# The Commander and His Staff;

# The Dynamics of Rapid Decision-Making in Tactical Formations

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# Foreword

This study concerns a critical task of warfighting: the ability of a commander and his staff to rapidly execute a command-staff process that arrives at a decision and a plan of action in minimum time. As the nature of war evolves in the next century, and as reaction time in combat continues to narrow due to advances in weaponry, rapid decision-making will be required in many tactical situations. Careful analysis of the command-staff process is, therefore, a matter of primary interest to military professionals,

Decision-making can be conducted explicitly or implicitly. An explicit style consists of an analytical approach to problem solving, and works best when there is ample time and when it can be conducted by a highly skilled and experienced staff. An implicit approach is more cognitive, or recognitional, and can provide adequate results if conducted by a highly skilled and experienced staff when there is very little time. Few command-staff processes can work if the commander and the staff are not skilled or highly trained.

Developing a workable plan, in minimum time, is a task that takes training, education and great skill. There are five essential elements of a tactical plan. These consist of: finding the enemy; keeping the enemy from finding you; fixing the enemy with a supporting effort; maneuvering against the enemy with your main effort; and following through. Each of these essential elements must be presented to subordinates in a manner that prevents ambiguities, vagueness and omissions. Most importantly, at the tactical level of war, they must be explained rapidly in order to provide maximum preparation time for subordinate units.

It may appear to the uninitiated that the tasks of tactical decision-making and planning should be a very simple matter. The reality of combat, however, proves that these tasks are anything but simple. Commander and staff cohesion, effective and implicitly understood doctrine and effective commander-staff training is the only means to prepare a commander and staff to execute a successful command-staff process in combat. The first step in

mastering this process is an understanding of the requirements of the command-staff process.

Major John Antal's study, "The Commander and His Staff; The Dynamics of Rapid Decision- Making in Tactical Formations" is an excellent attempt to stimulate professional thought and discussion concerning the command-staff process. His presentation of rapid decision-making is informative and educational. Rapid decision-making is one technique that must be thoroughly understood for the successful execution of tactical operations and is a subject that every professional soldier must master to provide overwhelming relative combat power on tomorrow's battlefields.

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# Chapter 1
# Introduction

## *"Speed is the essence of war."* [1]

One hundred and sixteen M1A1 Tanks and fifty-four Bradley Fighting Vehicles waited in position for the attack to begin. At 0730, on 26 February 1991, the "Tiger Brigade" of the US 2d Armored Division, passed its final orders to its battalions. The brigade, which was attached to the Marine Central Command, had been given the mission to attack to seize the Al Mutla Pass. The pass was northwest of Kuwait City. Blocking the Basra-Kuwait City Highway would trap the Iraqi forces trying to escape to the north. At 0730 the brigade commander issued an oral order over the FM radio to begin the attack at 0930. Between 0730 and 0930 the brigade's mission, boundaries and final objective changed five separate times! [2]

How can a command-staff process operate in such time-pressured situations? As the example above clearly illustrates, the tactical commander in combat is in a constant race against time. Time is the one quantity of the battlefield that can never be saved, slowed or reversed. "Loss of time," Napoleon once said, "cannot be made good in war. Delays alone cause operations to fail." [3]

A major source of delay in combat operations is the vital need to decide on a plan of action and convey the commander's intent to subordinate commanders and soldiers. A recent study of US Army operations orders determined that the orders issued on 70 operations (eight divisions, thirty-two brigades and thirty battalions) were of such poor quality, fraught with redundant information and needless detail, that the order hindered the units ability to accomplish the assigned mission.[4] Tactical ground forces cannot afford this type of command-staff ineffectiveness.

The ability to act faster than the enemy, to gain a relative speed advantage over an opponent, is largely dependent upon rapid and correctly-timed decisions. To assist the commander in decision-making, military organizations provide staffs. Today's staff officers, assigned to specific functional roles in their respective headquarters, are often consumed by their duties and find it exceedingly difficult to relay important tactical information and monitor the rapidly changing events of the battlefield.

The size, role and duties of a tactical staff differ in various armies and, even within different branches of service of the forces of the same country. All commander's and staffs, however, must conduct operations in three general categories: Plan, Prepare and Execute. The dynamics and speed of the commander and staff's ability to plan, prepare and execute combat operations is a measure of a unit's tactical agility.

Agility is a tenet of the US Army's AirLand Operations doctrine that is defined as the ability to act and think faster than the enemy. It is a combination of physical (fast moving forces, equipped with the ability for intense firepower and high mobility, that can act in time) and mental (the ability to plan, prepare and execute a combat operation faster than the opponent) qualities. For commanders and staff officers this mental agility requires the ability to visualize, sense and comprehend the battlefield, make rapid decisions in the face of great risk and uncertainty, and act decisively. For tactical units, physical agility requires the ability to move rapidly, concentrate relative combat power quickly, shoot straight and take advantage of the fleeting opportunities of war. To fight outnumbered and win, the command-staff process must maximize agility.

Agility is hampered by the ever-present friction of war. Friction is the combination of endless events that impede and degrade the plan. The often quoted, but seldom studied, German military philosopher, Carl von Clausewitz stated in his work On War that: "War is the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty." Staffs were designed to help the commander navigate his way through the fog, overcome the friction, and achieve his intent. Although no command and staff procedure can replace the human element of command, tactical units need procedures that rapidly produce "correct" decisions in minimum time in an environment of great uncertainty. The reality of this situation has not been lost on the doctrine writers of the United States Army and Marine Corps.

The U.S. Army's AirLand Operations doctrine, as expressed in FM 100-5 Operations, emphasizes that tactical plans must balance both agility and synchronization. This doctrine stresses decentralized initiative and the effective employment of depth in terms of both space and time. Similarly, the US Marine Corps, in its capstone manual FMFM 1, Warfighting, based its tactical doctrine on similar concepts and stresses a doctrine of maneuver. [5] Both services recognize that tactical land combat requires rapid and decisive action. Both services, however, have not institutionalized rapid decision-making techniques in their officer education programs.

The American military is now undergoing a period of great change. The collapse of the Soviet Empire and the lightening victory over Iraq in Operation Desert Storm has changed the nature of the threat. The US military, in an era of the rapid down-sizing of its force structure, must now reassess how future combat will be waged with fewer forces. For the United States Army and Marine Corps, this reassessment must include a careful look at how commanders and staffs operate on the battlefield. Future battles may find US forces operating in an environment of numerical inferiority, chaos and constantly changing situations. Methods to increase the effectiveness of the command-staff process, especially the dynamics of rapid decision-making, must be seriously studied and practiced. Limited resources, and the

unwillingness to accept high casualties, will require that the ground warfare components of US military power possess a decision-making process that can quickly generate a relative combat power advantage over an enemy and direct that advantage to produce victory.

What motivates commanders and their staffs to take command and operate in the fog and friction of war with confidence? There is remarkably little written in available military literature about this question or the "how to" of the command and staff process. Most military studies concentrate on history, battles, leaders and weapons. Commanders and staffs are left to develop these techniques largely on their own.

This study attempts to redress this deficiency. The purpose of this paper is to explain the dynamics of the tactical commander and his staff with regards to rapid decision-making on the tactical battlefield. This work is designed to provide techniques for commanders and staffs to execute rapid decision-making. In addition, it proposes changes to the way that commanders and staffs are trained.

Rapid decision-making is a requirement in tactical combat and is not new. Commanders and staffs execute rapid decision-making out of necessity in battle. This does not mean, as many professional soldiers seem to believe, that *effective* rapid decision-making occurs naturally, without practice or training. Effective tactical decision making requires a trained commander and a trained staff. The more rapid the decision-making, the greater the requirement for commander-staff training .

This study of rapid decision-making begins by examining two historical examples. The first example is an overview of the German approach to the command-staff process. The second is an in-depth look at an American commander-staff relationship in World War II. These examples are illustrative and not all inclusive. The study then discusses decision-making in tactical units and offers a training concept for tactical level staffs in an era of constrained resources. Finally, the study offers techniques for tactical command-staff process tasks that can be useful to present day commanders and staffs.

# End Notes Chapter 1

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1 Samuel B. Griffith, ed. and trans., Sun Tzu, The Art of War, (New York: Oxford University Press, 1963), p. 134.

2 Notes from LTC Robert M. Williams, who, then a major, was the S3 of the 1st Brigade, 2d Armored Division, assigned to Marine Central Command Control on 26 February 1991 during operation Desert Storm.

3 Napoleon wrote to his brother Joseph on March 20, 1806. Henry Lachouque, Napoleon's Battles, A History of his Campaigns, trans by: Roy Monkcom, E.P. Dutton & Co. Inc, New York 1967.
p. 401.

4 Major Edward J. Filiberti, The Standard Operations Order Format: Is Its Current Form and Content Sufficient for Command and Control? (Leavenworth: School of Advanced Military Studies, U.S. Army Command and general Staff College, Fort Leavenworth, Ks., 1887), p. 70.

5 Headquarters, United States Marine Corps, FMFM1, Warfighting, (Washington D.C. : Department of the Navy, Headquarters, United States Marine Corps, 1989), p. 37.

# Chapter 2

## The German Approach to Rapid Decision-Making

*"... in a tank division there are no written orders!"*
*General von Mellenthin*

The German command-staff process has been extolled by many historians and professional soldiers as the best in history. The battle winning talents of the German Army belie the fact that Germany lost the Second World War. Outnumbered, but seldom outfought, the German Army's reputation for tactical expertise was labeled as "characteristic German tactical virtuosity" [1] by one noted, contemporary author. This tactical virtuosity can be traced to three critical concepts; the institution of the German General Staff, the philosophy of "Forward Command," and the adoption of "Mission Tactics." We will examine these factors, in detail, to gain an insight into the German command-staff process.

### The Influence of the German General Staff System

The Prussian General Staff was the architect of German military victory in the last half of the 19th Century. Attracting the best minds Germany had to offer, the German General Staff became an organization committed to military excellence. "By 1870 the Prussian General staff had become a "body whose object was to fulfill exactly this function: applying to the conduct of war a continuous intelligent study, analyzing the past, appreciating the future, and providing commanders in the field with an unceasing supply of information and advice." [2] This institution sowed the seeds of German military proficiency in the 20th Century. More than any one person, Helmuth Von Moltke, the Chief of the Prussian General Staff during Germany's Wars of Unification, was responsible for this institutionalization of excellence.

Moltke developed the General Staff into an institution dedicated to tactical and operational expertise. Moltke transformed the Prussian military machine into an example of momentum in action. Under Moltke, the Prussian General Staff, by the time of the 1870 Franco - Prussian War, became

military force; and without which the French armies, huddled together in masses without the technical ability to disperse, found numbers a source not of strength but of fatal weakness." [3] Moltke employed the trained officers of the General Staff to orchestrate a series of brilliant victories over Denmark (1864), Austria (1866) and France (1870). In the light of these successes, the General Staff became the educational and directing body of the German Officer Corps. Moltke's first purpose for the General Staff was to develop a corps of thinking, self-assured officers proficient in the art of war.

This purpose was tested to the breaking point during the First World War. In 1914, a genius of Moltke's caliber was not available to direct the planning and movement of the German armies. Confident of success, and poised to refight the war of 1870, the professional soldiers of the German Army were frustrated in their attempt to win a quick and decisive victory. In spite of German military prowess, the General Army failed to conquer France in 1914 with one giant move of the German scythe. Having miscalculated the length of its reach, Germany was now faced with a two front war against powerful and more numerous opponents.

Fighting a two front war, the well-trained officers of the German General Staff were crucial to the effectiveness of the Imperial German Army. Trained to take decisive advantage of their enemies mistakes, the corps of officers trained under the General Staff system retrieved victories from the jaws of defeat. The great German victory at Tannenburg, in 1914, is an excellent case in point. Here the genius of the German General Staff system was clearly demonstrated:

> At this level in the German service the office of chief of staff was often synonymous with that of *de facto* commander, the reason being that designated army commanders might be members of Germany's royal families or general officers of great seniority who were respected figureheads but who needed the guidance of a professional at the peak of his abilities. Sometimes, when presented with a difficult problem, the army commander and his chief of staff would retire to separate rooms to prepare their own solutions, which were then compared. Frequently they were identical, but if they were not, the best features of each were chosen. In this case, even before he had joined Hindenburg for the journey to East Prussia, Ludendorf worked out a rapid redeployment of the Eighth Army's corps which made maximum use of the frontier railway network, and then telegraphed orders directly to the corps commanders on 22 August, his action being subsequently approved by Hindenburg. This action had already been predicted in detail by Lieutenant Colonel

> Max Hoffman, the army's Staff Officer (Operations), so that when Hindenburg and Ludendorf arrived next day the necessary movements had already been initiated, the result being that, while a covering force had been left to delay the advance of the Russian First Army, the bulk of the Eighth Army was now concentrated against the Russian Second Army.
>
> The episode demonstrates in the most graphic manner possible the uniform thought - pattern of the General Staff when confronted with an unexpected situation; it also emphasizes the German preference for spoken as opposed to written orders in circumstances where decisions have to be made quickly. The immediate result was that the Second Army marched into a trap and by 31 August had been encircled and crushed at Tannenburg. Hindenburg and Ludendorf now turned their attention to the Russian First Army and a fortnight later managed to destroy part of it with another double - envelopment in the area of the Masurian Lakes. Together, these two disasters cost Russia 250,000 of her best troops and 650 guns. [4]

The Battle of Tannenburg vividly demonstrates the ability of the German command-staff process to operate at a faster tempo than the competition. In the case of the Battle of Tannenburg, a relatively junior staff officer, trained in the methods of the General Staff, gained the time advantage necessary for victory by applying a uniformly understood command-staff process. Lieutenant Colonel Hoffman was able to predict the correct solution to the tactical problem, and initiate action, confident that he was acting as his future commander intended, **even though he had not received any instructions!** As was typical of German military tradition, Hoffman took responsibility and acted decisively rather than wait for orders. This technique was repeated by German commanders and staff officers throughout the First World War and was the standard practice during the Second World War.

But Tannenburg was an exceptional battle in an otherwise unexceptional, attrition oriented, bloody stalemate. The power of the trenches, machine gun and rapid firing artillery had reduced the art of tactics on the Western Front to the level of siege warfare. The application of mass had failed to produce a breakthrough. The use of more guns and more battalions had merely increased the casualty figures without forcing a decision.

With maneuver out of the question in the face of barbed wire and machineguns, the answer to breaking the deadlock was thought to be in the application of more firepower. This hope was unrealized. More and heavier artillery merely pounded the ground into an untrafficable field of shell-holes.

Artillery bombardment changed the landscape into a sea of shell holes and mud, making rapid movement impossible. Firepower, therefore, had reduced movement to a snails pace. Any unit that advanced beyond the range of its own supporting cannon was usually chewed up by the enemy's guns.

The war dragged on as the French, British, Germans and Russians bled each other white. More novel ideas to break the deadlock were developed and attempted. The introduction of poison gas, a technological breakthrough in horror, added to the misery but failed to produce a penetration that could be successfully exploited to force a decision and end the war. By 1917 it was apparent that the attrition approach would not create a decision on the Western Front.

To break the stalemate, the Germans developed new techniques to apply maneuver warfare. "The German plan was distinguished by a research for tactical surprise more thorough and far-reaching than in any earlier operations of the war. It is to the credit of the German command and staff that they realized how rarely the possession of superior force offsets the disadvantage of attacking in the obvious way." [5] The German General Staff believed that "German war is an affair of the intellect; the intellect is stronger than any other force." [6] They adopted new elastic defensive tactics and new offensive infiltration tactics to overcome the deadlock of the trenches. In 1918, these tactics came closer to any other approach in winning the war. Had it not been for the incursion of fresh troops from the United States, the new German tactics might have determined the war.

In spite of this innovation, the German Imperial Army was ground down by the overwhelming resources of the Allied coalition. "Unable to hold the Western front and support its allies at the same time, and near the point of economic exhaustion, the Second Reich collapsed with great suddenness in early November (1918)." [7] After the Armistice the Allies paid a begrudging tribute to the effectiveness of the German General Staff. The Treaty of Versailles specifically abolished the German General Staff. Secretly, however, the German General Staff continued in other forms. In spite of the treaty, "...highly trained staff officers were still being produced by clandestine methods...." [8] Seeking revenge for their defeat, Germany secretly rebuilt her Army. The newly formed Reichswehr focussed the effort on the training of the officer corps. In 1935 the Reichswehr was retitled the Wehrmacht (armed forces). Amazingly, only 21 years later, the German General staff produced some of the most talented tactical and operational leaders of modern warfare.

This tradition of taking responsibility and acting decisively, in time, was the legacy of the General Staff's education of the German Officer Corps. An example of the far reaching effect of this legacy on the execution of tactical decisions during World War II is explained by the following quote from Major General F.W. von Mellenthin, General Rommel's chief of staff during the African Campaign:

"...It was November 1941 near Tobruk, Westphal as G3, myself as G2, we were sitting there in the headquarters. Rommel was away for five days on the front line. He had had great success at Sidi Rezegh, he had seen the thing was not completely settled, with the result he gave an order for the Afrikakorps to go over to the pursuit near the Egyptian border and only a few forces were left at Tobruk where part of the 8th Army was within the fortress. Anyhow, as we feared, the pursuit was too early. The development near Tobruk became very dangerous, nearly untenable. Rommel was not there; we sent aircraft to look for him but we could not find him. Things became very hot, and there was no other decision but to call off the offensive from the eastern frontier, call back the Panzer divisions and give them the order to attack the enemy in the rear near Tobruk. That means G3 canceled Rommel's order and ordered all troops back from the front line to Tobruk to relieve the situation. And when Rommel came back, first he didn't look very pleased about our decision, but after 10 or 15 minutes of explanation about the situation, he agreed with a smile. This is what I wanted to explain to you, what we German General Staff want. If things are dangerous then even the smallest General Staff officer must have the courage to make a clear-cut decision." [9]

## Forward Command

An excellent example of the style of leadership expected of German commanders in World War II was displayed by General Erwin Rommel in France, 1940. The situation in question is typical of Rommel's bold and "up front" approach to command. An example of the "forward command" approach involved the 7th Panzer Division's initial attempt to cross the Meuse River. The western bank of the river was staunchly defended by French machine guns. After several courageous attempts to conduct an assault crossing the German attack stalled. German casualties mounted. The German assault units were stunned by the withering French fire.

This was the decisive spot of the 7th Panzer Divisions battle. The situation demanded a commander on the scene. When things looked their blackest, the division commander, General Erwin Rommel, appeared. Taking command of the assault troops, Rommel personally led the 2nd Battalion, 7th Rifle Regiment of the 7th Panzer Division into action. He rapidly sized up the situation, issued orders, and organized support for another crossing attempt. Within an hour, Rommel and the 2nd Battalion forced the Meuse and secured a bridgehead for the division. The next day his 7th Panzer Division was racing to the west, significantly assisting in the decisive,

humiliating defeat of the French and British Armies in France in May 1940. Rommel's leadership was an important combat multiplier for the 7th Panzer Division. His application of "forward command" assisted the rapid crossing of the Meuse River.

"Forward command", was not just something Rommel did. "Forward command" was the standard method for executing tactical command and control in the Wehrmacht. "Forward command" required senior commanders to issue orders based upon personal observation. Commanders were expected, if necessary, to assume command of a subordinate unit during a critical point in the fighting. This approach relied heavily on thinking, independent leaders; unflinching trust in subordinate officers to carry out the mission within the guidelines of the commander's intent; and the clear understanding that missions were directed two echelons down and that all units were required to think two echelons up.

The German Army did not believe in an orders intensive, centralized approach to command and control. The blitzkrieg concept demanded a quick, flexible and decisive command style. This understanding permeated the Wehrmacht's approach to war:

> "The tempo of blitzkrieg calls for speedy and precise command, and its dynamic nature calls for anticipation. To achieve these the operational and higher level commanders have to be forward not only to see for themselves what is really happening but to get the feel of the battle.
>
> All one can add is that this command technique was not a gimmick of Rommel's but was laid down in Guderian's training manuals for the Panzertruppen. As Manteuffel put it, 'I always located where I could see and hear what was going on in front; that is near the enemy and around myself -- namely at the focal point." [10]

This approach substituted control for guidance and trust. If the subordinates abilities did not meet the challenge of the situation, or if the situation required a more experienced head, the senior commander was expected to take command of the subordinate unit and take decisive action. The understanding between commander and subordinate was that the senior commander's intervention was his natural prerogative. "Trust" became a central principle in the Wehrmacht. This trust required excellently trained officers.

> "The combat value of every unit depends on the quality of its officers. An average-trained unit, which has its weak points, can still give a good performance if it has a good commander. In the same manner, a well-trained and experienced unit may fail under

> a mediocre commander. The value of good leadership is proved by the confidence of the troops in their leaders, the improvement of their fighting qualities and finally by success in combat.... The confidence which the troops have in their commander will give them the assurance that his orders are correct, even if the reason behind them is not fully known. [11]

Senior commanders planned two echelons down. A division issued tasks to each of its battalions. Each regiment would receive instructions for each of its battalions based on the division plan. The regiments would then synchronize the elements of combat power as directed by the division plan. In this manner a high degree of unity of effort was achieved. Furthermore, every commander was required to understand the intent of the commander two echelons above his level of command. This became essential in making independent decisions in the heat of battle when senior commanders could either not be reached or not be reached in time. By clearly understanding the intent of the commanders two echelons above a subordinate leader could use the senior commander's intent to guide his actions.

The Wehrmacht expected its tactical commanders, division level and below, to lead from the front, sense the situation and take decisive action without waiting for permission or further instructions. Commanders at every echelon expected their superiors to take personal command of their units in critical situations. Senior commanders were trained to issue orders that synchronized the combat power of their units by effectively planning two echelons down and thinking two echelons up. Junior leaders were expected to take decisive action, guided by the commanders intent.

The synthesis of these techniques led to a powerfully focused combat force, directed by a fast reacting chain of command that sought out enemy mistakes and took immediate and decisive advantage of them. "Divisional operations were conducted from the forward position on the battlefield. The Division Commander had his place with the group which was to make the main effort *(Schwerpunkt)*. He visited the regiments several times a day. The divisional headquarters was somewhat further back and did not change its location during operations." [12]

The essential core of the "forward command" approach is the subordinate commander's dedication to the senior commander's intent combined with independent action. The senior commander issues his orders. They are completely binding on his subordinate leaders. Subordinate leaders can change the plan, act independently and make their own decisions, if these decisions are guided by the commanders intent. Inactivity is considered criminal. Leaders are expected to think and make decisions. Any independent decisions must conform to the basic goal of the commander.

Allied propaganda often portrayed the Germans as unthinking automatons. The facts are that the soldiers of the Wehrmacht showed

unbelievable initiative and excellent tactical leadership. Junior leaders were willing to take risks when risks were necessary. They consistently out-thought their adversaries. History proves that the thinking, independent minded tactical leaders of the Wehrmacht consistently outfought their opponents. That the Wehrmacht fought almost everywhere outnumbered, often in hopeless situations, and never disintegrated is proof of their tactical abilities. The forward command approach to command and control was a major reason for that success.

The Germans believed that the basis for command was formed by the mission and the situation. The mission consisted of what objective was to be achieved. The order to accomplish the mission must be simple, clear and definite. The order establishes the guidelines necessary to accomplish the mission. It establishes what units are to do; not how they are to do it. " On the basis of mission and situation a decision is formed. When the mission is overtaken by events the decision must take changed circumstances into account." [13]

The method of execution is deliberately not included. Subordinate commanders are trusted to come up with the "how". Mission oriented discipline is demanded. This approach substitutes control for guidance and trust. If the subordinates abilities did not meet the challenge of the situation, or if the situation required a more experienced head, the senior commander was expected to take command of the subordinate unit and achieve decisive action. The bond between commander and subordinate was such that the senior commander's intervention was not looked upon as a lack of trust but merely as his prerogative to take command at the critical place and time. The trust, therefore, needed to be two sided.

The key contribution of the Prussian General Staff to the development of the orders process was in the efficient application of a command-staff system that operated on the basis of minimal information. The Germans developed this system, called mission tactics, as their philosophy for command and control. Mission tactics has a long tradition in the German army and was employed since the time of Frederick the Great. Mission tactics were so important to the German way of war that Field Marshal Moltke personnally inserted the following lines in the draft of a new tactical manual for senior commanders :

> A favorable situation will never be exploited if commanders wait for orders. The highest commander and the youngest soldier must always be conscious of the fact that omission and inactivity are worse than resorting to the wrong expedient. [14]

## Mission Tactics

Mission tactics, or *Auftragstaktik* (as it became known only after World War II), is the time honored Prussian tradition of trusting the commander on the ground to make the right tactical decision based upon the overall guidance of his superior officer. Mission tactics are "more than a method of giving orders, actually more akin to a habit of thought . . . Usually the commander would provide only a single statement about the operation . . . the job of working out the details was left wholly to the subordinate commander without supervision."[15] An excellent example of this philosophy is expressed by Field Marshall Erich von Manstein in his book "Lost Victories:"

> It had always been the particular forte of German leadership to grant wide scope to the self-dependence of subordinate commanders -- to allot them tasks which leave the method of execution to the discretion of the individual. From time immemorial -- certainly since the elder Moltke's day -- this principle has distinguished Germany's military leadership from that of other armies. The latter, far from giving the same latitude to subordinate commanders on the tactical plane, have always tended to prescribe, by means of long and detailed directives, the way orders should actually be carried out or to make tactical action conform to a specific pattern. on the German side this system was considered a bad one. It would, admittedly, appear to reduce the risk of failure in the case of a mediocre commander. Yet it only too easily leads to the executant's having to act against the exigencies of the local situation. Worst of all, in its preoccupation with security it waives the opportunity that may occur through the independent action of a subordinate commander in boldly exploiting some favorable situation at a decisive moment. the German method is really rooted in the German character, which -- contrary to all the nonsense talked about 'blind obedience' -- has a strong streak of individuality and -- possibly as part of its Germanic heritage -- finds a certain pleasure in taking risks. The granting of such independence to subordinate commanders does, of course, presuppose that all members of the military hierarchy are imbued with certain tactical or operational axioms. Only the school of the German General Staff can, I suppose, be said to have produced such a consistency of outlook. Nevertheless, there are plenty of occasions when the senior commander in the field is faced with the problem of whether or not to take a hand in the operations of the armies or other formations under his

> command. The more complex the situation and the smaller the forces with which he has to manage, the more often is he tempted to meddle in the business of his subordinates.[16]

The concept of mission tactics translated the decentralization of decision-making to the lowest tactical level. Moltke recognized the criticality of "independent decision on the part of subordinate commanders,"[17] and made this a responsibility of command. Moltke's "lowest soldier" was expected to seize the initiative. The following quote from Field Marshall Manstein, concerning his account of the winter campaign in Southern Russia in 1942 - 1943, is an excellent case in point: "The reason why we succeeded, despite a series of crises, in mastering the tasks already outlined is that the army and the army group staffs adhered to two well established German principles of leadership: (i) Always conduct operations elastically and resourcefully; (ii) Give every possible scope to the initiative and self-sufficiency of commanders at all levels."[18]

The Germans believed that the basis for command was formed by the mission and the situation. They believed that obscurity of the situation is the rule in combat. Seldom would commanders have exact information on the enemy. "Clarification of the hostile situation is a self-evident demand. However, to wait in tense situations for information, is seldom a token of strong leadership, often weakness."[19]

The mission consisted of what objective was to be achieved. The order to accomplish the mission must be simple, clear and definite. The order establishes the guidelines necessary to accomplish the mission. It establishes what units are to do; not how they are to do it. The method of execution is deliberately not included. Subordinate commanders are trusted to come up with the "how". Mission oriented discipline is demanded.

Mission tactics emphasize a thought process. It is a process of visualizing the enemy actions, mentally generating options, creating new options, and shifting rapidly among those options as the situation changes.

This kind of thinking is assisted by the concept of the commander's intent. This commander's intent guides all future decisions by the subordinate commander. "The German Army used mission statements...in the form of the commander's intent...The commander then assigned tasks *(Auftrage)* to subordinate units to carry out his and his superiors intent. The subordinate commander decided upon a specific course of action which became the resolution *(Entschluss)*"[20] The commander's intent clarified the parameters of the mission. The intent assisted subordinate leaders by explaining how they should act when the situation in battle did not correspond to previously developed plans. The intent, therefore, became a means to increase action on the battlefield by empowering subordinates with

explaining how they should act when the situation in battle did not correspond to previously developed plans. The intent, therefore, became a means to increase action on the battlefield by empowering subordinates with the authority to act when advantageous situations arose.

The form of these orders is described by the term "mission-type order." A mission-type order explains the "who, what, when and why," but leaves the "how" to be determined by the subordinate unit leader. Mission-type orders help streamline the command-staff process. Brevity and efficient transmission of the order in the minimum possible time is the goal. "The order given by a commander is the expression of his value as a soldier. The order achieves its purpose in the best and quickest way if it is brief and clear."[21]

Mission-type orders are designed to speed up the decision-reaction cycle. When decisions are made rapidly, at the point of execution, battle opportunities can be taken advantage of as they occur without loss of time. Time is always critical and mission type orders save time. An excellent example of this was stated by Generalmajor F. W. von Mellenthin, concerning General Hermann Balck, the World War II commander of the 11th Panzer Division:

> The command style and staff functioning that contribute most to maneuver warfare and mission oriented tactics are characterized by the application of mission-oriented orders to combat. The axiom of the 11th Panzer Division in 1943 was "night marches save lives. Orders were always issued verbally. The division commander, General Balck, made his decision for the next day during the previous evening, and he gave the necessary orders verbally to his regimental commanders on the battlefield. Then he returned to his main headquarters and discussed his appraisal of the situation and his intentions with the chief of staff of the 48th Panzer Corps. If the latter approved, the regiments were sent the radio messages "no change," and all was done according to plan. If there were any fundamental changes, the division commander visited the regimental commanders during the night and gave the necessary orders personally and verbally.[22]

From 6-29 December 1942 the 11th Panzer Division, under the command of General Balck, was involved in an almost continuous battle against five separate Soviet corps-sized attacks along the Chir River in southern Russia. In a series of quick counterattacks, Balck led his exhausted forces against the Soviets winning a series of lop-sided victories. Through night marches and the consistent use of oral orders, Balck employed a rapid command-staff decision-making process that gave him the relative combat

power advantage in engagement after engagement. Balck's employment of his panzer division during nineteen days of desperate combat is an excellent example of tactical agility.

The Germans emphasized mental agility and quick tactical planning. They saved time by employing a simple and streamlined command-staff process. Time was understood to be the critical element of war. The term "sufficient planning time" was unknown in the Wehrmacht. Leaders were taught to expect "insufficient" time to analyze combat missions. In combat there is never enough time. In combat, unequivocal and rapid decisions were required of the tactical commander.

> ...To come to rely on some imaginary increment of time as necessary to execute a mission properly would subtly inject a degree of doubt, if that time did not materialize, into the minds of the leaders before the operation ever commenced. That could create dangerous reservations among the leaders and led before battle was joined. The men and unit must simply improvise and conduct the operation to the best of their capabilities under the prevailing conditions." [23]

The Wehrmacht did not require a ten-page operations order at the task force level. Commanders made rapid decisions and issued their orders orally either in person or by means of radio. Reduced orders time was translated into more time for combat preparation and more rapid execution. A commander was expected to spend more time seeing tot he execution of an order, rather than using all of the available time attempting to create a "perfect" plan. This practice offered subunit commanders more time to prepare, brief and rehearse their own men. A poor plan, boldly and energetically executed often succeeded in the fast tempo of modern, combined-arms war. Time and again the record shows that Wehrmacht commanders gained a time advantage over their enemies by implementing a rapid command-staff process.

## Summary

The Wehrmacht employed a streamlined command-staff process that was an important combat multiplier for Germany in World War II. German command-staff organizations employed a rapid decision-making ability that routinely gained a time advantage over their opponents. Part of the reason for this success was due to the organization of small, highly trained staffs. These tactical staffs were the legacy of the German General Staff.

