14 October 1988

FOREWORD

1. PURPOSE

Fleet Marine Force Reference Publication (FMFRP) 12-2, Infantry in Battle, is published to ensure the retention and dissemination of useful information which is not intended to become doctrine or to be published in Fleet Marine Force manuals. FMFRP's in the 12 Series are a special category of publications: reprints of historical works which were published commercially and are no longer in print.

2. SCOPE

This reference publication complements existing training manuals on small-unit tactics and provides a perspective on infantry in combat by examining basic principles in an easily understandable format using actual battle studies from World War I. Although published in 1939, the lessons illustrated in this book are as valid today as they were to the soldiers and Marines preparing for combat in World War II.

3. CERTIFICATION

Reviewed and approved this date.

BY DIRECTION OF THE COMMANDANT OF THE MARINE CORPS

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DISTRIBUTION: "T.JJ"
# CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>vii</td>
</tr>
<tr>
<td>I. RULES</td>
<td>1</td>
</tr>
<tr>
<td>II. OBSCURITY</td>
<td>16</td>
</tr>
<tr>
<td>III. SIMPLICITY</td>
<td>35</td>
</tr>
<tr>
<td>IV. SCHEME OF MANEUVER AND MAIN EFFORT</td>
<td>55</td>
</tr>
<tr>
<td>V. TERRAIN</td>
<td>69</td>
</tr>
<tr>
<td>VI. TIME AND SPACE</td>
<td>79</td>
</tr>
<tr>
<td>VII. MOBILITY</td>
<td>94</td>
</tr>
<tr>
<td>VIII. SURPRISE</td>
<td>107</td>
</tr>
<tr>
<td>IX. DECISIONS</td>
<td>122</td>
</tr>
<tr>
<td>X. THE PLAN</td>
<td>138</td>
</tr>
<tr>
<td>XI. ORDERS</td>
<td>152</td>
</tr>
<tr>
<td>XII. CONTROL</td>
<td>169</td>
</tr>
<tr>
<td>XIII. COMMAND AND COMMUNICATION</td>
<td>179</td>
</tr>
<tr>
<td>XIV. SUPERVISION</td>
<td>195</td>
</tr>
<tr>
<td>XV. DIRECTION</td>
<td>205</td>
</tr>
<tr>
<td>XVI. FIRE AND MOVEMENT</td>
<td>223</td>
</tr>
<tr>
<td>XVII. FIRE OF MACHINE GUNS</td>
<td>239</td>
</tr>
<tr>
<td>XVIII. INFANTRY-ARTILLERY TEAM</td>
<td>250</td>
</tr>
<tr>
<td>XIX. NEARING THE ENEMY</td>
<td>277</td>
</tr>
<tr>
<td>XX. THE ADVANCE TO THE ATTACK</td>
<td>294</td>
</tr>
<tr>
<td>XXI. SOFT-SPOT TACTICS</td>
<td>307</td>
</tr>
<tr>
<td>XXII. BATTLE RECONNAISSANCE</td>
<td>324</td>
</tr>
<tr>
<td>XXIII. COUNTER-ORDERS</td>
<td>345</td>
</tr>
<tr>
<td>XXIV. ACTION AND MORALE</td>
<td>355</td>
</tr>
<tr>
<td>XXV. NIGHT ATTACKS</td>
<td>364</td>
</tr>
<tr>
<td>XXVI. MIRACLES</td>
<td>390</td>
</tr>
<tr>
<td>XXVII. OPTIMISM AND TENACITY</td>
<td>400</td>
</tr>
<tr>
<td>INDEX</td>
<td>416</td>
</tr>
</tbody>
</table>
INTRODUCTION

THIS book treats of the tactics of small units as illustrated by examples drawn from the World War. It checks the ideas acquired from peacetime instruction against the experience of battle.

There is much evidence to show that officers who have received the best peacetime training available find themselves surprised and confused by the difference between conditions as pictured in map problems and those they encounter in campaign. This is largely because our peacetime training in tactics tends to become increasingly theoretical. In our schools we generally assume that organizations are well-trained and at full strength, that subordinates are competent, that supply arrangements function, that communications work, that orders are carried out. In war many or all of these conditions may be absent. The veteran knows that this is normal and his mental processes are not paralyzed by it. He knows that he must carry on in spite of seemingly insurmountable difficulties and regardless of the fact that the tools with which he has to work may be imperfect and worn. Moreover, he knows how to go about it. This volume is designed to give the peace-trained officer something of the viewpoint of the veteran.

By the use of numerous historical examples, the reader is acquainted with the realities of war and the extremely difficult and highly disconcerting conditions under which tactical problems must be solved in the face of an enemy. In so far as there was material available, these examples pertain to American troops and have been drawn from the personal experience monographs on file at The Infantry School. The combat experience of other armies, however, has been utilized to supplement that of our own.

This work does not purport to be a complete treatise on minor tactics of infantry. The aim of its authors has been to develop
fully and emphasize a few important lessons which can be substantiated by concrete cases rather than to produce just another book of abstract theory.

GEORGE C. MARSHALL,
Colonel, Infantry.

May 1, 1934.

FIRST EDITION

May 1, 1934.

INFANTRY IN BATTLE was prepared by the Military History and Publications Section of The Infantry School under the direction of Colonel George C. Marshall. Major Edwin F. Harding planned the book and supervised the preparation and edit of the manuscript. Major Richard G. Tindall wrote the original drafts of most of the chapters. Captain John A. Andrews, Captain Robert H. Chance, and Lieutenant C. T. Lanham assisted in the research and the preparation of the maps, and contributed parts of some of the chapters. Captain Russel B. Reynolds drafted the chapter on the fire of machine guns. Lieutenant Lanham edited and revised the manuscript in full.

SECOND EDITION

September 1, 1938.

The second edition of INFANTRY IN BATTLE is not a mere reprint. The entire book has been extensively revised. Many of the sections have been completely rewritten; much of the tactical doctrine restated; and new maps by Technical Sergeant William H. Brown substituted for those of the first edition. This work was performed by Captain C. T. Lanham, in consultation with Lieutenant Colonel Edwin F. Harding.
Chapter I: Rules

Combat situations cannot be solved by rule.

The Art of War has no traffic with rules, for the infinitely varied circumstances and conditions of combat never produce exactly the same situation twice. Mission, terrain, weather, dispositions, armament, morale, supply, and comparative strength are variables whose mutations always combine to form a new tactical pattern. Thus, in battle, each situation is unique and must be solved on its own merits.

It follows, then, that the leader who would become a competent tactician must first close his mind to the alluring formulae that well-meaning people offer in the name of victory. To master his difficult art he must learn to cut to the heart of a situation, recognize its decisive elements and base his course of action on these. The ability to do this is not God-given, nor can it be acquired overnight; it is a process of years. He must realize that training in solving problems of all types, long practice in making clear, unequivocal decisions, the habit of concentrating on the question at hand, and an elasticity of mind, are indispensable requisites for the successful practice of the art of war.

The leader who frantically strives to remember what someone else did in some slightly similar situation has already set his feet on a well-traveled road to ruin.

EXAMPLE 1. In the early days of August, 1918, the Germans were retiring toward the Vesle River. On the third day of this month the U. S. 4th Division relieved the 42d and advanced. The 39th Infantry, part of this advancing division, moved forward in an approach-march formation with two battalions in assault. All day the troops struggled forward—the slowness of the advance being caused not by hostile resistance but by the
difficulty of the terrain, particularly the dense woods that had to be negotiated.

Late in the day resistance was encountered and overcome. The enemy fell back. Orders were now received to form a column with an advance guard, take up the pursuit and drive across the Vesle in order to establish a bridge-head on the slopes to the north.

The 39th Infantry (less one battalion) was designated as the advance guard of the 7th Brigade. After a march of several hours, hostile artillery fire was encountered, whereupon the column halted for the remainder of the night. At dawn the march was resumed, but finding that the proposed route of advance was being shelled by the enemy, the advance guard counter-marched to another road. Some confusion resulted from this, the 2d and 3d Battalions becoming intermingled. Thus, when the movement again got under way, Company H formed the advance party, Companies F, K, and L the support, and Companies I, M, Machine-gun Company, Companies E and G, in the order named, the reserve.

Early on August 4 the column approached the Vesle on the Chéry-Chartreuve—St. Thibaut Road. About 2,000 meters south of St. Thibaut this road passes through a deep defile, 200 meters wide and nearly perpendicular to the commanding heights north of the river. The road runs through the full 1,000-meter length of this defile, then emerges at the northern exit to open terrain, over which it winds smoothly to the little village of St. Thibaut. To reach this village, the open terrain before it has to be crossed, and this lies under direct command of the high ground to the north.

No enemy infantry had been encountered. Company H, in column of twos, approached St. Thibaut without being fired on. At 8:00 a.m. it entered the town. By this time part of the support, marching in column of squads, was well out of the defile. Company H had cleared the town and had nearly reached the bridge over the Vesle when suddenly the Germans on the north-
ern heights opened with machine guns and artillery on the advance party and the support, causing heavy casualties and throwing the support, in particular, into the greatest confusion.

From the personal experience monograph of Major Manton S. Eddy, who commanded the Machine-Gun Company of the 39th Infantry.

DISCUSSION. Here is a perfect example of a command offered up on the bloody altar of form. Let us look at that sacrifice more closely.

Until the advance guard emerged from the defile, the terrain had shielded it from hostile ground observation. As it left this friendly protection it came in direct view of the commanding heights to the north. Hostile artillery had been firing from these heights but a short time before, but in spite of this the advance party moved out in column of twos and the support in column of squads. In Major Eddy's words, "It was a sight that must have made the German artillery observers gasp in amazement, for before them lay an artilleryman's dream."

Why was this done? Probably because their training had established it as a custom of the service, as a law of the Medes and the Persians, that an advance party moved in column of twos and a support in column of squads. Their orders had directed them to form an advance guard, they were not under fire, and therefore they adopted one of the diagrammatic formations set forth in training manuals.

True, this unit was entirely lacking in open-warfare experience, having participated in only one attack and that from a stabilized position. It is also true that the intermingling of the 2d and 3d Battalions rendered command difficult. Nevertheless, common sense decried such a suicidal formation in the presence of the enemy.

EXAMPLE 2. On October 14, 1918, the U. S. 77th Division attacked the Germans north of the Aire River near St. Juvin.
The hostile positions in this vicinity were strong, particularly against an attack from the south. Feeling certain that the German barrage and defensive fires were registered south of St. Juvin and the Aire River, the division commander planned to take the village by envelopment from the east and southeast,
while one regiment made a frontal demonstration from the south. He decided that, under cover of darkness, troops could cross the Aire well to the south unobserved. This operation would require movement in the zone of the 82d Division on the right, but the position of the 82d facilitated this maneuver. Therefore the 77th Division order specified:

By maneuvering with its right in the area of the 82d Division it (the 77th Division) will attack St. Juvin from the south and the east.

Unfortunately, this idea of maneuver was not reproduced in the orders of the lower echelons, the troops being sent "straight against St. Juvin from the south," the direction that the division commander had particularly wished to avoid for the real attack.

The 1st Battalion of the 306th Infantry, which the division commander had expected to be directed against St. Juvin from the east, attacked straight from the south with the unfordable Aire between it and its objective. The hostile barrage and murderous machine-gun fire from the slopes north of the Aire swept through the assaulting units in a wave of destruction. The attack stopped. At noon the situation was such that the division commander believed a serious repulse inevitable.

At this time the commanding officer of the 306th Infantry concluded that there was no chance of success if the attack continued along these lines. Therefore, after the failure of the frontal effort, this regimental commander, acting on his own initiative, directed the rear elements of his regiment to cross the Aire east of Marcq and make a flanking movement against St. Juvin. This maneuver was carried out, and the town, the hostile position, and 540 prisoners were captured.

From "Memories of the World War" by Major General Robert Alexander, who commanded the 77th Division.

DISCUSSION. General Alexander emphasizes the fact that the attack, as launched at first, was merely frontal. It failed. Not until the regimental commander, acting on his own initiative, ordered troops to cross the Aire and strike the hostile position in flank, was success achieved.
RULES

This division commander states that "evidently the malign influence of trench-warfare doctrine, which in all cases depended upon a barrage and a straight push behind it," still controlled the minds of some of his subordinates.

From beginning to end, the World War is studded with major and minor reverses that resulted from attempts to apply methods that were successful in one situation to another situation.

EXAMPLE 3. On November 2, 1918, the 9th Infantry, part of the U. S. 2d Division, was in division reserve southwest of Bayonville-et-Chennery. An American attack, launched on November 1, had achieved considerable success, and the Germans appeared somewhat demoralized.

On the afternoon of November 2, the 9th and 23d Infantry Regiments (3d Brigade) received orders to advance abreast, cross the front line at 8:00 p.m., and under cover of darkness moved forward to the heights just north of the Nouart—Fossé Road. They would then organize this position and prepare for a vigorous pursuit.

The 9th Infantry, in the order 1st, 2d, 3d Battalions, moved out in column of twos along the Bayonville-et-Chennery—Nouart Road to the front line then held by the 4th Brigade. As the regiment came to the outguards of the 5th Marines it was informed that the enemy still occupied the area to the immediate front—information which was soon found true.

The leading company (Company A) sent forward a patrol of several selected men which preceded the column by about 100 yards. Slowly the regiment moved forward. It passed through a long cut in the road. As the head of the column emerged from the cut, it ran into an enemy outguard of seven or eight men. These were promptly killed or captured and the regiment resumed its forward movement, this time protected by a deployed platoon to the front and by small groups from the leading company as flank guards. Heavy fire was now received from the left.
The column at once took cover while Company A deployed, moved against the enemy and drove him off. It was now midnight and the objective was close at hand. Accordingly, a halt was called until 5:00 a.m., at which time the regiment advanced a short distance and deployed on the designated line, Nouart—Fossé.

An attack was launched from this line and new objectives were reached without encountering serious opposition. Here another pause ensued.

Although German resistance was rapidly crumbling along the entire Western Front, the 9th and 23d found that a definite stand was being made a short distance to their front on the crest along the south edge of the Bois de Belval. Accordingly, American artillery fire was placed on this position and preparation made to take it.

The brigade plan was unusual. The 9th and 23d were ordered to penetrate the German position by marching in column on the road through the Bois de Belval and to seize and occupy the heights south of Beaumont. The advance was to be supported by a rolling barrage extending 200 yards on each side of the road.

The 9th Infantry began its forward movement about 4:30 p.m. in the following order of march: 3d Battalion and Machine-Gun Company as advance guard, followed by the 2d and 1st Battalions, each with one company of the 5th Machine-Gun Battalion attached. It soon became dark. As the head of the advance guard approached the edge of the woods a few hundred yards south of Belval, German machine guns opened fire from both sides of the road. Patrols sent to the left and right made short work of silencing these guns. At Belval the road was barricaded. This was cleared up and the regiment, in column of twos, moved on in the darkness and mud. Rain began to fall.

Frequent halts were made to intercept enemy detachments moving along the road and to verify the route. Several German-speaking soldiers were placed at the head of the advance guard to hold the necessary brief conversation with any groups of the
Example 3
enemy that might be encountered. Several of these groups were taken prisoner without firing a shot.

Just north of la Forge Farm the leading company of the advance guard surprised a large detachment of German troops who were industriously preparing a position from which they could cover a clearing in the forest. Sixty or seventy prisoners were taken.

The column continued, surprising a train bivouac and capturing an aid station. It arrived at the north edge of the wood at 10:45. At la Tuilerie Farm the officers and men of a German minenwerfer company were surprised and captured. Dispositions were then made to hold the ground won. According to reports of prisoners and captured documents, the Germans had intended to hold the position near the south edge of the Bois de Belval for two days.

From the personal experience monograph of Captain Roy C. Hilton, who commanded the Machine-Gun Company of the 9th Infantry.

DISCUSSION. Here is a remarkable action. During a single night a regiment, in column and on roads, marched five miles through the enemy position! This feat becomes still more remarkable when we consider the fact that it was preceded by four years of stabilized warfare during which such an operation would have been classed as the height of insanity.

The plan was revolutionary. It was contrary to all the tedious rules that had been evolved while the war stagnated in the trenches. Perhaps that is the very reason it succeeded. Of course, some praise this operation and others damn it as poor tactics and a dangerous gamble. But no matter what the rule books say, one unassailable fact remains—the American commander's estimate of the extent of German demoralization and confusion was thoroughly upheld by the success obtained. And we judge by results.

EXAMPLE 4. On October 29, 1918, the 2d Battalion of the U. S. 61st Infantry held a position south of the Andon Brook.
RULES

From the north edge of the Clairs-Chênes Woods the ground—devoid of cover—falls in a long gentle slope to the little brook that skirts Aincreville.

The Germans, in possession of Aincreville, had emplaced their machine guns about 250 yards in front of the town in a semicircular position. In addition, they had prepared an artillery barrage to fall about 200 yards in front of their machine guns.

The Americans could hear voices and the rumbling of wagons in Aincreville, but had no idea in what strength the enemy held the town. Patrols could advance only a short distance before they were driven off, for the Germans signalled for their defensive barrage on the slightest provocation. The signal was a green-star rocket, which brought the barrage down about two minutes later.

Expecting that he would be ordered to capture Aincreville, the battalion commander made his estimate of the situation. His men were very tired. After a succession of long marches, they had taken part in operations from October 12 to 17, and, though suffering heavy casualties, had met with only small success. Following this they had remained under artillery fire in division reserve for several days and then, after receiving a few partly-trained replacements, had relieved elements of the 3d Division in the front line on the night of October 26-27.

In view of the condition of his men, the battalion commander believed that any cut-and-dried attack would have small chance of success. There was no cover. An American artillery preparation would be certain to bring down the German's barrage and cause their machine guns to open. And he was not at all sure that his weary men would advance through this fire over open terrain. He did believe, however, that the Germans were equally tired and that if he could only get close quarters with them the problem would be solved.

On the afternoon of October 29 the expected order arrived. It directed that one officer and 100 men from this battalion attack
12

INFANTRY IN BATTLE

and seize the town following a preparatory artillery and machine-gun barrage. The battalion commander immediately proposed an alternative plan which was approved. Only the officer directly in charge of the action and four or five reliable sergeants were let in on the plan. This is how the battalion commander proposed to take Ainceville—

At 2:30 a.m., October 30, Lieutenant R. W. Young and 100 men from Company F would capture Ainceville by surprise.

The attack would jump off without preparatory fire of any kind. The assault would be made in two waves. The sergeants who were in on the plan would follow the second wave to insure that all men went forward at the crucial moment and not back. The advance would be made silently. The battalion commander believed that these troops could reach a point within thirty yards of the line of machine guns before being discovered. When the hostile machine guns opened up, the attackers were to lie down and take cover. Lieutenant Young, with a captured German Very pistol and green-star rocket, would then fire the signal calling for the German defensive barrage. All of the Americans knew this signal.

As soon as Lieutenant Young felt that his men realized the meaning of the green-star rocket, he would yell: "Beat it for the town!" The battalion commander believed that the assaulting troops would realize that there was no time to regain their line before the German barrage came down in rear of them and that, therefore, their only hope of safety lay in reaching the town.

Arriving in town, they would take cover in the houses and cellars, wait until morning, and then mop it up. Arrangements were made to report the capture of the town by rocket.

The unit on the left would place a machine-gun barrage on the western exit of the town, preventing German escape and diverting attention there. The signal for this barrage would be the green-star rocket fired by the attacking force.

The plan worked perfectly. The Americans advanced until
Example 4

halted by fire from one or two machine guns. They were close to the guns and in a line. The rocket went up and a voice shouted: "Beat it for the town, it's your only chance!" The men ran over the machine guns, leaped across the stream and entered the
town, where they were assembled and directed into houses and cellars. There were only one or two casualties.

Lieutenant Young was killed the next morning while supervising the mopping up of the town.

*From the personal experience monograph of Major Alexander N. Stark, Jr., who commanded the 2d Battalion of the 61st Infantry.*

**DISCUSSION.** Certainly there is nothing stereotyped about this plan. It is not customary to sit on a piece of ground where the enemy places his barrage and then send up a signal calling for that barrage. It is equally unusual to devise a deliberate surprise for your own troops. This plan worked, however, and that is the criterion by which an action must stand or fall.

It is possible that the town might have fallen before a daylight assault well supported by fire. Perhaps it might have been taken by a night attack more nearly conforming to the book. On the other hand, it is possible that the battalion commander was entirely correct in his estimate of the effort he could expect from his men at this particular time. The result obtained fully justified the means employed.

**CONCLUSION.** Every situation encountered in war is likely to be exceptional. The schematic solution will seldom fit. Leaders who think that familiarity with blind rules of thumb will win battles are doomed to disappointment. Those who seek to fight by rote, who memorize an assortment of standard solutions with the idea of applying the most appropriate when confronted by actual combat, walk with disaster. Rather, is it essential that all leaders—from subaltern to commanding general—familiarize themselves with the art of clear, logical thinking. It is more valuable to be able to analyze one battle situation correctly, recognize its decisive elements and devise a simple, workable solution for it, than to memorize all the erudition ever written of war.
To quote General Cordonnier, a French corps commander:

The instruction given by leaders to their troops, by professors of military schools, by historical and tactical volumes, no matter how varied it may be, will never furnish a model that need only be reproduced in order to beat the enemy...

It is with the muscles of the intellect, with something like cerebral reflexes that the man of war decides, and it is with his qualities of character that he maintains the decision taken.

He who remains in abstractions falls into formula; he concretes his brain; he is beaten in advance.
Chapter II: Obscurity

In war obscurity and confusion are normal. Late, exaggerated or misleading information, surprise situations, and counterorders are to be expected.

IN WARFARE of movement even higher commanders will seldom have a clear insight into the enemy situation. Detailed information of hostile dispositions and intentions will ordinarily be revealed only through the medium of combat. Obviously, such information is not available in the initial stages of a battle and experience has shown that little of it ever filters down to front-line leaders as the fight progresses. In mobile warfare, then, small units may expect to fight with practically no information of friend or foe. Theirs, as Captain Liddell Hart expresses it, is the problem of how to guard, move and hit in the dark.

In stabilized warfare more information is usually available, but even here the smaller units will be repeatedly confronted with obscure situations that demand immediate action.

The leader must not permit himself to be paralyzed by this chronic obscurity. He must be prepared to take prompt and decisive action in spite of the scarcity or total absence of reliable information. He must learn that in war the abnormal is normal and that uncertainty is certain. In brief, his training in peace must be such as to render him psychologically fit to take the tremendous mental hurdles of war without losing his stride.

EXAMPLE 1. On September 8, 1914, the German 14th Division, which had been in army reserve during the early stages of the Battle of the Marne, was ordered to force a crossing of the wide swamp south of Joches. This swamp, impassable even to

[16]
foot troops, was bridged by a single road. The French, located south of the swamp, could fire with artillery and machine guns on both Joches and this road.

Marching from the north the 2d Company of the 57th Infantry (temporarily attached to the 53d Infantry) reached the north edge of Coizard at 8:00 a.m., and prepared for action while its commander went forward to the southern outskirts of the village to reconnoiter. From there he could see Joches, the formidable swamp and, beyond the swamp, Hill 154 interlaced by hedges and dotted with sheaves of grain. He could see that the French held this hill, for their red pantaloons were clearly visible in the morning sun. There was no firing; everything was quiet. Behind him he saw a few German batteries moving up. At 9:00 a.m. he saw a group of German scouts leave Joches and start forward to cross the swamp. The French immediately opened fire on the village and the road with artillery, machine guns and rifles. At this point the company commander was called to the rear where he received the following battalion attack order:

The 2d Battalion of the 16th Infantry starts the crossing of the Petit Morin River. The 53d Infantry will follow, with the 2d Company of the 57th Infantry at the head. The objective is the village of Broussy-le-Petit.

That was all.

The attacking infantry knew neither the enemy's strength nor the location of his front line. They were not told whether or not their attack would be supported by artillery. They had no idea what units would be on their flanks. They only knew that they had to attack and would meet the French somewhere beyond the swamp.

*From the personal experience monograph of Captain Adolf von Schell of the German General Staff, who commanded the 2d Company of the 57th Infantry.*

**DISCUSSION.** This example is typical of attack orders that infantry companies may expect in open warfare. Leaders had to be guided by their mission, by the ground in front and by what they could see. Indeed, Captain von Schell emphasizes the fact
that the order quoted was the only one he received during the entire day.

In peace these highly-trained troops had been accustomed to orders arranged in a certain set sequence and to elaborate information of the enemy. But when war came there were only fragmentary orders and little or no information of the enemy. To quote Captain von Schell:

In open warfare on the Western Front and on the Eastern Front, in Rumania and in the Caucasus, it was always my experience that we had the most meager information of the enemy at the start of an attack.

EXAMPLE 2-A. On July 14, 1918, the U. S. 30th Infantry held a defensive sub-sector south of the Marne, with its command post in the Bois d'Aigremont. The 1st Battalion, reinforced by an additional rifle company (K), Stokes mortars and machine guns, defended the area north of the Fossoy-Crézancy Road. Companies B and C outposted the river bank from Mézy to the Rû Chailly Farm. The rest of the regiment, with two companies of the 38th Infantry attached, had organized the Bois d'Aigremont in depth.

Communication agencies between the 1st Battalion and the regiment included two independent telephone lines, one buzzer, one TPS (earth telegraphy), a projector, pigeons and runners.

About midnight on the 14th, American artillery opened a violent bombardment. A few minutes later German shells began to burst in the American area. The cannonade increased in violence.

Soon after the German bombardment had gotten under way, it was realized at headquarters of the 1st Battalion that the long-expected German attack had at last jumped off. Signal equipment was tested and found useless. A rocket was sent up calling for artillery fire on the north bank of the Marne. Since it was impossible to tell whether the American artillery was firing
there or not, other rockets were sent up from time to time. Runners were sent to Companies A, K, and D, informing them that the expected attack was in progress and directing them to hold their positions.

About 2:10 a.m. an excited runner from Company C arrived at the battalion command post. He reported that at the time he left Mézy the Germans in the town greatly outnumbered the Americans there. He also said that he had passed many of the enemy between Mézy and the battalion C.P. He appeared very calm after a time and was positive that the information he had given was correct.

A few minutes later another runner arrived, this time from Company B. He stated that the Germans had crossed the river opposite the Ru Chailly Farm, had destroyed two platoons of Company B, and that his company commander requested reinforcements. The folly of attempting to move troops through the woods in darkness and under intense artillery fire was realized, and accordingly no movement to reinforce Company B was ordered.

A messenger from Company A now reported that all the officers in his company had been killed.

Runners sent out from the battalion C.P. for information never returned.

At daylight four officers' patrols were sent out. One of these, commanded by a battalion intelligence officer, returned shortly and reported that a hostile skirmish line was only fifty yards in front of the woods.

In view of these alarming reports the battalion commander decided to move his C.P. about 500 yards to the rear in a ravine west of Crézancy. He believed that this location would facilitate control, give a better line on the action, and be more accessible to runners. Messengers were sent to Companies A, K, and D, informing them of the change. The commander of Company D construed this message to mean that the battalion was withdrawing. Accordingly he withdrew his company to the Bois
d'Aigremont via Crézancy. The battalion commander was unaware of this movement at the time.

At this point a message was received from the regimental commander asking for a report on the situation. From the context it was clear that he had not received any of the messages that had been sent back during the previous five hours.

From the personal experience monograph of Major Fred L. Walker, who commanded the 1st Battalion of the 30th Infantry.

DISCUSSION. Although the battle had been in progress only a few hours, the battalion commander knew neither the location of his own front line nor that of the enemy. In fact, he did not even know if his two forward companies were still in existence. He was unaware of the situation of the units on his flanks—if they were holding or if they had been withdrawn. He had to judge the situation by surmise, and part of that surmise was incorrect.

EXAMPLE 2-B. Let us now consider the situation at regimental headquarters during this same action. Hour after hour passed, but no word came in from front, flanks, or rear; only reports from nearby units in the Bois d'Aigremont that they were suffering heavy casualties. All means of communication within the regiment had failed soon after the bombardment began. Messages were sent to the rear reporting the situation. Runners sent forward did not return.

Throughout the night the regimental commander and his staff sat about a table in the C.P. dugout, studying a map by the uncertain light of one dim candle. This candle was periodically extinguished by the concussion of bursting shells. The roar of artillery made conversation difficult.

At daylight the regimental commander made a personal reconnaissance. Shells were falling everywhere within the area between the Fossoy-Crézancy Road and the Bois d'Aigremont, but except for this he saw no signs of activity.
He returned to the C.P. and there he found that a message had come in from the front line indicating that the Germans had crossed the Marne at two or three places. Apparently it had taken hours to get this information back.

At 5:00 a.m. a runner from the 1st Battalion brought in the following message:

**FROM:** Portland (1st Battalion, 30th Infantry) July 15, 2:30 a.m.
**To:** Syracuse (30th Infantry)

*We have had some gas. All groups south of railroad, on line with P.C. are being heavily shelled. Heavy machine-gun fire in vicinity of Mont-St.-Père since 2:00 a.m. Have received no news from front-line companies. I believe all lines are out. Bombardment began at 12:00.*

Signature.

