated actions useless and irrelevant to the changed circumstances.

There is, however, no law that says brigade or division staff cannot or should not reinforce that sudden move as quickly as possible with all available combat support.

A maneuver element responding to a sudden opportunity or frag order may have the jump on the enemy, but it carries only its organic combat power. If the battalion or the brigade commander can reinforce that move with fire support and tactical air power, cover it with added air defenses and follow it with reinforcing engineers, the disparity in effectiveness between the agile and partially synchronized Blue Force and the desynchronized Red Force can be decisively increased.

When a quarterback in the NFL goes to an “audible” when calling signals, he is calling for a change in the play to be run. He has seen a problem and an opportunity in a sudden change in the defensive deployment. He expects his team to respond instantly to a new concept. Correspondingly, on the battlefield, a frag order may change the concept “on the run” in order to cope with, or exploit, an enemy move. The C² team (commander and staff) goes into *dynamic sync*.

In a tactical case, we might give the division, brigade or battalion 100 percent on agility and still reach 50 percent to 75 percent sync within a few minutes. Training simulations should be designed to test dynamic as well as deliberate sync against very high standards of both scope and pace. Command post organization and procedures should be optimized for this purpose.

Perhaps in this whole process we have given insufficient prominence to the indispensable role of the staff. It has been somewhat deliberate in order to underline the creative impulse represented by the commander’s concept, as distinguished from the supporting, but crucial, role of the staff. The ideal relationship is one between a continually conceptualizing commander and a staff that, from long association, is inside his mind—a staff that responds long before he asks—a staff that keys its many activities to his current or evolving concept and ties up all of the loose ends—fast!

Collateral Operations and Collateral Concepts. At the tactical level, the concept provides the basis for synchronizing the individual battlefield functions directly with maneuver. At the operational level—that is, at corps and at joint echelons above corps—the individual functions begin to be grouped and combined into *collateral* operations. We have appropriated that term to embrace the following complex, multifunctional, cross-service or joint operations:

- Intelligence operations.
- C³ countermeasures (C³CM operations).
- Suppression of enemy air defenses (SEAD operations).
- Follow-on forces attack (FOFA, deep attack operations).
- Joint counterfire operations.
- Deception operations.
- Special operations.
- Special logistics operations.

Each collateral operation will usually involve a number of functional elements from at least two services as illustrated in Figure 3 right.

The clearest demonstration of the nature and importance of collateral operations comes to us from the preliminary actions taken by the Israeli armed forces before they moved their maneuver forces into Lebanon in the operation called “Peace for Galilee.”

To provide air support for Israeli maneuver forces, it was first necessary to destroy or neutralize the very formidable Syrian air defenses. The Israelis started with a prolonged and intensive intelligence collection operation, which located, identified and electronically defined each missile site and the entire air defense command and control system. That was followed by an air defense suppression operation led by drone flights, which activated the missile site radars and the C² links. The radars were then jammed by standoff aircraft followed by massive air attacks on those sites by attack aircraft using self-protecting electronic countermeasures and employing both antiradar missiles and conventional munitions. Simultaneously, a counter C³ operation was mounted against the air defense command and control system by lethal air attack on control nodes, jamming of communication links and even a commando raid on the main control center. These operations were followed by a deep attack against enemy reserves, and then the Israeli maneuver force began to roll.

Figure 3. Collateral Operations

• Collateral operations could be comprised of functional components as below in white:

Collateral Operations

COUNTER C³

COUNTERFIRE

SEAD¹

SPECIAL LOGISTICS

COMBAT MANEUVER	COMBAT SUPPORT						COMBAT SERVICE SUPPORT						TAC AIR			
	PS ²	ADJ	ENGR	INTEL	EW ³	MAINT	SUP ⁴	TRANS	MED	ADAMN	CAS ⁵	BAJ ⁶	RECS	EW ⁷	ABLUFT	INTEL

¹SEAD = Suppression of Enemy Air Defenses; ²PS = Five Support; ³AD = Air Defense; ⁴EW = Electronic Warfare; ⁵CAS = Close Air Support; ⁶BAJ = Battlefield Air Interdiction; ⁷RECS = Reconnaissance.

Because the Army corps is the nexus between the tactical and operational worlds, the corps commander becomes the principal agent for collateral operations. Although many, if not most, of these operations will have sponsorship at the joint level, some may not and yet may be required for purely corps purposes.

Consequently, a corps concept of operations and the ensuing OPOD must embrace those collateral support operations the corps commander wishes to conduct under his own control to assist his divisions and to increase the likelihood of overall success. At a minimum, he must explain when, where and how he expects those collateral operations to contribute to the execution of the corps mission.

Because the divisions and the collateral operations are drawing support from a single pool of forces, the corps commander will face the necessity of evaluating the most lucrative employment of every support capability available to the corps—that is, he will be forced to choose between reinforcing his divisions and conducting corps-level operations. It will never be an easy choice, but there are some opportunities to mitigate these conflicts and simultaneously reduce the impact of complexity, which he may wish to consider. They are:

- Division of labor between the echelons of the corps.
- Division of time between collateral operations.