The legacy of the German General Staff transformed the tactical army by setting the conditions that allowed the flowering of a rapid decision-making philosophy. The German command-staff process was simple, oral

and mission oriented. The entire process was geared to decisive action. Tactical plans emphasized the gathering of intelligence information (termed today as reconnaissance pull operations) that focussed decisive action on the enemy.

Commanders were expected to act decisively. Decentralized command responsibility was expected. The heart of the Wehrmacht command-staff process was the concept of *Auftragstaktik* , or mission tactics. This concept employed the use of "mission orders." Mission orders left the accomplishment of the mission to the commander that was charged with executing the mission. The commander was provided with the "who, what, where, and why" in very succinct and implicitly understood terms. In addition, the commander's intent, two echelons above the unit of execution, was routinely provided and became an essential ingredient in increasing the ability of subordinate units to act effectively in confused and changing battlefield situations.

This decentralized and rapid decision-making command staff system was possible because, in the German Army, it was normal for superiors to trust their subordinates to do their duty without supervision. Leaders took responsibility for everything within their limits of command. Quality junior leaders, trusted to take decisive action, led by trained commanders imbued with the concept of forward command, turned the German Army into a remarkable tactical fighting machine. The German Army's command-staff process was a victory of intent.

# End Notes Chapter 2

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2 Michael Howard, The Franco Prussian War, (London: Rupert Hart-Davis, 1961), p. 23.

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5 Sir B. H. Liddell Hart, Strategy, (New York: Praeger Publishers, 1967), p. 205.

6 Perrett, p. 6.

7 Larry H. Addington, The Blitzkrieg Era and the German General Staff, 1865-1941, New Brunswick: Rutgers University Press, 1971), p. 27.

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9 Battelle Columbus Laboratories, interview by Generalmajor F. W. von Mellenthin, Armored Warfare in World War II, Conference Featuring F.W. von Mellenthin German Army May 10 1979, (Columbus, Ohio: Battelle Columbus Laboratories, 1979), p. 6. Hereafter listed as Battelle.

10 LTC Mountcastle, "Command and Control of Armor Units in Combat," Military Review, (Fort Leavenworth: Command and General Staff College, November 1985), p. 29.

11 Generalfeldmarschall Albert Kesselring, Manual for Command and Combat Employment of Smaller Units (Based on German Experience in World War II), (originally prepared by the Chief Historian, Headquarters European Command United States Army, on 17 July 1952), p. 12.

12 Battelle, p. 26.

13 Martin van Crevald, Fighting Power, German and U.S. Army Performance, 1939-1945, (Westport, Connecticut: Greenwood Press, 1982), p. 37.

14 Colonel (U.S.A. Ret) T. N. Dupuy, A Genius for War, The German Army and General Staff, (Englewood Cliffs, N.J.: Prentice Hall Inc.),1977. p. 116.

15 The success of *Auftragstaktik* rests on the knowledge by the subordinate of the higher commander's concept of operations and objectives. The subordinate is expected to choose sensible courses of action which contribute to the desired outcome within the framework of the overall scheme of maneuver. There are several ways to achieve this kind of understanding. One is to clearly explain the commander's intent and another is to have such a long association together that "second guessing" becomes natural. Success is largely determined by a mutually understood doctrine, education, and trust. The dependence on trust is not a matter of faith but an implicit understanding derived from education and training. (Antal)

Battelle Columbus Laboratories, Translation of Taped Conversation with Lieutenant General Heinz Gaedcke, 12 April 1979, (Columbus, Ohio: Battelle Columbus Laboratories, November 1979), p. 5.

16 Field Marshal Erich von Manstein, Lost Victories, ed. and trans. by Anthony G. Powell, (Novato, California: Presidio Press,1958), p. 383.

17 Walter Goerlitz, History of the German General Staff, 1657-1945, trans by Brian Battershaw, (New York: Praeger, 1953), p. 75.

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19 Truppenfuhrung (1933) ["Troop Leading,1933 edition"] German Field Service Regulation, trans by LTC F.W. Milburn, (Fort Leavenworth, Command and General Staff College, 1933 edition translated in 1936; reprinted 30 January 1989), p. 5.

20 Robert J. Walters, Order out of Chaos, A Case Study of the Application of Auftragstaktik by the 11th Panzer Division during the Chir River Battles, 7-19 December 1942. (Monterey, California: Naval Postgraduate School, March 1989), p. 6.

21 Kesselring, p.13.

22 Battelle, p. 84. The quote below from the same source further illuminates this point:

"Orders were exclusively verbal within the Panzerdivision. Balck made his decision for the next day during the evening and he gave the necessary orders verbally to his regimental commanders on the battlefield; then he returned to his main headquarters and discussed his intention with the Chief of Staff of the 48th Panzerkorps over the phone. If approval was obtained, the regiments were sent a wireless message: "No change", and all the moves were carried out according to the plan. If there were fundamental changes, the Division Commander visited all of his regiments during the night and gave the necessary orders, again verbally. Divisional operations were conducted from the forward position on the battlefield. The Division Commander had his place with the group which was to make the main effort (Schwerpunkt). He visited the regiments several times a day. The divisional headquarters was somewhat further back and did not change its location during operations. There, information was collected and collated, supplies were handled, and reinforcements sent on their way." p. 26.

23 Richard F. Timmons, "Lessons From the Past for NATO," The Parameters of War, Military History Journal of the U.S. Army War College, vol xiv no 3, (Washington: Pergamon - Brassey's International Defense Publishers, 1987), p. 277.

# Chapter 3

## An American Approach to Rapid Decision-Making

### General Bruce Clarke and the Battle of St. Vith

*Trouble was encountered from the beginning . . . There had been no time for the proper dissemination of information and many staff officers and company commanders did not know their destination until their arrival in the St. Vith area. Maps were not available, the mission was not known, and there had been little time to post the routes with guides.* [1]

"Hold the reins loose, and let the armies race." [2] The scream of the German *Nebelwerfer* rockets and the crash of thousands of heavy German artillery guns, exploded the quiet of the early morning. A short but intense artillery barrage, fired on the morning of 16 December 1944, paved the way for the advancing German tank columns. Twenty desperate German divisions, with almost 800 tanks, attacked west along an eighty-mile stretch of the Western Front. The Wehrmacht was on the march again, the fate of the fatherland was at stake. This time, the German propagandists claimed, the panzers would go all the way to Antwerp and capture the city as a Christmas present for their *Fuehrer*, Adolph Hitler.

The Wehrmacht expected to fight a battle of maneuver against their slower "attrition-minded" enemies by attacking through the "quiet" Ardennes forest. Many Germans, but Hitler in particular, believed that a blitzkrieg against the Allies was still possible. The essential elements of the blitz - speed, surprise and mass - would create a victory of German arms over the Allied forces in the West. The German generals knew that the attack must focus on the line of least expectation at a point of least resistance. If this was achieved, then the panzers could strike deep into the enemy's rear and bring about the psychological and physical paralysis of the enemy's command structure. All of these conditions were met along the sleepy, quiet sector, of the Ardennes forest of the Western Front. That is why Hitler had selected the Ardennes as the *schwerepunkt* , the decisive main effort, of the German attack.

The Germans knew that they could not fight a costly war of attrition against superior allied numbers. Maneuver was their only option. Generalfeldmarschall Walter Model's words on the eve of the assault emphasized the critical need for maneuver: "The first objective is to achieve

liberty of movement for the mobile forces." [3] But the German General Staff also knew how desperate a gamble they were taking. Outnumbered on all fronts, the Germans had stripped away their mobile forces and concentrated them for this last, decisive blow. The attack against the Americans had to succeed or the war would be lost. For the Germans, it was now or never.

## The American Defense

The Americans were not ready for a German offensive, especially in the Ardennes. For the past six months the Allied Armies had driven the Germans back from the beaches at Normandy all the way to the borders of Germany. During those costly months of battle, Allied superiority in the form of numbers of soldiers, tanks, artillery and airpower had become unstoppable. Only now, in the difficult winter months, with Allied supply lines extended and the weather too bad to allow continuous close air support, did the Germans stand a chance of winning. Almost unbelievably, Allied intelligence did not detect preparations for the German offensive. The Allied High Command was unwilling to believe that Hitler's Army could mount a serious attack. The Americans had placed weak, green formations on the front lines facing the Germans in the Ardennes.

The scene from the American side on the 16th of December 1944 was one of wild confusion and disorganization. Surprised by the unexpected and ferocious blow, the Americans reacted badly. In the early hours of the morning the Germans had sliced through the weakly defended American lines. German penetrations occurred all along the front. The American commanders in the Ardennes, their communications disrupted, were unable to develop an accurate picture of the situation. No one understood what was happening. Rumor dominated the battlefield. Reports of German units driving to the west filled the radio waves. The German attack achieved its initial aim of paralyzing American command and control. A deliberate and coordinated stand against the attackers became impossible. It appeared that American Generalship had failed in the contest against Wehrmacht stratagem.

American units, shocked and disorganized, put up only a feeble resistance all along the front. The 106th Division, nicknamed the "Golden Lions," a new division fresh from the United States, was shattered by the fast tempo of the German attack. Overwhelmed by the surprise and fury of the assault, American soldiers threw down their weapons and ran. Unit cohesion began to crumble. Forced into a confused and one-sided situation, over seven thousand soldiers from the 106th Division surrendered. Some small, isolated units held and fought bravely, but their defense was uncoordinated and lacked combined arms support. The front was disintegrating. Disaster was in the air. The 16th of December 1944 was a black day for the United States Army.

General Troy H. Middleton, VIII Corps Commander, was responsible for a large portion of the Ardennes area. His information on 16 December

was very sketchy and consisted mostly of bad news. Rumors of German Panzers, overrunning everything in their path, were rampant. Middleton, however, was a seasoned commander and not one to panic. He reviewed the area of operations and noted the important centers of communications. He immediately recognized the value of the small town of St. Vith. St Vith is a vital road and rail center in the northern portion of the Ardennes (See Map). General Middleton also realized the need for fresh units to stem the tide of panic that had gripped the American units in the Ardennes. He asked for reinforcements, specifically tank forces. The Allied High Command was reacting slowly to the Wehrmacht's massive blow and initially was reluctant to release reserves. It took most of the day but General Middleton finally received permission to use the 7th Armored Division from the Army reserve. Middleton immediately ordered the 7th Armored Division to deploy St. Vith and block the enemy from moving west.

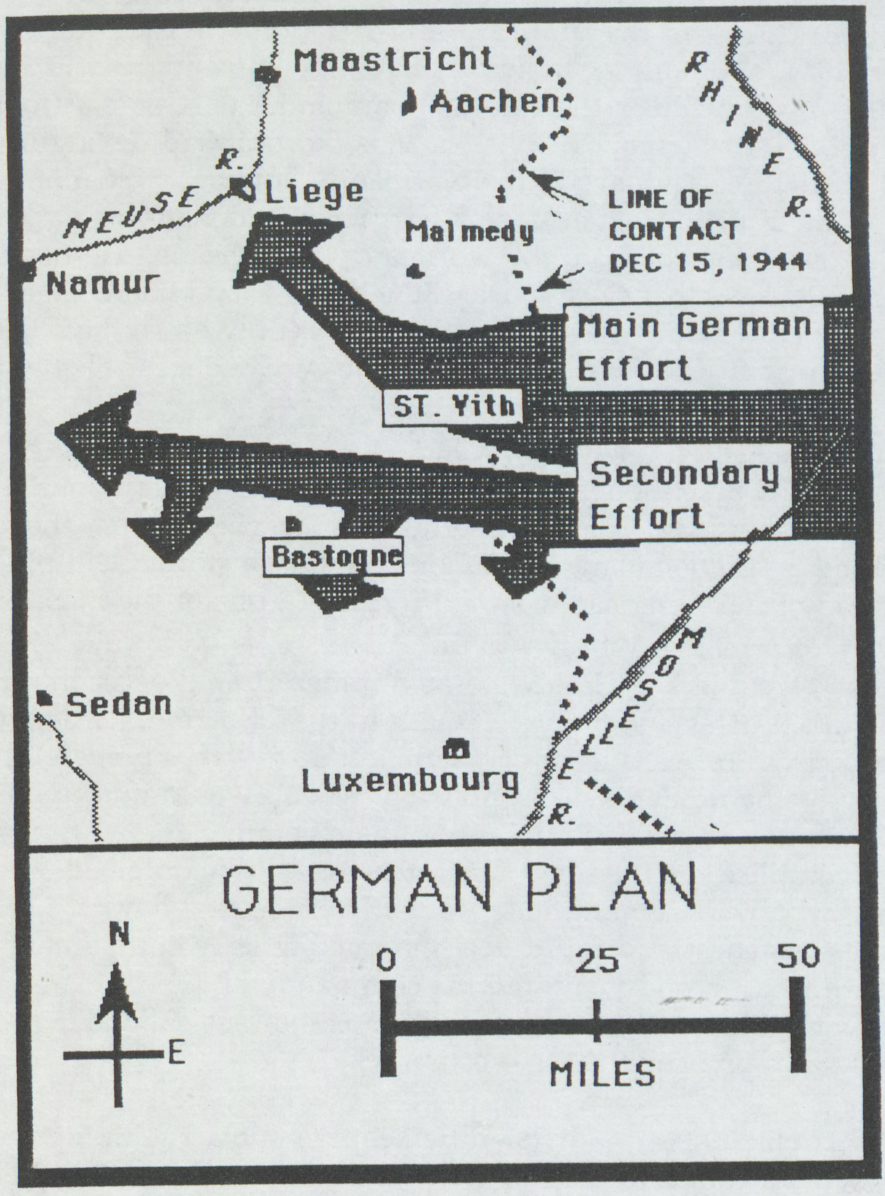
The 7th Armored Division received its orders to move to St. Vith late on the evening of December 16th. The 7th was located to the north, near Heerlen, and was undergoing a "major shakeup in the command structure." [4] The 7th had been called a "hard luck" division. Its record of accomplishment on the battlefield had been poor, a fact that caused the previous division commander to be relieved for incompetence. Its' new commander, Major General Robert W. Hasbrouck, had only been in command since 1 November 1944. Middleton, however, had no choice. The 7th would have to do. There was no one else.

The commander of the 7th Armored Division's Combat Command "B" was Brigadier General Bruce C. Clarke. Clarke had enlisted as a youth in the New York National Guard and then received an appointment to West Point. Initially assigned as an Engineer, he had volunteered for service with tank and mechanized units as soon as the Army created them. After twenty years in the Army he had earned a reputation as an excellent leader and a determined fighter. He was considered by many as an expert on tanks and tank warfare. He took command of Combat Command "B", and was promoted to Brigadier General, only forty five days prior to the German attack in the Ardennes.

Clarke ordered Combat Command "B" to road march for St. Vith under the command of his executive officer. Unwilling to wait for his columns to close on the battle area, Clarke rode ahead of his unit with his jeep driver and his operations officer. With this limited staff, he arrived at St. Vith on 17 December 1944.

The scene in St. Vith was sheer Pandemonium. Almost everyone who had a vehicle was heading away from the sound of the German guns. Roads were clogged with dispirited troops heading west. The American Army seemed to be in full retreat. Clarke quickly found the 106th Division headquarters and reported to General Jones, the commander of what was left of the shattered "Golden Lions." Jones was a defeated man. His staff officers were busy burning papers in the fireplace and preparing to leave St. Vith.

Jones had little to tell Clarke. Jones talked only of retreat and disaster. Jones said that he doubted that anyone could stop the Germans. His last words to Clarke before relinquishing command of the area of operations were: "You take command, I've got nothing left. I've thrown in my last chips."[5] The sole responsibility for victory or defeat was now Clarke's.




With little over a month in command, and with his command strung out along ninety-six kilometers of congested, ice caked roads, Brigadier General Bruce C. Clarke was about to fight one of the most difficult battles in the history of American arms. He was outnumbered by the Germans more than eight to one. How was Clarke going to succeed against such odds? Why

should his unit fight effectively while the rest of the American forces in the battle area were in head-long retreat?

## Before the Battle

Brigadier General Bruce C. Clarke took command of Combat Command "B" (CCB), of the "unlucky" 7th Armored Division, on 1 November, 1944. Although Clarke was new in command, he was not new to combat. He was previously the veteran commander of Combat Command "A" (CCA) of the 4th Armored Division. His old unit had distinguished itself in combat since the early days of the Normandy landings, five months before the Battle of the Bulge. He had done a terrific job commanding CCA during General Patton's breakout from the Normandy beachheads. He had seen almost continuous combat since D-Day, June 6, 1944, and had been awarded the Distinguished Service Cross, the Silver Star with two Oak Leaf Clusters, the Bronze Star with Oak Leaf Cluster and the Air Medal for his heroism in combat. [6]

In the 4th Armored Division, Clarke had been commanded by one of the truly great US practitioners of maneuver warfare, General John S. "Tiger Jack" Wood. "Tiger Jack," had earned his *nom de guerre* from the Germans. He was called by Liddell Hart, the famous military historian and philosopher, "The Rommel of the American armored forces . . . one of the most dynamic commanders of armor in World War II." [7]

Under "Tiger Jack" Clarke operated under a rapid decision-making command-staff process that had few equals in the US Army. Orders were issued orally, from forward locations with acetate overlays prepared by his staff to provide the needed synchronization. Wood would quickly decide a course of action and leave it to his subordinate commanders to figure out 'how" to accomplish the mission. His forces were self-contained, combined arms forces, capable of fighting independently for several days, if needed. Wood's aggressiveness and rapid decision-making style complimented Bruce Clarke's approach. Wood mentored his commanders. Men such as Bruce Clarke and Creighton Abrams became the most famous. Wood expressed his command-staff approach in these words:

> "I commanded my division by keeping contact with my column commanders from jeep or Cub plane. My staff was occupied mainly in keeping contact with me and seeing that my directions for supply and maintenance were carried out. They also tried to get word back to higher commanders, but in the extremely fluid operations after the breakout it was up to higher headquarters to find us, and we hoped now and then that they would not be able to do it." [8]

In the 4th Armored Division, Clarke had employed the techniques of command that were to be so successful in his battle at St. Vith. As a veteran of the 4th Armored Division, Clarke had learned the hard lessons of armored combat. His command style incorporated three essential pre-battle decisions: the decision to organize his forces in self contained forces capable of independent action to the maximum degree possible; his decision to streamline the information flow to the maximum extent possible; and his strong belief in forward command.

Immediately after taking command of CCB, 7th Armored Division, Clarke got to work. He trained his command with the keen eye of a battle-tested commander. He spent most of his time teaching. His style of command was positive, proficient, and no-nonsense. The men of CCB were impressed with their big, barrel chested, six foot tall commander. Clarke later related: "It took a lot of training and coaching to turn this division around to play the key, successful role in stopping Manteuffel six weeks later at St. Vith." [9]

Clarke recognized the value of self contained forces. He reorganized his command for built-in flexibility. He recognized the fact that mobile, armored formations required a quick decision cycle to take advantage of enemy mistakes and the fleeting opportunities of the battlefield. His intent was to make his armored combat command "seem like and armored corps." [10] He made sure that the sub-units of his Combat Command, the battalions, had the necessary combat support and combat service support elements to fight independently, if necessary. This organizational decision gave Clarke's subordinate commanders the ability to act without tying their moves to the coordination of supporting units. Under his guidance they learned to act without continuous control from headquarters. In short, they were given the organizational capability, and the operational flexibility, to achieve objectives within their scope of operations, without constant supervision.

Clarke's expected his subordinate commanders to boldly command their units. He had little patience for a subordinate commander that waited for instructions. He believed strongly that when decisions are made at the point of execution, a bold, subordinate commander can take advantage of battle opportunities as they occur, without losing time. "Time is always critical and mission type orders save time. The command-staff process that contribute most to maneuver warfare is characterized by the application of "mission orders." [11]

Clarke streamlined the flow of information up and down the chain of command. The central point of this effort was the use of mission-type orders. Clarke believed that "mission-type orders were a requirement if the most was to be obtained from a command." [12] Clarke replaced long, multi-paged operations orders with on-the-spot oral orders with overlay graphics. His combat orders technique involved eyeball-to-eyeball verbal orders, issued

from a vantage point overlooking the battlefield. His staff supported this effort by producing the necessary overlays and maps. He took great pains to explain the intent of his plans, rather than just the expected. sequence of moves for each operation. Clarke understood that plans were merely a basis for changes. He trusted his subordinate commanders to make decisions within the guidelines established by his intent. If necessary, subordinate leaders were expected to disobey orders, if necessary, when the situation changed and the original plan no longer made sense. The driving principle of the Clarke method was to accomplish the overall mission, within the guidelines established by the commander's intent, and leave the "how it finally gets done" to the leader at the point of decision.

Clarke's orders were usually oral, quick, and to the point. He told his commanders what to do, not how to do it. Clarke's technique of employing mission type orders was not new to the U.S. Army, but was particularly important in creating the short decision cycles demanded of fast paced, maneuver warfare. General Bruce C. Clarke, explained how to give mission type orders in his book Guidelines for the Leader and Commander:

> To get maximum combat power, we must have plans flexible enough to meet rapidly changing situations. But careful planning is not enough; this must be coupled with the readiness to change and adapt to situations as they are, not as they were expected to be.
>
> Basically a mission type order needs to cover only three important things:
>
> 1) It should clearly state what the commander issuing the order wants to have accomplished.
>
> 2) It should point out the limiting or control factors that must be observed for coordinating purposes.
>
> 3) It should delineate the resources made available to the subordinate commander and the support which he can expect or count on form sources outside his command." [13]

Lastly, Brigadier General Clarke was a true believer in the concept of "forward command." "Forward Command" was explained in graphic terms by another great armored leader, General George S. Patton Jr. Patton said: "Trying to lead men from behind makes you a driver and not a leader. It is easier to lead men just as it is easier to drag a log chain. You cannot push a log chain and you cannot push troops." [14]

Clarke did not believe in a "systems" approach to war, a prescribed logical process leading to a quantified decision. He believed that the commander needed to be at the point of decision to recognize what decisions needed to be made. "The commander should be forward as much as possible to detect early the critical situations in all fields and to render help quickly to his units when it is needed." [15]

## During the Battle

In St. Vith, Clarke was faced with a grim situation. As staff sections of Clarke's Combat Command "B" began arriving at the headquarters of the defeated 106th Division, "they met men from the 106th Division Headquarters leaving with their equipment." [16] The defense of St. Vith was turned over to Brigadier General Clarke by Major General Jones on 17 December, at approximately 1430 hours.

Clarke was not in and enviable position. In St. Vith, he could hear the crash of artillery and the sound of machine gun and small arms fire. The roads leading to St. Vith were clogged with Belgium refugees and retreating American soldiers. Every kind of vehicle seemed to be heading west, away from the Germans. "...it was a case of every dog for himself; it was a retreat, a rout." [17] Movement towards the front was reduced to one mile an hour in many locations. Only a few units were standing to hold back the Wehrmacht, and his own forces were still ninety-six kilometers, slowing moving along icy roads. Clarke's first combat in command of CCB seemed less than promising!

But Clarke was not the kind of man that gave up, no matter how fierce the odds. He took charge of St. Vith and organized everyone he could find to defend the positions around the town. He commandeered units that were running away from the Germans as they streamed into St. Vith from the east. By midday the lead elements of CCB began arriving. He adapted and improvised the defense of St. Vith as fast as his CCB units arrived. "By midnight of December 17, a fairly cohesive defense had been established in front of St. Vith with three companies of armored infantry, a company of medium tanks, and a troop of cavalry...." [18]

In less than ten hours the commander and staff of CCB arrived at the battlefield, assembled forces as they arrived, formulated a plan and issued orders. There was no time for lengthy decision-making or long-winded orders. At 0200, on 18 December 1944, the Germans launched the first of many attacks against the St. Vith positions. "Throughout all this mayhem, only one thing was certain, General Bruce C. Clarke was the sole defending commander of St Vith." [19]

Clarke did more than just defend. He aggressively employed small unit counterattacks and blunted one German attack after another. "General Bruce Clarke's' 7th Armored men showed that men in combat, confronted with a sudden and confused situation, could act aggressively, immediately and independently." [20] Clarke was a strong believer that defense consists of continually hitting the enemy by all means and imposing the will of the defender on the enemy. Clarke continued his mobile defense of St. Vith with determination and skill, giving ground, but killing and delaying the Germans in the process.

During the battle, Clarke seemed to appear everywhere there was a crisis. He frequently visited the front lines to get the true "feel" of the

situation. Several times he personally directed traffic when only his presence would solve the problem of how to get vital reinforcements to the critical place in the defense. At the village of Commanster, when nine artillery battalions tried to displace at the same time, Brigadier General Bruce C. Clarke was there, unsnarling the mess, and getting vital combat power moving in the right direction. [21]

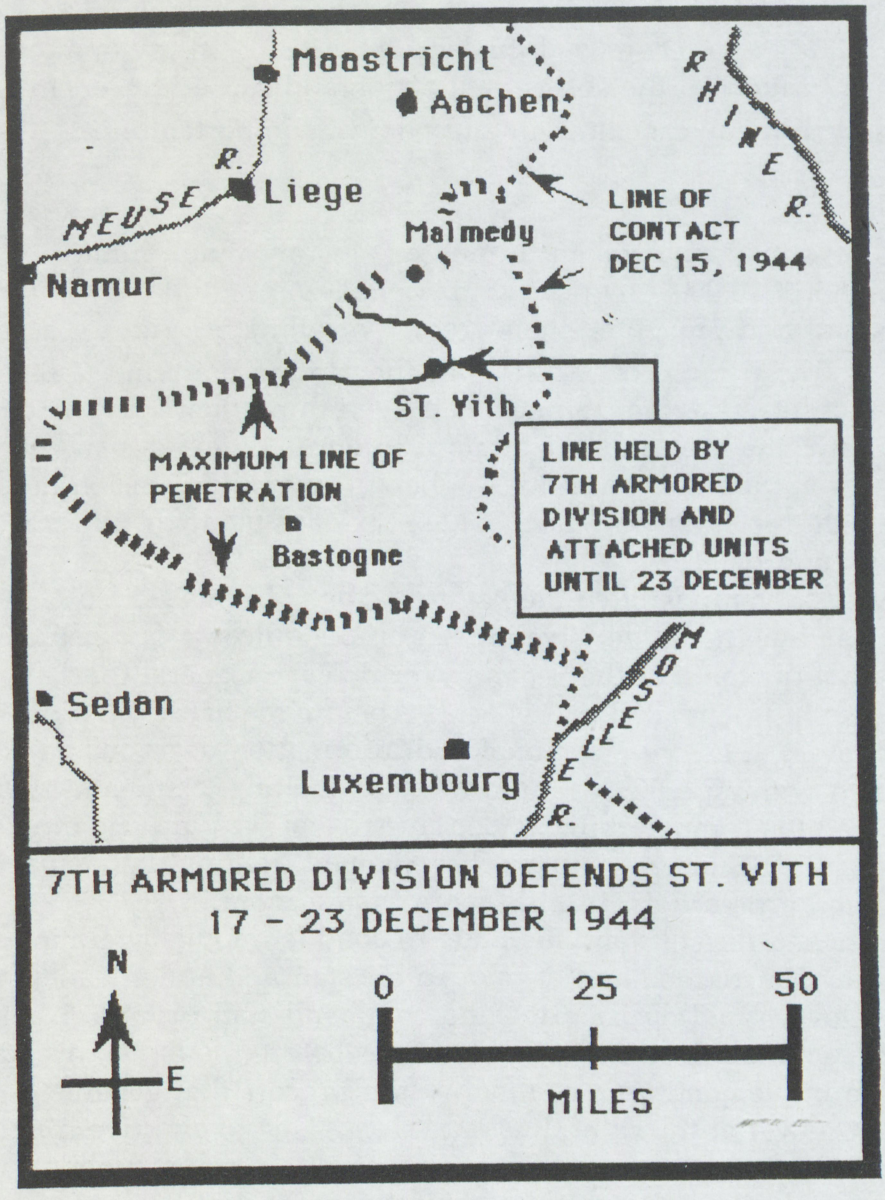
Between 17 - 23 December, 1944, Clarke's command fought off continuous German attacks. His aggressive tactics confused the Germans and made them believe that they were up against a much stronger force than merely one reinforced Combat Command. Clarke and his staff orchestrated massed artillery attacks on the advancing Germans, followed by extremely agile, mobile counterattacks. His counterattacks were often composed of as little as a company-size unit of tanks which swept through the advancing enemy and returned to be used for further action. When General Matthew Ridgway questioned Clarke about giving up ground, Clarke replied:

> "General, I don't think you know what they are trying to do. This terrain is not worth a nickel an acre to me. In my tactics I am giving up about a kilometer a day under enormous pressure but my force is intact and I am in control of it. A few kilometers advance cannot be of any substantial value to my German opponent.... He must, I believe, advance many kilometers to accomplish his mission. The 7th Armored Division is preventing him from doing that. We are winning, he is losing." [22]

Brigadier General Bruce C. Clarke's decisive leadership during the Battle of St. Vith made the difference. His mission-type orders streamlined his command and control system. His staff worked to make those mission-type orders clear and simple. The time-gained in this process helped his efforts to employ his mobile reserves with decisive speed. His forward command during the battle insured the timing of vital counterattacks. His style of command allowed his subordinate commanders to act without active control. When communications was lost, they fought on, implicitly understanding what their commander expected, and continued the fight. In this fashion, Clarke's presence was felt everywhere throughout the battle. Under Clarke's leadership his men fought and refused to run away.

But the situation was serious all across the Bulge, as the battlefield was quickly labeled by US war correspondents. Clarke's men had gained time for the vital village of Bastogne to be fortified by the 101st Airborne. It was time to pull out CCB or risk its total annihilation. On 23 December, Clarke was ordered to disengage and withdraw from St. Vith. His men were fatigued from five days of continuous fighting. His ammunition, especially his artillery ammunition, was dangerously low. Issuing oral orders to his command, Clarke disengaged his forces one at a time. H-Hour was set for 0600. No men or operational vehicles were left behind. By 2300 he had

successfully disengaged his entire command and was regrouping, well behind American lines, in an assembly area in the vicinity of Xnoris, Belgium.




The withdrawal was "carried out under heavy pressure and was started with a minimum of oral instructions to unit commanders through liaison officers. Time for its final planning was short . . ." [23] The disengagement was skillfully executed. "Covering forces to the east, west, and south fought bitter rearguard actions as the enemy pressed hard on the retreating division's heels." [24] Defiant, his Combat Command "B" had disrupted the German time-table and marched away, bloodied, but in-tact. He led his command in the most critical test of American arms in the Second World War.

Combat Command "B", under Brigadier General Clarke's command, was the mainstay of the defense of St. Vith. Because of his gallant stand in and around St. Vith, the Allies were able to regroup and hold at Bastogne. General Troy Middleton, recognized this and latter said: "In my opinion it was CCB which influenced the subsequent action and caused the enemy so much delay and so many casualties in and near this important area." [25]

## Summary

"It was no small achievement in military history that a reinforced combat command of 10,000 American soldiers had warded off over 87,000 enemy troops and had prevented them from controlling St. Vith for a period of six days." [26] The defense of St. Vith was the turning point in the Battle of the Bulge. Before St. Vith, the Germans had everything their way. After St. Vith, the failure of the Wehrmacht's attempt to win a quick, decisive victory in the West, was apparent to both sides. The 7th Armored Division held the German onslaught for six critical days. Those six days made the difference between victory and defeat.

Decisive leadership is often the key to victory. In this example, the leadership of one man had a decisive impact on the outcome of a battle and, perhaps, the final outcome of the Second World War. General Clarke's successful leadership depended on his actions before the battle (Planning and Preparation phases). His organizational and information decisions before the battle, combined with an effective rapid decision-making, command-staff process, prepared his command for its decisive role at St. Vith. He molded Combat Command "B" into a flexible, self contained fighting unit, capable of executing mission type-orders, in little more than a month.