P.S. Captain McAllister reports that he needs reinforcements and that his two front-line companies have been driven back. Cannot depend on any method of liaison. Better base your actions from your P.C.

In five hours the regimental commander had learned practically nothing of the situation. The American artillery kept pressing him for targets, but he could designate none. He had no idea where his own troops were or where the enemy was. All he could do was send out more runners in an endeavor to determine the situation; and this he did.

Shortly after 5:00 a.m. an officer came to the C.P. with the report that one of his men had talked to a man from Company C who said that some of his company had been driven out of Mézy. A few minutes later an officer reported in from 1st Battalion headquarters. He stated that the battalion commander had been unable to get any direct news from his forward-company commanders since 2:30 a.m.; that the woods just north of the Fossoy—Crézancy Road had been torn to pieces by shell-fire, and that casualties in the headquarters personnel were heavy. Companies A, K, and D had not been engaged. The battalion commander was certain, from what some stragglers
had said, that the Germans had crossed the river near Mézy and the Rû Chailly Farm, had passed the railroad and were moving south.

Some time after this the commander of the 1st Battalion reported in person to the regimental command post. He said that his two forward companies (B and C) were totally lost; that every unit of his command had sustained heavy losses; that communication, even with companies nearby, was extremely difficult; and that he had moved his command post slightly to the rear. He then recommended that the artillery, which had prepared defensive concentrations within the position, place fire south of the railroad. He added that the remnants of Companies A, K, and D should be able to hold out a while longer.

A little later another officer came in. He had a message for the regimental commander—"a message from brigade," he said. The colonel reached for it expectantly. Here, at last, would be some definite news—the location of the hostile front line, the enemy's assembly areas, the location of the German boats and bridges. Brigade probably had it from the aviators. He opened the message and read:

FROM: Maine (6th Brigade) July 14, 11:30 p.m.
To: Syracuse (30th Infantry)

Test message. Please check the time this message is received and return by bearer.

This message, received at 6:35 a.m., was the first word from higher headquarters since the start of the battle at midnight.

DISCUSSION. Here is an instance where the regimental commander knew even less of the situation than the commander of his front-line battalion. Not until the battalion commander went in person to the regimental command post did the colonel have even a glimmering of the situation, and then much vital information was lacking and much was in error. For example,
Example 2-B
the regimental commander was informed that the two front-line companies were "totally lost." Actually, as we shall see, this was completely erroneous. Some elements of these companies were still very positively in the war. In fact, at about the time the colonel was receiving this disheartening report, two platoons of one of his front-line companies, aided by machine guns, were breaking a German attack by the effective expedient of practically annihilating the battalion making it.

The incident of the message from brigade to regiment, received at the height of battle, and seven hours en route, is most instructive.

EXAMPLE 2-C. Lieutenant James H. Gay commanded a platoon of Company C of the U. S. 30th Infantry, posted near the river bank opposite Mont-St.-Père. His command had not suffered a great deal from the German bombardment, but communication had been out with all units except one platoon located about 300 yards to his rear. "At dawn," states Lieutenant Gay, "I knew absolutely nothing of what it was all about or what was happening except in my own little sector."

About 4:30 a.m. some Germans approached from the front and after a fight lasting several hours were beaten off by Lieutenant Gay's platoon. Around 9:00 a.m. a lull ensued. Communications were still out. Lieutenant Gay's idea of the situation is given in his own words:

I thought the whole action had been merely a good-sized raid which had been repulsed. There was absolutely no further movement in our range of vision and I did not know of the events which were occurring elsewhere at the time.

Shortly after 9:00 a.m., Lieutenant Gay saw Germans to his right-rear and to his left-rear. At this point American artillery fire came down on his unit. He decided to move back and join the platoon in his rear. When this was accomplished the two
platoon leaders met and, after discussing the situation, agreed to move their combined units back toward the company C.P.

En route they stumbled into two parties of Germans and took 150 prisoners. Having so many prisoners and finding that the company command post was occupied by the enemy, they decided to move on to the battalion C.P. On the way they passed another command post. It was deserted. They reached the old location of the battalion C.P. only to find it had been moved—no one knew where.

Lieutenant Gay then marched the two platoons and his 150 prisoners directly down the Crézancy-le Chanet Road. Although the column must have been highly visible, not a shot was fired at it. He finally reached American troops, turned over his prisoners and later rejoined his battalion.

Taken from a statement of Lieutenant James H. Gay, who commanded the 2d Platoon of Company C, 30th Infantry.

DISCUSSION. In the midst of one of the decisive battles of the World War, Lieutenant Gay diagnosed the situation as a good-sized raid. In a general engagement, leaders of small units will seldom know much more than this lieutenant. Their conception of the situation is invariably distorted.

In this action we have seen the meager information possessed by a regimental commander, by the commander of a forward battalion, and by the leader of a front-line platoon. What information they did receive arrived hours after the events had occurred, and was indefinite and often negative. A comparison of this with the extremely definite information usually provided in map problems is striking. Officers who expect anything approaching such precision in actual combat are headed for a bitter surprise.

Owing to the extreme violence of the German bombardment, communication in this battle was undoubtedly more difficult than usual. But on the other hand, this was a defensive action for the Americans; they were operating over familiar terrain,
and their communication agencies were installed at the start of the fight.

EXAMPLE 3. On July 17, 1918, the 2d Battalion of the U. S. 104th Infantry, which was then holding a position in Belleau Wood, received word that it would be relieved that night. Later, a message came in directing the battalion scout officer to report to regimental headquarters. Following this, another message arrived ordering the captain of Company E to report to the brigade. Neither of these officers returned. Preparations for the relief went on, but as hour after hour passed and no reconnaissance parties arrived, the battalion commander became concerned. At midnight he called the regimental command post but could locate no one except the supply officer, of whom he inquired:

“What about this Field Order No. so-and-so [the order for the relief]? There haven’t been any friendly visitors up here.”

The reply killed any idea of an early relief.

“Well, there isn’t anybody around here, but I can safely tell you that it is all off.”

At 3:30 a.m. the missing scout officer returned with word that the 3d Battalion would pass through the 2d and attack at 4:35 a.m.

Time passed. No one appeared. At 4:15 a.m. the 3d Battalion commander arrived alone with his hands full of charts and orders. He was visibly agitated. After complaining about “a horrible tie-up on the part of the higher-ups” he briefly explained the contemplated plan. This attack, which was to be launched from the north edge of the wood and drive toward the little town of Belleau, was believed to be merely a local operation for the purpose of rectifying the lines.

In due course the American barrage came down and at 4:35 a.m. began to roll forward. Not until then did elements of the
3d Battalion's assault companies begin to arrive. A heavy enemy artillery concentration began to fall on Belleau Wood.

The 3d Battalion commander, seeing that his troops had arrived late and were somewhat disorganized by hostile artillery fire, now declared his attack off, and directed his officers to have the men take what cover they could find in the woods. He then sent the following message by pigeon to brigade headquarters:

**PIGEON MESSAGE:** Time 6:05 o'clock.

**LOCATION:** At woods where 3d Battalion was to start from.

Did not reach starting-off place until attack had started. Machine-Gun Company did not arrive until 5:10. Their ammunition did not arrive. Infantry companies all late on account of lateness of arrival of ammunition and other supplies. When they arrived it was broad daylight and fully exposed and companies being shelled by the enemy. Battalion now scattered about woods, taking whatever cover they can find, as woods are being heavily shelled by high explosive. Can get in touch with me through P.C. 2d Battalion.

Meanwhile, the 2d Battalion commander had started for his C.P. En route he saw scattered men of the 3d Battalion frantically digging. When he reached his C.P. he was told that the regimental commander wished to speak to him. He heard the colonel's voice:

"The 3d Battalion has not attacked."

"I know it."

"Well, you take command of it and attack at once."

"It can't be done," the stupefied major replied. "They are scattered all over the world."

"Well, it has to be done. This order comes from higher authority. However, I'll give you a little time. What time is it by your watch?"

"7:05 a.m."

"All right, I'll give you until 7:30 and a rolling barrage. Go to it!"

Then the wire went out and ended the conversation.

The commander of the 2d Battalion took charge. At 8:20 a.m. he managed to launch the attack that should have started at
Example 3

Situation - 7:00 a.m.
At this time the 3d Bn is scattered through the northern part of the Wood.
4:35 a.m. Although the 7:30 barrage had passed, the attack at 8:20 a.m., in which he employed some elements of his own battalion, was reasonably successful.

From the personal experience monograph of Major Evan E. Lewis, who commanded the 2d Battalion of the 104th Infantry.

DISCUSSION. Here we see two battalion commanders participating in the Aisne-Marne Offensive, the attack in which the initiative on the Western Front finally and definitely passed to the Allies. Both officers believed it to be a local action to rectify the line!

We see the commander of the 2d Battalion suddenly confronted with a surprise situation—an order to take command of another battalion, whose men were scattered, whose units were disorganized, and to attack with it in twenty-five minutes. This officer had not been thinking about the problem of the 3d Battalion. He knew neither the location of its units nor the whereabouts of its officers, and yet immediate action was mandatory.

Hundreds of examples can be given; those cited are not isolated cases. Consider the experiences of the French Third and Fourth Armies and the German Fourth Army. On August 22, 1914, these huge forces clashed in a series of true meeting engagements. The French army commanders, in particular, did not believe that any appreciable force of the enemy was anywhere near.

On the morning of the 22d a battalion of the French 8th Division (part of the Third Army), detailed as the support of the advance guard, was destroyed within its own outpost lines, without higher authority knowing anything about it at the time. Even today it is difficult to say what actually happened. Apparently it was surprised in route column by Germans who had penetrated the French outpost in the early morning fog.

On the same day, a few miles to the west, the French 5th Colonial Brigade, marching north, stumbled into the flank of the German XVIII Reserve Corps, which was marching west. The
battle started with the French advance guard striking the German column at right angles and shooting up the combat trains of part of one division.

Near St. Vincent, on this same eventful day, the commander of the French II Colonial Corps informed one of his division commanders, "There is nothing in front of you. You can push right on. It's just a march today." Soon afterward he and his staff became the private and personal target of German light artillery and scrambled to cover. When asked for information he replied, "I haven't the faintest idea of the situation."

In the Battle of Guise, on August 29, 1914, initial contact on the front of the German Guard Corps seems to have been made by the corps signal battalion which, through error, marched into the enemy lines.

Indeed, there appears to be no limit, save the imagination, to the astounding situations that evolve in the darkness and confusion of war. Consider the Turkish pursuit of the British in 1915, after the Battle of Ctesiphon. The Turkish cavalry was sending in reports of the location and movements of the retiring British. The Turkish infantry was pressing forward to gain contact with the British. According to the British official history the Turkish cavalry was actually in rear of the Turkish infantry without the infantry, cavalry, or high commanders being aware of the fact. The movements attributed to the British were presumably the Turkish cavalry's observation of its own infantry.

CONCLUSION. Again it is stressed that these examples afford a striking contrast to the detailed and precise information that is given in map problems. In actual combat practically nothing is known. The situation, particularly in open warfare, is almost invariably shrouded in obscurity. Advanced units, at best, will have but little accurate knowledge of the enemy and frequently none of their own troops. Moreover, even the meager information they do possess will often be false or misleading.
But this does not mean that leaders must meekly submit to the proposition that war is likely to be a game of Blind Man's Buff and that nothing they can do will alter this condition. On the contrary, this realization of the dearth of reliable information in war should serve a dual purpose. First, it should stimulate leaders to adopt those positive and energetic measures that are necessary if vital information is to be gained. Secondly, it should so prepare the leader mentally that, instead of letting himself sink into the bog of apathy when no information is forthcoming, he will recognize the condition as normal and rise to prompt and decisive action.

We carry out in war what we learn in peace. In consonance with this principle the military student, after becoming familiar with the basic tactical concepts, should be given but little positive information of the enemy in his various terrain exercises, map problems and map maneuvers. Thus will he become conversant in peace with one of the most trying and difficult problems in war.
Chapter III: Simplicity

Simple and direct plans and methods make for foolproof performance.

Whether we like it or not, combat means confusion, intermingled units, loss of direction, late orders, misleading information, unforeseen contingencies of all sorts. Troops must often carry out their orders under conditions of extreme fatigue and hunger, in unfavorable weather and almost always under the devastating psychological and physical effect of the fire of modern weapons. Not to take into account these grim realities in formulating a plan of action is fatal.

But even when they are taken into account the leader often faces a cruel dilemma. For instance, the situation may call for an involved maneuver, and an involved maneuver increases the chance of disastrous error. On the other hand, a simple maneuver, though decreasing the likelihood of serious error, may fail to meet the situation. Therefore, it is fallacy to preach simplicity as a battle cure-all. But it is not fallacy to say that simplicity in plans, methods, and orders should always be striven for and that elaborate and complicated maneuvers should not be adopted except for the gravest reasons.

Example 1. On the morning of October 10, 1918, the U.S. 30th Infantry was ordered to attack to the north toward the little town of Cunel. Following an artillery preparation, the 1st Battalion was to attack from the north edge of the Bois de Cunel. Of the two remaining battalions of the 30th, the 2d was in support and the 3d in brigade reserve.

The attack jumped off at 7:00 a.m. The 1st Battalion reached a point about 500 yards north of the wood where it was stopped by heavy fire from the front and both flanks. The men sought
holes in the ground for cover. The hostile fire was so heavy and covered the area so thoroughly that movement in any direction appeared suicidal. Therefore, this battalion remained where it was until dark. The 2d Battalion had not left the wood.

Meanwhile, an order came in from the division commander directing that the trenches in the 30th Infantry zone, north of
the Bois de Cunel, be taken at once. To carry out this mission the following plan was adopted:

The 1st Battalion would withdraw under cover of darkness to the Bois de Cunel, where it would reorganize. At 7:30 p.m., after an artillery preparation had been fired on the trench, the battalion would again attack, closely following a barrage. The 2d Battalion would follow in support.

At dark the 1st Battalion fell back to the wood and began to reorganize for the new attack. This proved extremely difficult. In the darkness the withdrawing units lost direction and became intermingled. No vestige of control remained. To crown the battalion's difficulties, German artillery lashed the little wood with violent and tireless energy.

H-hour approached, and the American preliminary bombardment began, while the battalion commander still struggled to gather the remnants of his command and to bring some semblance of order out of the confusion that existed.

H-hour arrived and passed, but the battalion was still so disorganized that no troops moved forward at the designated time.

At 10:00 p.m. the 2d Battalion, which had not been committed during the day and which was completely in hand, made a surprise attack and captured the German position.

From the personal experience monograph of Major Turner M. Chambliss, who commanded the 2d Battalion of the 30th Infantry.

DISCUSSION. The plan of attack for the 7:30 p.m. operation can be explained simply and briefly. But although the words are few, simple, and readily understood, the operation that they dictated was far removed from simplicity.

A battalion that had been pinned down under hostile fire all day was required to withdraw under fire, reorganize in a wood in the darkness, and then resume the attack.

The withdrawal was difficult and had to be made by individual movement. Movement in the dark for 500 yards, across a shell-pitted, fire-swept zone, is not a simple operation for a
battalion, which at the start is deployed in lines of skirmishers; neither is a night reorganization in a wood that is being shelled by the enemy.

The simple and effective solution would have been to attack with the 2d Battalion at 7:30 p.m.

EXAMPLE 2. On October 3, 1918, the U. S. 5th Brigade, with the 4th Infantry on the right and the 7th Infantry on the left, occupied the zone of the 3d Division. Each regiment was disposed in column of battalions. In the 4th Infantry the 1st Battalion held the front line with Company B on Hill 274 and Company A along the Cierges—Nantillois Road, with patrols in Wood 268. The remaining companies of the battalion were located in rear of Companies A and B.

In the 7th Infantry, the 2d Battalion occupied the northern part of the Bois de Beuge with two companies in the front line and two in support. These companies were all partially deployed. The 1st Battalion of the 7th Infantry, with an attached company of the 8th Machine-Gun Battalion, was located south of the Bois de Beuge near a stream and a narrow-gauge railroad. This unit was well in hand and more compactly grouped than the 2d Battalion. The brigade had occupied approximately these same positions since the afternoon of September 30. It had been expecting to attack to the north.

Orders were finally received directing that the attack be launched at 5:25 a.m., October 4. By this order the boundaries of the 3d Division were moved a few hundred yards to the west and the direction in which they ran was slightly altered. The new right boundary of the division and of the 4th Infantry was the Nantillois—Cunel Road while the new left boundary for the division and the 7th Infantry was to the west of the Cierges—Romagne Road. The boundary between regiments approximately halved the zone. Therefore, in order that the troops
Example 2
might face their objectives at the start of the attack, both the 4th and 7th Infantry had to move to the west.

At 6:00 p.m., October 3, the regimental commander of the 7th Infantry issued an oral attack order at his C.P. located south of the Bois de Beuge near the narrow-gauge railroad. It was nearly dark at the time. This order directed the 2d Battalion, which was then in the front line in the Bois de Beuge, to sidelong to the left and be prepared to lead the attack the following morning. The 1st Battalion of the 7th Infantry was also directed to move to the left and, in the morning attack, to follow the 2d Battalion in support at 500 yards.

Although the 1st Battalion commander suggested that it would be simpler for his unit to be employed in assault, since its movement into the new zone would be easier, the order was not changed. This battalion completed its movement successfully. A road, a stream, and a narrow-gauge railroad all provided guiding features leading from the vicinity of its former position to the new location.

Arriving at its new position, the 1st Battalion was unable to locate the 2d. When the hour for the attack came the 1st Battalion moved forward with two companies leading and two following. Near Cierges a portion of the 8th Machine-Gun Battalion was encountered. Its commander requested information as to the location of the 2d Battalion. About this time Company G of the missing battalion was seen moving forward. The company commander, however, had not been in touch with the remainder of the battalion for a long time and had no idea where it was. He attached himself to the 1st Battalion.

The 1st Battalion commander now reported to the regiment that he was unable to locate the 2d Battalion; that in pushing forward in the regimental zone his unit had come under fire and that, therefore, he was advancing it to the attack as assault battalion. This attack moved forward from the line of departure later than had been intended and, as a result, met with little success.
The 2d Battalion, in attempting to sideslip to the left during the night, had become so badly scattered that, as a unit, it was rendered ineffective on October 4.

* * *

Let us now turn to the 4th Infantry. In this regiment the assault battalion, the 1st, was similarly ordered to sideslip to the left in the dark. It successfully accomplished this movement.

Part of the battalion order, issued at 11:00 p.m., October 3, which referred to the movement of Company B, then on Hill 274, was in substance as follows:

Company B will be relieved by units of the 80th Division. It will not wait for them but will withdraw at once and move into Company A's present position.

The company commander returned to his unit and issued his order about 1:00 a.m. The 1st and 2d Platoons were in the front line and the 3d and 4th were in support. The company commander ordered the two front-line platoons to withdraw due south until they reached the southern slope of Hill 274 and there assemble in columns of twos. He ordered the 4th Platoon (on the left) to move to the Nantillois—Cunel Road (near its location at the time), form in column of twos and then move south until it reached the Nantillois—Cierges Road; there it would wait for the company commander. He ordered the 3d Platoon to move to the left and follow the 4th in column of twos. The 2d and 1st Platoons, in order, were directed to follow the 3d. All platoon leaders were cautioned to have their men observe the utmost secrecy.

After all platoons had started, the company commander went to the head of the column. When the road junction was reached he directed the 4th and 3d Platoons to march to the west along the Nantillois—Cierges Road. When the last man had cleared the road junction these two platoons were halted, deployed in squad columns and marched to the south for 300 yards. Here they were again halted and faced to the front. The assault pla-
toons, the 1st and 2d, similarly marched along the road, halted, and deployed in rear of it. Thus, by utilization of distinct terrain features and by care in making the movement, this company was enabled to deploy in the dark, in its proper zone, after a flank movement along the line of departure.

About 4:00 a.m. it reported that it was in position. Company A, the other assault company of the battalion, also made the sideslip successfully.

However, after Company B left Hill 274 the Germans moved forward and occupied it, thereby enfilading the attack with machine-gun fire. Little success was obtained.

From the personal experience monograph of Captain Fred During, who commanded Company B of the 4th Infantry; and from a statement by Captain George S. Beatty, who was adjutant of the 1st Battalion of the 7th Infantry.

DISCUSSION. It is not a simple movement for battalions to sideslip in the dark into positions with which they are not familiar and then attack at daylight. The failure of the 3d Division’s attack on October 4 can be largely attributed to this attempt to sideslip the two assault battalions.

In the 7th Infantry, the 2d Battalion became scattered and lost, and the support battalion suddenly found itself in the front line. It would have been far simpler to move the 1st Battalion to the left-front and use it in assault. It was better grouped initially; it did not have to make such an extreme movement to the flank; and finally, there were distinct, unmistakable terrain features that could be easily followed, even in darkness, to the new location.

In the 4th Infantry the assault battalion successfully completed its difficult movement by painstaking attention to detail; but even so, the evil features inherent in that move made themselves evident. Obviously the execution of such a complicated maneuver required a considerable amount of time and therefore it could not be postponed too long. This was undoubtedly the reason Company B was directed to move at once, without waiting for the arrival of the troops who were to relieve them. As
a result, the Germans occupied Hill 274; and enfilade fire from
the commanding ground played a major part in breaking the
attack on the morning of October 4.

Attempts to execute complicated maneuvers in combat have
both direct and indirect evils. They almost never succeed.

EXAMPLE 3. On June 29, 1918, Company D, U. S. 26th In-
fantry, carried out a raid on German positions near Cantigny.
The hour set for the action was 3:15 a.m., at which time there
was just enough light to see. Part of the order for this raid fol-
lows:

HEADQUARTERS 1ST BATTALION,
26TH INFANTRY

France, June 24, 1918.

FIELD ORDERS
No. 10

INFORMATION
The enemy is occupying the woods to our front with one battalion,
something in the manner indicated in the attached sketch.

INTENTION
On J Day at H Hour, we will raid the Wood, entering the woods at
the angle 22.8—30.4 (point Y on sketch), and kill or capture the
occupants of the trenches running north and northeast as far as
the northern edge of the woods, returning from there by the north-
ern edge of the BOIS DE FONTAINE.

ALLOTMENT OF UNITS
The raiding party will be composed of personnel of Company D, 1st
Lieutenant Wesley Fremi, Jr., officer commanding raid.

(1) Lieut. Dillon —1 Sgt. —2 Cpls.—12 Pvts.—A Party
(2) Lieut. Dabney —1 Sgt. —2 Cpls.—12 Pvts.—B Party
(3) Lieut. Ridgley —1 Sgt. —2 Cpls.—12 Pvts.—C Party
(4) Lieut. Tillman —1 Sgt. —2 Cpls.—12 Pvts.—D Party
(5) Lieut. Fremi (O.C.) —2 Sgts.—3 Cpls.—18 Pvts.—E Party

(2 stretchers and 4 stretcher-bearers.)
INFANTRY IN BATTLE

FORMATION

A, B, and C Parties will form left to right on taped ground at point marked X (see sketch) at H minus 30 minutes. They will each be in column of files. E Party will follow in rear in same formation. D Party will, at the same time, be disposed in observation on the extreme eastern tip of the BOIS DE CANTIGNY.

* * *

SPECIAL SIGNALS

When he has assured himself that the party has withdrawn to within our own lines, the officer commanding the raid will fire three (3) star RED rockets—this will signify to all concerned that the raid is completed.

TASK

On commencing artillery bombardment, A, B, C and E Parties, preserving their general alignment, will advance as close as possible to the woods.

A, B and C Parties, in the order named from left to right, will advance directly into the woods. If opposition is encountered, B Party will hold with covering fire from the front, and A and C Parties will advance by the flanks, outflanking the resistance.

On entering the woods, A Party will split off to the left branch of the trench to the north edge of the wood, capturing or killing all occupants and from that point it will return.

B and C Parties will continue down trench running to the northeast, outflanking tactics being employed when necessary. On reaching north edge of the woods, they will function the same as A Party.

E Party will follow in rear. It shall be its particular function to guard the right flank and reinforce the assaulting parties when necessary.

D Party will remain in observation in its original position, ready to engage with fire any machine guns that may open from the slope of the ridge or northeast of the woods. It will retire on completion of the raid.

* * *

THEODORE ROOSEVELT, JR.
Major (USR), 26th Infantry
Commanding

Information and instructions as to fire support, dress and equipment, and many other details were included. The assault parties were directed to move forward during a ten-minute preparation by artillery and Stokes mortars. A box barrage
would then be formed, while the infantry rushed the position. The plan called only for those supporting fires normally available in the sector. The position and routes followed by the assault parties are indicated on the sketch.

The raid was carried out as planned. Thirty-three prisoners were taken, including one officer, five noncommissioned officers,
two artillery observers and two or three machine gunners. Several sacks of papers and other intelligence data were secured. The American casualties were one officer and one soldier killed and four soldiers wounded.

From records of the U. S. 1st Division.

DISCUSSION. We have previously examined a plan that was briefly and simply stated but that nevertheless was the antithesis of simplicity when it came to execution. Here we have a plan that appears complicated. It requires some time and thought to understand, and yet simplicity is its underlying feature. It is obvious, then, that simplicity in tactics is not necessarily equivalent to simplicity in words.

Let us examine this plan. In the first place, the order was published several days before the raid, thereby giving all concerned ample time to digest it and to make the necessary preparations.

The work planned for the artillery, machine guns, and Stokes mortars was simple. They were directed to do some shooting on a time schedule. That was all.

It is with the assault parties, however, that we are chiefly concerned. Note that the southern edge of the Bois de Fontaine parallels the route of advance of these parties. To maintain direction to their objective, each group had only to follow this edge of the wood. Arriving at the hostile position the left party turned to the left (north) following the German front-line trench until it reached the north edge of the Bois de Fontaine which it then followed back to the American lines. The two right groups moved along the trench that runs to the northeast until they, too, reached the north edge of this wood which they followed back to their own position. All three parties had clear-cut features to guide them and each route formed a circuit.

Thus we see that the tasks for the individual groups were not difficult to carry out on the ground. The chances for possible mishaps were greatly reduced by the care taken in selecting these guiding features for the parties to follow. Their mission
was clear and simple. The action of Party A did not hinge on that of Party B. The plan did not depend on any delicate calculation of time and space. It was simple and it proved effective.

EXAMPLE 4. On October 17, 1918, the French 123d Division attacked northeastward toward Grougis and Marchavenne. The scheme of maneuver follows:

Three battalions were employed initially in assault. On the left, a provisional battalion of the 12th Infantry (2d and 3d Battalions combined because of losses) had the mission of maintaining contact with the 66th Division to the north. This was considered particularly important. The 2d and 3d Battalions of the 411th Infantry, with a company of tanks attached, were on the right of this provisional battalion. These two battalions were ordered to move forward and establish themselves facing Grougis.

The 1st Battalion of the 411th, in second line, was directed to follow behind the interval between the 12th Infantry unit and the 2d Battalion of the 411th Infantry, and then, after the two right assault battalions had established themselves facing Grougis, push ahead and take Marchavenne. The 1st Battalion of the 6th Infantry was ordered to follow the 1st Battalion of the 411th Infantry initially and protect its right flank, finally taking position on the left of the 2d Battalion of the 411th Infantry, facing the northwest portion of Grougis.

The 2d and 3d Battalions of the 411th Infantry and the 1st Battalion of the 6th Infantry, having established themselves as a flank guard to the south, were to push forward to Marchavenne when successively liberated by the advance of the 15th Division on the south. Thereafter they would assist the attack of the 66th Division on the north.

The remainder of the 123d Division's infantry, which was holding the line of departure, was ordered to reform and be-
come the division reserve. Artillery fires were to lift on a care-
fully arranged time schedule. Marchavenne was to be taken in
one hour and thirty minutes after the jump-off by a battalion
which, at the start of the attack, was some 4,500 yards away.

Marchavenne was captured practically on time, by an attack
from the south and southeast—carried out by the provisional
battalion of the 12th Infantry which was to guard the north
flank of the division. This battalion lost contact with the 66th
Division and got ahead of the troops on the right. Its two assault
companies crossed each other's path and the bulk of the bat-
talion, advancing rapidly, crossed the entire divisional zone
diagonally. It found cover just north of Grougis (which was
still held by the enemy) and took Marchavenne by an envelop-
ment from the south and east about 7:45 a.m.

The battalion that had been ordered to take the town was
still more than a mile to the rear, slowly advancing. It arrived
at Marchavenne long after the town had fallen, but in time to
help hold it against a counter-attack. These two battalions in
Marchavenne held an isolated position for several hours.

The assault battalions of the 411th Infantry and the 1st Bat-
talion of the 6th Infantry met with some success, but after reach-
ing Grougis they were unable to go farther. At 5:00 p.m. they
were still there, facing southeast. On this day, after the initial
capture of Marchavenne, which could not be exploited, the di-
vision had no success. During the early part of the attack the
provisional battalion of the 12th Infantry captured ten cannon
and 300 prisoners.

