S-2 IN ACTION

LT. C. P. PALMER

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By

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FOREWORD

By

GENERAL C. P. SUMMERALL

IN PREPARING this valuable contribution to the profession of arms, Lieutenant Colonel Shipley Thomas has taken the time and the trouble to transmit to others the benefit of what he learned by exceptional opportunity, ability and experience. He has converted into simple and direct language the technique of the art and the science of what has long been recognized as the basic element of military operations. In the preparation of orders for attack or defense the first requisite is information about the enemy. The only reliable source is the observations and reports of those who are in contact with him and who understand and can transmit speedily that which is valuable to the commander concerned. A high degree of training, aptitude, skill and devotion to duty is necessary for an S-2 man. Any intelligent officer or soldier can derive from Colonel Thomas' stirring illustrations and his graphic and vivid directions for the selection of personnel and for organization and instruction, the methods that will guarantee success till his own ad-

ventures in this dramatic phase of war can suggest modifications adapted to any changes that mechanization, new devices or organization may demand. He need never be uncertain as to how he should act in any situation.

None whose courage does not call them to the post of danger, whose restless energy does not drive them to boundless initiative, whose fortitude does not sustain them under endless privation, fatigue and nervous tension, and whose intellect does not enable them to interpret facts, to avoid fancy and to pierce the thick veil that hides from the mass of men the mysteries of the enemy's composition, movements and intentions, can hope for success in this exclusive field. As Colonel Thomas indicates, many must be called to choose a few, and these few must further undergo the test of the survival of the fittest. But those who triumph will be rewarded by a sense of security in every crisis, the confidence of their superiors and the admiration and loyalty of their associates. The present and future S-2's will owe a debt of gratitude to Colonel Thomas, and the service will be immeasurably benefited if they will begin where he left off.

General, Retired

The Citadel,
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January 29, 1940

PREFACE

By

COLONEL HJALMAR ERICKSON

U. S. Army, Retired

SHIPLEY THOMAS was the senior staff and Regimental Intelligence Officer of the 26th Infantry, First Division, A. E. F., when I commanded that famous regiment in its twelve-day attack in the Meuse-Argonne offensive. Before joining the regiment in 1917, he had completed a course at the British Fourth Army Intelligence School. He commanded a platoon when the first American troops entered the line in October, 1917, and was soon thereafter made Intelligence Officer of the regiment. As such, and later as senior regimental staff officer, he served until the Armistice. During this time, he took part in every type of warfare: from quiet trench, through attack and defense, and into wide open pursuit and meeting engagements, saw the regiment lose more than 1200 killed and over 100 per cent in total casualties, and was one of the three officers of the regiment who took part in every action. During the two months following the Armistice, he took a course at the Army Intelligence

School, from which he was graduated with honors, and was then sent to the Peace Commission. Later, he was a brigade adjutant in the Army of Occupation.

After seven days of almost constant action in the Meuse-Argonne offensive, casualties had greatly reduced the effective strength of the regiment, and the front had been widened by the addition of a battalion of Engineers on the flank. A counter-attack was feared. It was vital to learn of the enemy's strength and dispositions in order to be prepared for defense and still be able to continue the attack with the small forces remaining. During the early evening of October 7, 1918, Shipley Thomas went forward, crawled out and made a reconnaissance of the enemy positions on the front of the regiment. For this, I later recommended him as follows:

> "Captain Thomas was serving as Operations Officer of the 26th Infantry, First Division, A. E.F., and reconnoitered alone and at great personal risk the positions of the German forces in the immediate front of the regiment during the night of October 7-8, 1918. He brought back timely information of their disposition which enabled the regimental commander to dispose his regiment in such a way that the advance the following morning was made with a minimum loss and with considerable gain of ground. Captain

Thomas performed a service clearly beyond the ordinary duty of an officer."

Few officers in the U. S. Army have a battle experience as great or as varied as that of Shipley Thomas. He was in a position to see and had a hand in directing every kind of action and, thereby, is in a position to tell, from actual experience, the officers who may be called to be S-2's, the duties and odd situations which he met in action.

Captain Thomas was admirably fitted to perform all the duties of an intelligence officer by physical and mental endurance, intelligence, education, training, temperament and courage.

I have seen him, for example, circulate among prisoners as they were brought in and, by his knowledge of the German language, pick up information that disclosed worthwhile targets for immediate artillery fire.

I am glad his experiences have been recorded and made available to present and future officers of our armed forces.

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I

THE FINEST JOB IN THE WORLD

"YOUNG MAN, you are "Regimental Intelligence Officer," whatever the Hell that is." Colonel Hamilton A. Smith looked up from reading a division order. A young lieutenant was standing at rigid attention in the dimly-lighted stable in northern France which, in late December, 1917, served as headquarters of the 26th Infantry. The lieutenant ventured a small question, only to learn that he was then and there relieved from Company "I" and command of his platoon. The sadness of parting from the soldiers he had trained and with whom he had held a tiny bit of front, the first time American troops entered the fighting in France, dimmed his vision, for he had just been given the "finest job in the world."

He did not realize then what the job really was. The month he had spent at the British Fourth Army Intelligence School put him one up on the colonel when the regiment was ordered to form an intelligence unit. He at least knew what it should do. But how could anyone who has not conducted combat intelligence in the field possibly understand

the thrill of piecing together the information which lifts the curtain on the enemy?

Napoleon was a most successful user of combat intelligence. His famous coach, when captured, was found to possess most up-to-date data on the enemy together with a detailed biographical sketch of every enemy general.

General Washington's success was largely dependent on his constant and accurate knowledge of the enemy's actions. General Robert E. Lee, as an engineer officer in the Mexican War, developed the art of combat intelligence until he became the greatest intelligence officer this country had yet seen. Later he was able to combine with it a personal first-hand knowledge of the mental traits of his opponents, which enabled him to predict, with reasonable accuracy, what each might do.

True, they all used information from spies, but their reliance on front-line intelligence was nowhere better shown than when Sheridan smashed the Confederate Cavalry. This seemed to blind Lee, who stood still for three days thereafter while Grant moved swiftly up to Petersburg.

From time immemorial until 1914 there were but two sources of intelligence of the enemy. These were "Combat Intelligence" and "Spies within the Enemy's Lines." Beginning with 1914, three additional sources became effective:

1. Deep airplane reconnaissance
2. Electrical and radio listening apparatus
3. Artillery observation.

Of all these five, however, only one remains, as it always has been, the prime source of intelligence or information of the enemy, namely combat or battlefield intelligence. Information from spies is at best late and is often very questionable. An observer, peering down from a plane flying many hundred miles an hour at an altitude of four miles, gains but a sketchy idea of what is going on below and fails to note the vast majority of movement which takes place at night. Electrical and radio apparatus can intercept messages and locate command posts by triangulation, but they merely supplement ground information. Likewise, artillery observation batteries and observation posts can, from accurate recording of enemy fire, determine the size of opposing artillery forces and their dispositions. All of these, however, are supplementary. The primary information of the enemy is that which is developed in fragments by the many S-2's on the front. Everything else is complementary and supplementary. Under modern conditions the difficulty of raising the curtain on what the enemy is doing is not made more simple by these additional means. In fact they only tend to counter the enemy's additional means of concealment which

are more effective. The net result is as Major Carrias (in his book, *Les Renseignements de Contact*) points out:

> "General Joffre experienced greater difficulties in 1914 to secure information of the German armies opposed to him from Switzerland to Flanders than did Napoleon in June, 1806 in securing information of the Prussian forces massed in Thuringia."

And as a corollary, the failure of the Germans to obtain and interpret direct battlefield (combat) information of their enemy in August and September, 1914 led them to lose the first battle of the Marne and perhaps the war. With minor exceptions, fifty-four years without combat had developed a German general staff which, little by little, had grown to ignore "Combat Intelligence." They had become like a college which in fifty-four years had never played football against another college. They had merely practiced on a fair green lawn. They had everything figured out in advance but were totally ignorant of the fact that in operations, as in football, no quarterback can plan his plays in advance. Blindly they went ahead. They knew, because it was written in all texts, what the French would do. If they had combat intelligence, they

paid little or no attention to it. The following is a typical example which Major Carrias cites:

"During the operations of the Prussian II Corps in Picardy in 1914, the 4th Infantry Division furnished very little information upon contact, while the 3d Infantry Division furnished much. This marked difference in the results obtained is not ascribed to good fortune, but to the lack of interest shown by General Von Pannewitz in command of the 4th Infantry Division. This General Officer issued a standing order to the 12th Dragoons, forming part of his division, that "any officer seen beyond the forward elements of the Infantry advance guard would be court-martialed."—12th Von Arnin Dragoon Regiment (2d Brandenburg) in the great war 1914-1918.

The failure to secure and interpret combat intelligence was nowhere more strikingly apparent than in the entire German 1914 campaign. The seeming disregard of what might have been learned of the British and French movements in early September, 1914, and the failure to interpret these correctly, led to disastrous results.

Von Moltke (nephew of the great von Moltke) and the whole German Army of 1914 suffered from the same basic failure to appreciate and use combat intelligence. In their long years of peace,

combat intelligence had become a dead letter. Theory, dogma and schoolroom logic had become, as it usually does, the substitute for combat intelligence.

The combat intelligence which was used with such consummate skill by Napoleon, Washington and Lee, and which was apparently disregarded by the younger von Moltke, is still of vital importance today. Basically, it is a mosaic of the bits of information gathered by local S-2's. Often the information they obtain of the enemy seems of no value. But that is because they, as individuals, have only a partial picture. For instance, in 1918 a regimental observation post noted the movement behind the enemy front lines, of a few men in light gray uniforms with green collars. This meant little, as it filtered back along the channels, to the regiment, brigade, division, corps or army, but at general headquarters it was a most vital identification. It confirmed other evidence of an immediate German attack. Those uniforms indicated a reconnaissance by officers of the Jaeger Division (long missing from the front). It was a first-class assault division which generally led major attacks.

There is no combat intelligence until a unit is face to face with an enemy. Consequently, by 1917, with no enemy for twenty years, combat intelligence had atrophied by disuse in the U. S.

Army. Some few remembered its use in Cuba and the Philippines, where the "water cure" was effective but to the majority more than fifty years without facing an enemy had developed a whole generation of Regular Army officers to most of whom it was legendary. And again, today, with twenty-one years elapsed since it was last used, only the few who actually practiced it know the technique of combat intelligence.

To say that it does not exist in peace time will bring a storm of protest. "How about our S-2? Every unit has one." True, but he is usually the much overworked "Post Exchange Officer" or "Camp Welfare Officer" who, on occasion, drops his daily duties long enough to copy off some canned information about two states, generally "Black" and "Blue," who went to war two days ago and with identical forces, arms and equipment have met at a convenient terrain. The book gives complete details of the "enemy." If anyone thinks that such duties, or anything that can be tried on maneuvers, in any way remotely simulates combat intelligence, they are greatly mistaken. As Marshal Foch said: "The next war will begin where this one left off." Nowhere is this more apt than in combat intelligence. It simply dies out in peace time.

Should the United States ever become involved

in another war, a thousand young men would suddenly find themselves called upon to be S-2, and the probabilities are strong that the appointing authority may add "Whatever the Hell that is."

They must remember that the combat intelligence which Napoleon, Washington and Lee used so successfully was developed by the front-line infantry and cavalry units. Not only is this information of the enemy vital to the high command! It is of equal importance to their colonel. He has three battalions and a direct supporting battalion of artillery but can only use this team to advantage when he knows what the enemy can do. If the S-2 can give the correct answer he makes easy the job of his colonel.

As soon as the regiment comes in contact with the enemy the colonel will want to know and the S-2 must be prepared to tell him:

Who the enemy is
Where the enemy is
What the enemy can do.

The colonel has four things to consider:

His own forces and their condition
His mission
The terrain
The enemy.

The answers to the first two are comparatively simple. As to the ground, he will need help from

his S-2, but as to the "enemy," he must rely absolutely on his S-2.

Now it matters little whether this is trench warfare, where the S-2 precedes the unit by forty-eight hours (to assimilate all that he can from the S-2 he is relieving), or whether he is at the head of the main body in a meeting engagement. His job is still the same. The S-4 has full information on the supplies, the S-3 has all the information on the troops and the mission, but it is left to the S-2 to lift the veil of secrecy behind which the enemy has sought to conceal his dispositions and intentions. Without the knowledge of the who, where and what of the enemy, it is most difficult for the colonel to make any plan which may be pursued with success.

Surprise wins battles. The expected can be warded off as were the daily attacks for six months on the forts of Verdun. But the unexpected, the complete surprise like the attack of July 18, 1918 at Soissons, usually succeeds.

Therefore, as surprise is necessary for success and to be surprised is fatal, one must know of the enemy:

Who he is (organization, quality and training of troops)

Where he is (dispositions on ground)

What he can do.

Without this information, a commander is almost helpless. Especially is this true today. No longer is it merely "cavalry meets cavalry and the fight is on." Mechanized, motorized, horse and foot units, supported by air, anti-aircraft and fire power from innumerable sources, make the enemy today a formidable power against which a commander is called to move.

But, if the commander knows his enemy, where he is disposed and what he can do, the tremendous power at the commander's disposal enables him to use his troops and the ground so as to surprise and overwhelm the enemy.

Accordingly, the basic elements, success or defeat, lie for the most part in the hands of the S-2, assuming that the colonel has the will to succeed.

Let us assume, therefore, that you have just been called from command of a platoon, company or troop and made the S-2 of your outfit. The war is on and your unit is moving toward the front. Of course, everyone knows in a general way about combat intelligence. But suddenly face to face with the job of organizing a unit to do it, you will cast about for some first-hand advice. Here, then, is the advice of one who, as you will have to do, started from scratch, and was the S-2 of an infantry regiment in the First Division. To the S-2's of the next war this book is written.

When action becames imminent, you will have no time for the "Post Exchange" or "Camp Welfare." Yours is a full-time job, twenty-four hours a day, and only if you, yourself, and your detail are well trained, well disciplined and expert in the work, fully equipped with much more than the tables require, can your work be successful.

But it is fascinating work. You go everywhere, know everything and everyone. You get information from every source and are constantly piecing it together to make a picture. True, there are new methods, new weapons and new tactics, but battlefield intelligence is no different because of these. It merely takes them into consideration. It is an art unchanged and unchanging in principles and methods. You, as S-2, have a tremendous responsibility and a marvelous opportunity. Yours is the "finest job in the world!"

II

PICK YOUR CREW

How THEN should you, the newly appointed S-2 of your regiment, prepare yourself and your detachment for the arduous duties and sudden changes and opportunities which will have to be met in combat?

The most important, the most vital action that you will ever take is the selection of the men who will do the work. Picking men for such highly-specialized jobs will either make a success or failure of your own efforts. You must fully recognize what they will have to do and that they will have to do it alone and particularly without you. If you see them once a day, you are lucky. In action, you cannot be present to guide your little flock. They have to go on their own. Battle is quite the reverse of maneuvers. In maneuvers the colonel, executive, S-2, S-3, S-4 and several others cluster around the command post so as to produce perfect, nicely typed responses to any problem.

In action, it is quite the contrary. A sudden situation arises, as it did so often in the late war, which demands immediate action by your regiment. Your

colonel is not at the command post. He is on one of his usual visits at the front, wandering around among the corporals, sampling their fare, swapping lies with the sergeants and talking to the men. By his presence, he builds their morale! The executive officer, if you have one that is any good, is back holding the hand of the chief of staff of the division. (The general is usually out swapping lies with the front-line sergeants about how they saw much more action in some other war.) You may have the usual type of executive officer seen in the late war. They were assigned to command rear echelons, be billeting officers or given some other inconspicuous job. In action a regiment seldom has two good men of high rank. Of the remainder, the S-4 is at the railhead or the distribution point or midway, fighting against insuperable difficulties to get food, water, ammunition and replacements up to where they are needed. By elimination, therefore, either you (S-2) or the S-3 have the job of running the regimental command post. You take watch on and watch off. Either you or he is asleep, eating or going some place. But one of you is *always* there ready, able and willing to act for and in the name of the commander of the regiment. That is your function. Therefore, when the emergency arises, you will be alone at the command post and will have to issue orders in the colonel's name.

