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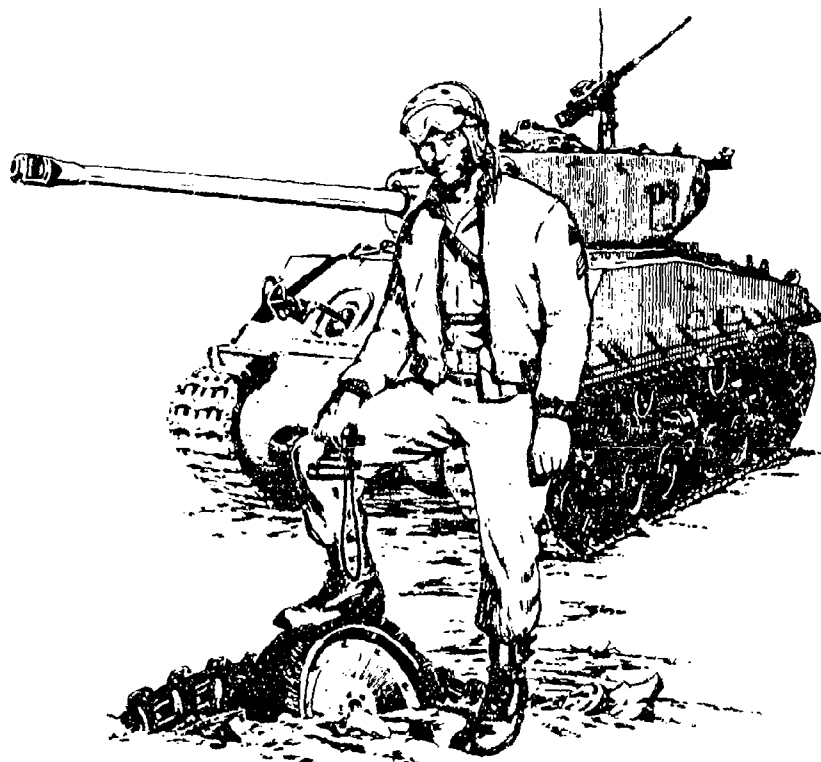
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ARMOR IN BATTLE



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U.S. ARMY ARMOR SCHOOL
FORT KNOX, KENTUCKY
MARCH 1986



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TO THE READER

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INTRODUCTION

In 1939, George C. Marshall, then a Colonel in the Infantry, wrote these words in the Introduction to Infantry in Battle:

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

His words are still valid today. The majority of military history is written at the division, corps, and echelons above corps level. Although the big picture is also important, company level leaders can better understand and learn from small unit actions - military history at an applicable level. Armor in Battle is not intended to be a carbon copy of Infantry in Battle, although the initial concept came from it. The concept behind Armor in Battle is to fill a void in military history. There has never been a dearth of small unit infantry actions, yet small unit armor actions are few and far between. This is an attempt to fill that void by providing an anthology featuring armored action starting with the very first armor battle in 1916. Additionally, Armor in Battle is designed to provide a turret's eye view of armored conflict - military history at the small unit level. This anthology mainly revolves around platoon and company level actions, for it is from such accounts that company grade leaders can benefit most from military history.

LEADERSHIP BRANCH
UNITED STATES ARMY ARMOR SCHOOL

"Those who cannot remember the past are condemned to repeat it."

George Santayana: The Life of Reason, 1906

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CHAPTER 1

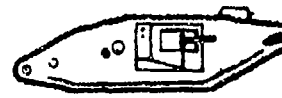
WORLD WAR I



UK: "Little Willie" 28t



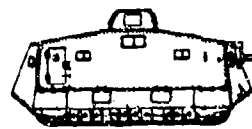
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UK: Mk II/III (Male) 57mm 28t



FR: St Chamond 75mm 28t



GE: A7V 57mm 33t



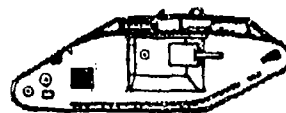
UK: Mk IV (Male) 57mm 28t



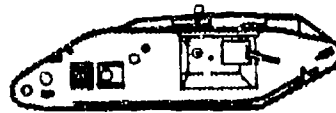
FR: Schneider CA1 75mm



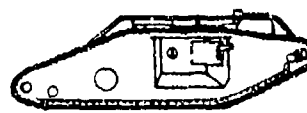
UK: Med Mk A "Whippet" MG 14t



UK: Mk V (Male) 57mm 28t



UK: Mk V* (Male) 57mm 34t



UK: Mk VII (Male) 57mm 33t

"THE ENEMY, IN THE LATEST FIGHT, HAVE EMPLOYED NEW
ENGINES OF WAR AS CRUEL AS (THEY ARE) EFFECTIVE."

CHIEF OF STAFF
GERMAN THIRD ARMY GROUP 1916

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ARMOR IN BATTLE, CHAPTER I

THE FIRST ARMOR BATTLE:

The Somme, September 15, 1916.

Forty-nine Mark I tanks were used by the British during the Battle of the Somme, the first test of the tank in action. Owing to the fact that these vehicles had been secretly designed, built and delivered to the battlefield, little was known about them even by the troops who were to use them. Many questions concerning the new weapon had to be answered and many new problems pertaining to their tactical use, control and supply were hastily solved. Naturally, considerable confusion existed concerning the methods to be used since no precedent or past experience of any kind was available to serve as a guide.

It was finally decided that the tanks should start in time to reach the first objective five minutes ahead of the infantry, that they should be employed in groups of two or three against strong points, and that the artillery barrages should leave lanes free from fire through which the tanks could advance.

No special reconnaissance was made by the tank personnel and, consequently, the tank commanders were not well informed as to the situation prior to the attack. However, this was only one of the links in the chain of circumstances which, as we look back at this first tank action, appears to have been designed to insure its certain failure. In their book, The Tank Corps, Major C. Williams - Ellis and A. Williams - Ellis, refer to the orders issued for the tanks: "For every three tanks only one set of orders had been issued, and only one map supplied; consequently we had to grasp these orders before we passed them on to the other two officers However, at 5 PM on the day before the battle these orders were cancelled and new verbal instructions substituted."