From an article by Major P. Janet, French Army, in "La Revue d'Infanterie,"
December, 1926.

DISCUSSION. Here is a complex plan of attack devised by
officers of long experience in the war, which was to be carried
out by veterans. The original assault battalions were to fan out
and form flank protection while a second-line battalion, advanc-
ing through the interval, was to take the objective. The flank
battalions would then disengage successively, move on to the objective, and take part in a renewal of the advance beyond Marchavenne. Furthermore, the artillery support was arranged according to a carefully worked out time schedule; it would be upset unless this delicate time-table worked with mathematical precision.

True, the 123d Division achieved a modicum of success in this attack, but it certainly cannot be attributed to the plan. Nothing happened as expected. The assault battalions of the 411th Infantry managed to make some advance, as did the 1st Battalion of the 6th Infantry, but all three became involved near Grougis and were there the entire day. These were the troops that, according to the plan, were to carry the attack beyond Marchavenne.

The complicated maneuver of attacking to the front, then facing to the right, then disengaging, then pushing forward again, was too much even for these veteran troops. It could not
be carried out at all, let alone according to the carefully prepared time-table.

It is interesting to note that the battalion which had been directed merely to maintain contact on the north flank, crossed to the south boundary of the division and took the objective by an envelopment from the south and east. It was to the aggressiveness of this battalion that the division owed such success as was achieved. It appears that the inability to exploit the rapid capture of Marchavenné was due principally to the complicated and involved plan of attack.

EXAMPLE 5. On the morning of November 23, 1914, a German force, located south and east of Lodz, in Poland, finding itself surrounded by Russians, turned about and struck to the north in an effort to break through the enemy and escape. The Germans, who had been fighting for days, were at the point of exhaustion. Fresh Russian columns were converging on them from all sides. The situation was desperate.

The 3d Guard Division, part of the beleaguered German force, spent the 23d attacking northward toward the little town of Brzeziny, which it had passed through shortly before in its advance to the south. All day the Guards drove forward through a dense wood, against strong opposition. Russians appeared to be everywhere—on both flanks and in rear.

At 4:00 p.m. the Guards reached the railroad that runs through the wood south of Galkow, and here they were halted and reorganized while their sixty-five-year-old commander, General von Litzmann, took stock of the situation.

Along the railroad stood some 1,500 men, all that was left of seven battalions of infantry. The division artillery, under the protection of a handful of infantrymen, was still south of the wood. Information of other German units and of the enemy was virtually non-existent. Earlier in the day firing had been heard to the east, but this had gradually died away. Late in the afternoon
the Russian resistance to the German advance had perceptibly weakened. But the Guards were in a deplorable state. All units were terribly depleted and hopelessly intermingled. The men were so exhausted that they could scarcely be kept awake. Such was the situation that confronted this remnant of a division as darkness and the bitter cold of a Polish winter night closed in on November 23.

Soon after dark a corps order arrived. In a stable filled with Russian wounded the division commander pulled a small candle
out of his pocket, lighted it, and examined the order. It had been
delayed in reaching the Guards. The instructions it bore per-
tained only to operations for November 23, but it did make clear
the fact that the corps commander wanted them to reach Brzeziny
on that day.

Therefore, at 7:25 p.m. the division commander rapidly out-
lined the following plan:

This division captures Brzeziny tonight. It will advance in column,
with advance guard via Galkowek and Malczew, in silence, and
gain the road running from the southwest toward Brzeziny. It
will develop when one kilometer in front of the town and press
into it by a surprise attack.

After the storming of Brzeziny, baggage will be brought forward.
Messengers will report to receive orders at the marketplace in the
building where division headquarters was located before.

The advance guard and the order of march were designated,
and a supplementary order was sent to the artillery.

The division commander marched with the advance guard.
The maneuver was successful. Brzeziny was stormed and the
staff of the VI Siberian Corps captured. The success of this action
materially aided the remainder of the German forces in smash-
ing through the hostile lines. The Russians, becoming discour-
aged, withdrew while the German units, taking along thousands
of prisoners and much matériel, rejoined their main army.

From the Reichsarchiv account.

DISCUSSION. The Guards were in a situation as difficult and
desperate as can be imagined. They had no information of the
location of other German troops and no knowledge of the hostile
dispositions, except that the enemy seemed to be everywhere in
superior numbers. Their men were exhausted and their units de-
pleted and intermingled. They were in a dense forest; it was
bitter cold, and night was falling.

Under such conditions a master effort could be made only by
superior troops, commanded by determined leaders, working
under a simple plan. The division commander took these con-
siderations into account. His plan was based on the three essentials for a night operation—direction, control, surprise.

Troops become easily lost in a night march, particularly exhausted troops who are staggering forward in a daze. Things must be made as simple as possible for them. The route prescribed facilitated the maintenance of direction. First, movement along the eastern edge of the wood to the north edge. From here Galkowek could be reached with little danger of the column getting lost. From Galkowek the march could continue straight to the north and be certain of intercepting the road that led directly to Brzeziny.

To insure the utmost control the division commander ordered that the advance be made in route column. It was no time for half-measures. The men were completely exhausted, so much so that unless they were directly under the eyes of their leaders, they would lie down and go to sleep. An attempt to move in several columns or in any extended formation would have meant disintegration and certain failure.

To achieve the third essential, surprise, the order directed that the advance be made in secrecy and silence.

Finally, as a crowning bit of psychological bravado, came the order for establishing the command post in the marketplace of Brzeziny. A large dose of optimism was required by officers and men, and their commander, with the deft touch of the true leader, gave it to them. German accounts describe the thrill that ran through the assembled German officers on hearing the resolute words of their leader.

Here, one of the most complex, difficult, and desperate situations which troops have ever been called upon to face was met and solved by a simple order. In such a dilemma only the utmost simplicity of plan and execution stood any chances of success.

CONCLUSION. In war the simplest way is usually the best way. Direct, simple plans, clear, concise orders, formations that
facilitate control, and routes that are unmistakably defined will smooth the way for subordinate elements, minimize the confusion of combat and ordinarily increase the chances of success.

In brief, simplicity is the sword with which the capable leader may cut the Gordian knot of many a baffling situation.
Chapter IV: Scheme of Maneuver and Main Effort

Every attack should have a scheme of maneuver. The main effort should strike the enemy's weakness.

All means—reserves, fire support, ammunition—are concentrated for the decisive stroke. Economy of force at non-decisive points and greater mobility permit the concentration of superior forces at the decisive point. To make the main effort a real knockout blow, economy of force elsewhere may have to be extreme.

To determine the location for his principal effort, the leader seeks to discover the enemy's weakness. The flanks and rear of an enemy being weak points, he will strike at these when they can be reached. Often the ground itself will be the deciding factor. By a careful study the leader will be able to determine those parts of the terrain where the enemy cannot employ his weapons to advantage. At the same time he should not lose sight of the fact that the terrain should permit his own attack to be supported by artillery, machine guns, and tanks. Thus, strength will strike weakness.

Having made his choice, the leader's dispositions must correspond to his scheme of maneuver. The density of deployment is greater where the main effort is to be made. Troops must be available to assure continuity of the effort and to permit the leader freedom of action to deal with the incidents of battle. All available fire support is concentrated to assist the main effort.

The scheme of maneuver of small infantry units is simple and does not look too far in the future. It is concerned with the enemy resistance which is close; new decisions, based on the new situation, must be made later. For example, when con-
fronted with a vague situation, or unsuitable terrain, it is possible that no definite idea will stand out. In such a case, there will be no true main effort at the start; it will be withheld. The scheme of maneuver will simply be an advance in order to determine what is in front, with the unit commander retaining control and freedom of action. His dispositions will be such that he will be able to reserve his main effort until the situation warrants the commitment of the bulk of his force.

EXAMPLE 1. On September 26, 1918, the U. S. 33d Division attacked north in the opening phase of the Meuse-Argonne offensive with the 66th Brigade in assault and the 65th Brigade in reserve. In front of the division lay the dense Bois de Forges which covered one side of a formidable height. Along the right of the division sector ran the Meuse River, but since there was to be no attack on the east side of the river the right flank would be wide open to fire from that direction. With these facts in mind the division planned its attack.

"The whole theory of the attack," said the division order, "is by echelon with the left in advance." The 131st Infantry, the left regiment of the 66th Brigade, would advance rapidly to open ground east and north of Gercourt and Drillancourt in order to assist the 132d Infantry in the capture of the Bois de Forges. Accordingly, the barrage in front of the 131st would move forward faster than that in front of the 132d. The 132d Infantry would strike the Bois de Forges from the southwest. As the advance progressed the attack of the 132d would gradually swing until it was headed almost due east. The Bois de Forges would not be attacked from the south or the southeast.

The 131st Infantry and 132d Infantry would, at first, attack side by side, each with two battalions in assault. The 132d, however, would make a sharper turn to the right than the 131st; the interval thus formed would be taken care of by reserves.
The zone of the 131st would be 2,000 meters wide, but it would actually follow a rolling barrage about 800 yards wide.

Following an intense preparation, the attack jumped off and drove forward with the support of an artillery and machine-gun barrage. The machine-gun barrage, which was directed against the southern edge of the Bois de Forges, was particularly helpful in that it fostered the idea of a non-existent attack from the south.

By 10:00 a.m. the two attacking regiments had carried their objectives and captured 1,400 prisoners, at the cost of only 250 casualties.
In his report of the operation the brigade commander stated:

The 132d Infantry, on a front of about two kilometers, attacked the enemy positions in front of and in the Bois de Forges from the southwest, and making a turning movement to the east while in the woods, using the roads in the center of the woods as a guide and a dividing line between battalions, came out at the objective exactly as planned in the orders of the brigade at 10:00 a.m. This maneuver struck the enemy's works in the flank and rear, took them entirely by surprise and also was responsible for the few casualties inflicted upon the troops.

The history of the division has this to say:

This entire engagement was particularly interesting because of the fact that it was an action planned and executed by a brigade as a unit. It was entirely successful owing, first, to the courage and dash of our splendid troops, and, second, because the plans had been carefully worked out and studied by all concerned, and during the action these plans were followed with marvelous exactness.

From "History of the 33d Division."

DISCUSSION. On this day the 66th Brigade took about five prisoners for each casualty it suffered. Its two regiments swept through the enemy and were on their objective in a few hours. The brigade was an interior unit making an attack against enemy positions to its front. But that did not keep it from striking in an unexpected direction at enemy weakness—from having a main effort. It did not spread troops all over its zone. It did not smash up against the Bois de Forges as the Germans expected. In parts of the zone no troops attacked at all. Any Germans between Forges and the Bois de Forges were in a trap if the main attack went through, and that attack did go through.

The 33d Division was not making the main effort of the American attack; its mission was rather one of flank protection. Here, then, we see a main effort within an attack which itself is not a main effort.

The main effort is usually characterized by the assignment of comparatively narrow zones of action, and by massing many reserves behind and much fire in front of the attacking troops.
In this case we see a regiment with two assault battalions make a main effort on a front of approximately 800 yards.

EXAMPLE 2. On October 11, 1918, the 1st Battalion of the French 412th Infantry reached the Oise River. The Germans held the east bank in strength, but owing to the general situation, it was thought that they would probably withdraw. Therefore, in spite of the fact that the French battalion occupied a front of three kilometers, it was ordered to seize the crossings of the Oise and be prepared to pursue the Germans.

All efforts to seize the crossings on the 11th and 12th having failed, a stronger attack was organized on the 13th. For this attack the three rifle companies and 12 machine guns of the battalion were disposed to cover the four groups of crossings. Five additional machine guns had been picked up during the previous advance and these, too, were emplaced to fire on the disputed passages. A Stokes mortar and a 37-mm. gun completed the picture.

The battalion had a very good idea of what it was up against. It knew that the enemy had posted advanced groups along the river to cover the crossings and that these groups were tied in by patrols. It also knew that there was a continuous line of resistance on the east bank of the canal, and that there were reserves and supporting artillery at Senecy Farm, Sucrérie, and along the west edge of Séry-les-Mézières.

The terrain in front of the battalion, though flat, was covered with a rather lush vegetation which afforded a certain amount of cover. The river, fifteen to twenty yards wide and seven or eight feet deep, constituted an appreciable obstacle, but the canal was fordable. Reconnaissance revealed that the enemy had demolished all the bridges and had emplaced machine guns to cover the ruins. Heavy undergrowth on the far bank of the Oise provided excellent cover for the Germans along the river.
The French attack was fruitless. The slightest movement near the river bank provoked a storm of fire from the well-concealed enemy. Nevertheless, the battalion struggled throughout the afternoon to gain a foothold on the east bank. By nightfall the casualties had mounted to alarming proportions and this unit, which had battered at the river line for three successive days, knew that it had again failed.

In spite of this stubborn enemy resistance, the higher command still believed that it had nothing but a German rear guard to deal with and continued to call on the infantry to hammer its way through. Thus, at nightfall this battalion received still another attack order. The entire division would renew the attack at 8:00 a.m. the next morning and the 1st Battalion of the 412th Infantry would again be in assault.

Shortly after dusk a patrol which had been reconnoitering the river line made an important discovery. At X (see sketch) it found an undamaged foot bridge so well hidden by overhanging branches that until now it had gone undetected. The patrol leader, followed by his men, quickly and quietly crawled across. At the far end they surprised but failed to capture two German sentinels and in a few minutes the bridge was blown up.

The patrol now moved to the destroyed railroad bridge to the northeast and struck the enemy post there by surprise. After a short fight the Germans withdrew. The patrol leader then posted his men so as to form a small bridge-head near X, swam back across the Oise, and reported the situation to his battalion commander.

The battalion commander at once decided to throw troops across the Oise near X, form a larger bridge-head, and attack in the direction: canal bend—Sucrérie. He then sent a message to the regiment stating that the battalion intended to handle the whole affair by its own means, and asking that all friendly artillery fire cease in front of the battalion, except as requested by the battalion commander himself.
By 2:00 a.m. the bulk of the battalion had crossed the river. At dawn it attacked to the southeast. Let us examine that attack. The entire 3d Company, three platoons of the 2d Company...
and two platoons of the 1st Company, constituted the attacking force and advanced on a front of less than 500 yards. The other three rifle platoons were spread out on the remaining 2,500 yards of the battalion front, with the mission of assisting the attack by fire.

Seventeen machine guns plus one captured from the Germans—every gun the battalion could muster—were located on the high ground west of the stream, and supported the attack by overhead fire. Each gun was given a mission of neutralizing a definite portion of the zone between the river and the canal and between the Berthénicourt—Senercy Farm Road and the railroad.

The Stokes mortar emplaced near Mézières-sur-Oise fired on the railroad bridge over the canal. The 37-mm. gun, in position near Berthénicourt, fired on the canal bridge on the Berthénicourt Road and on Senercy Farm.

A 75mm. gun previously located north of the battalion's zone, had been driven from its emplacement by German fire, and its commander had reported late on the night of October 13 to the 1st Battalion. That same night the battalion commander ordered it to a position on Hill 84 and assigned it the mission of enfilading that portion of the canal in front of the attack as soon as it was light enough to see. The fire of the 75 was to be the signal for all other fires to open. A short time thereafter the assault would be launched on rocket signal.

In addition to the fire support described, the battalion commander ordered each company to form a battery of VB grenadiers, each battery having a precise target on the canal. He also arranged for the three platoons not in the main effort to protect the flanks and assist the attack by fire.

The attack was launched at about 7:15 a.m. and was a complete success. The battalion, advancing on a narrow front, captured the hills east of the Oise. Other troops were pushed across the river behind the successful battalion:

From Infantry Conferences at l'École Supérieure de Guerre, by Lieutenant Colonel Touchon, French Army.
DISCUSSION. The actors state that in all this there was not the reasoned method that we are pleased to find there today.
"Because of the urgencies of the situation," said the battalion commander, "it was necessary to move fast, to muddle through. There were no written orders, only hasty, fragmentary, oral orders—many of them given as one went from one place to another. The whole scene resembled that which probably exists on the deck of a sinking ship."

Nine rifle platoons were massed in a main effort on a front of less than 500 yards. The rest of the battalion zone—over 2,500 yards—was held by three platoons which were charged with flank protection and with fire assistance to the main effort.

The main effort was supported by every available weapon—18 machine guns, a 37-mm. gun, a Stokes mortar and a 75. And every weapon fired! All the fire support was concentrated on the area in front of the main effort and on the terrain immediately to its flanks.

The action of the leader dominated everything. He had so familiarized himself with the terrain that when the opportunity came, he was able to assign positions and missions to all his machine guns and to a 75-mm. gun in the dark. And it worked! Because of this and because he knew that a main effort should be a main effort, his battalion scored a notable triumph.

EXAMPLE 3. On August 20, 1918, the 4th Battalion of the French 365th Infantry, an interior unit, attacked to the east with the mission of taking Cuisy-en-Almont. About 900 yards in front of the battalion's position stood a fortified work which had not been reduced by the artillery preparation. The battalion commander believed that machine-gun fire from here might smash his attack before the battalion even got under way. He therefore adopted the following plan:

The 15th Company, with one platoon of machine guns, would be the only unit of the battalion to move out at H-hour. This
company would move into the zone of the unit on the north and, taking advantage of the cover in that locality, would swing wide past the field work, then turn south and storm it from the rear.

As soon as the fortification fell, the rest of the battalion would attack. The 14th Company, following the 15th, would advance via the wooded slopes that border the northwestern portion of the Cuisy-en-Almont plateau, and attack the town from the north.

The 13th Company would maintain contact with the unit on the right and outflank Cuisy-en-Almont on the south.

The battalion commander with the machine-gun company would move straight toward the town (between the 13th and 14th Companies).

The attack, carried out according to plan, was highly successful: 530 prisoners and 24 machine guns were captured. In this connection it is interesting to learn that at the start of the attack the companies of this battalion averaged some 60 effectives.

The next morning the battalion was just east of Cuisy-en-Almont. The battalion commander and his command group were making a reconnaissance near the east edge of the town.
While engaged in this work they heard a sudden roar and saw the bare plateau to their left-front (which was held by the enemy) erupt under a heavy bombardment. The battalion commander at once concluded that the French units on his left were launching a powerful attack. Although he had not been notified of any such attack, he immediately issued the following order:

Our left has just attacked; we must keep touch with it. 
The 15th Company will cling to the flank of the 127th Infantry (unit on the left). The 13th Company will follow the 15th. The 14th will hold Cuisy-en-Almont temporarily. Two platoons of machine guns will support the movement.
All our movement will be made without going down into the ravine. [Reconnaissance had revealed that the ravine was thoroughly covered by enemy machine guns.]
Our objective is Laval, but Laval will fall of itself if we turn the Cuisy-en-Almont ravine by the north and then swing south. We will thus gain the spur east of the town. From there we will take Tancourt and Vauxrezis.
We will advance by individual movement, by infiltration, avoiding the ravines and outflanking them on the north. According to latest information, the Germans still hold the crossroads (155).
The 15th Company will send a patrol, commanded by a very energetic leader, to determine if the 127th Infantry has really advanced. Our attack will start on my order.

The patrol found that the 127th was attacking and, upon receipt of this information, the 4th Battalion began its advance. Without loss it captured an entire German machine-gun company which occupied the spur east of Cuisy-en-Almont. These machine guns were sited west and southwest to cover the ravine of Cuisy and Laval.

The battalion continued its advance.
The division commander, who had gone forward, met a runner coming back with a message. He glanced at it.

12:30 p.m.

Lieutenant Gilbert (13th Company) to the Battalion Commander: I am at Tancourt. We have gone 300 meters beyond the village.
From the sound of the firing the 5th Battalion must be still at Laval. No liaison with the 14th and 15th Companies. I push on toward Vauxrezis. I have met some resistance which has been reduced. Prisoners were sent back in three groups, altogether 70 to 80 men. The German machine guns were left on the ground.

Having no resistance in front of me, I am advancing until I get contact.

The division commander took a pencil and scribbled on the message:

My congratulations to Gilbert. That's the way to make war.

From an article by Major St. Julien, French Army, in "La Revue d'Infanterie," November, 1927.

DISCUSSION. On two successive days this battalion scored striking successes. This was a real feat for an interior assault unit in the usual Western Front push. We do not have to look far for the reason: the commander of the 4th Battalion was not a copy-book soldier. He did not traffic in schematic solutions and neatly-turned maxims. Instead, he determined the enemy's vulnerable point and then devised a scheme of maneuver in which his main effort would strike that point.

On the first day he moved his battalion through wooded ravines; the second day he avoided ravines and moved over a bare plateau. In the first instance he moved through the wooded ravine because this route offered cover and enabled him to fall on the flank and rear of a dangerous field work. On the second day the situation was different. The ravine east of Cuisy-en-Almont was thoroughly covered by enemy fire. Therefore, he elected to move his battalion, man by man, over the open plateau. But again his scheme of maneuver was marked by a main effort that struck the enemy at a vulnerable point and from an unexpected direction. The success of this leader's shrewd reasoning is attested not only by the ease with which his command took its objectives, but by the fact that the number of prisoners taken exceeded the battalion's effective strength by some 300%.

Of course it will not always be possible to maneuver in the
zone of a neighboring unit as this battalion did. Frequently it will not be advisable and still more frequently it will not be permitted. In this case it so happened that movement in the neighboring zone was both desirable and permissible, and the battalion commander was quick to avail himself of the opportunity.

CONCLUSION. In each case examined, the scheme of maneuver of the commander played a major part in the success achieved.

Generalship consists of being stronger at the decisive point—of having three men there to attack one. If we attempt to spread out so as to be uniformly strong everywhere, we shall end by being weak everywhere. To have a real main effort—and every attack and every attacking unit should have one—we must be prepared to risk extreme weakness elsewhere.
Chapter V: Terrain

In the absence of definite information small infantry units must be guided by their mission and by the terrain.

MANEUVERS that are possible and dispositions that are essential are indelibly written on the ground. Badly off, indeed, is the leader who is unable to read this writing. His lot must inevitably be one of blunder, defeat, and disaster.

The intelligent leader knows that the terrain is his staunchest ally, and that it virtually determines his formation and scheme of maneuver. Therefore he constantly studies it for indicated lines of action. For instance, there may be no evidence of the enemy, yet the terrain may say clearly and unmistakably, "If you come this way, beware! You may be enfiladed from the right." Or it may say, "Right-o! This way to the hostile position." Or again, "Close your formation here or a platoon or two will be lost."

Although small infantry units cannot choose the terrain over which they will attack or on which they will defend, they can make the best use of it. For example, a small infantry unit may find portions of its assigned zone devoid of cover. It will seldom be desirable to attack over such exposed ground. It is usually better to fix the enemy by fire in such a locality and utilize more favorable portions of the allotted area for the advance. On the defense a unit may find that part of the terrain to its front is open and presents a splendid field of fire while another part affords good cover by means of which the enemy may be able to work up close to the position unobserved. This covered approach fairly shouts, "Hold me strongly! This is the danger point."

The ground is an open book. The commander who reads and heeds what it has to say is laying a sound foundation for tactical success.
EXAMPLE 1. On July 15, 1918, the 1st Battalion of the German 47th Infantry took part in an attack against the U. S. 3d Division south of the Marne. This battalion crossed the Marne at a bridge near Mont-St.-Père. Other units, utilizing crossings at

\[\text{Graph} \]

Example 1

X and Y, had gone before with orders to clear the ground in front of the 47th.

The battalion commander had no information whether or not this had been done. The situation was vague and his battalion was the first unit to cross the bridge. A few hundred yards beyond the bridge stood a small wood and beyond that a railway embankment. Between the river bank and the woods the ground was open.

The battalion, in route column, continued its advance toward
the railway embankment. It was suddenly surprised by heavy, close-range, rifle and machine-gun fire and virtually destroyed as a combat unit for the day.

*From the battle report of the German 47th Infantry.*

**EXAMPLE 2.** On August 4, 1918, the advance guard of the U. S. 7th Brigade, consisting of elements of the 39th Infantry, approached the Vesle River. German artillery had been firing from the north bank earlier in the day. The last 1,000 or 1,500 yards to the Vesle offered little or no cover and was dominated by the high ground north of the river. The situation was vague.

The advance guard moved forward on the road. The advance party, in column of twos, followed by the support in column of squads, had almost reached the river bank when the German artillery suddenly opened with deadly accuracy and inflicted heavy losses.

*From the personal experience monograph of Major Manton S. Eddy, who commanded the Machine-Gun Company of the 39th Infantry. (This action is described more fully in Example 1 of Chapter I: Rules.)*

**DISCUSSION.** In both the preceding examples the situation was obscure, but the terrain clearly decried the maneuver that was actually carried out. In each case, failure to take the possibilities of the terrain into account was roundly and soundly punished.

**EXAMPLE 3.** On November 4, 1918, the French 6th Infantry, with the 152d Division on its right and the 411th Infantry on its left, attacked across the Sambre-Oise Canal with the 2d and 3d Battalions in assault, the 2d on the right.

By 7:30 a.m. the 3d Battalion had captured the north portion of Venerolles, had reorganized, and stood ready to renew the advance. The 2d Battalion was still mopping up the southern part of the town. On the north, the 411th Infantry had advanced rapidly, captured Étreux and pushed on. Right elements of the
411th were approaching the long rectangular wood between Étreux and Caucreaumont. Other units of the 411th were still farther advanced. The attack gave every indication of a brilliant success.

East of Venerolles, in the central portion of the 3d Battalion's zone, lay a flying field—flat and bare. Some slight cover existed south of the field. East of the Valenciennes Road an interlacing network of thick hedges divided the ground into many inclosures.

Without effective artillery support, the bulk of the 3d Battalion attempted to advance straight across the bare aviation field. It encountered a deadly machine-gun fire. With tremendous losses and in the utmost confusion, it fled back to Venerolles. So great was this battalion's demoralization that it was unable to resume the attack for many hours.

The repulse of the 3d Battalion had its effect on the 2d, constraining that unit to advance at a snail's pace. It was 1:00 p.m. before the 6th Infantry succeeded in crossing the Valenciennes Road.

Shortly after 9:00 a.m. leading elements of the 411th Infantry reached the eastern edge of Caucreaumont, but the slow progress of the 6th Infantry permitted the Germans to concentrate their reserves against the 411th, with the result that at midnight this regiment was 400 yards in rear of the point it had reached at 9:00 a.m.

Although the attack succeeded, the French were unable to exploit it.

From the account by Major P. Janet, in "La Revue d'Infanterie," January, 1928.

DISCUSSION. The dislocation of the 6th Infantry's attack, which in turn compromised that of the entire division, appears to have been caused by the brash attempt of the 3d Battalion to cross terrain that was utterly devoid of cover without proper artillery support.

Although the French were not aware of the German dispositions to their front, one glance at the terrain should have
shown them the danger ahead. If the battalion moved out across the flying field and the Germans did happen to be on the other side, that battalion would be in a bad way.

The rapid advance of the 411th Infantry indicates that a maneuver either to the north or south, combined with fire action across the flying field, would have been effective. The 3d Battalion, however, in utter disregard of the terrain, took a chance and advanced in the open with the result described. The bulk of the casualties in the 6th Infantry on November 4 were sustained by this one battalion in its few disastrous minutes on the flying field.

Infantry unsupported by artillery or tanks has practically no chance of success in a daylight advance over bare, open terrain against machine guns.

EXAMPLE 4. On October 10, 1918, the U. S. 29th Division crossed the Meuse, fought its way northward, and captured
Molleville Ridge, where the attack came to a halt. The division's front line on Molleville Ridge ran northwest and southeast, roughly parallel to Etrayes Ridge which lay beyond the deep Molleville Ravine. The 26th Division prolonged the 29th's line to the southeast.

When orders were received to take Etrayes Ridge, it was decided to strike to the east.

The 101st Infantry (26th Division) would attack to the northeast from the position shown on the sketch. The 1st Battalion of the 113th Infantry (29th Division) would jump off from a position 600 meters northwest of the 101st Infantry and attack due east. By referring to the sketch it will be seen that the lines of attack of these two units left a large triangular section of the front uncovered. The Germans in this sector would, of course, be cut off by the junction of the two American units on the common objective.

The lines of advance of the 115th and 116th Infantry and the positions of the 110th, 111th and 112th Machine-Gun Battalions are shown.

The late Brigadier General L. S. Upton, from whose article this account is taken, says:

I saw the opportunity to employ a machine-gun barrage from Molleville Ridge and directed Major Tydings to work out the details of an interlocking barrage paralleling the line of advance. Major Tydings' task was to keep his parallel barrage 125 meters in advance of the attacking infantry. On the sketch are four black dots—A, B, C, and D. These represent four machine-gun batteries of four to six guns each. About 10 meters in front of each gun he placed a number of stakes in a semicircular row. By traversing the guns through the angles formed by these stakes, each gun gave a beaten zone 100 meters wide and 100 meters deep. Therefore, the beaten zone before the 113th and 116th Regiments consisted of four to six interlocking zones.