In action you will have little time to bother with your detail. Your sergeant will often be acting S-2 when you are away or busy acting for the regimental commander. In battle an order suddenly arrives for your regiment to attack. You are the only officer at headquarters. You read and give the order, replace battalions in the line and make all similar dispositions. Your sergeant does the S-2 work.

Your observers function on their own initiative all day long. Seldom are you able during action to reach the post. It is generally not until the next night that you catch up with them again. Consequently, as they will do most of your work, they can either make or break you.

In general, here are the broad qualifications of the men who will gather for you much of the vital information on the enemy and how you should select them:

You will probably ask for men from the companies. Forget all rank at the outset. Do not ask for sergeants, corporals and privates. Ask for men of any rank who the company commanders think would be capable to observe, collate, define and interpret the information and the actions of the enemy; as many as possible should speak the enemy's language. From them you will make, for the regimental unit, at least three sergeants and two cor-

porals. The remainder will be first class privates. You may also train and supply men for the battalion intelligence units. One man, your striker, will take care of you, for you do not have time to take care of yourself. What the company commanders send you may be the scum of every outfit, but, from them, you may be able to pick a balanced crew.

Just because a man is a good "spit and polish" soldier is no guarantee that he is the best for this job. Choose the kind who holds his head high, even though he may be expert at finding ways of getting out of every unpleasant detail and is a constant source of irritation to his company commander. When the time comes for you to select your detail, call for five men from each company. There is no use asking for the "best," for in peace time you will invariably get the ones the company commanders want to get rid of, the bums, drinkers and troublemakers. But among them you may find the individualists who will turn out to be the aces of your outfit in battle. Pick the kind who think they know more than you do. They will give you nothing but grief when you are *not* in action. They may run amuck, indulge in all the lighter vices and be a source of constant irritation to the powers that be. But in action they function. You do not want anyone who has to be told what to do. You want "selfstarters" who "know" what to do. Before the

regiment goes into action for the first time, you can get all of this type you want. Grab them quickly, for some day the company commanders will realize that these are the real battle soldiers. The "buck" who does right-hand salute and never anything else until he is told, is hot stuff in peace time to the company commander. Let the C. O.'s keep them, and you take their problem children. Either they are no good or they are world beaters—you can soon sort them out. Send the rest back to their companies.

Your outfit seldom does "drill," "maneuvers," "kitchen police," or "guard," and they may lack many "soldierly attainments." They are looked upon as "loafers," "bums," "coffee coolers," for they do not do the usual training. When out of the lines they seem to the others to lead "the life of Riley." But you and they will find this time only too short to prepare for the next action.

Now a few notes on the individual jobs and the qualifications of the various individuals therefor:

You will need a staff sergeant who is, if at all possible, also an interpreter. When you find just the right man, have him "made." His selection is the most vital one you can make. He should be able to examine prisoners and documents. In addition to this, he will be your "top sergeant," will have to keep your records and write your reports.

In your frequent absences from the command post, he will have to judge the importance of information he receives. On his own initiative he must transmit it to those who should receive it without waiting for you to return. You cannot and never will be at the command post twenty-four hours a day. Remember, he is your second in command, he often is "acting S-2" reporting directly to the colonel and to the division G-2 whenever you are asleep or on a more vital mission. He must be able to do this part of *your* job.

The second most important man is the sergeant in charge of your observation post. Bear in mind what this man has to do and select him accordingly. At midnight you give him the plan for the next day, *two* copies of the map of the terrain, as much detail as you can about what our troops are going to do, and what you will want to know of the enemy. That is the last you will see of him. He gathers up his detail and disappears into the night, stringing a telephone line as he goes. In an hour or so your telephone rings. It is your sergeant saying that he is at such and such a point, dug in with good observation except behind certain obstacles. He'll ask you to see if the observers of the units on the right and left can cover in these defiladed places. You check with the units on the right and left and let him know the results. If some vital area is still

uncovered, you may tell him to send out a sub-observation post to cover it. That is the reason for the second map. He then reports to you, by telephone, everything he can make out in the darkness. As soon as it becomes light enough for him to see clearly, he reads off to you a full description of the terrain. You, with your map in front of you, mark thereon each item. This continues all day.

Now, if your unit is attacking, this sergeant will have his sub-observation post ready to move forward. He will have selected the spot and, as soon as he sees that the forward troops have reached it, he will leave someone in charge of the first post and himself take the detail forward to the second. This detail will string telephone wires as they go. On reaching the second position your sergeant will decide if it is satisfactory and then telephone you, giving the new location and the defiladed areas. He will request observation on these from the right and left and finally order his rear echelon to close the first post and come up to the second.

You have selected the two key men of your organization. One runs your office and the other the observation group. This will leave you free to do the real work of the S-2, which is explained in later chapters.

The third man is "sergeant topographical

draughtsman." He keeps all your maps up to the minute, supplies everyone with maps and aerial photographs and acts as relief for the "staff sergeant" in running the S-2 office. Get a good draughtsman and teach him the rest; for the ability as a topographical draughtsman, who will have to work under impossible conditions, is too much of a job to be taught in your limited time. He also keeps the one copy of the secret code which is issued to your regiment. Of course, you as S-2 will acknowledge receipt of it for your colonel and note that "it is always to be kept at the command post in the custody of a commissioned officer." You are responsible for it, but, as you are often away from the command post or busy on other things, you turn it over at once to the sergeant draughtsman, who keeps it for you. He does all the coding and decoding of messages. You are merely responsible!

The sad case of the S-2 officer who took too literally the code keeping instructions and was captured during an emergency visit to the front, made the logic of this quite apparent. He had gone off in a hurry and had the code book on him when captured.

Now as to the remainder of your crew: Tables of organization are changed from time to time. Experience in the late war showed that a well-

balanced crew of about twelve men actually functioned well in every kind of action. Two sergeants, a clerk and your striker will be at the command post. A sergeant, two corporals and five men are a balanced crew to operate one main and one advanced observation post. In addition, you will most likely have to train groups for the battalions.

Every man must be an observer because replacements must be present when a man goes out of action. There was an observation post in the last war which was manned by one good observer, a lineman and two runners. A direct hit disemboweled the sergeant observer. All observation ceased until the S-2 could be located and work his way out to the post. For about an hour the regiment was blind. Thereafter, it was in an equally bad predicament, for, while it had observation, it had no S-2 to interpret. The observed information was of no use until it was interpreted from existing data, and the S-2 had not trained his sergeant to interpret for him. This and other experiences prove that every man in the observation post must be able to fill every job and that a competent S-2 office must function continuously at regimental headquarters.

Now as to your other men, care should be taken to select them with this in view: First, they must be the self-reliant, self-starter type, as explained

above, and in addition must be able to see things at night almost as well as in daylight. Send back those who cannot.

Second, you and every man of your detail must be able to read an aerial photograph or a map as readily as you can read your home-town newspaper and know at a glance what is going on. This can be taught to receptive soldiers in a month, while others can never learn it. It is a matter of selection of men and minute training. Send back those who cannot.

Third, each one must be a natural-born observer whose instinct is to note details as a hunter notes tracks, trails and movements in a landscape.

Fourth, all must be able to connect these two traits: to note a distant movement and point immediately and unerringly to a point on a map where it occurred.

Fifth, all must know the hundreds of items which are necessary and their relative importance in developing an estimate of the who, where and what of the enemy.

Sixth, you and every man of your outfit must be expert in the use of the Morse Code. When all lines are "out" the observation post reports by blinker or sends a man back over the hill to report by wig-wag flags. In the evening, enemy communiqué in Morse Code is often of great interest.

Seventh, each man of the detail must understand and be able to fulfill the basic duties of the observation post and the S-2 office of regimental headquarters; each must be utterly self-reliant, self-disciplined and eager to assume full charge in a competent and purposeful manner. The S-2 seldom is with his detail; he has other duties and his detail must work without his direct supervision. Often they work in two echelons; some are always asleep or gone to bring up rations or away on some other mission when a sudden event happens. Whoever is there must be ready, able and willing to act for the S-2.

One of your most important selections is your own striker. He must have all the above qualifications. In addition, he must be ever watchful for your safety and comfort. You never have a chance to figure how to get food, water and sleeping accommodations. Your time is fully occupied with other duties. Unless he has everything ready for you at the moment you want it, you must do without. In the late war, one of the most successful strikers was a former state senator; he was accustomed to taking care of himself, and that is the type you want.

Finally, most of your detail must be able to crawl forward into the enemy lines. Basically, all raids are made by units from companies. It is a battalion

function. You and your unit have only a supervisory interest in the conduct of these frontal intelligence raids. Usually, the battalion S-2 sees to it that one of his "observers" is attached to a raiding party. Once in a great while you attach one of your men to a battalion raid for the purpose of securing documents. But in ninety-nine out of every hundred raids, you and your unit take no part. There comes a time however, in every campaign, when the information of the enemy is of such vital importance that it transcends everything else. This is usually at a time when your regiment has suffered about sixty per cent casualties; you have the remnants of two battalions spread over what was a regimental front, and the evidences of a counterattack appear conclusive. Unless your regiment is able to secure the heights, the counterattack is certain of success. At that time the colonel expects his S-2 and some of his men to volunteer. Their function is simple in outline but requires the utmost skill in operation. You crawl out on lines prearranged, and by prismatic compass creep around, behind and in front of the enemy advance posts. You avoid every contact. You do not fight! You note the location and strength of every post and unit. Upon your return, you prepare a sketch of the enemy's forward positions in such detail that the colonel can order assaults which will gain major

objectives. In the late war, such a party went forward and made the great mistake of thinking itself a combat patrol. They met and defeated an enemy patrol, returned with no information but gave away the location and intentions of their own unit.

This is a particular type of work, highly skilled and successful only after extensive exercises. Only those whose training is of the best, whose technical knowledge of terrain and map exceptional and whose morale is of the highest are able to perform this mission. Remember, you lead this party!

III

LEARN YOUR JOB

BACK ONCE MORE to the beginning. You have just been appointed S-2 of your outfit, and some sixty soldiers are going to report to you tomorrow morning for training. You know that you have a very short time before your outfit will come in contact with the enemy. All you have to do is to teach yourself and your detail what there is to know and do, select the best men from the group and move out.

This may sound simple, but try it once and you will find that there are not enough hours in each day and night to cover it all. Before the men from each company report for training you must procure, by hook or crook, several copies of an aerial photograph mosaic of the area in which lies your camp and several copies of a contoured map of the same area, several prismatic compasses and a telescope or pair of field glasses. In addition you must have a field mapping board (small drawing board will do), a stereoscope and a hand level.

The basic instruction starts with reading aerial photographs and maps. Unless every man of your

detail can read a map or aerial photograph and point unerringly to places on the map where events are happening, he will be of no use to you. A simple means of teaching this, which proved effective, is to begin with an aerial photograph. Take your detail in small units up to the highest hill, tower or building in the vicinity. Then show them the aerial photograph. If you can get up high enough the photograph will seem real. Point out to them the various features on the ground and make them find them on the photograph. Continue this over and over again until each is letter perfect. Then leave a small group at this observation post with instructions to observe your actions and note them on the photograph. Taking another photograph with you, conduct the remainder of your party from place to place on the terrain. Mark your route as you go. Do things at marked locations, such as setting-up exercises here, stacking arms at another, leapfrog at a third, skirmishes at a fourth (carefully marking extent of flanks) and so forth, until you return. Then gather your whole unit, put both photographs on a blackboard and make each man compare the two and point out the inaccuracies.

You must then repeat, changing crews, until each man has had several chances to be observer. Then alter your terrain and repeat the process. Then detach yourself totally from both operations and have

your men repeat on wholly new terrain. You continue this every day until your men are all expert in observing and able to locate on the photograph the exact point at which the action took place. Then comes the more difficult job of doing this at night. Only practice will make your outfit perfect in this.

There follows the second step in instruction. This time you take your whole group in the field. With an aerial photograph and a hand level you stand at an initial point (the low spot) and, using the hand level, station soldiers around the perimeter on positions where their shoes are just five feet (eye level) above the low spot. You do not do all this yourself; you make each man take his turn. When you have completed the circle, you have each man's position located accurately on the aerial photograph. Then each man is moved half way to the next man at a point where his feet are just five feet above the low spot. These second positions are then accurately located on the aerial photograph. Sometimes a steel tape and compass are necessary to determine a location. When all the main terrain features of the perimeter have been located, gather all your unit around you at the low point and draw a line through the points, five feet above the low point, making proper allowances for ravines, etc., which are apparent. You then explain this as a contour line. Then station yourself or one of

your men at a convenient point on this five-foot contour line and, with the hand level, again station men with their shoes five feet above the first five-foot contour. You may have to use several points on this first contour line to establish the ten-foot contour points of the area, but in principal the theory is the same. You then repeat the process of going to the low point and marking on your aerial photograph the ten-foot contour line. After this is done you will locate the fifteen-foot contour line and will continue as long as practicable. Remember always, this is instruction in what contours mean. Make every man do every part. Get yourself into an advisory role. Make your men instruct themselves as soon as possible and your worries are over. Self instruction is the best, quickest and helps to eliminate those who cannot learn. You will not have to pick out the "duds;" everyone in the outfit will point them out to you.

By now they can read terrain features on aerial photographs and can place contour lines on the photographs from field observations. You next instruct them in the conventional signs used on maps to indicate these terrain features. When this is done, have these marked clearly on the photograph. Then place a piece of tracing paper over the photograph and have all the details traced just as they would appear on a map. In fact, your men are

creating a contour map of the area. The next step is to explain that a contoured map is in reality an aerial photograph, on which contours have been drawn and from which most of the distracting detail has been expressed in conventional symbols.

Supplanting the map for the original aerial photograph, you must start your observation practice all over again. This time your observers must mark on the map, but otherwise the routine is the same. All that is necessary is to repeat this daily, always changing details and terrain, until every man is perfect in his observation and location either on aerial photograph or contoured map and on a constantly varying terrain. This method of instruction worked; it was found to be the quickest and most assured of success. As a result, you will have some who can read maps perfectly; the remainder, who are of no use to you as observers, you can send back to their companies.

Meanwhile, you will have sent your men out individually with a map, to follow a written compass course first by day and then at night and report to you all they saw along the route. Needless to say, you will have "planted" the route with every type of military information so that no good "observer," who could follow a compass course, would fail to note the various items of military information while making his tour. This, repeated nightly, always

over a new terrain, will soon show up those who can follow a compass course, can see at night and are capable of observing items of military importance.

A favorite trick of a British intelligence school in the last war was to load up a truck with all the students at about 4 A. M. All matches were sequestered, and one by one the students were dropped off with a compass and an envelope. As dawn broke, the student was able to read the envelope which merely stated, "Proceed at once to 274.6—827.8." Inside the envelope was a map. Without their knowledge, the students had been dropped at points on the perimeter of a circle whose center was a cozy "public house" in a small town. As each student arrived at this point 274.6—827.8, he bought a drink for all who had arrived before him. It was a very effective method of demonstrating to each his relative skill in map reading. Search parties had to be sent out for some of the students.

Send those who cannot observe by day and night back to their companies. You will have hard enough work to teach those who remain the manifold tasks which await them in action.