Although these first tank troops were severely handicapped, fate appears to have balanced the books by leaving to them the element of surprise, since the German troops apparently had no information concerning the tanks. This extraordinary achievement of secrecy in the development, construction and shipment of these tanks seems the more remarkable when it is remembered that the British had been working on the tank project for nineteen months during which time enemy secret service agents were very active in England and behind the Allied lines in France.

Instead of using this small number of tanks on a relatively small front, the 49 tanks were divided into four groups and assigned as

follows: 17 of the tanks to the 14th Corps, 17 to the 15th Corps, 8 to the 3rd Corps, and 7 to the Fifth Army. Ten other tanks, all of which were unfit for action due to mechanical troubles, were held in GHQ reserve. This made a total of 59 tanks which were shipped to France prior to the first action. Many of these tanks had been practically worn out during training and demonstrations before leaving England.

The record of the Somme tank activities is one of partial success only. The available data is meager and only a brief summary of the results can be given. Of the 49 tanks assigned for the action, only 32 succeeded in reaching their line of departure, the other 17 becoming stuck or breaking down mechanically. Nine of the 32 tanks were held up on account of mechanical difficulties; 9 did not succeed in leaving the line of departure on time and therefore did not move out with their infantry, but did succeed in helping to mop up; 5 became stuck in the attack. Only 9 tanks fulfilled their missions.

One tank commander assisted the infantry troops in a difficult situation when they were held up by wire and machine gun fire, by moving his tank to a position where he could enfilade the trench from which the fire was coming. He then moved his tank along the trench and is credited with having caused the surrender of about 300 of the enemy troops. Another tank destroyed a 77 mm gun in Guedecourt. Later this tank was struck by a shell and caught fire. One of the most successful exploits was observed by a British airman who reported that "A tank is walking up High street in Flers with the British army cheering behind it."¹ Although Flers was known to contain a great many machine guns, it was taken by this tank and its infantry without casualties.

Very few casualties occurred among the tank personnel in the Somme action. Of the 32 tanks which reached their starting points, ten were put out of action for the time being and seven were damaged slightly. The latter, however, managed to return under their own power.

ANALYSIS

The experimental use of tanks on September 5th was not a great success but this test of the "tank idea" proved its feasibility, indicated the mechanical shortcomings of the vehicles themselves and from it many lessons were learned by the tank personnel, the infantry troops, and the higher commanders. Considering the crude design of these first tanks, the ignorance of all concerned with reference to methods of employment, the fact that this was the first test of a new and complicated piece of machinery under battlefield conditions, and the change in the orders at the last moment, it is not surprising that the results were only moderately successful.

Reprinted from The Fighting Tanks Since 1916, by Jones, Farey, and Icks.

¹The Tank Corps, Williams-Ellis. 1-2

COMBINED ARMS:

First Battle of Cambrai, November 20, 1917.

In this action, which was fought over terrain suitable to tank operations, the chance for success depended, according to General Fuller's *Tanks in the Great War*, upon the attack being a surprise, the tanks being able to cross the large trenches of the Hindenburg lines, and the infantry having sufficient confidence in the tanks to follow them.

In addition to these factors, this attack involved the passage of the Canal de l'Escaut, and what was at first thought to be an important obstacle, the Grand Ravine. Added to these obstacles were the great bands of well made wire obstacles protecting the Hindenburg trenches.

The three wide trenches of this system proved to be one of the greatest obstacles of all since they were too wide to be crossed by the Mark IV tanks unaided; hence 350 fascines, weighing about one and a half tons each, had to be built. The plan for crossing these trenches is interesting.¹ The tanks were divided into sections of three tanks, an advance guard tank and two infantry tanks, the former having the mission of protecting the last mentioned tanks and the infantry as they crossed the wire and trenches. Since there were three trenches and only three tanks to the section, the arrangement for the crossing operation involved the following maneuvers by the tanks of each section. The advance guard tank passed through the band of wire and, turning to the left without crossing the trench, used all weapons which could be brought to bear from the right side of the tank, as it moved along the trench, to protect the passage of the other tanks and the foot troops following. The first infantry tank approached the first trench, dropped its fascine from the forward part of the tank and, crossing the trench and turning to the left, moved down the right side of the trench and around its prescribed area. The other infantry tank crossed over the fascine of the first infantry tank and, going to the second trench, released its fascine and carried out the same maneuver. As soon as the second trench had been crossed by the last infantry tank, the advance guard tank turned around, crossed both trenches on the fascines already laid and started for the third trench with its fascine ready for this crossing.

Three details of infantry were assigned, the first to operate with the tanks in order to clear the dugouts, etc., the second to block the trenches at certain points, and the third to garrison the captured trenches and protect the approach of the rest of the troops. This part of the plans for the Cambrai action furnishes an excellent example of cooperation between tanks and infantry.

¹Information obtained from *Tanks in the Great War*, Fuller.

To attain the surprise feature of the general plan, there was no preliminary bombardment; counter-battery work and a barrage of smoke and H.E. was to start at zero hour; there was no change in the airplane activities; no change of troops on the front lines; no registering shots were to be fired by the artillery; all moves were to be made at night; and no reference to the coming battle over the telephones.

To give the infantry troops confidence in the ability of the tanks to cross all obstacles, the two were trained together and the infantry was invited to, and did, build severe obstacles which the tank personnel agreed to cross, and did cross, during the training period.

The cavalry was given a part in this battle and some of the tanks were equipped with grapnels for the purpose of clearing a path through the wire for the horses.

The British Third Army, assigned to the Cambrai attack, consisted of six infantry divisions, a cavalry corps, 1000 guns, and the available Tank Corps of nine battalions with 378 fighting tanks and 98 administrative vehicles, a total of 476 vehicles.

Briefly, the plan of the Third Army was: to break the Hindenburg line, seize Cambrai, Bourlon Wood and passages over the Sensée river, then to isolate the enemy south of the Sensée and west of the Canal du Nord and, finally, to exploit the success in the direction of Valenciennes. In the first phase, the infantry was expected to occupy a line Crevecourt - Masnieres - Marcoing - Canal du Nord; the cavalry was then to pass through this line at Masnieres and at Marcoing, capture Cambrai, cross the Sensée, capture Paillencourt and Pailluel and move with its right on Valenciennes. During this time the 3d Corps was to form a defensive flank on the right of the Third Army. The cavalry was given the mission of cutting the Valenciennes-Douai line to aid the 3d Corps in moving toward the northeast.