Division of Labor. It is simply not reasonable to expect every maneuver echelon to perform every function. There is a clear necessity to specialize, and thus narrow, responsibilities at each level to manageable proportions. For example, a basis of specialization—division of labor—might be the following:

*Battalion and brigade - Fire and Movement—*precision synchronization of fire support, close air support (CAS), short-range air defense (SHORAD), engineers and direct CSS within the framework of the commander's concept.

Division - Extended synchronization with maneuver of general support (GS) and general support reinforcing (GSR) levels of fire support, air defense, combat engineering, intelligence, electronic warfare (EW), CSS and battlefield air interdiction (BAI).

Corps - Conduct of collateral operations to support the corps or joint concept.

Time Division. Even the division of labor between the various tactical echelons will not entirely solve the problem of competition for the same limited pool of support resources. It is probably not possible to throw a critical mass of support elements against a FOFA operation, a corridor-busting SEAD operation and a full-up C³CM operation at the same time while simultaneously providing adequate reinforcement of the division (or divisions) making the main effort.

Some collateral operations such as intelligence operations and deception and even special operations may fall comfortably into the time period preceding a major operational or tactical initiative. Others may have a natural sequence—such as SEAD would presumably precede FOFA, and C³CM may be important for only short critical interludes.

The tentative nature of this discussion reveals the softness in the current state of the art for collateral operations. Each collateral operation will require its own concept of operation, its own assigned forces and its own internal synchronization. The whole question of exactly how to organize and command collateral operations falls into the category of unfinished business.

Given the prominence we have assigned the concept of operations as the heart of command and control, it is only fair to ask whether it receives equal veneration out there in the working Army. The answer seems to be a kind of diagonal nod—yes and no.

On the yes side, a concept is inescapably required in every OPORD or OPPLAN (operation plan). Furthermore, some kind of concept is required for the orderly execution of any mission or the undertaking of any collective task in or out of the military profession.

Recently, the “commander’s intent” has been elevated to high status and, in the OPORD, inserted between the mission and the concept. The mission says *what* and the concept says *how*. What is left for the intent except heroic language? Examples of intent that try not to encroach on either mission or concept are pretty thin gruel. It has been said at Ft. Leavenworth, Kan., that the intent tells us *why*, but the answer as to *why* the first battalion is to seize hill 101 is (or should be) clearly contained in the concept of the brigade commander. Thus the concept is the vehicle which conveys the intent, and the method as well—all in one neat classic package. It needs no further elaboration.

There is, however, one aspect of intent which is as powerful as the quality of the concept itself. The strength of the concept can be no greater than the strength of the commander. The force and confidence with which he conveys this concept to his force is an inseparable property of that concept.

This aspect of intent could not be more important, but it is not an additional line of print in an OPORD. Rather, it is the strong steely eye of a Gen. Ridgway as he ordered Eighth Army into the counteroffensive after its retreat from the Yalu. It is a commander saying, “Gentlemen, this is the way we are going to win this battle.”

AirLand Battle doctrine demands seizure and retention of the initiative. There is evidence, however, at NTC and elsewhere that concepts for the defense are often explained in terms of: “We will do A if the enemy does B, and we will do C if the enemy does D” and so on. These concepts leave the initiative with the enemy and do not aggressively shape the battle in accordance with the preferred concept. Apparently, this error is somehow related to a Clausewitzian discussion of branching. It is, of course, necessary to consider contingencies, but making contingencies the main theme tends in practice to drain the concept of its dominating purpose.

Conceptual Cop-Out—The Tyranny of Boundaries. In World War I, the control measures for the concentration of large forces were developed and refined and are still with us—boundaries, lines of departure, phase lines and objectives. The unbroken line that stretched from the Swiss border to the North Sea was divided into the sectors or zones of army groups, armies and corps, and these were subdivided into divisions, brigades, battalions and companies. Divisions in the attack had frontages of less than five kilometers. This system of control forced almost every tactical unit to go straight forward into the teeth of the enemy defenses. Sixty thousand young Britons fell on the first day of the battle of the Somme—19,000 were fatalities. At Verdun in 1916, 450,000 Germans and 550,000 Frenchmen were consumed. More than one generation of Frenchmen, Germans and British went down in the prolonged holocaust.

The baleful legacy of those control measures, when substituted for tactical operational concepts, is still with us. They still provide a way out for the unimaginative, risk-averse commander—a commander who passes the conceptual buck downward to his subordinates—a commander who simply divides his attack mission into zones and his defense mission into sectors and his objectives into goose eggs distributed equally to his subordinates, and finally Capt. Jones of A Company with a narrow zone assigned and an objective one kilometer straight ahead moves into the killing zone alongside Capt. Smith of B Company, who fights his parallel battle to a similar objective—alone.

Although there were conspicuous exceptions, World War II concepts of operation were too often expressed in control measures without elaboration—Unit X destroys enemy in zone. The

idea was that the control measures would facilitate the execution of the concept, but it was just too easy to put out an overlay with boundaries objectives, line of departure times and let it go at that.