The attacking troops dropped back from their line of departure before H-hour to allow the artillery barrage to fall on the German line which was close up. The machine guns took advantage of this movement and at 5 minutes before H-hour, Battery A put down its interlocking zone just in front of the line of departure.
At H-hour each gunner of Battery A swung his gun so that his line of sight was directly over Stake A. This placed his cone of fire 125 meters in advance of the line of the 113th Infantry. Batteries B, C, and D remained silent. The artillery and machine-gun barrages were synchronized to the rate of advance of the infantry, 100 meters in 10 minutes. The machine gunners traversed slowly and steadily. At the end of ten minutes they were firing over Stake C, and their beaten zone had moved 100 meters on the ground and was still 125 meters in advance of the infantry. Each gunner continued to traverse: from Stake C to D in ten minutes, then to Stake E in ten minutes more, reaching Stake F forty minutes from H-hour.

When Battery A had completed forty minutes it ceased firing and Battery B commenced. When Battery B completed its mission, Battery C opened up. As soon as a battery completed its firing, it withdrew.

At their intermediate objective the troops were halted and reorganized. There was no machine-gun firing during this halt. It was Battery D's mission to fire if it should be necessary. Six minutes before the jump-off from the intermediate objective, Battery D concentrated all its fire on Hill 361 where the German observation posts were located. At one minute before the jump-off it switched its fire back to the zone last fired on by Battery C and then resumed its mission of covering the advance of the infantry to the final objective.

The 111th Machine-Gun Battalion fired approximately 300,000 rounds of ammunition during this attack. None of its personnel was killed and but few wounded. Casualties were kept low by the successive withdrawal of each battery when through firing.

The 113th Infantry captured about 50 machine guns in its zone of advance. These guns were in brush piles and were sited down the Molleville Ravine. All were laid for short-range work.

The losses of the attacking infantry of the 29th Division were light. The effectiveness of the machine-gun barrage drove the German gunners from their pieces and enabled the infantry to advance with slight opposition. It was a good illustration of the importance of fire superiority and of the ease of winning a fight when this has been established. The flank barrage of machine guns, carefully laid and timed, was a major factor in the success of this attack.


DISCUSSION. The results achieved in this attack were almost entirely due to an appreciation of the possibilities offered by the
terrain. General Upton says, "The conditions of the attack gave a rare opportunity for a flank barrage of machine-gun fire generally paralleling the line of advance."

It was the ground and its relation to the front line that made this unusual and highly effective type of machine-gun support possible. As told, it all appears simple and obvious. The terrain was there and the relative positions of the opposing forces offered the opportunity. In this case it was recognized. Too often such opportunities pass unnoticed. After the disaster has occurred or the favorable chance has gone by, someone usually suggests what might have been done. It is too late then. Opportunities presented by the terrain must be seen and utilized before they are revoked by the change of war.

Consider the experience of the French 3d Colonial Division. On August 22, 1914, this unit blithely advanced across the Semoy (a stream that was fordable in only one or two places) and plunged into the forest north of Rossignol. To its right-front the ground was open and completely dominated the bridge on which the division was crossing. The location of the enemy was unknown but some of his cavalry had been encountered.

The terrain fairly screamed that machine guns and artillery should be emplaced to cover the division and that every means of rapid reconnaissance should be utilized to search the ground commanding the defile. This mute warning was either ignored or not seen.

The divisional artillery, once across the Semoy and approaching the forest, found itself on a road flanked on both sides by swampy ground, hedges and ditches. If the enemy was encountered, the artillery could do practically nothing. The enemy was encountered, both to the front and the right-front. The artillery, unable to leave the road, was helpless. That part of the division which had crossed the Semoy was cut off and captured or destroyed.

The French had had ample time to occupy the keypoints beyond the river, but they failed to do so. They had been afforded
an opportunity to select their battlefield but had let the opportunity slip by. They neglected the possibilities of the terrain, and for that neglect they paid dearly.

CONCLUSION. The ability to read the writing of the ground is essential to the infantry leader. In open warfare he will never
be able to arrive at a detailed idea of the hostile dispositions. He can, however, see the ground. He can see where enemy weapons are likely to be located. He can see critical points from which a few well-emplaced machine guns can knock his attack into a cocked hat. He can see what areas the enemy can cover effectively and what areas are difficult for him to defend. He can pick out the routes of advance which permit effective fire support by his own supporting weapons. From this study of the ground he can plan his attack, make his dispositions and send back requests for definite artillery missions.

So it goes. If we have a clear idea of the enemy's dispositions, which will be seldom indeed, we will attack him, taking the terrain into consideration. If his dispositions are obscure and the situation vague, we can still solve the problem; for by attacking the terrain, we can effectively attack the enemy.
Chapter VI: Time and Space

In war a large safety factor should be included in all time-and-space calculations.

Incorrect estimates of the amount of time required for the distribution of orders, for the movement of units to new locations and for the necessary reconnaissances by subordinates, frequently lead to tactical failure. A strict application of the various rates of march set forth in neatly compiled tables of logistics, without consideration of the special conditions prevailing, may easily disrupt an operation. Obstacles will arise, mishaps will occur, hostile activities will intervene—and without ample allowance for these unforeseen inevitabilities, the most promising plans will, at the very outset, be sadly disjointed.

In war, time always presses; therefore leaders should be quick to seize upon any time-saving expedient. Where time is the essential factor, let orders go forward by staff officer or by wire rather than require front-line commanders to go to the rear. Let officers be assembled beforehand when it is known that orders are about to be received. Prescribe the necessary reconnaissance in advance when the course of action is reasonably obvious. When practicable, make use of operations maps, oral orders and fragmentary orders. In brief, utilize every time-saving device that ingenuity and forethought can devise.

Example 1. On August 6, 1918, the U. S. 47th Infantry (in brigade reserve) occupied a defensive position in the northern part of the Bois de Dôle.

The 39th Infantry, then in the front line, had been trying to cross the Vesle and establish a line along the Rouen—Reims road, but this regiment had suffered so heavily from artillery fire that its relief appeared imminent. The commander of the
2d Battalion of the 47th Infantry realized this. Furthermore, he believed that his battalion would take part in this relief and then drive forward as an assault element. Finally, he was convinced that orders for this operation would arrive that night.

Acting on this assumption, the battalion commander moved forward during the afternoon and made a detailed personal reconnaissance of the front line near St. Thibaut. There he learned a good deal from the officers of the 39th; among other things that the Vesle was "not very deep" and that, except for a few snipers along the river and in Bazoches, there would be little or no resistance between the river and the road. From this information it appeared that a night relief of the front line and a subsequent move to the river could be made with little difficulty.

After he had completed his reconnaissance, he returned to the Bois de Dôle, assembled his company commanders on a wooded hill that commanded a view of the front line, and acquainted them with the situation. Then, with the aid of a map, he issued an oral warning order, in substance as follows:

The enemy, supported by considerable artillery, holds the heights north of the Vesle. A few machine guns and snipers occupy scattered positions north of the Rouen—Reims Road. The 39th Infantry reports one of their battalions across the river. Our engineers have been constructing foot bridges over the river. The river itself is twenty or thirty feet wide and not very deep. In the event we are directed to relieve the 39th Infantry, we will probably be ordered to cross the Vesle and take up a position on the Rouen—Reims Road. If our battalion is in the assault, the boundary lines of the present 39th Infantry sector will be maintained. They are shown on the map and include the town of Bazoches. The direction of advance will be due north. Companies G and H will be in the assault echelon and Companies E and F in support; Company H on the right supported by Company E. If the advance from St. Thibaut is to the Rouen—Reims Road, companies will form for the movement in the sunken road immediately east of St. Thibaut. As your companies arrive at this point you will take up whatever formation you believe best.

Throughout the night the rain came down in torrents. About midnight the regimental commander received a message to re-
port to brigade headquarters, located at Chartreuve Farm. There he received an oral order directing the 47th Infantry to relieve the 39th by 5:00 a.m., cross the Vesle and establish a line on the Rouen—Reims road. Two companies of the 11th Machine-Gun Battalion were attached to the regiment. Boundaries were the same as those of the 39th Infantry. Bazoches would be pinched out by a combined French and American advance.

Returning at 1:00 a.m. to his command post in the Bois de Dôle, the regimental commander assembled his unit leaders and issued a brief oral order, which was similar to the warning order issued by the commander of the 2d Battalion during the afternoon. The 2d Battalion was designated as the assault unit; the 3d Battalion, with the regimental machine-gun company attached, was ordered in support; and the 1st Battalion was held in regimental reserve. Battalions were directed to move out at once in the order: 2d, 3d, 1st.

The regimental commander then proceeded to St. Thibaut. Darkness and heavy rain made reconnaissance almost impossible.

The forethought of the commander of the 2d Battalion now served its purpose. He assembled his company commanders and explained the battalion's mission. He stated that no information, other than that already given, was available and that the orders he had issued during the afternoon would be carried out. He then directed his adjutant to bring up the battalion as soon as it could be assembled, and left for St. Thibaut.

At 2:00 a.m. on August 7 the regiment, covered by a small advance guard, marched on St. Thibaut. No guides were furnished. The road was a knee-deep quagmire. Dead men and animals added to natural obstructions of the narrow way. Slowly, and with great difficulty, the column struggled forward. The enemy continued to shell the road, but owing to the darkness this fire was largely ineffective. In reply, American artillery steadily shelled the heights north of the river.
About 3:30 a.m. the 2d Battalion reached St. Thibaut, where it was met by the battalion commander. He told his company commanders that he had been unable to obtain any additional information but that the situation looked worse than had been represented to him the previous day. In fact, the only protection against hostile machine guns and snipers lay in reaching the Rouen—Reims road before daylight.

The 2d Battalion moved quickly to the sunken road 200 yards east of the village, took up an approach-march formation and at 3:45 a.m. moved out. Enemy artillery fire increased. The 3d Battalion, followed by the 1st, moved slowly along the St. Thibaut road, in order to allow the 2d Battalion time to clear the sunken road.

The regimental commander was extremely anxious to have his assault battalion reach the Rouen—Reims road before daylight; therefore he personally directed the initial stage of the approach to the river:

The enemy evidently expected the relief, for an artillery barrage was laid on the sunken road, the roads leading into St. Thibaut, and on the village itself.

Dawn was breaking and a light mist hung over the ground as the 2d Battalion crossed the narrow-gauge railroad track north of the sunken road. Three hundred yards more brought the battalion to the river. Foot bridges reported to have been constructed by the engineers could not be located. The company commander of the right company moved forward and attempted to wade the river. In so doing he made two discoveries: first, that wire entanglements extended from the middle of the stream to the opposite bank; second, that the stream was too deep for wading. Nevertheless, a few officers and noncommissioned officers managed to struggle across. Once across they made another disheartening discovery: the north bank was wired with a line of double apron entanglements and beyond this with a line of spirals. The noncommissioned officers who had reached the far
bank at once began to cut gaps through the wire while the officers strove to get the troops across as quickly as possible.

Meanwhile, enemy artillery had opened up on the river line with mustard gas. In order to expedite the crossing, heavy articles of equipment such as grenades, bandoliers, and automatic-rifle clips, were thrown across. Many of these items fell in the river and were lost. All men who could swim were then ordered to sling their rifles and swim across. The water was soon
full of struggling soldiers. Leggins were lost, clothing slashed to ribbons, and many men badly cut about the arms and legs by the entanglements. Several soldiers were drowned. Men who could not swim were pulled across on crude rafts improvised out of any buoyant material that came to hand.

As the line moved forward through the wire the mist lifted and immediately the assault waves came under heavy enfilade machine-gun fire from the left flank. It was now broad daylight.

Although sustaining severe casualties, the two assault companies succeeded in pushing on to a line about 50 yards short of the Rouen—Reims Road. The remainder of the regiment, however, was cut off along the Vesle by hostile artillery fire. After several days of fruitless effort, all units were withdrawn to the south bank.

From the personal experience monograph of Captain William A. Collier, Infantry.

DISCUSSION. This example shows some of the reasons why time-and-space calculations taken from the book often go awry. It also shows how time can be wasted and how it can be saved.

First, consider the situation at midnight. Brigade headquarters wanted the 47th Infantry to move forward and reach the Rouen—Reims Road by daylight. This meant that the 47th would have to make a night march of at least three miles, partly across country, in a torrential rain, and with a stream crossing included.

The regimental commander was called back to the brigade command post to receive his orders. He did not get back to his own command post until 1:00 a.m. It appears that time might have been saved had the order been sent forward instead of calling the colonel back. On his return he assembled his officers and issued his order. Another hour went by before the regiment moved out. If the officers had been assembled prior to the return of the colonel, time again could have been saved and time, as usual, was vitally important.
Secondly, we see the valuable results of the preparation made by the commander of the 2d Battalion. During the afternoon he had made his reconnaissance. He had gone over the situation with his subordinates. He had issued a tentative order based on the probable course of action. When he found that the regimental order coincided with his surmise, all he had to say was, "The orders I gave this afternoon will be carried out."
The 47th Infantry started on its three-mile march at 2:00 a.m. It appeared just possible for it to reach the Rouen—Reims Road by 5:00 a.m. provided the march was continuous and no obstacles were encountered.

Unfortunately, the 47th did meet obstacles—serious ones. Rain fell in torrents, the road was knee-deep in mud, dead animals and men blocked the way, the enemy shelled the road and no guides were furnished. The 2d Battalion, leading, did not reach St. Thibaut until 3:30 a.m., did not leave the sunken road, where it changed to combat formation, until 3:45 a.m., and did not reach the Vesle until dawn. The foot bridges could not be found and further advance was opposed by enemy fire.

Calculations of time and space were evidently based on rates of march without allowances for unforeseen contingencies. An hour, or even a half-hour, saved in launching the movement would have been invaluable in this instance where time was a paramount consideration.

EXAMPLE 2. In November, 1918, the U. S. 91st Division, attached to the French Army of Belgium, took part in the Ypres-Lys offensive.

Throughout the day of November 2, the 364th Infantry (part of the 91st Division) had been held in division reserve at Spitaals-Bosschen. During the evening the commanding officer of the 364th Infantry received oral orders for an advance that night. Returning to his command post at 9:40 p.m., he met his unit commanders, who had been previously assembled, and immediately issued his order. Within twenty minutes the 364th Infantry was on the road moving toward Wortengem. The written order for this movement reached the regiment after midnight.

The 364th had been directed to proceed to temporary foot bridges which had been thrown across the Scheldt River between Eyne and Heurne (about a mile out of the 91st Division's zone).
After crossing the Scheldt it was to move south and attack Fort Kezel in conjunction with the remainder of the division which would be located along the west bank of the river.

To accomplish this mission two things were essential: first,

the regiment would have to march nearly ten miles, cross the river, form for attack and advance about two and a half miles more, all under cover of darkness; second, if the enemy were to be surprised, the troops would have to reach a position close to Fort Kezel before daylight.

At 4:00 a.m. the 364th reached a point about three kilometers beyond Oycke where it was met by guides. Here the column was delayed by a message directing the colonel to proceed to the artillery command post for a conference with the brigade and artillery commanders relative to supporting fires.
At 4:45 a.m., a half hour before daylight, the head of the column was still three kilometers from the foot bridges. Enemy artillery had been interdicting the roads. Appreciating the situation, the regimental commander ordered the battalion to march to areas east of Oycke and dig in. The crossing was not attempted.

From the personal experience monograph of Captain Frederick W. Rose, Infantry.

DISCUSSION. This regiment received orders so late that its task was almost impossible. The distance to the point of crossing was a little less than ten miles. Two and a half miles more remained from the crossing to Fort Kezel. Using the usual rate of march by road at night (two miles per hour) it would take about five hours to reach the crossing. Following the crossing, the march would be across country at one mile per hour. This would require two and a half hours more. The whole movement would require seven and a half hours of steady marching—not including the time lost in crossing.

In this case, the colonel had his unit commanders assembled and waiting for him on his return. Due to this, the regiment was in motion in the exceptionally good time of twenty minutes, or at 10:00 p.m. Daylight came about 5:15 a.m., or seven and a half hours later. Theoretically, the movement was just about possible, but practically, it was not. No time was allowed for delays—not even for such obvious things as enemy artillery fire, crossing the river, issuing the attack order or taking up the attack formation.

The account does not explain the cause of the delays in the march of this unit, but that there were delays may be seen by the fact that at 4:45 a.m. the head of the column was still three kilometers from the crossing.

The calculation of time-and-space factors had been too optimistic.
EXAMPLE 3. At 4:30 p.m., October 9, 1918, the 2d Battalion of the U. S. 38th Infantry was ordered to move from its position at Cierges, leapfrog the 1st and 3d Battalions which were holding la Mamelle Trench near Romagne-sous-Montfaucon, and attack toward Bantheville. The ridge southwest of Bantheville, which was the battalion objective, was four miles away. Darkness would fall in an hour and a half.

The battalion, advancing over the ridges northeast of Cierges
in approach-march formation, came under heavy artillery fire and had to break up into smaller sub-divisions. It did not arrive in time to attack that day.

From the personal experience monograph of Captain Francis M. Rich, Infantry, who commanded Company G of the 38th Infantry.

DISCUSSION. Here we have an attack ordered in which the objective could not possibly be reached before night, and yet a night attack was not intended.

The comment of Captain Rich on this phase of the operation follows:

The objective was four miles off, there had been no preliminary reconnaissance, and darkness was only one and a half hours away. The briefest consideration of time and space would have shown that it was impossible to execute the order. A better plan would have been to make the approach march under cover of darkness, thus avoiding the bombardment to which the battalion was subjected, and attack at daylight.

EXAMPLE 4. On June 6, 1918, the 23d Infantry (U. S. 2d Division) held a position northwest of Château-Thierry. At 3:15 p.m. that day division issued orders for the 23d Infantry and the units on its left to attack at 5:00 p.m. This order reached the commanding officer of the 23d Infantry at 4:00 p.m. He ordered the 1st and 3d Battalions, then in the front line, to attack in conjunction with troops on the left.

It was nearly 5:00 p.m. before the battalions got this order. Both battalion commanders assembled their company commanders at double-time and issued their orders. Captains literally gathered their companies on the run and started toward the enemy lines. The 3d Battalion attacked at 5:50 p.m. Its attack was repulsed with considerable losses.
On July 18, 1918, the 23d Infantry was attacking eastward in the Aisne-Marne offensive. The advance had been rapid all morning, but in the afternoon it began to slow down.

Early in the afternoon the division commander met the commander of the 3d Brigade (9th and 23d Infantry Regiments) and ordered a resumption of the attack at 4:30 p.m. The brigade commander, however, did not even find his two regimental commanders until after that hour. When he finally located them he ordered them to resume the attack at 6:00 p.m.

Fifteen French light tanks were to support the attack. Most of the units of the 23d were badly intermingled. Both regimental commanders were of the opinion that the attack could not be launched by 6:00 p.m. The tank commander wanted even more time than the colonels. The colonel of the 23d Infantry conferred with the French captain commanding the tanks, and then, at 6:30 p.m., moved forward to organize the attack.

At 7:00 p.m. the 23d Infantry jumped off under the personal command of the regimental commander. The 9th Infantry, also led by its colonel, jumped off fifteen minutes later.

From the personal experience monograph of Captain Withers A. Burress, who was Operations Officer of the 23d Infantry.

DISCUSSION. Such experiences as that of the 23d Infantry on June 6 are avoidable, yet they occurred with monotonous frequency in the World War. There were undoubtedly many excellent reasons why the order for a 5:00 o'clock attack did not reach the regimental commander until 4:00 and the battalion commanders until nearly 5:00. But in spite of reasons good or bad, the fact remains that the order should have reached the troops at an earlier hour. The chances are that much time would have been saved all the way down the line, had each headquarters visualized the ultimate effect of cumulative delay.

On July 18 the same thing happened. Battalion and company commanders had almost no time in which to make arrangements.
The troops were good, the leadership was vigorous, but all time estimates were profoundly in error. It took more than five hours for the division commander to make his will felt. In this instance there was an excuse for the delay, for the 3d Brigade had been in full battle. The fault here is that due allowance for the disorganization incident to combat was not made in arranging for the resumption of the attack.

Within each of the attacking regiments the commanding officers obtained coördination by personally conducting the operation. The confusion of the battlefield, particularly in resuming an attack that has been stopped, makes coördination by time extremely difficult. For small units other methods should be considered. If the time method is used, the allowance must be generous.

CONCLUSION. These illustrations are by no means extreme. Accounts of the World War bristle with tactical failures that are directly due to fallacious conceptions of time and space. Indeed, instances abound in which attack orders were received after the hour specified by the order for the jump-off. In many cases unpredictable circumstances intervened—circumstances that disjointed even the most generous time allowances. But it is equally true that many leaders based their calculations on parade-ground logistics, completely ignoring the inevitable obstacles that arise in war.

Commanders and their staffs must give the most careful thought to considerations of time and space. The time element should be computed from the specific conditions that will be encountered, or that are likely to be encountered, and not be taken merely from theoretical tables setting forth rates of march and time required for distribution of orders under average conditions.

Actual application of troop-leading methods, as taught at our
service schools, will save many precious minutes. Forethought in making reconnaissance, shrewd anticipation of the probable course of action, tentative warning orders issued on this hypothesis, and arrangements for the instant transmission of orders, represent but a few of the time-saving devices the aggressive leader will adopt.
Chapter VII: Mobility

Open warfare demands elastic tactics, quick decisions, and swift maneuvers.

Mobility includes far more than mere rapidity of movement. From the leader it demands prompt decisions, clear, concise orders, anticipation of the probable course of action and some sure means for the rapid transmission of orders. From the troops it demands promptness in getting started, the ability to make long marches under the most adverse conditions of terrain and weather, skill in effecting rapid deployments and abrupt changes of formation without delay or confusion, facility in passing from the defensive to the offensive, or the reserve, and finally, a high morale. In brief, then, mobility implies both rapidity and flexibility.

EXAMPLE 1. In the early days of the World War the 35th Fusiliers, part of the German II Corps, made the following marches:

August 17: 13.1 miles
August 18: 25.0 miles
August 19: 06.2 miles (Battle of the Gette)
August 20: 21.9 miles
August 21: 06.2 miles
August 22: 07.5 miles
August 23: 28.1 miles
August 24: 10.0 miles (Battle of Mons)
August 25: 18.7 miles
August 26: 12.5 miles (Battle of le Cateau)
August 27: 21.9 miles
August 28: 23.8 miles
August 29: 05.0 miles (Fighting on the Somme)
August 30: 15.6 miles
August 31: 20.6 miles
September 1: 18.8 miles (Fight at Villers-Cotterêts)
MOBILITY

September 2: 08.8 miles
September 3: 20.6 miles
September 4: 18.8 miles (Fight at Montmirail)
September 5: 15.6 miles
September 6: none (Battle of the Marne)
September 7: 23.1 miles (Battle of the Marne)
September 8: 20.6 miles (Battle of the Marne)
September 9: none (Battle of the Marne)
September 10: 20.0 miles
September 11: 18.1 miles
September 12: 07.5 miles (Battle of the Aisne)

DISCUSSION. In 27 consecutive days the 35th Fusiliers marched 408 miles, an average of 15.1 miles a day. This period included at least 11 battle days and no rest days. All marches were made under full pack.

On September 7 and 8, in the movement to attack the north flank of the French Sixth Army, this regiment marched 43.7 miles with only a three-hour halt. The entire march was made under the most difficult traffic conditions.


EXAMPLE 2. On May 30, 1918, the 7th Machine-Gun Battalion of the U. S. 3d Division was training near la-Ferté-sur-Aube. This battalion was motorized, but its motors were of unsuitable design and its personnel had had comparatively little training in handling them.

At 10:00 a.m. an unexpected order directed the battalion to proceed at once to Condé-en-Brie, using its own transportation. This order was occasioned by the headlong drive of the Germans for the Marne, following their successful break-through along the Chemin des Dames.

A warning order was promptly issued. Troops were recalled from drill, extra trucks borrowed, and at 2:30 p.m. the column cleared la-Ferté-sur-Aube. Within the space of a few miles the trucks were found to be seriously overloaded. On steep hills the men had to detruck and, in some cases, push. Tires were old and
INFANTRY IN BATTLE

punctures many. Delays were frequent. Motorcycles proved valuable in carrying spare parts to broken-down trucks.

About 9:00 p.m. a short halt was made near Sézanne in order to rest the men and refuel and overhaul the cars. Thereafter no lights were used. At daybreak the column encountered refugees who crowded the roads and made progress difficult. Nearer the front, infantry, artillery, and supply wagons appeared in the intervals between the refugees. At 12:30 p.m., May 31, the head of the battalion halted at Condé-en-Brie, having made 110 miles in 22 hours over congested roads. The battalion arrived at Château-Thierry, went into position in the afternoon, and at dawn engaged the Germans.

From the personal experience monograph of Major John R. Mendenhall, who commanded Company B of the 7th Machine-Gun Battalion.

DISCUSSION. In this case mobility was obtained through the use of motors. Although the equipment was deficient and traffic conditions difficult, this battalion moved 110 miles and deployed in position against the enemy within some twenty-seven hours after receipt of its orders.

EXAMPLE 3. On August 17, 1914, detachments of the German I Corps were disposed on the East Prussian frontier with the main German forces concentrated well in rear. A strong Russian advance was in progress from the east.

The I Corps had been given a covering mission, but its commander believed in an aggressive defense.

The 4th Infantry Brigade, a squadron of cavalry and a regiment of field artillery were located at Tollmongkelmen. To the north, elements of the 1st Division covered a wide front east of Stalluponen.

Early on the 17th the Tollmongkelmen detachment was confronted with the following situation: The elements of the 1st Division, to the north, were engaged against much stronger Rus-
sian forces, and their situation was serious. The south flank of this fighting was some eleven miles from Tollmongkelmen.

According to reliable information, a Russian division advancing west from Wisztyniec was now but a few miles from Mehikelmen.

The German commander at Tollmongkelmen at once decided to contain this Russian division with a small force and, with the bulk of his command, move north and strike the southern flank of the Russians who were attacking the 1st Division elements near Goritten.

From his command, which had already been assembled, he sent two battalions of the 45th Infantry, a squadron of cavalry, and a battery of field artillery against the Russian advance from Wisztyniec, with orders to stop the Russians at Mehikelmen at any cost.

With the 33d Infantry, one battalion of the 45th Infantry,
INFANTRY IN BATTLE

and five batteries of artillery, he marched to the northeast, arriving in the vicinity of the fighting about 11:30 a.m. This detachment promptly attacked toward Goritten directly against the rear of the enemy. The effect was immediate. The Russians withdrew in disorder with heavy losses, including some 3,000 captured. German losses were slight. The delaying detachment to the south carried out its mission, holding the Russians at Mehlkelmen the entire day.

From "Tannenberg," by General von François, German Army, and the Reichsarchiv account.

DISCUSSION. Although the Russians were vastly superior in numbers, they were overwhelmed by their faster-thinking, faster-moving opponents. A quick decision, a rapid march, and a sudden attack from an unexpected quarter completely routed them.

Had the German force at Tollmongkelmen not been moved north promptly, the result would probably have been a successful defense east of Tollmongkelmen, and a reverse near Stalluponen.

The German commander at Tollmongkelmen took a chance. He risked defeat on his own front in order to put weight into his effort to redress a critical situation on a more decisive front. His confidence in the superior mobility of his troops and in the ability of a weak detachment to effect the required delay near Mehlkelmen was justified.

EXAMPLE 4. On November 5, 1918, the 28th Infantry, part of the U. S. 1st Division, bivouacked about three miles east of Buzancy. The division was in corps reserve. The Germans were withdrawing.

About 2:30 p.m., the regiment received warning that the 1st Division would relieve the 80th Division that night and that orders for the movement would be issued later. The troops were given a hot meal, packs were rolled, and a tentative march order
prepared. By 4:30 p.m. all arrangements were complete; the regiment was in readiness, waiting only for the order to move out.

About 5:00 p.m. a written message came in, directing the command to march at once to the vicinity of Beaumont, via Nouart and la Forge Farm. The regimental commander was instructed to report to the brigade commander at la Forge Farm for further orders. A few minutes after this message arrived the regiment was in motion.

The march was difficult. Nouart's narrow streets were congested with units of the 2d and 80th Divisions. Beyond Nouart the road meandered through thick woods and over marshy ground; shell holes and fallen trees blocked the way; in many places the mud reached halfway to the knee; fields and ditches, bordering the road, were filled with water. Often the men had to march in column of twos. Rest periods were few. But in spite of the difficulties a steady rate of march was maintained (about one and one-third miles an hour for the greater part of the distance).

At la Forge Farm orders were received directing the 1st Division to attack towards Mouzon on the morning of November 6. The 28th Infantry was ordered to occupy a position in the woods two miles west of Beaumont.

When the leading element reached Beaumont it found the bridge destroyed and the exits of the village under shell fire from positions east of the Meuse. After studying the map the regimental commander decided to move across country to the prescribed position.

Since it was too dark to pick up landmarks, battalion commanders were given compass bearings. Three unimproved roads that intersected the route of march furnished a check on the distance. When the third road was crossed, the regiment would be near its destination.

The going was heavy. Ditches and shell holes barred the way;
fields were wet and soggy; fences had to be cut. To add to these
difficulties, the enemy steadily shelled the area through which the
column was passing, making it necessary to extend the distance
between units.