At 6 AM General Hugh Elles led 350 tanks forward and the prearranged artillery fire started. The element of surprise played a big part in the success of the action. The Hindenburg wire and trenches were reached and crossed as planned, much to the surprise of the defender, and Havrincourt, Marcoing, and Masnieres were captured and occupied.

While the passage of the Hindenburg trenches was being made, many interesting incidents occurred. The commander of a tank observed that the infantry appeared to be under fire, but none of the crew could locate the point from which the fire was coming. Finally, three infantry scouts advanced toward the tank by rushes. One of them reached the tank and, with his hat on his bayonet, indicated the direction of the hostile machine guns. This tank had orders to wait until the next tank dropped its fascine into the second trench before trying to cross, it having already dropped its own fascine. However, the infantry was under fire from guns which had been located, so the tank commander decided to attempt a crossing of the second line unaided. This was finally accomplished and the tank made for the machine guns near the crest of a hill. The German gunners made no

move to leave their position or cease firing; they continued their fire regardless of the approaching tank until their weapons and one of the gunners were crushed by the tank.

In response to a signal from the tank commander, the British infantry now came forward without losses. Being too far ahead, the tank commander could have waited for the rest of the tanks which were coming with the infantry, but he decided to move on over the crest of the hill. As soon as he had done this, he observed four German field guns which were a short distance away and apparently prepared to fire. The German gunners seemed to be as much surprised as the tank crew. Although no doubt realizing that he was alone and unsupported, and that the guns could go into action before he could move his tank out of their field of fire, the tank commander gave orders for full speed ahead.

With its weapons firing, the tank made for the battery at about 4 m.p.h., its highest speed, and the German gunners soon went into action. The first two rounds were high, then one gun fired short, the aim of the gunners, no doubt, being somewhat influenced by the suddenness of the attack and the excitement of the moment. The tank commander was at first undecided as to whether to zigzag in his approach and thus cause the gunners to re-lay, but, as the tank drew nearer, he decided against this course and continued straight for the center of the battery. The tank was a few yards from the guns when the upper cab was struck by a shell, temporarily dazing the crew. One man was fatally wounded by a shell splinter. The crew recovered and the tank continued, much to the surprise of the artillerymen. In a moment it was among the guns, the fire from its machine guns and the case shot from its six pounders wiping out the remainder of the gun crews.

The infantry and the other tanks arrived and the partly disabled tank moved out to aid in taking the next objective. No casualties occurred among the remaining members of the crew during this part of the action although several were slightly wounded by bullet splash.

The next mission of this tank was to seize a bridge over a canal for the use of the troops following. The route passed through Mairie and, as the tank was passing through this place, retreating German artillery limbers were observed in another street making for the canal and the bridge. The tank commander followed the limbers and ordered his gunners to hold their fire, as he reasoned that the bridge would not be blown up as long as the artillery was on his side of the canal. As soon as the limbers passed across the bridge, the German officer detailed to destroy the bridge came up to see if any more German troops were to use the bridge and found that tank upon it. The tank gunners fired at him but missed as he ran under the bridge to light the fuse. Two of the tank crew quickly followed and shot him with their revolvers before he succeeded in lighting the fuse, thus saving the bridge. The tank moved forward into position to cover the approach to the bridge and await the coming of the infantry.

When the infantry and another tank arrived, preparations were made

to return the tank that saved the bridge to its rallying point as the crew were by this time exhausted. Deciding to give them a little more time to rest before starting back, the tank commander withheld the order to move back. Before the order was issued he was requested to aid an infantry company which was being held up by fire from a nearby ridge. Knowing he had only enough gas to reach the rallying point and that, by this time, all other tanks had gone back and, consequently, he would have no tank support, and believing that his crew was physically incapable of the additional effort necessary to take the strong point on the ridge, the tank commander at first decided against making this additional effort. As the infantry officer who had made the request moved away to return to his company, the tank commander changed his mind and called for three volunteers from his remaining six men. The six men responded. As soon as the tank reached the hill it came under very heavy fire from all directions. The machine gun being operated by the tank commander jammed and, as the tank was now close to the German troops, he opened the front flap and fired at them with his revolver. Lead splash from bullets striking the open flap blinded the commander, but case shot from the tank six-pounders drove the German troops from the ridge. Soon thereafter three shots from a German field gun struck the tank and set it on fire. His vision having improved somewhat by this time, the tank commander moved his men from the tank and, taking charge of some of the many German guns left on the ridge, prepared to hold the position until the arrival of the infantry. With these weapons and the small tank crew, which was augmented by the arrival of an officer and three men from an infantry company, three counter attacks were stopped and the ridge was held until the rest of the infantry arrived.

Graincourt was the farthest point reached by the infantry troops during the 20th. The tanks continued on from this place but, due to the exhaustion of the foot troops by this time, no further gains could be made and held. At many points during the advance, heavy fighting took place. Among the most interesting encounters was the duel near Lateau wood between a tank and a German 5.9 inch howitzer. After the latter had, at close range, blown off a part of one sponson and before the howitzer gunners could load again, the tank struck the big gun and crushed it.

At all points along the advance the infantry and tanks cooperated as planned except in the case of one division operating near Flesquieres, which, according to General Fuller, had devised an attack formation on its own. This information prevented the desired close cooperation between the division and the tanks and, as the tanks moved forward, they came over a ridge and found themselves under direct short range artillery fire from a single gun which is said to have knocked out several tanks before it was silenced. These tanks evidently came over the ridge one at a time in plain view of the gun.

The supply tanks were advanced to their new positions, the wireless tanks reported the capture of Marcoing, and the tanks assigned to clear the wire for the cavalry opened up wide passages as directed. The tanks completed their part of the program by 4 PM. and

the successful conclusion of the first day's efforts had more than justified the faith of the tank advocates in these vehicles.

As no provision had been made for tank reserves in the general plan, the best of the remaining tanks and crews were formed into companies for use on the 21st. Twenty-five tanks aided in the capture of Anneux and Bourlon Wood and 24 tanks helped capture Cantaing and in the attack on Fontaine-Notre Dame. At the latter place, 23 tanks entered the town ahead of the infantry. The Germans defended their position from the tops of houses, firing at the tanks and throwing bombs on them. The British infantry was so exhausted that it could not support the tanks and take advantage of the opportunity provided by them, so the tanks had to withdraw from the town.