The famous and unlucky Marshal Mikhail N. Tukhachevski describes the problem in terms of "corridor commanders":

Commanders with a poor understanding of the essence of maneuver, i.e. the union of efforts, prefer, most of all, to divide the area of their maneuver uniformly among their subordinate units and demand the same results from all. It is a misfortune to be subordinated to such a "corridor" commander. A completely opposite picture obtains with good, efficient leadership . . . A clearly posed objective and an internally coordinated plan mobilize all the resources and equipment and rouse and direct the spirit and enthusiasm in a clearly comprehensive direction.

Field Marshal Erwin Rommel was the antithesis of a corridor commander. Figure 4 records his personally drawn sketch of his attack plan at Gazala in 1942.

Rommel's concept of operation is clear. His entire force was employed within the cohesive embrace of that concept. He did not pass the buck to his corps commanders. He told them *where* to go and his sketch conveyed the *why*. Just *how* they were to fight was left to them. Here again we are in the presence of a tactical genius.

When his plan went awry, he placed his force temporarily in the defense, personally went back and fetched his trains in the middle of the night, had a new supply route opened westward through the British minefield, devised a new concept, issued appropriate orders, overwhelmed the Eighth Army—chased it into Egypt and captured Tobruk on the way. Rommel dominated the action from beginning to end.

When one examines this remarkable performance, it is impossible to separate the execution from the concept. *Rommel created the concept and then left his headquarters to make it happen.* Perhaps in that one sentence we have captured the essence of battle command. Sir B. H. Liddell Hart in his *Rommel Papers* noted that "there are these two forms of military genius—the conceptive and the executive. In Rommel's case they were combined."

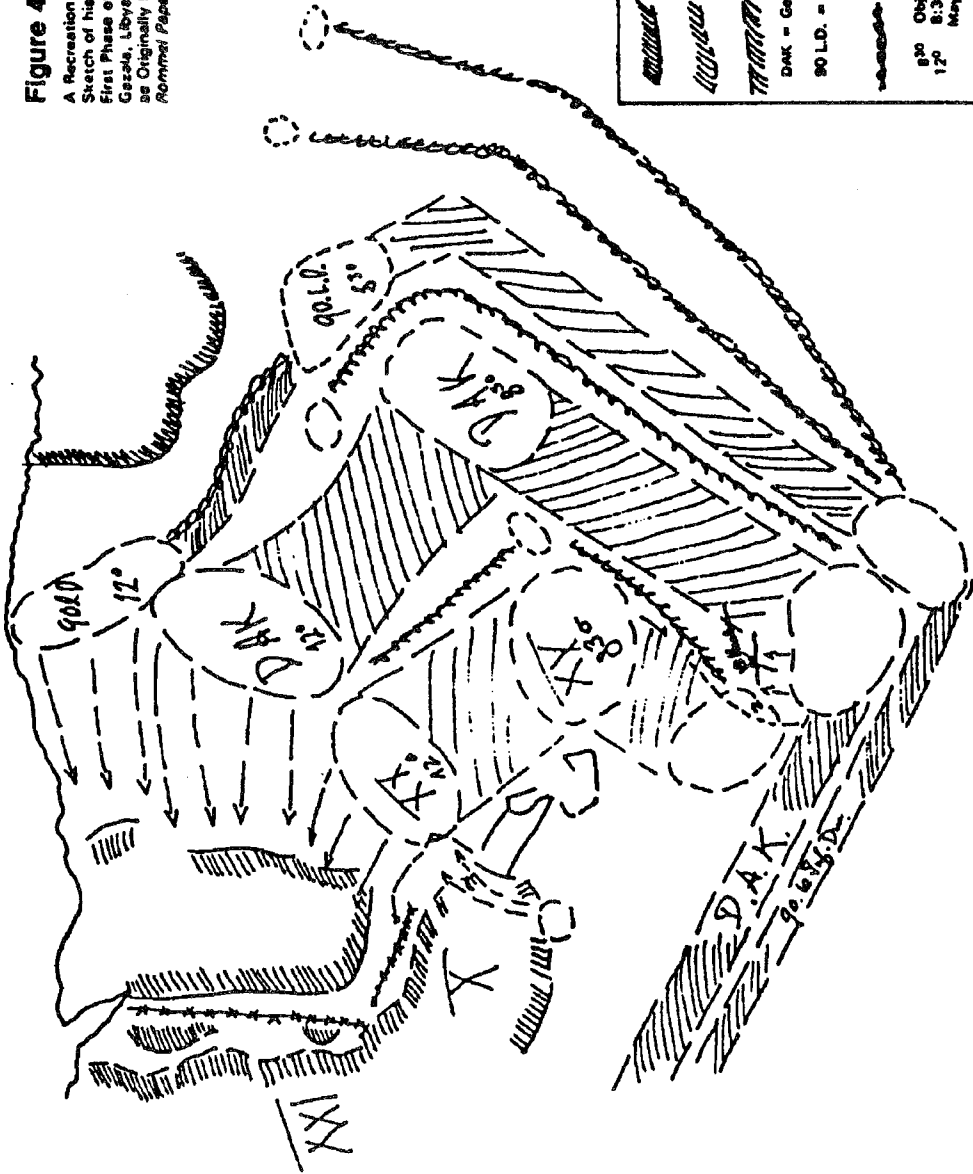
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The commander's concept is his supreme contribution to the prospect of victory on the battlefield whether he is at the tactical or the operational level. Without a sound and dominating concept of operation, no amount of command presence, personal flair, years of rectitude, demonstrated integrity, advanced degrees, perfectly managed assignments, warrior spirit, personal courage, weapons proficiency or troop morale can hope to compensate. Of all the qualities we seek to imbue in our leaders, the ability to create and apply a powerful preemptive concept in the heat and pressures of battle and to propagate that central set of ideas throughout the minds of his subordinates is the heart of command.