Clarke trained his staff and his units to conduct mobile operations before the battle. He coached and developed his staff and junior leaders to effectively employ a rapid decision-making command-staff process Due to these organizational and informational decisions before the battle, his staff was effective in implementing a command-staff process that generated relative combat power at the right time and place. Due to effective training prior to the battle, Clarke's command was prepared to conduct mobile, combined-arms operations successfully against a numerically superior foe. His command-staff process was a vital ingredient in CCB's success against the massed might of the Wehrmacht.

Brigadier General Bruce C. Clarke's actions at the Battle of St. Vith are a perfect example of the critical impact a commander and staff can have on a combat unit. Guided by Clarke's leadership, CCB and the other elements of the "unlucky" 7th Armored Division, held up the most formidable force the American Army has ever had to face. His rapid decisions and effective command-staff process set the soldiers of CCB in motion to blunt the blow of Hitler's last great offensive.

# End Notes Chapter 3

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1 US Army Armor School, The Battle of St. Vith, Belgium, 17-23 December 1944, An Historical Example of Armor in the Defense, (Fort Knox: US Army Armor School, 1966), p. 5. Hereafter referred to as Battle of St. Vith.

2 Robert E. Merriam, The Battle of the Bulge, Hitler's Last Desperate Gamble to Win the War!, (New York: Ballantine Books, 1957), p. 79.

3 Ibid., pp. 77-78.

4 Stephan Dominic Borows, Clarke of St. Vith: Brigadier General Bruce C. Clarke's Combat Command "B" of the Seventh Armored Division at the Battle of Sr. Vith, Belgium, Ardennes Campaign (Battle of the Bulge) 16 December - 23 December 1944, (Louisville, Kentucky: University of Louisville, May 1984), p. 46.

5 Ibid., p. 60.

6 Ibid., p. 45.

7 Hanson W. Baldwin, Tiger Jack, (Fort Collins, Colorado: The Old Army Press, 1979), p. 18.

8 Ibid., p. 156

9 Borows, p. 75.

10 Ibid., p. 44.

11 Ibid., p. 95. Clarke goes on to say:

"In World War II, those who served in armored divisions -- and probably in other units as well -- learned that mission-type orders were a requirement if the most was to be obtained from a command....As the battle becomes more complex and unpredictable, responsibilities must be more and more decentralized. Thus mission-type orders often will be used at all echelons of command and probably will be the rule at the division and higher levels. This will require all commanders to exercise initiative, resourcefulness, and imagination -- operating with relative freedom of action.

In our tactical forces we have built-in organizational flexibility. We must recognize this and capitalize on it in our orders." p. 95.

12 General Bruce C. Clarke, Guidelines for the Leader and the Commander, (Harrisburg: Stackpole Books,1963), p. 95.

13 Ibid., p. 95.

14 Porter B. Williamson, I Remember General Patton's Principles, (Tucson: Management and Systems Consultants Inc., 1979), p. 114-115.

15 Clarke, p. 106.

16 Battle of St. Vith, p. 9.

17 Battle of St. Vith, p. 7.

18 Charles B. MacDonald, A Time For Trumpets: The Untold Story of the Battle of the Bulge, (New York: William Morrow and Company, 1985), p. 329.

19 Borows, p. 64.

20 Charles Whiting, Death of a Division, (New York: Stein and Day, 1980), p. 76.

21 Hugh M. Cole, The Ardennes: Battle of the Bulge, (Washington, D.C: Office of the Chief of Military History, United States Army, 1965), p. 417.

22 Borows, p. 89.

23 Battle of St. Vith, p. 29.

24 Ibid., p. 96.

25 Battle of St. Vith, p. vi.

26 Borows, p. 100.

# Chapter 4

# A Tactical Decision-Making Process

*"With many calculations, one can win; with few one cannot. How much less chance of victory has one who makes none at all!"* 1

Sun Tzu, the great Chinese military philosopher and general wrote the words printed above over two and a half thousand years ago. They are as true today as they were then. Sun Tzu clearly understood the value of a commander's ability to calculate the variables of time, space and purpose. Sun Tzu also clearly recognized the need for decisive leaders who could rapidly assess the situation and act decisively.

**Time is a common denominator of all military operations.**

Combat is often a race against time. The side that can seize a time advantage over their enemy gains a tremendous advantage. Time is gained by thinking and acting faster than your opponent. Time is gained by making clear, reasonably correct decisions quickly. The goal of the command-staff process is to assist the commander in making correct decisions *in time*. Time gained in making the decision, is time gained for combat.

## The Commander's Role

The first demand in war is decisive action. A commander accomplishes military actions through his decision-making process and by issuing orders. Decisive action requires clear, succinct and timely orders. Muddled, confused or late decisions produce combat orders often set the stage for defeat. The commander, alone, is responsible for making decisions and for the results of his decisions. He cannot delegate his responsibility to his staff or to his subordinate commanders.

The commander of a military force is charged with the power to make decisions. The commander's decisions are translated, by his staff, into plans for execution. Effective planning can provide a decisive advantage over the enemy. The purpose of the command-staff process, the commander's staff, and the $C^3I$ (Command, Control, Communications and Intelligence) system is to support the commander's ability to make decisive decisions in time.

The side that can decide and issue orders faster than its opponent, and translates their instructions into an order that generates decisive

action, usually wins the battle. To gain this time advantage, the tactical planner must create and transmit the minimum essential elements of the order within the limitations of the available planning time. This must be accomplished in enough time for subordinate commanders and sub-unit leaders to conduct their own planning, preparation, reconnaissance and rehearsals. On the battlefield, rapid decision-making is an essential tactical skill.

Planning tactical operations and making sound tactical decisions is the commander's responsibility. How commanders make decisions, and how we teach generations of soldiers to make combat decisions, is crucial to how we will fight wars and what command and control equipment we buy. FM 100-5 emphasizes "flexibility and speed, mission type orders, initiative among commanders at all levels, and the spirit of the offense." [2] An effective tactical decision making process must aid the commander to accomplish these goals.

> While the command and staff process was described and analyzed from time to time, few practioners, historians or theorists dealt with exactly how the increasingly complex systems were controlled - perhaps because it was in comprehensible. Military history and science focused on the general progress of battles and campaigns, embellished by anecdotes and descriptions of events, leaving the actual functions of headquarters and signal functions and those who worked them as far out of focus as field hospitals or quartermaster depots. At the same time, many command and staff techniques and practices remained in the military 'shop culture' procedures shaped by momentum, custom, word of mouth, adaptive informal practice and the inclination or whim of commanders and staffs. [3]

## The Role of the Staff

Staff officers assist the commander. The staff obtains the information and insight the commander needs to make his decisions and from which he derives subordinates tasks. The staff transmits the commander's decisions to subordinates and ensures the execution of his decisions. The staff collects, assesses, and provides detailed information to the commander during the decision-making process. They prepare and disseminate plans and orders after the commander makes his decision. They coordinates activities so the integration and synchronization of all battlefield operating systems agree with the commander's intent. Staffs also monitor activities and collects current battlefield information consistent with the commander's vision.

Moreover, the staff identifies unforeseen opportunities or situations which might require more guidance. Throughout the decision-making

process, the commander also relies on his staff to provide technical expertise in their functional areas. The staff is tasked to be able to provide the commander with judgments that they derive from their experience, training, intellect, and "gut feeling." An effective tactical staff provides the commander with a means to assure that his decision and commands are timely and sound.

Traditionally, American military staffs have employed an orders process that was slow and included detailed instructions. This orders intensive approach compliments the traditional American style of attrition warfare. "The traditional American approach to war attempts to emphasize the enemy decision process (deterrence), to complicate the enemy problem-solving structure (TRIAD), and to manage risk in conventional conflicts (attrition-based strategies)." [4] In the past the traditional response to the chronic American weakness in command and control was to "plan more thoroughly, leaving as little to chance as possible. But thorough planning, with its natural deemphasis of unexpected situations (beyond the scope of contingency plans), led to rigidity and, often, heavy losses. In other words, the command-and-control weakness and its chosen professional remedy were but two aspects of a single larger problem: inadequate preparation of commanders and staffs for the real world of combat." [5]

The effectiveness of the current command-staff process practiced by units of the U.S. Army is an item of close scrutiny for the units rotating to the realistic and demanding force-on-force training at the National Training Center at Fort Irwin California. Lessons learned from the NTC suggest that units have difficulty conducting time-critical tactical planning. This problem often develops because planners spend too much time trying to complete a detailed synchronization plan for a single course of action without enough information concerning the enemy. [6]

In addition, most units practice inefficient and ineffective command-staff process techniques. The average staff arrives at the NTC with little prior training in time-critical orders techniques. Planners are told merely to work faster in these time-critical situations. The products (task and standard) of an order are seldom defined. The priority of orders products is seldom thought through. The results are that tactical planners often attempt too much planning in too little time.

As stated above, the command-staff process has received little formal analysis. The reason for this may lay in the chaotic nature of combat and its inability to conform to linear logic. Tactical decision-making is conducted in an environment of great uncertainty, unpredictability and constant change, and has therefore been viewed by many as more than an art than a science. Doctrine attempts to bridge this gap by providing commanders and staffs by with pragmatic guidelines to accomplish planning in the chaotic environment of war.

## Order out of Chaos

War is chaos. Military planners seek order in an environment that rejects order. Military planners have developed, over the years, a logical, sequential method to analyze and conduct tactical planning. The emphasis on the analytical approach to decision-making is an attempt to bring order out of chaos. Current US Army and Marine Corps doctrine on the command-staff process emphasizes this analytical approach to combat problem-solving.

Frequently, commanders must make decisions in combat without the benefit of a time intensive, deliberate analysis. In combat "the commander may have to proceed through the decision-making process and issue oral orders based on his own knowledge of the situation without taking the time to formally include the staff in the process." [7]

This suggests that commanders must possess a flexible set of decision making strategies that can meet the demands of planning when there is plenty of time and during time-pressured situations. The commander must then choose the correct decision making process based on his assessment of the situation and upon the available planning time. [8] A doctrine that provides only one way to accomplish tactical planning will lack the flexibility to meet the varied demands of war. An effective command-staff process must, therefore, provide command and staff methods that will work on the battlefield, not just in the classroom.

This choice is explained by one researcher as the choice between analytical and recognitional decision making strategies. [9] A simple analogy is to think of decision-making techniques as tools in a tool box. The tools in the box are designed to solve tactical planning problems. An effective command-staff process should provide the right kind of tools to for each specific task.

### Analytical Decision-Making

The first tool in the decision-maker's tool box is analytical decision-making. The United States Army has taught analytical decision-making since World War II. Analytical decision-making is a technique for making decisions based upon the review and comparison of available information. It is a systemic approach to arrive at the best possible solution to a given problem.

A systematic approach to decision-making fosters effective analysis by enhancing application of professional knowledge, logic, and judgment. The best decision is determined from evaluation of sets of options and then comparison of the options by a list of essential battlefield factors. It also creates a systems approach to decision-making that can easily be taught in staff schools.

In analytical decision-making the staff plays the dominant role. The general approach is for the staff to "select a set of alternatives decisions to evaluate subjectively the utility (or value to the decision-maker) of outcomes expected under each decision, and to select the decision maximizing the

utility." [10] The commander gives general guidance and the staff defines the problem, gather the facts and make assumptions necessary to determine the scope of and the solution to the problem. The staff then develops several possible solutions, analyze each solution through wargaming, records the wargaming results and compares the outcome of each solution. Finally, the staff briefs the commander and he selects the best solution. The analytical strategy for decision-making used in the US Army is described in "Annex A- The Command Estimate."

In the Command Estimate process, the staff follows a step-by-step approach to determine the single best solution. If conducted properly, several effective plans will be developed from which the commander will select only one. If the staff wargames each plan thoroughly the analytical process will produce a series of workable options for the commander to select from. The analytical process also double or triples the time needed to produce an effective plan. If the staff takes shortcuts, and does not completely wargame each set of options, it is not conducting analytical decision-making. "Jumping at a solution," because of a lack of planning time, usurps the commander's authority and presents him with a *fait accompli.*

This situation typically occurs when brigade and battalion staffs are hard-pressed to prepare plans in limited time using the Command Estimate. This practice typically presents the commander with one well-thought out plan, and several half completed, straw-man plans. During the decision briefing, most commanders reject the straw-man plans out-of-hand and are forced to accept the decision of the staff because time is running out.

This analytical decision-making process, as established in the Command Estimate format, can be highly effective under certain circumstances. The Command Estimate is the preferred approach when the information concerning the enemy is too abstract to recognize a discernable pattern, when justification is a prime requirement for the final decision (coalition planning for example), when the goal of the decision making process is a single optimized solution, and, most importantly, when there is plenty of time to analyze all the facets that impact on the solution to the tactical problem.

The problem with the analytical process is that it requires a lot of time to develop, wargame, brief several workable courses of action and then select the best. The emphasis is on finding the best solution, not in finding a workable solution within the constraints of the available planning time. Efficiencies can be gained by practice, but even the best staff runs out of time when they attempt to use analytical decision-making techniques, as represented by the Army's Command Estimate, to develop tactical plans during time-sensitive tactical situation. The stories from the field, of subordinate unit commanders waiting at the brigade or battalion command post for the operations order to be completed, are legion.

In ten years of training experience at the National Training Center, it has been frequently noted that the Command Estimate, the analytical decision-making process, can be executed by commanders and staffs only for the initial

tactical plan. After the initial order, all subsequent planning and preparation periods did not permit the full implementation of the Command Estimate. [11] This is particularly true because brigade and battalion staffs rarely have enough intelligence data on the enemy at the time of the conception of the plan to select a single best course of action. In most cases, the selection criteria is based solely on the terrain and not the enemy.

This situation puts the commander and his staff in a serious dilemma. The staff schools teach the analytical decision-making approach as the only technique that staffs are trained to conduct. Other techniques are not taught nor described. This creates a serious credibility problem when doctrine establishes one right way to make decisions - the analytical strategy - and then places commanders and staffs in situations where they must ignore doctrine in order to make the vast majority of time-pressured tactical decisions during training exercises. [12] What is the correct command-staff process to use when there is not enough time to conduct the analytical method?

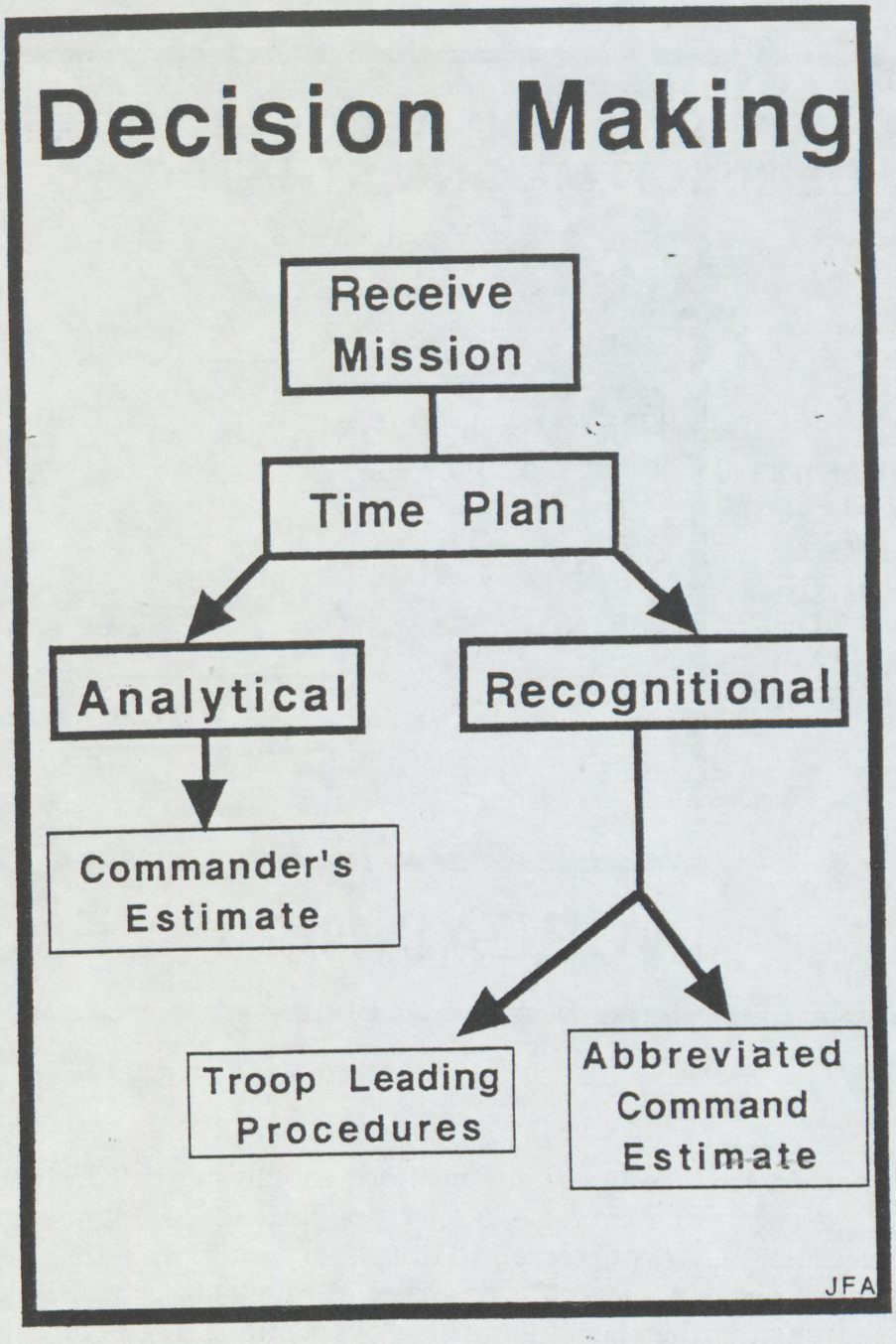
## Recognitional Decision-Making

The analytical decision making process is a time-intensive staff process that is often unusable for time-pressured situations. Luckily, there is more than one tool in our decision-making tool box. In these situations the commander must apply recognitional decision making.

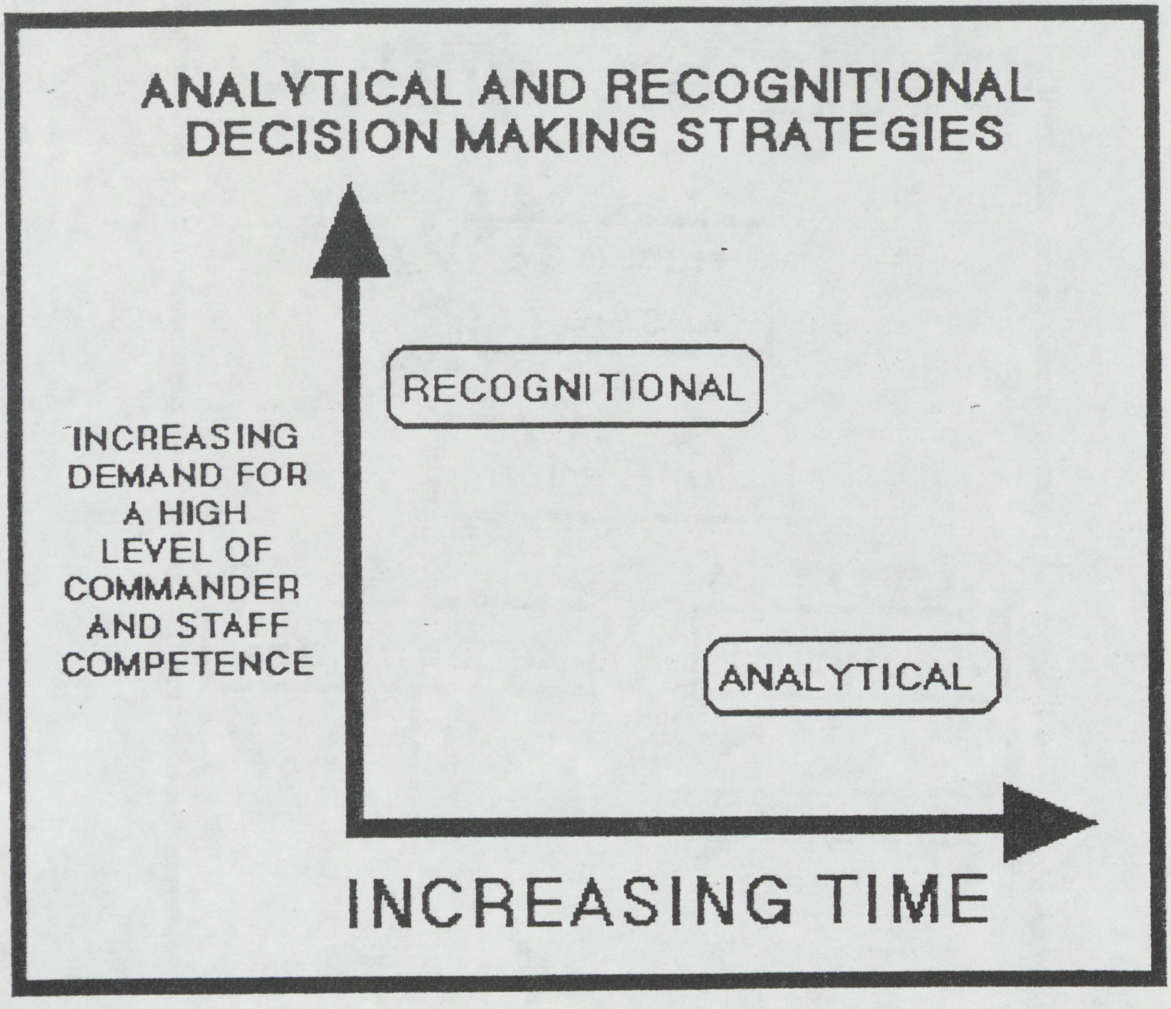
The term recognitional decision-making (also known as: recognition prime decision-making) is a technique for making decisions based upon the intuitive knowledge or experience of the decision-maker. In recognitional decision-making, the commander plays a prominent role.

This technique emphasizes the quick mental jumps at a solution to a problem and the wargaming of this solution. The recognitional decision-making strategy applies when a decision-maker recognizes a situation as typical, recognizes the typical reaction to the situation, evaluates the reaction for feasibility, and then either implements it, improves it, or rejects it for another reaction. [13]

Recognitional decision making focuses on the commander's ability to recognize tactical patterns, decide the correct counter-pattern, and apply that solution rapidly to meet the demands of time-pressured situations. Experienced commanders frequently conduct this kind of decision-making.




The recognitional strategy is implied by the Abbreviated Command Estimate (Annex B) and the Troop Leading Procedures (Annex C). In the abbreviated process the commander issues specific guidance to his staff and the staff implements the commander's decision (rather than optimizing several possible solutions). The Troop Leading Procedures, in particular, were designed to aid the commander to apply his judgement to quickly decide a course of action when he did not have a staff.




The analytical and recognitional methods should not be considered competing decision-making strategies. They are, instead, complimentary options for decision-making, designed to fit special conditions. The commander must decide which decision-making strategy to choose based upon his assessment of the enemy and friendly situation. The ability to select either an analytical or recognitional approach provides commanders a flexibility that has not yet been institutionalized by the United States Army or Marine Corps.

Sun Tzu believed that every tactical decision in war must be based on the enemy. Commanders who attempt to execute their plans, regardless of the enemy situation, open themselves up to fall into a trap. Commanders who determine their course of action based solely on the terrain, likewise set themselves up for failure. "What is of supreme importance in war is to attack the enemy's strategy." [14] Commanders must, therefore, quickly analyze the enemy situation, estimate the time available for planning, and rapidly select

the appropriate decision-making strategy. The guidelines below list criteria that can aid a commander to select the correct decision making approach.

**Use Analytical Decision Making**

Experience Level Low
Plenty of Time
Slow Changing Events
Abstract Situations
Need Justification
Group Conflict Resolution
Find the Best Course of Action
Explicit Understanding Required

**Use Recognitional Decision Making**

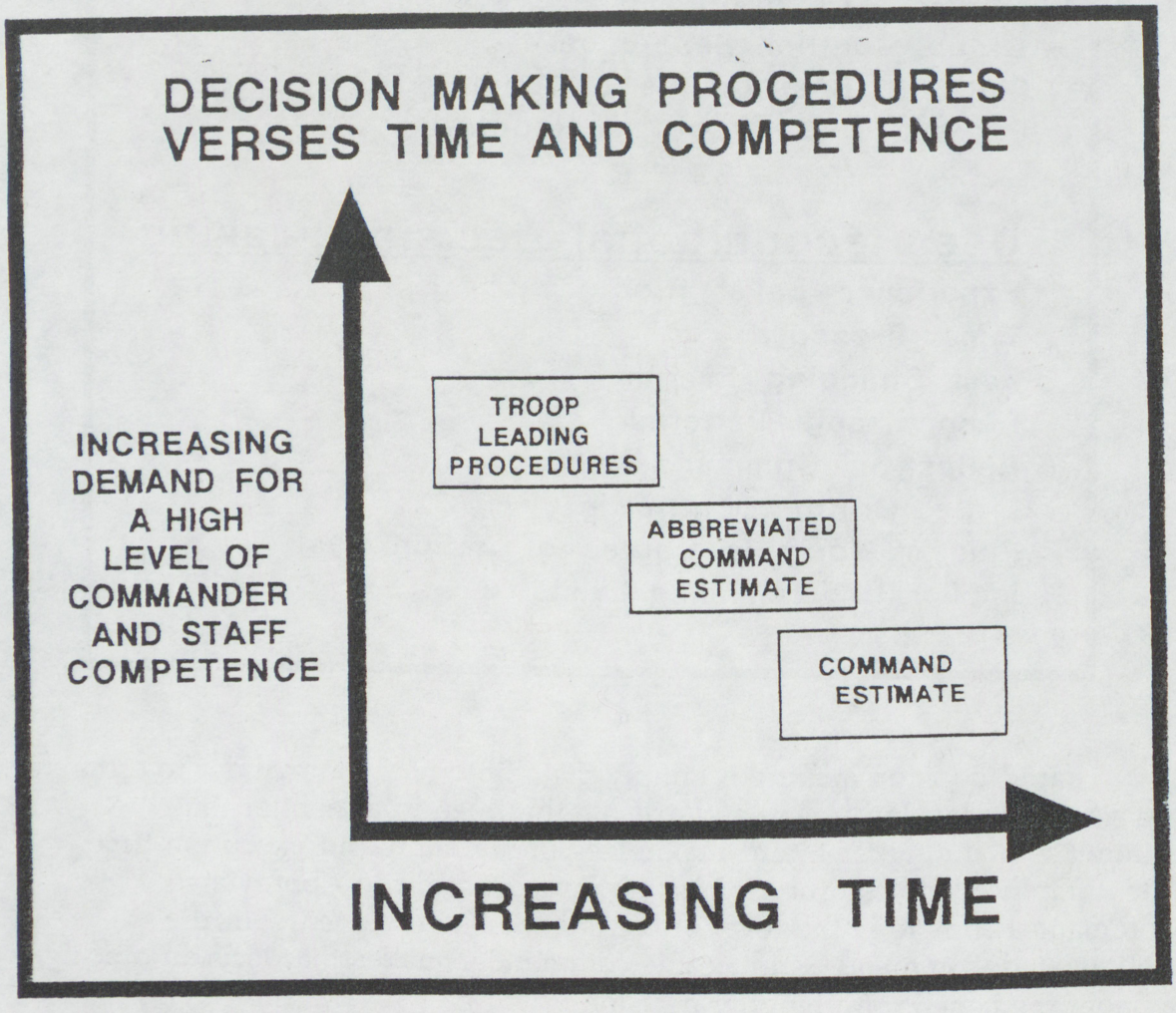
Experience Level High
Time Pressure
Fast Changing Events
Recognizable Patterns
Relies on Commander's Judgement
Little Group Conflict
Find a Workable Course of Action Fast
Implicit Understanding Exists

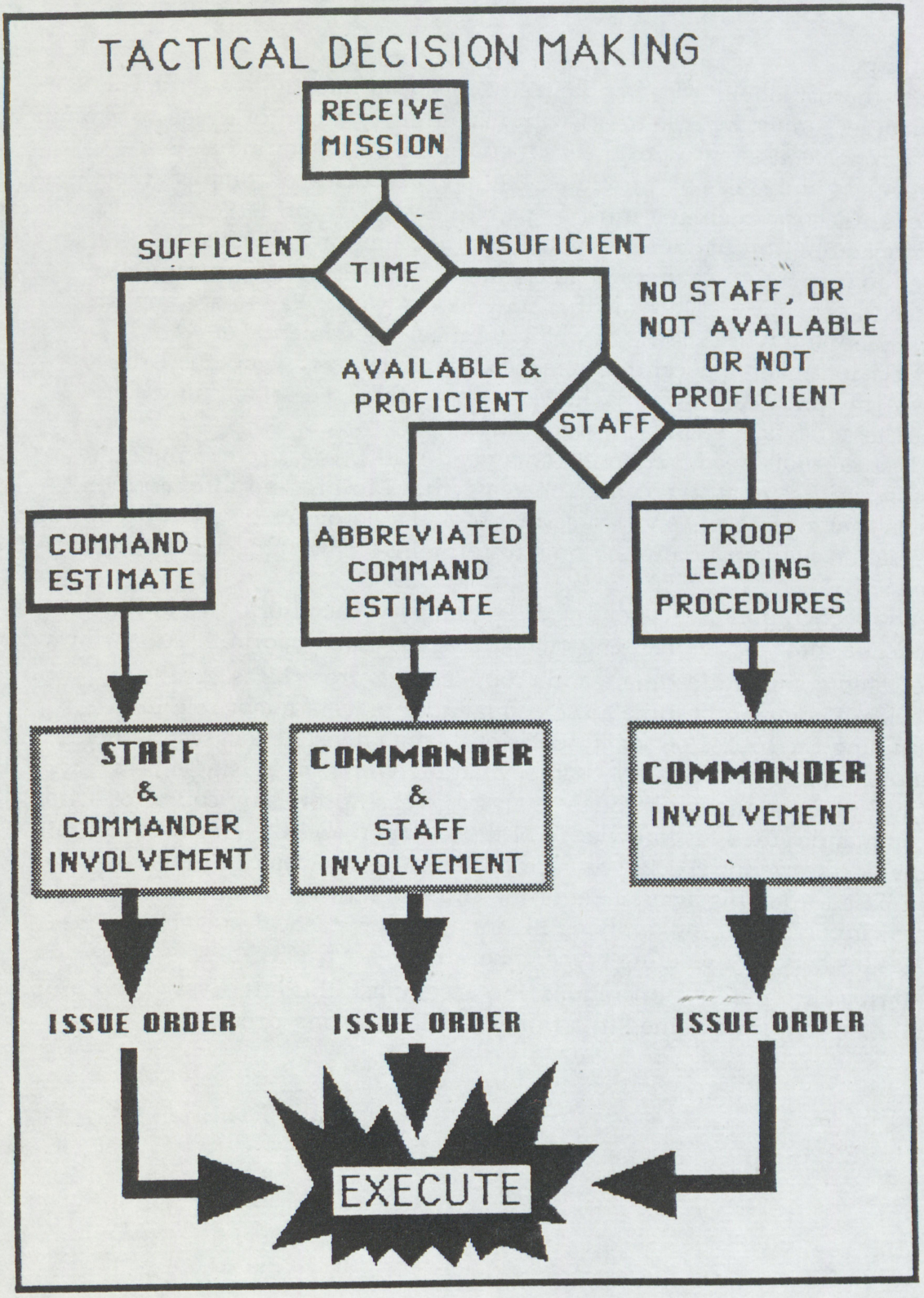
Rapid decision making is simply the ability of a commander to estimate the situation, develop a plan and execute that plan in a manner that minimizes planning time and maximizes preparation and execution time. The difference between the Command Estimate and the Abbreviated Command Estimate is the level of commander involvement. In the Abbreviated Command Estimate the commander makes the decision quickly, without the benefit of a lengthy decision briefing of several thoroughly wargamed courses of action. His staff then implements his decision, synchronizes the effort and produces a plan. By making the decision early, the commander streamlines the entire process and saves time.