Dawn was breaking when the column reached the third road.
The terrain did not check with the map! The regiment was halted
and an officer was sent down the road toward Beaumont. He
found that there were four roads instead of three; the Germans
had built one for use in transporting supplies to the front. The
command was marching in the right direction and had only a
short distance to go. The regiment resumed its march and arrived
at its designated position in good time.

Since the attack toward Mouzon met but little resistance, the
28th Infantry remained in brigade reserve. About 4:00 p.m. this
same day, the regiment received a telephone message from the
brigade commander, in substance as follows:

The brigade is going on a long march. Move out at once on the
Beaumont—Stonne road toward Stonne. The regimental com-
mander will report to me in person at the crossroad at la Bagnelle
for orders. The 26th Infantry will be withdrawn and follow you
in column.

In a few minutes the regiment was again en route. Orders re-
ceived at la Bagnelle directed the 1st Division to march on Sedan
in five columns, seize the hills southwest of that city, and attack
at daylight. The 28th Infantry and Company D of the 1st Engi-
neers were ordered to march via Stonne—Chéhéry—Fenois.

Neither the location of the enemy front line nor that of
friendly units, other than the division, was definitely known.
Therefore the brigade commander decided to move forward in
route column, preceded by an advance guard, and push through
such resistance as might be encountered with as little extension
as possible.

The regimental commander was ready with his orders when
the 28th Infantry reached la Bagnelle. The regiment marched all
night. About 7:00 a.m. the advance guard was fired on from a
Example 4

MOBILITY

SCALE IN MILES
position near Chevenges. The regimental commander, who was
with the advance-guard commander, at once ordered an attack.
The attack got away promptly and drove past Chevenges to
within two or three miles of Sedan.

At 11:00 a.m. orders were received to halt the advance and
organize the ground for defense. Five hours later the 28th was
ordered to withdraw to the vicinity of Artaise, as it was not de-
sired that the 1st Division enter Sedan. The last units of the regi-
ment arrived in Artaise about 11:00 p.m.

From the personal experience monograph of Major William G. Livesay, who
was Plans & Training Officer of the 28th Infantry.

DISCUSSION. Between 5:00 p.m. November 5 and 11:00
p.m. November 7, the 28th Infantry covered about thirty-five
miles. During this period it made a difficult and exhausting night
march to take up a battle position, a second all-night march in
pursuit, an attack, a transition from the offensive to the defensive
and, finally, a withdrawal. For fifty-four hours this regiment
marched and fought without food and virtually without rest.

Although this outstanding performance would have been im-
possible without the physical efficiency and high morale that
characterized the regiment, it would have been equally impossi-
bile without first-rate troop leading. Instructions were anticipated
and warning orders issued. In each case, the regiment was able
to move immediately on receipt of the order. The regimental
commander was directed to put his troops in march toward a
certain point, and then told where to report for further instruc-
tions. There was no time wasted in issuing elaborate march
orders, nor was there any delay in taking prompt, positive action
when the column encountered unforeseen difficulties.

Intelligent foresight, rapid decisions, prompt orders and high
morale are factors that make for mobility.

EXAMPLE 5. On August 19, 1914, the 30th Chasseur Bat-
talion, with one battery of artillery attached, was ordered to
move east from Stosswihr along the north side of the Fecht, in order to cover the debouchment of other troops. One battalion of the 152d Infantry was assigned a similar advance and mission south of the river. The 30th Chasseurs consisted of six companies of well-trained, well-conditioned troops, ready for any eventuality.

The valley of the Fecht is about a mile wide. The valley itself is relatively flat and open, but is dominated on both sides by steep, wooded hills. The secondary valleys entering the Fecht from the north are pronounced depressions. Progress through the woods by deployed units would be slow.

The battalion commander, knowing that German covering forces were near and combat imminent, decided to move the bulk of his command along the slopes of the north bank to envelop
any resistance met. Crests were to be used as successive objectives. Few troops would be left in the valley. He explained his general idea before the march started and issued his order, extracts of which follow.

The battalion will follow the road Stosswihr—Hohroth—Fräuenackerkopf and then, without losing height, will move parallel to the valley. Order of March: 4th, 5th, 6th, 2d, 3d, 1st Companies.
The 4th Company (advance guard), will deploy astride the route followed as soon as the enemy is met; the 5th, then the 6th, will deploy to the north.
The 2d Company will deploy to the south, maintain contact with the 4th Company and cover the valley road.
The 3d and 1st Companies will be in reserve.
The battery will move behind the 2d Company, keeping generally near the south edge of the woods, abreast of the reserve. The machine-gun platoon will also follow the 2d Company.

About 8:00 a.m. the 4th Company, near 661, encountered an enemy force to its front and deployed, as did the 2d Company. The 5th Company at once moved to the north, deployed two platoons and advanced against resistance. The 6th Company farther north, met no enemy and continued its advance.

Along most of the front the French deployed more rapidly than their opponents, whom they could see fanning out under their fire. This was particularly true on the north flank, where the French definitely had the advantage of being the first to deploy. Here an envelopment was made and the Germans were taken under a converging fire. Meanwhile, the French battery and machine guns had promptly gone into action, directing their fire against German elements in the open valley.

In spite of the fact that the Germans had artillery support, the French envelopment made progress. About 3:30 p.m. the 6th Company arrived on the spur northwest of Chapelle-St.Croix and turned southward, surprising a command post and the German elements that were located there.

A strong German attack in the valley, near Gunsbach, failed. As a result of this repulse and the progress of the French en-
development, the Germans withdrew in confusion. The French pushed on and reached their assigned objective.

This battalion, assisted by fire from the battalion of the 152d south of the Fecht, had defeated the 121st Württemburg Reserve Regiment and some elements of the 123d and 124th.

From Infantry Conferences by Lieutenant Colonel Touchon, French Army, at the École Supérieure de Guerre.

DISCUSSION. Here is an instance where a battalion commander regulated his deployment in advance. His maneuver had been carefully planned in the event the enemy was encountered—fire in the open valley, maneuver in the covered area. He realized that the negotiation of such steep slopes as those along the Fecht would be a slow and fatiguing job, even for his hardy Alpine troops. Therefore he wisely began the climb before gaining contact with the enemy, but without deploying. Thereby he saved his men and increased his speed.

That the French were able to deploy faster than their opponents was largely due to the almost automatic nature of their maneuver. A few shots and the movement got under way. No time was lost in making decisions and issuing orders.

Those cases in which a prearranged deployment can be used will be few. Situations seldom develop in accordance with preconceived ideas. Nevertheless, this action graphically illustrates the tremendous advantage that may result from a previously planned course of action.

The defeat of this larger and stronger German force may be directly attributed to the superior mobility of the 30th Chasseurs. This superior mobility resulted from two things: First, the excellent performance of the troops, who were well-trained and in good physical condition; second, the foresight of the battalion commander.

CONCLUSION. The physical marching ability of troops is an important factor in mobility, but it is only a part. Rapid de-
cisions and clear, quick orders are vital. No less important are the requirements demanded of the troops—prompt execution of orders, rapid deployment, quick changes of formation and observance of march discipline.

Superior mobility must be achieved if we are to surprise our opponent, select the terrain on which we are to fight, and gain the initiative. There is no alternative. If we are slow in movement, awkward in maneuver, clumsy in deployment—in a word, not mobile—we can expect to be forestalled, enveloped, or constrained to launch costly frontal attacks against an enemy advantageously posted.
Chapter VIII: *Surprise*

Surprise is a master key to victory.

S*URPRISE* is usually decisive; therefore, much may be sacrificed to achieve it. It should be striven for by all units, regardless of size, and in all engagements, regardless of importance. When the squad opens fire it should do so suddenly and simultaneously. When an army attacks it should strike from an unexpected direction, at an unexpected time, with unexpected violence.

When the enemy confidently expects a certain course of action his dispositions are made with the view of meeting that action. If, however, an unexpected plan be adopted the hostile dispositions and arrangements must be hastily improvised, and are therefore less effective. Concealment of the point of attack permits the offense to mass superior forces against a critical point before its action can be countered by a hostile concentration. Similarly, concealment of the time of attack prevents the defense from initiating appropriate counter-measures and, at the same time, adds tremendously to that moral effect which is the soul of offensive action.

Surprises gained by large forces in the World War are well known. For example, on July 18, 1918, the French and Americans surprised the Germans. On May 27, 1918, the Germans won an easy victory by surprising the French on the Chemin des Dames. The British and French surprised the Germans on August 8, 1918—"the black day of the German Army."

In all these cases the precautions taken to insure secrecy were extreme and so were many of the chances. On the 8th of August, for instance, all the infantry of the French 42d Division formed for an attack in a block some 400 yards deep by 1,200 yards wide. If the Germans had suspected this, few of their shells would have
missed. The formation was not discovered, however, and at the prescribed hour of attack the French infantry moved forward in mass. It completely escaped the enemy's counter-preparations and barriages, smashed through his lines, advanced miles into his territory, and captured 2,500 prisoners. True, this division took a chance, but it got away with it and made one of the most successful French attacks of the war.

The French spring offensive of 1917 failed chiefly because it lacked surprise. Many earlier Allied offensives failed for the same reason; they had been too well advertised by days of artillery preparation.

Surprise is by no means a monopoly of the larger units. It applies to the squad as well as the army, and for both it is almost invariably decisive. Indeed, it is not too much to say that without surprise of some kind an operation will fail, or at best achieve but a limited success.

EXAMPLE 1. On November 7, 1918, the U. S. 356th Infantry reached the Meuse River, whose far bank was held in strength by the Germans. Colonel R. H. Allen, the regimental commander, had orders to prepare a plan for effecting the crossing.

Colonel Allen, in consultation with engineers, selected a point for crossing. His plan was based primarily on surprise. Six captured German pontoons (borrowed without leave from the 2d Division) were to be used. The crossing was to be made at night just west of the mouth of Wame Creek. A covering detachment of twenty-five men would go over first and fan out across the neck of the river bend to stop hostile patrols.

Immediately after this the 1st Battalion would cross and push forward in silence, with rifles unloaded. They would pass to the north of Pouilly, cut the wire lines leading to the town, and then seize the heights east of it. Later this battalion would continue to the high ground on the edge of the Bois de Soiry.
The 3d Battalion would follow the 1st, pass around Pouilly and move to the Bois de Hache. As it passed Pouilly it would drop off one company to overcome organized resistance in the town.

The artillery prepared concentrations on a time schedule carefully calculated to keep ahead of the infantry. Fire would be opened only on receipt of orders or on rocket signal from the regimental C.P. at Wame Farm. If fire had not been opened by the time the 1st Battalion reached the Pouilly—St. Rémy Farm Road, the artillery would open up on signal from this battalion.
Similar arrangements were made for machine-gun support—the machine guns to remain silent until the artillery opened.

A demonstration was planned at Pouilly. The river was shallow here and the enemy obviously expected an attack, for a previous attempt had been made to build rafts near this town and effect a crossing. The Germans had noted the preparations and had heard pounding. At the slightest movement in this vicinity they opened fire. Full advantage was taken of this. Lumber for rafts was piled near the Forêt de Jaulny and imperfectly camouflaged. Each night men were detailed to hammer on boards in a quarry near Pouilly.

For the main crossing, boats were to be lashed together in threes thus making two rafts of the six pontoons. These rafts were to be pulled back and forth across the river by ropes manned by shore parties of the 314th Engineers. Hay and boards were placed in the metal boats to deaden the sound of hobnailed shoes. No commands were to be given. Absolute silence was to be enforced. Signals across the river were arranged by the engineers. A light telephone wire was attached to each end of the rafts. A vigorous jerk on the wire was the signal for the raft to be pulled across. The pontoons were to be hauled to Wame Creek and floated down to the Meuse.

Battalion and company commanders were given the detailed plan on November 9, but no one else was told of the scheme until shortly before its execution.

Certain changes were ordered by the division but, as a result of protest by Colonel Allen, these were reduced to a minimum. For instance, the division ordered an artillery preparation but the regimental commander felt that this would eliminate the element of surprise. He protested and the original plan for artillery support was allowed to stand.

The crossing was ordered to be carried out on the night of the 10th. The demonstration staged at Pouilly succeeded beyond expectation. Practically all of the hostile artillery in the vicinity
placed its fire on this area and kept it there during the entire operation.

At the real crossing, the first troops were ferried over at about 8:20 p.m. Soon after this some German artillery came down nearby, whereupon Colonel Allen ordered the signal rocket fired and the American artillery and machine guns opened. In a few minutes the enemy shifted his artillery fire to the Pouilly area and from that time on not another shell fell near the ferry.

The crossing continued, generally according to plan, and was
entirely successful. Many prisoners were taken in Pouilly and Autréville. At the last place an entire machine-gun company was captured as it was falling in to move on Pouilly.

The 1st Battalion, moving through darkness and fog, advanced to its objective by compass bearing. This battalion and the 3d, which followed it, suffered few casualties. The enemy was taken completely by surprise.

The experience of the 2d Battalion of this regiment was different. It had been ordered to move to a foot-bridge where the 2d Division was crossing. It reached the designated bridge at 9:00 p.m., but had to wait until 1:00 a.m. before it could cross. The enemy discovered the movement. His artillery came down with deadly accuracy on the crossing and on the 2d Battalion. Most of the officers of this battalion, including the battalion commander, were killed or wounded, and 232 men out of the 600 who began the operation shared the same fate.

*From the personal experience monograph of Captain Arthur S. Champeny.*

DISCUSSION. Colonel Allen's plan was based on surprise, and surprise succeeded as it almost always does.

The Germans expected a crossing at Pouilly and the regimental commander took great pains to encourage them in that belief. For several days he fostered this idea. The building of rafts nearby, the imperfect camouflage of lumber, the previous threat of a crossing, the nightly pounding on boards near Pouilly, all confirmed the Germans in their belief. Further, since secrecy was the basis of the operation, the colonel strongly opposed the division's desire for an artillery preparation prior to the crossing. His views prevailed.

The sum total of all these precautions resulted in the 1st and 3d Battalions attacking in an unexpected manner from an unexpected place. The Germans were not even sure that a crossing had been made. That the surprise was complete is clearly shown by the fact that practically no artillery fire fell at the point of the
actual crossing, whereas the Pouilly area was pounded unmercifully during the entire operation.

The disastrous effect of the lack of surprise upon casualty lists is forcefully illustrated by the experience of the 2d Battalion, which lost nearly one-half its men in crossing the same stream.

EXAMPLE 2. Late on July 17, 1918, the 1st Battalion of the U. S. 39th Infantry made a trying march to the front. By the time the battalion reached the front line, which ran along the Faverolles—Troësnes Road, the men were tired out.

Late that night an attack order came in. The regiment had been ordered to take the Boisson de Cresnes and the colonel had decided to do this by attacking with the 1st and 3d Battalions abreast, the 1st on the left. The 1st Battalion staff hastily examined maps. Diagonally across the battalion front flowed the Savières. Beyond the stream rose the densely wooded ridge of the Boisson de Cresnes, which was believed to be strongly held by the enemy.

The 1st Battalion did not make any reconnaissance of the ground to the front. On the map the Savières appeared too insignificant to occasion any difficulty in crossing. The battalion attack order was issued, therefore, without reconnaissance. Companies A and B were placed in assault, and C and D in support. Company C of the 11th Machine-Gun Battalion was directed to follow the right support company. The Faverolles—Troësnes Road was designated as the line of departure.

The American attack was scheduled to jump off at 5:30 a.m., while the French, in adjacent zones, were to attack at 4:30 a.m., an hour earlier. The idea was to pinch out the formidable Boisson de Cresnes by a simultaneous advance on each side of it. The Americans would then drive forward and mop up the wood.

At 4:30 a.m. the French attacked. Coincident with this, Ger-
man artillery and trench mortars placed heavy concentrations on the American front line. At 5:15 a.m. the 1st Battalion was informed that the American hour of attack had been postponed to 8:00 a.m.

At this hour the battalion moved forward. The German bombardment had ceased. Not a sound was heard as the men moved across the long, wheat-covered field that sloped down toward the Savières. Finally, the assault companies broke through a fringe of trees and scrambled down a bluff to the river.

Then it was discovered that the Savières, which had appeared so insignificant on the map, was swollen by heavy rains to twice its normal width and depth. The banks on each side had become deep and difficult swamps.

Companies A and B, continuing the advance, became intermingled and forthwith fell into the greatest confusion, not 200 yards from the hostile position. The floundering, the splashing, and the shouting made enough noise to alarm every German in the Marne salient, but strangely enough drew no fire.

Finally, a few patrols, armed with automatic rifles, succeeded in crossing the swollen stream. One of these killed or drove off the crew of an enemy machine gun that was just about to go into action. The noise of this sudden burst of fire spurred the other men to greater effort and the crossing was at last completed.

Once over, the battalion promptly reformed and pushed on into the Boisson de Cresnes. It advanced rapidly, meeting surprisingly little resistance. A captured German sergeant explained the lack of opposition by saying that the Germans had not expected anyone to be daring enough or foolhardy enough to attempt an attack over the flooded and swampy Savières in broad daylight. Therefore the Germans had massed their machine guns and organized the terrain on the northern and southern approaches to the woods where the ground was firm and the cover suitable for an attack.

From the personal experience monograph of Captain Walter B. Smith, who was Scout Officer of the 1st Battalion of the 39th Infantry.
DISCUSSION. The Germans had made a painstaking, logical estimate of the situation. They had placed their strongest defense where an attack seemed most probable. Opposite the 1st Battalion of the 39th, where an attack appeared incredible, they had only a handful of troops.

Thus, when the Americans blundered into the illogical solution, the Germans were caught completely off guard. After floundering through a marsh where a few well-placed machine guns could have stopped a regiment, the battalion captured a
strong position—a position so formidable that it was almost undefended.

This battalion was unquestionably lucky. The failure to reconnoiter and to ascertain the true condition of the Savières should, by all odds, have resulted in a bloody repulse. Instead, it resulted in a brilliant success. Why? Because the attacking troops, by stumbling into the unexpected and the improbable, achieved the decisive element of surprise.

EXAMPLE 3. On July 14, 1918, the 4th Platoon of Company A, U. S. 30th Infantry, held a small wood northeast of Fossoy. Farther forward, scattered platoons of the 30th formed an outpost along the Marne.

About midnight July 14-15, the Germans north of the Marne opened a terrific artillery bombardment, but the 4th Platoon escaped without casualties. At dawn the bombardment ceased but rifle and machine-gun fire could still be heard. Fog and smoke obscured the view of the river. Men coming back from other organizations said that the Germans had crossed the Marne.

Some time later the platoon leader saw German infantry moving toward his position in an approach-march formation. They were near the railroad. The platoon leader did not open fire. The German infantrymen and machine gunners came on at a slow walk and as steadily as though on parade. An officer walked at their head swinging a walking stick.

The American platoon leader waited "until the Germans came as close as the British did at Bunker Hill, perhaps 30 yards." He then gave the order to fire, and the men opened up all along the line at point-blank range. To use his own words, "The automatic-rifle squads made their Chauchats rattle like machine guns."

The Germans fired only a few shots. Two Germans, who were trying to get a light machine gun into action, were very conspicuous. They were literally riddled with bullets. Nearly every man
Example 3
in the platoon claimed to have killed them. The enemy took what cover they could find and later withdrew to the Marne.

The American platoon leader stated that approximately forty Germans were killed (as determined by a count made later) and an undetermined number wounded.

*From a statement by Lieutenant William C. Ryan, who commanded the 4th Platoon of Company A, 30th Infantry.*

**DISCUSSION.** Surprise can be obtained in the defense as well as in the attack. The surprise effect was gained in this action by withholding fire until the enemy was within thirty yards of the position, then opening suddenly and simultaneously.

Had Lieutenant Ryan opened fire when he first saw the Germans he might have stopped them farther from his position, but he would undoubtedly have failed to crush the attack so decisively. The strength of the assaulting Germans cannot be stated definitely, but presumably they were a depleted battalion of the 398th Infantry.

Lieutenant Kurt Hesse, adjutant of the German 5th Grenadiers, tells of a similar experience in his description of the fighting along the Marne on this day. His unit, committed against troops of the U. S. 3d Division (apparently the 38th Infantry), was similarly surprised by fire at point-blank range. He says:

> I have never seen so many dead. I have never seen such a frightful spectacle of war. On the other bank the Americans, in close combat, had destroyed two of our companies. Lying down in the wheat, they had allowed our troops to approach and then annihilated them at a range of 30 to 50 yards. "The Americans kill everyone," was the cry of fear on July 15—a cry that caused our men to tremble for a long time.

**EXAMPLE 4.** The 2d Battalion of the U. S. 127th Infantry (32d Division) relieved other troops in the Bois de Baulny on the night of October 3-4, 1918. On the morning of the 4th it took part in a general attack as an assault battalion. Its first objective was the Bois de la Morine and the Bois du Chêne Sec.
Although supported by artillery and machine guns, the attack soon broke down under heavy and accurate German machine-gun fire. Several attempts to resume the attack with the aid of further artillery preparation, got nowhere. The battalion suffered fairly heavy losses.

During the night, orders were received to resume the attack at 6:00 a.m. A heavy fog covered the ground the next morning when the battalion jumped off. When the attack reached the Gesnes stream it encountered machine-gun fire, but this was high and ineffective. The battalion reached a point 100 yards from the Bois de la Morine with only a few casualties. From this point it launched a frontal attack in combination with a flanking attack by two platoons from the east. This attack carried the position along the forward edge of the wood and the battalion pushed on to the north edge of the Bois du Chêne Sec, where it halted and reorganized. About 100 prisoners were taken.

From the personal experience monograph of Major Ralph W. Dusenbury, who commanded the 2d Battalion, 127th Infantry.

DISCUSSION. Here we see a battalion carry out a successful attack against a position it had failed to take the previous day. On October 5 it was much weaker numerically than on the 4th, and yet it succeeded without great difficulty. The fog made the difference. The Germans could not tell where or when the attack was coming. Thus the movement on the second day contained the element of surprise.

When enemy fire renders terrain impassable by day, that same terrain may frequently be negotiated under cover of darkness, fog, or some artificial screening agent. Leaders must, therefore, be prepared to take prompt advantage of unusual weather conditions that offer sudden and golden opportunities. Thus, may they achieve surprise.

CONCLUSION. Though all leaders recognize the decisive effect of surprise, it does not follow that all leaders are able to
achieve it. Too often are routine methods adopted with the idea that surprise will result. Too often are schemes, that have gained surprise several times in the past, relied upon to gain that same surprise again. Frequently they end in failure. For instance, prior to July 15, 1918, the Germans made several successful attacks, gaining surprise each time. But on July 15 the same methods failed. This time the French adopted effective counter-measures against tactics that had become stereotyped. The German tactics were the same that had succeeded before, but they had now lost all the decisive qualities of the unexpected. Failure resulted.

The importance of varying methods cannot be overemphasized. Often the good, standard solution, particularly if it be the obvious one, will not be as effective as some other solution that has many apparent disadvantages, but has the transcending quality of the unexpected.

Tactical surprise is usually the reward of the daring, the imaginative, and the ingenious. It will rarely be gained by recourse to the obvious.
Chapter IX: Decisions

A leader must meet battle situations with timely and unequivocal decisions.

DECISIONS IN WAR are difficult. More often than not they must be made in obscure and uncertain situations. Frequently the time at which a decision should be made presents a greater problem than the decision itself.

Solving map problems, particularly those which depict detailed and definite situations, is only slight preparation for the mental ordeals of war. The map problem has an important place in military instruction, but by itself it is inadequate. Academic knowledge and a stored-up accumulation of facts are not enough on the battlefield. The leader must know when to act as well as what to do in certain well-defined situations, but above all he must be willing to accept responsibility for positive action in blind situations. To develop these qualities to the full, map problems should be supplemented by exercises with troops in conditions more closely approximating those of actual combat.

EXAMPLE 1. On the morning of August 22, 1914, the French 5th Colonial Brigade, with a battalion of field artillery attached, marched north through the Ardennes Forest with the destination of Neufchâteau. Other French columns marched north on both flanks. Although these columns were only a few miles apart, the heavy woods virtually precluded intercommunication.

The advance guard of the 5th Brigade consisted of a regiment of infantry, less one battalion. Orders directed that the enemy be attacked if met. Although hostile cavalry patrols had been encountered, no strong enemy force was believed near.

Shortly before noon the brigade neared Neufchâteau. Billet-
ing parties moved ahead of the main body to enter the town.

Suddenly the advance party darted up the hill west of Neufchâteau and began firing to the north and northwest. The point was heard firing near Neufchâteau. A company of the support, which was then nearing the bridge west of the Bois d’Ospot, turned to the right and moved rapidly into the wood. The rest of the support moved up the hill west of Neufchâteau. At this
time the head of the main body was near the north edge of the forest marked Ardennes on the sketch.

It was now discovered that the first firing had been directed at a long train of vehicles moving west on the road from Neufchâteau and on a squadron of hostile cavalry halted in close formation near the tail of the train. An enemy force, strength undetermined, was now seen approaching Neufchâteau from the east. The reserve of the advance guard immediately attacked to the northeast into the Bois d'Ospot.

The brigade commander promptly directed his main body to assemble near the north edge of the forest and ordered his artillery into positions from which it could assist the advance guard, cover the deployment of the main body and support the attack. This decision was made a few minutes after contact had been gained and before any but the vaguest information had been received.

The support of the advance guard, on the hill west of Neufchâteau, was now attacked in force from the east, the northeast, the north and the west.

The German attack that came from the east struck the Bois d'Ospot and, after a brief but bloody fight, drove the reserve of the French advance guard to the southwest.

Even before all his main body cleared the forest, the brigade commander issued an attack order. He had four battalions. Three would attack the Bois d'Ospot from the south and southeast. Their attack would be supported by artillery. The fourth battalion would remain in brigade reserve.

Just as these units moved out it became evident that the situation on the left was desperate. The force on the hill west of Neufchâteau was fighting for its life. It was being enveloped from two sides. The brigade commander therefore diverted one battalion to meet this menace to his left and continued his planned attack with the other two.

The main attack encountered strong German forces moving
from the east and the French enveloping movement was itself en-
veloped. The attack stopped. The two assault battalions now
found themselves in a serious situation. Much stronger forces
were holding them in front and striking them in flank. The Ger-
mans were employing a great deal of artillery. To prevent the
threatened envelopment of his right, the French brigade com-
mander committed his reserve. At about 5:00 p.m. he established
a position on the line of villages south and southwest of the Bois
d’Ospot and passed to the defensive. The German attack was
stopped.

From “Neuf château,” by Colonel A. Grasset, French Army.

DISCUSSION. During the period considered, the decisions of
the French advance-guard and brigade commanders met the
actual situations. Indeed, they are much like approved solutions
to a map problem in spite of the fact that they were based on
little information.

What happened was this: The French brigade stumbled into
the bulk of the German XVIII Reserve Corps which was march-
ing across its front from east to west. Thereafter events moved
rapidly.

The action taken by the advance guard was on the initiative
of its commander. The brigade commander acted with equal
celerity: although the situation was vague, he immediately as-
sembled his main body and issued a hasty order prescribing a co-
ordinated attack. He put in all his artillery. He gave weight to
his main effort. Just as this attack moved out, it became evident
that the advance gaurd would be routed or captured before the
blow at the enemy right could take effect. The brigadier there-
fore took the necessary action to cover the left flank, even at the
expense of weakening his main effort. When the main attack was
enveloped, the brigade reserve—which the commander had
hoped to employ for the decisive blow—was used to protect
the right flank. The brigade then passed to the defensive and
held.
The brigade commander did not wait for the ideal situation to develop. Instead, he met the recurring crises of the action as they arose. Even when the situation developed unfavorably and entirely at variance with what he had expected, his prompt and intelligent decisions were equal to the occasion. As a result his brigade fought the bulk of a corps to a standstill!

EXAMPLE 2. On the morning of July 15, 1918, the 1st Battalion of the U. S. 30th Infantry held the forward area in the 30th Infantry sector south of the Marne. Companies B and C, as outpost, were disposed by platoons close to the river bank. The remainder of the battalion, with Company K and some machine guns attached, held positions in the woods north of the Fossoy—Crézancy Road.

A German bombardment began about midnight. Neither the battalion commander nor the regimental commander received any definite information for several hours. (A more detailed account of this action is given in Examples 2-A, 2-B, and 2-C of Chapter II.)

About 5:00 a.m. the battalion commander made the following report to the regimental commander:

The losses of the battalion have been very great.
Companies B and C (the outpost) are a total loss and survivors of these companies are stragglers.
Communication within the battalion is impossible.
Germans have crossed the river and are now on the south side of the Marne.
The enemy’s rolling barrage has passed Companies A, K, and D, but the enemy does not appear to be following the barrage.

He then recommended that the artillery fire its SOS barrage (prepared concentrations within the American position to the south of the railroad line).

From the personal experience monograph of Major Fred L. Walker, who commanded the 1st Battalion of the 30th Infantry.

DISCUSSION. The regimental commander had to make a de-
Example 2
cision here. Should he ask for this SOS barrage which could be put down in a matter of minutes, or should he wait just a little longer before doing anything?