We can tolerate, although we do not prefer, commanders who may be deficient in other respects so long as they are consistently successful on the battlefield—and at minimum human cost. Experience tells us that soldiers will follow and fight for such a leader whether they love him or not just so long as he keeps them alive while giving them that other essential satisfaction of soldiering—membership in a unit (or a team) that succeeds in battle—a unit that gives them pride.

Figure 4.

A Recreation of Rommel's own Sketch of his Concept for the First Phase of the Battle of Gazala, Libya, 26-27 May 1942, as Originally Published in *The Rommel Papers*, 1953.



	British Positions
	Italian Forces (Corps indicated by Roman numeral etc)
	German Forces
DAK	= German Afrika Corps
90 L.D.	= German 90th Light Division
	Attended Lines of Advance
9:30	Objectives to be reached at 12° 8:30 a.m. and 12 noon, 27 May

There is no mystery why the tactical and operational creativity of a commander towers over his other qualities. The complexity and diversity of modern military forces, the enormous combat power that is inherent within them, the potential for creative initiative, which resides in the hierarchy of subordinate leaders, and all the professional reservoirs of doctrine and training can only be mobilized and focused upon the enemy in victorious action through the medium of a unifying commander's concept. Such a concept is the heart of command—the tool of doctrine—the triumph of a disciplined professional mind over the fear, fog and friction of war.

GENERAL (RETIRED) WILLIAM DePUY

**PRESENTATION TO THE TRADOC COMMANDERS'
VISION '91 CONFERENCE**

5 OCTOBER 1988

We went through something similar to this not more than a few weeks ago in a very small room, and I am prepared only for a very small room—so I will have to make some field expedient moves here today.

Most of you, I suppose, were in 1972, field grade officers at one time or the other—the generals around the table—and you will remember the atmospherics back at that time. The Vietnam drawdown was coming to a close—we had just cut the Army from 1.6M to 800K in 4 years: a turbulent, disagreeable time with a lot of questions about the morale of the army, an Army perturbed by drugs, by the VOLAR experiments (the War College made a study about ticket punching you may recall). The atmosphere was somewhat poisonous, characterized by a vociferous loss of confidence in the Army leadership.

There was a place called CDC out at Fort Belvoir—when George Forsythe ran it, he thought it had no clout and wrote a letter and asked if the schools could be placed under CDC. CONARC, of course, only snickered at that. Jack Norton, the commander of CDC, also did not think they had enough clout and suggested that it be headed by a 4-star general. CONARC, over where some of you now live, was overloaded.

The reduction of the Army, the cutting of the Army in half, presented a real challenge to CONARC. There was a lot of unhappiness over performance, but there was no way anybody could do a good job in those days or win any medals—no matter what they did.

Bruce Palmer was the Vice Chief of Staff. He didn't think that CONARC was doing a good job with respect to the Troop Command, because he had gone to the Dominican Republic and did not like the support he got. Stanley Resor was the Secretary of the Army; he did not think that CONARC was a good management agency. It was a budget-driven organization, manned mostly by civilians who were in the CONUSA's that General Thurman just mentioned. The technique of management was to cut the budget and listen for the screams and, using a decibel meter, make adjustments between the commands.

One day when the budget was the program and, therefore, the budget was seriously cut, Swede Larsen, who was commanding 6th Army, came in with a message that he was, on the following day, going to fire every civilian in 6th Army. That was later referred to as the "Olympic Gold Medal," the "Gold Watch Treatment." The Secretary of the Army was not amused.

The Maxwell R. Thurman Papers. Box 2: Official Papers—CG, TRADOC; ALB—AirLand Battle; AOF—Army of the Future; ASB—Army Science Board. Folder: Army of the Future. U.S. Army Military History Institute, Carlisle Barracks, PA.

With that background, General Palmer, who was General Westmoreland's vice, and a fine and powerful man, asked me, in my capacity down there as his assistant, to make a study about doing something about CONARC. I called on Bill Tuttle, and a Lieutenant Colonel named Jim Edgar, and the three of us made the study—in a hurry. The going-in concept was simply to combine CDC with the schools and the training centers and do something with the Troop Command that, of course, became TRADOC and FORSCOM. In one week, we briefed the Vice Chief of Staff, Palmer; the Chief of Staff, Westmoreland; the Secretary of the Army, Volke; the Secretary of Defense, Laird; and they all approved it. That does not testify to the brilliance of the work we did; it only testifies to the state of mind of the high command, which was looking for any kind of initiative whatsoever, to try to dispel the gloom and show some signs of life.

