

Foreword

Colonel John C. Studt, USMC (Ret.)

The author of this book has never served a day of active military duty, and he has never been shot at, although there are no doubt some senior officers who would like to remedy that latter deficiency. Yet he demonstrates an amazing understanding of the art of war, as have only a small handful of military thinkers I have come across in my career.

I served over 31 years active duty with the Marine Corps, saw combat in both Korea and Vietnam, and attended service schools from The Basic School to the National War College. Yet only toward the end of my military career did I realize how little I really understood the art of war. Even as a Pfc in Korea, after being med-evaced along with most of my platoon after a fruitless frontal assault against superior North Korean forces, it seemed to me there had to be a better way to wage war. Seventeen years later, commanding a battalion at Khe Sanh, I was resolved that none of my Marines would die for lack of superior combat power. But we were still relying on the concentration of superior firepower to win--essentially still practicing Grant's attrition warfare. And we were still doing frontal assaults!

When I first heard Bill Lind speak, I must confess I resented a mere civilian expressing criticism of the way our beloved Corps did things. After all, he was not one of us, he had not shed blood with us in battle, he was not a brother. And I had strong suspicions that he would have difficulty passing the PFT. But what he said made sense! For the first time I was personally hearing someone advocate an approach to war that was based on intellectual innovation rather than sheer material superiority: mission-type orders, surfaces and gaps, and Schwerpunkt, instead of the rigid formulas

and checklists that we normally associate with our training and doctrine. It was a stimulating experience! Through Lind's articulation, years of my own reading of military history began to make a lot more sense.

But why all this from a civilian instead of a professional soldier? In fact, the entire movement for military reform is driven largely by civilian intellectuals, not military officers--one notable exception being retired Air Force Colonel John Boyd. When you think about it, this is not surprising. We have never institutionalized a system that encourages innovative ideas or criticism from subordinates. Proposing significant change is frequently viewed as criticism of superiors, since they are responsible for the way things are, and borders on disloyalty if not insubordination. So it is not surprising that the movement for reform comes from outside the military establishment.

And it is not surprising that the author of this book should be in the forefront of the reform movement and president of the Military Reform Institute. A magna cum laude history major from Dartmouth, Bill Lind was gifted with a brilliant mind and a rare talent for translating the lessons of history into practical application. He has studied and researched war, and has delved into the minds of the more successful practitioners, as no professional military officer I know of has done. His crusade to sell "maneuver warfare" has made him well known--if not well loved--by those who read the Marine Corps Gazette and other current military literature.

In this handbook Bill Lind lays out the concept of maneuver warfare in clear, understandable language, and he supports and illustrates his theories with excellent historical examples. What he has produced is a text book on how to conduct warfare, and it calls for a totally different approach than we teach in our schools today. Yet it is no more than a compilation of theories proven on a hundred battlefields throughout history. But it would

seem that only the Germans and Israel have institutionalized the practice of maneuver warfare in recent times.

B. H. Liddell Hart once remarked that "The only thing harder than getting a new idea into the military mind is to get an old one out." In 1925, when he was expounding such heretical theories as the "indirect approach," the American General Service Schools' "Review of Current Military Literature" dismissed one of Liddell Hart's major works as: "Of

negative value to the instructors at these schools." I expect Marine Corps schools to receive this publication with similar enthusiasm. But I cannot believe a professional military officer would not benefit by reading it. For the first time in our history we face a potential enemy with superiority in men and material. Against such an enemy we cannot win with the firepower/attrition doctrine we embrace today. In this book Bill Lind offers an alternative.

Introduction

Although this book has been written to be helpful to anyone interested in land warfare, it is addressed primarily to Marines. Most Marines have already heard or read something about maneuver warfare. It has been the subject of many articles in the Marine Corps Gazette. The 2nd Marine Division, under Major General A. M. Gray, Jr., adopted maneuver warfare as doctrine. General Gray established a Maneuver Warfare Board to help spread the concept throughout the division, and also carried out a series of maneuver warfare field exercises at Ft. Pickett, Virginia. The Junior Officers' Tactical Symposium in the 1st Marine Division has also worked to understand and develop maneuver warfare ideas. For a brief period, maneuver tactics were taught as doctrine at Amphibious Warfare School.

Nor is maneuver warfare just of academic interest to Marines. 2nd Battalion 8th Marines, under Lt. Col. Ray Smith, used it on Grenada. As this author wrote in a Military Reform Institute report:

Although the Marine units on Grenada never met much opposition, they did face a number of confusing and urgent situations, which they seem to have handled well. Reflecting their parent 2nd Marine Division's emphasis on maneuver warfare, they did not attempt to follow a rigid plan but rather adapted swiftly to circumstances as they changed. The speed with which the Marines acted and moved was decisive in one interesting case. The Grenadians had about one platoon of troops defending St. George's, which ultimately did not fight. Part of the reason it did not was explained by a senior Grenadian officer after his capture. He said the Marines appeared so swiftly where they were not expected that the Grenadian Army's high command in the capital was convinced resistance was hopeless, the best possible outcome in maneuver warfare.¹

Despite all the attention, maneuver warfare remains a subject of much confusion. Some say, "It's just a fancy new name for what we've always done." Others call it "common sense tactics," as if all it requires is a bit of common sense. Terms such as mission-type orders, reconnaissance pull, surfaces and gaps, and Schwerpunkt are thrown around with little understanding of their meaning or significance.

The purpose of this handbook is to try to clear up the confusion. It has been written as a ready reference for field Marines, not an academic monograph. It seeks to define and explain the basic concepts and terminology of maneuver warfare; to show some practical ways to apply maneuver theory; and to spur further thinking, reading, and writing on the subject by Marines.

Why should Marines care about maneuver warfare? Why should anyone bother to write a book on the subject especially for Marines? Maneuver warfare has special meaning and potential for the Marine Corps, for three reasons:

First, the Marine Corps has traditionally been an innovator. In the 1920s and 1930s, when the common wisdom said amphibious warfare was impossible under modern conditions, Marines responded with some uncommon wisdom. They studied history with great care, thought about what they had read, and gave their imaginations free rein. They developed new amphibious concepts, doctrine and techniques. With strong support from their Commandants, they took their new ideas to the field and tested them.

When war came in 1941, the new ideas were ready, and they worked. As General Alexander A. Vandegrift said, "Despite its outstanding record as a combat force in the past war, the Marine Corps' far greater contribution to victory was doctrinal: that is, the fact that the basic amphibious doctrine which carried Allied troops over every beachhead of World War II had

been largely shaped -- often in the face of uninterested or doubting military orthodoxy -- by U.S. Marines. and mainly between 1922 and 1935."²

Second, Marines know they are likely to fight outnumbered. In Europe, the Warsaw Pact fields more combat units than NATO. In the Persian Gulf, nations such as Iran and Iraq have armies of 500,000 or more men. In other parts of the Middle East, in Asia, and even in Latin America our shortage of amphibious lift, the relatively small size of the Corps and the many commitments facing the Army mean that Marines could be sent into battle against a numerically superior enemy.

History suggests God is on the side of the bigger battalions -- unless smaller battalions have a better idea. A slugging match against someone much stronger than yourself is never very promising. Even if you win, the cost is usually high. But if you can use judo against your larger opponent, if you can psych him out, throw him off balance, and use his own momentum against him, you can win, and often you can win quickly and at small

cost.

Maneuver warfare can be thought of as military judo. It is a way of fighting smart, of out-thinking an opponent you may not be able to overpower with brute strength. As such, it offers Marines the best hope of winning the battles, campaigns and wars they may face in the future.

Third, to a Marine, nothing is more important than combat. In some other services, the most important things sometimes seem to be engineering or management or high technology. Marines have not fallen into these traps. They do not introduce themselves at cocktail parties as "middle managers." They see themselves as fighters, as warriors, and they want to be the best of the breed. They are willing to work, study and, if necessary, "bet their bars" in order to be the best.

That is what this book is about -- combat, and how to win in combat. That is what maneuver warfare is about. And that is why this book has been written for Marines.

1

The Theory of Maneuver Warfare

Maneuver warfare is not new. It probably dates from the first time a caveman surprised an enemy from behind instead of meeting him club-to-club. The first clear case in recorded history was the battle of Leuctra in 371 B.C. The Thebans won that battle, thanks to a surprise strike against the right flank of the rigid Spartan phalanx. Hannibal's defeat of the Romans at Cannae in 216 B.C., one of the most decisive tactical victories of all time, was an example of maneuver warfare. Modern history offers many examples: Rosecranz at Chattanooga, Grant at Vicksburg, and Jackson's Valley Campaign in the American Civil War; German infiltration tactics in the offensive of 1918; the World War II Blitzkrieg; and General Sharon's attack across the Suez Canal in 1973.

Why are all these cases of "maneuver warfare"? What is "maneuver"? Sometimes the word maneuver is used as a synonym for movement, such as in references to "fire and maneuver" in small-unit tactics. A traditional definition is offered by Soviet Colonel F. D. Sverdlov in a recent study, *Tactical Maneuver*. "Maneuver...is organized movement of troops (forces) during combat operations to a new axis (line) and region for the purpose of taking an advantageous position relative to the enemy in order to deliver a decisive strike."¹

But when used in the phrase "maneuver warfare," maneuver means much more. It is what all these cases--Leuctra, Cannae, Vicksburg, the German 1918 offensive, the Suez Canal crossing and many, many others--have in common. The theory of maneuver warfare must answer the question: What was the essence of success in all of these cases?

Only recently has someone suggested a convincing answer. The man is a retired Air Force colonel and fighter pilot named John Boyd. Colonel Boyd's development of the theory of maneuver warfare began, not with ground battles, but with a study of some mock air-to-air combat exercises (conducted at Nellis Air Force Base in 1974) that led him back to the study of air-to-air combat during the Korean war. American aviators were very successful in that conflict. They achieved a 10:1 kill ratio over their North Korean and Chinese opponents. Colonel Boyd began his study with the question: "How and why did we do so well?"

He noted that in several traditional measures of aircraft performance, the principal Communist fighter, the MiG-15, was superior to the American F-86. It could climb and accelerate faster, and it had a better sustained turn rate. But in two less obvious measures of aircraft performance, the F-86 was much superior to the MiG. First, the pilot could see out much better. The F-86's bubble canopy gave its pilot very good outward vision, while the MiG's faired canopy made it difficult to see out. Second, the F-86 had high-powered and highly effective hydraulic controls and the MiG did not. This meant that while the MiG could do many individual actions--including turn, climb, and accelerate--better than the F-86, the F-86 could transition from one action to another much more quickly than the MiG.

Using these two superiorities, the American pilots developed a tactical approach that forced the MiG into a series of actions. Each time the action changed, the F-86 gained a time advantage, because the F-86 pilot could see more quickly how the situation had changed and he could also make his aircraft shift more quickly to a new action. With each change, the MiG's actions became more inappropriate, until they were so inappropriate that the MiG gave the F-86 a good firing opportunity. Often, it appeared the MiG pilot realized what was happening to him and panicked, which made the American pilot's job all the easier.

Later Colonel Boyd began studying ground combat to see if there were situations similar to that he had found in the air war over Korea. He found that in battles, campaigns and wars like Leuctra, Vicksburg and France in 1940, a similar thing seemed to have happened. One side had presented the other with a sudden, unexpected change or a series of such changes to which it could not adjust in a timely manner. As a result, it was defeated, and it was generally defeated at small cost to the victor. Often, the losing side had been physically stronger than the winner. And often, the same sort of panic and paralysis the North Korean and Chinese pilots had shown seemed to occur.

Colonel Boyd asked himself, what did all these cases have in common? His answer was what is now called the Boyd Theory, which is the theory of maneuver warfare. The briefing Colonel Boyd gives to explain his theory, "Patterns of Conflict," takes over five hours. But, at the cost of missing some of the subtleties and the supporting historical evidence in the briefing, it can be summarized as follows.

Conflict can be seen as time-competitive observation-orientation-decision-action cycles. Each party to a conflict begins by observing. He observes himself, his physical surroundings and his enemy. On the basis of his observation, he orients, that is to say, he makes a mental image or "snapshot" of his situation. On the basis of this orientation, he makes a decision. He puts the decision into effect, i.e., he acts. Then, because he assumes his action has changed the situation, he observes again, and starts the process anew. His actions follow this cycle, sometimes called the "Boyd Cycle" or "OODA Loop."

If one side in a conflict can consistently go through the Boyd Cycle faster than the other, it gains a tremendous advantage. By the time the slower side acts, the faster side is doing something different from what he observed, and his action is inappropriate. With each cycle, the slower party's action is inappropriate by a larger time margin. Even though he desper-

ately strives to do something that will work, each action is less useful than its predecessor; he falls farther and farther behind. Ultimately, he ceases to be effective.

This is what happened to the Spartans at Leuctra, the Romans at Cannae, the French in 1940 and the Communist fighter pilots over Korea. Sometimes, a single action was enough, as in the Thebans' oblique attack at Leuctra. Sometimes, as in the Blitzkrieg or air combat over Korea, a series of OODA Loops was required. But whether it was through a single action or a large number, the essence of what happened was the same.