Infantry and tanks captured Bourlon Wood. The tanks then went on toward the town of Bourlon nearby, but, owing to casualties among the infantry, the troops available were not sufficient to capture and hold Bourlon. Tanks and infantry attacked both Bourlon and Fontaine-Notre Dame on the 25th and 27th but did not succeed in taking and holding either place. The plans made for the employment of cavalry were not carried out.

The following incidents in the defense against tanks in Fontaine, published in *Taschenbuch der Tanks*, are given to illustrate the efficient methods used by both the offense and defense in this early instance of street fighting.

The author and leader was Lieutenant Spremberg, commander of the 5th Company, Infantry Regiment 52.¹

My aim was the village entrance to Fontaine. Should the first tank succeed in coming out of Fontaine, our battalion was lost, since it would be subject to the flanking fire of the tank on an open field. With twenty men of my company I wheeled somewhat to the right, ran through the connecting trench on the double, in order to reach the first house before the tank arrived. My men with full packs, heavy lumps of clay on their feet, rushed after me. No one held back, as each one realized his task at this moment.

We saw the tank about 100 meters ahead of us advancing and holding the entire village street under its fire. However, we quickly sprang into and behind the yards. We had found a hand grenade dump in a previous assault on the village and tried at first to throw the hand grenades under the tracks of the tank. That succeeded. The single grenades, however were too weak in explosive ability. I then ordered that empty sand bags be brought and four hand grenades to be placed in them, with one grenade tied near the top of the bag so that only the firing spring showed. In the meantime the tank, which had stopped, was kept under steady rifle fire, particularly the eye slits, so that my assault group could work to better advantage.

¹From *Taschenbuch der Tanks*, 1927, Dr. Fritz Heigl.

Then came a favorable moment and Musicians Butenberg and Schroeder, both storm troopers, rushed upon the firing giant and, from throwing distance, tossed two bunched charges under the tracks. A single explosion, the tracks on the left side flew in the air, and the tank stood still. At this there was a cheer from our little group. An approach was not to be thought of since the tank held everything under its fire. In a few minutes the fire ceased. Suddenly a second tank appeared, armed with cannon, and opened fire, penetrating the lower house walls so that we had to flee into the farm yard. In spite of that we placed it under rifle fire and saw to our dismay that it moved to the right side of the tank which we had disabled. Since we could not cross to the other side of the street, we could do it no harm even though it was only 10 meters from us. What happened? The second tank evacuated the crew of the first and, firing constantly, departed like a roaring lion.

Then came information from my noncommissioned officer post under 1st Sergeant Lutter whom I had placed at the east exit from Bourlon Wood, that sixteen tanks were advancing against the west exit of Fontaine from Bourlon Wood. Volunteers to report to the regiment! Noncommissioned officer Maletzki, who made his way through a heavy barrage, requested artillery fire. The tanks, some of which were seen at 10:30 were destroyed. The artillery, particularly the heavy artillery, had completely put them out. So it was with the English infantry, who, at about 2:00 in the afternoon, were on the defile of Bourlon Wood near the western village entrance of Fontaine in dense column march. This time the heavy artillery fulfilled its obligation. The English infantry was destroyed. With that, the English attack was temporarily halted.

(After 2 o'clock) We all know that the Englishman is tough. Near 3 o'clock they organized another attack with 80 tanks deeply echeloned on a narrow front, and attacked energetically, single tanks penetrating as far as the village of Fontaine. Their watchword then was clearly, "Take Cambrai, cost what it may!" The first tank that came into Fontaine was C-47. We sat in a house and had prepared ourselves well with armor piercing ammunition and bunched grenades. "They are coming!" was heard. My orders went to each subordinate leader. We could hardly raise our heads over the lower window sills so heavy was the enemy machine gun and shell fire. It was necessary

¹From Taschenbuch der Tanks, 1927, Dr. Fritz Heigl.

to flee to the yard since the shells fired from 10 meters easily penetrated the walls of the house. We let the tank go by and opened fire at nearly 20 meters on the eye slits in the rear walls, at leisurely but continuous fire with armor piercing ammunition. Then I saw a reservist firing with trembling hands from a window and hitting nothing. Taking his gun, the first shot cracked, and a yellow flame came out of the tank. I repeated, shot once more, and already my men were yelling. "Hurrah, Lieutenant, you hit it!" I saw two bright flames leaping from the rear. Everyone ran out, covered by the houses, behind the still-moving tank until it suddenly began to smoke and then stopped. The tank crew fired wildly at us so that none of my men could approach. After about five minutes the doors of the tank opened. Believing that the crew wished to surrender, we held our fire. But no, the crew had no thought of surrender, but continued to fire like fury, as they had only wanted fresh air. My command was repeated to direct fire against the now closed doors. This incident perhaps lasted seven minutes. All of a sudden everything in the tank was quiet; firing ceased. Carefully we ran up, ripped open the door and found truly that the entire crew had met their battle death.

New tanks were reported by 1st Sergeant Lutter. One of these monsters came along the road from Bapaume as far as the schoolhouse in spite of the fact that we continued to ply it with armor piercing ammunition. At this point on the road we had a machine gun that we had taken over from the 46th Regiment during a counter attack. Point blank fire was placed on the right side of the tank up to counter attack. Point blank fire was placed on the right side of the tank up to 5 meters, but then we had to flee to the house. The tank moved suddenly to the south part of the village and began to smoke. We followed; suddenly the crew threw smoke bombs and utilized the opportunity to escape to the cellars. We took possession of the tank but were unable to find any trace of the crew, who surely were provided with civilian clothing by the residents who remained.

Suddenly (at 4:30), behind us is heard a characteristic and well known din. We saw at the road bend toward Cambrai, and awaited with delight, two motor guns. Commanding them was a keen captain who reported to me immediately and became oriented. At once the captain placed one gun at the road bend toward Bourlon Wood and placed one, concealed, near the Bapaume road.