Jim Kalergis was then put in charge of the steadfast office (and just incidentally, Carl Vuono was one of his executives). About that time, General Abrams was nominated as Chief of Staff, but Congress did not get around to confirming him. He had quite a bit of time. He reviewed the study, and his contribution was to put in the readiness regions and the readiness groups because he had been, at one time, Chief of Reserve Components. So the starting organization in July of 1973 was a rather remarkable horizontal structure. There were—I do not remember, Max, but you may—about 19 or more entities being commanded directly from Fort Monroe. The training centers, the schools, the integrating centers, ROTC, CDEC, and later, I guess, TRASANA, etc., etc.

Because of that wide span of control, we adopted a Contract Management System, which was input/output oriented. In other words, we tossed money out to Fort Swampy, strictly on the basis of how many students, trainees, or whatever Fort Swampy would produce for that amount of money. And then (because we were still in a turbulent era and the money would change during the year), we would renegotiate the contract with the installation at some lower level at which the reduction in money was matched with the reduction in output. (TRADOC is a command more compatible with that concept than, for example, FORSCOM. It is a little more difficult than FORSCOM because the output measurements are not quite so clear.) The whole purpose of that process was to avoid any surprises of the kind I described when Swede Larsen was going to fire all of the civilians.

I have to tell you a little story about Abe with respect to the selection of the commanders for TRADOC and FORSCOM. Generally, Abrams was by no means decided. He knew that it would be Kerwin and DePuy, but he did not know who would go where. And as he was agonizing over that, two of his old buddies, who were retired, came in and sat down with him and said, "For God's sake, don't send DePuy to TRADOC because when he was Assistant Vice Chief of Staff, he ruined the Army's study system." So Abe announced my appointment to TRADOC the next day.

Now, I think you are entitled to know why we organized the way we did, I am going to run down a few of these reasons, and then we will get into the future.

In the first place, Combat Developments: We started with the CDC organization simply being absorbed into the schools and into freestanding integrating centers. From my viewpoint, it was unthinkable in 1973 to turn over any of the schools to an intermediate command like one of the integrating centers for the following reasons:

There was a rampant criticism of the Combat Development process in Washington. I suspect that's just simple endemic. There was much discussion of the quality of the user representation. It was thought not to be very good. QMRs, which we now call ROCs, were thought to have one or another of two deficiencies. The first was that they were so vague that they were used by the laboratory commands of AMC as a hunting license, a license to go on with a large civilian complement of employees spending a lot of money and producing nothing. The second was that specifications were so precise that the developer had no flexibility. The same controversy is alive today.

It was further thought that alternatives were frozen out of the process. Industry particularly has always felt that we only looked at a few alternatives and that most of those were pet pigeons within the commodity commands. Industry felt that the process excluded all sorts of alternatives. (These controversies that I am mentioning are the kinds that do not go away.)

It was also thought that the centers and the schools were very parochial, that the O&O concepts were all loaded dice: infantry thought infantry. (The first time I saw the MIK V was designed to kill BMPs. It made no reference to the fact that TOWs and tanks might kill BMPs also.) Tanks were to fight tanks or artillery to fight artillery. There were a lot of private wars and no combined arms integration to speak of at that time. In fact, it has only been in the last ten years, I believe, that counterfire, which was part of the artillery war, has, in fact, become one of those things you synchronize with maneuver that wasn't very well understood. The scenarios were thought to be canned. The manuals were thought to be weak. The COEA's were nonexistent or loaded. Test plans were either designed to succeed or, if they did not, ignored. And anyway, the PMs had total control because they had total money and the user got lost somewhere on downstream in the development process. These are criticisms that were rampant at the time.

I had spent four years in the Pentagon as part of the office up there that had been the Weapons Systems Analysis Group under Dick Trainer and so, I came to TRADOC with some history of involvement with weapon systems, just like General Max came after having presided as the Vice Chief of Staff over Weapon Systems Acquisitions. I was sensitive to these things. (I suspect that General Thurman had been sensitized to these same kinds of things.) I just did not believe that we could afford to decentralize further; I believed that the problem was quality control. At that time, Len, CAC, in my opinion was about 75 percent oriented on the Commanding General Staff College and 25 percent or less oriented on combat development. Part of the reason was that Jack Cushman who was running it had grown up within the college and was primarily interested in the Command and General Staff College part of his responsibilities.

Training: We initially took over all the training establishment in place, as is or as was. The Deputy Chief of Staff for Training at CONARC and therefore at TRADOC, was a fellow named Jim Hunt, a very strong character. The training establishment was going through what they called engineered instruction, which was the forerunner of the performance-oriented, task analysis. POIs and lesson plans were in concrete. They were approved by a large cohort or phalanx of civilian specialists at CONARC Headquarters and no deviation was permitted.

In the training centers, the impact of this was especially bad. First of all, there was a psychology best described by the term "on the trail." I ran into it when I first visited a training center. ("On the trail" was, you may recall, a term that came from driving cattle, generally from Texas to Kansas or Oregon to Kansas. Oh my God, here comes another batch—that sort of mentality.) The sergeants had taken over. I have no quarrel with sergeants, believe me, but the

sergeants had been following the lesson plans for so many years that sometimes they had drifted off the center line.