The Boyd Theory defines what is meant by the word "maneuver" in the term "maneuver warfare." Maneuver means Boyd Cycling the enemy, being consistently faster through however many OODA Loops it takes until the enemy loses his cohesion-- until he can no longer fight as an effective, organized force.

Sometimes, a Boyd Cycled enemy panics or becomes passive. This is an ideal outcome for the victor, because a panicked or passive enemy can be annihilated or captured at the lowest cost in friendly casualties. At other times, the outmaneuvered enemy may continue to fight as individuals or small units. But because he can no longer act effectively as a force, he is comparatively easy to destroy. A good example of a panicked enemy can be seen in Rommel's success at the battle of Caporetto in World War I, where with a force of about a battalion he took more than 10,000 Italian prisoners. At Cannae, the Romans continued to fight as individuals. But in both situations, the basis of victory was the same: one side Boyd Cycled the other.

If the object in maneuver warfare is to move through OODA Loops faster than the enemy, what do you need to do? How can you be consistently faster? Much of the rest of this book is an effort to address that question. But in terms of general theory, the following points are worth thinking about:

1. Only a decentralized military can have a fast OODA Loop. If the observations must be passed up a chain of command, the orientation made and the decision taken at a high level, and the command for action then transmitted back down the chain, the OODA Loop is going to be slow. As the Israeli military historian Martin Van Creveld has observed:

From Plato to NATO, the history of command in war consists of an endless quest for certainty. Certainty concerning the state and intentions of the enemy's forces; certainty concerning the manifold factors which together constitute the environment, from the weather and the terrain to radioactivity and the presence of chemical warfare agents; and, last but definitely not least, certainty concerning the state and activities of one's own forces... historical commanders have always faced the choice between two basic ways of coping with uncertainty. One was to construct an army of automatons following the orders of a single man, allowed to do only that which could be controlled; the other, to design organizations and operations in such a way as to enable the former to carry out the latter without the need for continuous control. ...the second of these methods has, by and large, proved more successful than the first; and...the ongoing revolution in the technology of command notwithstanding, this is likely to remain so in the future and indeed so long as war itself exists.²

2. Maneuver warfare means you will not only accept confusion and disorder and operate successfully within it, through decentralization, you will also generate confusion and disorder. The "reconnaissance pull" (see Chapters II and III) tactics of the German Blitzkrieg were inherently disorderly. Higher headquarters could neither direct nor predict the exact path of the advance. But the multitude of German reconnaissance thrusts generated massive confusion among the French in 1940. Each was reported as a new attack. The Germans seemed to be everywhere, and the French, whose system demanded certainty before making any decisions, were paralyzed.

3. All patterns, recipes and formulas are to be avoided. The enemy must

not be able to predict your actions. If your tactics follow predictable patterns, the enemy can easily cut inside your OODA Loop. If he can predict what you will do, he will be waiting for you.

This is why it is so hard to tell someone how to do maneuver warfare. There is no formula you can learn. When someone says, "Cut all the bull about theory; just tell me what to do," you can't. You can talk about how to think, and about some useful techniques. But you can't give new formulas to replace the ones currently taught at Marine Corps schools.

Instead of a checklist or a cookbook, maneuver warfare requires commanders who can sense more than they can see, who understand the opponent's strengths and weaknesses and their own, and who can find the enemy's critical weaknesses in a specific situation (which is seldom easy). They must be able to create multiple threats and keep the enemy uncertain as to which is real. They must be able to see their options in the situation before them, constantly create new options, and shift rapidly among options as the situation develops. General Hermann Balck, one of the most successful practitioners of maneuver warfare, said:

I'm against the school approach that says, "In accordance with the ideas of the General Staff, in this situation you must do thus and such." On the contrary, you must proceed as dictated by the personalities involved and the particulars of the situation. For instance, you are attacking at 7 o'clock in the morning and you have given clear tasks to each of your divisions: this one takes this objective, the next one grabs this, the third does nothing except to protect the left flank. At the next attack opportunity you may have an almost identical situation, but everything must be changed completely because your most competent division commander has been killed in the meanwhile.

Therefore, one of the first principles has to be: There can be no fixed schemes. Every scheme, every pattern is wrong. No two situations are identical. That is why the study of military history can be extremely dangerous.

Another principle that follows from this is: Never do the same thing twice. Even if something works well for you once, by the second time the enemy will have adapted. So you have to think up something new.

No one thinks of becoming a great painter simply by imitating Michaelangelo. Similarly, you can't become a great military leader just by imitating so and so. It has to come from within. In the last analysis, military command is an art: one man can do it and most will never learn. After all, the world is not full of Raphaels either.²



2

Tactics and Operations

If maneuver warfare cannot be done by formulas and recipes, how can it be done? To help answer this question, you might want to look at some pictures of maneuver warfare.

Picture #1: The expanding torrent. B. H. Liddell Hart, the famous British military historian and theorist, drew an analogy between a maneuver warfare attack and flowing water. He wrote:

If we watch a torrent bearing down on each successive bank or earthen dam in its path, we see that it first beats against the obstacle, feeling and testing it at all points.

Eventually, it finds a small crack at some point. Through this crack pour the first dribbles of water and rush straight on.

The pent-up water on each side is drawn towards the breach. It swirls through and around the flanks of the breach, wearing away the earth on each side and so widening the gap.

Simultaneously the water behind pours straight through the breach between the side eddies which are wearing away the flanks. Directly it has passed through it expands to widen once more the onrush of the torrent. Thus as the water pours through in ever-increasing volume the onrush of the torrent swells to its original proportions, leaving in turn each crumbling obstacle behind it.

Thus Nature's forces carry out the ideal attack, automatically maintaining the speed, the breadth, and the continuity of the attack.¹

Picture #2: German defensive tactics in 1917. During the winter of 1916-17, the Germans abandoned what we think of as the classic First World War defense, where men were closely packed into trenches and

fought to hold every inch of ground. Instead, they adopted an elastic defense in depth, a defense that reflected maneuver warfare. Captain Timothy Lupfer discusses it in his excellent study, The Dynamics of Doctrine:

The trenches were necessary for daily living, but once detected they were lathered with preparatory fire and barrages. Deep dugouts in forward areas were also impractical, for soldiers remained in them too long after the enemy barrage lifted and were often captured. Therefore, under heavy fire, the forward German soldiers evacuated their trenches and shifted from shell hole to shell hole, avoiding concentrations of fire and escaping the detection of aerial artillery spotters.

The Allied advance would first encounter resistance from pockets of German survivors in shell holes. Having been concealed from aerial observation, units positioned on the reverse slope would then open fire unexpectedly. The Allies would also encounter fortified strongpoints... built to provide for all-around defense and they engaged the attackers, whenever possible, with devastating enfilade fire. The strongpoints would remain fighting even if cut off by the enemy advance.

The ideal scenario was:

A fragmented, exhausted Allied attack force reaches the battle zone. They hope that their thorough artillery preparation has killed all the Germans, but they encounter several Germans firing at them from shell holes in the torn ground. Sudden fire from the German main line of resistance has slowed the Allies and their scheduled artillery barrage has crept forward without them, according to a timed sequence of fire they cannot modify. They feel helpless without artillery support. The Allies finally have taken the main line of resistance at great cost, but now they are in unfamiliar ground, under fire from concealed enemy machine gunners and riflemen. German artillery, which the Allies expected to destroy in the preparatory fires, now appears very active. The Germans concentrate their artillery fire behind the Allied advanced units, cutting them off from reinforcements and supplies. For the next few minutes, the Allies have a tenuous hold on a few acres of ground, but by advancing into the

battle zone, the Allies are most vulnerable, and have exposed themselves to the counterattack, the soul of the German defense. The immediate counterattack, well coordinated with accurate artillery fire, destroys, captures or ejects the Allied unit before it can consolidate its gains. The coherence of the German defense is restored...

In Its most developed form, the defense had designated counterattack forces throughout the zones. In the outpost zone, local commanders designated counterattack squads. In the battle zone, commanders designated counterattack companies. . . The regiment's reserve battalion was part of the division reserve, in which each remaining battalion from each frontline regiment served as a counterattack battalion, striking from the rear of the battle zone. Behind these counterattack battalions were the reserves of the field army (entire counterattack divisions), and OHL itself (Supreme Army Headquarters) retained control of additional counterattack divisions.

The defense thus assumed a very aggressive and potentially offensive character. The best time for counterattack was the period of confusion when the attacker had not yet consolidated his position or reorganized his forces. Timing was critical.²

Picture #3: German assault tactics on the Eastern Front, 1942. Following an abortive armored attack on a Soviet defensive position, an infantry task force cleared the strongpoint using assault teams and follow-on reinforcements.

The left wing was formed by the seasoned 6th Armored Reconnaissance Battalion, the right by the 1st Armored Infantry Battalion of the 114th Infantry Regiment (Mechanized). The two battalions were reinforced by engineer assault detachments, flame-thrower teams, and mine-clearing details. The tanks and remaining armored infantry elements were assembled in the rear between Zalivsky and Klykov, where they stayed in reserve, ready to follow up the assault force.

At 0800 on 17 December the massed guns of the artillery regiment opened fire. As the hail of shells came down on the ridge it obliterated the Russian observation post. The dried-out steppe grass burned fiercely and reddish clouds

of dust enveloped the whole ridge, depriving the Russians of all visibility. After a short time, however, the fires died out because a light snowfall prevented them from spreading.

Meanwhile, the first German assault wave moved up to the ridge. When a signal flare was set off to indicate it was entering the Russian defensive positions, the artillery fire was shifted. The assault detachments had opened a gap at the center of the ridge. The difficult task of ferreting out the enemy force dug in on the ridge had thus begun.

Several squadrons of German dive bombers, flying in relays, came over and headed in the direction of Verkhniy Kumskiy, where they blasted Russian artillery positions, silencing one battery after another. Directly overhead, Messerschmitts and Ratas tangled in dogfights, during which three of the Russian fighters were shot down near the ridge.

Paying little heed to the air action, the assault forces fanned out from the initial point of penetration and moved forward. Machine gunners and sharp-shooting riflemen stalked the hidden Russians like game and fired well-aimed bullets at anything that moved. Whenever Russians from a nearby foxhole returned the fire, they were silenced by a well-placed hand grenade. The fortified positions were neutralized by the flame-thrower teams. Whenever a particularly fanatic Russian force could not be flushed out by the assault troops they fired a signal flare to pinpoint the target for the German artillery pieces and mortars.

By noon the reconnaissance battalion had cleared all enemy forces from its zone of action, and an hour later the armored infantry battalion had done likewise on the eastern part of the ridge. An attack on Verkhniy Kumskiy could be envisaged.³

Today, Marines learn tactics as a series of formulas, starting at The Basic School. Tactics are defined as the "how to" of things like a penetration, an attack, coordination of supporting arms and so on. Ability is measured in check 1st-type tests like the CAX and the MCCRES. In 1983, the final exam in tactics at Amphibious Warfare School was all true/false or multiple choice, and included such questions as "The _____ stove is the primary

heat source for the Ten Man Tent," and "The _____ is the basic ski technique utilized in a controlled movement downhill

Maneuver warfare is not very concerned with names of stoves and skiing techniques. It looks at tactics differently. A useful definition of tactics in maneuver warfare is:

Tactics is a process of combining two elements, techniques and education, through three mental "filters" or reference points mission-type orders, the focus of effort or *Schwerpunkt*, and the search for enemy surfaces and gaps—with the object of producing a unique approach for the specific enemy, time and place.

What does a careful look at this definition show? First, it says tactics is not a thing, but a process -- especially a mental process. It is a way of doing something. It is not just a certain type of attack or defense, it is also why you chose that particular attack or defense. Tactics is not just your decision as a commander, it is how you come to your decision--your method.

Second, the definition says the goal of the process is a unique approach. You always want to do something different, something the enemy does not expect.

Third, you must consider the specific enemy, time and place. Everything must be according to the situation. Each situation is different. One enemy behaves differently from another -- Czechs or North Koreans or Syrians fight differently from Soviets. One Soviet division or regiment or company will fight differently from another. And the same enemy unit will fight differently on Thursday from the way it fought on Tuesday. What you do as a commander must take all these changes into account. What works one day will not work the next.

Fourth, tactics combines two basic elements, techniques and education. Techniques are things you can do by formula. They include how to aim a rifle, set up a machine gun, give an order, establish communications, call in fire support, gun crew drills, unit battle drills and so on. Excellence

in techniques is very important in maneuver warfare! Some people have suggested maneuver warfare advocates do not care about techniques. This is flat wrong! A major difference between a military that can do maneuver warfare in combat and one that can only talk about It is excellence in techniques. Sloppy techniques slow down your Boyd Cycle and make your action ineffective.