Soon, through the defile, as into a rat trap, from Bourlon Wood came nine tanks toward Fontaine. The gun crews stood to their guns, burning with eagerness. The captain commanded "Steady men, it will soon be time." Now the tanks are climbing out hardly 100 meters away. The command rings, "Rapid fire!" The first tank rears upward, those following halt. One direct hit after another strikes the tank company. The crews, which were left alive, fled and abandoned sound tanks. For us it was a rare fine moment. All praise to the motor guns and their personnel.

In Fontaine now were concentrated all available troops. The English appeared to have given up their desire for further advance.

In a crater on the road to Bapaume lay a tank. Members of every possible organization had, with tremendous losses, attempted to storm the colossus. Constantly, new troops of the steadily increasing units, stormed it and were regretfully required to retreat because of heavy losses. The tank crew defends itself well. They mow down in every direction with their machine guns. 30 to 40 brave field grays, some dead, some wounded, lie about the monster. My 1st Sergeant Luban and Musician Schoenwetter bend all their skill and succeed. Crawling along, using every crater for cover, they approach the monster and strike against the doors with rifle butts. The doors were opened and a single Englishman appeared. The rest of the crew were already dead. The Englishman who had defended himself so bravely was taken prisoner. One machine gun, the only one still capable of firing was taken as a trophy.

By November 28th the tank units had become so depleted that it was decided to withdraw two of the tank brigades. This plan was carried out and, while it was in progress, the remaining tanks and exhausted infantry had to bear the brunt of the strong German counter attack, which started on November 30th, and which, due to lack of preparation by the British for such a contingency, was destined to turn the tables and practically wipe out the advantages gained in the brilliant victory of the 20th and 21st. By way of comparison of results, it was noted that an advance of 10,000 yards, from a base 13,000 yards wide, was made on the 20th in about twelve hours, while at the Third Battle of Ypres, it required three months to effect a similar advance. The tank force at Cambrai numbered about 4200 men. The casualties in the 3rd and 4th Corps during the 20th exceeded 4000.

Reprinted from The Fighting Tanks Since 1916, by Jones, Rarey, and Icks.

Bapaume, August 21, 1918.

The plan was for the Third British Army to attack north of the Ancre toward Bapaume on August 21st, while the Fourth British Army attacked south of this river. August 22nd was to be used by the Third Army in preparation for a continuation of the attack of the 23rd. If success attended the efforts on the 23rd, both armies were to exploit any advantages gained, and the First Army on the north was to make an additional attack.

To the Third Army were allotted the following: The 1st Tank Brigade, consisting of one battalion of Whippets, one battalion of Mark IV tanks, one battalion of Mark V tanks, and the battalion of armored cars; the 2d Tank Brigade, consisting of one battalion of Whippets, one battalion of Mark IV tanks, and one battalion of Mark V tanks; and the 3d Tank Brigade consisting of two battalions of Mark V tanks and one battalion of Mark V Star tanks. This army was to deliver the principal attack. The Fourth Army was to be assisted by the 4th and 5th Tank Brigades, each of which had three battalions of Mark V tanks. Although 15 battalions were thus allotted for this action, these units were much reduced in numbers of tanks available, due to the casualties incurred in the Battle of Amiens, and the battalions at this time had only from 10 to 15 tanks each.

About this time the Germans adopted new tactical methods of defense which consisted mainly in holding the front line lightly, as a line of observation or outpost line, with their reserves and guns farther back, thus extending the depth of their defense. On account of this extension and the difference in maneuverability of the three types of tanks available, the Third Army arranged for the Mark IV to go no farther than the 2nd objective, while the Mark V and Mark V Star tanks were to aid in the attack on the 2nd objective and go as far as the Albert-Arras railway. The Whippets were to operate beyond the railway.

In addition to Squadron No. 8 of the Royal Air Force, Squadron No. 73 was attached to the Tank Corps for use against German field guns.

Starting at 4:45 AM, the Mark IV tanks and their infantry took the first objective and moved on to the second objective which was hurriedly evacuated by the German troops.

A different situation was encountered, however, when the Mark V, Mark V Star and Whippets arrived at the railway. This line had been prepared for defense, and was strongly held by machine gun nests and by field guns placed well forward. In addition to these measures, it was found that the points on the railway which were not embanked were defended by concrete blocks and iron antitank stockades. The fog

lifted about the time the tanks arrived, with the result that they came under very heavy fire. A number of tanks were put out of action at this time but the infantry, who avoided the tanks, moved forward without many casualties. One of the Whippets succeeded in getting across the railway before the fog lifted but it was then right in front of the German guns and was put out of action. The tank commander got his crew out of the tank and then went back to the point of crossing, under heavy fire, to warn the other tanks which were intending to cross at that point. As soon as the fog lifted, the planes designated for attacking field guns came forward and were of material assistance from this time on. At some points the German machine gunners and artillerymen fought to the last, while at others large groups surrendered before the tanks could use their weapons.

The crews of the Mark V and Whippet tanks suffered severely from lack of ventilation, heat, engine fumes, and gas. In some cases the entire crew of the Mark V tanks fainted and the tanks were consequently out of action temporarily due to the fault in design whereby the crew compartment was not properly ventilated. After about an hour of operation, the Whippets were almost as bad in this respect as the Mark V tanks. Even the weapons became hot, and the steering wheel, in one case, became too hot to hold.

The armored cars operated successfully after the Whippet tanks had towed them through a large hole in the road near Bucquoy. Passing through this place, they entered Achiet-le-Petit before the infantry arrived and put several machine gun nests out of action. Two cars received direct hits at this place and were knocked out.

The objectives set for this date were gained. The cost in tank casualties was 37 out of the 190 tanks used.

The following account, which describes an instance of a tank catching on fire during this action and which was written by L. A. Morrison, a member of the crew, was published in the Royal Tank Corps Journal:

By August 21st we were behind Courcelles and Gommecourt, where the enemy were concentrated in force. We were warned of tank traps, antitank guns, and all sorts of other devices to entertain us. The weather was still mainly fine, which was lucky for us, for we slept at night beneath our buses. At least we were fairly safe from shelling and bombing.