From now on, you make it really interesting to them by explaining what the colonel and the division G-2 expect of them. In action of any kind

it is almost impossible to get information from front to rear. Every man is facing the enemy. Word goes forward but none comes back. Platoon, company and battalion commanders, once they are in contact with the enemy, forget all their training about sending in reports. The only time the regimental commander ever hears from them is when they want something. The universal attitude is, "Let the old B—— come up here, where the bullets are whistling, if he wants to know where I am and what I am doing." They capture prisoners, make identifications, learn of enemy plans but never think that what they know is of interest to anyone but themselves. After the first day at Soissons, the S-2 of a regiment found a front-line company commander bitter at being held back from crawling out to obliterate a freshly dug-in machine gun position. The commander had carefully sketched the position on a message pad but had never thought of sending the sketch back. His attitude was typical of all good soldiers. He had found the enemy through risking his life to get there. If anyone else wanted that information, that was the way to get it.

The intelligence detail of battalions and regiments must be schooled that their duty is only half done when they obtain information. The other half, which is equally important, is sending the information to those who need or can use it to best ad-

vantage. That is their function; everyone alse faces the front. Mentally, you and your men are over behind the enemy lines, looking from his side toward your own rear. The intelligence personnel are the only people on the battlefield who think of their friends on the flanks and in rear echelons.

And "friends" they must be. The division G-2 and his whole staff should make frequent visits to each regiment. These are not inspections but intimate visits. You gather your battalion S-2's and their outfits together with your own outfit. The G-2 arrives with his entire crew, and the better part of a day is spent in discussing the enemy, what is known of him and what must be found out. Everyone who is charged with intelligence duties in a combat unit must know and be well known by everyone who is doing intelligence work. Every man in your regimental detail must know the division G-2 as a co-worker. Sometime, when you are away, a man of your group will be in charge of your office. Something vital will happen. Your sergeant or corporal will grab the telephone and get the G-2 at division. They must know each other. How can a man understand a telephone conversation unless he knows well the person who is telling him of what he has seen? And how can any soldier explain to a lieutenant colonel of the general staff a minor movement of the enemy, un-

less he feels that the man he is talking to knows him as a friend and is as deeply interested as he in the slightest movements of the enemy? Every man in your regimental unit must know every man in the divisional intelligence unit as well as every man in the three battalion units and also every man in the intelligence units of the other regiments of your division. Intelligence is a fraternity where all work to help each other. Rank means little; your corporal may dig a lieutenant colonel of the general staff out of his bed to give him some local gossip which may change the course of a campaign, or the lieutenant colonel may have some hot news and only your corporal is there to get it. Nothing is more vital than that all the intelligence personnel know each other. True, each man is working for his immediate superior, but men on intelligence work must never forget that they have two "masters," their own and the next higher echelon.

Instruction commences with the hundreds of items which, if known, will tend to lift the veil from the actions of the enemy. You teach them what to look for. You teach them all you know of the enemy's organization and tactics so that when they see a group forming for counterattack behind a hill (with "X" men, "X" machine guns and "X" mortars), they can estimate with accuracy that one, two, three or four battalions are forming.

From the G-2 of the division you should obtain a complete description of the enemy uniform and all the marks of rank and distinction. At the most, he may furnish you with uniforms of the various units likely to be encountered, so that you might stuff them and lay them out for your night marchers to observe. At least he should furnish you with his guess as to what units you might encounter. But in all circumstances, he has sufficient data available for you to instruct your men how to read the name, rank and organization of a dead enemy.

The first of the enemy you may meet will probably be dead. Remember, the G-2 of your division will be panting at the end of a telephone for the information (regimental identification) of these first dead. Your duty is to obtain identification of their regiment and to send the word back to G-2 of division by the quickest possible means.

Then there is the question of enemy documents. You must teach your men the various classes into which these are divided by their importance to your own and the higher command and the danger of their loss if "souvenir hunters" are permitted to steal them. On coming across enemy dead or prisoners, your men must be expert in searching first the officers, then the sergeants and lastly the lower ranks. They must know where to look and what to look for.

First of all are enemy field orders, combat messages and operation maps. These are usually found on officers. Every man must be able to pick an enemy officer at sight. Sometimes these are also found on sergeants, so they too must be readily recognized.

Second, are the personal but official service records, identification markers, pay books or whatever that particular enemy uses. These too are usually carried on each soldier and generally in the same place.

Third, are the purely personal effects which fall into three classes: diaries, usually forbidden but almost universal among some troops; letters from home; and money, charms, keepsakes, photographs, cigarettes, tobacco, pocket knives, razors, emergency rations, etc.

Fourth, is the military equipment of the dead or captured soldier.

All of these are of relative importance, either to your own command or to the G-2 of your division; so your outfit must be instructed in how to look for each category, why it is important and how it should be handled.

Field orders, combat messages and operation maps are of the first importance. They must be sent by messenger to the S-2, for hasty examination by him and then for speedy shipment to the division G-2.

They tell what the enemy is going to do. The soldier who rolled over an enemy lieutenant's body and found a map with directions for three regiments in an attack, saved his regiment from annihilation. When this information reached the G-2 of the division, the attack was smothered by artillery fire.

Official personal records which assist in identification of the enemy should be sent through the S-2 to division G-2 with the least delay, for their meaning may only have importance at higher commands.

Personal effects fall into two classes. A diary or letter from home will inform the G-2 of the past movement of the enemy unit and the morale of the troops and people. It should be handed to the escort of prisoners or sent back as the effects of the dead through intelligence channels.

Enemy equipment is often of great interest. A gas mask may show a new type of gas not yet released; new anti-tank or anti-aircraft weapons may indicate changes in tactics. Therefore, your men must be taught to look for new items of arms and equipment and report these or send back specimens whenever they appear. Enemy aircraft which falls in your area is of vital importance. Your men must seize the plane and insist that the local commander place a guard to prevent souvenir hunters from

wrecking the machine. Likewise, enemy ordnance, when captured, is often of great importance to the high command. Especially is this true of captured cannon and shells, anti-tank guns, tank mines, gas projectors, gas shells, anti-aircraft guns, anti-aircraft shells, etc. Unless protective measures are called to the attention of unit commanders, there is a universal tendency for the infantry who capture artillery positions to turn the guns around and fire off all the ammunition. This, of course, serves no useful purpose except to gratify the retaliatory spirit of infantry who have long suffered enemy shell fire. However, it defeats the purpose of the intelligence section of the artillery or Ordnance Department whose duty it is to learn of the enemy's arms and ammunition. The inspection of a captured enemy battery position disclosed, from the unfired shells, that a substitute and inferior metal was being used in the fuses. This accounted for the large percentage of duds in soft ground. Therefore, you must school your men to call upon local unit commanders, in the name of your colonel, to stop the reversal of the guns and place a guard over the ammunition until the artillery unit S-2 has taken over.

The final instruction is how to handle enemy prisoners of war. There is a technique which produces results. You must instill in all your men the

absolute necessity of obtaining information from enemy prisoners. Assaulting infantry troops of your own regiment see in prisoners the people who have been shooting at them for many days and may visit upon them their resentment. To do so only hardens the prospective "fountain of wisdom" against any voluntary offering of news. Teach your men to remember always that the captured enemy soldier has not eaten for at least twenty-four hours, has marched for many a weary hour on an empty stomach and has looked death in the face. He has seen the climax, the barrage, the sudden thrust, the terror of death by the bayonet or knife (for which his propaganda had prepared him). Now he is a prisoner and feels the sudden release from the fear of throat-slitting to which he had been schooled. There comes a moment at which he believes he will live and that you are not going to kill him. The war is over for him. He may eat regularly once more. At this moment he will gladly unburden his mind of all that he knows. It is a natural reaction. School your soldiers in how to make the most of it. Prisoners will be brought to the regimental post in mortal fear, for the area in front of the command post is usually swept by fierce fire.

The regimental command post, to be effective, is usually somewhat sheltered so that it can function.

Here, the interpreter will take over the prisoners. The escort will turn over the documents and drop back into the scenery. The greatest success in the late war was obtained by the interpreter sergeant who sat them down and gave them hot coffee and cigarettes. He sympathized with their terrible experiences before being captured and told them how fortunate they were that, for them personally, the war was over. He then listened. With the cigarette there usually comes a volume of detail most of which is of no consequence but some of which is of value. Your interpreter must learn enemy military language, slang, tactics, arms, equipment and what you want to know. On your best map of the enemy positions they may point out several startling additions.

Teach your men, however, not to delay these prisoners. What you want to learn from them is only local details. If you can get them back to people who can really question them on strategic data, before the shock of battle has worn off, the G-2 may get valuable information. Your interpreter will make a record of the information he received and send a copy back, together with the documents, to the G-2 of your division.

Meanwhile, you must teach your men every means of communication. This commences with the keeping of records of everything observed, the

log of the observation post, sketches of terrain, conventional signs and, most important of all, the writing of messages. This is followed by instruction to the point of expertness in the Morse Code, sending and receiving at night by flashlight and by wigwag in daytime, the care and use of carrier pigeons and, finally, practice and complete familiarity with telephone equipment. Each man of your detail must be expert in the field repairing of telephone wires, switchboards and instruments.

But, above all, the whole intelligence outfit of a division must know each other well. Your division G-2 will hold frequent conferences, not only of the officers but also of all the men. He must get to know them, for some day he will receive a call, "Say major, this is Sergeant X; two battalions are forming up behind those woods." If he knows that sergeant, he will be able to act more intelligently on what he hears. Similarly, you must constantly draw in not only your battalion S-2's but also their complete units. You and all your detail must know every man in the battalion details. Much of the information you receive is from them. Now to evaluate information you must know your man. No two men report the same circumstance in the same manner. The reports of some individuals must be discounted while those of others must be amplified. Remember, men in action are not movies

with a sound track. They are very fallible individuals, tired, hungry and always scared to death. All their reports must be interpreted with this in mind, and you must know your men and they must know you. Unless they know you, and know that you will back them up, they are likely to forget you in action. You must instill in them that they are doing the S-2 job for you. Constant and very frank conferences with all the regimental and battalion intelligence units assembled, with the instruction carried out by sergeants and corporals on the details of operations, did and will give the best results.

You now have covered the bare essentials, have been able to eliminate the unfit and should have about one-third of the original sixty still with you. Of these you will keep half and turn over the others to the battalion S-2's, who will use them to form the basis of their units. These men will also be your reserve to replace casualties.

One final admonition you must give them all, however, is that their value to the regiment is that they are not actual fighters. To be successful, you and your men must avoid the temptation to be "shock troops." You carry arms but only for self-defense when cornered. You avoid personal combat. There is the famous case of the war correspondent at Cantigny who became a "combatant." In the rough and tumble of early dawn, he carried

a litter three times back from the most forward position, captured several prisoners but was totally unaware of the fact that he had been in Cantigny. He literally saw nothing. Your job is to see everything and, as you will never have time to look yourself, your men must do it for you.

Your own job is to represent the enemy at your headquarters. You are the only one there who knows who he is, where he is and what he can do. And, for the most part, you usually know more about the location of your own forces. As a result you, the staff officer who is most often found at regimental headquarters and who has the most accurate idea of what is going on, are usually the one who has to make decisions. You do not command an infantry regiment, but at least your job is to have a big hand in running it. There is no better job in action.

IV

EQUIP YOURSELF

YOUR EQUIPMENT is of three parts: your observation post, your S-2 office and your own personal equipment.

Your Observation Post

No observation post detail can possibly carry on their backs all the equipment necessary for a post to function. Your men have to run their own telephone lines, dig themselves in, conceal themselves and live for a day or so on the rations and water they carry with them. In addition they will have a heavy telescope, several pairs of field glasses, a sending flashlight and all their personal equipment.

Under no circumstances can your observation post detail be separated in action for one moment from their equipment. No part of it can be placed on any conveyance unless the whole detachment is also on that conveyance. Remember the fate of the observation post of a regiment of the First Division in the attack at Soissons. Their heavy equipment was relegated to the "regimental headquarters" escort wagon which was lost for two days. They functioned, as best they could, by plain un-

assisted eyesight, until they captured a German "Zeiss" telescope, used runners in place of telephones and lived through miraculously without tools to make shelter for the first twenty-four hours. Thereafter, they acquired a conveyance, loaded it with their gear and never let it out of their sight.

Some sort of a hand cart is absolutely necessary. If none is provided for in the tables, you should immediately improvise a two-wheeled cart which a man can push over almost any terrain. Never permit any part of your observation post equipment to get on the wagons. Remember, when the signal wagon of the 26th Infantry overturned in a swamp the night before the Soissons attack, the regiment had no telephones for the first twenty-four hours. Thereafter, they always carried all their equipment. So you must be guided accordingly and get a cart.

No cart being available, a regiment of the First Division in the late war found a baby carriage. It worked beautifully. It was just large enough to carry all the necessary equipment and light enough to go anywhere. This baby carriage was taken for granted by the regiment but caused trouble with corps and army inspectors. Everyone in the division knew when it went by that there went the eyes which had picked up in time and thus prevented three counterattacks at Cantigny. It was famous.

One day an army inspector stood watching the regiment march by on its way into action. The leading battalion went by carrying odd looking, extra equipment which was not in the manuals. The inspector stood it in silence, for the unit already had a good record. Then around the corner came one soldier pushing a baby carriage, festooned with twelve packs and loaded with odd looking gear; behind it marched eleven soldiers smoking cigarettes. The army inspector turned purple with rage and almost burst with anger. Audible were his oaths and remarks about courts-martial. He did not realize that he was looking upon the most efficient and admired observation post in France.

So get a cart or some substitute. In action, where there are no inspectors, you will be able to have an observation post that can function. The following is the equipment with which the vehicle should be loaded:

1 field telescope
3 field glasses
2 small drawing boards
3 field telephones
telephone wire (as much as can be carried) and friction tape
2 engineer shovels
2 engineer picks
1 axe

8 canteens (extra)
2 rations complete for each man (canned beef and biscuits)
4 watches
1 stereoscope
6 prismatic compasses
2 notebooks, ring binder, letter size
4 ponchos
2 flashlights with extra batteries
6 candles
1 camouflage net
2 sets of wig-wag flags

After your first engagement you will have no trouble about your vehicle. It will be respected as the eyes of the regiment, for there is no other way of moving so much equipment forward over broken ground at the psychological moment when observation posts must be moved on to the next crest.

Your S-2 Office Equipment

Draw a standard field desk and load it with the following:

small atlas of the world
map of the entire theater in which you may operate
dictionaries of all languages you may meet, both allied and foe, together with military expressions

pictures of enemy uniforms and markings of rank
tracing paper, carbon papers, typewriter paper
pencils (black, colored and indelible) and erasers
magnifying glass and stereoscope
map measuring equipment
3 letter files with 26 compartments, A to Z
3 ring binders, letter size
a small size Corona typewriter
scratch pads
flashlight (large with extra batteries)
6 candles
alarm clock
conversion tables, feet and inches to meters, shadow heights
table of organization of the enemy army, list of units, names of commanders, etc.

Get an 18" x 24" drawing board with lots of thumbtacks and tracing paper. Have a waterproof canvas cover made with a shawl strap and handle.