But good techniques are not enough. The process that is tactics includes the art of selecting from among your techniques those which create that unique approach for the enemy, time and place. Education is the basis for doing that — education not in what to do, but in how to think. Military history, war gaming, terrain walks and all other educational tools must be used by every officer to build his own military education. It is only the combination of techniques and education that enables an officer to do maneuver tactics. Education without excellence in techniques means action will not be timely or effective, But techniques without education means tactics will be formulistic, rigid, and predictable to the enemy.

What about the three "filters"? Perhaps the first question is, what is a "filter"? A filter is a mental reference point, a way to help shape and guide your thought process. We all have them. Some are conscious, some not. Three are very helpful in maneuver warfare tactics: mission-type orders, *Schwerpunkt*, and surfaces and gaps.

1. Mission-type orders. Mission-type orders are key to the decentralization necessary for a rapid Boyd Cycle. A mission-type order tells the subordinate commander what his superior wants to have accomplished. That is the mission. "It leaves how to accomplish it largely up to the subordinate. As the subordinate's situation changes, he does what he thinks is necessary to bring about the result his superior wants. He informs his superior what he has done, but he does not wait for permission before he acts. What would happen to his Boyd Cycle if he did?

A useful way to think of mission-type orders is in terms of contracts between superior and subordinate.⁴ There are two contracts. One is long-term. It is based on what we call the commander's intent. This is the commander's long-term vision of what he wants to have happen to the enemy, of the final result he wants. The subordinate needs to understand this two levels up. If he is a platoon commander, he needs to know the battalion commander's intent. If he is a company commander, he needs to know the brigade commander's intent, and so on. The "contract" is simple: the subordinate contracts to make his actions serve his superior's intent -- what is to be accomplished -- and the superior contracts to allow the subordinate great freedom of action in terms of how his intent is realized.

The mission is a shorter-term contract. It is a "slice" of the commander's intent, a slice small enough to be appropriate to the immediate situation of the subordinate unit. The contract is the same: the subordinate agrees to make his actions support the mission in return for wide-ranging freedom in selecting the means.

How far does this freedom of action go? The answer, as is so often the case in maneuver warfare, is that it depends on the situation. In some cases, the freedom of action granted the subordinate may be total. The superior may not specify anything more than the result to be achieved. For example, at one point during the fighting on the Golan Heights during the 1973 Mideast war, an Israeli commander received orders to block a Syrian armored brigade. That was the whole order -- don't let them through.⁵

At other times, the orders may be quite specific and detailed as far as the subordinate's initial actions are concerned. A good example is a deliberate attack on a prepared position. Jumping-off points, timing, and initial objectives will often be specified, and the subordinate will rightly be expected to do what he is told. But once the attack is underway and the situation begins changing rapidly, the subordinate will again be expected to adjust his actions to the changes on his own initiative, with appropriate

reference to his superior's intent.

Under such a system, how do you avoid mistakes? You don't entirely. Mission-type orders and a "zero-defects mentality" are contradictory. Several years ago, a member of Congress told a German Army colonel that he wanted to organize his Congressional office on the basis of mission-type orders. The colonel replied, "That is very good, but I hope you realize it means allowing your staff to make mistakes." A maneuver warfare military believes it is better to have high levels of initiative among subordinate officers, with a resultant rapid Boyd Cycle, even if the price is some mistakes.

Doesn't the superior lose control if his subordinates have a great deal of freedom to make their own decisions? The historical record quickly shows this is not the case. Generals George Patton and Bruce Clark both used mission-type orders in World War II. The German army has used mission-type orders for over a century, yet it has not been an army that was "out of control." What changes is the way control is achieved. Instead of controlling by telling the subordinate what to do and then demanding constant reports to show he is doing it, control comes through the intent and the mission. Indeed, control is really replaced with guidance, while the intent and the mission "glue" the force together.

There are a number of misconceptions about mission-type orders. Some of the more common are:

"In a mission-type order, the battalion commander just orders his company commander to 'attack and seize hill 207.' He does not tell him how to do it." Sometimes, a mission-type order may tell you to take a specific piece of ground. But more often, it will tell you what your commander wants you to do to the enemy. Instead of "attack and seize hill 207," it will say, "attack the enemy in the left flank through hill 207." In this case, if the company commander sees that hill 207 is not the best route to the enemy's flank, he will take another route on his own authority. If possible, he will

inform his battalion commander of the change in plans. But he will act first, inform later.

"A mission-type order just tells you to defeat the enemy." There is more to it than that in most cases. Your commander has a responsibility to think through a way to defeat the enemy, and to communicate that clearly to you. He must tell you, "here is what I want to do to the enemy." You must know what he has in mind, and think through what that means for your unit. Then you must make sure your subordinates understand what you are thinking.

"Mission-type orders mean you can do whatever you want." In many cases, you can largely "do what you want" in terms of means, but not ends. Your actions must always fit in with what your commander is trying to accomplish—with his intent and the mission. If he also suggests some means, you cannot disregard his suggestions, but if you find that the situation changes or is different from what your commander envisaged, you put the ends above the means and do what you think is appropriate.

What do mission orders look like? A historical example can help answer this.

In July of 1941 the 78th Infantry Division of the German Army had crossed the Dnieper about ten kilometers south of Mogilev, with orders to advance on the town of Krichev. The division commander, General Curt Gallenkamp, issued this order preparatory to an attack on July 25:

(1) Enemy forces numbering at least one Soviet division in the area south of Mogilev endanger the ordered advance of the division in the left flank. The enemy situation to the northeast, where heavily motorized traffic has been reported, is not yet clear.

(2) On the morning of 25 July, the 78th Division will attack and destroy the enemy group south of Mogilev. For the duration of the attack the division will be attached to VII Corps.

(3) For this purpose the following units will be assembled prior to 0600

hours on 25 July:

(a) The 195th Infantry with 4th Battery, 178th Artillery...It will be the mission of 195th Infantry to concentrate its main effort on pinning down the enemy on its front on both sides of the road to Mogilev and to push him steadily northward.

(b) The 238th Infantry...The task of the 238th Infantry will be to concentrate its main effort on the right, attack the enemy on its front and to drive him back. The regiment will direct its main attention to the prevention of any enemy action against the left flank of the 215th Infantry attacking on the right of the 238th Infantry.

(c) To the right of the boundary line separating it from the 238th Regiment, the 215th Regiment will organize its forces on both sides of the road leading northward to the Dnieper bend and echeloned to the right rear.

It will be the regiment's mission, by means of a powerful thrust northward as far as the Dnieper bend, to prevent Soviet forces stationed westward in the Dnieper bend from escaping eastward. The 238th Infantry will be responsible for protection of the left flank of the 215th Infantry. The speed of the 215th Regiment's advance will decide the success of the over-all attack.

(4) The commander of 178th Artillery will concentrate his entire fire power (less the 4th Battery, which is to be attached to 395th Infantry) to the rear of the right flank of the division in such a manner that the massed fire of the regiment can be observed while it first supports the attack of the 215th Infantry, and then the right flank of the 238th Regiment...

(5) By 0600, 25 July, the main body of the 178th Panzer Jaeger (anti-tank) Battalion will assemble in area (y) behind the 215th Infantry and to the right, in such a manner that it can repulse any armored assault against the attacking 215th Infantry Regiment. For this purpose it will reconnoiter in a northeasterly direction the enemy motorized forces which have been reported.

(6) The 178th Reconnaissance Battalion will reconnoiter in a general easterly direction in the area adjacent to the Panzer Jaeger battalion and will protect the right flank of the attacking 78th Infantry Division...

(7) Division Reserves:

(a) The 238th Infantry Regiment must not commit the battalion held in reserve behind the right flank without my permission...

(8) The closing in assembly positions will be reported to me at my command post by 0600, 25 July.

(9) The beginning of the attack will be ordered on the morning of 25 July.

(10) During the division's attack I shall first be with the 238th Infantry Regiment, and later in the sector of 215th Infantry Regiment. The Division command radio station will accompany me wherever I go.

/s/ Gallenkamp

Generalleutnant
and Division Commander

On July 29, with the action well underway, new orders were required. With full confidence in the officers and troops under him, the division commander decided on a "double enveloping attack against enemy groups attacking from the north." For this purpose he issued the following individual orders:

(1) By telephone to 195th Infantry Regiment

The reinforced 195th Infantry (less its 3d Battalion), with 178th Engineer Battalion, 178th Panzer Jaeger Battalion, and the heavy weapons company of 178th Reconnaissance Battalion attached will attack from its left flank in the direction of Hill 95 north of Blagovichi and from there push forward toward the village of "Y".

All available motor vehicles will be used to form a mobile combat group which will skirt the enemy left flank and compress it by a thrust deep in its flank.

The 236th Infantry will envelop the right enemy flank. The combat group in Blagovichi will hold its present position and will be supported by 215th Infantry attacking from the west.

(2) Radio message to 215th Infantry Regiment

The division will destroy enemy through double envelopment. It will pin down and slowly force back the enemy on its front toward village Y. By making contact with the combat group in Blagovichi, which is being attacked by superior enemy forces, it will relieve this unit.

Radio message to 238th Infantry Regiment

The 238th Regimental Combat Group (minus first Battalion, 238th Infantry) will force a decision by enveloping the enemy's western flank from our left. Direction of attack of its own right flank is "Y" village.

The 1st Battalion, 238th Infantry, will fight its way through in the direction of Blagovichi and at 1400 will be at my disposal in the forest south of Blagovichi.

(3) Oral Order to Commander, 178th Artillery Regiment

Combat Group Blagovichi, under the commander of 178th Artillery, will hold its positions. Its most urgent mission is to relieve 178th Signal Battalion. Combat Group Chaussy, and the 215th and 238th Regimental Combat Groups will carry out an envelopment. The division headquarters will move its command post to a sunken road due east of the village near the road to Chaussy.

These orders show how the commander makes his intent known to his subordinates and gives them missions. They also show the wide latitude allowed to subordinates. How they accomplished their missions -- conducting an attack, relieving a unit that was under enemy pressure, enveloping one of the enemy's flanks, etc. -- was up to them.

The commentary on these orders makes some useful points:

The manner in which the division commander gave his orders to his regimental commanders at Mogilev, namely by assigning missions, may in some cases cause surprise. The division commander used this manner of issuing orders during the entire 1941 campaign in Russia, because since the autumn of 1939 he and his division had become so close to each other, and because in his subordinate commanders he had men whose capabilities were best suited to this manner of issuing orders. The numerous great successes scored by the division prove that this was an effective method. In this respect, too, the ... examples prove that no rigid pattern should ever be followed in combat. Individual adaptation to given circumstances and a profound understanding of the psychology of subordinate commanders and troops are qualifications which are necessary to senior commanders. Frequently such characteristics are the key to success.⁶

The change to mission-type orders is a big one. Some Marine commanders will find it difficult to give their subordinates so much freedom of action. Senior commanders will have to make it clear that the days of "zero defects" are over. But most commanders will find the new freedom a breath of fresh air. And the mutual trust the "contracts" involve will be a welcome change from the constant checking and reporting that now take so much of a Marine officer's time.

2. The second "filter," and the third "glue" that holds activities together is the focus of effort or, to use the German term, Schwerpunkt. This is sometimes translated as "point of main effort," but such a translation is dangerous. It is not a point on a map. It is where the commander believes he can achieve a decision, and it translates into a unit, as in "Schwerpunkt is 2nd battalion."

When a unit is designated the focus of effort, all other units work to support it. It gets the artillery, air, and so on. The reserve is positioned to be able to exploit its success. Its neighbors each ask themselves, "What can

I do to support the Schwerpunkt?"

The concept of Schwerpunkt is very important for any force that will fight outnumbered, because it enables it to direct all its power to one purpose. If it focuses all its effort to strike hard at one of the enemy's weak points, it can overthrow an opponent who is, in total strength, more powerful.

Schwerpunkt is not just the main attack (though the main attack is often at the Schwerpunkt). It is a conceptual focus, not just a physical one. All commanders, refer to the Schwerpunkt, along with their superior's intent and the mission, in making their own decisions. Each makes sure his actions support the Schwerpunkt. This is why it is the third "glue" that keeps activities from degenerating into disorder.

The Schwerpunkt can also be understood as the harmonizing element or medium through which the contracts of the intent and the mission are realized. It pulls together the efforts of all subordinates and guides them toward the goal, toward the result their commander wants.

3. Surfaces and gaps. Where should you place your Schwerpunkt? The third "filter," surfaces and gaps, helps guide this decision- Quite simply, surfaces and gaps are enemy strengths and weaknesses. Why not just call them that? The term "surfaces and gaps" is useful to the small unit commander, because it describes the kinds of strengths and weaknesses he will often find. A "surface" is a line of enemy defenses. A "gap" is a hole in that line. You want to put your Schwerpunkt opposite a gap, not a surface. In maneuver warfare, you always try to avoid the enemy's strength and hurl your strength against his weaknesses. You want to use judo, not fight a boxing match.

For a platoon, company or even battalion commander, an enemy weakness is likely to be a physical gap in the enemy's position. How can he find the gap? Through what we call "reconnaissance-pull" or "recon-pull."