The commander's decides the appropriate decision-making strategy as shown in the diagram labeled "Tactical Decision-Making," shown below. If the commander has a staff and has time to conduct analytical decision making, he employs the Command Estimate Process. If the commander has a

staff, but does not have time to conduct the complete analytical decision making process, he employs the Abbreviated Command Estimate Process. If the commander does not have a staff due to the combat situation, he employs the Troop Leading Procedures.

The figure below shows the relationship of these three methods to time, staff availability and staff skill.




TACTICAL DECISION MAKING
RECEIVE MISSION
TIME
SUFFICIENT
INSUFICIENT
NO STAFF, OR NOT AVAILABLE OR NOT PROFICIENT
AVAILABLE & PROFICIENT
STAFF
COMMAND ESTIMATE
ABBREVIATED COMMAND ESTIMATE
TROOP LEADING PROCEDURES
STAFF & COMMANDER INVOLVEMENT
COMMANDER & STAFF INVOLVEMENT
COMMANDER INVOLVEMENT
ISSUE ORDER
ISSUE ORDER
ISSUE ORDER
EXECUTE

## Summary

On the battlefield, rapid and effective decision making is essential. Commanders must be able to act with maximum freedom of action to exploit opportunities consistent with their superior's intent. Doctrine assists commanders and staffs by providing the mental tools to accomplish their missions. Tactical planning must be precise enough to preserve synchronization throughout the battle. At the same time, it must be flexible enough to respond to changes or to capitalize on fleeting opportunities to damage the enemy. [15] Doctrine that provides only one way to accomplish tactical planning will lack the flexibility to meet the demands of war.

Decision-making is central to tactical planning. For years the United States Army and Marine Corps, however, have focussed on teaching a deliberate, analytical style of decision-making.

Tactical units need a common command-staff process to execute rapid decisions. In combat "the commander may have to proceed through the decision-making process and issue oral orders based on his own knowledge of the situation without taking the time to formally include the staff in the process." [16]

The recognitional decision-making strategy is the alternative to the analytical approach. The recognitional strategy is embodied in the US Army's abbreviated command estimate and troop leading procedures. In the abbreviated command estimate the commander plays a major role in determining the course of action (decision), while his staff focuses their effort on implementing his decision. Rather than searching for a "single best solution" and conducting through analyses of each promising course of action, the commander uses his knowledge of the situation and the latest reports to rapidly decide on one specific course of action. He decides upon this course of action based upon his assessment of the situation, the recognition of the patterns involved and by applying his intuition and tactical judgement. He "hedges his bets' by executing branch plans that were triggered by "reconnaissance pull" [17] operations. To accomplish this effectively takes a commander and staff trained in a rapid-decision making process.

# End Notes Chapter 4

1 Sun Tzu, The Art of War, trans. by Samuel B. Griffith, (New York: Oxford University Press, 1963), p. 71.

2 Ibid., p. i.

3 Roger Beaumont, The Nerves of War, Emerging Issues in and References to Command and Control: (Washington: D.C.: AFCEA International Press, 1986), p. 12.

4 Major George E. Orr, Combat Operations C3I: Fundamentals and Interactions, (Maxwell Air Force Base: Air University Press, Maxwell AFB Alabama, July 1983), p. 78.

5 Charles E. Heller and William A. Stoft, America's First Battles, 1776-1965. (Lawrence, Kansas: University of Kansas Press, 1965), p. 330.

6 Author's notes from experience derived from observing over ninety-six brigade battles at the National Training Center, Fort Irwin California as the Brigade Operations Observer Controller.

7 Ibid., p. 5-5.

8 Unfortunately FM 101-5 does not explain how to accomplish this.

9 Gary A. Klein, "Strategies of Decision Making," in Military Review, (Command and General Staff College, Fort Leavenworth Kansas, May 1989), p. 56.

10 Major George E. Orr, p. 39.

11 Author's notes from experience derived from observing over ninety-six brigade battles at the National Training Center, Fort Irwin California as the Brigade Operations Observer Controller.

12 paraphrased from Klein, p. 62.

13 paraphrased from Klein Associates Inc., A Knowledge Elicitation Study of Military Planning, p. 23.

14 Sun Tzu, p. 77.

15 Headquarters, Department of the Army, FM 100-5, Operations, (Washington, D.C.: U.S. Government Printing Office, 5 May 1986), p. 15.

16 Ibid., p. 5-5.

17 "Recon pull" operations require a rapid decision-making command-staff process. An example of "reconnaissance pull" operations was provided in a monograph produced by the US Army Armor Center titled Tanking in The Desert (Fort Knox: US Army Armor Center, August 1990), p. 7-40:

"Recon Pull is a technique used by commanders to identify and maneuver against an enemy weak point and to exploit success. Leaders at every level - from scout squad leader to regimental commander - may use this technique. In a force-oriented attack, the commander should maneuver his main effort against the enemy weak point, By attacking the weak point of the enemy, the commander enhances the ability of the unit to destroy the enemy; the commander enhances the ability of the unit to destroy the enemy because it can generate tremendous local superiority in firepower.

Commanders normally identify a weak point during IPB. Often, however, the commander will not know ahead of time the exact location of the weak point with absolute certainty. Reconnaissance during the execution of the attack will often disclose that the suspected weak point is not present, and that there is a weak point elsewhere. The commander should then attempt to shift his main effort to attack the newly discovered weak point."

# Chapter 5

# Training Staffs for Rapid Decision-Making

*"There is no teacher but the enemy. No one but the enemy will ever tell you what the enemy is going to do. No one but the enemy will ever teach you how to destroy and conquer. Only the enemy shows you where you are weak. Only the enemy tells you where his is strong. And the only rules of the game are what you can do to him and what you can stop him from doing.* [1]

General Balk and General Clarke, as we saw in Chapter 2 and 3, both exercised an effective command-staff process. Both generals, however, left no formal record of their staff training techniques. How their staffs were trained and what techniques were employed to produce a rapid decision-making capability must be pieced together from a wide range of historical information. In general, however, their highly trained staffs learned the hard lessons of combat on the battlefield. This kind of training may be possible in long-war situations, but will probably not be an effective option for short-war scenarios.

Surprising little has been written on how to train staffs in the command-staff process that most staffs will experience in combat. There is a little information on how to train a commander and staff in rapid, recognitional decision-making. Most of what is written concerning staff training in the United States Army and Marine Corps involves training for analytical decision-making. Repetition in producing orders is as far as most training programs go to prepare commanders and staffs for combat command-staff operations.

Any study of the training methods to imbue a commander and his staff in the rapid decision-making staff process should first consider the historical staff training techniques. Central to this study, therefore, is the answer to this important question: What command-staff training methods are available today to help create superior staffs capable of executing rapid decision-making?

## Historical Staff Training Techniques

Very little information is available on how staffs have been trained in the armies of the past. "Staffs had existed at least since the days when the Egyptian Pharaohs first marched organized armies onto the pages of

history." [2] The ancient Roman army, renown as one of the most efficient fighting machines of antiquity, had a highly organized and trained staff system. There is evidence of the Roman Army's logistical preparations for many campaigns. Little however, remains in historical records concerning the training of operational staffs. This trend continued throughout recorded military history until the end of the Napoleonic period. It is after Napoleon that modern day staffs emerged. The complexity of warfare in the 19th and 20th centuries demanded specialized staffs of trained officers to assist the general in the conduct of military operations. With the development of a true staff system, professional soldiers and historians began to study and analyze methods of training staff officers.

An examination of some of the staff training methods that have been developed over the past two hundred years reduces staff training to three general categories. These categories consist of staff rides, wargames, and maneuvers.

## Staff Rides

In the 19th Century, the Prussians, under such men as Scharnhorst, Gneisenau, Clausewitz and Muffling, pioneered staff training through the institution of the German General Staff. The Germans carefully selected General Staff officers through a series of competitive examinations. Selected from the best and the brightest of the German officer Corps, General Staff officers were considered the mechanism that would lead the German Army to organizational and operational excellence. The German staff concept worked on the principle that the "leader or leadership makes decisions and gives commands; The General Staff's responsibility is to provide all possible support to assure that the decisions and commands are timely, sound and effective." [3]

Tactical discussions were the cornerstone of a German officers professional education. Tactical discussions were the means to develop individual staff skills. They emphasized the understanding of a common doctrine and a specific military language. A tactical discussion consisted of a rigorous historical study and a thorough tactical analysis. Recent battles were the best subjects for tactical discussions. Recent battles provided a historical vignette that employed the same, or similar, weapons, tactics and conditions that might be encountered in contemporary combat. A group of officers, who had studied the battle in detail, discussed the battle and analyzed it in great detail. The officers would tear the historical events apart, piece by piece, to determine what actually happened and why. Through this rigorous form of intellectual education, German officers gained a common insight into the theory, language and practice of war.

Staff rides were another technique that became a vital part of the German command-staff training method. A staff ride, or terrain walk, consisted of a staff executing a tactical plan on actual terrain in real-time. Initially, the German General Staff conducted an annual staff ride.

> "The purpose of those staff rides was to have the entire staff gain an intimate acquaintance with one of the potential operational areas for which the deployment and combat plans so painstakingly prepared. For a period of a week or more, the officers would ride over the countryside, becoming familiar with the terrain, and attempting to visualize on the ground the maneuvers they had developed on maps. Every evening there would be a discussion of what they had seen and done during the day; notes would be taken . . . and when they got back to Berlin, the plans would be revised accordingly." [4]

As the value of the staff rides became apparent, the technique became widespread throughout the German Army. Staff rides were held frequently at all echelons of command. Other armies adopted the techniques. Tactical terrain walks and tactical exercises without troops (TEWTs) all sprang from the staff ride concept. In varying forms, staff rides are used today by most of the armies in the world as a valuable tool to develop tactically proficient combat leaders.

## Wargames

Wargames became another staff training technique. *Kriegsspiel*, or wargaming for military training and combat prediction, is considered by many to be a German invention. German tacticians experimented with war games in the 19th Century. One game designer developed a game titled the New *Kriegsspiel*. He wrote a book, "Rules of a New War game for the Use of Military Schools," to go along with his game. This game, "was played on a board whose 3,600 squares represented the terrain along the Franco-Belgian border." [5] The game soon became popular with the professional German officer corps. In 1824, when General Karl von Muffling, the chief of the German General Staff saw *Kriegsspiel* being played, he exclaimed, "It is not a game at all! It's a training for war! It is of value to the whole Army." [6] Under the guiding hand of the German General Staff, *Kriegsspiel* became a highly developed form of staff training. "Every Prussian regiment was issued *Kriegsspiel* and ordered to play it regularly." [7]

The concept soon caught on with other armies. In the 1880s an American author, Major William R. Livermore, produced a book titled American *Kriegsspiel*. [8] In the American Navy, wargaming became part of officer instruction, simulating the movements of ships at sea with the use of lead vessels and precisely determined rules. But German-style wargaming never truly caught on with the American Army. in spite of the German experience with wargaming, many American Army officers believed that land combat was too messy to reduce to a disciplined game. From the late 1890s until the early 1970s the United States Army used "Map Maneuvers"

and scripted "Command Post Exercises" to practice decision-making. Seldom were these techniques used to train a command-staff team. In "such simulated warfare, there was no sense of enemy, no game against even a simulated opponent." [9]

The United States Marine Corps, on the other hand, adopted the Navy's enthusiasm for wargaming and employed a wide range of wargames for officer education. The Marines Corps started serious wargaming shortly after the Spanish American War. Marines wargamed historical battles using modern weapons. The Marine wargame tradition included, between the World Wars, "a landing at the Caribbean island of Grenada - a scenario made real in 1983. Marines studied historical battles and sometimes refought them. In the 1920s Marines reenacted Pickett's charge at Gettysburg and the battle of Newmarket." [10]

## Maneuvers

Large scale maneuvers, involving full formations of troops, have been viewed as the most challenging and beneficial training exercises for command-staff operations. The German Army, for example, conducted annual large-scale maneuvers to test its mobilization and operational plans. Valuable staff training occurred. Lessons were learned from these exercises concerning the mobilization, planning, preparing and movement of units across real terrain. Unlike map exercises, war games or staff rides, the friction that attacks all operations is real and all pervasive in a large-scale maneuver. Things go wrong that cannot be waived aside as they can be in a map exercise. Orders are misinterpreted, units get lost, logistics fails to arrive, just as they do in real-war.

Large-scale maneuvers, however, usually fell short of simulating actual combat. The maneuvers were not considered realistic simulations of tactical combat and often devolved into an exasperating game of "who shot who." No matter how many 'umpires" were employed, the tactical battle, the point where the competing forces engaged in close combat, was difficult to present realistically. The effects of artillery and the suppression from direct fire weapons were beyond the means of the times to replicate to any realistic degree. The ability to determine the true effect of the command-staff process, therefore, was missing.

This situation was pervasive until the late 1970s when modern technology came to the rescue. In the late 1970s sophisticated eye-safe lasers were developed that created the opportunity for realistic battle simulation. This blend of wargaming and maneuvers has generated the greatest revolution in combat training in the 20th Century. It produced the ability to train the full range of military planning, preparation and execution in the most realistic conditions possible. The new technology could now determine the close battle with a high degree of realism and accuracy. This permitted a

true test of soldier and unit skills, as well as a test for the command-staff process.

The best example of a marriage of large scale tactical maneuvers and wargaming is represented in the United States Army's Combat training Centers. Of these, the National Training Center, or NTC, is the only CTC that offers a brigade staff the conditions to fully test its command-staff process in actual brigade operations. Today, after the success of Operation Desert Storm, few military professionals doubt the utility of the National Training Center. Through the NTC, the words of Major General Paul F. Gorman, the man who proposed and nurtured the NTC concept, became a reality: "Training is rehearsal for battle." [11]

At the NTC, Army combat brigades train in the most realistic conditions short of actual war. Every US Army brigade in the continental United States rotates several battalions each year to the NTC. These units are called the "Blue Force." "Blue Force" units arrive at the NTC, draw their equipment from the NTC equipment stockyard, and prepare for fourteen days of intense battle. Battles are fought against the "Red Force" with the use of a sophisticated laser-shooter and laser-sensor package that is attached to each vehicle, soldier and weapon. These lasers are completely safe, replicate the exact effects of the assigned weapon, and perform the function of designating direct- fire battle casualties. With this equipment, the Blue Force battles the Red Force in countless, bloodless battles to learn the difficult art of war. The most important learning point is that the outcome of these simulated battles is determined by the actions of the players, not by umpires or a preconceived script. These battles also provide the U.S. Army a treasure house of valuable lessons learned concerning the conduct and execution of modern, combined arms combat.

The key to the force-on-force concept is the employment of a professional "Red Force" called the Opposing Forces, or OPFOR. The OPFOR is the sparring partner and principal teacher in the NTC's one-thousand square mile classroom. The use of the OPFOR represents a modern revolution in the conduct of training for combined arms warfare. The training philosophy behind this concept is that a thinking, highly trained adversary will provide the best simulation for actual combat. It is based on a belief that soldiers, well-trained and well led, win wars. Training, therefore, is seen as a dramatic force-multiplier on the battlefield. Sophisticated weapons are vital, but weapons alone cannot decide the issue. "The best troops cannot win if they are badly equipped, but good equipment in the hands of poor troops or badly led troops also cannot win." [12] The value of the NTC was dramatically displayed by the effectiveness of U.S. Army forces in the 1991 Gulf War.

> "The opposition force tended to win. The army did lose its first battle, over and over again, but only against its own opposition force. It came to Saudi Arabia chastened, as previous American

armies had been chastened by their early failures, and well aware of what it had to do. Thus in enormous contrast to previous wars, the U.S. Army which came to Saudi Arabia in 1990-91 was already somewhat battle-hardened and battle-wise. It proved remarkably effective when the time came to fight." [13]

## Command-Staff Training Spectrum

The success of the NTC in producing a first-rate training experience for brigade and battalion staffs is well known. Few staffs, however, come to the NTC prepared to execute brigade and battalion level operations to their full potential. Many staffs, in fact, are woefully untrained and spend most of their training days at the NTC barely able to meet the minimum requirements of command and control. Although individual staff officers are often well educated in Army staff schools, staffs at the NTC have displayed a recurring weakness to operate effectively as a collective body during time-pressured planing episodes. This problem is nothing new.

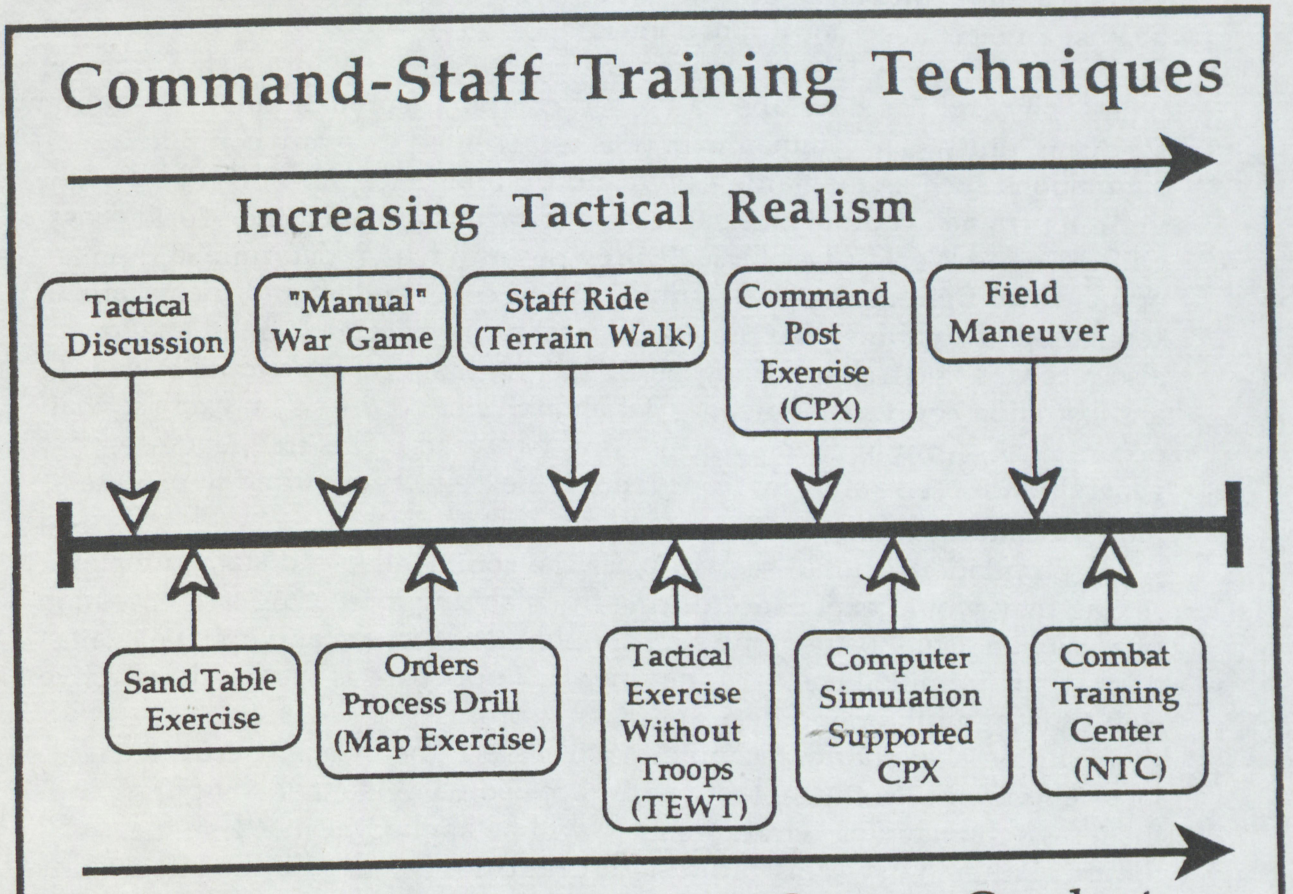
"In the late war these attack orders were of many types. Early in the game, they were most complete field orders, pages of descriptive data with annexes for every arm and service. These were usually of about as much use in action as if a football coach attempted to outline in advance each play his team should use successively during the first half. But long theoretical training at Leavenworth will bring forth such orders at the start of any offensive, so you probably will receive just such an order. They are very comprehensive and complete, but everything is based on "D" day and "H" hour which, you are told, will be announced later." [14]

Although the above quote comes from the experience of the First World War it could just as well have been a comment at a recent rotation at the NTC. Something more than excellence in individual staff skills is required. It is fair to submit that the US Army and Marine Corps has not institutionalized a method to train combat staffs to their full potential. Training in the use of a rapid decision-making command-staff process is particularly weak. Staffs have particular difficulties in preparing for the NTC in their "home station" training environment. Since combat staffs will seldom experience more than one NTC rotation in their tour of duty on a particular staff, "home station" training techniques become critical.

An important first step to developing a superior staff is for the staff trainer to know how to use the staff training tools that are available to him. The diagram below depicts a list of general "Command-Staff Training Techniques." These techniques are arrayed in order, from left to right, according to their degree of tactical realism and their degree of time, effort and

cost. Techniques on the left side of the spectrum are easier to plan, prepare and execute, but offer less realism and possible benefit. Techniques on the right side of the spectrum offer the most realism and the most potential benefit but are too difficult and costly to conduct in the frequency needed to train a superior staff.

Obviously, a balance must be reached by the staff trainer. In order for the US Army and Marine Corps to institutionalize excellence in their command-staff process a staff trainer must conduct frequent staff training. Commanders, chiefs of staff and executive officers should select from the staff training techniques shown below and conduct command-staff training at "home station."




## Toward a "Competitive" Staff Training Philosophy

The key to the success of the NTC training concept is in the use of a living, determined enemy. The Opposing Forces (OPFOR) is the secret to the NTC's effectiveness. The rotational units train against the OPFOR and learn

from the competition. The OPFOR becomes the teacher. The Blue Force learns from the enemy. Beating the OPFOR becomes the training goal. The excitement and challenges of the competition, make the learning interactive and increase the level of enthusiasm. This kind of competition is exactly what is lacking from most command-staff process training.

First, a staff must learn the basics of the command-staff process. Once this is accomplished the commander and staff should exercise their capabilities in a series of interactive wargames. These wargames should become increasingly more difficult and challenging as the commander and staff improve. These exercises can be map exercises , command post exercises, computer assisted command post exercises or staff rides. The key is that the staffs planning, preparing and execution actions are tested in "real-time," against a determined and trained enemy.

The US Army has recognized the need for a competitive staff training philosophy and has developed a trained computer simulation OPFOR to fight US Army units. This trained enemy is represented in Army computer simulations such as the Battle Command Training Program (BCTP) by a group of trained computer technicians and tacticians called the World Class OPFOR. The World Class OPFOR provides a thinking, determined, human opponent to fight against US Army Division commanders and their staffs in sophisticated computer wargames. Tactical staffs, at brigade and battalion, also receive some training from the BCTP program. BCTP, and its brigade and battalion equivalent Brigade/Battalion System (BBS), is an exercise that occurs in US Army units only once every two years. This frequency has generally not been sufficient to produce the excellence required to execute a modern command-staff process. [15]

Simulations should seek to place the commander and staff in the exact setting they would experience during the planning, preparing and execution phases of an actual battle. The staff should plan, prepare and execute against a thinking, determined enemy. The use of an opponent is the key to effective staff training in the rapid decision-making process.

In the near future, technology will unlock the means to train staffs more effectively. Software that can be applied on personnel computers and the new technology of "virtual reality" will be applied to staff training. Future simulation systems promise to dramatically increase the effectiveness of this approach by reducing preparation time and increasing group interactive learning. The major drawback in the near term is that these simulations are becoming increasingly expensive and may not be available for every unit for the frequency required.

Until command-staff training technologies improve, battalion and brigade staffs can use manual methods to practice the command-staff process. The most critical aspect of this training is to plan, prepare and execute the command-staff training in real-time and against a determined opponent. This can be replicated, with minimal effort, by using manual wargames or dedicated, trained umpires.

A simple staff training competition is easy to develop and does not take sophisticated computer assistance. One method, that can be conducted anywhere by any tactical staff, involves a combination of a wargame and a tactical discussion. An operations order and overlay is provided to a subordinate staff. An umpire develops a critical events list. This critical events list keeps the wargame on focus, as the umpire watches the planning and preparation phase of the orders drill. An enemy staff prepares the opposing force plan, using the enemy's doctrine, organization and tactics. Once the staffs have issued their orders to the umpire a wargame is conducted on a game board, map or sand table. Graphic symbols, arranged to the exact scale of the game board, map or terrain model, are used to help the staffs visualize the correct spatial relationships. Exact planning factors for ranges and movement rates are employed and enforced by the umpire. The umpire predicts the outcome of the battle, analyzing the force ratios and using his best judgement. A simple attrition table and dice are used to determine the outcome of engagements. A recorder keeps track of the action for the After Action Review (AAR).

The role of the umpire in this simple simulation is critical. The umpire keeps the war game on track, avoid distractions and ensures that one avenue is worked at a time from beginning to completion. He judges the actions of combat support and combat service support units. To do this the umpire must know the correct planning factors (movement rates, ranges, supply constraints) involved.

This competitive concept should also be considered for command and staff college instruction. Too much instruction at the staff colleges involves the mechanics of making a "perfect plan." Instead of practicing the writing of long detailed orders, and spending a year in a "gentlemen's course" the staff sections should be practicing a rapid decision-making process that produces oral and overlay orders. Students should be organized into staffs, each with a functional specialty, upon entering the staff school. These staffs should then work together to learn the basics of the command-staff process and then graduate into a tactical competition against other staff sections. A series of simple wargames, executed in real-time, faced with the pressures of experiencing victory and defeat, would produce a series of staffs trained in fighting battles.

The more realistic the competitions, the better the training. Although a simple manual wargame could be used, computer simulations could easily be adapted. Staff groups would fight one battle after the other, planning, preparing and executing their plans. Winning staff groups would advance to oppose other winning staffs. Real time exercises would teach the lessons of rapid decision-making provide a forum to experiment with new techniques. Group cohesion and cooperation, critical elements to any staff, would become apparent assets. The staff group that would eventually come out on top would become the honor graduates of the course.

## Summary

No one would seriously consider training a football team on a basketball court. Military staff training, however, often resembles this bizarre situation. Staffs train at "home station" by developing plans in a classroom, without time constraints. Seldom do they practice in "real-time," in a field environment, or against a living, thinking and determined opponent. Staffs must learn the techniques of rapid decision-making before they deploy for the NTC. Unlike the long-war situations of the past, there may not be time to develop superior staffs in future conflicts.

In combat, commanders will have to generate a rapid command-staff process. The rapid decision-making command-staff process requires a highly trained and effective staff. Organizational and operational excellence will require improvements on current techniques. Staff training methods should be focussed in three traditional techniques of staff training; tactical discussions , staff rides and wargames. These techniques can be greatly enhanced through simulation devices, but can also be accomplished manually, without the support of expensive computer software. The lack of sophisticated gadgets should not be used as an alibi for effective staff training.

What is the best command-staff methods are available today to hep create superior staffs capable of executing rapid decision-making? The key to successful staff training is not in one particular technique. It resides in a philosophy that recognizes that war is a two-sided, competitive, no-holds-barred contest. Staff training must be interactive and competitive in order to meet these demands. Staff training must employ techniques of wargaming to produce the conditions to fully challenge the command-staff process. The real education will come in the game. A competitive staff training approach is the surest way to develop a superior staff capable of executing a rapid decision-making command-staff process.

# End Notes Chapter 5

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2 Colonel (ret) Trevor N. Depuy, A Genius of War: The German Army and General Staff, 1807-1945, (Englewood Cliffs New Jersey: Prentice-Hall Inc., 1977), p. 25.

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5 Thomas B. Allen, War Games: The Secret World of the Creators, Players, and Policy Makers Rehearsing World War III Today, (New York: Berkley Books, 1987), p. 110.

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8 Ibid., p. 113.

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11 Major General Gorman, DCST, TRADOC Concept Paper, "Toward National Training Centers (NTC) for the US Army, " 23 May 1977.

12 Ibid., p. 237.

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14 LTC Thomas Shipley, S2 In Action, (Harrisburg, Pa: The Military Service Publishing Company, 1940), p. 70.

15 Authors notes from observing over 192 battles of brigade and battalion sized units, from 1990-1992, at the National Training Center (NTC) at Fort Irwin California.

# Chapter 6

# Conclusion

*In every case, however, the only purpose of command and control is to implement the commander's will in pursuit of the unit's objective The system must be reliable. secure, fast, and durable. It must collect, analyze, and present information rapidly. It must communicate orders, coordinate support, and provide direction to the force in spite of enemy interference, destruction of command posts, or loss and replacement of comanders. The ultimate measure of command and control effectiveness is whether the force functions more effectively and more quickly then the enemy.*[1] *FM 100-5*

The collapse of the Warsaw Pact and Soviet Union did not guarantee regional stability and world peace. Quite possibly this dramatic shift in the balance of power may result in increased instability as the world shifts to a multi-polar orientation. Faced with this situation US forces may find themselves involved in a regional conflict, initially outnumbered and outgunned.

The US Army and Marine Corps have the mission to deploy on short notice to project US ground combat power anywhere in the world. To further complicate the issue, the United States Army and Marine Corps are reducing force structure to meet the demands of the new political realities of the 1990s. Both services hope to be smaller and more capable at the end of this down-sizing. If combat occurs, both services will have to fight and win with smaller forces. It goes without saying that smaller forces will have to be more capable and will have to display a tremendous amount of agility.

An essential part of a military force's combat power is generated by its command-staff process. An effective command-staff process, that is capable of deciding and acting faster than the enemy, can develop a relative combat power advantage over the opponent. Commanders and staffs msut be trained in the full range of decision-making options. Commanders must be prepared to choose the right decision making strategy for each situation. To accomplish this, the commander can choose between analytical and recognitional decision-making techniques.

## Decision-Making Options

Analytical Decision-Making is a technique based upon the review and comparison of available information. The best decision is determined by a comparison of critical battlefield factors. This technique emphasizes the evaluation of sets of options. This technique is presented in US Army literature as the Command Estimate. Analytical decision-making takes a long time to conduct properly. For battalion and brigade staffs, analytical decision-making will probably be used only for the initial order of a war.

Recognitional Decision Making , on the other hand, is a technique based upon the intuitive knowledge and experience of the decision maker. This technique suggests quick mental jumps at the solution to a problem and the war-gaming of this solution. Recognitional decision-making occurs when a commander recognizes a situation as typical, recognizes the typical reaction to the situation, evaluates the reaction for feasibility, and then either implements it, improves it, or rejects it for another reaction. [2]

In the recognitional decision-making process, the decsion-maker recognizes a pattern and applies an appropriate counter-pattern. The nature of combat forces commanders and staffs to make decisions using a relatively small number of variables. Commanders do not have time to consider every possible variable and confer with his staff on each possible response. They must develop ques, critical enemy patterns, that key their actions.

For a brigade commander at the NTC, for instance, the decision to employ the brigade reserve may be keyed by the firing of the OPFOR's persistent chemical agent or a report of the location and activity of the enemy's advance guard formation. General Balk's and General Clarke's command-staff process employed this same kind of recognitional decision-making. The requirement to generate relative combat power faster than their opponents caused them to employ a rapid decision-making command-staff process. The commander's staff supported him by anticipating the critical decisions that would take place during the battle and tracking those few, key variable that were required to make the decision with a higher degree of certainty.