Your Personal Equipment

Based on fighting in northeastern Europe, which is about the same as northeastern United States, you will want the following equipment if you expect to fight in similar areas:

a. Shoes: Two pairs, about one and a half sizes

too large so that when your feet swell in the damp cold you can wear one pair of wool socks and still leave room for your toes to move. Get stout shoes with the heaviest soles you can find. If possible, buy "Phillips Military Soles, A-Stout" from London, England, and have them attached to your very thick soles.

b. Socks: Three pairs of one-half wool, one-half cotton "issue socks."

c. Underwear: Buy yourself two suits of the softest, thinnest, warmest, most fleecy long-sleeve, long-leg underwear. You will have difficulty finding it and will be horrified at its cost. You may pay $30 per suit, but buy the *best.* You will never regret it!

d. Shirts: Get four khaki poplin shirts that fit you and, when freshly laundered, will grace any festivity. Remember, troops in the field of battle wear only field uniforms but, without warning, may have to dine with many-starred generals, diplomats, presidents and kings. The white shirt and white collar are never worn, but your field shirt must be suitable for the front line or a royal banquet.

e. Uniform: You will have only one uniform. It will have to be adequate for all occasions. Get the best uniform you can buy, cut by a tailor who understands anatomy and how the human body works. Try it on in every possible position, from

mounted to sleeping, so as to assure yourself of a job that will come out of ten days of swimming rivers and sleeping in shell holes and still be presentable at a banquet. Only the best cloth, well cut and tailored, will suffice.

Now, as to odds and ends, your one piece of major equipment is a *prismatic compass.* Do not wait for Congress, G-4, the Corps of Engineers, the supply officer or any other dignitary to supply you with a prismatic compass. *BUY ONE!* It is the absolute necessity of your office.

In action you will find that you will be effective if your "kit" is well selected. You have three main subdivisions of your personal equipment.

In the first place, that which you carry with you in action. This is all you are certain of seeing from the day you move into the sector until the day you are relieved. It must contain the essentials not only of your personal livelihood but also of your office. In other words, you must be able to go forward for a week or so with this and nothing else.

Secondly, there is your bedding roll. It lives with the other regimental headquarters baggage, on some sort of a conveyance which is of such little importance in action that it must give way to every other piece of transportation. You may therefore go for several days without your bedding roll. This, of course, is most unpleasant and uncomfortable.

Therefore, make your bedding roll so small and so light that your striker can go back to the wagon train and bring it up on his shoulder. A few pounds one way or other, and, more important still, keeping down the diameter, may be the deciding point as to whether you sleep in your overcoat on the ground or in a sleeping bag on a mattress.

Then, thirdly, you will have a government locker, trunk or some smiliar storage arrangement. This is packed up and sent to a depot in the rear a day or so before you start moving forward into action—you may see it again in a month or so—it is merely "dead storage."

Bearing these considerations in mind, you should discard all nonessentials and pack four units about as follows:

I. What you will always carry on your person:
   - 1 wrist watch
   - 1 good pocket alarm watch
   - 1 prismatic compass
   - 1 hand level with quadrant
   - 1 canteen and cup
   - 1 pistol and ammunition
   - 1 first aid packet
   - 1 field glasses, 8 power with mil scale
   - 1 dispatch case with magnifying glass (with inch and millimeter scale) stereoscope, message book, pencils and carbon paper

1 flashlight (small but of a size for which batteries are readily available)
1 pair gloves, fur lined and waterproof

II. You must get a musette bag. This hangs on your right hip slung from your left shoulder. It should be waterproof and just large enough to contain the following:

1 stainless steel 3″ x 5″ mirror
1 tooth brush
1 razor (old-fashioned straight one that can be stropped)
1 razor strop
1 nail scissors
1 soap in metal or celluloid box (also used as dentifrice)
1 hair brush and comb
1 nail brush
1 shoe brush
1 Eau de Cologne (discourages cooties)
1 towel, bath
2 tin covered boxes of hard tack
2 cans of Pate de Foies Gras (just as nourishing as corned beef and lots more palatable)
1 toilet paper roll
1 boy scout knife (corkscrew, bottle opener, screwdriver, marlin spike, knife blade)
2 candles
1 watertight box of matches

1 small flask of spirits
1 pipe and tobacco pouch (cigarettes can seldom be smoked because most of your work is done at night)
3 extra batteries for flashlight in waterproof container
1 mess kit complete with knife, fork and spoon

III. These are the specifications for a complete bedding roll:

1 small (18" x 18") carpet (indispensable)
1 waterproof canvas container with flap which takes the place of a shelter tent
2 4′ folding aluminum supporting rods
1 6′6" x 2′0" x 1½" powdered cork, quilted mattress
1 6′6" x 2′0" soft fleece sleeping bag
1 aluminum collapsible stool with back
1 canvas wash basin
1 canvas bucket
1 small feather pillow in oiled silk case
1 large flashlight with 3 extra batteries of standard size
1 pair of socks
1 suit of underwear
1 o.d. shirt
1 pair of shoes

IV. Trunk to be stored at base. Everything else you possess.

V

OPEN WARFARE

THERE ARE SEVERAL unmistakable signs which herald the approach of battle. In the first place, inspections and reviews become more numerous and objective. Division, corps and army staff officers begin taking a decided interest in identification tags, condition of horses and supplies of arms and equipment. Secondly, the rumors become more fantastic and spread with greater rapidity. But the third and unmistakable sign is the arrival of the major commanding the battalion of 75-mm artillery which will be always with your regiment in "close support" or "attached."

In open warfare the action is carried forward by single teams. For the most part these consist of a regiment of infantry or cavalry and a battalion of artillery, some engineers and a few other small units. In the late war it was found most satisfactory to attach always the same units in every action, for the effectiveness of the team depends to a very large extent not only on intimacy of the various commanders with each other but also of the men themselves. Casualties cause strange things to happen.

In the battle of Soissons, a company of the 26th Infantry was commanded for the better part of a day by a private, first class, while the regiment was commanded by a captain.

This may sound irrelevant, but battle psychology is so strange that it is only when you know an individual well and for a long time that you are able to interpret his actions in the field of battle. An officer reports that he is all that is left of "C" Company. You know him and check only to find the company fighting well under a sergeant. The officer had concussion. Another instance was a captain in the 26th Infantry. About noon on the first day in the Argonne, he reported his company in the Exermont Ravine. The staff officer, who knew this captain well, pleaded in vain with the new colonel to wait for a confirmation. The staff officer was able to persuade the major of the artillery to wait, but the colonel telephoned in great pride to division. There G-4 ordered the rolling kitchens to move into the Exermont Ravine that night. But it was not until two days later that the ravine was finally cleared. Only by an intimate knowledge of the officers and men, not only of your regiment but of the attached units, and how they react under terrible tension, can a staff officer be effective.

The artillery, engineers and others must become

an integral part of your regiment. Their command posts are usually in your command post.

Parenthetically, there is one basic plan by which a command post operates. Yours is an infantry regiment. Your colonel (or whatever his rank may be) is in command. The moment he steps out of the command post *his* senior staff officer, be it the executive, S-2, S-3 or S-4, exercises command of the infantry regiment and of the attached units until the colonel returns. You may be a 2d lieutenant, S-2 of your regiment. There may be a lieutenant colonel of Field Artillery right there in the C.P. Remember always, in action as the representative of your colonel, you exercise command. If the artillery is in "support," that lieutenant colonel is a visiting "auxiliary;" if it is attached, he is simply another battalion commander. You are exercising for your colonel the higher (the regimental) command, and they are under your orders.

Very few units got into real open warfare in the late war. The experience of these few, however, is all corroborative. Control was the essential factor. The S-3 and S-4 had duties which often took them away from the control point. Likewise, the colonel tended to wander. The S-2, however, seemed to be the focal point of the command post. Axiomatically, once an officer leaves the command post he relinquishes his office until he returns. This

was a standing rule in the units which were successful in France. Those colonels and generals (and there were many) who thought that they had the command post in their pocket wherever they went, soon found themselves relieved. The unit must be commanded from a geographical spot where communications center. The staff officer, then on duty there, exercises command in the name of the commander instantly and without waiting to find the colonel. Unless this system is followed there is chaos. The examples of commanders going forward to fight as corporals and taking with them all authority are too recent to be forgotten.

From experience in every type of action, but particularly in open warfare, the S-2 must seize the major commanding the attached or direct supporting artillery and never let him out of his sight for long. Artillery functions best when it knows from moment to moment where its own and the enemy forces are. The S-2 alone has this information. The major conducts the firing while others supply the batteries and operate the guns and men. He can conduct the firing of his batteries best from the infantry regimental headquarters. This was proved so often in the last war that it is now a fact. Only when the teamwork of infantry and artillery is perfect can action be carried forward without staggering casualties. At Soissons, the artillery assigned

to direct support of the 26th Infantry failed to connect the two headquarters. The infantry went out ahead. All telephone equipment was back, sunk in a swamp. Not knowing where its infantry was, the artillery had to cease firing. And there was a regiment of infantry frantically battling forward with the artillery standing idle. The solution was found that day. Artillery battalion commanders moved in to infantry regimental headquarters. At times all the artillery of the division fired a particular mission. But as soon as this was over, the battalions were instantly returned to direct support of the infantry, and the battalion commander of the artillery seldom left the infantry regimental headquarters. Whenever he did, he left a competent staff officer there to represent him.

From the experience of the last war, it is evident that the S-2 of an infantry regiment must find and grow to know intimately the commander of the battalion of artillery which will be assigned to his unit in action. It should always be the same. They will work together as a team. The S-2 and the artillery major must eat, work and sleep side by side. The artillery observation post often sees things which the infantry post may miss. Then only will the combined "combat team" work smoothly.

Similarly, but to a lesser degree, the regimental surgeon is of value to the S-2 and should work with

him. The regimental aid and casualty clearing station should be close to the post of the S-2. Wounded, both enemy and your own troops, have the latest details of the actual fighting. Enemy prisoners carry in the wounded. Thus the path to the aid station is the one line of communication along which the prisoners will come.

So past experience shows that you must gather to you the artillery officer and the surgeon in order to make your office function well. You are the center of the command post in open warfare.

When you are moving up to a meeting engagement, the advance guard is spread out all over the landscape trying to find the enemy. You are at the head of the main body and your observation post is "leapfrogging" along from crest to crest roughly parallel with you, pushing its vehicle from one vantage point to another.

If the S-2 of the advance guard is capable, he will be on the lookout to get identifications, prisoners or documents. If for any reason he is not functioning, send your staff sergeant to accompany (but not be a part of) the advance guard. You, yourself, should always be with the main body. As S-2 of the regiment you must not get "lost" or involved in a meeting engagement. You must stay far enough back from the action so as to keep a perspective. You must always be in a position to

tell the who, where and what of the enemy. Remember, you are *not* a fighting soldier. The pistol you wear is for self-defense if you are trapped. There are thousands of officers and men in your regiment with a passion for slaughter. You and your outfit must curb all such sentiments. You are the eyes of the regiment. Your job is to see, hear, think and interpret and never get caught in a fight. Too many are the instances in the late war of colonels and generals leading their staffs into combat in the front-line fighting; there they could only act as corporals and should have been so reclassified.

At the beginning of your first engagement, you must bear in mind and constantly instruct your men that you and they are the servants of the fighting men. You perform a service for them. Your duty to them is to keep them advised. You therefore have three masters to serve: your colonel, the G-2 of your division and the lower echelons (battalion, company and platoon commanders). Whenever possible, you circulate among the latter and keep them posted as to what is going on. Remember, you can find out from division where the columns are. They may be near by or far away, and it makes a great difference to all in your regiment.

Your unit may be out in front and the flanking units behind. If your troops fully understand the

situation they can "take it." But too often, in the late war, uninformed units failed to press an advantage because they thought that they were far advanced when in reality they were actually behind. It is your duty to keep all your units informed all the time.

With everything ready, you are moving forward to your first meeting engagement. In all probability, you have been marching far too long at the head of the main body. Dead tired, crazy for sleep, worried as to where your observation group may be, and usually at that lowest point of human vitality, the hour before dawn, the odd quiet of the night will be broken by machine guns fired at you. Next to air bombs descending on you, this is the most unpleasant sound in all nature. Dimly, in the gray dawn, you can see the advance guards taking cover, hear the order given to the main body to halt and lie down. Right behind you should be your sergeant draughtsman with the situation map, aerial photographs, pencils, scale and small drawing board. He goes to work and marks on the map where everything is that he can see. Your office is functioning. Soon your colonel will expect you to tell him the who, where and what of the enemy. It is then, if you have a well-trained and skillful observation post, and battalion S-2's who are capable and know their job, that you will receive messages

telling you explicitly just where the enemy is, about how strong he appears and what defensive terrain he may be occupying. That is the function of your battalion S-2's and your observers. If you have trained them correctly you will receive such messages. As they come in your sergeant draughtsman notes them on his map.

Suppose then that this firing appears to be from an isolated rear guard post. You so advise your colonel and division G-2. The decision is made to push on. You check with your artillery officer to see that he has called off the prearranged barrage. The enemy post is wiped out, and the advance continues over the ridge. You find yourself in a more strongly-held valley. The reports you receive will soon show the strength, and your colonel may decide to break through.

Over the next ridge on the other side, once you have broken through, you may find a village. These are usually in the bottom of each valley. In open warfare, the civilians will not have been evacuated. There is much information available to you whether the inhabitants are friendly, neutral or hostile, but remember, they are not trained observers. Your most reliable sources are the best educated of the local inhabitants. What you want are identifications and battle information. Search out the following in about the order named: the priest, mayor,

postmaster, chief of police, town clerk and proprietors of the store and local hostelry; they are people trained in the study of human reactions. From them, you can learn of the intentions of the enemy, what kind of units had been there and why they had pulled out. No greater task ever falls upon an S-2 than the questioning of such civilians. They know much but do not know what is important. You must lead them on to disclosures of the information you require. Remember, always, that the civilian fears and resents the soldier. The fact that you wear a uniform, have a pistol and seemingly thousands of men will do your slightest bidding, that they believe soldiers are given to murder, rape and pillage and that you seem to be aiding and abetting this, may make civilians terrified and afraid to talk. You must calm their fears and gain their confidence. Only by so doing will you be effective.

One further source of information of the enemy is available. The telephone or telegraph office, any place he may have used as a temporary headquarters and any dead or wounded he had to leave behind may give you some information. On reaching a town, those of your men who are not actively engaged in observing must search for documents of the enemy. They must know where to look and what to look for. They must act fast before the infor-

mation is lost or destroyed. Sometimes a counter-attack by the enemy will drive your troops out of a village soon after the advance guard has seized it. Perhaps there was a hastily evacuated enemy head-quarters there. By quick work your men can scoop up all the papers and get them back to you before your own advance guards are driven out.

Now, in open warfare, from these sources and your study of the map of the terrain, you must sum up and determine who the enemy is, where his main body is and what he can do. It will take every ounce of energy, ingenuity and resource to build up the picture. Your regiment may have stopped, the soldiers become sleepy, but you are still hard at work trying to piece together a bit here, a fact there, so as to make a theory as to the who, where and what of the enemy.

In withdrawals or rear guard actions, your men function relatively in the same way as in meeting engagements. Naturally, the general movement is reversed, but your battalion units and observation post are still of vital importance. From them you will be able to gain constant advice as to the move-ments not only of the enemy but also of friendly units on your flanks. Both are vital in rear guard actions. Your observation posts must be echeloned in depth so that, as the forward one is forced to close, the rear one can take over.

You, yourself, are constantly at the regimental command post so that you can keep in close touch with battalion S-2's, your observation post, the division G-2 and the units on right and left. Your main effort must be to prevent surprises, particularly on the flanks. You must keep an objective point of view.

The few isolated and seeming irrelevant facts you have gathered may seem of little value to you and your colonel. Send them as fast as you can to G-2 at division and to the regiments on your right and left. These regiments have sent runners to your headquarters for such reports. Somewhere along the line, like a kaleidoscope, all the details will fit together to make a picture. The curtain will rise. It may possibly be in your headquarters. Suddenly the enemy will appear as though a fog had lifted. There he is, so many troops, and this is what he can do. You have done your task. The curtain is up.

VI

ATTACK

LARGE-SCALE ATTACKS are usually initiated by "fresh troops." The regiments which developed the enemy's position and found him holding a line in strength are usually too tired and scattered over too wide a front to make them effective in assault. Consequently, the preliminary or "warning" order for an attack usually comes to regiments in reserve, who may be many miles in rear.