Currently, most Marine units use the opposite of recon-pull tactics, called "command push." The axis of advance is chosen before the operation begins, and it is seldom altered. The commander pushes however many forces are needed down that axis to make the attack successful. Of course, this often results in throwing strength against strength. With recon-pull, the axis of advance is determined by the results of reconnaissance rather than being fixed by command from above, and it shifts in response to what the recon finds.

An example of one type of attack may be helpful in understanding this. Your forward element is a reconnaissance screen. Its job is to look for surfaces and gaps. When it finds a gap, it goes through, and calls other forces to follow. If the gap seems to be promising, the unit commander commits more forces through it. Some of the forces widen the gap and roll out behind the enemy position that has been penetrated, collapsing it from the rear. Meanwhile, the reconnaissance screen continues to move forward, always seeking the paths of least resistance. The recon pulls the main force around the enemy surfaces and ever more deeply into the enemy position.

Recon-pull requires a different type of reconnaissance from what Marines are used to. Today, most recon forces are committed deep, along the axis of advance chosen for the "command push." There is no reconnaissance screen. For recon-pull, you must have a recon screen. It is different from a security screen, in that it orients on the enemy, not on your own unit. It must be strong. Indeed, all your forward forces must be part of it. In maneuver warfare, recon is everyone's responsibility.

The three "filters" -- mission-type orders, Schwerpunkt, and surfaces and gaps -- are so important in maneuver warfare that they form part of our definition of maneuver tactics. But there are also some other helpful tools. First among them is firepower.

Firepower is very important in maneuver warfare. Some people have accused maneuver warfare advocates of downgrading the importance of

firepower. Nothing could be further from the truth. What changes in maneuver warfare is not the importance of firepower, but the purposes for which it is used.

Firepower/attrition warfare uses firepower mostly the way the term implies, to reduce enemy numbers through attrition. Movement serves firepower; you move to get into a better firing position to cause more attrition.

Maneuver warfare uses both firepower and movement in a maneuver context. What does this mean? Usually, you are moving not just to a better firing position, but to create a series of unexpected and dangerous situations for the enemy. Only this kind of movement qualifies as maneuver. The main role of firepower is to help you maneuver. Firepower is used most often to suppress the enemy while you move around or through him.

A good example of the use of firepower in maneuver warfare is given to us by Rommel. At one point during the battle of Caporetto in 1917, he decided to attack an Italian force on Kuk mountain. Rommel described the action in his book, Infantry Attacks:

He (the Italians) was to be given as little time as possible for digging in, for it would be increasingly difficult to dislodge him if he were permitted to anchor himself firmly. It was essential to use the time for thorough preparation of the planned attack.

In order to maintain surprise I refrained from hampering his entrenchment with fire ... I explained my plan of attack against Kuk to Captain Meyr, the General Staff Officer of the Alpine Corps, and requested the support of two heavy batteries for the attack. My request was granted . . . Now it was necessary to prepare the infantry fire support. For this purpose I emplaced the light machine guns of the 2nd Company and the whole 1st Machine Gun Company on the north and south slopes of Hill 1192. Their positions were concealed from the enemy on Kuk. I planned to use weak assault teams in the attack and the automatic weapons had the mission of pinning down the enemy force on Kuk. Targets were designated for each gun.

By 1100 the whole fire detachment (six light machine guns, 2nd Company and 1st Machine Gun Company) under Lieutenant Ludwig, was in concealed position on the north and south slopes of Hill 1192 ready to open fire on the Kuk garrison. An assault team of the 2nd Company consisting of two squads, was in position on the north slope of Hill 1192 and an assault team of the 3rd Company, of equal strength, was on the south slope ready to advance. As soon as firing commenced, the task of these assault squads was to take the saddle between Kuk and Hill 1192, and then, under strong support from artillery and machine guns, to advance against the Kuk garrison along the position on the north slope or through the draw on the southeast slope. I wanted to feel out the hostile position with these assault teams. The 3rd and 4th Rifle Companies and 2nd and 3rd Machine-Gun Companies were in concealed reserve positions in the saddle just east of Hill 1192. I intended to commit them on the north or south slope depending on the success of the initial assault teams.

In his comments on this action, Rommel notes, "The (Rommel) detachment first attacked only with two assault teams of 16 men under the fire support of one machine-gun company, six light machine guns and two heavy batteries. These teams felt out the possibilities of approaching the enemy and I then used the main body to encircle the entire Kuk garrison."⁷

Certainly the amount of firepower Rommel used was substantial, even by current Marine Corps standards. But the purpose was not to bombard the enemy to pieces. Rather, it was to permit movement -- the attack of the assault units --and maneuver -- the encirclement of the entire enemy force.

Just as the purpose of firepower changes in maneuver warfare, so does the way it is employed. Maneuver warfare practitioners strive to employ their fire support systems not just as supporting arms, but as combined arms.

What is the difference? Combined arms hits the enemy with two or more arms simultaneously in such a manner that the actions he must take to defend himself from one make him more vulnerable to another. In

contrast, supporting arms is hitting the enemy with two or more arms in sequence, or if simultaneously, then in such combination that the actions the enemy must take to defend himself from one also defends him from the other(s).

Combined arms, like other elements of maneuver warfare, seeks to strike at the enemy psychologically as well as physically. It puts the enemy on the horns of a dilemma. For example, let us say you are defending against an enemy tank attack. You lay a surface minefield with FASCAM to cover an approach that is also within good range of your TOWs. The enemy encounters the mines and the TOWs simultaneously. To avoid the mines, he must move slowly and carefully and keep visibility clear. To avoid the TOWs, he must move quickly and abruptly and obscure visibility. Either choice gets him in trouble, and the fact that his problem has no solution strikes at his mental cohesion.

Supporting arms, in contrast, just faces the enemy with a problem, not a dilemma. Let us say you are facing enemy infantry in entrenchments. You call in an air strike, followed by artillery. To avoid the air, the enemy stays down in his trenches. To avoid the artillery, he does the same. Even if the air and the artillery hit at the same time, he faces no dilemma. His problem has a solution, and the only effect of your action is some attrition.

The distinction between combined arms and supporting arms is important, because combined arms take no more firepower, but will usually be much more effective. If you are fighting outnumbered, you need to get the greatest possible effect from your fire support systems. While circumstances will sometimes compel you to adopt the supporting arms approach, you should always strive for combined arms.

The importance of firepower in maneuver warfare cannot be over-emphasized. In some cases, you can find a hole in the enemy's position and infiltrate through. But in many situations, you will have to move in the face of the enemy. The only way to do so is to plaster him with fire, to

suppress him while you move around him or through him. The suppression must be very heavy and well-timed to be effective. It is no less heavy or well-timed than in the style of warfare Marines are now accustomed to. The difference is in what you are trying to do with it.

A second important tool in maneuver warfare is the counterattack. A counterattack is an attack on the enemy's attack. But it is really more than that. It is an action you take after the enemy has irrevocably committed himself.

When the enemy has launched his attack, he has committed himself to a definite action with all or almost all his resources. His momentum is carrying him in a certain direction. If an unexpected threat suddenly presents itself, he will have great difficulty in dealing with it -- much greater difficulty than if he were doing nothing. Again, maneuver warfare is like judo — you want to use the enemy's own momentum against him. That is what a good counterattack does.

In many instances, the counter-attack will be the key to a successful defense. If you are fighting outnumbered, you will generally not be able to afford a linear defense, a defense where you try to hold a line against the strongest attack your opponent can muster. Even if you hold him, he will have battered you badly. As the smaller force, you can't win by attrition, but you can certainly lose by it!

In the defense as in the offense, you want to shatter the cohesion of the enemy's units, not just kill his troops and destroy his equipment. A common tool for achieving this is the counterattack. In general, the counterattack must have three characteristics to be successful. First, it must be strong. As Guderian often exclaimed, "clobber them, don't jab at them."⁸ Second, the counterattack must achieve surprise by striking the advancing enemy at a weak point created by his own forward momentum. Last, and most critical, the success of a counterattack depends upon timing. The commander must be able to sense that point when the enemy,

exposed and tiring, is incapable of rapid response to an unexpected threat. Given these three elements, a counterattack can be a devastating tactical tool. To see how devastating, you need only examine the crushing defeats suffered by advancing Russian forces early in 1943, defeats dealt by numerically inferior German forces.

A third important tool, closely related to the counterattack, is the reserve. In both the offense and the defense, a strong reserve provides the key to retaining the initiative and achieving victory. It is a tool with which you can widen gaps and create breakthroughs by reinforcing local successes. It also comprises the counterattack forces. Without a strong reserve, even the most promising opportunities will be wasted, for you will be unable to exploit them. Indeed, a strong reserve offers such potential advantages that it should reflect a sort of inverse proportionality - the weaker the main force with respect to the enemy, the stronger the reserve. Also, the more uncertain or confusing the situation is, the stronger the reserve should be.

Fourth, to be able to outfight the enemy using maneuver warfare, you need a command and control system based on leadership and monitoring. Leadership is something Marines understand well. The antithesis of "micromanagement," it requires each level to take risks and assume responsibility by giving subordinates adequate freedom.

The difference between responsibility and accountability is very important. Responsibility grants wide latitude to subordinates and allows for honest mistakes. Accountability, with its suggestion of punishment, demands absolute knowledge of all subordinates' actions.

The second element of maneuver warfare command and control is monitoring. Simply stated, monitoring supports leadership by providing discreet, by exception, control through observation and listening. Rather than requiring masses of periodic reports, monitoring incorporates forward command principles and "silence is consent" radio monitoring to re-

main abreast of the tactical situation. Allowing subordinates to fight the battle, the commander intervenes only to exploit opportunities or shift the Schwerpunkt. Closely related to leadership, monitoring allows for maximum information without interference with subordinates.

Both leadership and monitoring are valueless without trust. The "contracts" discussed earlier of intent and mission express that trust - trust by the commander that his subordinates will understand and carry out his desires and trust by those subordinates that they will be supported when exercising their initiative. Such trust is molded by a shared way of thinking. While the specific thoughts and intended actions of adjacent and subordinate commanders will probably be unknown, their thought process must be clearly understood. All levels have to share a comprehension of the intent, the mission, and the focus of effort as well as what each of these means. With this, each Marine can be trusted to act appropriately to defeat the enemy without having to waste critical time requesting permission to take action or subsequently reporting the details.

While sounding almost too simple to be effective, command and control based on trust has been an integral part of modern warfare. It is the way the German Army operated in World War II. To a lesser degree, so does the Bundeswehr today. A Marine officer who was umpiring a Bold Guard exercise was sent to a German brigade headquarters. He asked where the German battalions were so the Marines could assess the effects of their artillery fire. The German brigade commander answered, "How should I know?" The Marine was shocked. He had been told the Germans were good, and this brigade commander not only didn't have his battalions under positive control, he wasn't worried about it! Of course, what he had encountered was the "trust tactics" of maneuver warfare. The brigade commander and the battalion commanders knew how each other thought. When the battalions did something or found something out that the brigade commander needed to know about, they would tell him. Until

then, they knew his intent, had their missions, and knew which unit was the Schwerpunkt. That was enough.

A Marine officer rightly said in a recent discussion, "Maneuver warfare tactics are trust tactics. That is their single most important characteristic. And that's the biggest difference from what we do now." It is certainly the biggest change from the current command and control system. Trust and a shared way of thinking, leadership and monitoring, not fancy new equipment, are what you need to be able to fight using maneuver warfare.

What do all these pictures, definitions, "filters," and tools add up to? Together, they comprise maneuver warfare tactics. You have probably noted a lack of "how to" instructions to this point. While some technical and tactical suggestions will be offered in the next chapter, the essence of maneuver warfare is its approach to tactics and operations. Rather than concentrating on formulas and checklists - with their inherent predictability - maneuver warfare emphasizes a thought process. It is a process of seeing your options, creating new options, and shifting rapidly among those options as the situation changes. Ultimately tactics in maneuver warfare require that you "out-Boyd Cycle" the enemy.

One final, although critical element of maneuver warfare must be discussed: the operational art. To gain an appreciation of this concept, another picture may be helpful. On Tuesday, May 14, 1940, General Heinz Guderian with a corps of three Panzer divisions had just crossed the river Meuse at Sedan. Strong French forces were immediately to his south, threatening his only bridgehead. Len Deighton writes in his book Blitzkrieg:

Guderian now had to make a decision of such vital importance that it was more a strategic than a tactical one. His three armored divisions had ripped a large gap in the French defenses. To what extent should he consolidate and guard that crossing place? Should he fight the big reserves, which anyone could guess must be moving northward to the gap? Should he batter at the broken

edges of the armies on his flanks and thus 'roll up' those defenders? Guderian did none of these things. He paused only to make sure the somewhat mauled Grossdeutschland Regiment and 10. Pz. Div. were in possession of the high ground at Stonne, a few miles due south of his crossing place. Guderian took 1 Pz. Oiv. and 2. Pz. Div., and disregarding all the theories of war, moved due west, away from the battle areas, across the flat open land of the Aisne and the Somme.²

What is the operational art? Broadly, it is the art of winning campaigns. It fits between tactics — the art of winning battles -- and strategy -- the art of winning wars. If we think of operations as the art of the campaign, that tells us what it is, but not much more. Can we come up with a more useful definition?