The rapid decision-making command-staff process is represented in US Army literature by the Abbreviated Command Estimate and the Troop Leading Procedures. In the Abbreviated Command Estimate, the commander decides the course of action early in the process and his staff implements his decision. In the troop leading procedures, the commander makes the decisions and issues orders because his staff is either not available or incapacitated by enemy action. In both cases, the commander chooses a technique that meets the requirements of the situation and the time available.

The concept of a rapid decision-making command-staff process does not mean a lack of specificity in orders. Orders must be detailed as necessary to establish requirements for coordination, task organization, and support. The commander's intent must be stated clearly and concisely in all orders,

whether written (paragraph 3a) or oral. However, no more constraints than necessary should be imposed in assigning a mission. This means that the least restrictive measures should be imposed that will achieve the desired results. Provided that missions to subordinates are consistent with the organization, resources, and authority given to them, they must be allowed the latitude to execute those missions as the estimate of the situation requires, consistent with the commander's original intent.

A decentralized command and control system, supported by a trained staff that aids the commander in gathering critical decision information, is the system most suited to exploit the realities of chaotic nature of tactical combat. This decentralization is not new to the American military and has been proposed in both the Army's FM 100-5 Operations and the Marine Corps FMFM 1 Warfighting. It remains to be proven whether this command style, and the necessary trained staff officers required to make the system work, has been institutionalized in either the United States Army or Marine Corps.

## Competitive Staff Training Approach

In addition, officers must be educated in a common understanding of the command-staff process and a common military language. "The seriousness of the problem can be understood when we realize that in dictionaries English words can have as many as twenty-eight different meanings!"[3] George S. Patton, Jr emphasized this same need when he said: "Untutored courage is useless in the face of educated bullets."[4] Staff officers must be tutored in the techniques of rapid decision-making to meet the demands of modern tactical combat.

The institutionalization of a rapid decision-making command-staff process demands changes in the way staffs are currently being trained. Changes must also be made in how individual officers are educated in the military school system.

Everything in war is based upon the enemy. Staffs must be trained using available techniques in competitive, real-time, interactive exercises. The latest computerized simulations can assist the process, but the lack of sophisticated hardware is no excuse for the lack of effective staff training. Staffs should be manned by the best officers available and steps should be taken to provide a maximum of cohesion. Serious consideration should be given for assigning staffs to commanders for the duration of the commander's tour of command. A competitive staff training approach is the surest way to develop a superior staff capable of executing a rapid decision-making command-staff process.

## Staff Personnel Policies

The personnel assignment policies in the US Army and Marine Corps directly oppose the effort to create high-performing, cohesive staffs. The current personnel policy quickly rotates officers through tactical staffs in order

to prepare them for the more valued assignment of command. Few staff officers hold their positions for more than a year. Fewer still have any experience in thier assigned duties prior to taking the job. Due to this situation staff officers frequently rotate through various staff positions and seldom become experts at tactical staff procedures. The personnel assignment policy produces a staff system that is filled with officers learning their jobs.

Staff training, therefore, must be frequent and must replicate the conditions of combat as closely as possible. It is not enough to experience the once a year full scale maneuver at the NTC or participate in a massive computer simulated CPX to be labeled a trained staff. Staff trainers have many tools at their disposal to accomplish this. Staff trainers must employ real-time staff training exercises that pit their efforts against a determine and thinking opponent.

Improved officer education, competitive staff training and better staff personnel assignment policies could well be the decisive edge necessary to fight outnumbered and win on future battlefields. Today, rapid decision-making techniques are largely the result of the whims of local commanders and the development of local "shop cultures." To reduce this confusion, rapid decision-making techniques should be studied and examined as a critical part of the command-staff techniques of tactical formations. "A confused army leads to another's victory." [5]

The ability to act faster than the enemy, to gain a relative speed advantage over an opponent, is largely dependent upon rapid and correctly-timed decisions. Rapid decision-making is a historically proven technique. Rapid decision-making is a requirement in tactical combat and is not new. Commanders have used a rapid decision-making command-staff process in the past to throw this confusion squarely on the enemy and thus develop a relative combat power advantage that leads to victory.

# End Notes Chapter 6

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# Annex A

## The "Command Estimate"

Since 1909, the US Army's warfighting, decision-making process has been the estimate of the situation. During this time the estimate of the situation format has helped the commander and staff by providing a logical and analytical method for processing information and to determine the most suitable course of action to accomplish a given mission.

The estimate of the situation, which the Army now calls the command estimate, depicts the dynamics of decision making to more accurately portray commander and staff interaction. In this process, the commander and staff follow a detailed blueprint of actions to derive the optimum solution. This process works extremely well during times when data is too abstract to recognize a discernable pattern, when justification is a prime requirement of the final decision, when the goal of the decision making process is a single optimized solution, and when there is plenty of time to analyze all the facets that impact on the solution to the tactical problem.

The estimate process requires interaction between the commander and his staff. The amount and nature of interaction depend on how much the commander trust his staff. He is responsible for training them to properly support him. Moreover, the commander is responsible for his own training so he can continue to adequately guide his staff.

Staff members help the commander reach decisions by preparing staff estimates in their own areas of responsibility.
The staff must analyze how factors influence mission accomplishment; confirm that their information is critical, relevant, and accurate; and prepare and present their estimates.

Staff estimates are integral to the command-estimate process. They also form the basis for staff annexes to orders and plans. There are several types of staff estimates. The personnel estimate analyzes personnel and administration factors on soldier - and unit-effectiveness during the mission. The intelligence estimate analyzes the enemy situation and the characteristics of the area of operations in terms of how they can affect the mission. The operation (commander's) estimate analyzes all of the factors which could affect the mission to determine all reasonable courses of action and their effect on friendly forces. The logistics estimate analyzes logistics factors affecting mission accomplishment. The civil-military operations (CMO) estimate analyzes the influence of CMO factors on mission accomplishment. Other staff estimates may also be required which each staff officer makes in relation to the situation and his area of responsibility. A staff officer may also make such estimates when performing dual roles, such as being both a

subordinate-unit commander and a special staff officer. In addition, he may make an estimate of specific subject within his area of responsibility (as when the operations officer makes separate estimates on deception, operations security, or psychological operations).

The information the commander gains from all staff estimates results in a composite estimate of his command. From this information, he can decide how best to accomplish the mission.

The Command Estimate is the primary guide for staffs to conduct the command-staff process. The purpose of the Command Estimate Process is to focus the commander and his staff to decide and issue orders in the shortest possible time. The goal of the process is to achieve both agility and synchronization through the planning process.

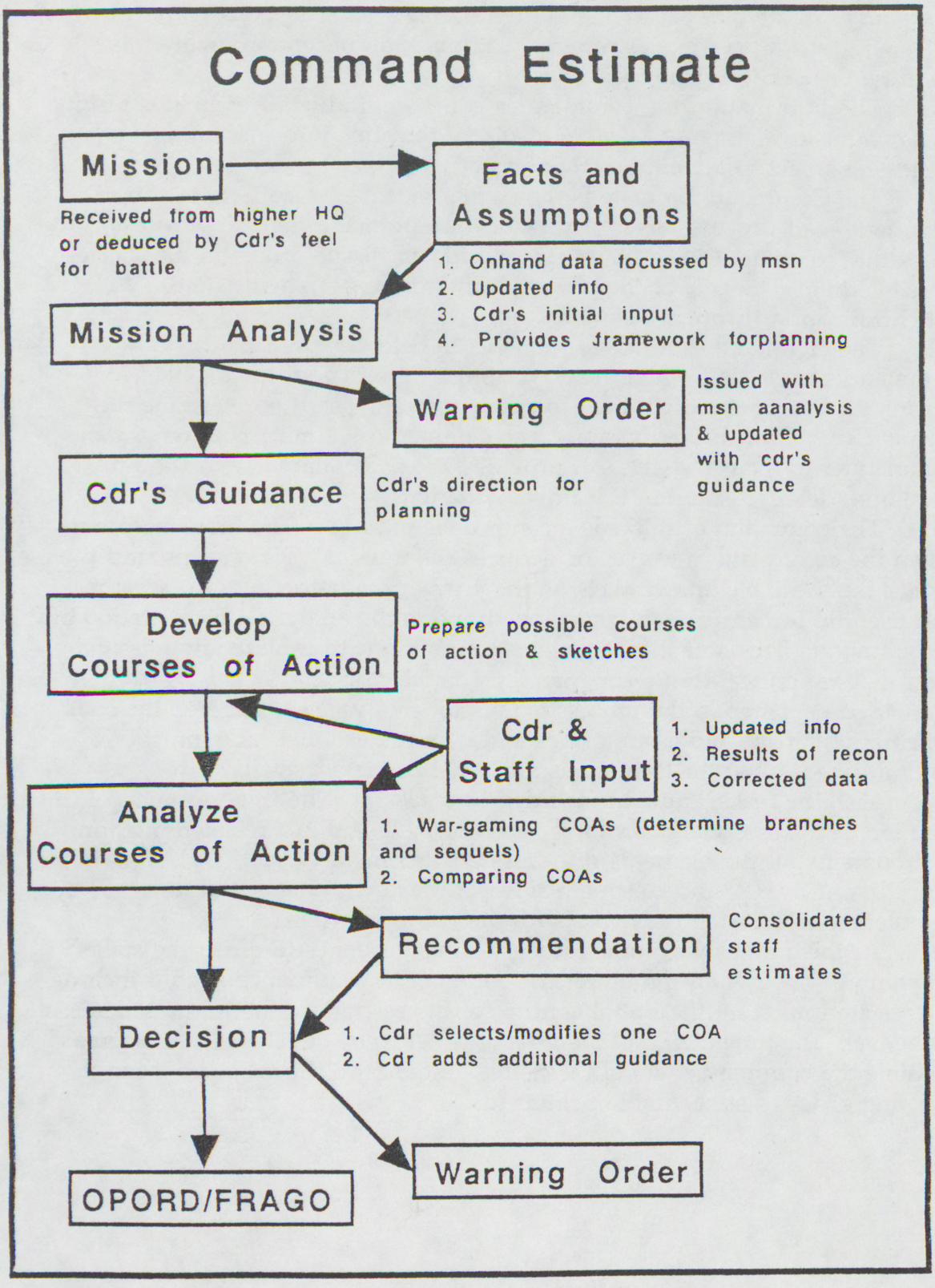
The command estimate format shown below is used by the commander and staff when there is enough time to conduct detailed planning. In this situation, the estimate process is used to determine the means to accomplish the mission. The Command Estimate is a tool for the commander to focus his staff. It provides a logical, analytical method to develop a detailed solution to combat situations.

The command estimate is a continuous process. The first step occurs when the commander receives or deduces the mission. He and his staff then gather the available known facts on the enemy, the battlefield, the weather and friendly forces. This information supports the analytical presentation of the situation. The staff then develops assumptions to replace any missing facts that are critical to the commander's decision.

The next step in the process is mission analysis. In this step the staff organizes the facts and assumptions and determines what tasks must be accomplished, what the limitations are, what assets are available to accomplish the tasks, and what the degree of risk is. The final products of this step are: 1) the essential tasks to be accomplished, and 2) a restated mission that contains all the elements of a mission statement (WHO, WHAT, WHEN, WHERE and WHY) and a sequential list of the key and essential tasks. The completion of this step is the basis for the warning order.

At this point the commander issues his guidance to direct the staff's planning effort. As a minimum the commander's guidance should include the restated mission, the initial concept of the operation, the initial scheme of maneuver, the time plan and the type of order to be developed. As soon as possible the commander should issue his guidance to the staff and send a warning order to subordinate commands.

# Command Estimate



With the commander's guidance the staff then begins to develop courses of action. A course of action is a possible plan that will accomplish the mission. To develop the course of action, the staff completes the following steps:

1. Analyze relative combat power.
2. Array initial forces.
3. Develop the scheme of maneuver.
4. Determine command and control means and control measures.
5. Prepare course of action statement and sketch.

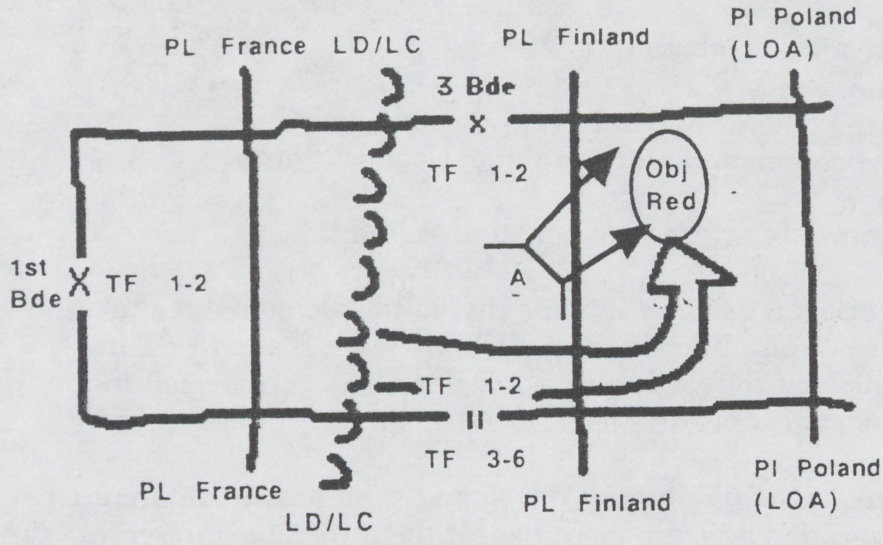
A course of action should include the all the elements of a mission statement except WHO. The WHAT, WHEN, WHERE and WHY are determined by the staff for each course of action. The WHO is left to the commander. The staff, of course, can offer recommendations to the commander.

Each course of action must be developed significantly different from any other. These differences are identified through the use of reserves, task organization, designation of the main effort, scheme of maneuver and defeat mechanism (that singular action that ensures the success of the course of action; for example, reserves striking the enemy second echelon or the use of army aviation to attack the enemy's center of gravity). [1]

A useful technique to present courses of action to the commander for his decision is to develop course of action sketches. Each course off action sketch consists of a sketch with a short explanation of how the operation will occur. The statement and sketch must cover WHAT, WHEN, WHERE, HOW, and WHY. It must clearly and briefly state the purpose of the operation, the main effort or the main attack, the scheme of maneuver, and included the defeat mechanism (what chain of events will trigger the enemy's defeat). Each course of action sketch should include Unit and subordinate unit boundaries and control measures such as phase lines, ground axis/or air axes of advance, zones of attack or defense sectors, assembly areas, strongpoints, battle positions, engagement areas, objectives, FEBA/LD, fire control measures, and the main effort (defense) or main attack (offense).

The course of action sketch should provide a clear picture of HOW the unit will defeat the enemy. These events are addressed by the elements of the battlefield framework as explained in FM 100-5, Operations. An example of a course of action sketch for a Task Force attack in zone is shown in Figure 6.

## Course of Action Sketch for a Task Force




TF 1-2 Attacks D-day, H-hour, to penetrate enemy defenses and seize key terrain in order to block the withdraw of the enemy forces in zone.

Deep Operation: Brigade will attack with CAS and FA fires to pin enemy reserves in our zone.

Recon & Security: The Scout Platoon will conduct a route reconnaissance of the southern portion of the zone to determine the line of least resistance (fewest enemy defending).

Main Attack: The main attack will occur in the south and will seize Objective Red from south to north. One tank company will provide support fire from attack by fire position Alpha.

Reserve: One platoon will be designated as Task Force Reserve.

Rear: Company/Teams are responsible for local security. If a level III threat attacks the Bde rear we continue the attack and be prepared to go on the defense on order.

After the staff develops courses of action the commander and staff review the situation and the plan and update the the courses of action as necessary. The results of reconnaissance and corrected friendly information are added to the plan.

After war-gaming each course of action, the results of the war-gaming, and a recommended course of action, are presented to the commander for his decision. After the commander makes his decision, an additional warning order is issued and, finally, the operations order.

War-gaming is a mental process of visualizing each step of the battle, considering friendly and enemy actions and counteractions. He starts the war-gaming by looking at the enemy in detail. "Where will the enemy attack from?" "Where do I want to kill him?" These are the type of questions that

are asked based upon the enemy's capabilities. A thorough understanding of the enemy, his tactics, organization, and weapons capabilities is essential to developing a tentative plan.

The Intelligence Preparation of the Battlefield (IPB) plays an important part in war-gaming. The IPB is a crucial step in developing an effective combat order. Through IPB, the commander develops a clear picture of the battlefield, the courses of action available to the enemy commander, enemy actions that disclose which course of action the enemy will adopt and to establish decision points to key friendly actions. These decision points require a specified action to occur (a counterattack, or the firing of an artillery target for instance) on order or as directed in the operations order.

In the complex real-world of combat, the fog of war will make most decisions beyond the capability of analyses. This forces many decisions to be reached through judgements based on incomplete optimizations or sub-optimizations. Tremendous effort has been exerted to develop war gaming aids for commanders in the field.

The concept of trying to predict the outcome of battle by some process or war game is as old as warfare itself. The Soviet Army spends detailed effort in using nomograms and charts to predict the outcome of battle based on their sophisticated system of "correlation of forces." The United States Army uses a similar, yet much cruder, "force ratio" system to developing its courses of action and aid in war gaming the outcome of combat.

The difference is the American and Soviet view is that the Soviets consider their "correlation of forces" equations as a tool to determine how much force is needed to provide the odds that will support success. A Soviet commander is required to produce the appropriate force ratio of 3.0 - 4.0 to 1 in motorized rifle battalions, 3.0 - 4.0 to 1 in tanks and self propelled artillery, 3.0 - 5.0 to 1 in artillery, and a 2.0 to 1 in aircraft before he is authorized conduct a main attack. 16 p. 93 Tactics III

The U.S officer uses force ratios, if he bothers to calculate them at all, only as a guide. He is not required to describe the force ratio, other than a description of the enemy forces by the intelligence officer, anywhere in the order. A rapid, accurate determination of the ratio of enemy to friendly forces can be a significant decision aid to the commander. There is little need to plan an attack if the force ratio is 10 to 1 against the attacker. The development of rugged, battlefield computers to assist in this type of planning will be the norm in the future.

But it is possible to employ effective war gaming without the use of computers. A method that was successfully used by the Wehrmacht and the Soviet Army during World War II involved using one of the staffs best men in the role of enemy commander. This staff officer was tasked with developing enemy courses of action and using these to compete against the friendly staff's plan. By testing out individual decisions and playing out possible versions of combat activities on maps or terrain models, the relative success of friendly courses of actions could be effectively tested.

The staff then compares and chooses a course of action. The best course of action is often that which offers the greatest flexibility during the execution of the mission. To maintain maximum flexibility, the commander should develop branch plans. By developing branch plans as a part of the initial planning process the commander creates the agility necessary to operate in an environment of limited information.

# End Notes Annex A

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1 ST 100-9, p. 3-1.

# Annex B

# The Abbreviated Command Estimate

The goal of the Command Estimate is the completion of a detailed, written order. It is very thorough and can produce excellent results if conducted properly. It is also very time consuming . When there is not enough time to thoroughly evaluate more than one course of action, the sequence of events of the Command Estimate are often ignored or abridged. In the perpetual race against time to produce orders and plans quickly, brigade and battalion staffs are hard-pressed to employ the Command Estimate during tactical operations.

The Abbreviated Command Estimate, or ACE, is a recognitional decision making strategy. This recognitional decision making approach represents a common sense effort to accomplish time-pressured tactical planning. The recognitional decision making strategy is a technique for making decisions based upon the intuitive knowledge or experience of the decision maker. This technique emphasizes the quick mental jumps at the solution to a problem and the war-gaming of this solution. They occur when a decision maker recognizes a situation as typical, recognizes the typical reaction to the situation, evaluates the reaction for feasibility, and then either implements it, improves it, or rejects it for another reaction. [1]

In the Abbreviated Process the commander issues specific guidance to his staff and determines the course of action. The staff then channels its energies into implementing the commander's decision. The abbreviated estimate process is designed to be used by commanders when time is not available to complete the full command estimate sequence. This process aims at producing a workable solution, fast.

The abbreviated command estimate cuts out the formal briefing procedures because the commander makes the decision up-front. The commander tells his staff exactly WHAT he wants; the staff works out the details of the HOW. The staff is then free to work out the essential tasks that must be accomplished. Abbreviating the command estimate depends on well-trained staff officers who are tactically and technically proficient and who understand their role in the rapid decision-making process.

The Abbreviated Command Estimate differs from the Command estimate in three significant ways: The commander recognizes the course of action to take after assessing the situation and makes a decision; The staff implements the commanders decision rather than generating competing

courses of action; The staff develops at least one branch plan to build flexibility into the plan.

**The commander is the key to the Abbreviated Process. He must be available to provide guidance and direction and to make on-the-spot decisions as needed. The commander's full participation in the process is the most important ingredient of success.**

In the abbreviated process, the decision may actually be the cumulative result of the commander's guidance and decisions as he participates in the process. His guidance, the course of action he selects, the war-gaming results he considers, the risks he will accept, and developments in the current operation shape his decisions. If trained and experienced officers perform the process, the end result will be fully adequate.

Using these abbreviated command-estimate techniques is not without risk. By preemptively approving a course of action, the commander may fail to consider a better course. By failing to record results in detail, he may overlook key insights which would improve the resulting OPORD.

Risk can be reduced through the use of branch plans and reconnaissance pull tactics. The commander must balance these risk against the additional time he can provide to subordinate commanders for their planning and preparation. The axiom "better is the enemy of good enough" applies in this case. There are no perfect plans.

**Plans are merely a basis for changes.**

If the basis is solid, the changes (which are inevitable in war) will be easy to apply.

## Key Points

a. The abbreviated staff estimate assumes that the best course of action is usually that which **offers the greatest flexibility during the execution of the plan.**

b. **The commander decides the course of action early.** This course of action should always involve several axis of advance (offense) or several movements to alternate defensive positions (defense). The alternate plans that flow from the course of action that the commander selects are called branch plans. The decision to execute a particular branch plan is based on the enemy situation shortly before, or during, the execution of the mission.

c. The commander's guidance to the staff is critical. This guidance should consist of the restated mission, the initial concept of the operation, the initial scheme of maneuver, a time plan, the rehearsal technique and the type of order.

d. The staff implements the commander's decision rather than developing alternate courses of action to debate over. The staff creates branch plans that can be executed on-order once the enemy situation becomes clear.

e. Branch plans are used to execute the commander's decision based upon the latest enemy situation. The branch plans are driven by reconnaissance. Reconnaissance information confirms the commander's decisions. Branch plans are also central to effective deception planning.

f. The staff develops the Decision Support Template (DST) to focus the commander's decision to execute one or the other branch plan. The commander's PIR (Priority Intelligence Requirements) are the critical information needed to make decisions about which branch plan to execute. The PIR are described in the DST.

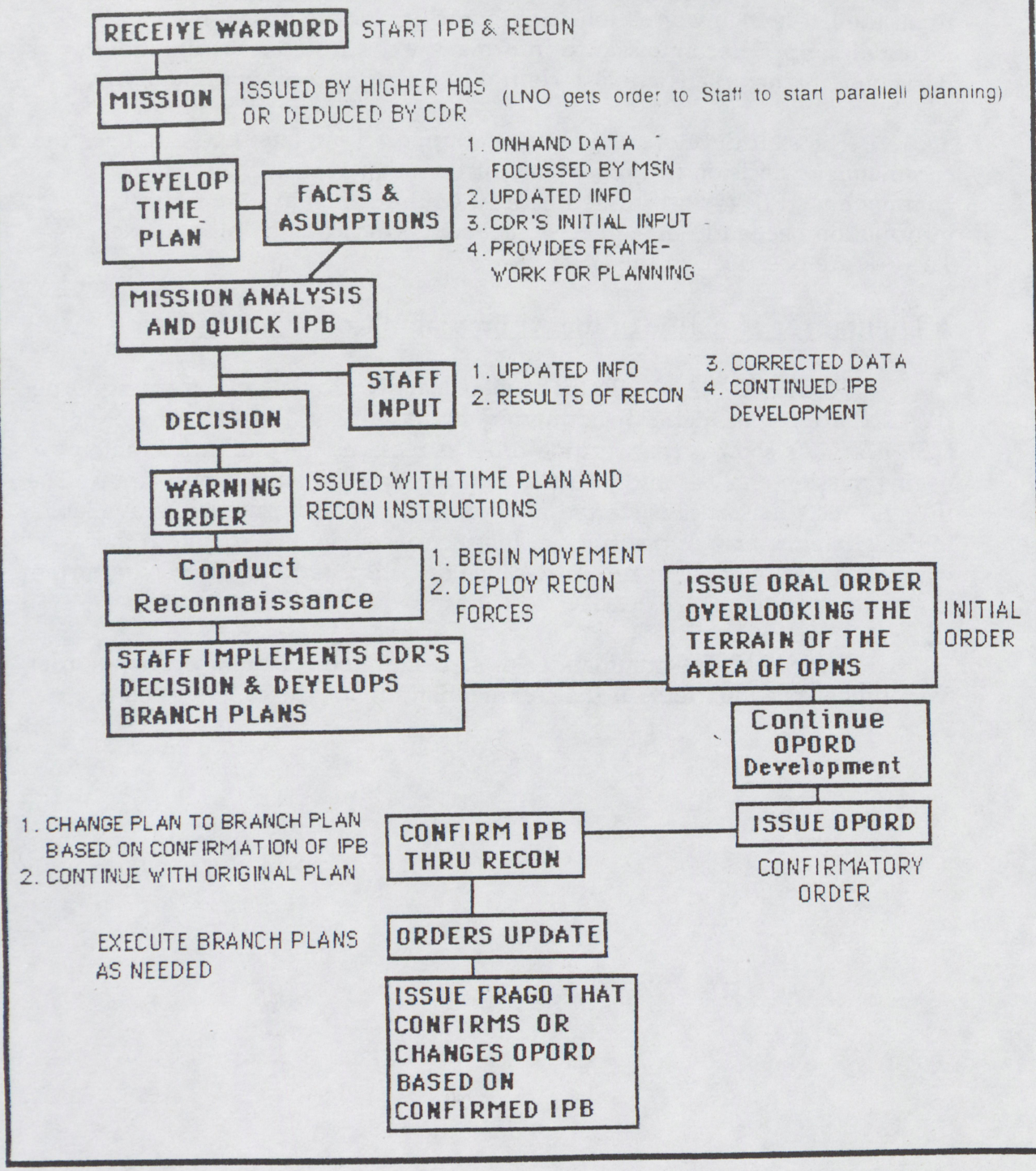
## A Diagram & Timeline of the Abbreviated Command Estimate

a. **RECEIVE WARNORD:** The staff usually receives the Warning Order (WARNORD) from higher headquarters by messenger, FM radio, MCS or MSE FAX. As soon as the warning order is received the staff immediately begins mission analysis and issues a warning order to subordinate units. The IPB and reconnaissance is started as soon as enough information is available to designate the area of operations. Instructions should be issued in the warning order to conduct reconnaissance of critical terrain features important to future operations.

b. **MISSION:** The commander or staff may receive the operations order from higher headquarters. If the commander attends the orders brief, a

# Abbreviated Command Estimate

(Modified for Recognitional Decision Making)



liaison officer should accompany him and FAX or transport the order to the command post as soon as possible. Every effort must be made to get the order to the unit planners in the minimum of time. As soon as the operations order is received, mission analysis is continued. A draft of the "Commander's Guidance" is created by the XO, S3 or available staff planner to assist the commander upon his return from the formal operations order. This guidance should consist of the restated mission, the initial concept of the operation, the initial scheme of maneuver, a time plan, the rehearsal technique and the type of order. A fill-in-the-blank form helps the staff to accomplish this task quickly.

c. **FACTS & ASSUMPTIONS:** Staff officers develop the facts and assumptions for the assigned mission as soon as they receive the operations order from higher headquarters. When the commander returns from the formal order issue, at the very beginning of the abbreviated process, he must specify any critical facts and assumptions that he wants the staff to consider.

d. **MISSION ANALYSIS:** The commander performs his own mission analysis, during and after the formal operations order issue from higher headquarters. As soon as he returns to his planning staff the staff updates him on the IPB and mission analysis that they have conducted. The commander quickly approves or changes their restated mission for his organization through his understanding of his superiors intent (perhaps received face-to-face), his study of the higher headquarters OPORD, his knowledge of the situation, and his "feel" for the coming battle.

e. **COMMANDERS GUIDANCE:** The commander gives the staff specific guidance on the course of action they will develop to accomplish the mission. The commander employs his XO, S3, and S2 to quickly develop and mentally war game a workable course of action. This small planning group uses all existing information (to include reports or overlays of enemy, analysis of combat power, and initial array of friendly forces). He reviews and completes the draft commanders guidance. and makes the decision. The commander's guidance focuses the staff on one course of action with one or two (time permitting) branch plans. An example of a Brigade Actions time line is shown below:

**X=WARNORD TIME Y=OPORD Time Z=Cdr Rtn Time**

| Time | Action | Responsibility |
|---|---|---|
| X Hr | Warning Order Received, begin Mission Analysis and draft commander's guidance. | Main CP Battle Cpt |
| | S2 Section begins Hasty IPB (terrain analysis, identification of avenues of approach, key terrain and situation template. | S2 Battle Officer |
| X+15 min | Staff Issues Warnord to all Subordinate Units Main CP Battle Cpt acquires latest combat power status, maintenance status, personnel status and fuel status from all units. | Main CP Battle Cpt |
| X+20 min | S2 Section completes Hasty IPB. Approved by Main CP Battle Cpt. | Main CP Batttle Cpt |
| Y Hr | Operations Order Received<br>Continue with IPB and Mission analysis and draft commander's guidance. | Main CP Batttle Cpt<br>S3 Plans Officer |
| Y+20 min | Compete draft Cdr's guidance. Complete up-to-date status report of all units. | |
| Z Hr | Commander returns to Main CP.<br>Conduct staff huddle with commander. Main CP Battle Cpt briefs current status. Review draft commander's guidance (Cdr, XO, S3,S2). | Cdr,XO,S3,S2<br>FSCOORD or FSO,<br>S3 Plans Officer &<br>Main CP Battle Cpt |
| Z+30 min | Approve commander's guidance.<br>Commander decides base plan, branch plan and spends additional time with FSCOORD or FSO. | Cdr, XO,S2,S3<br>FSCOORD or FSO,<br>S3 Plans Officer &<br>Main CP Battle Cpt |
| Z+40 min | XO, S3, S3 Plans officer & S2 implement the commander's decision and produce Overlay Operations Order. S3 (Base Plan), S3 Plans Officer (Branch Plan) when possible. | Entire Battle staff in two separate planning teams. |
| Z+3hr, 30 min | Overlay Order, with a base plan and at least one branch plan complete. | Entire Battle Staff |

Total Contiguous time = 4 hrs 10 minutes

Branch plans are are integral part of the completed order. "Actions are taken to compensate for any disadvantage associated with the chosen course of action and contingency plans are fully developed." [2] These branch plans build flexibility into the selected course of action and allow the commander to act decisively to enemy weaknesses as those weaknesses are discovered on the battlefield.

The Israeli Army has a saying which emphasizes their belief in flexibility, **"plans are merely a basis for changes."** [3] The Israeli's generally plan several branch plans and put these alternative plans on their overlays. If the situation changes, they will still achieve their commanders original intent by radioing a code word to execute one of the branch plans. This technique greatly increases agility. Branch plans allow a commander to act on the latest intelligence. Branch plans permit flexibility and the opportunity to get inside the enemy's decision cycle. Anticipating the enemy's next move, branch plans give commander's the leverage to violently execute AirLand Operations doctrine.