Let us suppose then that your regiment is resting comfortably in reserve. The only contact with the war is the daily bulletin which you issue to all units. Minds and bodies are much more interested in "browsing and sluicing" and other pastimes.

From all the experiences in the late war, this is the usual practice, and it will probably be repeated in the next war! Every regiment in the zone of operations maintains a twenty-four hour regimental headquarters. One of the regimental staff officers is always there "on duty." To make the picture more graphic, let us suppose that you, the S-2, are returning from forty-eight hours' leave in the metropolis. The following happened so often that

it is fairly typical of how attack orders come to regiments. In this case, it was at the headquarters of one of the infantry regiments of the First Division on July 15, 1918.

You alight at a strange railroad station; the sergeant of the guard salutes and points out the regimental headquarters. Dimly, through bleary eyes, you see a nice house with a large garden, and you open the door. The hall is filled with soldiers; your striker is among them. He reports that he has all your gear laid out in the best room upstairs and that hot water and a bath are ready. You become strong minded, decide to postpone the joys of a much overdue shave and bath and determine instead to heed the call of duty. You are shown to the large living room of the house, which is the regimental command post.

You are cordially welcomed by the S-4. In one corner, your sergeant draughtsman is at a table with your field desk open. The regimental sergeant major is pecking away at a typewriter on a table in another part of the room, and a third table is empty. The S-4 is the officer on duty at regimental headquarters. His welcome is unmistakable, for he has been on duty alone for the last ten hours. He immediately turns over the job to you with all the news. The regiment is in this one town, and God alone knows where the colonel or any other members of the staff

are, and he is going to bed. You check with your sergeant draughtsman, find nothing new, sink softly back in the big chair to await someone to relieve you and decide to catch up on your sleep.

Some time later, you find yourself being shaken by a sergeant who hands you the telephone with the sole remark, "Division is calling." Mechanically, you take the phone and answer, "Headquarters X Infantry, Captain Z speaking." The chief of staff at division announces himself. You reach for a pencil to note his message, which is usually for S-3 about some training, when suddenly you drop the pencil. "This division has been ordered to attack," you hear the chief of staff saying, "your regiment will entruck in a half hour. Head of column will report to Captain "B" (assistant G-3 of division) at crossroads "43-b" at 4:30 P. M. Extra trucks for the business end of the rolling kitchens and two days rations will be included. Horse-drawn transportation will report to Captain "G" at the next town at 5:30 P. M. A regimental staff officer will report in motorcycle sidecar to G-2 in another village at 4:20 to proceed with him at once on reconnaissance. This headquarters will remain open until you are advised of the new headquarters. That is all."

What to do? You have no time to find the colonel, executive, S-3 or S-4. Yet to meet that

schedule everyone must act at once. There is but one thing to do. You bellow in stentorian tones, "sergeants, clerks, runners and strikers!"

Soon the room is filled with a runner from each company, the striker of each staff officer and the enlisted personnel of the regimental staff. You repeat verbatim the message and send them off to put their outfits in readiness. Meanwhile the regimental sergeant major starts slowly typing out the necessary number of copies of this warning order. But the runners do not wait. They salute and are off in a cloud of dust to their companies. The regiment is in motion.

Your sergeant draughtsman has packed up the field desk, and he and your striker stand, awaiting further orders. You send your striker to get your field kit and instruct your sergeant to have your whole detail with full equipment attach themselves to and move with the head of the second battalion in line; the observation post to be fully equipped and to be ready to function, taking its cart on the truck. You then tell the regimental sergeant major to have a motorcycle sidecar report at once.

Soon your striker reappears with your trench coat, field belt (to which are attached pistol, filled canteen, first aid packet and prismatic compass), dispatch case, musette bag, steel helmet, gloves and gas mask. He helps you into them and explains that

he will be on the regimental headquarters truck with your bedding roll.

Soon the motorcycle driver reports, but you cannot depart until you are relieved. A little later the S-3 arrives and takes over. You are tucked into the motorcycle with all your freight, and you are off. You and the other S-2's meet the division G-2 as arranged, and off you go, bouncing along an unfamiliar road in utter darkness. If you are philosophical you get some sleep.

Somewhere in the wee small hours you are awakened by a more than usually sudden stop or by the odd silence caused by the simultaneous cutting off of many motorcycles. You are in the edge of a wood and in the distance can hear the dim rumble of shell fire. All cluster around the division G-2 who points out that where he sits is now division headquarters. He produces maps and marks on each that part of the woods each unit will use as a bivouac. The troops will detruck here. Usual anti-aircraft precautions will be observed.

Map in hand, you locate your sector, return and wait. At dawn, trucks arrive and you shepherd your regiment into the area. Once you have led each unit to its sector, have explained that enemy aircraft are photographing, and the maximum air reconnaissance precaution must be taken, you return to regimental headquarters. Here you find that

division G-2 wants to see you. This turns out to be a routine meeting and back you go to see that all latrines in your area are dug under cover.

Then you roll up in your trench coat for some sleep, only to be awakened by your striker with a full mess kit. No food tastes better. After that you sleep but later are awakened. You, with S-3, S-4 and the colonel are off to division for the attack orders. In the late war these attack orders were of many types. Early in the game, they were most complete field orders, pages and pages of descriptive data with annexes for every arm and service. These were usually of about as much use in action as if a football coach attempted to outline in advance each play his team should use successively during the first half. But long theoretical training at Leavenworth will bring forth such orders at the start of any offensive, so you probably will receive just such an order. They are very comprehensive and complete, but everything is based on "D" day and "H" hour which, you are told, will be announced later.

Simultaneous with the issuance of the attack order will be the issuance of the attached map. This will show sector boundaries, possibly lines to be reached by certain times (such as H+2 hours) and lines on which to halt and reform, etc. The usual allotment was four maps to a regiment. This

meant four copies of the order and four maps (one for the colonel and one for each battalion). At Soissons there were but two maps per regiment, and what happened proved the fallacy of this distribution. As far as the order went, the two copies were sufficient, for the attack order became almost obsolete from the moment of the "jump off." The enemy failed to cooperate. He did not do as he was supposed to do, and the rest of the order became useless. So two copies of the order and map were sufficient to get the regiment into position. But, once the "jump off" came, each unit found itself working along on its own. Companies, on a broken terrain, without maps, soon lost direction and, instead of remaining within the boundaries as given, were naturally deflected to face enemy fire. Battalion commanders strove hard to keep the remaining companies in the proper lane. One company of Marines went off to the left, where the resistance was the greatest. They unwittingly crossed the left boundary of the Second Division, coursed diagonally through the First Moroccan Division sector, and were surprised to find themselves as a part of the First Division. It is not unusual for units to become mixed in battle. A corporal of the 26th Infantry, who was thought to have "gone over the hill," found himself about noon of the first day commanding a unit, of about

the size of a company, which roughly consisted of equal parts of the 16th and 18th Infantry, 1st and 2d Foreign Legion, 4ieme Tirailleurs, 5ieme Zouaves, 5th and 6th Marines. He led his motley crew for the balance of the day and won the Medaille Militaire.

One of the most important duties of an S-2 is to provide sufficient maps and aerial photographs so his unit can function. Two maps are not sufficient for an infantry regiment in an attack. But the great difficulty is that the "attack maps" with the boundaries and other such important parts of the directions for the attack are part of the "*attack order*" and are therefore "*very secret*." Only battalion commanders and the regimental commander are permitted to have them for fear lest one be captured. However, your observation post cannot function adequately without one. It should have two copies of a map of the terrain since one can be used to better advantage if it has no sector boundaries, lines at which to halt and re-form, etc. Similarly, your sergeant draughtsman should have two unmarked maps (one for a situation map and one to be taken forward during every major halt) on which to note the positions. There are many more people who would function much better if they too had a general map of the terrain. If a map is not available, a sketch, tracing or small-scale aerial photo-

graph would be most helpful. You have only two sources from which to get maps. Either they are supplied to you by the G-2 at division or you make them yourself. As a result, you do all in your power to persuade G-2 to give you as many unmarked, non-secret maps as he can spare, for it is a tough job to make a decent sketch under field conditions.

The colonel, S-3 and S-4 having received the "attack order" minus the day and hour of execution, return to the regimental headquarters to make plans. You should bring back with you a bundle of extra, plain maps of the area. Returned once more to regimental headquarters, everyone agrees upon the point at which "advanced regimental headquarters will open at 1 A. M. on "D" day." You have this point marked on every copy of the map, both secret and plain, and then you see to the distribution of maps personally. This saves arguments later.

Your duties are now over until "D" day and "H" hour are announced. Your striker has brought up your bedding roll, so you take off your belt, overcoat and helmet and enjoy a well-earned sleep under the trees.

*Sometime later you are awakened with the news that you are to report at once to division. There the G-2 gives you the final order which merely states that "D" day is tomorrow, "H" hour is 4:30 A. M. He advises you that such and such enemy

divisions are supposed to be encountered, their strength, units, equipment and morale, and what particular details he wants to know first. These latter are always identifications. You then set your watch with the "official" time of the division (which time came from corps), and you are off.

You assemble the colonel, S-3, S-4, commanding officer of the artillery (who has just reported) and surgeon and give them the order and true up their watches. You then locate every battalion and company commander, true up their watches and give them the order. You gather the three battalion S-2's and their outfits together with your whole unit and explain once more in great detail what enemy troops are expected to be in front of you, regiment numbers, organization, names of commanders, morale, usual tactics and remind them that you need identifications at the earliest possible moment. You explain again where the initial regimental headquarters will be and point out that you will be there at midnight, eagerly awaiting their reports, and that you expect them to keep you informed.

By now it will be growing dark. Throughout the woods you can hear great activity, and you know the attack order has put the whole regiment in motion. You rejoin your colonel, S-3, S-4, the artillery major, surgeon, chaplain, signal officer and the many others who work out of regimental head-

quarters. After checking every detail, you eat a big dinner. Soon a motorcycle sidecar arrives and you are off.

Why it should take six hours to do the fifteen miles may be to you an unexplained mystery. True, you have to take a round-about route because every road is choked with infantry, tanks and all kinds of transport. You have to put in an hour at the new advanced division headquarters, and, driving with no lights in the inky blackness, your speed averages little better than walking.

Finally, with much groping, you locate the spot on the ground which, that afternoon, had been marked on the maps as the advance regimental headquarters. You look at your watch; it is about midnight. The motorcycle goes away, and you are all alone. Soon, two strange soldiers appear unrolling telephone wires. They ask the location of the headquarters of your regiment. Upon your admitting that it is under your seat, they tie the ends of the wire to the nearest post and depart, announcing that this is the wire to division.

Now, if you are a wise young man and have profited by the mistakes of your predecessors, you will not sit in idle silence for the seemingly endless hours wondering if your regiment is lost, if the enemy knows of your intentions, and of the thousand and one things that might have gone wrong.

Instead, you have brought along a field telephone. At once you are chatting with G-2. He is as worried as you are, and misery loves company!

Sometime soon the S-2 of the battalion, which has been holding the line and through whose sector your regiment is going to attack, arrives with all the local gossip. With him you pore over the map and hear much about the enemy. This officer will stay with you until well after daylight as an expert on the enemy and the local geography.

After several hours of terrible suspense, you hear a loud noise on the nearby road and find it is your leading battalion. The major checks in, blaming you for a terrible night, and is gone. Soon comes more noise. It is the second battalion, and you are relieved to find your observation post group with their cart. Your staff sergeant, sergeant draughtsman and clerk fall out, lifting your field desk and small drafting board off the cart. Your office can now function. The situation map is on the board. The observation post leaves the end of a telephone wire and disappears off into the night. You report to division, "Two battalions in the forward area," and then cut in on your observation post wire. Your observers are in position, feeling fine and can see nothing. All is quiet!

Then, at 4:00 A. M., things happen fast. The artillery wire comes in; a group of runners from the

leading battalion with that wire and message from the major announces it in position. A burst of familiar profanity announces the arrival of the telephone sergeant, with the much-needed switchboard. You are now talking to everyone. The artillery major with a flock of runners arrives. Runners come in and announce themselves from the second battalion, from the reserve battalion and from the regiments on the right and left. The regimental surgeon arrives with his outfit who set up shop and go to sleep. Finally your colonel and S-3 wander in. All told, there are about seventy persons at regimental headquarters when the show starts.

Suddenly, someone discovers it is 4:25 A. M. and, with a rush, most of the officers go out to see the show. The runners are all asleep, so you and the "medico" and the S-2 of the relieved battalion sit down to await results. Only the constant babble of the switchboard operator, chatting with other operators about what they had for dinner in every other headquarters, breaks the grim silence within. Outside, with a deafening crash, all Hell breaks loose!

With a start, you pick up your ringing telephone; it is your observation post. The barrage is going over; they can dimly see your infantry moving up and report the color of enemy rockets. The S-2 of the relieved battalion checks these. They are

calls for enemy protective barrage, and you so report to G-2 at division. There follows an interminable wait. You call your observation post; they can see nothing, for the smoke and fog of early dawn have combined to obscure all vision; the enemy artillery replied but not in strength; otherwise, they know very little. Bored, you peer out of doors and are deafened by the roar of artillery, tanks and trucks.

Your first real contact is the arrival of a small party. Four enemy prisoners are marched in by a triumphant private with a pistol in his left hand, his right hand swathed in a blood-soaked bandage. On the shoulders of the prisoners is a litter with a badly-wounded sergeant of "B" Company, who has a message from the S-2 of the battalion: "I am on my way. You can best check the identifications."

Before you know what is happening, the sergeant of the Medical Corps has the wounded in process, and your sergeant is working on the four prisoners. You are talking with the wounded sergeant. Your interpreter sergeant has found a prisoner who will talk. Soon he hands you a paper: "Third Company, 186th Infantry, Captain J., here for three days, completely surprised, two battalions in line, third in reserve. Main line of resistance about a mile back front. 97th F. A. supporting." Beside

you, the S-2 of the relieved battalion confirms that it is the same outfit from whom they took prisoners the day before. You grab the telephone and give G-2 at division the news. Then you send runners to your colonel (who is out watching the show) and the regiments on the right and left of your battalions, with the word that you have surprised the enemy which was holding the line, and give them the position of his M.L.R.

Then comes another long pause. A few wounded filter in with news that all is going well; your observation post reports that it has moved forward and now can see and gives you a complete description of the terrain, where your troops are, where the enemy is firing from and what is going on. Your sergeant draughtsman marks it all on the situation map. The artillery major, looking at his watch, finds that his battalion is now released to direct support of your regiment. (It had been firing as a part of division artillery for an hour.) The colonel and S-3 return. All four of you look over the situation map. It is decided to blast out a wood from which the enemy fire is holding up the left of the regiment.

Sixteen shells on that corner of the wood, in exactly fifteen minutes, is decided upon. The major of artillery calls a battery, gives the time and coordinates; S-3 sends a message to the battalion com-

mander that sixteen shells, *and no more*, will fall on this point of woods in fifteen minutes, and you, as S-2, so notify your observation post.

All is tense for fifteen minutes. Then your telephone rings. Your observation post has counted the shells; so have the infantry. Like the backfield of a football team, they are swarming in on the point of woods. The firing was perfect. The infantry is in; they have it; prisoners are coming out. You remark to the artillery major that he did remarkably nice shooting and report the action to division.

There follows another lull. No matter how active and successful an attack, there come great periods of absolute quiet at regimental headquarters. You sleep sitting beside the telephone. These short naps are interrupted by moments of tremendous doings.