The operational art is the art of using tactical events battles or refusals to give battle - to strike directly at the enemy's strategic center of gravity. For the commander, it is the art of deciding where and when to fight on the basis of the strategic plan. You can see this definition in Guderian's decision at Sedan. Guderian looked beyond his immediate tactical situation to see that a victory against the French to his south meant nothing, while a successful advance to the west meant everything. He linked his tactical to his strategic situation in such a way as to see what future tactical actions he should take. He used the tactical event -- the crossing of the Meuse -- strategically, and decided what tactical actions to take -- where to fight and whether to fight -- on a strategic basis.

Why is the operational art important if you are to do maneuver warfare?

Because it is through excellence in the operational art more than through maneuver in tactical battle (as important as that is) that a smaller force can defeat a larger one. Traditionally, American armies have tried to attain their strategic objectives by accumulating tactical victories. They have given battle where and whenever it has been offered, wearing their enemy down engagement after engagement. This is attrition warfare on the operational level. Even if each battle is fought according to maneuver principles, operational attrition warfare is inappropriate for the smaller force, because even the best-fought battle brings some casualties. Fighting this way, a smaller force can win battle after battle, only to find itself facing yet another battle, but with no force left to fight it.

The small force wins only by using battle sparingly, by giving battle only where and when a victory will strike directly at the enemy's strategic center of gravity. Determining when and where to fight so a tactical victory has a strategic result is the operational art. If the Marine Corps is to do maneuver warfare, it must have MAB and MAF commanders who are expert in this art. The first steps toward this are to recognize the operational level in doctrine (as the Army has in the new FM 100-5), to begin teaching it in the schools at Quantico (especially through historical case studies), and to incorporate it in the planning for campaigns, both in CPXs and in actual situations such as the defense of Norway. Unless we develop excellence at the operational as well as the tactical level, we will continue to fight attrition warfare.

3

Techniques and Organization¹

While maneuver warfare cannot be done by formula, some formulas may be helpful in doing it. As already noted, techniques are formulas, and they are very important in maneuver warfare. Organization is also done by formula, at least to some extent.

Many of the techniques taught in FMFMs, Operational Handbooks, and Marine Corps schools will carry over into maneuver warfare. In fact, the Marine Corps' main weakness in techniques is not that most of its current techniques are wrong or outdated, but that it doesn't know how to do them very well. It cannot be said often enough that excellence in techniques is vitally important in maneuver warfare. Marines must improve their performance in techniques if maneuver warfare is ever going to mean anything beyond the confines of the schools and the pages of the Gazette.

But at the same time, maneuver warfare does suggest some new techniques and also some new approaches to how Marines organize. It may be helpful to look at some different types of units and functions and see what some of the changes might be.

The Rifle Squad

Although combat experience should indicate otherwise, the rifle squad currently occupies a relatively minor place in Marine Corps tactical

thought. Squad level training and doctrine seem to suggest that the squad has little independent tactical value. The squad has been relegated to the role of a subunit whose movements are closely controlled by the platoon commander.

Considered in terms of maneuver warfare, this attitude is disastrous. Because it is often at the point of contact, the squad must be able to react rapidly to changing situations and to seek out enemy weaknesses. This initiative, for which the German *Stosstruppen* became famous, demands that the squad assume a primary tactical role and that its organization and training be based on more than movement formations.

The basic structure of the rifle squad should be simple and should reflect the level of initiative expected. Rather than having two symmetrical teams, as exist now, the squad should be organized into a probing team and a support team. The probing team, composed of riflemen and grenadiers, should act as the probing, breaching, and, where necessary, assault element. The support team, armed with the squad automatic weapon and grenade launchers, should provide the firepower to suppress enemy opposition.

Although for administrative purposes the squad may have a set structure (see [Figure 1](#)), the squad leader should task organize his squad according to the situation. For example, if moving through wooded terrain and uncertain of enemy locations, the squad leader might opt to place only the team leader, a rifleman, and a grenadier in the probing team, reserving the bulk of his strength to exploit the situation as it develops. If reinforced with an anti-tank missile team or a machine gun, the squad leader might again realign his squad, while retaining the functional team structure. The simplicity of this organization allows the squad leader to react to changing situations without seeking higher level support and approval.

Some of the techniques employed by a squad organized this way will differ from those currently in use. Most significant, only one basic forma-

tion will be needed – the overwatch column. Much like the squad formation employed by the Army for the past decade, the overwatch column places the probing team forward and the support team to the rear. Distances between the two vary depending upon the situation. Individuals within the teams will be positioned by the team leader to meet tactical requirements.

The overwatch column contrasts sharply with existing doctrine, which has the squad shifting through many complex formations attempting to adjust to changing circumstances.² The advantage lies in the simplicity of the formation, which enables the squad leader to concentrate on fighting the enemy rather than controlling the gyrations of his squad. The teams, specifically organized as fire and maneuver elements, will require minimal control during those crucial initial seconds under fire.

While dividing the squad into two task-oriented teams would appear to separate fire and maneuver, the opposite is in fact true. Each team, organized and trained for specific tasks, will quickly come to rely on the other for tactical success. The probing team, being more lightly armed, will search for an exploitable weakness or present the enemy with an immediate, close range threat. The support team, keyed to the movements of the probing team, will position its suppressive fire, either by rapidly shifting fires or by physical displacement, so as to present the enemy with a longer range, equally dangerous threat. Individually, the two teams present easily counterable menaces; together, they become a combined arms team requiring the enemy to expose himself to one in order to combat the other.³

The concept of combined arms can be expanded to the platoon and company level, with one important change. In addition to forming probing -- or at the platoon and company level, penetrating -- and support elements, the commander also must form an exploitation element. While this may sound like current doctrine, which calls for a maneuver element, a base of fire, and a reserve, it is conceptually quite different. The penetrat-

ing element should be as small as possible, seldom more than a reinforced squad. Its mission is breaching the enemy defense.

11-Man Rifle Squad

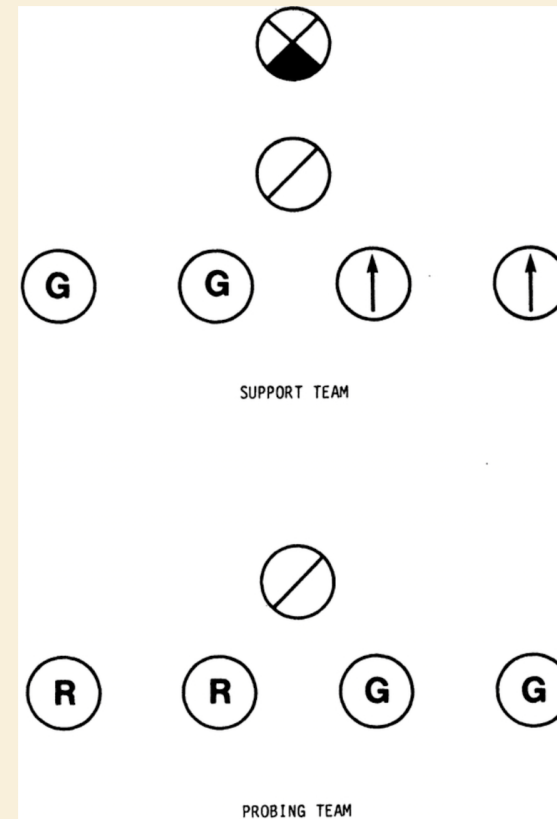


Figure 1

Once it has found or created a gap, the exploitation element, containing the bulk of the unit, should push through and expand both laterally and in depth to destroy the enemy position from the rear. The support element, having suppressed the enemy so the penetrating and exploitation elements could succeed, then shifts its fires forward and to the flanks, supporting the exploitation and enabling the penetrating element to resume probing. At the platoon level this process of probing, penetrating and exploiting will generally be carried out on a single axis. At the company level, two or three separate penetrating elements may advance simultaneously, with the commander committing his exploitation element where the penetrating element has the greatest success.

This technique requires decentralization of control. Penetrating elements advance semi-independently, their actions guided by their missions, with control measures limited to zones of action and, sometimes (but not often), limits of advance. Squad leadership demands initiative and boldness. The platoon and company commanders, rather than attempting to control squad movement, make the critical timing decisions on when to commit the exploitation element or, at the company level, shift the Schwerpunkt from one penetrating element to another.

To enable all three elements to carry out their missions, task organization is essential. Penetrating elements, particularly those facing prepared positions, may need combat engineer, machine gun, or light mortar support to provide immediate suppression. Exploitation elements may need anti-tank teams, mortars and artillery. Most situations will entail cross-attachment, dedicated fire support (to include aviation), and minimal, by-exception control measures. In no other way will small unit leaders be able to create and capitalize on momentary enemy weaknesses.

The Infantry Battalion and Higher Levels

The battalion and higher level commander's time and attention should be devoted mostly to tactics and the operational art rather than techniques. His primary tasks are deciding whether to give or refuse battle, conceptualizing the battle, giving initial orders that support his concept, and then seizing and capitalizing on opportunities created by subordinate units. Rather than directing all the movements of his companies through detailed control measures and requirements for constant situation reports, the battalion commander makes the critical timing decisions that enable forward elements to exploit promising opportunities. He must be able to assess developing situations rapidly and see through confusion to seize opportunities without becoming enmeshed in details. Control measures must be minimal and designed for guidance rather than explicit regulation of maneuver elements. Thus, a company commander seeing an opportunity in another company's zone of action should not hesitate to cross a boundary to exploit it.

Two techniques are useful to battalion and higher level commanders: command from the front and mission-type orders. Few commanders can adequately assess a situation and take prompt action in response to events while remaining at their command posts. Battlefield reports, however often submitted, lack timeliness and are often exaggerated or, worse, inaccurate. They usually result in requirements for more reports as commanders attempt to develop an accurate picture. The result is a slow OODA loop, with events outpacing reactions.

This problem can often be solved by a commander who, leaving more routine matters of coordination and logistics to his staff, positions himself where he can see and directly influence the battle at the Schwerpunkt. A close corollary can be found between Israeli military success and casualties among leaders, all of whom are imbued with the idea of command

from the front. To Marines this means that even the mobile CP created from the assault amphibian command vehicle may be too cumbersome. Something as simple as a jeep carrying a secure voice radio may be far more effective. With it, the commander, accompanied by a few crucial members of his staff, may concentrate his efforts on tactics and the operational art. The rest of his staff, more centrally located and following behind, can see to the techniques.

The mission-type order helps the battalion and higher level commander focus on tactics rather than techniques. As discussed in an earlier chapter, the heart of the mission-type order is the commander's intent. Through it, he expresses his conceptualization of the battle and maintains tactical control of his subordinates.

In contrast to the current 5-paragraph order, in which the mission is usually to seize a piece of terrain, the mission-type order provides subordinate commanders with the an understanding of what their superior wants to accomplish vis-a-vis the enemy. For example, paragraph two of the five paragraph order states, usually in geographic terms, the mission of the unit. It may read something like, "At 0900 on 1 Jan 8_, this battalion will attack and seize Hill 48 .(Grid 123456) and be prepared to continue the attack on order." The mission-type order would, instead, state, "At 0900 on 1 Jan 8_, this battalion will attack through Hill 48 in order to prevent enemy observation and interference with amphibious offloading in the beachhead area." This order clearly shows the intent of the commander and orients on the enemy rather than a terrain feature. Subordinate commanders, aware of the overall purpose of the attack, may deviate from the geographic objective in order to accomplish the commander's intent. The requirement to attack through Hill 48 also allows them to exploit any gaps created by the attack. If necessary, instructions in paragraph 3 - Execution - can delineate limits of advance. While a quick comparison of the format of the five-paragraph order and the mis-

sion type order shows little difference (see [Figure 2](#)), closer examination reveals conceptual changes that shift the focus towards more flexible, yet still controlled tactics.

Mission-type orders and forward command may force reexamination of many current techniques of command and control. As has already been mentioned, reliance on detailed reporting, particularly when cued to time schedules, cannot keep pace with the rapid decision cycle envisioned in maneuver warfare. Instead, reporting by exception, with subordinate units reporting noteworthy successes or failures, offers greater flexibility and more rapid local decision-making. The commander's mobile CP, travelling with the forward units, may only include his operations officer and his Fire Support Controller, each equipped with a direct link to the main command post. If the commander loses contact with the main CP, then the executive officer steps in to assume command. Likewise, if a situation should arise in which a critical decision must be made and time prevents consultation with the commander, the executive officer is empowered to act. Rapid response, based on mutual understanding of intent, must always override considerations of prerogative.