An excellent example of the use of branch plans at the tactical level was described in Lieutenant General Charles P. Otstott's article "Battle Rhythm," in the June 1990 edition of Military Review, :

> Because planning did not always go as we predicted it, we developed plays (or branches) for each of the major operations. For instance, we decided on Tuesday evening on the course of action that we would execute on Wednesday night. During Tuesday night, the staff not only created the FRAGO that would be issued to execute the operation Wednesday night, but they also developed plays that spun off the major plan. If our main attack was on the left with the supporting attack on the right, we built a play **[branch plan]** that assumed heavy resistance against the main attack, light resistance against the supporting attack and shifted the main attack to the right to take advantage of success there. The staff developed, in sketch form, anywhere from two to five plays for each major operation. If necessary, we could rapidly convert these sketches to FRAGOs. These were presented to me at the 0600 meeting when I ordered the execution of the operation. I found it valuable to take the sketches of acceptable plays **[branch plans]** with me when I visited the brigade commanders later in the morning. The commanders and I would discuss the main plan and the plays **[branch plans]** so that they clearly understood my intent and the conditions that could trigger a contingency play. Subordinate commanders focus on the primary operation, of course, but they must have at least an idea of the adjustments the commander is considering under certain circumstances. [4]

Branch plans are also central to effective deception planning. Deception operations exploit enemy actions by manipulating multiple friendly courses of action. Deception does not always require a separate feint or ruse to deceive. Multiple friendly courses of action become deceptions in themselves. By presenting the enemy with a pattern that depicts a strong attack in one direction the enemy may respond by moving forces to protect against your attack. Once the enemy moves a quickly executed branch plan that attacks the enemy's newly created weakness may smash through him before he can issue further orders.

The staff supports this process by developing the Decision Support Template. The Decision Support Template to focus the commander's decision to execute one or the other branch plan. It focuses on the enemy, and provides the commander with detailed time distance calculations to make his moves based upon what happens during the execution of the battle. The branch plans are driven by reconnaissance and appear on the Decision Support Template as on-order plans. The commander's PIR (Priority Intelligence Requirements) are focussed on the critical information needed to make decisions about which branch plan to execute.

# End Notes Annex B

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1 Marvin Thordsen, Joseph Galushka, Saul Young, Gary Klein, Christopher Brezovic, Klein Associates Inc., A Knowledge Elicitation Study of Military Planning. (Yellow Springs, Ohio, Dec 87), p. 23.

2 FM 71-2, p. 2-20.

3 Edward Luttwak and Dan Horowitz, The Israeli Army, (New York: Harper and Row Publications, 1975), p. 174.

4 Lieutenant General Charles P. Otstott et al., "Battle Rhythm," Military Review, (Fort Leavenworth: Command and general Staff College, June 1990), p. 19.

# Annex C

## Troop Leading Procedures

The Troop Leading Procedures have been used by generations of U.S. soldiers. The 1942 edition of FM 101-5, the Staff Officers Field Manual, described them as follows: "First, make an estimate of the situation. Then develop a plan to execute the decision. Next, by means of an order, issue instructions. Finally, supervise to ensure that the operation is executed according to plan." [1] Simple and direct, the Troop Leading Procedures were designed for use by a commander, with limited staff. Armed with the Troop Leading Procedures commanders have a logical process to make speedy, battlefield decisions.

**The Troop Leading Procedures are the basis for the command and control process in the United States Army.** These procedures are designed for use by commanders, at the small unit level. The procedures provide a handy guide to plan, coordinate, execute and supervise tactical operations. The Troop Leading Procedures represent an effective method that has a long tradition in the U. S. Army. "Follow the Troop Leading Procedures. They work. Not following these procedures almost always creates problems." [2]

**The troop leading procedures also form the basis for planning and preparation during situations of limited time. This is particularly true for commanders without staffs (company level and below) or when the commander does not have time to assemble his staff.** During such situations, the commander does a rapid estimate with the other members of the tactical command post. A quick radio update is provided and vital information is transmitted over the radio. The commander gathers his leaders together and passes information over the radio or face-to-face on terrain that overlooks the area of operations.

The Troop Leading Procedures are as detailed - or as simple - as time allows. The commander plays the central role in this process. The commander's decisions are based on his analysis of the factors of METT-T and comparisons of feasible courses of action, war-gaming, and his personal judgment. "The Troop Leading Procedures can occur in almost any sequence, with several actions taking place simultaneously. Some actions, such as reconnoiter, may begin early and be repeated as often as required." [3]
The Troop Leading Procedures are shown below.

## Troop Leading Procedures

(For Commanders without Staffs or when the staff is not available due to combat loss or time pressure.)

1. Receive the Mission
2. Issue Warning Order
3. Make a Tentative Plan
    a. Estimate of the Situation
        I. Detailed Mission Analysis
        II. Develop situation and courses of action
            - Enemy Situation (Enemy COAs)
            - Terrain and Weather (OCOKA)
            - Friendly Situation
            - Courses of Action (Friendly)
        III. Analyze Courses of Action (Wargame)
        IV. Compare Courses of Action
        V. Make a Decision

    b. Expand selected course of action into a tentative plan
4. Start Movement
5. Reconnoiter
6. Complete the Plan
7. Issue the Plan
8. Supervise and Refine the Plan

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U.S. Army Field Circular 71-6 Battalion and Brigade Command and Control, dated 1 March 1985, stressed that the "troop leading procedures form the basic framework the commander routinely uses to make timely decisions and supervise the execution of the mission. Staff input during this process will be accomplished as time and the situation permit." [4] The Troop Leading Procedures start with an assigned or perceived mission and end when the mission is accomplished.

The habitual use of the Troop Leading Procedures by commander's without staffs will aid in the implicit understanding of the commander's decision making process. This implicit understanding is very important to speeding up the commander's decision cycle. This is particularly important since a commander without a staff, primarily company commanders and platoon leaders, have very little time to conduct the decision making process. Experience from the National Training Center proves that successful commanders apply these procedures in a systemic fashion that they have trained their units to expect. The determined application of the troop leading procedures reduces "friction" and gains a time advantage.

### A. Receive the Mission

The first step is to receive the mission. The best situation is for the commander to receive his mission in person from his higher commander. If possible, the order is issued overlooking the ground where the action will take place. Often, the mission is received over the radio. If this is impractical, maximum use of maps, sketches and terrain models should be used. No matter how the mission is received, it is critical to get a clear understanding of the higher commander's intent and ***the intent of the next higher commander.*** The time spent in understanding the commander's intent will save hours later in proper execution.

The Commander should now analyze the mission using the factors of METT-T **(Mission, Enemy, Terrain & Weather, Troops and Time available)** as a guide. The first step in this process is to plan the available time. Time is the common factor of the battlefield. To emphasize the importance of time in military operations it is useful to reverse the location of the time analysis in METT-T to T-METT. T-METT is explained as follows:

(1) **Time Available** - Without an initial time plan it is easy to get so involved in the decision making process that the commander losses track of time and wastes precious minutes. Time drives the planning and execution of all military operations. Reverse-planning and ruthless enforcement of the time plan is the key to effective time management. The commander must make the most of his available time by starting reconnaissance units moving as soon as possible and by disseminating as much preliminary information as possible to allow subordinate units to begin planning and preparing.

The backward planning technique starts with the last known action and progresses backwards to the present time. Starting with the time for the crossing of line of departure (offensive battle), or from the time when the defense must be established (defensive battle), the time plan includes the units major tasks. The time of the battle action (crossing the LD or the time to be set, ready to defend), battle update briefing (BUB), orders issue, reconnaissance, and initial movement should be listed in the time plan.

Commanders must enforce the time plan. The goal is to give the subordinate unit enough daylight to conduct planning, reconnaissance and

preparation prior to the start of combat operations. It does more harm than good to present a "perfect" plan to subordinate units if they do not have the time to disseminate their own orders and prepare.

(2) **Mission** - The mission is what the unit is tasked to do. The mission is restated to contain the elements WHO, WHAT, WHERE, WHEN and WHY. The mission from the higher commander is restated in a clear, concise statement of the task to be accomplished.

(3) **Enemy** - Who is the enemy (unit, size, type)? Enemy forces are evaluated by their doctrine (how they fight) and known enemy information (what is out there opposing the friendly force). The goal of this analysis is to determine the enemy's intent and most likely courses of action.

(4) **Terrain & Weather** - The terrain is analyzed for its military application and for its effect friendly and enemy courses of action. The weather is considered for the same reasons.

(5) **Troops** - Units measure their combat power two echelons down. Brigade commanders, therefore, must consider the number of companies he can employ. Battalion commanders consider the number of platoons. The analysis of the friendly forces available is essential to establishing what a unit can do. A tired battalion, reduced to less than three companies, cannot fight in the same fashion as a fully rested, full strength unit.

### B. Issue The Warning Order

Warning Orders are partial orders that are issued to gain time. They are critical to effective parallel planning. Warning Orders get your forces moving in the right direction as you continue to develop the plan. They allow the preparation to get started. A clear warning order saves time and focuses the planning effort. Warning orders are issued over the radio or given orally overlooking the area of operations. Issue the warning order immediately after completing the initial analysis of the mission. Prepare the warning order to inform subordinates as the what the mission is, when it will commence, what preliminary actions are required, and where the order will be issued. Continue to update this warning order and issue further instructions as necessary. A detailed description of Warning Orders is provided in Section 5. b.

### C. Make a Tentative plan

To develop a tentative plan an estimate of the situation must be completed. The estimate of the situation is a basic problem solving tool. Using the best information available, and the results of the METT-T analysis conducted in the "Receive the Mission" step, the planner must develop courses of action. If time is short, one or two courses of action may be all that

is possible. If there is plenty of time, a more deliberate approach is called for. Initial graphic control measures should be developed and each course of action should be talked over with staff or with available subordinate commanders.

### D. Begin Movement

Movement should begin as soon as possible to position the force to execute the mission. In some cases, early movement will be critical if long marches to the area of operations are required. The commander can often order his unit to move while he is receiving orders from the higher commander. The commander may also designate his second in command to move the force, while the commander continues planning and conducts reconnaissance.

### E. Reconnoiter

The commander must focus his reconnaissance to gain the information he needs to execute his branch plans. Nothing can take the place of a good reconnaissance. Reconnaissance demands careful planning. The Commander must issue specific objectives to each of his subordinate leaders and specify a time and a place to meet with designated subordinate leaders to discuss the results of the reconnaissance. The commander will then war-game any changes these revelations have made on the tentative plan. If possible, the commander should choose a site for this meeting that allows the group to observe the terrain over which they will fight.

### F. Complete the Plan

The process of refining the concept continues as more information about the enemy, terrain and weather is gathered by the commander and his staff. The task organization, fire support plans, combat service support, surveillance, communication, command and control measures are finalized. Coordination with adjacent, supporting, and higher headquarters is made.

### G. Issue The Order

The ideal operations order is simple, clear and issued in time for subordinate commanders to fully brief and rehearse their missions with their subordinates. The friction of battle will quickly eat away at available planning time. Ideally, the commander should issue his orders orally. Oral orders are faster. Effectiveness is a matter of practice. Maps, sketches, and overlays are critical to effectively communicating the plan. Even in warfare, a picture is still worth a thousand words.

Oral orders can be issued over the radio or in person. As a minimum, an oral order requires an accurately drawn overlay. Subordinate commanders copy this overlay from their commander's map. Accurate map overlays are essential in synchronizing the movements and actions of the force. Without them, directions given over the radio would be very difficult. If possible, the

commander issues his order from a vantage point overlooking the terrain of the area of the operation. If this is not possible, the commander should use visual aids such as terrain models or sketches to help clearly explain his plan.

After the order is issued, the commander has his subordinate commanders conduct an oral backbrief of the plan. The brief-back is the final check by the commander to ensure that his intent is clearly understood. It also allows the commander to war game possible enemy counter-moves and the actions that counter those moves. Each subordinate commander should listen to each of the brief-backs to assist in synchronizing battle actions. This procedure insures that subordinate commanders will know the entire plan before they return to their units. It strengthens their ability to continue the mission if the commander becomes a casualty. "Ideally, backbriefs are conducted while overlooking the terrain with all commander's, fire support officers, and key staff present." [5]

Lastly, the commander issues a time check to synchronize everyone's actions. A misunderstanding over the difference of a minute can lose a battle!

## H. Supervise and Refine

The commander and his staff must supervise and inspect preparations prior to combat. The preparations include coordination, reorganization, fire support, engineer activities, maintenance, resupply, and movement. Rehearsals are conducted for both the maneuver and the fire plan. Emphasis by commanders above the company level must be placed on the supervision of items that require coordination between units of the same size.

Information derived from reconnaissance will cause the plan to change. Tactical planning must orient on the enemy. This means that a commander must do whatever it takes to discover where the enemy is. The size and composition of the friendly reconnaissance effort must be a METT-T decision. Reconnaissance must be a central part of the plan. If the unit's reconnaissance forces are not sufficient to accomplish the reconnaissance mission, they must be reinforced by other units. The reconnaissance is focussed to gain the critical information that will help the commander to decide the best way to accomplish his mission.

Refinement of the plan is a continual process. The reconnaissance determines which branch plan the commander executes during the battle. Branch plans are executed when the reconnaissance discovers information on critical enemy weaknesses. Once the battle starts, the commander makes the decisions necessary to give his force an advantage over the enemy. If communication is interrupted, subordinates are expected to act without active supervision, based upon their best judgment and their understanding of the commander's intent. To do nothing when the situation demands action is a sure way to surrender the initiative to the enemy.

# End Notes Annex C

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1 War Department, FM 101-5 The Staff and Combat Orders, Staff Officers Field Manual, (Washington: Government Printing Office, 24 March 1942), p. 36. The following quotation from the 1942 manual highlights this process:

"The solution of any situation demanding action by a unit requires that certain definite steps be taken by the commander in logical sequence. He must first make an estimate of the situation. The commander next evolves a plan to put his decision into effect. Then, by means of orders he conveys instructions to his subordinates who are to execute the planned operation. His final step is supervision to ensure conduct of the operation in accord with his orders." p. 36.

2 Combined Arms Training Notes, (Fort Leavenworth, Kansas: Winter 1984), p. 28.

3 U.S. Department of the Army, Field Circular 71-6, Battalion and Brigade Command and Control, (Fort Benning, Georgia and Fort Knox, Kentucky: United States Army Infantry School and United States Army Armor School, 1 March 1985), p. 2-4.

4 U.S. Department of the Army, FM 71-2 The Tank and Mechanized Infantry Battalion Task Force, (Fort Benning, Georgia: U.S. Infantry School, 27 September 1988), p. 2-20.

5 FM 71-2, p. 2-21.

# Annex D

# Commander's Guidance

Commander's guidance is the tool that a commander employs to direct his staff to implement his decision. Most commanders believe that they know how to issue guidance. Few commanders, however, issue clear, concise and effective instructions to their staff. Platitudes about "kicking the enemy's rear" or "moving swiftly to destroy the enemy in zone" rarely meet the level of detail required by staffs to prepare effective tactical plans. If the commander cannot effectively communicate his guidance to his staff, his tactical planning process will be degraded. Such degradation can increase the level of friction and has been the cause of many tactical defeats.

Clear commander's guidance is critical to effective tactical planning. Without clear guidance time is wasted. Commanders who can issue clear and concise directions to their staffs will help their staffs to develop tactical plans that focus on securing the commander's intent. Staffs that are trained to receive their commander's guidance in a systematic way will be better equipped to quickly translate this guidance into effective tactical plans.

The methods described in FM 100-5 Operations, and ST 100-9 The Command Estimate establish that the commander's guidance should consist of; the restated mission, the initial concept of the operation, the scheme of maneuver, the time plan, and the type of order to be prepared.

# Commander's Guidance

1. Restated Mission

2. Initial Concept of the Operation
   a. Commander's Intent
   b. Battlefield Framework

3. Initial Scheme of Maneuver
   a. Movement
   b. Objectives
   c. Responsibilities
   d. Formations / Dispositions *
   e. Maneuver options

4. Time plan and desired orders technique.

a. Restated Mission

The first element of the commander's guidance is the restated mission. The restated mission is the commander's mission statement for his unit. It is his means of clearly expressing his will. The restated mission is derived from the commanders understanding of the higher commander's mission and the higher commander's intent. The restated mission must address the WHO, WHAT, WHEN, WHERE and WHY of the assigned task. The element of WHAT is a listing of the key and ultimate essential tasks.

In the final analysis the restated mission is the commander's responsibility. The commander should be capable to develop a restated mission without the aid of his staff. The staff, however, should assist the commander in developing the restated mission when time allows. If the staff develops the restated mission statement, the commander must approve the staff's product. The commander should decide the content of the restated mission based upon his understanding of the higher commander's mission and intent.

To complete a restated mission statement the commander must understand and use precise terms. Missions must be explained as tasks that translate into specific actions that can be executed by the unit. Mission tasks need specific conditions and standards to effectively communicate what is to be accomplished. A list of tactical missions and their definitions are listed in Annex J.

### b. Concept of the Operation

The next step in commander's guidance is to explain the concept of the operation. The concept of the operation consists of the commander's intent and addressing the battlefield by the elements of the battlefield framework.

(1) **Commander's Intent** - The commander's intent is defined as "the commander's stated vision of the battle which defines: the purpose; the end state with respect to the relationship among the force, the enemy and the terrain and; how the end state will be achieved by the force as a whole." [1]

The concept of commander's intent is critical to AirLand Battle. FM 100-5, Operations states that: "Communications will be interrupted by enemy action at critical times and units will frequently have to fight while out of contact with higher headquarters and adjacent units. Subordinate leaders will be expected to act on their own initiative within the framework of the commander's intent." [2] **Commander's intent, therefore, cannot simply be a restatement of the scheme of maneuver.** It must explain much more than one way to accomplish the assigned mission.

The acid test of commander's intent is the ability of a subordinate to act "correctly" when the situation has changed, the initial order is no longer valid, and the subordinate cannot receive instructions in time to get a decision on a new course of action. The subordinate must either act or wait for instructions and run the risk of being defeated. If he acts within the framework of a well-thought-out commander's intent, then his chances of acting as the commander would want him to act increase.

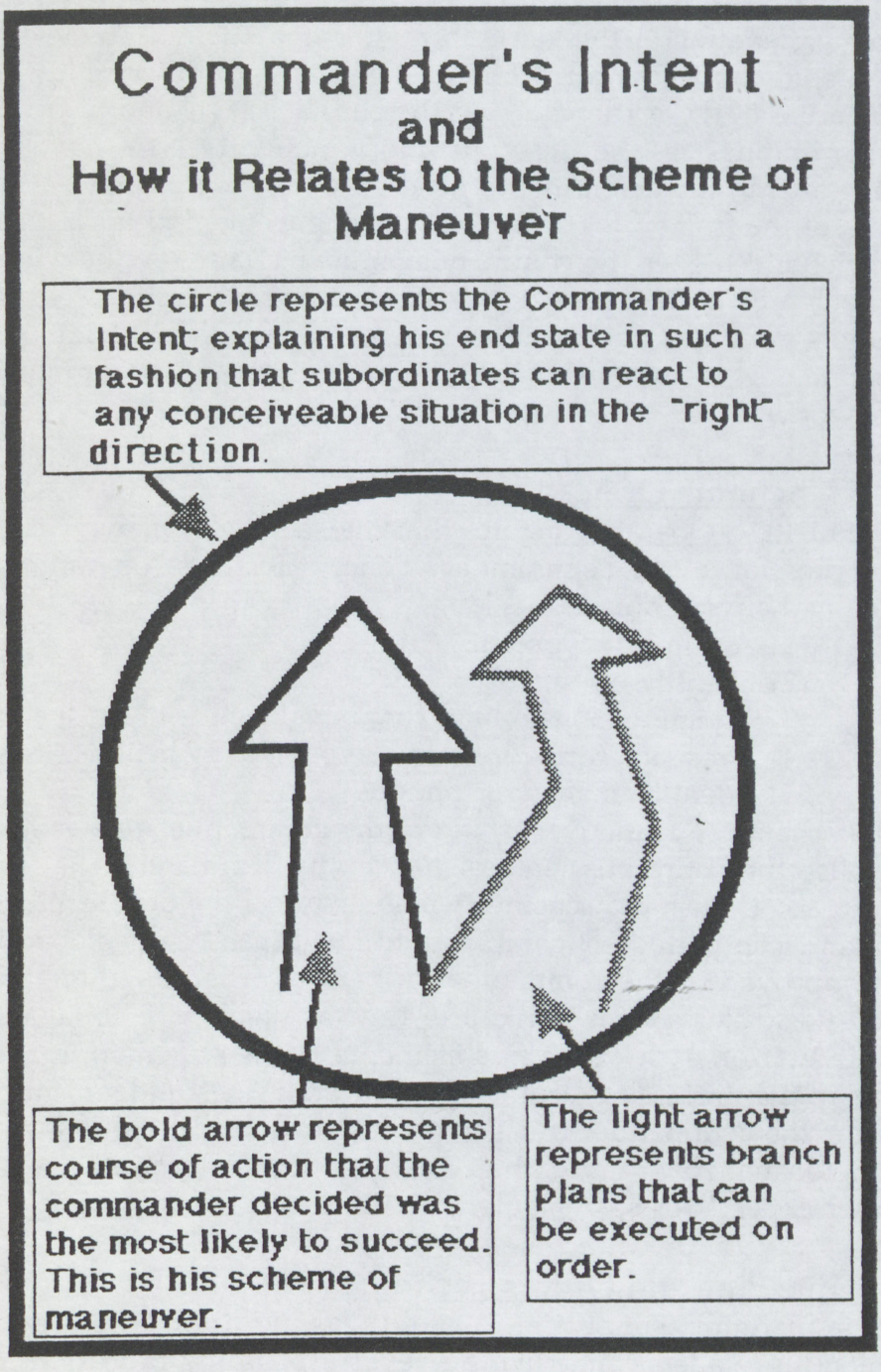
The commander's intent, therefore, must express what is expected of subordinate commanders and troops in order to secure the overall mission. The intent must define the final end state and interrelate this end state the force as a whole.

This definition of commander's intent is enhanced by an explanation of the definition of command climate found in FM 22-103 Leadership and Command at Senior Levels. This manual translates the commander's intent as the object, reason and importance. [3]

The **object** (the purpose of the action), the **reason** (the end state with respect to the relationship among the force, the enemy and the terrain) and the **importance** ( how the end state will be achieved by the force as a whole and how far to go to achieve that end state in terms of combat power).

The concepts of object, reason and importance become the memory aids that a commander can employ to write clear and effective intent. The commander should train himself to ask focussed questions to ensure that his

intent is clear. What is the object of my mission? What is the importance of the action that I have been ordered to conduct? How does this action accomplish the end state with respect to the relationship among the force, the enemy and the terrain? What is the importance of this end state and how will the end state will be achieved by the force as a whole.



(2) Battlefield Framework - FM 100-5 Operations, states that the concept of the operation must be explained by the battlefield framework.[4] The offensive battlefield framework consists of addressing the **main attack, reserve, reconnaissance and security operations, deep operations and rear operations.** The defensive framework consists of **security force operations, the main battle area, reserve, deep operations and rear area operations.**

The explanation of the battle through the battlefield framework provides a commander with an organizational tool to describe his guidance for critical areas of the battlefield. At the battalion level and below, a commander emphasizes the close operation (main attack for the offense and main battle area in the defense) and need only tell his staff how battle in the other areas of the framework will effect the engagement of his force. At brigade level and higher the commander must explain how he will fight the battle in each area of the framework. It is in these instructions of the commander's guidance that commanders, at brigade level and above, should clearly define how he expects to fight the battles that will occur in each area of the framework.

## C. Scheme Of Maneuver

FM 100-5 Operations states that the scheme of maneuver is the "central expression of the commander's concept for close operations."[5] The scheme of maneuver should:

(1) outline movement
(2) identify objectives
(3) assign responsibilities for zones, sectors or areas
(4) prescribe formations or dispositions (when necessary)
(5) identify maneuver options

The scheme of maneuver is where the commander relates his best plan to accomplish the entire mission assigned to the command. The exact course of action to accomplish the scheme of maneuver can be developed solely by the commander in periods of compressed time or can be developed by the staff and approved by the commander in periods when planning time is more available. Regardless of the amount of time available, the commander must instruct his staff on each of the five elements of the scheme of maneuver at some time in the process, or acquiesce to the staff's best judgement. It is more effective for the commander to issue his instructions on the five elements of the scheme of maneuver early, than to waste time determining what the commander expects for each element.

## 4. Time Plan and Orders Technique

Time planning is essential to avoid wasting time. The commander should plan his available time using a reverse planning process. Critical times such as the crossing of the line of departure, the time of the battle update briefing, and the issue of the operations and warning order must be considered. Whenever possible a time plan should be included in the warning order to subordinate units. A warning order that contains a time

plan can aid subordinate units in using their own planning and preparation time more effectively.

The commander must also issue guidance on what type of order he wants to issue. Seldom will one orders technique fit all the possible planning situations that a unit will experience in combat. Time is wasted if the staff does not understand the format that the commander desires. The commander must develop standard orders products that his staff and subordinates will be able to prepare and understand.

The commander is responsible to ensure that the staff employs a technique that maximizes both time and understanding. Although forty page operation orders at battalion level are common in training, they are seldom effective. There is no single way to prepare operations orders. How a commander issues his instructions is dependent on his assessment of METT-T. Recent combat experience proved that the orders that were produced in training were seldom employed in action.

The commander must develop a tool-box of orders techniques and choose the appropriate tool to fit the need. The ability of a staff to employ several techniques increases flexibility. Several different formats should be developed jointly by the commander and his staff and practiced for use in the field. Many techniques are available (Oral, Overlay, Matrix, Written Order with Matrix Annexes or Written Order with Written Annexes). Each of these techniques is based on the five paragraph field order and is directly related to the training level of the unit and a corresponding amount of planning time. The Commander chooses an orders technique that will maximize the effectiveness of his available time.

Clear, focussed commander's guidance is critical to effective staff planning. In the past, especially in the military schools environment, commander's guidance has been given too little attention. The result of this lack of attention has been to train staff's to expect little to no guidance from commanders. Such expectations are contrary to the purpose of the planning process as expressed in current Army doctrine.

Commander's guidance is a critical step in influencing the planning process. Commander's who are trained to issue clear and effective guidance will increase the chances of developing effective tactical plans in the minimum amount of time.

# End Notes Annex D

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1 General Foss, Letter dated 14 September, 1990. Subject: "Commander's Intent."

2 Headquarters, Department of the Army, FM 100-5, Operations, (Washington, D.C. U.S. Government Printing Office,: 5 May 1986), p. 4.

3 Headquarters, Department of the Army, FM 22-103, Leadership and Command at Senior Levels, (Washington, D.C. :U.S. Government Printing Office, 21 June 1987), p. 63.

4 FM 100-5, p. 106.

5 Ibid., p. 34

# Annex E

# Mission Orders

The command style and staff functioning that contribute most to maneuver warfare is characterized by the application of "mission orders." FM 100-5, Operations considers mission orders as the preferred technique to execute AirLand doctrine. "Commanders use mission order to describe the overall mission of the force, their own intent, the concept of the operation, and the missions of their subordinates. Restrictions on subordinates freedom of action must be minimized." [1]

This concept favors a strong command philosophy. This command philosophy empowers the commander with the responsibility and freedom of action to make the decisions and seize opportunities as they occur. "Prompt reaction will come from intense training and maximum decentralization and delegation of decision authority to the lowest level." [2]

Time is always a critical factor during combat. Mission type orders are a technique that can save time. This is accomplished largely by issuing oral orders. Oral orders should be issued by the senior commander overlooking the terrain of the area of operations. This concept relies on the ability of the commander, who is at the point of execution, to take advantage of battlefield opportunities as they occur.

Mission orders are not new to the U.S. Army. General Bruce C. Clarke, the hero of the Battle of the Bulge, employed mission orders throughout his long service in the U.S. Army:

> "In World War II, those who served in armored divisions -- and probably in other units as well -- learned that mission-type orders were a requirement if the most was to be obtained from a command....As the battle becomes more complex and unpredictable, responsibilities must be more and more decentralized. Thus mission-type orders often will be used at all echelons of command and probably will be the rule at the division and higher levels. This will require all commanders to exercise initiative, resourcefulness, and imagination -- operating with relative freedom of action.
>
> In our tactical forces we have built-in organizational flexibility. We must recognize this and capitalize on it in our orders. To get maximum combat power, we must have plans flexible enough to meet rapidly changing situations. But careful planning is not enough; this must be coupled with the

readiness to change and adapt to situations as they are, not as they were expected to be.

Basically a mission-type order needs to cover only three important things:

1) It should clearly state what the commander issuing the order wants to have accomplished.

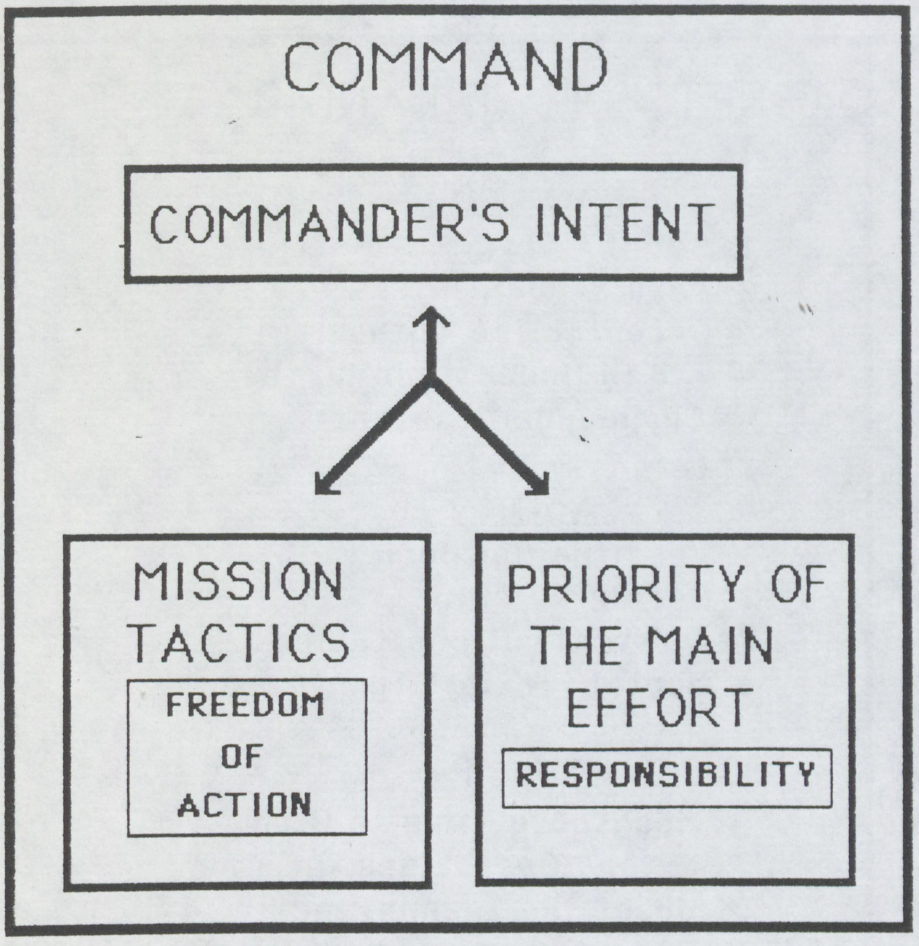
2) It should point out the limiting or control factors that must be observed for coordinating purposes.

3) It should delineate the resources made available to the subordinate commander and the support which he can expect or count on form sources outside his command. [3]

"Mission orders" emphasizes "mission tactics." Mission Tactics is a mental process that combines techniques and education. "techniques are things that you can do by formula. They include how to aim a rifle, set up a machine gun, give an order, establish communications, call for fire support, gun crew drills, unit battle drills and so on." [4] Education is the basis for applying techniques which create that unique approach for defeating the enemy at the right time and place. The combination of techniques and education is Mission Tactics.