We went forward from the tape in an impenetrable curtain of fog. Not a leaf stirred, even the sound of the guns seemed blanketed. At eight o'clock we were in the thick of it, firing going on from all directions, the dense mist enveloping us, and none of us knowing exactly what was happening. Then all manner of accidents took place at once. The crew commander bravely got out of the bus to discover how we stood, and to get into touch, if possible, with company headquarters; a few minutes later we were surrounded by Germans; one of them got under the six-pounder and fired his automatic through the aperture; poor Morris at the other gun was shot through the spine;

then the engine burst into flames. I told the gunners to blaze away like the devil with machine guns and revolvers, while the rest of us seized the Pyrene extinguishers and directed streams of acid on the burning engine. Dense smoke soon filled the cabin, and the rank stench of singeing rubber. We fought desperately, in terror lest the petrol went off. The gunners cleared the Germans, all but a persistent begger who was crawling round the bus and firing through every loophole he could find.

Miraculously he was missing us by inches, but he was just a bit more than we could stand. In sheer desperation I got hold of a Mills bomb, hopped out of the cab, and ran around the back, to meet him face to face as he was returning. We both started back automatically; I suppose it would have been funny in other circumstances. For a spare moment we looked into each other's eyes. I don't know what he read in mine, except sudden funk, but the pistol slid from his fingers and he bolted round to the other side of the bus. This gave me back some courage. I pulled out the pin, lobbed the bomb over the bus and cowered down in the shelter of its near side. The Mills went off all right, and fragments sang in the air overhead.

I was shaking all over. The boys had opened the sponsons and were heaving out the ammunition. Morris was on the ground, livid and speechless, his head wagging from side to side. The flames had got the upper hand, and the interior was a lurid inferno. Two stood at the doors and threw out all we could save — wedges from the six pounders; which he did, although he got badly burned. Mr. Allan returned then, to find his bus blazing merrily, ammunition popping off, one of the crew dying, the rest pretty "dicky".

That was the end of our jaunt that day. I found my way to Brigade with Mr. Allan's report, and we were ordered to withdraw. We saw Morris to a field dressing station and returned to company headquarters.

Epehy, September 17, 1918.

This action, carried out by the Third and Fourth Armies and in cooperation with the 1st French Army, had for its purpose the capture of the Hindenburg outpost line in order to secure observation over the main line and to permit the advancing of the artillery positions for the main attack.

Tanks were not used until September 18th, when GHQ allotted the 4th and 5th Tank Brigades to the Fourth Army. Twenty Mark V tanks of the 2nd Battalion, the first to arrive, supported the 3rd Australian Corps and 9th Corps over a wide front. Visibility was poor during the fight and the tank compasses in these tanks proved useful. On the 3rd Corps front, Epehy was taken, many Germans surrendering upon the arrival of the tanks. The village of Ronsoy was well defended by machine guns with armor piercing ammunition and by the German antitank rifles. The infantry was stopped in the attack on Fresnoy by heavy machine gun fire coming from the strong point called the Quadrilateral, a strong fortified system of trenches and buildings which were an important part of the Fresnoy and Selency defenses. Two tanks advanced against this resistance. The first one to arrive became ditched in a sunken road near the strong point and the intense machine gun fire prevented the crew from using the unditching beam. In the meantime the driver of the second tank had been killed and the assistant driver badly wounded, so the tank commander personally drove his tank, while the rest of the crew operated the guns until the tank caught on fire. As the crew left this tank, they were surrounded and captured by the Germans. The crew of the first tank then left their tank, removing their machine guns, and taking up a position away from the tank, held the Germans off until the infantry arrived. The diversion of many German weapons to these two tanks had, in the meantime, so lessened the opposition to the British infantry that it was able to advance without difficulty. Ronsoy and Hargicourt were also captured on this date, although the attack had not made rapid progress during the day.

The advance was not started again until September 21st, when an attack was made by troops of the 3rd Corps against the Knoll, Guillemont, and Quennemont farms. Nine tanks in all, seven Mark V and two Mark V Star supported this attack. In this action, land mines, field guns, antitank rifles and machine guns using armor-piercing ammunition opposed the tanks. There were not enough tanks to take care of the German machine gun nests and the attack failed. The two Mark V Star tanks successfully carried their load of infantry machine gunners and their weapons forward, but the tanks were under such heavy machine gun fire when they arrived at their destination that the transportation troops could not be unloaded at the point designated.

The next advance was started on September 24th with a view of completing the improvement of the line, which, on account of the determined resistance up to this point, had not yet been satisfactorily effected. In the meantime the 8th, 13th, and 16th

Battalions, together with the 5th Supply Company tanks had arrived. Nineteen Mark V tanks of the 13th Battalion supported two divisions in the attack on this date against Fresnoy-le-Petit and upon the Quadrilateral area, the previous attack having secured only a small portion of the latter stronghold. The tanks were moved up to the assault position by the operating crews and the fighting crews were later carried forward by truck. During the final approach march, some difficulty was had on account of the semaphores of the tanks catching on the overhead signal wires. During this part of the approach march, the Germans used gas effectively, causing the tank crews to wear their masks for two or more hours and, when they had arrived at the assault position, German planes dropped flares over the tanks and they were subjected to heavy shell fire. Antitank guns were used effectively and about half of the tanks were put out of action. Infantry troops and three tanks entered the Quadrilateral but all three tanks were knocked out by one German gun. By night the British line had been brought to a point which flanked the Quadrilateral, and certain observation points had been gained, but the full object of the attack had not been accomplished.

The following account, which describes an instance of the use of tanks to carry infantry troops and of the effect of gas on the tank crew, was written by L. A. Morrison, and appeared in the Royal Tank Corps Journal.

In those late September days, with the daylight fading and the first leaf falling and the winter chill advancing, a new emotion came to warm us and cement us still more closely. This was the strange, exulting sense of victory that pervaded the air. You could feel it; you thrilled to it. Our news room in those days of preparation was crowded after the arrival of the official bulletins. The number of prisoners became incredible; the swiftness of the advance amazing. We girded up our loins and worked feverishly to be ready for the crowning triumph. If we could capture Cambrai and all the network on communications of which it was the center, the end would be in sight. The four years' depression was lifting at last.

But I was not to see the end. My next engagement was the last. We advanced on the Epehy front against the famous Quadrilateral near Fresnoy-le-Petit. The Quadrilateral was the pivot on which the German defense hinged in this sector. Groups of cottages had been reinforced and fortified and encircled by an elaborate system of trenches. It was infested with field guns and antitank guns, and simply bristled with machine guns. And we hadn't nearly enough tanks that day to make good our losses.