5-Paragraph Order	Mission-Type Order
1. Situation a. Enemy Forces b. Friendly Forces c. Attachments/Detachments d. Commander's Evaluation (optional) 2. Mission. A statement of the issuing unit's mission, usually emphasizing seizure of terrain objectives. 3. Execution a. Concept of operations. Summary of scheme of maneuver and fire support plan. b. Subordinate missions. Usually given in terms of terrain. c. Coordinating instructions. 4. Service Support 5. Command and Signal a. Signal instructions b. Command posts, location of commander.	1. Situation a. Enemy Forces b. Friendly Forces c. Attachments/Detachments d. Commander's Intent (required) A clear statement of what the commander wants to accomplish. The intent two levels up should be included. 2. Mission. A clear statement of what the unit is to do, usually defined in terms of the enemy, not terrain. 3. Execution a. Concept of operations. Designation of focus of main effort (<u>Schwerpunkt</u>), initial axis of advance, and any limiting instructions. b. Subordinate missions. Usually given in terms of the enemy rather than terrain. c. Coordinating instructions. 4. Service Support 5. Command and Signal a. Signal instructions b. Command posts, location of commander.

Figure 2 Comparison of Five-Paragraph and Mission-Type Orders

Fire Support

Fire support is worthless if it is not timely. Weight of ordnance is less important than rapid effect on target. Tank gunners and infantrymen have understood this for decades.

The ultimate uselessness of the massive volumes of shells slowly poured on Ypres, Iwo Jima, Okinawa and the jungles of Vietnam should have taught artillerymen and pilots the same thing. Yet the newly procured M198 howitzer, an 8-ton behemoth, lumbers slowly about the battlefield, widening the gap between advancing maneuver elements and their fire support. Close air support, fearful of modern air-defense weapons, has come to rely more on preplanned missions, the time-consuming coordination of which restricts availability of immediate air support. Like the French earlier in this century, the Marine Corps seems to be adopting the idea that firepower conquers and infantry occupies. Fire support coordination increasingly seems to drive infantry and tank tactics, when it should be the other way around.

Maneuver warfare will require new fire support techniques, techniques that ensure timeliness. Tactics, particularly recon-pull tactics, demand immediate suppressive fire support. The advancing assault and exploitation elements must have rapidly available suppressive fires.

One possible technique for providing them is the use of dedicated aircraft and batteries. While dedicating fire support assets to specific companies or battalions may reduce the ability to mass and shift fires, the benefits may often outweigh the loss. The vertical take-off and landing capabilities of the AV-8 and the attack helicopter make these aircraft ideal for dedicated tasking. Co-located with the ground commander, their pilots will be attuned to the ground situation and the aircraft will be immediately available. Their bombs and rockets, while of limited volume, can be timely. Dedicated artillery batteries, perhaps operating in the split-battery

mode, can also offer timely fire support. Readily responsive to a single ground commander, the dedicated battery should be able to place immediate fires on enemy positions.

Dedicating aircraft and batteries will not always be an appropriate technique. Heavy reliance on dedicated aircraft or batteries degrades the total effectiveness of Marine Corps supporting arms. Deciding when and how much to dedicate remains a primary responsibility of the MAGTF commander. A careful balance is necessary between decentralization to provide immediate suppression and more centralized control to mass fires and rapidly shift fire support.

Even when control of fire support assets is centralized, target selection and engagement should generally not be. Through the mission-type order and, especially, designation of the Schwerpunkt, priority of fires is automatically established. Specific selection of targets should then be left to forward commanders. Higher level fire support coordination centers should generally restrict themselves to allocating assets to maneuvering forces and ensuring that adequate fire support continues.

Fire support thus takes on a dual character. Centralized control of fire support, through the use of general support missions, remains essential for initial prep fires in support of the Schwerpunkt and to provide rapid shifting of fires to support sudden changes in the battle. Equally essential, however, are the immediately available suppressive fires provided by direct support and dedicated fire support assets. Demanding little time for coordination or preplanning, this category of fire support becomes an integral part of the maneuver forces, enabling them to act and react swiftly in response to changing battlefield conditions.

Tanks and Mechanized Infantry

The last ten years have seen substantial changes in the way Marines view tanks and Amtracks. A decade ago, tanks were almost always seen clanking along at two miles per hour with infantry walking alongside, just as in World War I. The tank was not really a tank, but a combination assault gun and anti-tank cannon. In both roles, it was strictly an infantry support weapon. Amtracks were a device for getting ashore, after which they waited for the dismounted infantry to win the battle and come back to claim them.

Today, things are very different in most Marine divisions and exercises. Marines no longer think of "the tank," but instead of "the tank battalion." The tank battalion is seen as a maneuver unit. In most cases, it is kept together and used for a decisive stroke. Often it is reinforced by a battalion of mechanized infantry, mounted in Amtracks. In relatively open terrain, even a two-battalion armor/mech battle group can have a powerful effect on the enemy, especially if it is used to launch a surprise attack or counter-attack.

This new organization of armor and mech assets is consistent with maneuver warfare. As with everything else, how it is task organized and employed depends on the situation; there will probably even be situations where it is appropriate to distribute armor assets to the infantry. But for tanks and tracks, maneuver warfare is likely to mean more of what they are already doing: practicing to work as highly mobile combined arms teams.

However, new ideas are still needed in the Marine tank/mech community. Tanks and Amtracks will soon be joined by a third element: the Light Armored Vehicle (LAV) battalions. How should the LAVs be organized and employed? Answers to those questions must wait on substantial experimentation in the field. But a few observations might be helpful.

First, it must always be kept in mind that LAVs are tactically very fragile. Their armor is very light, and only the assault gun variant will have any

anti-tank capability. If LAVs are misused, they can easily become coffins for their crews. They must never be thrown against prepared defenses, and if they fight tanks they must do so from ambush.

Second, despite LAVs' tactical fragility, the LAV battalion should be regarded as a general purpose force. It would be a mistake to say, "The LAV battalion is to be employed for reconnaissance and security," or something similar. It should be employed according to the situation, not so as to conform to a list of specific missions. One of the reasons the German Panzer divisions were so much more effective than their French equivalents, the DLMs and DCRs, is that the Germans regarded the Panzers as general purpose, to be used according to the situation, while the French doctrine specified set tasks for their armored divisions.

Third, the LAV battalion should generally be committed as a battalion. If LAVs are distributed in penny packets, a few to each infantry battalion, their presence on the battlefield will not even be felt. Just as the Marine Corps has learned to think of tank battalions, not individual tanks, so it must think of the LAV battalion as the basic combat element.

Fourth, if the LAV battalion is to have enough options available to it to be effective, it must have a combined arms capability. This means that an assault gun variant must be procured -- something that now appears to be in question. A TOW variant is no substitute; when you suddenly spot an enemy tank a few hundred meters away, the TOW reacts too slowly to keep you alive. If the assault gun variant is not bought, the LAV battalion will be little more than a battalion of motorized infantry.

Fifth, both doctrine development and subsequent employment should focus on the operational more than the tactical level. This was the secret of the Panzers' success: they were used best when, instead of just fighting battles, they struck directly at an enemy's strategic center of gravity, such as the juncture of the French armies in Belgium with those in France itself. A good first sentence in the LAV doctrinal manual might be, "The LAV bat-

talion is an operational, not a tactical weapon; it will assume only those tactical tasks which are operationally significant."

Sixth and finally, in developing its LAV doctrine, the Marine Corps should seek to learn from others. The French have been the world's leaders in LAVs, and their thoughts and observations might be very valuable, especially those they have grounded on the combat experience of nations to whom they have sold their vehicles. Brazilian LAVs have also been used in combat, including in the Middle East, and the Brazilians might have some useful ideas. So might the South Africans. Too often, Americans do not pay much attention to what others are doing and learning. In the case of the LAV, where other nations have had such vehicles in service for decades, this could be a costly mistake.

Engineers

Engineers have been very important in maneuver warfare. In World War II, German engineers (pioneers) were often the lead elements in an attack, because their understanding of terrain was very helpful in guiding the recon-pull advance. If you ask an Israeli officer today what his most important piece of equipment is, he will often answer, "the bulldozer." The bulldozer is the first servant of the Israeli tanks, both in preparing hasty defenses and in clearing routes of advance. The Soviets often say that almost any natural obstacle is a lesser hindrance to an advance than a prepared, manned defense, which suggests engineers are likely to be found at the tip of their Schwerpunkt.

What does all this mean for Marine engineers? The best answer is, "Ask your friendly local engineer." Many Marine engineers have been doing alot of thinking about what maneuver warfare means for them. But too often,

nobody bothers to ask them. Engineers are not seen as part of the combined arms force, even though they are a very important part. In exercises, they are left in the rear to play with their own equipment, instead of being pushed to the forefront where they will be needed in combat.

The first step in adapting Marine engineers to maneuver warfare is to open the door and invite them in when you are doing your planning, thinking about your tactics in a given situation, and, for those in Headquarters, drawing up your budgets. They are as much a part of your team as infantry, tanks or artillery.

Combat Service Support

Before concluding this chapter, one additional area must be discussed: combat service support. Although vital to combat success, combat service support has been relegated by many Marines to the world of narrow specialists, where it is presumed that the mysteries of maintenance, supply, and transport will be solved. This attitude has led to a combat logistics system that more resembles a catalog sales department than an integral element of a combined arms team. While in theory the MAGTF concept calls for responsive logistics support, reality is too often otherwise. Pack-laden Marines, more resembling mules than fighting men, are combined with a system of requisitions and centralized resupply and maintenance that often seems more responsive to logisticians' desires for orderliness than combat requirements for immediate support.

Combat service support, to be truly effective, cannot be separated from tactics and operations. Just as with fire support, combat service support must be immediately available to the forward commander. Such responsiveness can only be provided by using forward-push logistics. Developed

initially by the Wehrmacht as part of its Blitzkrieg doctrine and adapted by the Israelis, forward push logistics lays the burden of combat service support on logisticians rather than combat units.

The heart of forward-push logistics is the ability of combat service support elements to anticipate the logistics needs of forward units. Rather than waiting for requests, which invariably involve delays in transmission and response, each level of command anticipates requirements and pushes forward whatever is likely to be needed. An excellent example of forward push logistics is the combat service support envisioned for Marine Mechanized Combined Arms Task Forces. Each echelon replenishes the combat service support element at the next subordinate level, beginning with the Combat Service Support Detachment, moving to the Mobile Combat Service Support Detachment, and on to the regimental, battalion, and company trains. Combat unit replenishment is conducted during momentary lulls in fighting.⁴ Using a combination of supply personnel and good judgement by logistics officers, subordinate units' needs can be readily anticipated and provided for in advance. Such a system, highly flexible and geared towards the tactical and operational requirements of the battlefield, will enable combat units to continue fighting unburdened by constant requirements to requisition and resupply.

Conclusion

The ideas in this chapter are offered as an appetizer, not a full meal. Much additional work needs to be done on techniques and organization for maneuver warfare. No one is as well qualified to do it as Marines. Read again your FMFMs and Operational Handbooks, this time with an eye on maneuver warfare, and see what is still applicable (a great deal will be).

Work with your neighboring infantry, tanks, tracks, artillery and engineers. Bring the air wing into the discussions, especially at the schools. See what techniques jump out at you from historical case studies.

Theorists outside the Marine Corps can suggest some basic ideas about maneuver warfare. But translating the ideas into practice takes people

with combat experience, with opportunities to test ideas in the field, and with direct personal experience with friction. That means you. If you start asking around, you will find plenty of fellow Marines who want to join with you in working the problems.

4

Amphibious Operations¹

Recent events have provided new evidence to support Marines' long-standing belief in the importance of amphibious operations. Argentina's seizure of the Falkland Islands and Great Britain's response both demonstrated the need for amphibious forces. In the Middle East, Israeli Army units sliced into Lebanon using a combination of armored thrusts and amphibious bounds. The Iran-Iraq war has put new emphasis on America's commitments in the Persian Gulf, commitments that must be backed by a strong amphibious capability.

Yet, at the same time, modern weaponry has raised serious questions about the potential costs of amphibious landings. In the Falklands, heavy casualties jolted the British. Even in its weakness, Argentina shocked military observers by exacting a frightening toll of British shipping; the nearly disastrous landing at Port Fitzroy provided a bloody lesson in the destructiveness of today's weapons. Israeli amphibious forces, mindful of Russian-equipped Palestinians, remained closely tied to advancing inland columns. Today, planners at Central Command are grappling with problems echoing those encountered by the British and Israelis.

The problem of getting forces ashore becomes even more difficult when the presence of mechanized, highly mobile enemy ground forces must be taken into account. Many of the basic conditions for a traditional amphibious assault may no longer be attainable. It may be impossible to isolate amphibious objective areas. Air and naval superiority may be achievable only temporarily. Enemy defenses and counterstrokes may prevent the landing force commander from methodically building up his combat

power ashore before breaking out of his beachhead.

Since the early months of 1943, amphibious operation planners have relied on these three basic requirements being met. Current amphibious exercises assume that they have been. Unfortunately, the enemy may not agree with our assumptions. Nor can we expect the problems to be solved by hi-tech "miracle weapons." LCACs and JVT aircraft, if employed in traditional ways, will change nothing. The solution requires far more than the mere application of technology.