Mission orders rely on the initiative of junior leaders to execute the commander's intent. They can provide an important element in the search for the "superior command and control" [5] required of AirLand Battle. In most cases, the mission-type order should be issued orally, from brigade level down, to preclude unnecessary time delays. An order issued by the commander, on the battlefield is worth ten perfect orders, mimeographed in quantity, but issued late. " Whenever possible, subordinate leaders should receive their orders face-to-face from their commanders on the ground chosen for the operation." [6]

General John W. Foss, the recent commander of the Army's Training and Doctrine Command, reinforced this tradition in his article titled Command in the Command and General Staff College's Military Review magazine in May 1990. Foss defined the strong command philosophy required for the conduct of AirLand Battle as a three legged stool. The stool consists of the Commander's Intent (his vision of the battle), Mission Tactics (the commander's authority for freedom of action), and the Priority of Main Effort (designation of the main effort to provide a common basis for action).




FM 100-5 clearly establishes the use of "mission orders." "Commanders should restrict the operations of their subordinates as little as necessary. Mission orders that specify what must be done without prescribing how it must be done should be used in most cases." [7] Although the formal changes to the five paragraph operations order have not yet been added to doctrine, FM 100-5 clearly lays out the basic requirements. The two basic requirements of an AirLand Battle operations order are the clear transmission of the commander's intent and the use of "mission orders."

## TENETS OF AIRLAND BATTLE

### Initiative

1. Set the Terms of Battle
2. Take Prudent Risks
3. Decentralize Authority
4. Aid in Understanding the Commander's Intent

### Agility

1. Read the Battlefield
2. Decide Quickly
3. Act without hesitation
4. Mental Flexibility

### Depth

1. Necessary Time to Plan
2. Extend Operations in Time
3. Upset the Enemy Plan
4. Degrade Enemy Freedom of Action

### Synchronization

1. Arrangement of the Battlefield in Time, Space and Purpose
2. Visualize the Battle
3. Implicit Coordination
4. Anticipation and Unity of Purpose

Mission orders are a key element in the AirLand Operations command and control process. The clear transmission of the commander's intent is a vital part of this process. In 1990 the operations order format was changed to include the "commander's intent" as an unlettered sub paragraph of paragraph (3) Execution. The tenets shown above outline the of importance of mission orders to AirLand Battle.

"The key principles of the AirLand Battle doctrine are: the use of the indirect approach; maintenance of initiative through speed and violence; flexibility and reliance on the initiative of junior leaders; clear definition of objectives, concepts of operations, and the main effort; and attack of the

enemy in depth. Wherever possible, the enemy will be defeated by destruction of critical facilities rather than through overall attrition." [8]

Most tactical planners desire to produce a perfect plan by following the school solution formats. The highly detailed, time intensive products of the school room are seldom produced in time to be useful in the field. With this in mind, it becomes obvious that information processing changes are needed to speed up the orders process to successfully conduct AirLand Battle at the tactical level.

Most commanders and staffs spend many hours learning how to write and construct the detailed written orders portrayed at the right end of the spectrum. These orders emphasize synchronization, detailed planning and detailed coordination. This type of order is the order style that is taught at the Army's Command and General Staff College at Fort Leavenworth. It is the only operations order format that is produced in a standard format by most units in the Army. Few staffs get the chance to develop orders in compressed planning time frames, as they will have to do in war. What is even more important, is the fact that few staffs have any kind of guide as to what the products and procedures of rapid decision-making under compressed time-frames.

# End Notes Annex E

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1 Headquarters, Department of the Army, FM 100-5, Operations, (Washington, D.C. U.S. Government Printing Office,: 5 May 1986),p. 122

2 General W.R Richardson, "Winning on the Extended Battlefield," Army Magazine, June 1981, p. 41.

3 General Bruce C. Clarke, Guidelines for the Leader and the Commander, (Harrisburg: Stackpole Company, 1963), p. 95 - 96.

4 William S. Lind, Maneuver Warfare Handbook, (Boulder, Colorado: Westview Press, 1985), p 12.

5 Martin van Crevald, Fighting Power, German and U.S. Army Performance, 1939-1945, (Westport, Connecticut: Greenwood Press, 1982), p. 37.

6 FM 100-5, p. 21.

7 Ibid., p. 21.

[8] Colonel Huba Wass de Czege, "AirLand Battle Doctrine," Art of War Colloquium, The US Army's Doctrinal Reforms, (US Army War College, June 1983), p. 8.

# Annex F

## Types of Orders

U.S. Army command-staff consist of four types of orders; Warning Orders, Fragmentary Orders, Operation Orders and Operation Plans.

**Warning Orders** are partial orders that are used to gain time. Warning Orders get your forces moving in the right direction as you continue to develop the plan. FM 101-5-1 Operational Terms and Symbols, October 1985 defines warning order as "a preliminary notice of an action or order that is to follow. Usually issued as a brief oral or written message, it is designed to give subordinates time to make necessary plans and preparations." [1]

Warning Orders allow preparation time for mission preparation. Critical time is wasted if a warning order is not issued as soon as possible. Warning orders should be issued over the quickest available means. Doctrine does not prescribe a specific format for the warning order. Although there is no mandatory format for warning orders, the warning order should contain five minimum essential elements shown below:

The Warning Order should consist of two parts; a time plan, and the warning order. These alterations are aimed at developing greater agility, increased depth (in terms of planning time available) and aiding in synchronization planning by emphasizing the importance of time management planning.

Time planning is critical to effectively use the time that is available between mission receipt and mission execution. In an AirLand Battle orders process, a time plan should accompany each warning order. This is a particularly important tool that will assist in insuring that subordinates get enough time to plan, rehearse and prepare their own orders. The backward planning process, where the time is planned from the crossing of the line of departure or the expected time of enemy attack back to the present time, should be used. In addition, it is very important to what type of time subordinates are given for their own planning. One hour of daylight is worth three hours of darkness.

The warning order shown below is designed to provide a standard format that will speed up the transmission of the warning orders. Each entry has a line number to facilitate transmission over FM tactical radios. The warning order can be written down for reference to assist transmission over the FM radio, and mimeographed,photocopied or faxed for hard copy distribution.

## Warning Order

1. The mission.

2. Who is participating in the mission.

3. Time of the operation.

4. Any special instructions.

5. Time/place for issue of complete order.

**Fragmentary Orders** (FRAGOs) direct a change to a portion of an operations order. Like warning orders, FRAGOs are usually brief oral, radio or written messages. Mission orders are a form of FRAGO which provides experienced commanders with essential information (such as a change in mission) to conduct mobile operations. The FRAGO follows the basic format of the five paragraph field order but addresses only those items that have changed from the original order.

**Operation Orders** direct the execution of specific tactical or operational actions. FM 101-5-1 Operational Terms and Symbols, October 1985, defines the operations order as "a directive issued by a commander to subordinate commanders for effecting the coordinated execution of an operation; includes tactical movement orders." [2] The operations order is the means by which a commander transmits his concept of the operation and his intent concerning the accomplishment of a given mission. The order can be issued orally, using the 5 paragraph as a guide, or can be written, with attached annexes and overlays. It provides a time-tested guide with which to issue military orders. The five paragraphs of the U.S. operations order format are shown below:

# Operations Order

Task Organization

1: Situation
   a. Enemy Forces
   b. Friendly Forces (including the intent of the commanders two echelons above)
   c. Attachments and detachments

2. Mission
   A clear, concise statement expressed in the who, what, when, why, and where of the tasks to be accomplished There are no subparagraphs.

3. Execution

   Commander's Intent - the commander's intent is listed as a separate non-lettered paragraph after "3. Execution" and before "3.a. Concept of the Operation."

   a. Concept of the Operation. The commander's plan to accomplish the mission from the beginning of the operation to the end.
      (1) Maneuver
      (2) Fires
   b. Missions for assigned/attached units are stated in separate subparagraphs. Details for each specific unit are discussed.
   c. Coordinating instructions [last subparagraph of paragraph 3]

4: Service Support
   Contains Combat Service Support instructions, information, and details for support.

5: Command and Signal
   a. Command [Includes Command Post location, succession of command and liaison]
   b. Signal [Signal Operating Instructions]

# End Notes Annex F

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[1] U.S. Department of the Army, FM 101-5-1, Operational Terms and Symbols, (Fort Monroe, Virginia: Headquarters Training and Doctrine Command, 21 October 1985), p. 1-75.

[2] Ibid., p. 1-53.

# Annex G

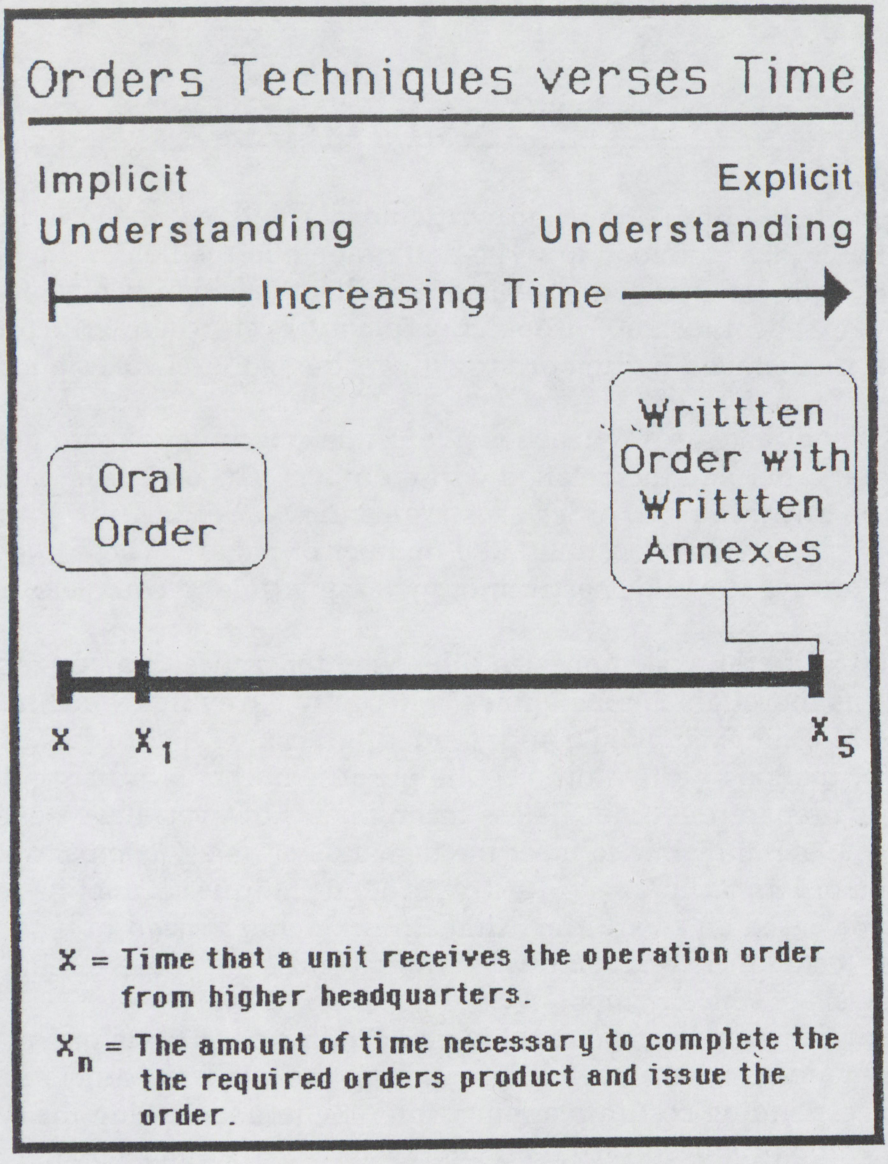
## Orders Techniques

The problem with the detailed written order with complete written annexes is that it takes too long to write and prepare in the field. The detailed written order with complete annexes is an excellent teaching vehicle for staffs, and an excellent format for operation plans. Even when written by the best of staffs, the detailed written order with written annexes takes a long time to produce.

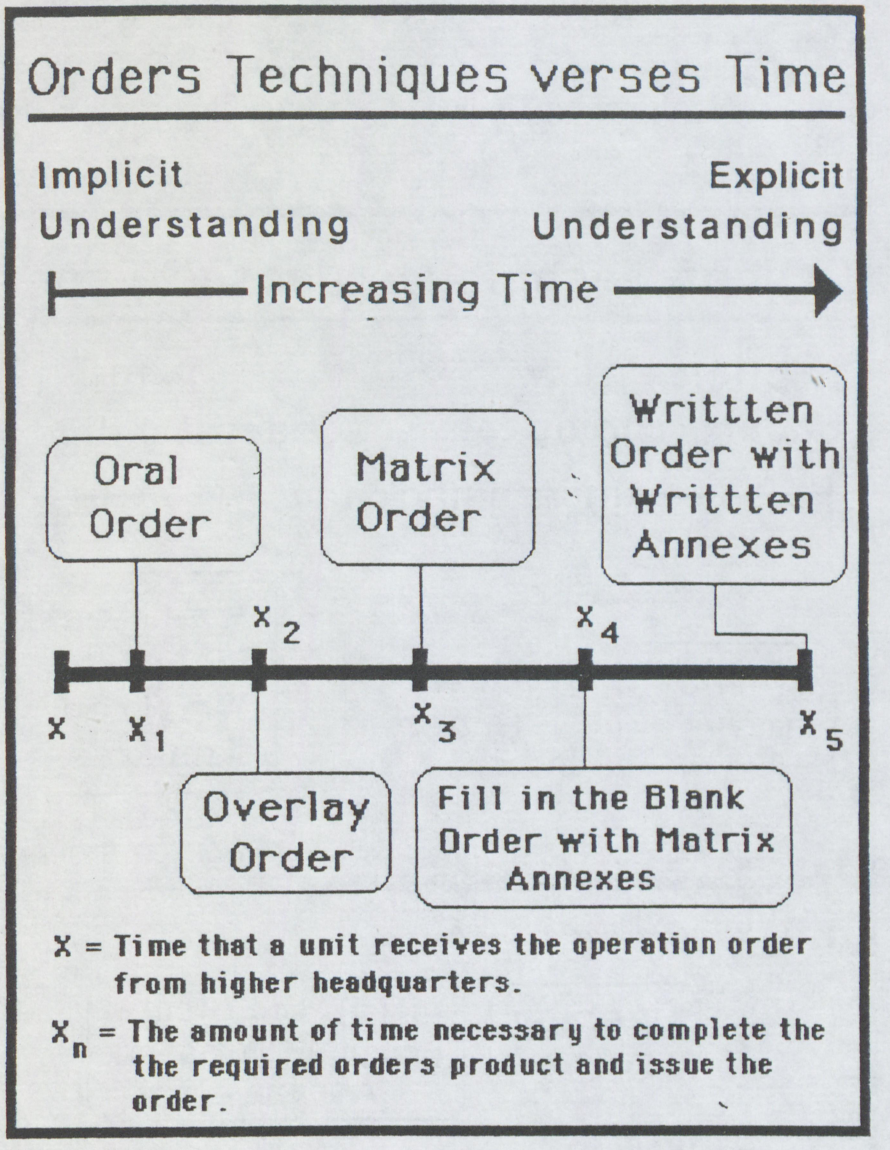
The United States Army teaches two primary techniques for operations orders; the oral order and the detailed written order. The oral order is fast and used primarily as a radio order or a fragmentary order (FRAGO). The written order can consist of an unlimited number of pages. These two techniques, portrayed over a spectrum of increasing time to complete, are shown in Figure 11.

FM 100-5 Operations emphasized the need for tactical planning to be flexible and "as thorough as time allows." Recently Army field manuals (FM 71-2 and FM 71-3 for example) have presented "Matrix - Type" orders as substitutes for the long written order. The purpose of these formats is to reduce orders preparation time. These techniques, however, have never been standardized. It is impossible to meet the demands of every combat operation with only one orders technique. **Effective order techniques cannot be reduced to a single type based on an arbitrary time limit.** Planners need to have several order techniques to accomplish different missions based upon a METT-T analysis of the situation.

The development of time sensitive criteria for operations orders would provide commanders with a useful definition of the available orders products and their corresponding cost in planning time. By understanding the types of orders that can be produced the commander can better visualize his command and control process options and can better gauge his planning resources to maintain the agility, depth, initiative and synchronization demanded by AirLand Operations doctrine. The purpose of these recommendations is to produce a time advantage for the tactical commander on the battlefield through the speedy and intelligent application of the command-staff process.



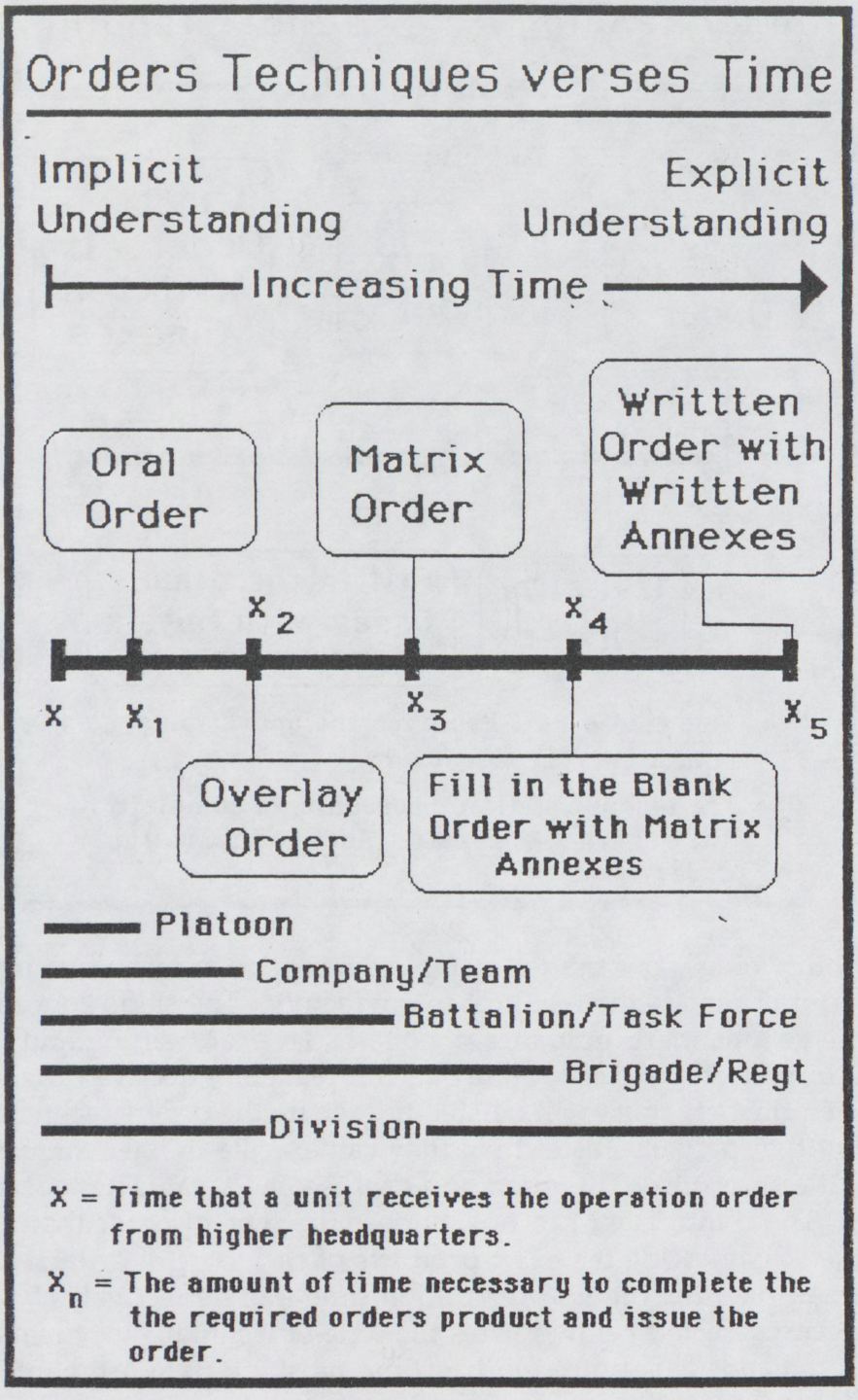

The Orders Spectrum shown below offers the tactical planner a "tool box" of operation orders options. These different orders techniques are arranged along a spectrum of increasing time. The orders techniques on the left side of the spectrum are the fastest to issue. The techniques on the right side of the spectrum take increasingly larger amounts of time to complete.




The ability of any one staff to complete a particular technique in a specific amount of time is the result of many factors. The staffs condition, the quality of the commander's guidance, the staff's level of training and cohesion all impact on the staff's ability to complete an effective order in time. But even the best staffs will be able to execute the orders techniques at the left end of the spectrum faster than they can execute the techniques at the right end of the spectrum. This spectrum can become a valuable tool for a commander. The commander can now choose the type of order that fits the time available. By knowing the exact products of each type of order, a commander can plan his orders preparation time more effectively.

The figure depicted below relates the type of technique to time and echelon of command. This figure portrays the most effective technique by echelon. The oral order, for example, is the primary technique of platoon

leaders. The thrust of this concept is that a good plan in time is better than a perfect plan issued late.



# Annex H

# Sequential and Parallel Planning

There are two basic approaches to tactical planning that have a direct impact on the amount of time for preparation and the amount of detail each plan requires. These approaches are **sequential** and **concurrent** planning.

**Sequential planning** is a time intensive planning approach that completes the plan step by step at each echelon of command. A completed plan is then passed to each subordinate echelon to develop their own plans. This provides each echelon of command with a finished product with which to base their own planning on. this planning approach is used when synchronization is the predominant goal of the planning process.

**Parallel (sometimes called 'concurrent') planning** is a time saving planning approach that is based on issuing essential information early (as a minimum: the mission, the commander's intent, and the location and direction of the main effort) and expecting each subordinate echelon to develop their plans before receiving the completed order from higher headquarters. Planning functions are carried out simultaneously at all command and staff levels. This technique employs a series of warning orders to provide preliminary instructions to subordinate commanders to form the basis for the final plan. By informing subordinate commanders of future operations as soon as possible, and by authorizing them the responsibility to begin planning in their own operations in a focussed direction, planning is conducted concurrently and much time is saved.

The Soviet Army was particularly impressed with the parallel planning technique. The following statement, from Viktor Antonovich Matsulenko, shows how parallel planning was accomplished at the army level in the Second World War:

> ...In the Prague operation (1945) for example, generals P. S. Rybalko and D. D. Lelyushenko, the commanders of the 3d and 4th Guards tank armies, had about 2 days to organize the attack after regrouping. In order to save time, under these conditions the commander of the 4th Guards Tank Army posed the missions to the troops in succession, as the decision was worked out -- first in regard to reaching the forming-up place, and then in regard to the offensive itself. The first instructions

were transmitted to formation commanders 3-4 hours after the mission was received. Consequently the army's field directorate used up 10-11 percent of the 30-32 hours allocated; the rest of the time was provided to subordinate commanders and staffs. This work method was also typical of the army commanders of other tank armies; increasing the time for parallel planning was also typical. While in 1943 the control organs of tank armies devoted 65-70 percent of their planning time to work in parallel with corps staffs, in 1945 the figure was 85-90 percent....Preliminary instructions had a positive influence on the planning of combat. One set of instructions was submitted to warn the division commanders of a forthcoming offensive, and a second set was provided after the commander made his decision on the basis of a map (this second set of instructions spelled out the missions of the divisions and the timetable for combat activities to begin) This procedure made it possible to significantly reduce the time for organizing for combat.

When little time was allowed to organize combat activities, planning was carried out faster owing to a lower quantity and volume of combat documents, broader use of spoken instructions and early orientation of regiment commanders and staffs in the nature of the forthcoming mission....Despite the short time, all problems of planning combat and organizing coordination were successfully solved on the terrain. The order was sent out. Prior to this all of the units did their work on the basis of tentative instructions transmitted orally. [1]

Parallel planning is required if rapid decisions are expected. To accomplish parallel planning it is necessary to provide a constant flow of fragmentary orders down the chain of command. Subordinate headquarters will need this information to plan concurrently with higher headquarters. Subordinate unit orders will be delayed unless decisions are made early by commanders at higher echelons.

One effective technique is to issue an initial order orally, and provide a written order that confirms the initial order latter. Lack of timely decisions is the greatest stumbling block to effective parallel planning.

# End Notes Annex H

1 Viktor Antonovich Matsulenko, Encirclement Operations and Combat, (Moscow: Voyenizdat, 31 Jan 1983), p. 17 - 19.

# Annex I

## War Gaming

War Gaming is a conscious attempt to visualize the flow of battle, given friendly strengths and dispositions, enemy assets and possible courses of action, and a set piece of ground. It attempts to foresee the action, reaction, and counteraction dynamics of battle.
The following war gaming rules and steps are provided as a guide to war game: List the advantages and disadvantages; Remain unbiased; Assess the feasibility of each course of action to accomplish the mission; Complete one course of action at a time; Avoid comparing different courses of action until the comparison step; and do not draw premature conclusions. The steps of war gaming are displayed in the figure shown below.

The staff can analyze courses of action using any of the methods shown below:

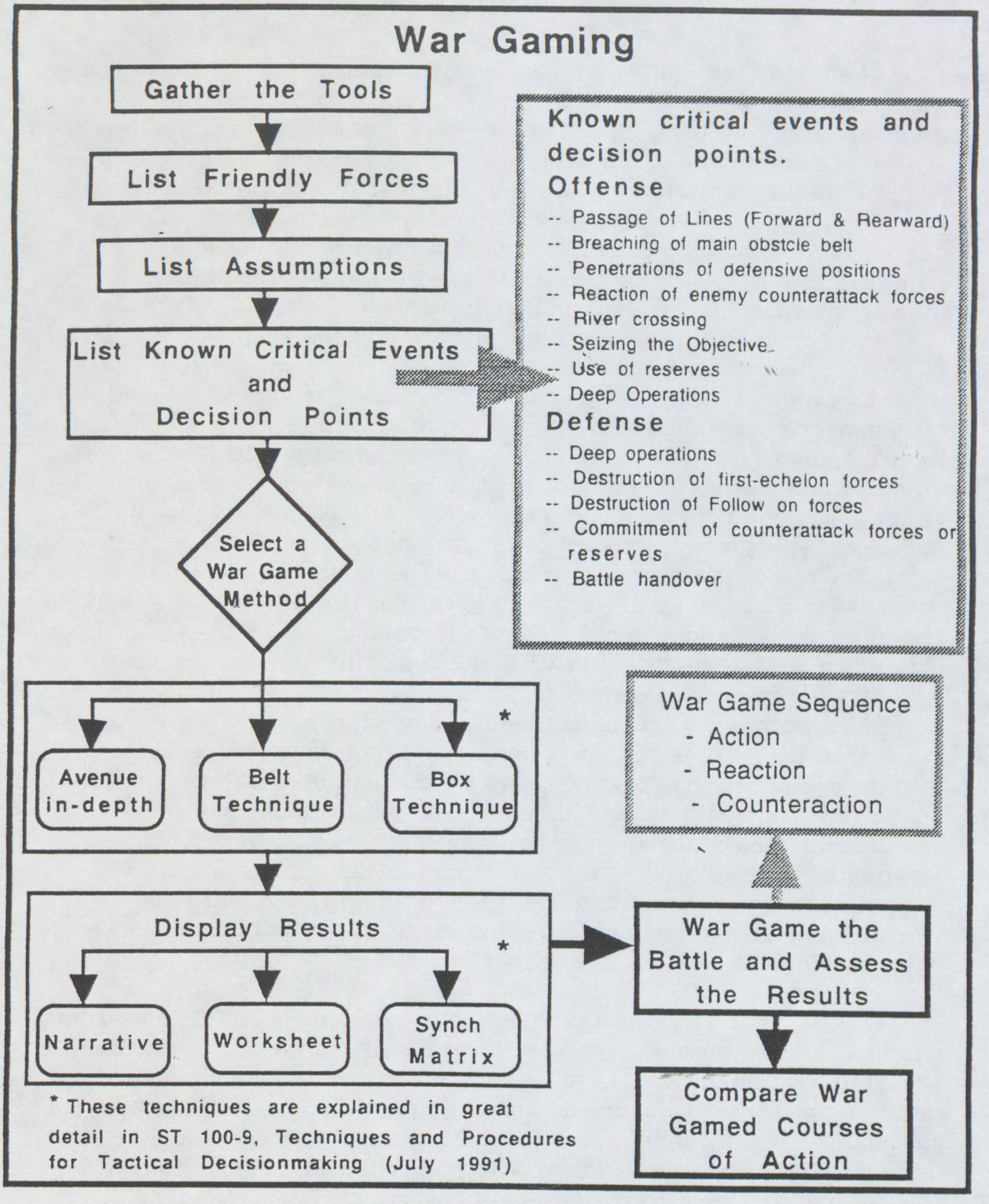
(a) Following are examples of methods that can be used:

- Avenue-in-depth-technique (focus on one avenue at a time, starting with the main effort).
- Belt-technique (divide the battlefield into areas that run the width of the sector or zone or by phase of the operation.
- Box-technique (microanalysis of a few critical areas, such as an engagement area. Isolate the area and focus on the battle in that area.)

(b) The following techniques are used to record and display the results of the war game:

- Narrative technique (sentence form)
- Sketch note technique (make notes on the map or a sketch with reference to their specific actions and location)
- Synchronization Matrix technique

(c) War gaming analyzes each selected event by identifying the components of its sub-events or tasks one level down and assets two levels down. The visualization step tries to identify how the immediate subordinate commander would employ allocated forces and how he would determine the composition of those forces. The war game sequence is action-reaction-counteraction.




c. A typical Sequense of Action for a Brigade Staff:

After the Course of Action is decided and portrayed on the map, the staff should will develop a critical event list. The recorder will use these events (modified by using phase lines as necessary) to form the top axis of the synchronization matrix (if a synchronization matirx is decided upon as the means to record the wargame). Units will be placed on the horizontal axis. We will normally use the avenue in depth approach, following one enemy attack axis from initial contact to completion (defense) or following one friendly attack axis from movement from the Assembly Area to completion of mission. After this, the staff will wargame the branch plan.

When possible the wargaming will consist of the XO (moderator & staff facilitator), S3 and S3 planner (Blue plan), the S2 (red Plan), the TAC OIC or a battle captain will be the recorder (using a Synchronization Matrix, worksheet or narrative) and the the rest of the staff inputting as directed by the XO. At the same time, the assistant S2 and/or targeting officer will be working the deep operation for the XO's approval. If the XO or S3 is not present, the senior officer will play the role of moderator and assistants will play the role of Blue and Red players. To-scale graphic symbols are be used.

The role of the moderator is critical. The moderator keeps the wargame on track, avoid distractions and ensures that one avenue is worked at a time from beginning to completion. He includes the CS and CSS staff, on Que, when they are needed. The CS and CSS staff listens from the wings, following the action on the map and interjects as necessary with permission from the moderator. Without this kind of discipline, needless time is wasted. Remember, the art of tactics is to determine what to do in time and space (i.e.: turn the course of action statement into a plan that puts the force rations in our favor at the right time and place). To do this the moderator must make sure that the correct planning factors (movement rates, ranges, supply constraints) are employed. The to-scale graphics help in this process.

Once the wargame is complete the S3 transfers the recodr of the wargame into an execution matrix. This execution matrix becomes part of the operations order.

d. THREAT verses U.S War Gaming: In combat, the fog of war will make most decisions beyond the capability of analyses. This situation usually forces commanders to make combat decisions with limited information. Methods that are designed to predict the outcome of battle are notoriously inaccurate. The Threat Army spent tremendous effort in using detailed nomograms and charts to predict the allocation of forces needed to win. Threat doctrine uses a sophisticated system called the "correlation of forces." The United States Army uses a less sophisticated "force ratio" system to war game courses of action.

The difference between the American and Threat view is that the Threat consider their "correlation of forces" equations to determine how much force is needed. A Threat commander is required to produce the appropriate force ratio of 3.0 - 4.0 to 1 in motorized rifle battalions, 3.0 - 4.0 to 1 in tanks and self propelled artillery, 3.0 - 5.0 to 1 in artillery, and a 2.0

to 1 in aircraft before he is authorized conduct a main attack.[1] If the appropriate correlation of forces is not achieved the Threat commander is expected to bring this to the attention of his commander.