If he decided not to call for the SOS, he might miss the chance of bringing effective fire on the enemy and breaking up the attack. On the other hand, if he did have it fired, the barrage might be in the wrong place; it might hit American troops, or it might waste ammunition by falling behind the Germans.

This was far from an ideal situation, but none-the-less it was a situation that had to be met. To the regimental commander it seemed clear that the Germans were somewhere south of the Marne. He accepted the report that Companies B and C were a loss. He noted the report of the battalion commander that the German barrage had passed but that Germans were not following. Presumably they must be somewhere near the railroad. He asked for the barrage. It was fired. Although it did inflict casualties on at least two platoons of American troops who were still holding out on the river bank, it is reported to have played an important part in stopping the German attack.

EXAMPLE 3. The 70th Infantry, part of the French Fifth Army, had marched north to meet the German enveloping movement through Belgium. On the afternoon of August 20, 1914, it halted a few miles south of the Sambre.

About 5:00 p.m. the 2d Battalion was ordered to move two or three miles forward to Arsimont "to hold the bridges at Auvelais and Tamines." The battalion marched at once. En route the battalion commander designated the 5th Company "to guard the bridge at the village of Auvelais."

The 5th Company arrived at Auvelais about 8:00 p.m. It was dark. The company commander had the following surprises:

(1) Auvelais was not the village he expected, but a sprawling town of some 10,000 inhabitants. His company, figuratively speaking, was lost in it.
(2) There was not one bridge to guard, but eight, and these were scattered along some three miles in a bend of the Sambre.

(3) The town extended to the north bank of the Sambre in a populous suburb. The company had been formally forbidden to cross the river. All of Auvelais was extremely low and completely commanded by high ground on the north bank where good cover abounded.

At 10:00 p.m. the captain of the 5th Company received a curt message: "You can expect to be attacked early tomorrow morning."

He got his battalion commander on the telephone and explained the situation.

"The main bridge and the bend of the river at Auvelais are down in a hole. My company will be shot here like rats in a trap. I request authority to move to the north bank and organize the defense there."
"No, the order is strict not to go north of the Sambre."

"Well, then, I request authority to organize the defense on the higher ground just south of Auvelais."

"No, the order is to guard the bridges, not to abandon them."

The company commander was promised one more rifle company, and with that he had to be content.

From an article by Captain Pott, French Army, in "La Revue d'Infanterie," December, 1929.

DISCUSSION. Before seeing a German, this company commander had several unpleasant surprises. The situation differed completely from what he had expected. Never in all his training had he been placed in anything even remotely resembling this situation and told to solve it.

Everything appeared illogical. The terrain was unfavorable and his force was too small. Even the two solutions that did occur to him were rejected by the battalion commander, for both violated rigid injunctions laid down by the army commander.

There was no use fighting the problem; it had to be solved. Therefore he did what he could. He held the bulk of his force in reserve at the principal bridge and posted small guards at the other seven.

Skirmishing began at 8:00 a.m. the next morning and gradually developed into an attack. The French held the town until about 3:30 p.m.

EXAMPLE 4. On the night of October 8-9, 1918, the U. S. 117th Infantry held a position near Prémont, with its three battalions disposed in depth and generally facing east. Late in the afternoon of the 8th it had been passed through by fresh troops who were reported to have advanced the line somewhat to the east.

Early on the morning of October 9 the regiment received an order directing it to attack in the direction of Busigny at 5:30
There had been no warning order and there was no time for the regiment to issue a written attack order. To launch the attack at the scheduled hour, the regiment decided to jump off in the formation in which it stood—the 2d Battalion in assault, the 1st in support, and the 3d in reserve. The order would have to be telephoned.

And then the trouble began. The line from the regiment to the 2d Battalion had gone out. However, the 2d Battalion was still connected with the 1st, so it was arranged that the 1st Battalion should relay the order to the 2d. But before the order to the 1st Battalion was completed that wire also failed. The hour of attack, the general plan, the general direction of attack, the objective and the boundaries (in part only) had been transmitted before the line went dead. This message was received at 3:40 a.m.—one hour and fifty minutes before H hour.

While checking map coördinates, the 1st Battalion found that
an error had been made in defining boundaries. The line of departure was indefinite; it was believed to be some three miles away but its exact location was unknown. Information of the enemy was lacking and no information was at hand as to the proposed activities of reserves and adjacent troops. The hour was growing late. It was obvious that much time would be lost in relaying the order to the 2d Battalion. It narrowed down to the question of whether or not the 2d Battalion would arrive in time.

The following steps were taken in the 1st Battalion:

At the first word that an advance was to be made, company commanders were ordered to report in person at battalion headquarters. The sergeant-major attended to this while the message from regiment was still coming in.

At the same time the adjutant notified the 2d Battalion by telephone that it was instructed to attack and that details would be sent as soon as received. At this point wire connection with the regiment went out.

The battalion intelligence officer and his detachment were immediately sent out to locate the line of departure, obtain as much information as possible and send back guides along the route of approach. This officer, who had heard the telephone conversation, had his detachment ready and moved out at once.

It was apparent that the 2d Battalion, although closer to the front, might be late. Since the 1st Battalion had been able to start its preparations earlier, it was decided that it would also march to the front and, if it arrived before the 2d Battalion, take over the assault rôle. In other words, both battalions started forward, the one arriving first to be in assault, the other in support.

Both battalions arrived at the same time; each one had two companies available and two far to the rear. Consequently the attack was made with battalions abreast, each battalion initially employing one company in assault and one in support. The barrage which had started was overtaken. The rear companies finally got up and the attack drove forward successfully.
As the result of a lucky guess, the attack seems to have been made in the proper zone.

*From the personal experience monograph of Major Charles W. Dyer, Infantry.*

**DISCUSSION.** The situation confronting the 1st Battalion was abnormal and illogical. The troops should have been warned earlier. Orders should have been received sooner. At the very least the battalion should have been given the location of its line of departure and told what its boundaries were. The communications do not appear to have been well handled. Obviously there are many things to criticize.

By the terms of the order the 1st Battalion was in support. If the attack failed to jump off in time, it would not bear the onus. But this battalion does not appear to have spent any time dallying with the consoling thought that it was not responsible. The essential feature of the plan was that a battalion of the 117th Infantry attack at 5:30 a.m. from some ill-defined location. Since it looked as if the 2d Battalion might not be able to reach the jump-off line in time, the commander of the 1st Battalion decided to be prepared to pinch-hit for it if necessary. What matter if it were the 1st Battalion or the 2d? Either one was capable of launching an attack.

Therefore, acting in harmony with the general plan, the 1st Battalion disregarded the attack order, agreed on a solution with the 2d Battalion, and started on its way. A decision was taken that met the situation. Perhaps there are things in this decision that could be criticized. If events had gone seriously wrong the 1st Battalion commander might have been in a tough spot. If we sit down in the peace and quiet of a map-problem room and meditate for an hour or two, we may reach a better solution. This battalion commander had to make a decision quickly. He did, and as a result the 117th Infantry attacked with the right number of troops at approximately the right place and time.
EXAMPLE 5. On April 7, 1916, during the Verdun offensive, the 1st Battalion of the German 22d Infantry attacked a French strong point on a hill southeast of Haucourt.

The 1st Company was to attack straight toward 289. The 3d Company was to attack toward 288, then wheel to the west, taking the strong point in rear. The 156th Infantry was to attack on the left of the 3d Company and the 10th Reserve Infantry was to attack on the right of the 1st Company.

The 3d Company overcame resistance near 288 and faced generally west as shown on the sketch. One platoon, commanded by Ensign Bötticher, was sent to 287 with the mission of protecting the flank of the 3d Company.

Upon arrival at 287 the following situation confronted the platoon leader:

He heard heavy firing near 289 and concluded that the 1st Company was hotly engaged.

He saw that the 3d Company was confronted by a French force at A, and that this force seemed to be preparing for a counter-attack.

Near 292 the 10th Reserve Infantry was engaged in a fight with the French and seemed to be making no progress.

Near B he saw French troops marching toward the strong point, and near C another group resting in reserve.

The German platoon had not been seen by the French.

Bötticher decided to attack the French reserves at C. This he did, scoring a complete surprise and capturing a French colonel, two captains and 150 men. Reorganizing rapidly, the platoon then attacked the French opposing the 10th Reserve Infantry near 292. The attack was successful and several hundred additional prisoners were taken.

From an article in "Kriegskunst im Wort und Bild," 1931.

DISCUSSION. This is an example of a security detachment that accomplished its mission and more by means of an attack.

The leader reasoned that the French moving forward near B
could be dealt with by the 1st Company, since the French direction of advance was such that they would meet the 1st Company frontally.

He considered the advisability of aiding the 3d Company by firing on the enemy at A, but this would leave the company still exposed to the danger of being attacked in rear by the French reserves at C. These reserves constituted the chief threat. Once they were disposed of the whole problem would be solved.
Ensign Bötticher’s estimate of the situation was correct, and his prompt action met with spectacular success.

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**CONCLUSION.** Decisions will have to be made regardless of the fact that the situation may be vague, abnormal or illogical. Each event that occurs, each bit of information received, will cause the leader to ask himself, “Shall I continue with my present plan and dispositions, or is it now necessary for me to give a new order?” Whatever the answer to this question, it involves a decision on the part of the commander.

Even if information be lacking, the leader must produce decisions. In most cases a poor decision will be better than no decision at all. Negligence and hesitation are more serious faults than errors in choice of means.

No rule can tell us how to time decisions correctly. All we can say is that the decision must be made early enough for action based upon it to be effective. On the other hand, it must not be taken prematurely, lest it fail to meet a changing situation.

How can we learn to make decisions that meet the existing situation? Usually our map problems state a definite situation and then conclude, “It is now 10:00 a.m. Required: Decision of Captain A at this time.” Possibly Captain A would have made a decision before this time. Perhaps he would wait for more information or for a more ideal situation to develop. At any rate, one of the most difficult elements of his decision, *i.e.*, when to make it, has been made for him.

Problems and exercises in which the principal element is the time at which decisions are made should be included in peace-time instruction. By such means the natural tendency to temporize in obscure situations may be counteracted and leaders trained to take timely action.

In war, situations will frequently arise which are not covered by express orders of superiors. Perhaps the situation will appear
entirely different from that which higher authority seemed to have in mind when it issued orders. The subordinate may feel that literal compliance with orders received would be disastrous. In such cases he must act in accordance with the general plan. He must take the responsibility and make a decision.

Marshal Foch said:

There is no studying on the battlefield. It is then simply a case of doing what is possible, to make use of what one knows and, in order to make a little possible, one must know much.
Chapter X: The Plan

A unit must be engaged in accordance with a definite plan. It must not be permitted to drift aimlessly into battle.

IT REQUIRES perfect performance by a leader to insure that his unit is committed to action according to a clear, workable plan and under favorable conditions. Indeed, it may require extreme energy and forethought to insure that his command is engaged according to any plan at all.

We consider it axiomatic that in war there will always be a plan. But history is replete with instances where organizations have drifted into battle for no particular reason and with no particular plan. It is true that the leader's plan may, and frequently will, change with changes in the situation, but the motivating idea behind it must remain. "Battles of which one cannot say why they were fought and with what purpose, are the usual resource of ignorance," said Napoleon. And this indictment holds true for any pointless maneuver in the presence of the enemy.

The effective coordination of the means at hand for the accomplishment of some desired end has been a major problem since wars began. Too frequently the problem has not been solved and splendid fighting units have been expended in purposeless effort or have failed to accomplish anything at all by reason of masterly inaction.

Lord Chatham with his sword undrawn
Was waiting for Sir Richard Strachan.
Sir Richard, longing to be at 'em,
Was waiting too. For whom? Lord Chatham.

Hundreds of similar situations are revealed in the World War. Operations of the British at Suvla Bay in August, 1915, are particularly reminiscent of the two fiery noblemen.

[138]
THE PLAN

It has been well said that "in war all is simple, but it is the simple which is difficult." Misunderstandings, misleading information, late orders, the fact that troops are not actually where the higher commanders think they are, often result in units being engaged aimlessly. But, on the other hand, subordinate leaders as well as their superiors can do much to mitigate such evils by forethought, by careful planning, and by good troop leading.

In every operation there must run from the highest to the lowest unit the sturdy life-line of a guiding idea; from this will be spun the intricate web that binds an army into an invincible unit embodying a single thought and a single goal.

EXAMPLE 1. On July 29, 1918, the 3d Battalion of the U. S. 47th Infantry (attached to the 168th Infantry) had advanced to a position in the valley of the Ourcq south and southwest of Sergy. The enemy had been steadily driven back. Now he occupied positions a short distance north of the Ourcq.

The 3d Battalion knew little of the situation except that it had suffered heavily from German artillery and machine-gun fire during the advance to the Ourcq. Some American troops seemed to be on the south slopes of Hill 212.

The battalion, with units intermingled, was extended in one long line under cover of the woods along the stream. Most of Company L had become separated from the battalion. This is how the situation appeared to a platoon leader of Company M:

Runners were sent to locate battalion headquarters and ask for orders. Of three runners sent out only one returned. He brought back word that both of the majors [there were two with the battalion] had been wounded and that the captain of Company I was in command of the battalion. We were to organize our position and remain where we were until further orders.

The company commander [of Company M] decided to go to battalion headquarters. He came back in an hour with the information that Sergy was still occupied by Germans, but that patrols were working into it; that we would make no attempt to sort out companies until
after daylight the next morning. The present position was organized for defense.

It was now getting dark. Fire was decreasing. It was easier to move about. Rations were collected and ammunition distributed. We were now advised that the new battalion commander had been killed and that the captain of Company M would take command of the battalion. The runner who brought this message was told to notify all officers that the new battalion commander would remain with Company M, and to inform them of the location of his command post.

There was a shell crater about fifty feet in front of our line. Since it gave much better observation to front and flanks, the battalion commander and I went out there and spent the night. Save for gas alarms, the night was uneventful. We received one report from a patrol to the effect that the troops on our left were the 1st Battalion of the 47th Infantry. This was our first inkling that the 1st Battalion was in action with us.

At 7:30 a.m. a runner from the 168th Infantry located us and directed the battalion commander to report with his officers to the commanding officer of the 168th Infantry. He stated that we could find the headquarters by following the creek to the other side of the village. The battalion commander took me with him. On the way we picked up four officers. We reported to a major of the 168th Infantry southwest of Hill 212, who gave us the following oral order:

"You will form your battalion and move through the village. When you come to the sunken road leading out of the village, move due north, keeping the road as your right guide. A barrage will be fired. Keep as close to it as possible. You will find a lot of artillery and machine-gun opposition, but do not let it stop you. Continue the advance to the next village, Nesles, and consolidate your line on the north side of the village. The barrage starts at 8:00 a.m. Move out promptly at 9:00 a.m."

It then being after 8:00 a.m. and no barrage being fired, the question was asked if the time to start the barrage had been changed. We were informed that there had been some delay in receipt of the firing data, but that the barrage should be working beyond the village at that time.

We then returned and organized three platoons from Companies I, K, and M. I say platoons because the strength averaged five squads. (There were some men of the battalion not included in these three platoons. They were on the left under officers of Company K. A runner was sent to this group with an order to advance on the left of the village and join the battalion at the northern exit.)
Example 1
INFANTRY IN BATTLE

The battalion then moved out in column of squads in the order I, K, and M. No battalion attack order had been issued. We moved through the village with no difficulty but came under machine-gun fire as we reached the northern exit. As the two leading companies moved up the sunken road, I could see that quite a few of the men were being knocked down, so I took my company into the field on the left. Here, too, we received considerable fire. I put the company into skirmish line. I could not locate the battalion commander or his adjutant although I had seen them get out of the road when the leading units began to get into trouble. The following day I learned that the battalion commander had been killed and that his adjutant died of wounds that night. I also learned that the leader of the first company was badly wounded and that the leader of the second company was dead.

Company M advanced some 500 yards in about two hours. At the end of this time the company commander, seeing no other troops near, stopped the attack and held his position. At dusk he received orders to withdraw Company M to the sunken road near the village, which he did. Here the survivors found that there was some conflict of opinion as to why the 3d Battalion had attacked. Indeed, there appeared to be considerable doubt whether it had been intended to attack at all.

DISCUSSION. The attack of the 3d Battalion conveys an impression of utter aimlessness. Let us grant that orders came in late and were incomplete. Let us grant that the battalion did not have time to assemble all of its elements; that it was in poor condition to attack; that promised artillery support did not materialize; that the majors of the battalion were casualties; that enemy information was vague; that it was not known what other friendly troops were to do. Such a state of affairs is in the very nature of war. In this case it appears that some of the adverse factors could have been avoided, but let us forget that for the moment.

The attack order received by the battalion can be summed up as, "Attack at 9:00 a.m. toward Nesles with your right on the
THE PLAN

road.” What the companies of the battalion now needed to know was “What part are we to play in this battalion attack? Where do we deploy? What company is on our right? Who furnishes flank protection? Who is in reserve?” In other words, a battalion attack order, no matter how brief, was desperately needed. Instead, the battalion commander issued what was, in effect, a march order.

The battalion moved to the north edge of Sergy in column of squads and there came under fire. At once everyone did what seemed best to him. There was no coördination of effort—no plan—and the battalion promptly ceased to function as a unit. It drifted blindly and aimlessly into battle. Company M, on its own, moved to the left and attacked, and for the rest of the day labored under the impression that it was fighting the war single-handed.

A brief order regulating the deployment before the battalion came under fire would unquestionably have made a great difference. That the time for this was short was no excuse. An attack should have been anticipated. The enemy was being driven back and the battalion was close to his position. What could be expected but an attack?

It is obvious that the battalion commander should have made a point of getting in touch with the 168th Infantry, to which he was attached, in order to learn the plans for the next day. Also, much could have been done during the night toward effecting a reorganization of the battalion. So, too, the most perfunctory reconnaissance would have disclosed the fact that the Germans were still close at hand; this would have averted the movement in the sunken road.

The battalion was in its first fight. It lost twenty-five officers and 462 men. Its courage was marked, but courage is not a substitute for experience and training.

EXAMPLE 2. Late on the afternoon of July 25, 1918, the
U. S. 167th Infantry completed the relief of elements of the 26th Division northeast of Courpoil. The 1st and 3d Battalions, each with a machine-gun company attached, took over positions in the front line; the 2d Battalion was held in reserve near the north end of Etang de la Lagette.

Enemy artillery fire was heavy during the night and continued throughout the next day.

Early on the 26th, front-line battalion commanders sent patrols forward to gain contact and locate the enemy line. At 8:00 a.m. the patrols returned. They reported that the enemy line was only four to five hundred yards in front of the American position and that it bristled with machine guns. Patrols from both battalions had suffered casualties. Since the 26th Division had stated that the enemy was four or five kilometers away, this report was immediately forwarded.

The same morning, the regimental and battalion commanders inspected the front line. During this inspection the colonel oriented his battalion and company commanders on a proposed plan of attack. In fact, he issued what amounted to a tentative attack order. To be put into execution it required only confirmation and designation of H-hour.

The direction of advance, probable objective (which the regimental commander said would undoubtedly be la Croix Rouge Farm and the woods beyond) and the mission of each battalion were covered. Positions from which the 37-mm. guns and the Stokes mortars were to support the attack were specified. The aid station, the ammunition distributing point, and the regimental command post were located. Each company knew what it was to do.

Shortly after these arrangements had been completed, the regimental commander was directed to report to brigade headquarters. Expecting to receive an attack order, he ordered the battalion commanders to assemble at the regimental command post to await final instructions.
The brigade attack order was issued to assembled regimental commanders at Courpoil at 4:20 p.m. The order called for a two-hour artillery preparation. H-hour was designated at 4:50 p.m. The colonel of the 167th pointed out that the artillery could not comply unless H-hour were changed. He further stated that the French commander on the left of the 167th said he had no orders to attack. The brigade commander replied, "We will attack as ordered, and be sure you jump off at 4:50 p.m."

The colonel of the 167th Infantry immediately issued an oral attack order to his executive who was waiting with a motorcycle and side-car to rush it to the assembled officers at the regimental command post.

The colonel’s order was simply this:

H-hour is 4:50 p.m. Tell battalion commanders to attack as we planned this morning. There will be no artillery preparation. Caution Major Carroll to place a platoon to protect his left, as I don't believe the French are going to attack.
The battalion commanders received the order at 4:42 p.m. The regiment attacked on time, made a successful advance and captured 305 prisoners and seventy-two machine guns. The 168th Infantry on the right attacked somewhat later. The French did not attack.

From the personal experience monograph of Colonel William P. Screws, who commanded the 167th Infantry.

DISCUSSION. Owing to the foresight of its regimental commander, the 167th Infantry was enabled to attack on time. In anticipation of an attack he had carried his preparations to an extreme. Fortunately, his tentative plan was in full accord with the instructions he subsequently received.

In open warfare, anticipation to this extent is seldom advisable. Nevertheless, if the general situation clearly indicates the order that can be expected, a subordinate leader may well make many preliminary provisions. Reconnaissance, the establishment of contact with adjacent units, feeding a hot meal to the troops, issuing extra ammunition, dropping packs, providing for the instant transmission of orders, and the orientation of subordinates, are matters that need not await the receipt of an attack order. Indeed, such steps will frequently change many a laboriously logical explanation of failure to comply with orders to the succinct and satisfying phrase—"Attack launched on time."

EXAMPLE 3. On October 9, 1918, the 1st Battalion, 16th Infantry, participated in an attack by the 1st Division in the Meuse-Argonne offensive. The first mission assigned the battalion was the capture of Hill 272. This hill was strongly held and several previous attacks against it had failed in the face of a well-prepared and highly-coordinated system of protective fires.

The attack was ordered to jump off at 8:30 a.m. behind a
rolling barrage. One company of the 1st Gas Regiment was directed to fire a thermite concentration on a German machinegun nest located near Hill 176 to the left-front of the battalion.

Example 3

The plan of the battalion commander was essentially as follows:

Companies B and C in assault (B on the right), each having one-half of the battalion zone.

Companies A and D in support (A on the right), to form just in rear of the line of departure. Both companies to be well-closed up to escape the German protective barrage known to be registered on the forward slope of Hill 240.

To charge Companies A and B with the protection of the right flank.
Company C to be particularly alert for activity near Hill 176 in the zone of the unit on the left.

Aid station in a shell hole to the right front of Hill 240.

Command post between Companies A and D. The battalion commander to advance initially with Company C.

Although the attack jumped off in a thick fog, the Germans realized that something was afoot and called for their defensive barrage. This came down in rear of the support companies, both of which held their position until the assault companies had gained distance.

Soon after the attack started, Company C came under heavy machine-gun fire from Hill 176. The left half of the company wheeled toward the hill and vanished in the fog; the other half continued to the north. The battalion commander immediately confirmed this action, directing the left assault and left support platoons to continue their efforts against Hill 176 and then to advance, protecting the left flank of the battalion. When Company D came up he ordered it to continue toward Hill 272, since the capture of that hill was the battalion's main mission.

In the fog companies lost contact, but all moved forward. Arriving at the foot of Hill 272 the battalion commander halted Company D and checked up on his battalion. He found that all companies had arrived at the foot of the steep slope. Company B, on the right, had advanced straight to its proper position and Company A had come up abreast of it on the left. Two platoons of Company C were to the left of Company A, and Company D was some distance to the left of these.

Having determined the disposition of his companies, the battalion commander issued oral orders for them to move forward and capture that part of the hill in their immediate front. Following this they were to spread out to the flanks until contact was complete within the battalion and all parts of the hill occupied. The companies were told to get to the top of the hill and stay there at all costs.
Each company gained a foothold on the hill by working small groups up the hillside between German machine-gun positions.

The footholds thus gained were then enlarged by a continuation of this infiltration. At 11:00 a.m. the hill fell.

From the personal experience monograph of Major Charles W. Ryder, who commanded the 1st Battalion of the 16th Infantry.

DISCUSSION. The attack of this battalion appears to be just another frontal push. The artillery fired and the infantry moved forward to exploit the effect of the fire. The fog was a bit of luck. What is there noteworthy about the affair? There is this: the battalion was commanded. It acted according to a plan.

The plan was not merely a routine, stereotyped announcement of which two companies would be in assault and which two in
support. It contained several ideas. First, it foresaw where the German protective fires would be dropped and arranged to mass the battalion well forward so that even the support companies would escape this fire. Nothing revolutionary, perhaps, but still not the usual thing.

Second, the battalion commander foresaw what was going to happen on his left. Accordingly, he took action to protect this flank by orders to Company C and by personal intervention there at the start of the fight.

Finally, at the foot of Hill 272 we see the battalion commander getting his units in hand. We hear him revise his plan, bringing it up to date, thereby insuring a battalion blow instead of a series of haphazard, disjointed efforts.

Thus, even in a frontal attack behind a rolling barrage, one of those cut-and-dried “once more, dear friends, into the breach” affairs, there is need for an infantry unit to have a plan and there is room for its commander to have an idea.

**CONCLUSION.** We have examined a case or two where units have drifted into battle. We have seen what happened to them. Undoubtedly it would be going too far to say that every unit that becomes engaged without a definite plan is slated for defeat, for occasionally sheer valor is able to surmount passive leadership. In such cases, we have a “soldiers’ battle.” But even in those rare instances where such battles achieve a certain measure of success, they are seldom decisive since full exploitation is impossible. Regardless of the occasional exception, the fact remains that planless action is an open invitation to disaster.

We have examined other situations where the foresight of the leader enabled the unit to attack under conditions far more favorable than would otherwise have been the case. In these, success was achieved not by transcendent flashes of genius but merely by having an intelligent plan.
Insuring teamwork and coördinating the attack is the responsibility of the leader. Whatever the method adopted, he must guard against a disjointed, piecemeal effort. He can best accomplish this by keeping ahead of events instead of letting them drag him along in their wake.

It is always well to keep in mind that one fights to gain a definite end—not simply to fight.
Chapter XI: Orders

An order must clearly express the will of the leader and must fit the situation.

It is far more important that orders be written clearly and issued promptly than that they be correct in form. With well-trained troops, little time, and poor maps, orders will tend to be general. Especially should details be eliminated when time is short and changes in the situation are probable before the order can be executed.

With plenty of time, excellent maps, and troops lacking in experience, more details may be advisable.

EXAMPLE 1. Early in 1915 the 4th Company of the German 256th Reserve Infantry Regiment, part of the 77th Reserve Division, took part in an attack against the Russians.

Although the bulk of the troops had no war experience, there were one or two men in every squad who had been in battle. The officers were veterans.

The march to the front was long and difficult, but the fact that General von Hindenburg was in command of the operation instilled great confidence in all ranks. The Germans attacked at dawn, surprised and defeated the Russians, and promptly took up the pursuit. The battalion of which the 4th Company was a part found virtually no enemy to its front. Occasionally it met a few Russians who quickly took to their heels.

The battalion marched all day and all night, first toward the east, later toward the south. The cold was intense and the snow deep. The men who marched at the head of the column and broke the path through the snow had to be relieved every half hour.

In spite of the exhausting march and its attendant hardships, morale remained high. The entire command had estimated the
situation correctly: "This long march," they said, "is to enable us to encircle the Russians. This will be another Tannenberg."

Toward morning the weary column approached the town of Eydtkuhnen. The men were rejoicing over the fine billets they would find there, when suddenly the column bent away from the main road and again moved east.

Some of the recruits began to growl. But the old soldiers said, "Shut up, you dumb recruits. Do you think you are cleverer than Hindenburg? If we old timers are satisfied, you ought to be. We were making marches when you were still at your mothers' apron strings."

Morning came but the troops marched on. Fog limited visi-
bility to 100 yards or less. Suddenly the column halted. Company commanders were assembled and the battalion commander issued the following oral order:

About two kilometers in front of us is the main road from Eydtkuhnen to Russia. It is possible that we will find the enemy on that road trying to escape to the east.

The battalion advances deployed toward that road and gains possession of it. The 3d and 4th Companies lead the advance, moving on both sides of the road on which we are now marching. The 1st and 2d Companies follow at 500 meters. I will be at the head of the 1st Company.

The leading companies moved out with one platoon in assault and two in reserve. Each leading platoon sent forward two pairs of scouts. The advance had scarcely started when one of the scouts came running back and reported:

"The road is 300 meters in front of us. Russians are marching on it toward the east."

Upon receipt of this information the battalion commander merely ordered:

"Attack at once!"

The battalion, continuing its advance, suddenly burst upon the highway which was jammed with trains and artillery. A shout, a few shots, a rush, and the Germans were on the road in the midst of the enemy's transport. The Russians were completely surprised; all but a few who escaped in the fog were captured, with all their guns and vehicles.

From an address delivered at The Infantry School by Captain Adolf von Schell, German Army, who commanded the 4th Company in this action.

DISCUSSION. The battalion commander's order in this situation was brief, simple, and issued in time to permit subordinates to make their dispositions. The battalion commander did not refer to road junctions and points on the map; he spoke in terms of the ground which the troops could see. He did not go too far into the future, nor did he prescribe what would be done if various situations were encountered. He was satisfied to place his
troops in such a formation that they could handle any situation that came up.