For example, I think I described before having gone to Fort Ord. I watched the trainees crawl up a hill. At the top of the hill was a trench. They laid down parallel to the trench, turned their faces away from the trench, picked up their M-16 rifles, and went chunk, chunk, chunk, chunk in the trench. I asked them what they were doing, and they said they were detonating booby traps. I asked to see the lesson plan; of course, they did not have a lesson plan. I then watched soldiers go through a live-fire course in which one was to shoot to cover the other and then vice versa; I saw two soldiers go through it who I thought were absolutely unbeatable; in other words, I thought they did it perfectly. But the sergeant in charge flunked them, gave them an unsatisfactory. I asked him, "Why?" He replied, "Because they ran out of ammunition before they got to the end of the course." I said, "Well, what if they had ammunition left over?" He said, "That would have flunked them too." So what I am saying to you is that if you have rigid lesson plans and everybody's eyes are glazed over because they are bored to death, all sorts of strange excrescences occur in the system.

Morale was low. I, as an aside, asked the major generals running the training centers to stop doing all the dumb things and make whatever changes they wanted to make and then let me know it. Morale went up; everybody was happier. However, variations began to occur. The Chief of Staff of the Army viewed with alarm the deviations at the training centers and ordered that they be stamped out. I just wonder what kind of an institutional memory we have. It reminds me of the Russian system. I mean, if you got motivation, you got initiative. If you don't got motivation, you don't got nothing! I think that that is something we need to think about.

On schools, we sort of continued to march under the old regime until Paul Gorman arrived. He came up, as you may recall, from the Combat Arms Training Board in Fort Benning. He brought his apostles along and showered upon the Army a whole bag full of new ideas, which I guess can all be lumped under Performance Oriented Training: Tasks, Conditions, and Standards; Front-End Analysis; Instructional Systems Design; SQTs and soldiers' manuals; ARTEPs; Battalion Training Models; MILES; and TEC, etc. A lot for the Army to swallow in a short period of time. Schools had to be reorganized and there was plenty of blood on the floor.

Training Development changes were the toughest ones to impose because the theory of Training Development was that you cannot trust the instructors. You cannot trust the instructors because even in the colleges, it is well known, instructors teach what they know best—no mind what students need. That was the philosophy. So, at that time, the teachers were told they were no longer the guys who were going to design the instruction, but some other chaps would, disembodied spirits would go through the performance oriented training front-end analysis, and then teachers would teach what they were told to teach. That put more blood on the floor.

Training evaluation and analysis was of course, I think, nonexistent when I came here and barely alive when I left. Efforts to tie training costs and performance to battlefield performance was a goal during the four years I was here. My last official act was to get Rick Brown to set up a big study group to do that, but somehow or other, the focus of the study group drifted off that objective.

We had battles with simulators versus aviators, a perennial battle. We also saw the genesis of the National Training Center that sprung directly from the fertile mind of General Gorman, having experimented with MILES.

I thought that it would have been unthinkable to separate the generator from the engine; in other words, Gorman from the schools, particularly in the midst of this running gun fight. Since then, the performance-oriented training galaxy of theories, actions, devices, instruments, and products has gone through some ups and downs. Back a few years ago, I thought it was on a down trend. I think it is on an up trend now.

The toughest issue that we had to face eventually was doctrine. We started out ignoring it; it just was not an issue. One of the basic premises of combining CDC with the schools was the assumption that this would take care of doctrine. That doctrine then would be disciplined by the necessity of teaching it as well as designing it. And, of course, to some extent, that is correct. But doctrine was not, at the very beginning, much of an issue. It turned out, however, that this business of rubbing the schools together with the CD process did not automatically lead to doctrine nor necessarily to other beneficial results.

Now, there were at that time, it seems to me, several points of view about doctrine. One point of view was that doctrine is driven by weapons and weapons' capabilities and that was the point of view of the people who had to write O&O concepts from the weapons' developments. That was a CD point of view. There was a point of view that doctrine is driven by experience and accumulated wisdom, principles of war, and so on. That was the view at Fort Leavenworth in the Command and General Staff College. There was a point of view that doctrine provides operators manuals, which, therefore, become the basis for training developments: you cannot have an ARTEP unless first you have a doctrinal manual for the operator of a battalion. That was the point of view of the training establishment here.

Right about that time, the Yom Kippur war came along and woke up various elements of the Army in various ways. Some of us thought that the time had come to refocus from light infantry in Vietnam to heavy armored mechanized forces in Europe, that it was time to reorient on NATO; time to check our doctrine out to see if it was appropriate for that change in emphasis. So we started a process from the top to revise FM 100-5, which was going to be the keystone of a whole family of "How to Fight" manuals that would cascade from it. Gorman wanted "How to Fight" manuals as the necessary precondition for his tasks, conditions, and standards, so he asked for and took over the production mission within TRADOC. CD wanted a strong base for O&O concepts that could be related to weapon systems. Gorman wanted to see tasks, conditions, and standards jump out at him from doctrine. CD wanted O&O concepts to jump out at him. The Command and General Staff College wanted the principles of war to dominate the doctrine—accumulated wisdom. So we had a kind of donnybrook. (Incidentally, I suspect that curses of all of that still exist.)