Does maneuver warfare offer some possible solutions? It may. Today's amphibious doctrine traces its origins to the early years of the Depression, when a few Marines at Quantico produced the first manual on landing operations. Tested and expanded in the late 1930s and proven by combat in World War II, it has remained remarkably effective in the face of changing technology and methods of warfare. Yet, as we have noted, amphibious operations face serious new challenges. To meet them, amphibious doctrine must be capable of combining new ideas with proven principles. Maneuver warfare may offer some of the new ideas necessary for such a doctrinal revitalization.

What are some of the changes maneuver warfare might bring to amphibious landings? The first, and possibly the most important, might be the replacement of landing waves followed by a beachhead build-up with landing points and immediate thrusts deep into the enemy's positions. This would be analogous to the replacement of the linear attack with the reconnaissance-pull advance in infantry tactics.

Instead of the broad landing beaches currently used, much narrower landing points, sometimes no more than ten yards wide, may often offer opportunities to seek out enemy weaknesses. By landing his forces across multiple landing points, a commander would retain the ability to develop situations while committing minimal forces. If successful, initial landing forces could immediately be reinforced by uncommitted units; if not,

they could quickly be withdrawn and shifted to reinforce more successful landings.

Such an approach proved highly successful during MacArthur's drive along the New Guinea coast in 1943 and 1944. Hamstrung by limited quantities of amphibious shipping and unsure of Japanese defensive concentrations, the Seventh Amphibious Force became expert at limited visibility landings across lightly defended landing points, rapidly reinforcing successes and evacuating failures. Many of these landings were carried out in the face of enemy air and naval superiority.²

Reconnaissance elements would play a crucial role in landing point amphibious assaults, just as they do in other recon-pull attacks. Reconnaissance forces would be tasked with identifying gaps in enemy defenses, both on the coastline and further inland. The landing force commander would be ready to exploit identified enemy weaknesses rapidly by pushing assault forces ashore to reinforce successful reconnaissance elements.

The new LCAC and the JVT could both make big differences in amphibious landings if combined with a landing point assault. The LCAC could well become the primary ingredient in recon-pull amphibious landings. Loaded with exploitation forces, possibly including mechanized task forces of tanks and/or LAVs, LCACs could constitute a highly mobile, sea-borne reserve able to reinforce success quickly. The LCAC could also be invaluable for shifting from one landing point to another. One can picture the confusion of an enemy defender, faced with a large number of simultaneous landings, trying to counter an amphibious Schwerpunkt that can be rapidly shifted by sea. Add in high speed, low altitude JVT transports able to carry out similar missions further inland and such landings could prove devastating to the cohesion of enemy coastal defenses.

Many of the tactical ingredients and techniques of infantry and tank/mech ground combat would carry over into landing point, recon-pull amphibious operations. Effective control of forces landing in dispersed points

could only be maintained through mission-type orders. Such orders, clearly stating the intent of the overall task force commander as well as the amphibious and landing force commanders, would allow dispersed units to act with the necessary freedom. More important, subordinate commanders would understand what they were to do if required to shift to another landing point or to drive inland. They would be guided by the commander's intent, not geographic objectives, beachhead lines, or limits of advance. While these geographic control measures may, at times, be helpful, they should be guides, not iron shackles.

Just as in other combat situations, the commander should not rely on detailed reports to adjust his focus of main effort or react to rapidly shifting circumstances: instead he should position himself at the Schwerpunkt where he can see the developing situation. Banks of radios aboard ships will not provide the landing force commander with the type of information and control needed to get a 'feel' for the battle. By placing himself well forward, he can assess the situation and allocate forces to influence the action in a decisive way. Marines seized Tarawa largely because Colonel Shoup established a command post ashore and assumed control, directing crucial landings of reinforcements. Inland, subordinate commanders fought the tactical battle, fully understanding the landing force mission. The 2d Marine Division Commander aboard the USS MARYLAND merely watched.³

What other changes might maneuver warfare bring to amphibious operations? It certainly might bring into question the current division between the so-called ship-to-shore movement and operations ashore. By tactically separating the naval and the land components, current amphibious doctrine has created a split that could seriously degrade Marines' ability to react to rapidly changing situations. Command relationships have always been recognized as critical in an amphibious assault. They must re-

flect the fact that an amphibious landing is a single entity. Naval and land forces become interchangeable components of a single whole.

A key factor in determining command relationships should be the operational, not just the tactical, situation. Both naval and ground force commanders must understand the operational goal and be prepared to sacrifice short term tactical goals to achieve it. Whether the amphibious task force or landing force commander controls elements of an amphibious landing should be wholly dependent upon whatever considerations, be they naval or ground, are critical to achieving the operational goal.

Further, in developing the command relationships for an amphibious operation every effort should be made to ensure total integration of all arms. Naval gunfire, Navy and Marine air support, and artillery, as well as combat and service support units all require integration to be effective. The ability to combine diverse elements, quickly shifting them to meet rapidly changing situations, is essential. This requires task organization down to the lowest levels. Decentralization of artillery, naval gunfire, and even aviation assets is particularly crucial during the initial stages of an amphibious landing. Unlike in today's situation, task organizations cannot be confined by service jealousies. It must be possible to put Navy ships capable of delivering gunfire, air, or anti-air support in direct support of a Marine landing force. Conversely, Marine forces ashore may have to be subordinated to a naval command in other situations. The measure of command must be the ability to allocate forces at the right time and place to achieve the objectives. Combined arms synergism cannot be restricted by more traditional, and too often parochial, tasking of forces.

Because a maneuver warfare amphibious assault will from the beginning be looking beyond the beach, aviation will need to give more thought to battlefield air interdiction. Battlefield air interdiction calls for fixed wing aircraft to attack targets beyond the Fire Support Coordination Line. Fully briefed on the ground commander's intent, pilots flying such mis-

sions would be tasked to attack enemy forces beyond the immediate zone of combat. Command centers, logistics elements, and, most important, mobile reserves would be important targets for air attack. The resulting destruction and confusion would degrade the enemy commander's ability to react to changing conditions in the ground battle.

Fire support for maneuver warfare amphibious landings, like that for operations ashore, should combine decentralization with the ability of the landing force commander to exploit success rapidly. In a multiple landing point amphibious operation, each assault element must be given control of the artillery, air, and naval gunfire assets it needs. This approach is already included in the MAGTF concept. Each assault element commander, however, must also be ready to support adjacent landing points with fire, as well as with maneuver. Situations may occur that will call for control of assets by one assault element commander that were originally part of another task force.

No amphibious operation will succeed if it is not supported logistically. For a maneuver warfare landing, the current logistics doctrine of on-call resupply and gradual buildup in a Beachhead Support Area is inadequate. The vulnerability of the beachhead supply base is a particularly serious problem. It is a "nose" by which the enemy can grab the landing force and compel it to give battle on unfavorable terms.

Amphibious logistics should, instead, be based on the principle of forward-push logistics, which provides the commander with the type of fluid support necessary to fight a maneuver warfare battle. In an amphibious landing, forward-push logistics should center on mobile loaded floating dumps and TACLOG groups with expanded responsibilities. Preloading vehicles with combat essential supplies and similarly organizing logistics and maintenance units would largely erase the immediate need for vulnerable dumps and installations ashore. TACLOG groups, closely attuned to the situation ashore, would then decide which logistics elements were

required ashore and order them to land. Once across the beach, these elements would be pushed forward by the shore party. Upon completion of their logistics mission, the mobile elements would return to amphibious shipping for replenishment and reassignment in floating reserve.

The Marine Corps' new logistics transport vehicle, the 'Dragon Wagon,' offers an excellent means of preloading essential supplies into modules that can be rapidly brought ashore. Additionally, these procedures can be modified to include both helicopter and fixed-wing logistics packets. The concept of mobile logistics is currently undergoing evaluation.⁴ Its application in amphibious operations requires that both naval and ground force components, from shipboard crews to forward combat elements, remember that support must anticipate combat needs rather than respond to them.

The amphibious picture presented in this chapter is one of develop-

ment of time proven amphibious warfare doctrine. Much current doctrine requires no change; indeed, as one Marine recently said, "amphibious warfare is maneuver warfare."⁵ The pages of LFM 0-1, Doctrine for Amphibious Operations, require few detailed changes. What is required, however, is an extremely high degree of command flexibility. Decentralized control of widely dispersed landing points through which small, self-contained MAGTF's must be projected and reinforced requires commanders with a keen appreciation of the tactical art. Even more important are the changes required to apply maneuver warfare and amphibious warfare at the operational, rather than the technical or tactical level. The techniques offered in this chapter should be means by which the amphibious operation can be a devastating military tool. Of themselves, techniques and tactics are useless. They must be ensconced in the operational art, which means we must develop commanders who understand that art.

5

Education and Training

It is my great and constant hope that the Marine Corps will produce some outstanding man for the country. Such men are somewhere, and they may as well be in our classes as anywhere else. I do not want such a person to be hampered down by narrowness and dogmas: to have his mind cramped by compulsory details. It is my constant ambition to see the Marine officers filled with ambition, initiative, and originality; and they can get these attributes only by liberality of thought - broad thought - thought that differs from precedent and the compulsory imprint of others.¹

The above words, written in 1934 by the Commandant of Marine Corps Schools, Brigadier General J. C. Breckinridge, offer a clear assessment of the true value of military education. Written during an era of unparalleled Marine Corps innovation, these words are as relevant today as fifty years ago. Indeed, General Breckinridge's concept of military education could well have been developed with maneuver warfare in mind.

Today, the term "education" has become almost meaningless. People speak of a "high school education." They assume any college will automatically "provide an education." Virtually any sort of instruction is assumed to have "educational value." But education is more than the learning of skills or the acquisition of facts. It includes acquiring a broad understanding of one's culture, its development and the principles upon which it is founded. Education develops the ability to put immediate situations into a larger context built of history, philosophy, and an understanding of the nature of man. Inherent in education is the ability to think logically, to approach problem solving methodically, but without a predetermined set

of solutions.

Although more specifically focused, military education requires much the same process of development. Thoroughly grounded in the art of war - the soldier's "culture" - an educated officer must understand the guiding concepts of his profession, why they are held to be true, and how they evolved. He must be able to put whatever military situation he faces into a larger context of military history, theory, and men's behavior in combat. The development of an ability to think logically, under the stress of battle, must always be a fundamental objective of military education.

Military education is basic to the definition of maneuver warfare and is an integral component of tactics and the operational art. Without military education, tactics and operations become little more than applied checklists. True education removes the need for checklists and "school solutions," enabling commanders to approach each problem equipped with a large array of possible solutions, placing the problem in a larger context and evolving innovative answers. The common thought process developed in officers through military education binds techniques, tactics and the operational art. As noted earlier, it is also a basis of command and control in maneuver warfare.

Military education, when defined in terms of how rather than what to think, conflicts with current Marine Corps educational concepts. The Marine Corps education system is, in reality, one devoted to techniques. While the argument can be made that, due to long periods of absence from the FMF and increasing complexities of modern combat, officers must be solidly grounded in the technical fundamentals, the relative exclusion of innovative thought is tragic. Despite some historical analysis at AWS and the Command and Staff College aimed at improving decision-making skills, there seems to be little room for questioning and creative thinking. Even more tragically, many officers show little inclination for creativity. Beginning at The Basic School, techniques are memorized with little

broad understanding of their conceptual foundations. This emphasis on techniques - the so-called "basics" - has led to stagnancy in Marine Corps education.

How should the schools be reformed? Looking first at TBS, the idea that "we only have enough time to teach the basics" must be abandoned. Instead, lieutenants should first be taught how to think "two levels up," and only afterwards instructed in the techniques and terminology necessary for commanding a platoon. This issue was discussed by Wehrmacht Colonel H. G. Pestke in the October 1983 issue of the Marine Corps Gazette. Colonel Pestke said: "For our officer candidates, we use battalion scenarios. He is not a lieutenant yet, but consistent with our (German) method of training two levels up, we put the candidate in the battalion-level situation first. This way he builds a framework of understanding that will enable him to know what he is doing when he begins considering how to employ his platoon."²

The same principle applies to AWS and Command 6 Staff: captains should be taught to think at the MAB level and majors and lieutenant colonels at the MAF level. Only thus can they develop the understanding they need to lead companies and battalions under a system that relies on mission orders.

Second, TBS should give adequate time and attention to concepts, theory, and history. A lieutenant will not become an expert in theory or history during the 21 weeks he is a student at TBS, but he should be made fully aware of their importance. Readings, a daily historical case study, and war gaming based on historical situations should be part of the curriculum.

Third, antique techniques must be abandoned. Attacking "on line" has been obsolete since the battle of Cold Harbor. Tactics and techniques must reflect maneuver warfare on the modern battlefield. Free-play exercises should be introduced early in the course. Lieutenants should be brought

face-to-face with friction early in their education -- after all, it is the medium in which they will be expected to operate in combat. Only by encountering an active enemy who is trying to confuse, surprise and defeat them in an environment of uncertainty and rapid change can they begin to understand the nature of the business to which they have committed themselves.