Suddenly, you are deluged with more casualties and prisoners; they always come together. From them both, you learn much of the early fighting, but one enemy sergeant lets drop a sneering remark about the dire consequences which will befall when the Nth Division from reserve arrives at dusk. There you have it! G-2 at division gets it first because the telephone is handy. The colonel gets it next, then the battalion commanders and finally you send off messages to the regiments on the right and left. Meanwhile, another enemy prisoner, under the soft-

ening influences of coffee and a cigarette, has clearly defined the enemy defensive position and pointed out where the machine guns, the anti-tank guns, light mortars and artillery batteries are located. Here is a real fountain of information. You stay in the background, for you are a commissioned officer and rank must be respected. Your sergeant is working wonders with chocolate, cigarettes, coffee and the useful phrase, "now it's all over for you." Your sergeant draughtsman soon has all the details on a tracing of the sector map, and you get reproductions as quickly as you can; messengers take copies to your battalions, regiments on the right and left and to division. Meanwhile, S-3 and the artillery major are at work on a plan of successive fires and attacks to reduce the position with the minimum of fire and casualties.

This, you will find, continues with less and less frequency as the day progresses. One by one the other officers go out to follow and see what is going on. Soon only you, the artillery major and the "medico" are left in the C.P. with about sixty assorted soldiers. Sometime later, you get word that your observation post has moved to a more advanced position. A few wounded and prisoners confirm a slow, forward movement. There will come a time when nothing happens. The "medico" completes the evacuation of the wounded. The artillery major

returns from inspecting the new forward battery positions, and you three go to sleep.

The whole affair seems to go dead. No prisoners arrive, no action is seen from your observation post and no wounded come in. About this time you will receive word from the colonel or S-3 to close the regimental headquarters at the place you have been for so many hours and to move forward to the new C.P. at "X." You then order all hands to pack up and be ready to move. You call division and your observation post and send runners to the regiments on the right and left, to advise them of the closing and simultaneous opening of the headquarters of your regiment at "X."

Then, ordering all hands to follow at safe intervals, you, the major of artillery and the surgeon "jump" to the new C.P. It is not a dignified parade. Some sixty officers and men, the odd assortment of artillery officers, clerks and runners, engineer officers and runners, signal officers, linemen and runners, Medical Corps officers and men, runners from every known unit and the other strange gentry who become members of your official family, start forward carrying switchboards, field desks, drawing boards, crates of pigeons, litters, sacks full of splints and bandages, lanterns, picks and shovels, in fact everything except arms and ammunition. Slowly you lead them forward, stringing telephone wires

and avoiding enemy shell fire as best they can. Finally you reach the new C.P. and find S-3 there, glad to be relieved of holding it down.

You will probably wonder who selected this as the site for the C.P. True, it is as far forward as possible and yet sufficiently defiladed so as to permit the study of maps and aerial photographs by artificial light. Otherwise it is a most unprepossessing site selected quite evidently for anything rather than comfort. Here you set up housekeeping and begin all over again. Within a remarkably short time, telephone communication is establised, new runners from battalions, batteries and adjacent regiments "come in" and everything is operating as it was before. Your sergeant opens your field desk, marks up the situation map and catches up on his other bookkeeping of information of the enemy. Perhaps some aerial photographs arrive which require study. But soon your office is functioning as before.

Such a system continues with any forward action. Step by step, each unit moves forward. Enemy prisoners are persuaded to divulge tactical information to supplement that obtained by the observation post. But there comes a time, and it usually comes when the initial attack has spent itself, when an enemy counterattack is strongly possible. Little indications make it seem probable. The S-2 must be

aware of every tiny detail of the movements of the enemy. Your observation post reports a battalion forming up, behind a wood; the S-2 of the regiment on your right reports another battalion forming in a ravine, on your front, but defiladed from your observation post. You notify everyone. Once more all hands consult. The artillery major and S-3 decide upon what to do with the ammunition available. You advise your observation post of the decision. Soon comes the welcome sound of your artillery whanging away, and you hope it is landing in the area where the counterattack is forming. You haven't long to wait. The S-2 of the regiment on your right reports that your concentration destroyed the counterattack.

Nowhere is it more clearly demonstrated that the S-2's of neighboring units must constantly swap information of their own and enemy forces. Counterattacks are the greatest threat to attacking forces and are predictable to any S-2 by the types of troops being concentrated and the area in which this is taking place. The S-2 of the regiment weighs all the evidence and points out to his regimental commander the present position of the various elements of the enemy and the possible actions of the enemy. That is why the S-2 office is maintained always in one spot where all information centers, where the situation map is kept up-to-date and

where other intelligence information is kept on file by your sergeant draughtsman.

Once in a great while a sudden catastrophe occurs. The 26th Infantry found its left flank wide open late one afternoon at Soissons, and a counter-attack seemed imminent. Some bright genius decided to fill the gap with the group at regimental headquarters. Summoned from their regular duties were the cooks, kitchen police, strikers, runners, signal men, Medical Corps men, clerks, pioneers, and many other strange gentry who go to make up the official regimental headquarters. These seventy "soldiers" were "rounded up." Few had any combat equipment. Led forward by the assistant S-3 they filled a gap in the lines until the front could be reorganized that night. As one of the party was later heard describing it: "You ought to seen us "Strosstruppen" go into action and save the regiment at Soissons. We was gallantly led by a staff officer, the regimental sergeant major, both color sergeants and the stable sergeant. We was mostly typewriter clickers, grease balls, dog robbers, wire pullers, pill rollers, flag wavers, bird men, the old bathing commissioner, some red legs and more damned coffee coolers than was ever seen in one place before. We armed ourselves as we went forward. If we had ever met up with them Boches I think our sergeant major would have done them a

lot of damage. By the time he reached the front, he had three pistols, four hand grenades, a trench knife and a Springfield rifle. I guess it's lucky for them Boches they never tried to mix with us."

Happily, these crises are rare, but there is a reservoir of power, even though it temporarily breaks down the whole system.

Attacks never proceed continuously throughout the day. There are limits to human endurance. Some of the best disciplined troops can "leapfrog" and make the attack almost continuous, but passing battalions through each other in the face of an alert enemy is quite perilous. For the most part, attacks are made in a series of efforts with pauses between for consolidation, mopping up, bringing forward artillery, observation posts, ammunition and regrouping of the reserves. During these pauses it is the job of the S-2 to make a rather thorough tour of the whole position of the regiment. You call your staff sergeant, take the extra copy of the map and turn over the S-2 job to him. You and your striker begin working your way out. At each battalion headquarters you pick up the battalion S-2, who accompanies you on your tour of the front. In the forward outpost position you may have difficulty getting about. The soldiers will be digging in, the enemy machine guns very active and your presence will draw fire. Nevertheless, you must

mark on your map the exact location of every element in your regimental area and, of even greater importance, obtain from the troops actually holding the outpost line every bit of information they have of the enemy facing them. True, their knowledge is very limited and all they know or care about is the enemy platoon directly in front of them, but they can point out to you exactly where their own enemy is located. Bit by bit, you mark all this on your map; by the time you have completed your tour, you will be surprised at how accurate and detailed a picture of the enemy's defensive position you have. Now, in addition to locating both your own and the enemy positions, your tour is for another purpose. You must advise every man you see of the position of the regiments on your right and left. Be sure to get that information before you go out because that is what your troops expect of you. With it they will fight twice as well.

And then there is another job. You will be told that your own artillery is "firing short." Once in a great while it is, but in the vast majority of times those "shorts" are in fact from enemy guns shooting from the flanks. In an advance it is easy to lose direction or be deflected, and this makes enemy fire seem to come from the rear. Make the man who claims "shorts" show you one of the shell craters. With a little practice, it is quite possible to deter-

mine the direction of the shell when it landed. This in turn points out the line on which the firing battery must be. By this, you have convinced the infantry soldier that his own artillery is not shooting him up, as he had thought, and have brought back his morale. You have also shown him that such a flanking battery cannot stay there long because the regiment on the left is moving rapidly toward it. You have made a very accurate location of that enemy battery. You know it is on a given line; you mark the line on your map, and you can assure the soldier that the howitzers will take care of that battery as soon as you return.

Once back at the C.P., seven groups want your information immediately. You must remember to get it to all seven as quickly as possible. These are (1) your colonel, executive and S-3, (2) G-2 at division, (3) regiments on your right and left, (4) your own artillery, (5) the heavy artillery, (6) your own observation post and (7) your own front-line troops. Your sergeant draughtsman has some sort of a duplicating machine, and his job is to make a comprehensive sketch, adding your data to that already reported by the observation post, while you explain orally to the colonel and then telephone to everyone else you can reach. As soon as the sketchers are done, runners take them to the interested parties.

Attacks usually stop when it becomes really dark and recommence just before dawn. During the night each side is preparing for dawn. Somehow you must find out what the enemy intends to do at dawn. Sometimes it may be necessary, as the French did shortly after dark on July 14, 1918, to send out a patrol to get prisoners. This patrol brought in soldiers of a fresh assault unit with the information that the German artillery preparation would begin at 1:00 A. M., followed by the attack at 4:15 A. M. You can imagine the frantic haste with which the S-2, who wormed this information out of the prisoner, delivered it to the seven groups who needed it.

It is the duty of the S-2 to ask the colonel to order such a raid when he feels it necessary. This is a combat raid for prisoners, and neither the S-2 nor any of his detail go with it. However, they station themselves at the most convenient point close to where the patrol is expected to return, so as to be able to question the prisoner before he recovers from the terrific shock of night capture.

During an attack, battalions alternate in the forward position and when in reserve get plenty of sleep. All units eat once a day, usually at midnight, but an S-2 may continue his duties day and night for weeks. He never seems to sleep except in short snatches, and he is usually out when the rations come

up; unless his striker saves them for him, he does not eat that day. But no one in the regiment has a more fascinating job. This keeps up for days and nights without end.

From nowhere, some afternoon, a young man is escorted down by someone in your division G-2 office and introduced to you as the S-2 of the regiment which will relieve your regiment that night. You tell him everything you know, take him all over the forward positions, and, by the time you return, you find the colonel of the new regiment has arrived. About midnight the relief of the forward battalions is announced, and command passes to the new regiment. Your colonel, S-3, S-4, your artillery major and all of your pals disappear. You, however, remain for twenty-four hours as the adviser on the enemy in that area. Next evening, as soon as it is dark, you and your striker leave and try to find your regiment.

VII

DEFENSE

THE USUAL INTRODUCTION to defensive warfare is when some other unit, moving forward in open warfare, has developed the enemy in strength and the decision comes down from on high for your regiment to relieve the outposts and occupy the defensive position under cover of darkness. You will have no time to waste collecting your outfit or doing anything else. You must leave at once. You and the other S-2's, together with your division G-2, proceed to the headquarters of the division you are going to relieve. There you get all the information of the enemy you can and secure maps and aerial photographs of the area. Get all the maps and photographs you can. There are never enough, and everyone will be calling upon you to deliver more of them. Escorted by some one from the G-2 office of the division you are relieving, you go to the headquarters of the regiment which your organization will relieve. Never fear about your welcome, for they will always be delighted to see you. You learn all you can from the S-2, read all his recent reports and study with him aerial photo-

graphs and his map. Be sure to get the identification of all units found on that front and his description of how the enemy acts. The more you get, the better start you have. As soon as it is dark, you and he move out to make a careful check of the front and the enemy positions, just as you would do after an attack. Question the men on the front. They know where the enemy is and what he is doing. Check every item on the map and locate batteries wherever possible.

You then return to the C.P. and make out a map ready to show your colonel when he arrives. This is your guess as to the location of the enemy and what the enemy can do. A relief, in the face of a strong enemy, is very dangerous. An enemy attack launched at the moment of relief would be most likely to succeed. You must warn your colonel of the critical points in the terrain and advise as to where you think it best to infiltrate units into the forward position before actually relieving those holding the position. All hands of both regimental headquarters will be in on this job, and no one will breathe easily until your observation post reports all quiet after dawn. There are several things you can do to make more certain your precautions against surprise. Of course, the relieved S-2 will stay with you until the next day. But ask him to leave one of his good observers with your observa-

tion post for a day. This man will be able to show your observers more in the first few hours than they could pick up in a day. Besides, should anything break loose before dawn, he knows the terrain and, while no one can see, yet from the direction of the fire and the rockets he will know what is going on. Secondly, send the runners who have recently arrived from the battalions, regiments on right and left, etc., back at frequent intervals with messages so that every runner knows the way and has made several trips before dawn. If anything happens, you will want to feel sure that they can get there and back. Thirdly, whenever there is a critical evening when the enemy is suspected of attacking at dawn, there is one old but very sure means of finding out when it happens.

Such an attack is usually preceded by heavy artillery fire. This cuts every telephone line and so fills the forward area with smoke that it is impossible to learn what is happening. The group at regimental headquarters hears the fierce firing but does not know what it is all about. To solve this, the 26th Infantry, in the late war, stationed mounted orderlies in sheltered spots very near the forward battalion command posts on the night when the "Montdidier-Noyon Defensive" was expected to break. After midnight the German artillery fire began and continued until dawn. It was aimed

chiefly at the batteries, roads leading to the front, and the support positions. All telephone lines were soon out and could not be kept in repair. Just before dawn the fire dropped on the forward position. The regimental staff and artillery officer stood on the crest of the hill, but the valley, where the front lay, was blanketed with a thick fog and smoke so dense and high that no flares could be seen. In a moment, from somewheres in that valley, came the rattle of machine guns and rifle fire. It was evident that the Germans were attacking. But no one knew where it was. Suddenly, however, there came galloping up the hill a fearsome but welcome sight. Splashed with mud to the withers, rider and horse distorted by gas masks, came a mounted orderly with a message from the right battalion that they were receiving the extreme edge of the assault. In an instant word went to the guns, mortars and reserves, and everything began moving to protect the right flank. Once you know where the enemy is attacking, you have plenty of effective strength to stop his attack. It is only the unexpected, the surprise, that can succeed.

Slower in its action, but of great value, is the use of carrier pigeons. Perhaps just before you leave to go to the division C.P. some four cages of carrier pigeons will be delivered. As S-2, you sign for them and read the order. It is quite simple. One

soldier in each battalion and one at regimental headquarters is to be designated as "pigeon man." He has to carry the little, light cage with three birds, feed and care for them and produce them in moments of dire need. Be sure you select the right man; choose someone who can stand the sneers of his fellows, for he will have to enjoy some of the choicest abuse ever heard, and yet he must be a man of sufficient fortitude who, without food for several days, can withstand the temptation of a broiled pigeon. Remember the sad case of the private in the First Division in the late war to whom was entrusted the carrier pigeons for his battalion. Long had he suffered the slings and arrows of criticism; just as the frantic major decided that the only hope of his battalion being rescued from complete surrounding and capture was a message by pigeon, he came upon the "pigeon man" quietly munching the broiled carcass of the last bird. This proved to be a capital offense, but that did not help the situation.

Somewhere, in the wee small hours, your colonel will take over command, and all of the other regiment, except the S-2, will disappear in a flash. Everyone will be looking to you each time a shell bursts or a rocket goes up. At each instant, and upon every occasion, you are supposed to know why it happened. This is the time you lean most heavily

upon the S-2 of the relieved regiment. Word comes that the enemy is shelling crossroad "X". You ask him why. He replies, looking at his watch: "They always do at this time of night." That is most reassuring. The enemy figures to cut ration details as usual, and therefore that firing indicates he knows nothing of the relief.

Before dawn comes the crucial moment. Everyone is tense. The artillery major is ready to fire protective barrages in any given quarter, the "medico" has his shop all set up to handle casualties, the engineer officer has the new big dug-out about one third dug (and utterly unusable) and the signal officer has lines out to everything and everyone with a switchboard capable of reaching around the world. Runners from every conceivable unit are resting comfortably, and your observation post reports every five minutes that nothing has happened yet.