Of this order Captain von Schell says:

Please notice that the order included no information of the enemy. We had no information of the enemy. Nevertheless as we approached the road, a decision had to be made; not because we had met the enemy, but because it was time to give an order. The situation demanded it.

EXAMPLE 2. Near Cantigny on May 28, 1918, the U. S. 1st Division launched the first American attack of the World War. For obvious reasons it was highly important that their initial effort be a smashing success. To this end the operation had been planned far in advance and in the most minute detail.

The 1st Division had been holding this sector for several weeks and this, plus the excellent maps that were available, insured a high degree of familiarity with the terrain. Although seasoned in a defensive sector, the troops were still inexperienced in offensive combat.

The division order was an extremely lengthy affair that neglected no detail. Indeed, it left practically nothing to the initiative of subordinates. Finally, the attack itself was conscientiously rehearsed behind the lines on terrain that approximated the coming scene of battle. The attack succeeded.

From the personal experience monograph of Captain George E. Butler, Infantry.

DISCUSSION. The order for the Cantigny attack is an extreme example of the extent to which minute details may be prescribed in preliminary arrangements for combat. It illustrates the maximum authority a commander can exercise over a subordinate who leads a unit in combat. In war of movement, such an order would be wholly impracticable, but it was well suited to the special conditions at Cantigny. The troops were inexperienced; the objective was strictly limited; there were good maps;
there was plenty of time. Therefore the higher commander, having much at stake, exercised the maximum of authority.

EXAMPLE 3. On November 22, 1914, a German corps, reinforced, had attacked westward and northwestward toward Lodz. In conjunction with other German troops it had wheeled down from the north as part of a wide envelopment. But the envelopment struck a snag: the attack was checked, communication with other German forces cut, and reports indicated superior Russian forces closing in on all sides.

The position of the German force is approximately given on the sketch. The 3d Guard Division (5th and 6th Guard Brigades) faced north and northwest. The 49th Reserve Division faced generally west and the 50th Reserve Division faced south and southwest. The troops were exhausted, and units were depleted and intermingled. The effective strength of the divisions was not over two or three thousand men each.

In this situation the commander of the German enveloping force decided to withdraw to the east of Miasga Stream, and then strike north. His written orders directed the 3d Guard Division to remain in position until midnight, and then move east of the Miasga between Bedon and Karpin. The order also directed the division to send "a flank detachment to the south of Bedon immediately." In addition to this order the Guard Division received various oral messages, and from these it understood that its mission was to secure the right flank of the corps.

Accordingly five battalions of the Guard were moved south to establish protection on that flank. The division interpreted "right flank" to mean "south flank," and the instructions to place a "flank security detachment south of Bedon" to mean that the Guard Division was responsible for all flank security in the region south of Bedon. Actually the corps intended that the Guard should furnish flank protection on the north.
The five battalions dispatched to the south repeatedly crossed columns of the 49th Reserve Division withdrawing to the east, and caused great confusion. The German force withdrew successfully and escaped, but this crossing of columns and the ensuing confusion resulted in both the Guard and the 49th Reserve Division fighting on the following day in extremely unfavorable circumstances.

*From the Reichsarchiv account and "Der Durchbruch bei Brzeziny," by Ernst Eilsberger.*
DISCUSSION. A force which had been advancing west turned around and withdrew eastward. Everyone was tired and exhausted. Things were complex enough without having to puzzle over rules for writing orders. When the withdrawal began, it appears that some German headquarters considered the right flank to be the north flank, while others considered it to be the south flank. In such a confused situation as this, or in any situation where there is even a remote chance of misunderstanding, the words "right" and "left" should not be used.

The construction placed on the commonplace military expression "a flank security detachment south of" is instructive. It forcefully illustrates the dangers that may lurk in many a time-worn expression. If seasoned professionals can misinterpret their own specialized vocabulary, it is certain that nonprofessionals will fare even worse. In peace, then, special emphasis should be laid on the language employed in orders. Leaders of all grades should be trained to test every word, every phrase, every sentence, for ambiguity and obscurity. If, by even the wildest stretch of the imagination, a phrase can be tortured out of its true meaning, the chance is always present that it will be.

Short, simple sentences of simple, commonplace words, will go far toward making an order unmistakable.

EXAMPLE 4. On February 24, 1916, the 5th Battalion of the French 336th Infantry held a sector east of Verdun. Germans were attacking the fortress from the north. After a study of the situation the French high command decided that the troops in this sector should be withdrawn to a position closer to Verdun. Although this movement was planned for the night of February 24-25, the division order did not reach the 211th Brigade until after midnight, and orders for the front-line troops did not arrive until 4:00 a.m.

The division order went into great detail. In addition to pre-
Example 4

scribing the line to which the division would withdraw and boundaries between units, it directed two battalions of the 211th Brigade to act as a covering force. Both battalions were named in the order and their dispositions and duties minutely covered. The 5th Battalion, for example, was ordered to hold
Hautecourt and Broville with one company, Montricel Woods and la Malacorree with another company, and Moranville and Blanzée with the remainder of the battalion. The order then summed up the mission in these words:

The rôle of the covering detachments is to keep the enemy in ignorance of our movement. To this end they will fight a delaying action, employing powerful fires. For this purpose each battalion will be assigned two platoons of machine guns. Weak outguards will be left in the front line with the mission of holding enemy patrols in check and covering the withdrawal.

In spite of the detail in which this order abounded, it was silent on one point—the hour when the covering detachment would withdraw.

The movement got under way and, from all accounts, the withdrawal of the bulk of the division was well executed. At 6:00 a.m., with the division safely out of the way, the 5th Battalion believed its mission accomplished and began its own withdrawal under cover of a snowstorm. Its movement went undiscovered.

By 10:00 a.m. the battalion had reached the vicinity of Moulainville. The movement had been successfully completed—or so the 5th Battalion thought. An hour later came disillusionment in the form of an order to return at once to the positions occupied that morning.

During the march back, the battalion ran head-on into a German attack and never succeeded in reaching its old position. Its withdrawal had been premature and had cost the French several pieces of artillery.

From Infantry Conferences by Lieutenant Colonel Touchon, French Army, at l'École Supérieure de Guerre.

DISCUSSION. Here is an order that violated two fundamentals: it was late in reaching subordinate units and it omitted one essential fact—when the covering force would withdraw. Though not stated in the order, the division commander intended
ORDERS

161

this force to remain in position until forced back by the enemy.

The order may have seemed clear to the man who wrote it, but it was not clear to the man who had to execute it, and that is the all-important thing. One of the first things the commander of a covering force wants to know is “how long do we stay?” Upon the answer to that question depends the entire tactical course of the action.

In war, leaders of small units are usually no more than one or two jumps ahead of physical and mental exhaustion. In addition, they run a never-ending race against time. In such conditions long, highly involved orders multiply the ever-present chance of misunderstanding, misinterpretation, and plain oversight. Such orders also increase the chance of error on the part of higher commanders. In seeking to work out all details for subordinate units they may, like the division commander in this example, forget some essential. By looking too long through a microscope, they may lose sight of the big picture.

Perhaps in the above instance subordinates may be criticized for not correctly interpreting the order. But even if we concede this, the issuing authority must still shoulder the greater blame. The order should have left no room for misinterpretation. The elder Moltke’s admonition, “Remember, gentlemen, an order that can be misunderstood will be misunderstood,” still holds.

EXAMPLE 5-A. On June 6, 1918, the 3d Battalion of the U. S. 5th Marines was due west of Belleau Wood. Late in the afternoon the captain of the 47th Company (part of the battalion) assembled his platoon leaders and issued an attack order. He briefly indicated the direction of attack, the company dispositions, and then directed:

“Get your men into position as fast as you can. We attack at 5:00 p.m.”
He pulled out his watch, glanced at it and added, "It is 5:15 p.m. now."

*From the personal experience monograph of Captain Raymond E. Knapp, U. S. Marine Corps.*

EXAMPLE 5-B. The U. S. 35th Division attacked on September 26, 1918, and made a deep advance into the German lines. The division then issued an order prescribing a resumption of the attack at 8:30 a.m. on the 27th, after a three-hour artillery preparation. Among other things, the order provided that the 140th Infantry pass through the 138th Infantry. Shortly after the division order had been sent out, a corps order arrived directing the attack to be resumed all along the front at 5:30 a.m. The 35th Division attempted to change its first order. However, since some units had already been notified to attack at 8:30, it was considered impracticable to advance the time to 5:30. Therefore a compromise hour, 6:30 a.m., was decided upon.

In the midst of this confusion, the 140th Infantry received an order at 5:05 a.m. to attack at 5:30 a.m., after a five-minute barrage. The barrage failed to come down, but nevertheless the 140th moved out, passed through the 138th and attacked. The advance, unsupported by artillery, was quickly stopped with heavy casualties. The order directing the attack at 6:30 a.m. arrived too late.

*From the personal experience monograph of Major Fred L. Lemmon, Infantry.*

EXAMPLE 5-C. The 142d Infantry, part of the U. S. 36th Division, spent October 7, 1918, southeast of St. Etienne-à-Arnes, having relieved front-line troops in that vicinity. The 2d Battalion held the front line; the 1st Battalion was in support.

During the afternoon the commanding general of the 71st Brigade received an oral warning order of an attack that would jump off at 5:15 the next morning. Formal written orders, he was told, would follow. At about 8:00 p.m. he summoned his
regimental commanders and passed on this meager information. Not until after midnight did the brigade receive its written orders and not until 3:00 a.m. did its written order go out to the regiments.

At about 3:30 a.m. the battalion commanders of the 142d Infantry were called to the regimental command post and given oral orders for the attack which was scheduled to jump off in one hour and forty-five minutes. There was little time left for the battalion commanders to formulate and issue orders to their companies.

Five-ten (5:10) a.m. found the four company commanders of the 1st Battalion crouched around a map spread on the ground near the entrance to the battalion command post. They had little idea what the attack was all about. They knew the 2d Battalion was ahead of them and would attack in the direction indicated by the big red arrow on the map. The names of some towns had been mentioned as possible objectives, but none of the company commanders had heard of them, or if they had they didn’t remember them.

Companies A and B, A on the right, would follow the assault battalion at 1,000 meters and take advantage of whatever cover the terrain might afford. Companies C and D would follow A and B. No boundaries had been given nor was any other information forthcoming. Meanwhile, the American barrage had already started and the Germans were replying with their counterpreparation.

The attack jumped off a few minutes later and, after heavy casualties, scored a partial success. More time to acquaint the companies with the situation and tell them what was expected of them would undoubtedly have produced greater results at a smaller cost.

*From the personal experience monograph of Major Ben-Hur Chastaine, who commanded Company A of the 142d Infantry; and from the monograph "Blanc Mont," prepared by the Historical Section of the War Department General Staff.*

DISCUSSION. These examples are not rare exceptions. In
fact, almost every unit in the A.E.F. had the unpleasant experience of receiving orders too late. The cause was usually the same—too much time absorbed by higher echelons in preparing, issuing, and transmitting their orders.

It should always be remembered that no matter how perfect an order may be, it fails in its purpose if it does not arrive in time.

EXAMPLE 6. In September, 1915, the German 256th Reserve Infantry Regiment was marching eastward into Russia. Although there had been fighting a few days before, the regiment was now meeting little resistance. This happy state of affairs was short-lived. At about 10:00 o'clock on the morning of September 20 the commander of the 3d Battalion, who had ridden forward, returned to his unit, assembled his officers and told them:

"The Russians have attacked our cavalry with strong forces and pressed it back. We are to assist it by defending a river which lies about two kilometers to our front."

The advance continued. When the battalion reached the river they found it wide and deep. On the far bank they saw a village. But they saw no Russians, no German cavalry, and heard no firing. The battalion commander then issued this order:

Over there on the right about 500 yards away is a farm; a battalion of another German unit will be there. We defend generally along this edge of woods to the left. The 9th, 10th and 11th Companies, from right to left, will hold the front line, each with a sector 300 yards wide. The 12th Company will be in reserve behind the middle of the battalion. Our cavalry is to our left. Send patrols across the river. I will get in touch with the cavalry.

The 9th Company commander sent a patrol toward the farm and then, with a few subordinates, moved forward to the river to reconnoiter. Following his reconnaissance, he decided to place his 1st and 2d Platoons in the front line near the river, and hold
DIRECTIoN OF RUSSIAN MOVEMENT / RUSSIAN FIRES

Example 6
the 3d Platoon in reserve. He then issued a complete order and platoon leaders returned to their units.

The company commander remained near the river looking for a boat. Looking back he saw his platoons moving forward. Suddenly he heard a few shots off toward the right. At first he thought his men were shooting pigs, but as the firing increased he concluded that a Russian patrol had been discovered on the right. Then he heard another burst of fire, this time from his right-rear. Bullets whistled over his head. There was no mistaking the characteristic crack of the Russian rifle.

With a command to his runners to follow him, the company commander set off at a run for his reserve platoon. On the way he gave this message to a particularly reliable runner:

The left platoon will retire into the wood and get ready to follow me in an attack toward the farm. The right platoon will defend the entire company sector. Give this order to the platoon commanders and then report this decision to the battalion.

On reaching the reserve platoon, which had faced toward the farm and was replying to the fire coming from that direction, the company commander ordered:

"The whole platoon will attack in double time toward the farm."

As the platoon advanced through the wood toward the farm, a member of the patrol arrived with this message:

"The patrol is north of the farm. The Russians are at the farm. They are trying to get around us."

Upon reaching the edge of the wood where he could see the Russian position the company commander ordered:

"Lie down; range 400; commence firing!"

The German platoon opened fire and immediately drew down a heavy Russian fire in return. A few moments later a runner reported:

"The 2d Platoon is 200 yards behind us."

The company commander called out:
"I am attacking with the 2d Platoon on the right. This platoon will keep up the fire and then join the attack."

The company commander ran back to the 2d Platoon and led it forward on the right. During the movement he pointed out the position of the platoon already engaged and gave the order:

"There are Russians on this side of the river near the farm. We are attacking."

As the platoon emerged from the wood, it received heavy fire on its right flank. The Russians were not only much stronger than expected, but were much farther across the river than anyone had thought. At this moment a runner from the battalion commander reported:

"The Russians have broken through the cavalry. The battalion commander is wounded."

Since there were no signs of the German battalion which was supposed to be at the farm, the company commander decided to retire. This was accomplished successfully.

*From an address at the Infantry School by Captain Adolf von Schell, German Army, who commanded the 9th Company.*

**DISCUSSION.** The more difficult the situation, the less time there will be to issue long orders. Furthermore, men will be excited, and only the simplest movement can be executed.

Usually the first order for the fight can be given without hurry. It should therefore be complete. Above all, the mission and the information at hand should be given. In this case both the battalion and company commanders issued orders for defense which oriented all concerned.

Once combat has started, new orders of any length are impracticable. New situations should be met as Captain von Schell met them—by fragmentary orders that are *brief* and *clear*. In the foregoing example the situation was critical; had time been taken to issue long, formal orders, the battalion would have been cut off. The troops being veterans, an indication of what was desired was enough.
CONCLUSION. A good order must meet three minimum requirements:

(1) It must cover the essentials.
(2) It must be unmistakably clear to the subordinates who are to carry it out.
(3) It must be issued early enough to reach subordinates in time for them to execute it.
Chapter XII: Control

The test of control is the ability of the leader to obtain the desired reaction from his command.

EVERY TRAINED SOLDIER knows that control is essential to success in battle, but combat records afford ample evidence that the measures necessary to insure it are frequently neglected in the early stages of a war. The reason is plain. Officers without combat experience—even those who have had considerable peace-time training—do not fully appreciate the difficulties of control under battle conditions. There is a tendency to take it for granted; to assume that it will be there when needed.

To maintain control in battle, the leader must keep constantly in mind the supreme importance and great difficulty of the problem. The control factor must be carefully weighed in every tactical decision. This requirement is absolute; for no plan can be carried through, no previously conceived maneuver executed, no fleeting opportunity grasped, unless a leader has control of his unit. If he has it, even indifferent troops may obtain decisive results. If he does not have it, the most highly trained organizations become partially or wholly ineffective.

During certain phases of an action, control may be temporarily sacrificed or attenuated for other advantages—such as a reduction of casualties. This, however, is justified only when the leader is sure that he can regain control of his command and makes positive arrangements to do so.

Some of the more important matters affecting control within the unit itself are its organization, its state of training, the capacity of its subordinate leaders, and its morale. Every commander should bear these things in mind in evaluating his control problem. In addition, he should remember those factors
that tend to promote good control. Among these should be listed:

A simple plan, based on easily identified terrain features.
Convergent rather than divergent movements.
Clear, brief, definite orders.
A suitable formation.
Good communications.
Constant supervision.
Seizure of opportunities to reorganize.

EXAMPLE 1. On August 19, 1914, the 7th Company of the French 153d Infantry made an approach march of some three miles in the preliminary phase of the Battle of Morhange. The 4th Platoon of this company numbered about fifty-five men—forty of them regulars and the rest reserves who had been called to the colors three weeks before. These reservists had forgotten much of their former training, and consequently lacked the dependability, confidence and aggressiveness of the other members of the platoon.

The platoon advanced some two miles under continuous artillery fire but, thanks to a combination of good leading and good luck, lost only two men. The remainder of the 7th Company was not so fortunate; it lost 33.

Late in the afternoon the platoon reached the reverse slope of a bare hill which had to be crossed. The crest, though out of small-arms range, was within easy range of the German artillery. A company to the left of the platoon attempted to cross in skirmish line and was shot to pieces. The platoon witnessed this.

The platoon leader studied the terrain carefully. He noted a ravine at the foot of the forward slope that offered fairly good protection. The only cover from the crest down to this ravine was a line of grain shocks spaced at intervals of four or five yards. The platoon leader decided to move his unit to the ravine a man
at a time, taking advantage of the cover offered by the shocks. He led the way and directed his platoon to follow. On reaching the ravine he took cover and waited for the platoon to rejoin him. One by one they filed in. The enemy had not fired a single shot. Nevertheless, a check revealed 12 men missing—all reservists. The platoon leader had not left anyone behind to see that all men made the forward movement.

From studies on the advance of infantry under artillery fire by Major André Laffargue, French Army. Major Laffargue commanded the 4th Platoon of the 7th Company.

DISCUSSION. The formation adopted for crossing the crest
was undoubtedly correct. It enabled the platoon to escape the enemy's notice, and thus avoid the disaster which had overtaken the company on its left. True enough, this formation temporarily sacrificed control, but in this case it was justified in order to save casualties. Furthermore, the leader made positive arrangements to regain control at the earliest possible moment. He prescribed the length and method of the advance and he led the way in order to be on hand to gather up his men as they came in. He probably had an additional motive in going first: his outfit was undoubtedly shaken by the fate of the company on the left; by leading the way he provided his men with a first-class sedative.

Indeed, this young officer can not be criticized for anything he did, but, as so often happens in war, he can be criticized for something he failed to do. In this instance he forgot half of his command problem—the rear half. He failed to charge any of his noncommissioned officers with the job of seeing that the entire platoon followed him as directed. We have seen the result: when the platoon reformed in the ravine 12 reservists—nearly one-fourth of the command—were missing.

So far as these twelve men were concerned, special precautions were necessary. These men were reservists; they had but recently joined the unit; the platoon leader knew practically nothing of their state of training or their dependability. In such circumstances the closest supervision is necessary if control is to be maintained. The figures speak eloquently—two men lost from physical causes, twelve from moral causes.

EXAMPLE 2. On September 26, 1918, the U. S. 131st Infantry attacked to the north with the mission of gaining the high ground beyond Gercourt. The 1st Battalion, in regimental reserve (Point X), was to follow the assault battalions at 500 yards.

The battalion commander prescribed a formation in line of
companies in the order: A, B, C, D, from right to left. Battalion headquarters and attached units followed in rear.

At H-hour fog and smoke limited visibility to a few yards. After a short while contact patrols informed the battalion commander that the left assault battalion was held up by machine-gun fire and that they had been unable to locate the right assault battalion.

Realizing that both forward battalions were well behind the schedule of advance, the commander of the 1st Battalion decided, on his own initiative, to take advantage of the protection afforded by the rolling barrage, which was now some distance ahead, and advance in the zone of the right assault battalion.

He made no change in dispositions although his battalion was now moving forward as an assault unit. Much difficulty was experienced in maintaining direction owing to poor visibility and to the deep trenches that crisscrossed the areas. Frequent checks by compass were necessary.

About 20 minutes after the battalion moved out, it reached the top of the hill (Point Y) on which it had been advancing. At this moment the fog lifted from the hill and the sun broke through. Strange things had happened during the short advance. On the right the battalion commander saw Company B; on the left, Company C; just in rear, the battalion headquarters group. Companies A and D had disappeared. No other friendly troops were in sight. Visibility to the rear was still greatly limited by the fog and smoke which clung to the low ground over which the battalion had advanced.

From the personal experience monograph of Captain Carroll M. Gale, who commanded the 1st Battalion of the 131st Infantry.

DISCUSSION. The battalion entered the combat as regimental reserve. During this period it should have been held in as compact a formation as the covered approaches and the effectiveness of hostile long-range fire permitted.

The formation of four companies abreast spread the bat-
control over a wide area. This dispersion was particularly objectionable because of the poor visibility. In general, formations in column facilitate control; formations in line make it difficult. Premature development or deployment surrenders, before necessary, a portion of that full control which should be retained to the last possible minute. In this particular situation the formation adopted by the leader multiplied the chances for mistakes and for units getting lost.

When the battalion commander decided to take over an assault rôle, he might well have adopted the familiar "square" formation—two companies leading, two companies following. Certainly that disposition would have been far easier to control than four companies in line. Moreover, with visibility what it was, intervals and distances should have been reduced to the minimum.

The consequences of the faulty formation are instructive: at the moment the battalion required all of its fighting power, it found itself only fifty per cent effective.

EXAMPLE 3. On July 18, 1918, the U. S. 16th Infantry attacked to the east in column of battalions. The 1st Battalion, in assault, reached the initial objective, quickly reorganized, and pushed on toward the second objective in the formation shown on the sketch.

Just as the battalion moved out, its leader was struck down and the captain of the left assault company (B) assumed command. This officer promptly delegated the responsibility of coördinating the movement of Companies C and D and the attached machine-gun company to the captain of Company C, while he undertook to do the same job for the assault companies (A and B). At the same time he continued actively in command of his own company.

After a short advance the assault companies met resistance
from the right front, veered in that direction, and eventually found themselves on the second objective, but out of the battalion zone of action. Meanwhile the rest of the battalion had disappeared.

After some delay, the battalion commander took steps to rectify the error in direction and sent patrols to locate his other three companies. They were finally found at Point Z.

The time lost in locating the companies that got out of control gave the enemy an opportunity to restore order and strengthen his defensive dispositions, and compromise the battalion's chance of achieving a striking success.

From the personal experience monograph of Major Fred McI. Logan, who commanded Company L of the 16th Infantry.

DISCUSSION. The loss of control in this situation can be
attributed primarily to faulty organization of command. The new battalion commander assigned one officer to command the three reserve companies while he himself commanded the two assault companies. In so doing he failed to appreciate his new responsibility, which was the command of the battalion as a whole. In fact, it may be said that he inadvertently abdicated control.

When the reserve consists of more than one unit it may be desirable from a control viewpoint to have one officer responsible for its movements. This leaves the commander free to study the enemy situation and fight his assault units. He controls his command through his subordinates. In this particular case, the battalion commander was probably correct in designating an officer to command the three reserve companies but he erred in failing to restrict this officer to coördinating the advance of the reserve with the progress of the assault units. In effect, he set up two independent commands.

In retaining active command of his company, the new battalion commander committed his second error. He became so engrossed in the problems of Company B that he forgot his primary responsibility—control of the battalion. The result was all but inevitable: communication within the battalion broke down and the leader had no idea what had happened to the larger part of his command or even where it was.

Control presupposes that the leader know the location of all elements of his command at all times and can communicate with any element at any time.

**CONCLUSION.** The consequences in each of the three examples in this chapter were identical—a great reduction in the effective strength of the unit concerned. This reduction was caused by loss of control and not by casualties or pressure from the enemy. It is clear that a leader cannot strike with his full
power unless the elements of his command are available when needed.

In maneuvers, with good visibility, no casualties, no confusion incident to battle, the most perfunctory effort is often enough to keep track of the location of subordinate units. It is far different in war; there, the control problem assumes giant proportions. Only those leaders who realize its difficulties and who take positive and constant action to solve it will find their units in hand and ready to strike at the critical moment.
Chapter XIII: Command and Communication

An infantry headquarters must be mobile and must keep close to the troops. From this forward position, communication must be rapid and reliable.

The infantry leader should have a good view of the terrain, personal observation of the enemy, and be in close touch with his own troops. Thus will he be able to deal promptly with rapid changes in the situation. He cannot be tied to a remote command post and take effective action in a sudden crisis. The mere fact that communications function well does not excuse him from intimate contact with his subordinates or from personal observation of the action. Even though technical means of communication fail, a commander must still be able to exercise his influence on events.

To quote Major General J. F. C. Fuller of the British Army:

If intercommunication between events in front and ideas behind are not maintained, then two battles will be fought—a mythical headquarters battle and an actual front-line one, in which case the real enemy is to be found in our own headquarters. Whatever doubt exists as regards the lessons of the last war, this is one which cannot be controverted.

Example 1. On the night of July 18-19, 1918, the French 365th Infantry, which had been in reserve, made a march of eight kilometers to the front in order to effect a passage of lines and attack at dawn.

For this attack the 4th and 6th Battalions were to be in assault. The 4th Battalion, with its right resting on and following the Maubeuge road, was directed to attack toward Montagne
de Paris while the 6th Battalion, on the left of the 4th, was ordered to move against Mont-sans-Pain. The line of departure was in the vicinity of the Carrière trench. H-hour was set at 4:45 a.m. Units were to move out when the first shells of the rolling barrage came down.

At 4:00 a.m. the 4th Battalion reached the locality indicated on the sketch. Here it found that the battalion zone of action was much wider than had been expected. Liaison had not yet been established on the right with the 1st Zouaves of the 153d Division nor on the left with the 6th Battalion.

The battalion commander made a rapid reconnaissance and issued his orders. Company commanders rejoined their units.

As the first shells of the barrage fell, the 6th Battalion suddenly appeared, moving directly across the front of the 4th. It disappeared in the dust and smoke, attacking along the right boundary of the regiment. The 14th Company of the 4th Battalion joined the movement and became intermingled with the 6th Battalion and the 1st Zouaves. The barrage began to move forward.

Observing this movement, the battalion commander at once assembled his company commanders and issued the following order:

We were to attack on the right. Now we attack on the left of the regimental zone. Our objective was Montagne de Paris. Now it is Mont-sans-Pain. The 13th Company will cover the entire battalion front. Forward!

The attack of the battalion was fairly successful.

During the morning twenty-two messages dealing with tactical matters were sent or received by the battalion commander, who kept close behind the advance. All of these messages were carried by runner; not one was unduly delayed. This figure does not include messages sent to the regimental commander, or those dealing with anything but strictly tactical matters. The total number of all messages handled, including those dealing
with losses and supply, is said to have been about seventy-five.

From an article by Major Pamponneau, French Army, in "La Revue d'Infanterie," October, 1930.

DISCUSSION. Here we see an instance of a battalion losing its direction in a night march and attacking in the zone of the

Example 1

unit on its right. This action, coming as a complete surprise and at the very moment of the jump-off, presented an unexpected and confused situation to the 4th Battalion. Fortunately, the commander of the 4th Battalion was well forward, in close contact with his units, and was thereby enabled to retrieve the
situation. Had he been mulling over maps or orders in some sheltered command post, his entire battalion, instead of one company, would have become intermingled with the 6th Battalion and there would have been no assault in the left half of the regimental zone.

By means of personal contact with his unit commanders, supplemented by excellent communication within the battalion, this leader actually commanded.

In an attack, infantry commanders must be well forward.

EXAMPLE 2. By desperate fighting from August 6 to 8, 1918, the U. S. 112th Infantry, supported by the 1st Battalion of the 111th Infantry, had succeeded in capturing the little town of Fismes and driving the Germans to the north bank of the Vesle. On the night of August 8 the 111th Infantry relieved the 112th, and the 1st Battalion of the 111th, which had been attached to the 112th, reverted to its proper unit.

The 111th Infantry had orders to cross the Vesle and continue the attack. The 1st Battalion, being the most available unit, was directed to cross the river and assault Fismettes.

What little had remained of the one bridge across the Vesle had been completely destroyed. Bridging, in the face of the murderous accuracy of the German fire, was considered impossible. The barbed-wire entanglements that filled the river rendered wading or swimming out of the question.

Under cover of darkness, the men of Company A gathered rocks and débris from nearby ruins and heaped them in the stream until the pile formed a species of footpath close enough to the opposite bank to be bridged by a stout plank.

Utilizing this slippery and treacherous causeway, the men of Company A, with other troops of the battalion, filtered across the river and took cover in the ruins along the southern edge of Fismettes. It was 4:15 a.m. when this move was completed.
It now developed that no one knew the plan. The company commander had been given an oral order. He did not know the line of departure, the time of attack or, for that matter, just where he was.