To save the storming troops till the last moment, we packed as many as we could inside our buses. Talk about sardines! The infantry didn't enjoy their ride and vowed that the Tank Corps was a vastly overrated affair when it came to a question of comfort. But when they caught a glimpse of the "cloudburst" outside they were resigned to remain where they were. We dipped and dodged, taking advantage of every bit of natural cover there was, but the bombardment found us everywhere. However, it was the gas that defeated us. There is no

saying how far we might have gone if we could have had free use of our faculties. But when the gas barrage drifted toward us and began to seep into our bus, we were handicapped as much as if we had been blindfolded and handcuffed. To clamp a boxrespirator over your face in a hermetically sealed cab with the temperature at a hundred degrees is a bit too thick. The sweat streams down, the damp folds cling to your face, the eye piece dim, you can see nothing at all and you feel you are suffocating. All the while the bombardment went on, concentrating on each tank as a spearpoint of attack. Shells missed us by hair's breadths; our sides were splintered with shrapnel and machine-gun bullets; we couldn't see where to go or what to do; and the gas clung persistently round us. Again and again we pushed our hands into our respirators to sniff the air, but it was no use; the bus was permeated.

We jogged along aimlessly, dodging, dipping, zigzagging, swinging away from shell craters that were suddenly formed in front of our noses. At last it became intolerable. There we were, the engine roaring, the guns blazing, the cab stacked with explosives, seven of a crew and fourteen of the infantry with not enough air to keep an oyster alive. I couldn't stick it any longer. Besides, I couldn't see anything. I whipped off the mask and sniffed the air. It didn't seem so bad now, and the fact that I could see and hear was everything.

Not long afterwards a terrible cramp seized me, right across the stomach. The pain increased, gripping me until I doubled up in agony. Then I began to vomit, violently, endlessly. Everything seemed to be upheaving. I thought it would never stop. I coughed, spluttered, choked and retched, rolling on the floor with my knees up. I didn't care a cuss what happened to me. If the bus had blown up it would have been a blessed relief. Something did happen to the bus soon after, but not as bad as that. A shell pierced the rear sprocket and put us out of action. The crew had then a terrible fusillade to withstand before they could withdraw, during which the armor was twice penetrated by an antitank gun. Mr. Allan applied such remedies as he could find in the first-aid chest, but nothing seemed to help until the vomiting ceased. When evacuation was decided upon they wanted to take me along on a stretcher, but I had the decency to resist and hobbled back with them somehow, clinging to a couple of shoulders, as far as the field ambulance. Luckily for me they didn't inquire too closely into my case at the C.C.S., for really it was all my own fault.

By the time I was back the battalion had withdrawn to billets near Alangy, and the Armistice was signed before we were called upon again.

Reprinted from The Fighting Tanks Since 1916, by Jones, Rarey, and Icks.

"HOT WORK, THIS."

A good description of what a tank action looks like from the inside of a tank is contained in a report of the personal experiences of 2d Lt. Paul S. Haimbaugh, U.S. Army, one of the tank commanders in the 301st Battalion during the action on the 8th of October, an extract from which follows:

* * * The doughboys spring to their feet and start forward. You urge your tank on until you are nosing the barrage; ahead the German distress signals flare in the sky. In a moment the enemy barrage will fall. Here it is, and it's disconcertingly close. You think maybe you better zigzag a bit, maybe you can dodge 'em. The doughboys trudge sturdily on and here and there one sags into a heap (shell splinters). One shell nearly gets you as it bursts nearby with the rending crash peculiar to high explosive. Seems like it nearly lifts your tank into the air. A dozen pneumatic hammers start playing a tattoo on the sides and front of your tank, and splashes of hot metal enter the cracks and sting your face and hands.

Well, it's up to you to locate the enemy machine guns and put them out. Observation from the peep holes reveals nothing. You pop your head through the trap door and take a quick look around. There they are. A hasty command to the six-pounder and machine gunners. Crash! goes the port six-pounder, and the tank is filled with the fumes of cordite. A hit! A couple more in the same place and a belt of machine gun cartridges suffices to quiet that machine gun nest.

"Come on Infantry!" As the tank passes, you see the grey forms sprawled grotesquely around their guns. You are glad the "bus" is a male for these six-pounders certainly do the work.

Up ahead is a railway embankment and a sunken road, a likely place for machine gun nests. Tat-tat-tat! They've already begun to strafe you. Slipping from your seat you shout commands to your gunners. Picking targets they pepper away with the machine guns and six-pounders. The noise is terrific and the tank is filled with cordite and gasoline fumes. There is a sickening smell of hot oil about. You are pretty close now, so you order case shot and the six-pounders rake the embankment and road with iron case shot, with deadly effect. The place is a shambles—grey forms sprawled in the road—huddled in gun holes—lying in position about their guns. It's war, and you had to get them first. A half a dozen Germans scramble to their feet with hands upraised and you let them pass to the rear.

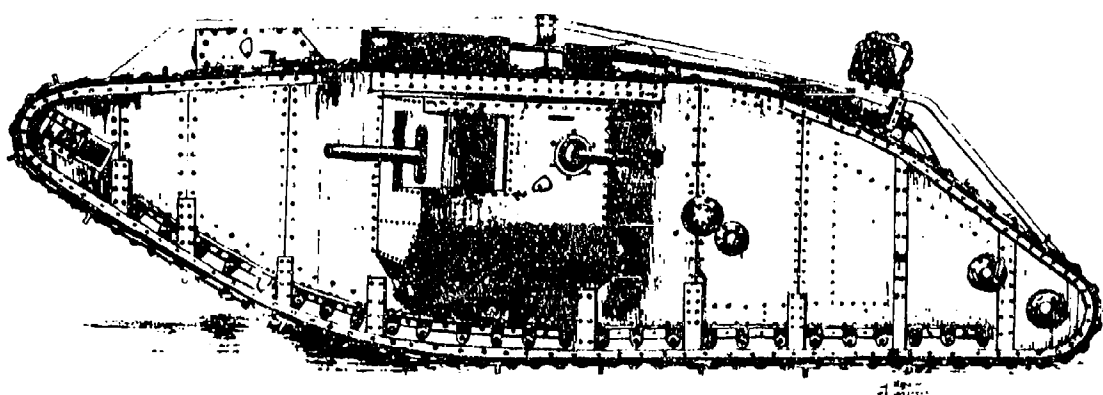
"Come on Infantry!"