Soon it is broad daylight and the possibility of enemy attack has greatly diminished. One by one every soldier in the forward position, with the exception of the sentries, has been forced by enemy machine gun fire to quit the furious digging when he became visible after dawn. Each soldier in the outpost line should be lying in the hole he has dug for himself. He is safe from enemy bullets, but the suffering of lying still in a hole, six feet long, two feet wide and a foot deep, from dawn until dusk,

is terrific. This also holds true of the second line and quite often of the third. The supports and reserves can usually dig all day, but, as they act as carrying parties at night, they need the day to dig.

Now, your chief duty is to set up a more detailed map for your colonel. His first day in a defensive position will be spent in determining where his own and the enemy troops are, how poorly his own troops are placed for defense and in making plan after plan to rectify these at night. Your concern is the enemy, and you must first determine: is he offensive or defensive and what can he do? Here the aerial photographs will be of the utmost help; demand all you can and take what you get. You could have, at the most, the area facing you to a depth of a mile photographed at frequent intervals. Then too, you will want your own area to a depth of a mile also photographed at the same time. For you must not only determine in your own mind the who, what and where of the enemy, but also you must always put yourself in the position of the enemy S-2 and see what he can learn of your dispositions. Oblique photographs, taken as though from an enemy observation post, will be very illuminating and will help you materially in determining what the enemy knows of your positions. If he has moved into the area at about the same time you did, you can watch paths develop, batteries appear

and then disappear under camouflage, headquarters show up by the convergence of paths caused by telephone repair men tracing wires to repair breaks.

In defense, both your own and the enemy units are echeloned in much greater depth and spread over a much wider area than in offense. Your problems therefore increase by geometric progression. You may have ten times the area to watch, and it may require two observation posts to cover it thoroughly. Likewise, prisoners are few and far between, and you are more or less in the dark as to whether the outfit that faced you last evening has not been replaced by another during the night. It is expensive to take prisoners; therefore you must observe each little item of the enemy to see if you cannot draw deductions from his conduct. While each company holding the front will cover its front each night by sending out a combat patrol, these groups often bump into enemy patrols but seldom are able to take prisoners. On contact both sides take cover and withdraw under heavy fire.

The longer a defensive position is held the stronger it becomes because the soldiers dig deeper each night for their own comfort. At first it is a 6′ x 2′ hole; then a deep hole is dug so as to be able to stand up for a while to break the monotony; then the hole is widened and a seat arranged. It is terribly lonesome, and the need for human company during day-

light compels two outposts to dig a shallow trench between their posts so that they can crawl over to talk. These are gradually deepened so that rations can be carried along during heavy fire, and in a very short time a whole system of trenches develops. With trenches, the garrison of the forward position can be greatly reduced without weakening the position. The enemy does the same, and soon the S-2 finds practically no enemy troops in the front lines. It is almost impossible to get prisoners except by deep raids in force, with large casualties to the raiding party.

Raids in entrenched positions are seldom ordered by the regiment. Usually these orders come from division or corps whose G-2's are becoming jittery about the enemy. Late some afternoon, just as you think everything is most quiet, you will receive an order for your regiment to send out a patrol of one officer and thirty men to capture a prisoner. (Just why the thirty men no one will ever know.) Now to raid an entrenched position is an art. In the first place, there are so few troops in the forward position that many a raid wanders around aimlessly in the dark, in and out of the enemy positions, without ever finding a single enemy soldier. The first requisite is to know the location of an enemy post. Any good S-2 always keeps on the lookout for the indications of such a spot and tries to keep two or

three up his sleeve ready for just such a call. Even though the enemy changes the location of his outposts each evening, it is still possible to determine the few strong points which he cannot leave undefended. When your regiment is ordered to get prisoners, you will have to select a spot in the enemy lines where you think prisoners may be had. One of the most famous and highly successful raids of the late war was planned and rehearsed by Colonel (then Major) Theodore Roosevelt, Jr., commanding 1st Battalion, 26th Infantry.

On June 29, 1918, a raid was ordered by division to get prisoners. "D" Company, Lt. Freml commanding, was formed into five parties. Four of these consisted of one officer, one sergeant, two corporals and twelve privates. The fifth, company commander's party, had two sergeants, three corporals and eighteen privates. Every man wore a white brassard on each arm. The spot selected was a well-held strong point; the plan was to enter on one side, crash through and come out the other, bringing back some prisoners. After ten minutes of artillery preparation by the 155-mm. howitzers and 75-mm. guns, the fire was lifted so as to shut off retreat by the enemy or support from neighboring units. The five parties entered the woods abreast, and fierce fighting ensued. The raiding party lost two killed, Lt. Freml and one private,

and lost one bayonet which was stuck so hard through an enemy that he was pinned to a tree. The wedged bayonet had to be left. Thirty-three prisoners were taken, and few, if any of the enemy were left alive in that area. Few raids were more successful.

In trench warfare, only raids in force, with artillery preparation and after careful rehearsal over simulated terrain, will be assured of success. The other minor raids usually return empty handed.

Thus raids and consequently prisoners are few and far between. As a result, you are forced to substitute a system of records of everything observed, every change in an air photograph and of everything caught by listening devices to take the place of real primary information. Hence, the minutiae of trench warfare, the books, the records, the number of shots fired, etc., which so mystified the American troops on their first entry into the lines. The system was a substitute to save casualties. As such it worked rather well but at best was a poor second, not the real thing.

This is the point at which most combat intelligence is approached today because here it became like bookkeeping. Volumes have been written about what the Military Intelligence officer does in trench warfare. Here enters the printed form, for everything is stereotyped. The observation post

uses printed forms; the battalions report on printed forms and at a specified hour; the regiment reports on a printed form all the information received during the past twenty-four hours. This is the lowest ebb of military intelligence. Any S-2 who is satisfied with this combination of the crossword and the jigsaw puzzle can scarcely be considered one who is on his job. Perhaps there may be criticism that most S-2's will enter the next war backward, as did the American troops in the late war. Someone held the umbrella over them until they (instead of moving forward to meet the enemy in open warfare, then follow in attack and finally take up a position in defense) were stealthily led into the trenches someone else had dug. All this trench stuff has been much overdone. But, unfortunately, it will happen again. When great armies face other great armies, only a part of the force may be left to hold a majority of the front while the remainder maneuvers. This holding force will have to dig in and commence trench warfare.

In trench warfare, the S-2 job is to perform the function of open warfare but with different tools. You will be farther away from a wider front and will have few, if any, prisoners. As a consequence, you must make the most of everything else you have. There are undoubted advantages: You always have the same terrain; you know where every-

thing and every person, both friend and foe, are supposed to be, and you have perfectly swell communications. Like the blind man who develops his senses of hearing and touch to a marked degree, you assemble a great mass of information and from it draw conclusions. Most S-2's found that a filing system was indispensable. The French, who were masters, had this developed to a fine art. In the observation post and in each headquarters were kept three main record books. The first was a journal of every item as it occurred. The second was a ledger, with every item from the journal copied in the column or page for that particular item. The third was the daily report in which each page of the ledger was summarized and conclusions drawn. Now these were the three main divisions of which there were innumerable subdivisions. For instance, in the case of aerial photographs, the area was arbitrarily subdivided into squares, each identified by a letter. Every photograph received, say of area "D", was kept in chronological order in a folder marked "D." Another set of folders was kept with such headings as "Enemy Works," "Enemy Shell Fire," "Enemy Rocket Signals," "Enemy Prisoner Reports," "Enemy Use of Gas and Smoke," "Enemy Minor Tactics" and so on to infinity. Similarly, there were usually eleven maps at an infantry regimental headquarters. These were:

1. Contoured map without any tactical lines
2. Air mosaic of area
3. Enemy positions
4. Own positions
5. Map showing location and effective field of fire of enemy artillery
6. Map showing areas shelled by enemy artillery, dates and amounts
7. Enemy circulation and communication map
8. Map showing possible enemy routes on major offensive
9. Map showing possible enemy routes on raids
10. Map showing possible routes for raids on enemy
11. Map showing possible routes for major attacks

Likewise, the sole prisoner caught on a fortunate raid was usually interrogated at great length on the tactical dispositions. The enemy position map was laid before him and every post, machine gun, battery, etc., checked and double checked. This was all solemnly recorded and, if chance brought in a prisoner two nights later, it was all done over again. Then both records were compared. Innumerable books have been written on the details of how to keep such records.

Now, in the late war, an infantry regiment held the front anywheres from a month to three months.

When the great day of relief came, the S-2, having prepared for it as though for an annual audit, had a long list of documents, code books, journal, ledger, reports, maps, files (all enumerated) and other "sector property" (such as carrier pigeons), which once included the S-2's cow and four hens. These latter were an integral part of the observation post and had been for three years. The incoming S-2 checked laboriously for hours and finally signed for the lot.

This is the high-water mark in trench warfare and the low-water mark in combat intelligence. You have to work so hard to lift the curtain.

VIII

DON'TS

AFTER SEVEN CHAPTERS showing what an S-2 does preparing for and in every type of action, comes the equally important list of things he must not do or let others do. As the S-2 of your outfit, you have as many negative responsibilities as positive. Some of these are counter-intelligence; some are just plain "don't get caught off base." To be a successful S-2 you must do all the "do's" and avoid all the "don'ts." Roughly, these latter are listed in their relative importance.

Don't Get Lost

Always keep this in mind. It is the easiest thing to do and nullifies your mission. It sounds simple but is most difficult. Your place is at regimental headquarters and not with your colonel; let him wander, you stay fixed. If you go out, as you do every once in a while to inspect the front, remember you slough off your office as S-2 as you step across the threshold. Call your sergeant, hand him the office, and you, yourself, go out to gather news. You are not then the S-2 of the regiment but just one of its auxiliaries until you return. S-2 is a ma-

chine which functions only in one spot, and the man on that spot is its operator. You have to go out, you have to sleep, you have other work to do, but never forget or let your unit forget that the S-2 of the regiment is a machine which functions twenty-four hours a day every day at one point, the regimental headquarters. Now you must try to be there doing the S-2 work as much of the time as you can. It is an uphill fight to do so, for there are hundreds of things which you may find thrust upon you. Of these, the one most often suggested is leading raids. To do so is about as silly as to have the battalion commanders do sentry duty. True, they might be better sentries, but, like the S-2, they have more important work to do. Next come "odd jobs" such as mess officer, provost marshal, post exchange, recreational director and so on down the line. Then come useless missions such as being sent down to see what is going on in the battalions or back to see what is transpiring at division. These are G-3 jobs and not yours. But most of all is the temptation or command to accompany your colonel on his long meanderings among his own troops. Now, how to avoid getting lost is an art. It will tax your imagination, require the utmost ingenuity and strain your veracity. It is hard for an S-2 to point out that his job of piecing together the odd parts, like a jigsaw puzzle, cannot

be deferred for the seemingly more pressing job of leading the reserve battalion into the gap on the exposed left flank. Sometimes, when your colonel becomes so demanding of your time that you cannot do properly the S-2 office, a hint dropped to G-2 may be effective. He will, in all probability, come down and discuss with your colonel how to improve the latter's intelligence service; this usually relieves the pressure on you of the extra-curricular activities which take you away from your job.

Don't Give Information to the Enemy

This sounds silly but is in reality one of your chief and constant duties. You think at once of spies, disloyal soldiers, etc. That is a part of it but only a very minor part. Your great troubles will come from the most loyal officers and men who, no matter how often you warn them, seem determined to inform the enemy of every detail of your plans.

Take camouflage discipline for instance in the late war. A defensive battery was carefully placed in the center of a field through which ran a small road. A camouflage net with a duplicate of the road was obtained, and next morning the air photographs showed no sign of the battery. For quite some time the discipline was perfectly maintained. Only by night could anyone approach the position and then only on that one road. No enemy shells fell within a quarter of a mile of the battery. Upon

relief, a new group took over the position. The restrictions irked them; it was quicker to cut across the fields with messages. Soon enemy shells bracketed the battery position. The S-2 searched a recent aerial photograph. There, sure enough, was the tell-tale evidence. Tiny white lines led off in all directions from a square where no paths were. In other words, paths converged and just failed to meet, the sure signs of a good camouflage net and of poor camouflage discipline. As S-2, you must constantly have your colonel preach and insist upon camouflage discipline.

Telephone wires seem harmless and inconspicuous. They are quite the reverse. Enemy shell fire, wagon wheels, even hob-nailed boots cut telephone wires. This means that linemen instantly go out, threading the wire through their hands until they come to the break. They repair this and follow the line back to wait for another break. Within a few hours, in an active sector, each telephone line will show up on an aerial photograph as a tell-tale white line. A regimental headquarters looks like the center of a spider's web. Your job is to make the soldiers who lay the initial lines understand that they must follow roads, paths, fences, etc., so as to prevent this.

Another favorite stunt is to plaster the number of the regiment on everything. Every tell-tale evi-

dence of the number of the regiment must be removed before going into action, and it is your duty to see that this is done. Every officer and man must have an identification tag, but no tag should carry the regimental number. This means inspection after inspection, for the soldiers seem to wish to have their regiment emblazoned on the tag. Next come the uniforms. Look out for those lapel buttons, coats of arms, officers' collar insignia and other such markings. (True, they are a required part of the uniform, but off they come before battle.) Just think how happy you would be if you were the enemy S-2 and came upon such things! In removing all trace of regimental and divisional units, do not try to remove badges of rank. You must repeat and reiterate to every soldier in your regiment that if captured he must tell his name, rank and serial number but nothing else. The Geneva Convention requires this.

Next, after you have the men all cleared of telltale insignia, comes the equipment. By the time your regiment is ready to go into action you will most likely find that every wagon, truck, gun, kitchen, cart, machine gun and mortar has the regimental number emblazoned in a tasty design, the proud work of some artistic soul. Off they all must come, and it is your job to make the men understand why. And finally, there are the assembly signs,

billeting signs, etc. These too must be watched. It is quite all right to have them read "1st Battalion," "Co. A," "Regimental Headquarters," "Wounded and Prisoners," and have arrows, but never must they read "1st Battalion, 77th Infantry," "Co. A, 65th Infantry," etc. Your job is to see that this does not happen.

Then you have one more job: to keep your men from dumping hot identifications into the lap of the opposing S-2. It is the old problem of documents. Orders, maps, reports, letters, diaries, memoranda, etc. are always a problem. Try and persuade your men to leave as many of these as possible off their persons. And with maps, orders, etc., school everyone, but particularly the officers, to leave these with a sergeant or runner when they go into the forward position. When an officer is a casualty, it should be the unwritten law that whoever is nearest him takes whatever papers he has on him and gives them to the next in command. These papers should be a sort of badge of office. The sergeant or whoever is going to command will need them. Too often in the late war all the orders and the battle map with directions were evacuated with the company commander, and the company was left to flounder around, not knowing where it was supposed to go.

And finally, in the rear areas your men can give

away much valuable information quite unwittingly. You cannot, and it is not your job, track every civilian who is in the employ of the enemy; there are far too many of them. Saloon keepers and particularly light ladies are often the ones, but you can never tell. The only thing you, as S-2, can and must do is to keep constantly preaching to each unit the danger of telling civilians anything about the regiment, where it has been, what casualties it had and where it is going. You, yourself, cannot wet nurse each soldier, but you must make him realize what he is doing.