Suddenly heavy artillery fire fell to the front, all the American guns appearing to open simultaneously. At this moment a runner appeared and thrust a package into the hands of a platoon leader. A hasty examination disclosed the fact that it contained the division's confirming order for the attack and was intended for the brigade. From this order it was learned that the artillery fire crashing to the front was a barrage in preparation for the attack and was due to raise to the objective at that very moment. The barrage was wasted as far as the 1st Battalion was concerned for this unit was supposed to be 500 yards farther to the front, 300 yards farther to the right, and ready to jump off at the next instant.

The battalion commander had remained in Fismes.

Daybreak found elements of the battalion huddled in Fis-
mettes. The commander of Company B, being senior, took command and organized an attack to the north. The attack was broken up by heavy fire at close range.

The Germans now gradually filtered back into Fismettes and began firing on the battalion from the rear. Confused house-to-house fighting followed. After a desperate struggle the battalion, though seriously depleted, still held Fismettes.

Several messages were sent to the battalion commander advising him of the situation and requesting reinforcements, ammunition, rations, and help in evacuating the wounded. Runners went back, under fire, over the foot-bridge. No word came back. No help was received. The fighting continued.

On August 11, a vigorous German counter-attack was repulsed. Immediately thereafter both German and American artillery opened on the town. Frantic messages were sent back to battalion headquarters to have the American barrage raised or stopped. But there was no relief from the artillery and no response from battalion headquarters. All the Very cartridges and rockets in the battalion were fired, but to no avail. Heavy casualties piled up.

Finally an officer made his way back to the battalion command post south of the Vesle. He stated that there were nearly as many men around the C.P. as the battalion had in the front line—among them many of the runners who had carried messages back from Fismettes.

This officer asked why the messages to raise the American barrage had not been complied with. The reply was that the telephone was out and that the information could not be sent to the rear. Upon the insistence of this officer, the liaison officer started back in person to tell the artillery to stop its fire.

The battalion commander appears to have been equally out of touch with the regiment. Although many detailed messages had been sent back by the troops north of the Vesle and many got through to the battalion command post, a regimental report,
dated August 20, stated that repeated requests sent to the C.P. of the 1st Battalion for information of the condition of the troops in Fismettes brought no definite information up to the afternoon of August 11.

On the morning of the 14th the battalion was relieved.

From the personal experience monograph of Captain Ottmann W. Freeborn, Infantry.

DISCUSSION. During the capture and occupation of Fismettes the battalion commander remained in his command post south of the Vesle. From such a position he was unable to deal with the many desperate situations which his battalion had to face—situations that demanded immediate action on the spot. In a word, he failed to command.

His only possible excuse for remaining south of the Vesle would be easier communication with the regiment and with the artillery. But even this must be invalidated since neither of these agencies was kept informed of the situation, although the
units in Fismettes poured vital information into the battalion command post.

Because the wire system failed, the battalion commander assumed that he was unable to communicate with either the artillery or higher authority. This, of course, is no excuse. So long as anyone, including the commander, can walk, crawl, or roll, an infantry unit is not "out of communication."

EXAMPLE 3. After pushing forward all day August 19, 1914, in pursuit of a retiring enemy, the French 153d Infantry reached the heights of Signal de Marthil and Hill 321. During the day heavy artillery fire had been received from the direction of Baronville, but the region north of Signal de Marthil seemed free of the enemy.

Outposts were established on the north slopes of the heights between Hill 321 and Signal de Marthil. As the advance was to be resumed the following day, no elaborate communications were established between the observation elements of the outpost and the remainder of the regiment. There was no wire or radio, and the outposts had not been provided with pyrotechnics.

At dawn on the 20th, the battalions assembled on the south slopes of the hills, awaiting orders. Breakfast was being prepared. Suddenly a hail of shells fell on the French position. Men ran for the nearest cover. Since no message came from the outpost it was assumed that the Germans were laying down a counter-preparation to prevent a French advance. Fifteen to twenty minutes passed and then a rumor spread: "The enemy is attacking."

The battalions received orders to deploy on the crests to their front. Scarcely had the leading platoons climbed the slope when they encountered a strong hostile attack. The French left was enveloped. The Signal de Marthil fell. The undeployed battalions, still on the southern slope, were taken in flank by heavy
fire. The French vainly strove to establish a firing line, but were so confused that they did not even know in which direction to deploy. They were driven back in disorder.

The French outguards had seen the Germans debouch from the heights south and west of Destry, but messages sent to the rear did not reach the French regimental and battalion commanders until the Germans were almost on them.

From an article by Major Laffargue, in "La Revue d'Infanterie," April, 1927.
DISCUSSION. The German attack progressed 1,500 to 2,000 yards in full view of the French outguards and reached the Château-Salins—Morhange Road before the French battalions received word of it. The Germans appear to have covered this distance in about twenty minutes.

The French battalions were only 400 yards or so from the crests. The commanders were among their troops. Their desire could be expressed simply: "Deploy on the hills to your front." Yet the Germans got there first. Regardless of the fact that the French appear to have been too confident to take warning from the artillery fire, the striking thing is that the German attack progressed 2,000 yards before messages from the outpost could travel a third of that distance and be acted upon.

In such a situation, the value of visual means of communication must be apparent. Pyrotechnics or projectors, using a pre-arranged code to express simple, important ideas such as "enemy attacking," would have met the situation.

The disaster to this regiment must be attributed, in large part to inadequate communications.

EXAMPLE 4. On October 6, 1918, the 3d Battalion of the U. S. 26th Infantry attacked Hill 272. Two companies, K in assault and M in support, advancing from the southeast, had reached the slopes of the hill, which was still strongly held by the Germans. Company I, extending along the entire battalion front south of the hill, assisted the attack by fire. Farther to the left some guns of Company A of the 3d Machine-Gun Battalion and elements of a battalion of the 28th Infantry added their fire to the effort. Company L, with two machine guns, covered the right flank and rear of the attack from the ravine northeast of the Ariétal Farm. It was realized that this was a danger point since the 1st Division, to which the 26th Infantry belonged, appeared to be farther advanced than the troops on its right. Ele-
ments of the 7th Field Artillery supported the attack, and a system of rocket signals had been arranged with them in case telephone communication should break down. The support battalion of the 26th Infantry was located near Hill 212.

About 3:00 p.m. the commander of the assault battalion was south of the left flank of the leading elements of Company M. He could see Hill 272 and Companies I and K. He also had a fair view to the northeast.

An extension of the telephone line from the battalion command post was within 400 yards of the battalion commander's
position. Actually, he had expected to have a telephone with him, for it was well understood in the regiment that if the communications of any unit failed to function, that unit would soon have a new commander. But in this case casualties among the telephone detachments had prevented a further extension of the telephone, so an advanced C.P. was established at the end of the line.

About this time artillery fire and some scattered rifle fire were heard to the northeast, and men from Companies L and M came running past the battalion commander. They reported that hundreds of Germans were counter-attacking southwest down the valley east of Hill 272. This would take the American attack in flank and rear. Company K, the leading assault company, began to withdraw. The battalion commander could now see the Germans moving down the valley in close formation. They seemed to be in force. A forward movement of the widely deployed Company I was not believed possible in the face of the fire from Hill 272. Moreover, any movement by this company would take time.

The battalion commander took the following action:

He sent an oral message by runner to Company K directing that it hold its ground and continue to face Hill 272.

He sent two runners by different routes to the end of the telephone line with written messages to be telephoned to the support battalion asking for machine-gun and artillery support. (It was routine for the support battalion to pass such messages on.) The runners were then to find the artillery liaison officer, inform him of the situation and ask for Fire No. 9, data for which had been prepared. The liaison officer was known to be observing artillery fire from a tree in the woods south of Hill 272. He had a telephone line to the artillery.

Meanwhile, with the aid of three veteran noncommissioned officers of Company M, the battalion commander succeeded in halting and assembling some 40 of the retreating troops. Tak-
telephoned the message properly and promptly. They then found the liaison officer and delivered their message to him.

The runners sent with the written message found that the officer left at the telephone extension had been killed, but they
These fires, in conjunction with the efforts of Companies L and M, and the fire of the two machine guns that were covering the right flank, broke the hostile attack. The Germans suffered heavy losses and withdrew in confusion.

*From the personal experience monograph and supplementary statements of Major Lyman S. Frasier, who commanded the 3d Battalion of the 26th Infantry.*

**DISCUSSION.** This situation, which developed so suddenly, appeared extremely serious to the battalion commander. Men from two companies had started to run. A third company had started to withdraw. Intervention by the battalion commander was imperative.

Had he not been well forward where he could see the enemy, see his own troops, and exert his personal influence, he would have been helpless. Information would not have reached him in time.

Thanks to excellent communications, he was able to make his wants known to the regiment and to the artillery. The telephones were working and he was within 400 yards of one. Moreover, the artillery liaison officer, though not with the battalion commander, was not far distant, and he had a telephone connected with the artillery. The battalion commander knew just where this liaison officer was. So did the runners. They knew where they were to go, and in a crisis, they telephoned important messages promptly and properly.

This situation could not have been fully met if preparations had not been made for such an eventuality. The artillery and the machine guns were prepared to place fire in the valley. On receipt of a short, simple message, they did so and did so promptly.

The following passage from the monograph of Major Frasier indicates the methods used in the 1st Division (by that time a veteran organization) to insure communication in the Meuse-Argonne offensive:

Battalion commanders had been informed before the battle that their
chief duty was to advance but that next to this their most important function would be to keep in touch with regimental headquarters. If these two things were done, the ground gained would undoubtedly be held.

It was understood that the assault battalion was responsible for the wire line as far back as the support battalion. The support battalion would maintain the line to the regimental C.P. The telephone section of the regimental signal detachment would assist in the supply and maintenance of the entire telephone system.

The wire scheme generally employed at that time was called a ladder line. The lines were laid about ten yards apart or at any other distance which would permit a lineman on patrol to observe both lines for breaks. At regular intervals these wires were bridged.

The linemen detailed to bridge the wires carried test sets. In order to keep the system working, men were detailed as line guards and patrols. At all times, both day and night, there would be one man patrolling every 500-yard section of wire. These guards would meet.

During the second phase of the Meuse-Argonne offensive it cost the 3d Battalion 74 men to maintain telephone communication, but had we not had communication at all times, the number of casualties that could have been charged to the lack of it might well have been 740 instead of 74.

Runners were depended upon entirely for communication between companies, and between companies and the battalion command post. Runners and mounted messengers were depended upon for communication (other than by telephone) with regimental headquarters.

An important message would be sent by at least two runners, one leaving some little time after the other. It was also found advisable to place some distinguishing mark upon runners. When no distinguishing marks were worn, it required that they carry their messages pinned on their blouses in a conspicuous place.

CONCLUSION. In order to exercise control, battalion commanders should be well forward. In their field training, battalions should practice methods of maintaining communication between the commander's forward position and his command post. Frequently an extension of the telephone system will be the simplest solution.
As a rule, the battalion commander should move forward along the announced axis of signal communication. If, for any reason, he leaves this axis, a runner should be left behind who knows where he can be located. The command-post personnel should always be able to find the commander.

Runners must be relied upon for communication within the battalion. Unless this messenger service is carefully planned and its personnel is of high quality and well trained, it will not be able to survive the tests of the battlefield.

To fight his unit efficiently, a leader must be able to impart his decisions to his subordinates quickly and correctly. To insure prompt, intelligent assistance from the higher echelons, he must be able to keep them informed of the situation.

In brief, without effective communications the efforts of infantry in battle will be aimless and uncoordinated.
Chapter XIV: Supervision

Leaders must supervise the execution of their orders. The more untrained the troops, the more detailed this supervision must be.

A SUPERFICIAL READING of military textbooks is likely to convey the idea that the duties of a leader consist only of estimating the situation, reaching a decision, and issuing an order. It is evident, however, that unless the orders of the commander are executed, even a perfect plan will fail. On the other hand, a poor plan, if loyally and energetically carried out, will often succeed.

A commander, then, must not only issue his order but must also see to its execution. It is the omission of this final step that has caused many brilliant plans to go awry. Too often a leader assumes that once his plan is completed and his order issued, his responsibility for the action terminates. He seems to feel that he has discharged his obligation and that the execution remains entirely with his subordinates. Such an assumption is false even when dealing with veteran troops. Where poorly trained troops are involved, the necessity for vigilance and supervision becomes even more imperative. Initiative must not be destroyed, but the commander must nevertheless bear in mind that the responsibility for the result of the action rests squarely with him. Consequently, he is not only justified in carrying out the supervision necessary to insure proper execution, but is seriously delinquent if he fails to do so.

Of course, a leader cannot be everywhere, but he can and should weigh the capabilities and limitations of his subordinates, determine the critical point or time of the action, and lend the weight and authority of personal supervision where it is most needed:
EXAMPLE 1. On the foggy morning of August 29, 1914, the German 2d Guard Regiment, located just south of the Oise River, faced an obscure situation. French outguards were known to be a mile to the south, but the strength and intentions of their main force remained problematic. Although the French had been withdrawing for several days, this was no guarantee that the withdrawal would continue.

The 2d Guard Regiment was ordered to advance, making a first bound to the high ground near Hill 164. The regiment moved out with the 1st Battalion on the right as base unit, the 3d Battalion on the left, and the 2d Battalion in the second echelon behind the center.

Neither the regimental commander nor the 1st Battalion commander gave the direction of march by compass bearing. Routes of advance were not reconnoitered.

The 1st Battalion descended the slopes of the ridge east of Roméry, and reached a wooded valley which it took for the valley leading to Wiege. After marching for half an hour the battalion reached the edge of the wood, but found no Wiege. Thereupon the battalion commander ordered a halt. Maps were produced and officers became involved in a discussion as to the location of the battalion. The truth was soon apparent—the battalion was lost!

At this point the brigade commander, Major General von Schacht, arrived. He showed the battalion commander that he had followed the valley leading from Roméry to the southeast and that if the battalion continued on its present course it would march diagonally across the zone of the division on its left.

General von Schacht then reoriented the entire regiment, and with this information the correct position was soon reached. This proved of great importance, for the French had ceased retiring and were making a stand.

From the account by Lieutenant Colonel Koeltz, French Army, in "La Revue d'Infanterie," June, 1927.
DISCUSSION. Except for the fact that the brigade commander was well forward, supervising the execution of this movement, the attack of the brigade, and very possibly the attack of the entire division, would have been launched under most unfavorable circumstances. Had the brigade commander given orders and then remained at a command post in rear, one of his regiments would have gone wandering off into the zone of another division.
The brigade orders were correct; it was the execution by the regiment which was at fault. We may well put down for reference the fact that neither the regimental nor battalion commander had given the direction by compass.

Fortunately, the brigade commander knew that even with such excellent troops as the German Guards, mishaps and mistakes can occur; and that after an order has been given, it is necessary to see that it is properly executed.

EXAMPLE 2. On October 9, 1918, the U. S. 92d Division took over the Marbache sector. By November 1 it had been in line for three weeks. During this time patrols had been ordered out nightly, and at least two raids had been made. But in spite of this activity no prisoners had been brought in. This, coupled with the fact that reports sent in by patrols were highly conflicting, indicated that many patrols were not going far beyond their own wire. Consequently, a staff officer of the 183d Brigade (92d Division) was directed to keep a large-scale patrol map of the routes followed by all patrols as shown in their reports, together with any detailed information submitted, such as location of hostile wire, lanes through wire, trails, and enemy outposts. By checking patrol reports against recent maps and aerial photographs it was soon possible to determine which reports were reliable.

From the personal experience monograph of Captain Roy N. Hagerty, who was aide-de-camp to the Commanding General, 183d Brigade.

DISCUSSION. This example shows one form of supervision that a staff may take to assure itself that orders are being carried out. Junior officers—lieutenants and captains—had failed to see that orders were executed. It was not practicable for the brigade commander or his staff to go out personally with the patrols, but they could and did deduce from the means at hand which patrols
SUPERVISION

were actually going out, and which were sending in misleading reports.

This incident illustrates the necessity for close supervision of a partly trained command whose discipline and morale are questionable. Here it would have been desirable to relieve all unreliable junior officers, but this was not practicable at the time.

EXAMPLE 3. During the period September 26-October 6, 1918, the U. S. 305th Infantry, with Company D of the 305th Machine-Gun Battalion attached, took part in the Meuse-Argonne Offensive. Most of the officers of the 2d Battalion of the 305th Infantry had been recently promoted or had just joined and were new to their jobs. A few days previously the battalion had received replacements, many of whom had little training. These replacements constituted about 20% of the battalion's effective strength. There were several instances during the ensuing action when men asked officers how to place a clip of cartridges in a rifle.

Late on the afternoon of September 30 the 2d Battalion reached a position near the Naza Ridge where the Germans were making a determined stand. It was too late to organize and launch an attack, so the battalion was ordered to halt and dig in. The terrain was broken and shell-torn. The ridges all looked more or less alike. No two officers could agree from a study of the map as to what ridge they were on. The battalion commander therefore disregarded the map and, taking all company commanders with him, made a personal reconnaissance and assigned sectors. Company commanders then led their companies into position.

Early on the morning of October 1 the battalion commander inspected the dispositions. He found a wide gap between the 305th Infantry and the 28th Division on the right which had to be closed by the battalion reserve. He also found that the two
machine guns attached to each company had been placed on the extreme flanks of the company lines without regard for fields of fire. In one case, the guns had been placed some 50 yards beyond the rifle company, without a single rifleman near enough to protect them. The machine-gun company commander had not been consulted in locating these guns.

Inspection of machine-gun emplacements showed that two had been dug with so much consideration for the protection of the gun crew that any firing would have to be done at an angle of 45 degrees!

From the personal experience monograph of Major Erskine S. Dollarhide, who commanded Company D of the 305th Machine-Gun Battalion.

DISCUSSION. The fact that soldiers were found in the front line who were unfamiliar with the simplest fundamentals of their weapons must appear incredible. Yet such conditions were not uncommon in our army during the World War and they may occur again in a future conflict of major proportions. They serve to emphasize the necessity for careful supervision.

We see a lack of training in map reading on the part of company officers, making it necessary for the battalion commander to conduct his unit commanders to their areas. Later, partly because of the character of the terrain and partly because the troops were unaccustomed to night movements, we see company commanders guiding their units into position by hand. The next morning's inspection of the dispositions disclosed that, in spite of all previous efforts, there was a dangerous gap on the right flank. Thanks to the battalion commander's vigilance this was discovered in time to take corrective measures.

Finally, the necessity for checking such details as the siting and construction of machine-gun emplacements, is clearly demonstrated. Personal safety is likely to be uppermost in the minds of partly-trained troops and only the most rigid supervision will insure that units and individuals are not sacrificing battle efficiency for an unwarranted amount of activity.
EXAMPLE 4. General Pétain, later commander-in-chief of the French Armies, commanded a corps in the French attack in Artois in the spring of 1915. After issuing his orders, the General repeatedly questioned subordinates in regard to their conception of the manner in which they would carry out those orders. He is said to have questioned every gunner about his part in the attack, and to have supervised the registration of every piece of artillery.

DISCUSSION. This is an extreme example of supervision and one that is rarely practicable. The results justified General Pétain. His corps achieved a remarkable success: it rapidly overran the German defenses in its front and effected a deep penetration. It was the only corps to achieve such a signal success in the general attack.

EXAMPLE 5. On the evening of June 1, 1918, the U. S. 7th Machine-Gun Battalion (two companies) occupied positions on the south bank of the Marne at Château-Thierry. Company B was disposed with one platoon covering the right flank of the battalion, and two platoons generally covering a bridge across the Marne.

French troops who had been fighting north of the Marne began withdrawing south of the river, and a German attack developed against the American position on the south bank. Germans were reported to have crossed the Marne in the darkness. The battalion commander had exercised little supervision over his companies. The situation as it appeared to the captain of Company B is described in the personal experience monograph of Major John R. Mendenhall, who at the time commanded this company. He says:

To the captain of Company B the situation appeared desperate. Runners sent to the battalion C.P. failed to return. His own reconnaissance and the report of a lieutenant from Company A, who had
been on the north bank, convinced him that, without rifle support, Company B could not avoid capture and was ineffective in the positions it then occupied. Moreover, failure to gain contact with the battalion C.P. implied that it had moved, probably to the rear, and orders had been to cover such a withdrawal.

The captain therefore sent oral messages by runners to his platoons, directing the 1st and 3d Platoons to withdraw to the second-line position, and the 2d, which he hoped was still commanding the bridge, to cover the withdrawal.

The company commander then went to the battalion command post which he found had not been moved. There he received orders to move his company back to its former positions. The captain, with his headquarters personnel and four reserve guns, moved back to the bridge. There he found the 2d Platoon had gone, as well as the others.

In his monograph Major Mendenhall then describes a fight in the dark between Germans, who could be recognized by their helmets, a few French, and the crews of his reserve guns which went into action.

The combined fire of these guns drove the remaining Germans across the bridge. The guns were then moved to positions from which they held the south bank until daylight when the remainder of the company was reestablished in its former positions.

Investigation later showed that the runners had become confused and delivered the company commander's order to each of the three platoons as "Withdraw at once."

Let us now see what happened to the two platoons near the bridge. This is described by Lieutenant Luther W. Cobbey, who commanded one of these platoons.

About 9:30 p.m. a runner came to me with an order to retreat with all possible speed; that the Germans had crossed the river and were on our side. Supposing that the Germans had made a crossing without my knowing it, I followed the instructions given, which were nothing less than to "beat it."

On the way back we passed through an enemy barrage. We moved about four kilometers to the rear, taking up a position on a hill overlooking the river, where the French had prepared a line of resistance. On arriving there I found Paul (Lieutenant Paul T.
SUPERVISION

Funkhouser, commanding a platoon of Company B) with his platoon; he had received the same order.

After putting our guns into position, we waited for the German attack that we expected at any moment. At about 1:00 a.m. Paul said, "Don't you think we had better go back into Château-Thierry and find out whether the Germans are actually in the town?"

Paul and I took one runner and started back. We finally reached the place we started from and to our surprise found there were no Germans on our side of the river. We immediately went to battalion headquarters to find out why we had been ordered to retreat. The major denied any knowledge of our retreat, and showed no interest in the matter. He didn't seem to give a darn what we had done or might do.

Paul and I felt that the only thing to do was to go back, get our men and guns, and get into action again in our old positions, which we were finally able to do about daylight.

From the personal experience monograph of Major John R. Mendenhall, who commanded Company B of the 7th Machine-Gun Battalion.

DISCUSSION. The 7th Machine-Gun Battalion was lucky indeed that this mishap did not result in a serious reverse. Its predicament affords a triple illustration of the necessity for supervision.

First, partially because of lack of supervision and control by the battalion commander, one of his companies began an unauthorized withdrawal contrary to his desires. Since he had not kept in close contact with Company B and since he had failed to supervise its operations (either personally or through a staff officer), he must be credited with a share of the responsibility for its withdrawal. During the operations, he gave his subordinates the impression of inactivity and indifference.

Second, as the captain of Company B discovered, orders—particularly oral orders sent by runner—may be easily altered in the transmission or misconstrued. It will often be necessary to issue oral orders in the haste and confusion of battle, but the next step must invariably be a verification of the execution.

Finally, this example shows that when errors are promptly discovered they may be repaired. True, the captain of Company B discovered his error too late to keep his platoons from with-
drawing, but he was able to prevent disastrous consequences by using his four reserve guns.

In spite of all we can do, misunderstandings will occur in war. The leader's job, then, is to detect these errors early and correct them quickly; this can be done only through close supervision. If he fails to supervise he will usually learn of the blunder after the disaster has occurred.

CONCLUSION. Orders will be misunderstood by troops, regardless of their experience or degree of training. But even when orders are understood, fear, fatigue, or sheer inertia may result in a failure to carry them out unless leaders exercise continuous and untiring supervision.

A simple, workable plan is important; a clear, understandable order is important; but supervision to see that the will of the commander is executed is all-important.
Chapter XV: Direction

The marching compass is the infantry officer's most reliable guide.

IN AN ATTACK, one of the leader's most important duties is maintenance of direction. Infantry Drill Regulations (Provisional), 1919, fresh from the experience of the World War, states: "More attacks fail from loss of direction than from any other cause." Whether or not this statement can be fully substantiated is not important. The important thing is that so many attacks did fail through loss of direction that this statement was written into post-war regulations.

Undoubtedly the best aids in maintaining direction are clearly visible terrain features that can be seen by all men and that cannot be mistaken. Distant direction points or such features as roads, streams, railroads, ridges or valleys that run in the desired direction are invaluable. It frequently happens, however, that these natural guides either do not exist in the desired locations or else lead only part way to the assigned objective. In such instances reliance must be placed on the marching compass.

Even when guides are furnished, the responsibility for getting a unit to the proper place at the proper time is still the commander's. It will therefore pay him to check on the guide.

EXAMPLE 1. On the night of July 17, 1918, the 2d Battalion of the U. S. 28th Infantry moved forward with orders to attack at 4:35 the following morning. Leaving its position near Morte-fontaine at 9:30 p.m., it marched via a trail and an unimproved road to the environs of le Chauffeur. A violent rainstorm set in shortly after the battalion got under way. A description of the march, as given by the battalion commander, follows:
The darkness became so intense that it was impossible for the men in ranks to see those in front of them. The trail, which was bad at best from recent shelling, now became a quagmire. It was necessary to close the units without distance and have the men hang on to the equipment of the men ahead. Great difficulty was experienced in keeping the column from being broken, as the men were constantly slipping and falling into shell holes.

As the column approached the front, the roads and trails became congested with horses, cannon, motor trucks, tanks and artillery, en route to their positions. This added to our difficulty and it was only through the almost superhuman efforts of the officers and the men that the battalion ever reached its destination.

The battalion commander joined the column as it passed the regimental command post. At this point the battalion was broken up and the individual companies, led by French guides, proceeded toward their respective positions.

The battalion commander had the only available map. As Company H started to descend into the ravine near Cutry, the Germans began to scorch that area with artillery fire. The guide, becoming excited and confused, promptly led the company in the wrong direction. The company commander, having neither map nor compass, did not realize this until he arrived in a town. Here French soldiers told him that he was in Cutry and
that there were some Americans to the east. Later he met the adjutant of the 26th Infantry, the unit on the right of the 28th, and this officer gave him general directions. The company then proceeded northeast.

At 4:15 a.m. it passed the command post of the 2d Battalion of the 26th Infantry, whose commander pointed out the position of Company H on the line of departure. Day was just beginning to break. The company dared not move out of the ravine to go into position lest it be seen by the enemy, and the benefit of surprise be lost. Therefore the company commander continued his march up the ravine until he reached the command post of the 2d Battalion of the 28th Infantry. Upon reporting to his battalion commander, he was directed to form his company near the top of the steep slopes of the ravine and be prepared to emerge at a run at H-hour and close on the barrage.

The company had failed to get into position for the attack on time. By a bit of good luck it did manage to get into a position from which it could join the advance at H-hour. This it did—quickly catching up with the barrage.

From the personal experience monograph of Major Clarence R. Huebner, who commanded the 2d Battalion of the 28th Infantry.

DISCUSSION. That the troops got into position at all speaks highly for the energy and determination of both officers and men. It also speaks well for the capability of the guides that most of the companies were properly led to the line of departure.

However, the guide assigned to Company H lost direction and took the company south instead of east. The company commander had no compass, and did not realize the mistake. In fact, if he had not reached a town which he knew was not in his zone of action, where he could make some inquiries, his company would not only have been unable to attack with its battalion,
but in all probability would have continued south into the zone of the other brigade of the 1st Division.

Guide or no guide, a leader should have a compass and use it.

EXAMPLE 2. On October 7, 1918, the Germans in front of the U. S. 3d Division held a line that ran from Ferme de la Madeleine through the south edge of the Bois de Cunel and over the crest of Hill 253 to the Cierges—Romagne-sous-Montfaucon Road. They seemed to be strengthening this position. Heavy fighting had been in progress for several days.

During this time the 6th Brigade was in reserve. On October 8, division orders directed that the attack be resumed at 8:30 a.m., October 9, with the 6th Brigade in assault and the 5th Brigade, which was then in the front line, in reserve.

The 30th Infantry, part of the 6th Brigade, was located near the north edge of the Bois de Beuge. On the afternoon of October 8, the regimental and battalion commanders made a personal reconnaissance of the front lines in Woods 250. During the course of this reconnaissance the regimental commander informed the battalion commanders of his general plan. At 10:00 p.m. at his command post he issued his formal orders which placed the 3d Battalion in assault and the 2d Battalion in support.

The 2d Battalion was ordered to be in position along the south edge of Woods 250 by daylight. Guides from the 3d Battalion were furnished for this movement. At 3:00 a.m. the battalion moved from the Bois de Beuge in column of twos and advanced across a shell-swept zone. Strict orders from higher authority prescribed that in all troop movements 50-yards distance would be maintained between platoons and 200-yards between companies. The battalion commander believed that this was impracticable for troops moving at night over a shelled area. Accordingly, he closed up the column.