The subjects of much of the current curricula at AWS and Command & Staff, such as writing skills, knowledge of nomenclature, staff procedures and basic techniques, should be entry requirements. Admission to both schools should require passing an examination in these subjects.

The time freed by elimination of these subjects from the courses of study should be devoted, first, to military history. The purpose of AWS and Command and Staff is educating officers, not producing academic historians. The purpose of studying history should be neither to memorize names, dates, and circumstances of battles, nor to learn formulas based on "what successful commanders always do" or some checklist of "principles of war." Rather it should be to learn how successful commanders think -- to study their thought processes.

Therefore, the teaching of history and the teaching of tactics and operations should be integrated. Most if not all historical study should be tactical and operational case studies. The instructor's job should be to take students through each case asking such questions as "What were this commander's options here? Did he perceive all of them? If not, why not? Why did he select the one he did? Was his decision quick enough to be useful? What might have been the consequences of alternative decisions?" While histories that focus on the commander's thought process are not common, they do exist: Rommel's Infantry Attacks is a good example. The faculties of the schools should be responsible for researching and writing others.

War gaming should play a much larger role in the courses of instruction. The purpose of gaming should not be to see who wins or loses, nor to attempt to "prove" certain specific approaches. There should be no "yellows," no school solutions. Rather, it should be to teach students to make quick decisions through a coherent, logical thought process, while under pressure. General F. W. von Mellenthin, a 1937 graduate of the German War College, has told of the frequency and importance of war gaming at that school. He stressed that there were no "right answers." A student was never told his decision was wrong. He was criticized for only two things: failure to make a timely decision, and inability to give a logical, coherent explanation for his decision. But if he made either of these errors, he was criticized severely.³

The games must of course permit maneuver warfare. Computerized games where the computer attempts to decide "who won" are worse than useless: the computer can only reward "kills," which means the game compels firepower/attrition warfare. Computers must be restricted to doing calculations and providing probability tables. Manual games are fully adequate, and a number of commercially available games can be useful.

The faculties of both schools must also be improved. Quality of education depends heavily on quality of faculty. Faculty members must themselves be educated in the art of war. They must also have the ability to critique someone else's thought process -- a somewhat rare gift. To obtain such a faculty, the schools' directors must have the authority to get whom-ever they want as faculty, regardless of the person's career pattern and the desires of the personnel shop at Headquarters Marine Corps. The faculty so chosen must in turn be rewarded well. A three-year tour as a faculty member, if satisfactorily completed, should bring either early promotion or a highly sought follow-on assignment or both.

These reforms could make the schools at Quantico again what they were in the inter-war years: dynamic, innovative centers of education, where

students are challenged to think critically.

Until then, what can you do? First, you can read. An annotated bibliography of maneuver warfare readings is included in this book. Second, you can war game, either alone or with fellow officers. If you are a commander, you can make war games part of your unit's duty-time activities. Third, you can organize seminars in your unit or informally among officers who share your interest in the art of war. You can use the seminars to discuss a book you all have read, to hear a presentation about a battle or a campaign, or to discuss a current tactical or operational problem.

These three steps might not sound like much, but together they can make a big difference in an officer's understanding of maneuver warfare. Even after the schools are improved, all three will continue to be necessary. Education is a continuing process. It cannot be restricted to the relatively small amount of time officers spend in schools. There is far more to be learned than the schools can hope to teach. You will have to learn most of it through your own independent efforts. Reading, war gaming and seminars are three important components of any self-education program.

Education is one part of preparing yourself to do maneuver warfare successfully in combat. Training is another. What is the difference between them?

Education is understanding the nature of war and learning how to think logically and creatively about it and in it. Training is the application of education. It is learning how to do maneuver warfare in the "real world," the world of friction. If you want to think of education as the classroom, training is the lab. It is the place where you put your education to work on concrete problems. Of course, training and education are not wholly separate. Good training broadens your education. As you learn how to do maneuver warfare through training, you also come to understand it better.

If we look at training from the perspective of maneuver warfare, we can identify four different aspects to it:

1. Basic techniques. These are things like firing a weapon, reading maps, physical conditioning, and so on. They are the same in maneuver warfare and in firepower/attrition warfare.

2. Advanced techniques. Advanced techniques include things such as unit skills, conducting a specific type of attack (e.g., a penetration), employing combined arms, and so on. In some cases, these are different in maneuver warfare from what they are in firepower/attrition warfare. For example:

- The attack by infiltration is often used in maneuver warfare, and it needs to be an important part of field training.
- The assault is conducted differently in maneuver warfare. Today, Marines use a two-element assault force. One element pins the enemy down while the other gets into his position and destroys him in close combat. In maneuver warfare, as noted earlier, the most common assault technique uses a three-element force: a large suppression element, a small penetrating element, and a large exploitation element. The suppression element makes the enemy keep his head down at the point of the assault. The penetrating element makes a small breach in the enemy's position. The exploitation element goes through the breach, fans out in the enemy's rear, and collapses his position from the rear. Some of the exploitation element immediately drives deeper into the enemy's rear, looking for surfaces and gaps, so the assault can immediately turn into an advance.

3. Building initiative and imagination among junior leaders. Initiative and imagination in junior leaders, including fire team and squad leaders, is

very important in maneuver warfare. Training must seek to develop it. How can it do this?

One of the most important ways is by giving junior leaders opportunities to operate in a free-play, aggressed situation on the basis of mission orders. Free-play exercises are critical to developing initiative, imagination and new tactics. They present junior leaders with unpredictable, rapidly changing situations just like combat. This automatically brings initiative and imagination to the fore.

In addition, it is important these exercises allow junior leaders to make mistakes. "Zero defects" is a sure prescription for wooden, formal set-piece exercises that stifle initiative. Leaders who try new approaches should be praised for doing so, even when they don't work.

A good example of a way to train junior leaders to show initiative and imagination is provided by the Israelis. An Israeli battalion commander will take a company to the field and say, "You will be attacked in one hour by an enemy tank company. The tank company will not have infantry or artillery support. Prepare an appropriate defense." Forty-five minutes into the hour he will say, "The enemy tank company will have infantry, artillery and air support. Modify your defense appropriately." Then, with just five minutes left before the attack is due, he will say, "We have just learned that the attack will come from precisely the opposite direction from which we expected it. Again, modify your defense appropriately." Then the battalion commander will hold a critique, looking at how the company adapted to rapidly changing circumstances.

4. Teaching leaders at all levels to live with friction. Friction is the inherent condition of war. It is caused by the enemy, by terrain and weather, and by the foul-ups that occur in your own force. The only way to learn how to deal with it is to train with it. Again, this means conducting aggressed, free-play exercises. And it means taking the whole unit to the field. CPXs have great value, but whenever troops are not involved, the level of friction

game, take a staff ride, or conduct a seminar. The 2nd Marine Division has begun to do this on a division-wide basis, but it can also be done on the local level.

Learn how to critique. The value of exercises is very much a product of the quality of the critique, because it is in the critique that lessons can be drawn for all to see. Today, many critiques are poor quality. Often, they are not a critique at all, but just a narrative of who shot whom. At other times, the critique is stifled by an etiquette that demands no one be criticized and nothing negative be said. Too often, critiques can be summarized as "The comm was fouled up but we all did great."

There are a number of things you can do locally to improve the quality of critiques:

First, the commanding officer can set a ground rule that demands frankness in critiquing. A good way to encourage this is for the CO to give a trenchant self-critique of his own actions and encourage others to do the same. Beginning a critique with the most junior officers and ending up with the most senior can also help encourage frankness.

Second, a critique should be defined as something that looks beyond what happened to why it happened as it did. It may be helpful to look

for instances where key decisions were made and ask the man who made them such questions as, "What options did you have here? What other options did you have that you failed to see? How quickly were you able to see, decide and act? If you were too slow, why? Why did you do what you did? Was your reasoning process sound, and if not, why not?"

Third, the unit commander can attempt to identify individuals who are good critiquers and have them lead the critique. Not everyone can do it well; it takes a certain natural ability.

Finally, the unit can hold a class on critiquing and from it develop some critique SOPs. These can help exercise participants look for key points during the exercise, points that can later serve to frame the critique.

These actions are not substitutes for an overall reform of Marine Corps training. But they are concrete ways you can improve your own training. And just as individual self-education will be important after the schools are reformed, so these actions will help you train even after overall training is improved.

Education and training should work together to build common approaches to problems, not common solutions. Both should prepare you to know how to think in combat.

Conclusion

As stated in the Introduction, this book is not an academic dissertation, but a handbook. It has not attempted to cover everything, but rather to talk about those aspects of maneuver warfare platoon, company and battalion commanders need to understand. There are a number of very important issues that must be addressed at higher levels if the Marine Corps is to be able to do maneuver warfare in combat. They include:

- Promotions, assignments, selection for schools and graduation from schools must all be based on excellence, not fairness. Today, fairness is the driving consideration. Personnel management is largely concerned with giving everyone an equal chance to be promoted. Personnel are rotated at a dizzying rate to give as many people as possible a fair shot at getting a command. Standards in schools, standards of performance for those in command, standards in exercise critiques, etc. are all set so as to give the average officer who works hard a good chance of succeeding.

This approach is attractive in many ways, and it is consistent with contemporary society. It is the way most civilian institutions work, it is the basis of other government and many private promotion systems, and it has deep roots in American beliefs.

Unfortunately, it is not suitable for a military that wants to do maneuver warfare. In any military service, only a relatively few officers will have the ability to make and execute the kinds of decisions successful maneuver warfare requires. The basis and goal of the promotion and assignment system must be to put the few people capable of excellence in the key positions. The system must look at people as individuals, not sets of credentials and standardized fitness reports, in order to do this. Especially in regard to promotion in the higher ranks, it must not allow itself to be

guided by clique or other bureaucratic politics. It must make every effort to find "the few who can do it," develop them, educate them, promote them, and give them key commands and staff positions.

- The Marine Corps must develop a professional NCO corps. Many Marines have seen a professional NCO corps in their training with the British Army and the Royal Marines. It has two basic components: an NCO corps that lives, thinks and sees itself as separate from the troops and that is technically highly competent, and an officer corps that leaves NCO work to the NCOs.

Why is this necessary for maneuver warfare? If the officer's time is given largely or exclusively to the detailed, day-to-day running of the unit, he has little if any time to think about combat and the enemy. He becomes an expert in human relations, vehicle maintenance, marriage counselling, preparing for inspections -- in short, in all the things traditionally left to NCOs. When does he read military history? When does he do his war gaming, terrain walks, staff rides, and thinking about the art of war? Today, too often, he doesn't. He doesn't have time because he is running the unit himself. If the Marine Corps is to be able to do maneuver warfare, it must have an NCO corps that can run the unit on a routine basis, so its officers can become the tactical and operational experts they are supposed to be.

- Preparing to win in combat must be the highest priority in the allocation of time, dollars, and rewards, at every level and under all circumstances.

Today, it is not. Public statements and pep talks may tell you it is, but every Marine officer knows the real story. Training for combat, studying war, and all the other things that go to create tactical and operational excellence take a back seat to preparing for the grand opera productions known as CAX and MCCRESS, to the maintenance report, to inspections, even to such trivia as the Combined Federal Campaign and base beautification.

In 1982 the world witnessed a clash between a military that made preparing for war its highest priority and one that had many higher priorities, domestic politics chief among them. The two militaries were, respectively, the British and the Argentine. In terms of the priority the Marine Corps today gives to winning in combat, it is closer to the Argentinians than to the British. That should deeply concern every Marine.

Changing priorities will require action beyond the Marine Corps. Certainly the Congress will have to support the effort if it is to succeed. But it will also take action from within the Corps, primarily at the highest levels but also, in the form of demands for change, from throughout the officer corps.

These and other similar issues should be subjects for thought for every Marine. Some of those now serving as lieutenants, captains, and majors will someday command MABs, MAFs, and the Marine Corps itself. The more carefully they consider these broad, long-term issues now, the better they will be able to direct policy then.

By that time, the Marine Corps will probably have gone far along the

road toward maneuver warfare, not just in terms of doctrine, but also in relation to the changes needed to be able to do maneuver warfare in combat. Why such optimism? Because despite the inroads bureaucracy, promotion politics, and thinking by formula have made, Marines are still Marines. The dedication of a large majority of the non-commissioned and commissioned officer corps to military excellence is strong. Marines want to be the best. If that requires changing some established practices, then they support the changes. They are heirs to a great military tradition, a tradition that emphasizes innovative ideas as much as courage and fidelity. They have an esprit strong enough to challenge policies and practices that degrade combat effectiveness. And combat remains their focus of effort, the Schwerpunkt of everything they do.

The Marine Corps is challenged by maneuver warfare, but it is also given an opportunity -- the opportunity to be the lead service in a change of historic significance. That is the kind of opportunity Marines have always welcomed. There is every reason to believe they will welcome it today the same way they did in the 1920s and 1930s.