In addition to these inherently different points of view, TRADOC Headquarters, represented to some extent by me, was also interested in trying to get our doctrine in synch with the Germans because we and the Germans had the two largest contingents in NATO. So, I was hoping that our 100-5 would bear some relationship, some compatible relationship, with their 100/100. Well, you know, Donn Starry created a doctrine shop in TRADOC because, I think, of the experiences we had with 100-5. That's when Don Morelli created AirLand Battle 2000.

The integrating centers were taken over in place. The Admin Center which you now call, I believe, the Soldiers' Support Center, had a very slow start because neither DCSPER nor the Adjutant General was really interested in it; they were actively hostile to it with respect to getting involved in current personnel operating procedures. They really didn't mind about a TO&E for a finance company or for an AG company, but when it got into the procedures of personnel management, it intruded upon the giants in the field. I don't know where the ball rests on that today, but I'm sure it's much more enlightened than it was in my day.

The Log Center also got off to a slow start. There wasn't any particular argument about the Log Center producing TO&Es for DISCOMs and COSCOMs but efforts to make it also the instrument of AMC (even though the AMC commanders and TRADOC commanders were close buddies) was only marginally prosperous. It's my impression that the Log Center is now up, running, and doing an excellent job.

CAC was and is a special case. To the best of my knowledge, no commander of TRADOC, and probably no Chief of Staff, has ever been very happy with CAC even though some of them worked there. It has nothing to do with the people at CAC. It has nothing to do with the quality of their minds. It probably has to do with the difficulty of the job. You see, CAC performs a function that lies very close to the heart of the function of the whole United States Army. In fact, if you look at the function of the Department: organize, train, and equip land forces so they can be turned over to the CINCs, you'll see also the mission of TRADOC. It's the mission of the Army and it's the mission of CAC. The center line. Heartland stuff. And it is difficult to do it right, to do it on time, and to influence the Washington management system.

Now, I want to get into CAC, CACDA, and the integrating function, but I want to remind you of two things. First is the functional organization of an AirLand Battle force in the field. Second is the functional organization of TRADOC. There is a similarity between the two. The only difference is that along the top, instead of vertical functions on the AirLand battlefield, we've now got schools (until you get over to cross-service support).

I want to say something about schools and about vertical functions. There was some question early on in TRADOC that may have even lasted well beyond my departure as to whether or not, for example, Don Infante, sitting down there, my buddy, was really responsible for the entire vertical air defense system. My answer to that is yes. He has to be because there isn't anybody else who can do it. He's the only man in TRADOC, and probably in the Army (with the possible exception of the air defense brigade commander in Europe) who can do it anyway: technically, tactically, qualified, and experienced.

All of those vertical systems have taken on a life of their own over time. I talked about the little parochial worlds in which the artillery was fighting artillery and tanks fighting tanks and infantry fighting infantry. That was one of the undesirable manifestations of the vertical mentality. Sixty percent of the Army or more is in the vertical systems other than maneuver. I was never able to understand how all of you guys who are in the vertical systems could have sat still and silently to AirLand Battle 2000, which more or less ignored you. The Army in general recognizes the branches of the vertical systems and their importance, but the Army has had a hang-up about synchronization.

In the functional organization of the AirLand Battle, synchronization is simply a maneuver commander with a concept of operation integrating or synchronizing the battlefield combat

functions of the vertical systems. In this functional organization of TRADOC, the same problem arises with different products. The integrating centers, and primarily CAC, at the brigade, division, and corps level, integrate all of the vertical functions. Instead of combined arms integration, it could just as well be the TO&Es and the doctrine for brigades, divisions, and corps.

I'll come to some of the implications of this in a moment, when I talk about the integration process because that is the tough job. And, by the way, gentlemen, that is the job that the Army says only the Army can do. The Air Force, given the differences in these charts, would say putting together wings and air forces is something only the Air Force can do. The Navy sure as hell will say putting together battle groups and fleets is something only the Navy can do. The process of integration, therefore, must be undertaken by the Department of the Army, and acting for it, TRADOC, and within TRADOC, CAC, and within CAC, CACDA. It cannot be performed elsewhere, at joint levels by defense bureaucracies by Departments of the Army, up there, etc. It is, in my opinion, the heart of the function and the mission and the process of the Department of the Army, and it lies within TRADOC, CAC, and CACDA.

I'm not in any way suggesting that the vertical systems are less important. They are, in fact, the building blocks upon which the integration takes place. I gave a talk last week at the Armed Forces Staff College and I do not believe that the people in Congress who drew up the Goldwater-Nichols legislation understand that the services are the geese that lay the golden eggs. I also have to tell you I'm not sure that the Department of the Army understands the centrality of that function and how it is lodged within the hierarchy of the department.

Now the branch schools produce functional building blocks, and within the vertical systems they produce battalion-level functional entities, by and large. CACDA, then, produces combined arms building blocks by integrating those functional battalions into brigades, divisions, and corps. The Deputy Chief of Staff for Operations in Washington, using the building blocks of force design, your function, assembles them into force structure. And the Office of the Chief of Staff, PA&E, looks at alternative structures, rates of modernization, and levels of readiness so that the Chief of Staff, the Secretary of the Army, and the Vice Chief of Staff can make decisions about the Army program which, in turn, must be responsive to the defense program, which, in turn is responsive now to the JCS and the CINCs. Let's talk about that function for just a moment.