Don't Permit Wanderers

One of the greatest dangers to your command is the presence of strange officers. In the late war, a favorite German trick was to dress up a man, who spoke perfect, idiomatic, soldier "American," in an American officer's uniform. During the night or in the midst of battle, this man would turn up in the front lines. Posing as a corps staff officer, he would issue orders in the name of the corps commander, change dispositions and directions and on occasion order a withdrawal to correct an "untenable salient." Always he told about disasters to units on the flanks; so plausible did his story sound that it was not until long after he left "to visit the adjoining regiments" that his true identity was established. It was almost impossible to pick up these

effective enemy agents until a standing order was issued in the First Division. This order prescribed that each officer, from any but the next higher echelon, should always be accompanied by an officer of the next higher echelon. Specifically, this meant that a division staff officer, in order to visit a battalion, had to report at regimental headquarters and from there be accompanied by a regimental staff officer on his tour of the front. Once, soon after the order was issued, the general sent an aide to inspect a front unit. The aide took a short cut and was seen by his friend, the battalion commander, coming direct. A few orders were given and a telephone call put in. As the aide arrived he was arrested at the point of a pistol by a sentry, disarmed and marched to battalion headquarters. Smiling on all his friends, he asked what the joke was, but alas, no one there was able to recognize him. Frantically, he plead with those with whom he had been wining and dining but a few days before, but in vain. He was marched under armed guard to regimental headquarters where an even worse fate befell him. He knew them all intimately, but none of them knew him. They read the order aloud to him, tried him before an impromptu court, proved him an imposter, through his inability to answer some of the most intricate questions, and sentenced him to be shot as a spy. Only on the approach of

the firing squad did the colonel listen to his then frantic pleadings and permit him to be sent back under an armed guard to the general. After that the ritual was always observed. Many a trembling staff officer from a neighboring division arrived at regimental headquarters, disarmed and with the point of some proud soldier's bayonet tickling between his shoulder blades. It was a one-way law with no exceptions. Either a regimental staff officer accompanied the visitor, or he was arrested by the first man who found him. Even the division commander was forced to obey his own orders. On the afternoon of the second day at Soissons, when General Summerall went forward to talk to the survivors of the famous charge up the small hill which had seven concentric rings of machine guns, he stopped by and was accompanied by a regimental staff officer. It is a most sensible rule and one that every S-2 should prepare and have his colonel issue to all troops before the first action. It prevents any enemy agents from operating and builds morale in your own unit.

By the same token, however, it brings upon you an added duty. Divisional and corps staff officers (other than G-2) are usually taken forward by S-3. But the "official visitors" fall to the lot of S-2. You may find yourself in the position of an S-2 in the late war. A division staff officer arrived at a

regimental headquarters with a gentleman in a double-breasted blue suit, bearing a letter from the President of the United States to the commander in chief. Thereon, by endorsement, was a command that this gentleman, the editor of a leading periodical, be shown through the front-line trenches. The colonel read the letter, again welcomed the visitor, and assured him that Captain "X", his S-2, would take him at once through all the front lines. Meanwhile, the division staff officer quietly let the S-2 read the note signed by the commander in chief which merely stated, "Mr. ——— is not to be exposed to danger." Here was another odd job for the S-2. He was to give the noted editor the thrill of imminent capture, enemy prisoner torture, sudden death or being maimed for life, all the terrible life and manly fortitude of the front-line soldier, in a quiet hour in the forward position, without exposing him to danger. It is an art, and you had best learn it. In one guise or another, it comes about once a week. The editor was searched for identifying or incriminating papers, his money, passport, watch and keepsakes bundled up in a package so that if captured no knowledge could be gained by the enemy. He was told just what to say should he be captured, a gas mask was strapped much too tight around his chest and a steel helmet replaced his derby hat. Alternately running and diving into

shell holes, waiting an incredible time in front of batteries until they fired right over him, pushed into deep mud holes, then running frantically to the observation post where a quick glance showed steel helmets (our own) in a support trench, and the S-2 then yelled, "That's the enemy in the front lines, now run quick, they are attacking!" Back over the same path, under the guns again (they fire with deafening effect), into the mud holes, into the shell holes; the blue suit is torn to ribbons, the poor gentleman is trembling from head to foot, he is soaking wet, tired, bruised, bewildered and bleeding. You tuck him in the sidecar with his passport, money, watch and keepsakes in the envelope in his lap. He has seen all the front, is perfectly satisfied and thankful to be alive. You have done your duty and had a lot of fun. The artillery officer is a big help. Others can lend an air of versimilitude by a tasty use of hand grenades at a small distance; unaccustomed ears cannot distinguish between outgoing and incoming fire; it all sounds like sudden death. Giving visitors "the works" is the S-2's recreation.

Don't Permit Souvenirs

Looting will break the discipline and morale of the best units. In war all soldiers of the same rank are equal. Each has the same kit and receives the same pay. Looting alters a man's status. One soldier

gets an armful of bric-a-brac, another gets the till of the local bank, and a third takes the pick of the ladies of the town; at once military duties fade into a competitive scramble for possessions. On pure theory, the soldier owns nothing but his little bag of keepsakes and his immortal soul. Let him start acquiring possessions and the whole theory and practice of soldiering breaks down. Looting must be stopped at the outset. This applies equally to the colonel who finds and acquires a workable automobile to the soldier who "souvenirs" an enemy pistol. Both may look useful at the moment but will fail in their purpose at the crucial moment because they are not standard and therefore cannot be supplied. Looting is the quickest way to break morale. It seems so justifiable at the time, but let it once start and the morale of your unit will shrink by the hour. Your job as S-2 is to recognize this and to have your colonel stop it immediately. Soldiers always want souvenirs, but nowhere was this so carried to the extreme as in the First Division, after its relief from its first sector, when the lieutenant (upon advice from the platoon sergeant) ordered pack inspection in a defiladed spot on the way out of the lines. Five rusty, old French hand grenades were found in a soldier's pack. They were souvenirs but were also a menace to the command, for a sudden shock might have detonated them.

Don't Build Booby Traps

Enemy artillery fire can be deflected by the building of false battery positions, false machine gun nests and false tank concentrations. It is lots of fun to work all night in developing a very fine position for four guns, then with drain pipe and wheels to put in the pieces and some ineffective camouflage. But the real fun is next day to see it being discovered, bracketed and then utterly demolished. Everyone in the sector has a pleasant day because, for the time being, the fire has been shifted away from the usual targets. False tank groups are particularly effective, and new machine gun positions are also of use in drawing off fire. But these things must never be done without written permission from G-2 because they may frustrate a plan that is being prepared. Suppose a battery is to be located on the edge of a woods for an attack three days later. Meanwhile, the regiment now holding the sector decides on its own to put a false battery there and does so. When the real battery moves in, it will be quickly wiped out. This is hard to explain and it seems silly to spoil the fun, but it is the duty of the S-2 to see that this rule is carried out. There will be plenty of opportunity to build these false positions. They are usually done under corps or army orders to deceive the enemy as to the location of the next attack. There will come a time when

you, as S-2, will have all hands at work filling your whole sector with tanks made of plywood nestling in the woods, and all the other false works. These are but the elementals of counter-intelligence. To fool the enemy, columns move up by day, when they can be seen, and back by night and up again next day. Great piles of barbed wire, engineers' tools and empty ammunition boxes are brought forward. Patrolling is intensified along with artillery fire. A battery will fire from several positions in one night by having one gun in each, while infantry columns make very obvious paths to false headquarters and many dummy rolling kitchens belch smoke where enemy captive balloons can observe them.

It is very fascinating, and you have to do it all. When the word comes up to feint an impending attack you first have to rough out what such a plan would entail in prior preparation. Then you put yourself mentally in the enemy observation posts and balloons; finally you determine at which spots the various activities will take place. You locate them, time them and see that your own troops are removed from the vicinity. Then you have them photographed by your own air service to see if they are adequate. Finally you watch the enemy as he becomes conscious of great goings-on behind your lines.

But you must not be fooled if he too does this to you!

Don't Bury the Dead

In your first action, you will suddenly come face to face with wounded men. It is a terrible sight. You are tempted to grab your first-aid packet, tie up the first man you see and then run to find the Medical Corps men to bind up the wounds and evacuate these men. Don't do it! Your job is to protect thousands of men in your regiment; you have no time for individuals. It is just a species of getting lost to try to minister to the needs of the individual. That is the job of the company officer, the battalion surgeon and many others. Your job requires your full time, and every minute you are away from headquarters your duty is being neglected. Once you have been through a major action, you will not have the same suffering on seeing the wounded. You will be surprised with what *sang-froid* you will pass the wounded, knowing that the litter bearers will soon find them and administer much more expert aid than ever you could.

Just so with the dead. The sooner you learn to treat them as you would other phenomena of the battlefield, the more effective you will become. Nothing is more wasteful than the false notion that you are doing something useful in burying the dead.

Guard against yourself, or any member of your regiment, being detailed to bury dead. In the first place, such groups draw fire and often suffer casualties. In the second place, it wastes the strength of effectives. And, in the third place, it lowers morale. Oddly enough, as one of the greatest battle-field generals (a brigade, division and corps commander in the last war and later chief of staff) often said: "No colonel or general understands how to command troops until he has seen his own dead where they fell, and the greatest thing to build the fighting morale of a unit is to see a dead general lying where he fell on the field of battle."

Don't Be Fooled

The unexpected always happens in battle. No matter what form the order is in, it never can be carried out as given. An attack order, which arrives during unexplained and heavy fire by your own artillery, in the form of a breathless staff officer who yells: "That's your barrage, let's go!" is the one most likely to be carried out. A great many attacks were launched that way. Conversely, the detailed, six-page order with paragraphs for each arm and annexes for each service is the pious wish of the commander. It can never be executed. It is just an ideal which must be altered momentarily almost from the jump off. The enemy is seldom cooperative in carrying out these plans. You are

the one who discovers what the enemy is doing and, on your reports, the plan is changed.

You must guard against making hasty or false assumptions. A raid in force at dawn is often mistaken for an attack. Your best officers will become confused and report themselves in positions where they are not. High-explosive shells smell so much like gas that only the most experienced are able to distinguish between them in heavy concentrations. Shrapnel was practically never used in the late war but was constantly reported through error. You must check and verify each report before you arrive at a conclusion. A few minutes lost in verification is amply repaid in preventing a false assumption. Your job is as much to judge men and their reactions to battle as it is to judge manifestations of the enemy. Parenthetically, while it has no apparent relation to your job, try to persuade your colonel from changing command lines. When an officer is a casualty, his second in command is more able to handle that company than any one from the outside. This holds true all down the line. As successive casualties take out the officers, the senior sergeant, corporal or first class private, who knows the men, is infinitely better fitted to continue the action than a new officer up from the rear. Often in the late war the company was left in command of the sergeant with a new officer attached for instruction.

One battalion was commanded by a first lieutenant with a bright and shining lieutenant colonel, fresh from instructing at West Point, attached for instruction. Old timers who know the men, how they act in battle and how to handle them to the greatest advantage, will be of more value than the new officer who does not know the individuals. Let the new officer watch and learn during battle. After it is over, and the regiment is at rest, is the time to make such vital changes.

Further, when a vacancy occurs in the command of a battalion, you may find yourself called upon to help select his successor. Seniority among the company commanders is interesting but not binding. Select the officer whom you think would do the best job regardless of rank. In the midst of a battle do not send back to the echelon for the senior captain in the regiment. That was tried once, and the unit became the "Lost Battalion." Pick an officer in the battalion and give him the command. Don't switch officers across battalions in battle; it has been tried and does not work.

Don't Forget Your G-2

In action, the most difficult thing is to find out what is going on. Everyone faces the front. Information, directions, orders, reports, all flow from rear to front with the utmost rapidity. Troops hanging on in the fringes of an isolated wood seem

to be almost instantly aware of the slightest whim of the corps commander. It is simply water flowing down hill. Everyone moves forward, looks forward, acts forward. Conversely, nothing moves in the opposite direction. The battalion commander fights his unit forward inch by inch or by leaps and bounds, taking every opportunity offered by cover to rush small units forward or by flank. He never looks back or thinks of the rear. In his mind, if the regimental commander wants to find out what is going on, let the "son of a bishop" come up and see. But it is not the individual regimental commander (who most likely is wandering around and does see) who needs this information. It is the mechanical units known as regimental, division, army headquarters and G. H. Q. which must know, and seldom do, from moment to moment, just what is happening on the front and just where the forward units are. No one save the S-2 has the constant interest in telling anyone in rear what is happening.

It may seem inconceivable to those who have not experienced it, but in the late war it was no uncommon sight to see the assaulting infantry battalions go over the hill and for hours thereafter to see the regimental staffs with attached artillery stand helpless, wondering where the assaulting infantry battalions were and what they were doing.

This is usual, for the mental attitude of unit commanders in battle is: "Let the S. O. B. come up here and see what is going on." It is the absolute duty of the unit S-2 to communicate constantly and instantly with his next superior G-2 the details of what is happening. One might say the S-2 marches three hundred yards in front of his regiment. He stands mentally three hundred yards within the enemy lines; from that point he faces with the enemy, towards his own advancing troops, and reports to G-2 of his division what he sees from that point.

S-2 gives conclusions to his colonel but gives every detail to his G-2, who draws his own conclusions.

Don't Overlook New Tools

With all this in mind, it is quite fascinating to think what more you could do should some of the newer devices of civil life be made available to infantry regiments.

Take the small portable broadcasting unit. Now, in battle, there never is the slightest difficulty in sending news forward. Everyone is facing the front. In almost no time at all, an idea of the corps commander trickles right down to every company commander on the front. But there are hours and hours in battle when regimental, divisional and corps commanders bite their fingernails while wondering

where the forward infantry units are, what they are doing and what support they need. Not once but almost invariably in the late war, when an attack went over at dawn, the infantry and accompanying field guns disappeared into the fog and no one knew for sure where they were. How much better it would be to have the forward battalion commanders open their microphones and say: "Major X at crossroads "P" receiving heavy fire from the enemy 325th Infantry in woods 317-5 on our left." No matter who heard that message in the clear, it would do no harm and would be of inestimable benefit to the major's regiment.

Then there is television. Recently, an airplane with a television sending set was flown experimentally over a main highway. The "observers," seated in a nice, quiet dark room miles away were able to see the traffic on that road and could almost read the license plates. Think what it would mean to an S-2 in battle if he could see with his own eyes what was going on behind the enemy lines.

Another device enables the operator in an airplane to take a photograph, develop it instantly, insert the wet negative in a machine which transmits it in a few minutes to any number of recording stations on the ground. The plane flies on to photograph other missions, but you have the photograph it took of the spot you wanted five or ten minutes

after it was taken, not that evening when the day's work is done.

And finally, there is being developed a helicopter which can take off anywhere, for it flies straight up. It can move in any direction, but, best of all, it can stand still in the air. Think of being an S-2 in a helicopter a thousand feet above your regiment! It is the ideal equipment for the S-2. With that machine there would be no mysteries. The curtain would be up all day and with magnesium flares could stay up all night. What the X-ray is to the bone-setter, the helicopter may be to the S-2.

But even with only the tools available to an S-2 in the late war, it is a job of fascinating possibilities. Often it has been compared with the stalking of the largest and most ferocious of wild animals. The simile does not seem apt. Big game hunting, the tracking down of predatory beasts by exercising human ingenuity, seems rather one-sided as compared with the more equal competition of man against man. There, each equipped with every device known to hinder the other, gaining information and conversely each possessing every aid in obtaining the required data, the odds are equal and the contest is likewise so. Then only is it a contest of wits alone. It is not a matter of superiority of numbers but a superiority of thinking, reasoning and of drawing the correct conclusions.

It would take volumes, and many have been written, to cover the multitude of details of combat intelligence. It is the oldest art of warfare and the first to be forgotten in peace time. Without an actual enemy, whose every purpose is to hide his intentions and whose subterfuges mean death to you, combat intelligence cannot exist. Once you come in contact with an enemy, it starts in earnest. Anyone can pull a trigger; those who have "the good old guts" can take a well-held position at the point of the bayonet, but the fascination of out-guessing the enemy, of determining in advance what he can do and then what he will do, makes big game hunting pale in comparison. To the S-2 of an infantry regiment in battle this book is written. It is the "finest job in the world."