The U.S officer uses force ratios to war game his courses of action. Unlike the Threat, the U.S. officer is not required to justify his actions by referencing the "correct" force ratio for each action. His available forces have already been established by the higher commander by the time he is ready to develop his force ratio. This method, however, often disregards the enemy situation. Force ratios serve to focus the planner on the enemy. They highlight the need to apply massed combat and combat support assets at critical points in the battle. They are only a guide, but they can be a valuable tool if they are used to allocate a force level that will ensure the accomplishment of the mission. There is little need to plan an attack if the force ratio is 10 to 1 against the attacker. In the future, battlefield computers will help commanders in this effort.

It is possible to employ effective war gaming without the use of computers. A method that was successfully used by the Wehrmacht and the Threat Army during World War II involved using one of the staffs best men in the role of enemy commander. This staff officer was tasked with developing enemy courses of action and using these to compete against the friendly staff's plan. By testing out individual decisions and playing out possible versions of combat activities on maps or terrain models, the relative success of friendly courses of actions could be effectively tested. A note-taker should be employed to record the results of the war gaming as the session takes place.

# End Notes Annex I

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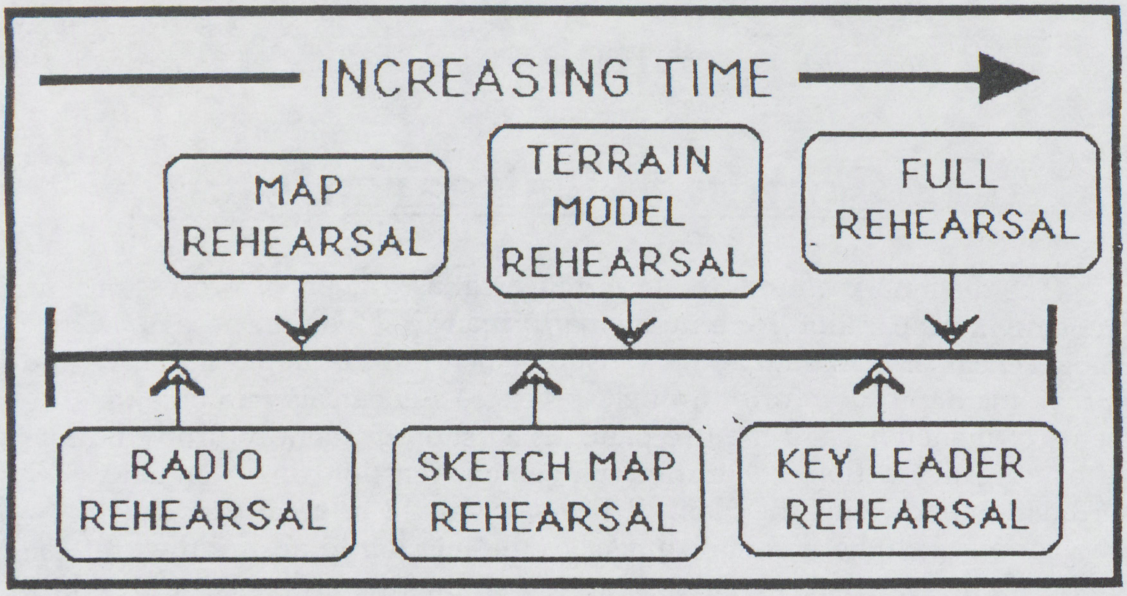
[1] John G. Hines, Soviet Front Operations In Europe: Planning for Encirclement, (from a conference report, "Spotlight on the Soviet Union Conference" held at Sundvollen Norway in 1985.) p. 18.

# Annex J

## Combat Rehearsals

The dictionary defines the term rehearsal as "the art or process of practicing in preparation for a public performance." [1] The purpose of a combat rehearsal is to gain agility, ensure synchronization, aid initiative and improve the depth of a force through practice. Rehearsals reinforce the scheme of maneuver and the fire plan. They should "identify problem areas and contingency actions, determine movement reaction times, enhance coordination and refine the plan. Rehearsals should be conducted for "actions critical to the accomplishment of the mission to ensure the unit can accomplish these actions given its state of training, the orders issued, and the terrain and weather conditions expected." [2]

When conducting a rehearsal the commander should emphasize key events that trigger friendly actions. Both fire support and maneuver actions should be rehearsed. The rehearsal becomes a tool that the commander can use to reinforce understanding of the plan and help subordinate commanders to visualize the exact meaning of the commander's intent. This assists subordinates in understanding what they are to do under circumstances where the battle does not go according to plan. A list of rehearsal options is depicted in Figure 14. Six rehearsal types are shown: Full Rehearsal, Key Leader Rehearsal, Terrain Model Rehearsal, Sketch - Map Rehearsal, Map Rehearsal, and Radio Rehearsal. The figure below shows the type of rehearsal in its relative position on an axis of increasing time. Each option takes an increasing amount of time to conduct as you travel from left to right on the option line. Each type has different requirements for preparation and security that must be planned for by the commander. The exact time associated with each technique is dependent upon the commander's analysis of the factors of METT-T (Mission, Enemy, Terrain, Troops available and Time).




(1) **Full Rehearsal** - This type of rehearsal is the most effective, but also consumes the most time and resources. This technique involves every soldier and system that will take part in the operation. If possible, the full rehearsal should be conducted under the conditions (weather, time of day, terrain etc.) that are expected to be encountered during the actual operation. In defensive operations, a full rehearsal can be conducted over the actual terrain. In an offensive operation, the full rehearsal can be conducted on any available terrain that closely matches the terrain and space parameters of the zone of attack. This type of rehearsal is the most difficult to accomplish due to the great demand on time and resources.

(2) **Key Leader Rehearsal** - This type of rehearsal involves only the key leaders of the unit. It can be conducted day or night but should be conducted under the conditions expected in combat (i.e.: rehearse a night attack at night). In this type of rehearsal the commander first must decide the level of leader involvement. These selected leaders rehearse the plan, in their assigned tactical vehicles, over the terrain. The terrain requirements are the same as for the full rehearsal, only the number of participants has changed. With fewer participants, the key leader rehearsal can take less time (i.e.: individual vehicles move faster than columns of vehicles, etc.). This type of rehearsal is often accomplished during defensive operations.

(3) **Terrain Model Rehearsal** - This rehearsal takes less time and fewer resources than the Key Leader Rehearsal. This type of rehearsal can be conducted during the day or at night under a tent or in a building. If the terrain model is constructed accurately, the Terrain Model Rehearsal technique can be an excellent three dimensional aid to assist subordinate leaders to visualize the battle. The terrain model should be constructed overlooking the actual terrain or, if the situation requires more security, on

the reverse slope of a vantage point within walking distance of a point that will overlook the terrain.

The first step in creating an accurate terrain model is to prescribe the scale. This is accomplished by walking off so many steps per kilometer. (For example; if the brigade zone of attack is ten kilometers by six kilometers the builder of the terrain model could assign one step per kilometer and "walk off" the scale of his terrain model.) The size of the terrain model can vary, from a table-top like arrangement to a model where the participants can actually walk through a scaled down version of the terrain on which they are expected to fight. A terrain model that is large enough to allow the key leaders to walk over a scaled down version of the terrain will help to reinforce the relative positions of units that are to conduct the plan. This technique will further aid the participants to visualize the battlefield. The second step in developing an accurate terrain model is to lay down the grid lines shown on the 1:50,000 map. Once the grid lines are established the terrain model builder has a handy reference to measure the size and locations of the terrain features. This step increases the accuracy of the terrain model and keeps the terrain features in the proper scale.

The terrain model should depict all the information shown on the operations overlay. It should include the names of key terrain features, enemy positions (known and suspected) and all critical fire control measures. An arrow should be placed on the terrain model to depict direction (north, south etc) to aid in orientation. If at all possible, this orientation should coincide with the true orientation of the terrain (i.e.; north actually points north). This will help the participants to orient to the actual battlefield. All terrain features, phase lines and objectives should be labeled with their appropriate names.

The commander then assembles his key leaders and staff officers in front of the terrain model and walks each subordinate leader through an inter-active verbal execution of the operation. The execution of this rehearsal is conducted sequentially, either by phase, event or time.

(4) Sketch Map Rehearsal - This rehearsal takes less time and resources than the terrain model rehearsal. This rehearsal can be conducted in day or night almost anywhere. The procedures are the same as for the terrain model rehearsal, except that a sketch is used in place of the terrain model. Using sketches large enough for all the participants to see, the commander and staff talk each subordinate leader through the execution of the operation.

(5) Map Rehearsal - This type of rehearsal takes less time and resources than the Sketch Map rehearsal. This type of rehearsal can be conducted in day or night. The procedures are the same as for the Sketch Map Rehearsal, except that a 1;50,000 tactical map with operations overlay is used in place of the sketch map. The commander and his staff walk each

subordinate leader through an inter-active execution of the operation, using the 1:50,000 map.

This technique is best accomplished on a vantage point overlooking the terrain of the area of operations. Each participant must have his own map and overlay to follow the action of the rehearsal. Since it is difficult for more than two or three people to see a 1:50,000 map, two techniques of map rehearsals are commonly used. One technique has each subordinate leader following the rehearsal on his own map. Another technique involves laying the map horizontally and talking over the action with the map in this position. Unit symbols made of acetate or cardboard can be moved to show the sequence of movement.

(6) **Radio Rehearsal** - This type of rehearsal takes less time and resources than the Map Rehearsal but is the least desirable. A radio rehearsal can be conducted in day or night, and is used extensively by fire support units.. To conduct a Radio Rehearsal the commander and his staff transmit an inter-active verbal execution of critical portions of the operation over the FM radio. For this technique to be effective, every participant must have working communications and a copy of the unit OPORD and overlays. Only the essential, most critical phases of the operation are rehearsed. The dangers of this technique are obvious. Prolonged FM radio communications, even when conducted with secure radios, may offer the enemy vital intelligence and targeting information prior to the operation. A commander should use this method as a last resort.

The commander plays a crucial role in each type of rehearsal technique. He is the driving force in the inter-active exchange of action / reaction /counter-action that cements the plan in the minds of his subordinates. He must focus his staff to create the conditions for the rehearsal that can best replicate the future battle. In the final analysis, whether the commander conducts the rehearsal himself or has his executive officer or S3 conduct it, the effectiveness of the rehearsal is the commander's responsibility.

The commander and staff should start planning for their rehearsal as soon as the operation order is completed. The first step in planning is to choose a rehearsal technique. The commander should select his technique based upon his METT-T (Mission, Enemy, Terrain, Troops and TIME available). The commander must also decide whether to conduct a rehearsal that includes the entire operation, or to cover only critical portions. Reducing the rehearsal to critical portions can save time, but might sacrifice clarity. In the final analysis, the commander must decide. As in most things in war, time will be the driving factor for his selection of a rehearsal technique.

The next step is to develop a time plan. The time plan consists of the best time-distance calculations of the units planned events. In an offensive operation the time plan should start with the first offensive action, the displacement from the assembly area or the time for the crossing of the line of departure. In a defensive operation, the time plan should start with an H-

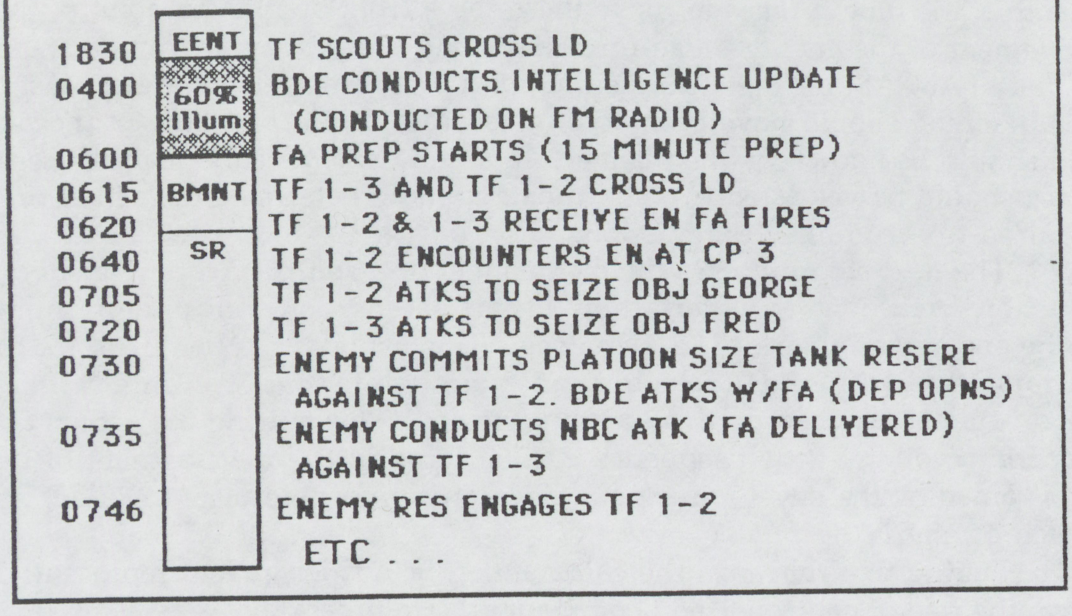
Hour time that depicts the first sighting of the enemy, or the first expected enemy event. In each of these cases the time plan depicts events that could occur during the battle.

The commander and staff then calculate the pertinent time-distance factors of enemy and friendly actions. These calculations include, for example, the time it takes to move the reserve from point A to point B; the movement of the enemy's lead formations and main body; the time it takes to place FASCAM or to get close air support in an engagement area. Most of this planning should have been accomplished in the war gaming of the plan and should be known by the planner. In a Full or Reduced rehearsal, these times should be validated by subordinate units to determine the actual time required to accomplish the mission.

The next step involves the commander and staff developing a short list of action / reaction /counter-action events based upon their understanding of the enemy and their METT-T analysis. This list becomes the script for the rehearsal and will guide the commander through the major events. Often, good commanders can do this scripting mentally, visualizing the action / reaction /counter-action sequence in their minds. The development of this list is aided by the development of a decision support template (overlay, sketch or matrix).

During the rehearsal the commander, or his designated representative, plays the role of controller and commander. He orders the "action" by time or event as he would in combat. His intelligence officer plays the role of the enemy and offers the enemy action/reaction part of the cycle. In this fashion, each critical battle action is rehearsed, contingencies and branch plans are practiced, and planning factors are verified. A recorder should be appointed to record any adjustments to the plan or unresolved questions that are produced by the rehearsal. The figure shown below is a vertical time-line technique that can be used to script a rehearsal. As a minimum, every event on his execution matrix and decision support template (DST) is addressed.

## Rehearsal Time-Line




# End Notes Annex J

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1 Margery S, Berube, et. al. The American Heritage Dictionary, (Boston: Houghton Mifflin Company, 1982), p. 1042.

2Headquarters, Department of the Army, Field Manual 71-1, The Tank and Mechanized Infantry Company Team (Washington: U.S. Government Printing Office, 8 April, 1988), p. 2-14.

# Annex K

# Decision Support Template (DST)

What is a DST? The current doctrine on the Decision Support Template is confusing. FM 100-5, Operations (1986), the Army's capstone manual for warfighting, does not mention the DST. FM 101-5, Staff Organization and Operations (1984), the Army's primary manual for staff planning and decision making, is also silent on the subject. FM 101-5-1, Operational Terms and Symbols (1985) does not list the DST as an operational term. It is only in more recent manuals, the ones produced in the late 1980's and early 1990's, that the DST concept appears. A chronological review of some of this literature reveals that the DST is an evolving concept.

FM 71-100, Division Operations, was published in June 1990 and represents the latest doctrinal definition of the term DST. This manual described the DST as a "melding of the enemy situation and event template information with the friendly course of action sketch or operations overlay of the final approved OPLAN or OPORD."[15] **FM 71-100 established that the DST is a master execution matrix.** The DST is started during the war game phase of the planning process and is expanded once a specific course of action is selected by the commander.

> "The DST is, essentially, a master execution matrix. It correlates the enemy operational timetable and the friendly operational timetable while identifying decision points (DPs) for commitment of friendly combat power, target areas of interest (TAI) where the combat power must be applied, time phase lines (TPLs) to assist the decision maker in synchronizing the combat power which is available and the named area of interest."[16]

## A DST for Maneuver Commanders

Doctrinal literature is not consistent concerning the DST. It does not adequately define or describe the use or development of the DST. To be effective at the battalion level, the DST must assist the commander to execute combat decisions during the battle. In other words, the purpose of a DST is to promote agility.

FM 100-5, Operations emphasizes agility and operational flexibility as the key to successful tactical operations. Tactical commanders are expected to be able to produce plans that "enable the commander to shift his main effort quickly without losing synchronization . . . To achieve this requires anticipation, mastery of time-space relationships, and a complete

understanding of the ways in which friendly and enemy capabilities interact."[18]

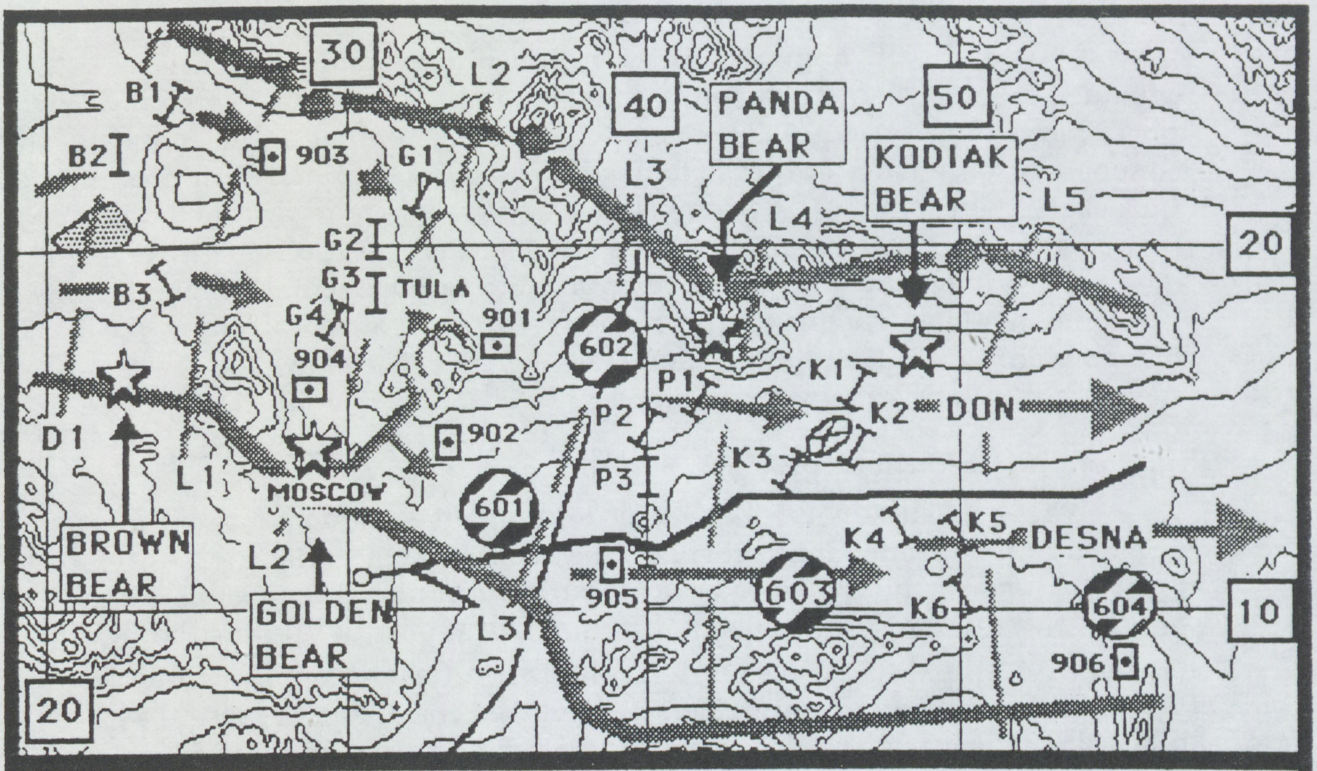
To accomplish this we must first develop a useful definition of a DST. Our definition is a synthesis of current doctrinal literature.

> The Decision Support Template is a master intelligence and operations execution product (overlay, sketch, matrix, or combination sketch with matrix, or overlay with matrix) used by the commander and his staff to assist in the execution of the battle. The DST is a product of the initial war game of the commander's chosen course of action and is refined continuously until execution. The DST lists all critical decisions, targets and time-distance factors that will assist the commander in making accurate and timely battlefield decisions. In its final product is a master execution matrix tied to the commander's battle map.

As described above, the DST can be presented in several forms. At the battalion/Task Force level the most useful form appears to be an overlay DST, or an Overlay-with-Execution-Matrix DST. This format should include all critical decisions, targets and time-distance factors that will assist the commander in making accurate and timely battlefield decisions. This product is produced as a combined staff effort under the direction of the operations officer.

Another useful format for a DST is a sketch with matrix. An example of an OPFOR **Sketch with Matrix DST** is shown below:[19] This DST was used by the Oppossing Forces Regiment at the national Training Center. This DST product reduces the complex operation to a simple concept. The OPFOR Regiment at the National Training Center (NTC) has used an improved version of a DST to assist the regimental commander in making battlefield decisions. This version has been validated in the field in several rotations at the NTC.

The DST is the commander's tool to execute fire, maneuver and combat support options during the battle. Decision points or decision lines are used to assist the commander to fire targets and execute branch plans. Decisions are based upon enemy actions. Decision points or lines also assist the commander to move along a new direction of attack based upon enemy weakness, or exploit an enemy mistake. Decision points, targets and time-space factors are calculated directly on the commander's battle map or depicted on a sketch.




| Decision Point | Criteria | Action | Fires |
|---|---|---|---|
| BROWN BEAR | Enemy west of L3, moving west, passes blocked OPFOR west of D1 | 3 MRB - Moscow, Angel-Tula<br>1 MRB - B1, 2 MRB - B2<br>4 MRB - B3, 7 MRB - B1 | 903 or 904 |
| GOLDEN BEAR | Enemy east of L3, moving west, passes clear, OPFOR east of L1 | 3 MRB - Moscow, Angel-Tula<br>1 MRB - G1, 2 MRB - G2<br>4 MRB - G3, 7 MRB - G4 | 901<br>601 or<br>902<br>602 |
| PANDA BEAR | Enemy east of L4, moving west, passes clear, OPFOR east of L2 | 3 MRB - Moscow, Angel-Tula<br>1 MRB - P1, 2 MRB - P2<br>4 MRB - P3, 7 MRB - P3 | 905<br>603 |
| KODIAK BEAR | Enemy east of L5, moving west, passes clear, OPFOR east of L3 | 3 MRB - P1, Angel-P1<br>1 MRB - K1/4 2 MRB - K2/5<br>4 MRB - K3/6 7 MRB - K3 | 906<br>604 |

DSTs are really nothing new. A rudimentary example of a DST is provided by an ordinary company/team fire plan. An effective company fire plan orients on several possible enemy avenues of approach. The company commander designates Target Reference Points (TRPs) to help him mass his fires at the critical point. The commander decides where to direct his fires based on the enemy's actions. Primary and alternate positions are focussed on the most likely enemy avenue of approach. Supplemental positions allow the company/team commander to maneuver fires in other directions (i.e. a branch plan). A DST at the battalion/Task Force level follows the same theme, but involves many more pieces.

## The DST and Branch Plans

AirLand Battle requires a flexible and intelligent orders process that is oriented on the enemy and recognizes the critical value of time. FM 100-5, Operations states the challenge aptly: "Our tactical planning must be precise enough to preserve synchronization throughout the battle...it must be flexible enough to respond to changes or to capitalize on fleeting opportunities."[20]

Some maneuver commanders see no need for a DST because they often plan to execute a battle according to a rigid, yet synchronized plan. These set-piece battles usually contain only one detailed course of action. Subordinate units are expected to execute the plan. This type of operation can work if the enemy cooperates with the assumptions that were developed when the single course of action plan was devised. If a plan is inflexible, and does not include branches, there are few decisions for the commander to make after the battle has started.

But what if the enemy doesn't cooperate? What if the enemy isn't where you expected him when you issued the order twelve hours before crossing the line of departure? The key to agility is to develop plans that can be executed once the enemy situation becomes clearer. This situation usually occurs closer to battle-time or during the battle. To achieve the flexible thinking and fast reaction prescribed for in FM 100-5, Operations, commanders must develop plans that are oriented on the enemy in an action and reaction thought process. This thought process demands that each plan have several branches. Branch plans provide for tactical agility and can compensate for any disadvantage associated with the chosen course of action. They can assist the commander to act decisively to exploit enemy weaknesses as those weaknesses are discovered on the battlefield. A DST can play a critical role in the execution of tactical agility by acting as a master execution matrix for the implementation of branch plans.

Branch plans are also central to effective deception planning. Deception operations exploit enemy actions by manipulating multiple friendly courses of action. Deception does not always require a separate feint or ruse to deceive. Multiple friendly courses of action become deceptions in themselves. By presenting the enemy with a pattern that depicts a strong attack in one direction the enemy may respond by moving forces to protect against your attack. If the enemy doesn't respond, continue with your

planned attack. If he does, quickly execute a branch plan. This kind of agility, that attacks the enemy's newly created weakness, may often is enough to smash through his defenses before he can issue further orders.

The branch plans are driven by reconnaissance and appear on the DST as on-order plans. The commander's Priority Intelligence Requirements (PIR) are focussed on the critical information needed to make decisions about which branch plan(s) to execute.

Current literature on DSTs is confusing and contradictory. The **Decision Support Template is a master intelligence and operations execution product (overlay, sketch, matrix, or combination sketch with matrix, or overlay with matrix) used by the commander and his staff to assist them in the execution of the battle.** The DST is a product of the initial war game of the commander's chosen course of action and is refined continuously until execution. The DST lists all critical decisions, targets and time-distance factors that will assist the commander in making accurate and timely battlefield decisions. **In its final form it is the commander's battle map.**

Commanders must master time and space factors to fight effectively on the modern battlefield. A DST is one technique that helps the commander simplify time-space data. To make correct battlefield decisions in time, you must first plan the decisions that you know that you will have to make. Next you can plan decisions for possible branches and contingencies. All of these decisions involve a precise understanding of what can be done in a specified time. The DST reduces these time and space calculations to efficient battlefield information. In addition, the DST focuses the commander and his staff on the enemy. The DST, therefore, is a tool that assists the commander to think and act faster. This ability helps to synchronize combat power and allows the commander to quickly take decisive advantage of enemy mistakes as they unfold.

Commanders and staffs trained to develop DSTs in a systemic fashion can increase their ability to execute tactical plans in minimum time. This makes the DST a critical enabler for AirLand Battle doctrine. It is now time for the Decision Support Template to become part of every maneuver commander's tactical tool box.

# End Notes Annex K

1 Headquarters, Department of the Army, Field Manual 71-100, Division Operations, (Washington D.C., 16 June 1990), p. 3-17.

2 Ibid., p. 3-17.

3 Headquarters, Department of the Army, Field Manual 100-5, Operations, (Washington D. C., 11 may 1988), p. 133.

4 Author's Note: This DST was used by the Opposing Forces (OPFOR) Regiment in a meeting engagement at the National Training Center. The battle, which occurred in the late winter of 1992, has since become known as the "Battle of Golden Bear." The DST used in this battle helped to make the action one of the most successful meeting engagements in OPFOR history. The DST listed four separate plans.

The first plan, Brown Bear, was designed to fight the battle if the OPFOR engaged the Blue Forces near CRASH HILL. This plan envisaged the BROWN AND DEBNAM passes under Blue Force control. The forward detachment was ordered to seize Objective MOSCOW in the DEBNAM PASS. In this case, the regiment was prepared to attack through the forward detachment if the motorized rifle battalion that composed the Forward Detachment (FD) enjoyed success. If the FD was stopped cold, then the regiment would shift to defend east of CRASH HILL. This plan had seemed unlikely, but was well within the capability of a determined Blue Force unit.

Golden Bear, the second plan, was the variant to use if the passes could be seized by the regiment before the arrival of the Blue Force. This was the best case. The forward detachment would seize Objective MOSCOW and the regiment's air assault force would seize Objective TULA. The forward detachment and the air assault forces were expected to hold their positions until the main body of the regiment arrived to back them up. Golden Bear used the key terrain in the regiment's zone to decisively defeat the Blue Force.

Panda Bear was the plan to fight at HILL 876, if the Blue force went to ground early. No one wished this variant because it was, basically, a reverse of Golden Bear. The difference was that now the Blue Force would be stationary, in hasty defensive positions and the OPFOR would be attacking across open ground. In this case the regiment planned to attack along the north wall of the central corridor, along Axis DON, bypassing the defenses at 876 and moving into the tactical depths of the enemy's defenses.

Kodiak Bear was the plan to fight the enemy near HILL 760. This plan seemed very unlikely, but had to be considered in case the Blue Force

kicked off their attack late or developed a problem with their maneuver. Kodiak Bear was merely a repeat of Panda Bear, with the regiment attacking in the north, along Axis DON, and striking deep to the east. In addition, the regimental staff had planned for an alternate attack axis, Axis DESNA, just in case the Blue Force decided to totally neglect the high speed approaches in the southern portion of the Central Corridor. This option also appeared unlikely. The OPFOR's planning, however, had been thorough and included this branch plan just in case.

[5] FM 100-5, p. 15.

# Annex L

## Definitions of Missions

**Attrition (Attrit)** - The reduction of the effectiveness of a force caused by the loss of personnel or material. (JCS PUB-1)

**Block** - Deny the enemy access to a given area or prevent enemy advance in a given direction. It may be for a specified time. Units may have to retain terrain and accept decisive engagement. (FM 101-5-1)

**Breach (ing)** - The employment of any means to secure a passage through an enemy minefield or fortification. (JCS PUB-1)

**Canalize** - To restrict operations to a narrow zone by use of existing or reinforcing obstacles which may interfere with subsequent operations. (Tactics Div, Infantry School, Ft. Benning 18 April 90)

**Clear** - To destroy or force the withdrawal of all enemy forces and reduce any obstacles which may interfere with subsequent operations. (Tactics Div, Infantry School, Ft. Benning 18 April 90)

**Contain** - To stop, hold or surround the forces of the enemy or to cause the enemy to center activity on a given front and to prevent his withdrawing any part of his forces for use elsewhere. (JCS PUB-1).

**Delay** - To trade space for time, inflict maximum damage on the enemy force and preserve the force within the limits established by the issuing commander. (Tactics Div, Infantry School, Ft. Benning 18 April 90)

**Destroy** - To physically disable or capture an enemy force. (Tactics Div, Infantry School, Ft. Benning 18 April 90).

**Fix** - Actions taken to prevent the enemy from moving any part of his forces from a specific location and / or a specific period of time by holding or surrounding them to prevent their withdrawal for use elsewhere. (FM 101-5-1)

**Interdict** - To prevent or hinder by any means the enemy's use of any area or route. (JCS PUB-1)

**Neutralize** - To render ineffective or unusable. (JCS PUB-1)

**Retain** - To occupy and hold a terrain feature to ensure it is free of enemy occupation or use. (Tactics Div, Infantry School, Ft. Benning 18 April 90)

**Secure** - To gain possession of a position or terrain feature with or without force, and to deploy in such a manner which prevents its destruction or loss to enemy action. (FM 101-5-1)

**Seize** - To gain physical possession of a terrain feature from an enemy force. (Tactics Div, Infantry School, Ft. Benning 18 April 90)

**Support Force** - Those forces charged with providing intense direct overwatching fires to the assault force. (FM 101-5-1)

**Withdrawal** - A retrograde operation in which a force in contact with the enemy frees itself for a new mission. (FM 101-5-1)