I have tried to draw a picture (TAB C) of what I take to be Len Wishart's job. And what I show in the middle a Mix Master, which is the force design process. Remember, this is the magical process that is the exclusive franchise of the Army as opposed to the JCSs, as opposed to the CINCs, as opposed to the OSD staff, as opposed to the Commander in Chief in Europe, and so on.

In the middle you have the process, and you've got lots of inputs. On the upper right, you've got combined arms doctrine. It comes from the Command and General Staff College as far as I know, at the moment. You've got the functional building blocks that come from the schools and the vertical systems that appear at all the echelons. Somebody's got to come up with alternative mixes of these functions—more armor and less artillery, more artillery and less mech, more command and control and less fire power, etc. Creative alternatives. Then you have to do some comparative analysis of the effectiveness of the different mixes. You've got to use some models that can, in fact, model these various mixes.

We used to have a thing called SCORES. I don't know whether SCORES still exists, but SCORES now better bloody well get the Good Housekeeping stamp of approval of the joint establishment. More and more you will have the joint establishment, both the JCS and the CINCs, tinkering at least around the edges of your force design. But you have input from the actual performance, training performance, of the Army: the battle command training program, what goes on at the NTC, how well exercises are conducted, command and staff simulators, lessons learned, the stuff Bill Mullen's doing. That's input to the Mix Master. You've also got Army program resource constraints. When you design a division, you're probably going to design it under a high, medium, and low manpower target.

Now what we have is a process. The CAC commander is responsible. The CACDA commander is probably his principal agent for running the Mix Master. I look at it, Len, in this way. Let's visualize one of those big companies that runs trucks around full of concrete for the building in northern Virginia. You are the CEO of that concrete manufacturing and distributing company. You've got to whip up customers, you've got to buy sand, you've got to buy cement and the machinery that mixes it, and you, you've got to be sure that the distribution works, and make all the management analyses so you can turn a profit. Now there's a guy who runs a mixing tower, that's Knudson's tower. He then puts the water together with the cement, the sand, and the gravel, and produces the various qualities of concrete, depending upon what your customers want. Now the problem with all of this is that you've got a big circle with 10 or 12 influences impinging upon it. There is no piece of machinery like that mixing tower out by Dulles Airport that I drive by so often in which somehow they do mix up the water and cement and sand and out comes concrete. Out of this thing has to come TO&Es (for brigades, divisions, and corps) and doctrine (because doctrine is an input and an output). There are a lot of implications to this.

You know, if I'm right that it's central to the Army mission, then it is imperative that the CAC commander control the vertical functions so he can integrate them. He has to perform the magic of the Mix Master. It seems to me that historically CAC has never had the time nor the strength to assume direct control and responsibility for the vertical systems, nor the talent. Not that they're dumb. They just barely have enough talent to do their own job, and that job has never been done yet to the satisfaction of the high command of the Army. But they need override authority—some form of command authority to make integration work, to intervene on the basis of a combined arms mission.

CACDA, in my opinion, is to the integration of the division or a corps what a commander is to the synchronization of a tactical force. And combined arms doctrine is the counterpart of the commander's concept. In fact, the commander's concept is simply the manifestation of the doctrine of the Army to which he belongs. Combined arms force design has to give the tactical commander a complete and balanced set of functional capabilities. Although doctrine is the starting point, both combined arms and joint, it is going to be conditioned by the decisions made as well as by the impact of the functional weapon capabilities. Again, doctrine is both an input and an output. That raises all sorts of interesting additional questions about Wayne: How you organize for combat, and how your division commander here supports you. It seems to me that the doctrinal hierarchy falls pretty much along these lines.

The lowest level is the most dynamic because it's tied to the weapons system and its operator doctrine. We used to call it crew drill. Whatever you want to call it, it's doctrine. The next level, which is very dynamic because it's still based on weapons systems changes and modernization

rates, is tactical employment doctrine. That's at the level of a battalion. And then, still very dynamic but not quite so, combined arms tactical doctrine, which is the Mix Master. And then, finally, not as dynamic on a periodic basis perhaps is operational and joint doctrine. And then last, our future concepts.

Now the fascinating and difficult interface, therefore, is between the combat development force design function, the executive agent probably being CACDA, and the larger responsibilities for doctrine, which still reside in the hands of the CAC commander. This is undoubtedly the most difficult interface in the system, loaded with difficult interfaces. It seems to me that future concepts need to be at TRADOC simply because they are so difficult, so enormous, so dangerous, and also periodic.

So the question as to how you manage the integration—I don't know. It's partly a collegial exercise, but it also has to take place in the head of the man in charge like a Knudson, like a Colin Powell, whom I remember in that job. My view is that there's considerable collegial assistance required, but at some point, you need a creative mind. Whether that creative mind appears in the form of the man in charge or one of his troops is very hard to forecast. But, without it, the function won't work.