Your tank surmounts the embankment and your hair raises for on a ridge 500 yards ahead are two 77's, sacrifice guns left to get you. Crash! Another one which lands close sends a shower of dirt and stones against the side of the tank. Working like mad, your gunner sends four shells after the two guns. Good work, for they are silenced. One member of the two gun crews is able to run away.

Beads of perspiration stand on your forehead. Hot work this. The combination of powder and gasoline fumes, the smell of hot oil and

the exhaust begins to daze you but you pull yourself together and rumble on. The infantry swings along behind, bombing dugouts and "mopping up," assisted by your running mate, a female tank armed with machine guns only.

It's a mile to your objective now, but it's a mile of thrills. You get "shot-up," put out a half dozen machine gun nests; clean up another sunken road with machine guns placed every ten feet along it. A one-pounder in a hedge scares you with several well placed shots before it goes "west." Some German artillery observer, way back, spots you; and chases you over the landscape, dropping now a shell in front and then in back of you. Here is our objective! You wait for the infantry to come up and your crew enjoys a breath of fresh air. After the infantry has dug in and consolidated its position, you turn towards the rallying point.



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TANK VERSUS TANK:

VILLERS-BRETONNEUX, APRIL 24, 1918.

Fourteen heavy tanks were assigned for this action. They were formed into three groups and assigned: three tanks to the 228th Infantry Division, six to the Fourth Guard Infantry Division, and five to the 77th Reserve Infantry Division. The first two groups were to attack Villers-Bretonneux in conjunction with the infantry and the last group was to attack Cachy.

Among the instructions given to one group commander the following items appeared: "No. 3, the commander's tank will be the guide; the other two will follow at a distance of 200 meters in echelon to the right and rear. If, during the combat, the infantry should request a tank, their request is to be granted in any case. Six men of the 207th Infantry will be assigned to each tank as patrols."

Two motor trucks, loaded with fuel, ammunition, intrenching tools, etc., were assigned to each group. These vehicles were to follow their groups, by bounds.

The terrain was very favorable for the use of tanks. There were few obstacles and the fields over which the attack was to take place, were dry. There was a heavy fog at the start and a heavy bombardment was carried out during the approach march to prevent the British from hearing the noise made by the tanks.

Engine trouble in one of the tanks reduced the number participating to 13. Group No. 1 left its starting point, just in rear of its infantry front line, at 6:50 A.M. crossed the German front line at 7 A.M. and the British front line shortly thereafter. The British troops and especially those in well concealed machine gun nests which, due to the heavy fog, the Germans had not discovered, put up a good fight, bringing all available weapons to bear upon the tanks. After a short but sharp engagement, the British infantry and machine gunners surrendered to the tank personnel and were turned over to the German infantry.

The commander's tank of Group No. 1 advanced under heavy infantry and artillery fire, to within 100 yards of Villers-Bretonneux, when it was discovered that the infantry was not following. It turned back to regain contact and soon wiped out four more machine gun nests which had been firing on the tank from the rear. Rejoining the infantry, this tank moved to the eastern edge of the town under heavy machine gun fire and overcame several machine gun nests at this point. The tank and its infantry then entered the town.

The other two tanks of this group cleaned out strongly intrenched machine gun nests which were holding up the German troops and, after reaching the town where they again supported the infantry attack, they joined tank No. 3, according to plan, near the tile factory. The

factory had been made into a large machine gun nest. The three tanks, using their heavy guns, shot it to pieces. Six British officers and 160 men surrendered. After the German infantry had arrived at the tile factory, tanks No. 1 and No. 2 moved against an airdrome, also heavily armed with machine guns, and destroyed it. After wiping out several machine guns in houses, where more prisoners were taken, they reached their objectives at about noon, and, having reported their departure to the infantry commander, returned to their starting point.

Group No. 2 crossed the German front line a little after 7 AM and attacked a strong point along the railroad embankment from the front, flank and rear, silencing its guns and permitting the infantry to advance. One tank cleaned out a trench nearby and captured 15 prisoners. Two of these tanks moved past the railroad station and one of them fired upon approaching British reinforcements. The other tank was having trouble with its gun recoil mechanism but managed to silence several strong points, and the two tanks, by opening fire on the Bois d'Aquennes and the British reserves west of it, aided the German infantry to enter these woods.

Tank No. 3 cleaned out the British first line, caused several casualties, and took 30 prisoners. It then captured a switch trench with 40 prisoners and moved toward a fortified farm. It reached the farm after a breakdown, and silenced the machine guns located there. The mechanical trouble continued, but before the tank stopped the crew was able to break down strong resistance south of the railroad station, capturing one officer and 174 men. Finally, the carburetor jets became stopped up and the tank could not be moved, so the crew went forward without it. Later, the commander returned to the tank, changed the jets and made another attempt to move the tank. He succeeded in getting it started but soon ran it into a large shell hole which had just been dug by a shell that exploded in front of the tank. As the tank entered the hole it turned over. It was therefore temporarily abandoned but later brought back to a safe position.

Tank No. 4 reached the British front line trenches at 7:10 AM, cleaned them out and attacked a fortified farm south of the town, where it cleared the way for the infantry. Joining tanks No. 1 and No. 2, the three vehicles moved against Bois d' Aquennes and stopped a British counter attack. Tank No. 5 became lost on account of the fog. It came under heavy machine gun fire and the driver was wounded. When he was hit, he lost control of the tank. The engine stopped and the tracks were held fast by the brakes, which jammed. The commander used some of his men as an infantry detachment until the tank was repaired, when, with the men remaining, he moved the tank toward the Bois d' Aquennes, cleaning out a few machine guns which were in the trenches crossed by the tank.

Tank No. 6 advanced at the proper time but its infantry did not follow. The tank came under heavy fire but went on until it was about 20 yards from the British line, when both engines stopped due to overheating. The driver had been wounded and the substitute driver was not with the tank. After the engines cooled off the commander brought the tank back to the German lines.

Group No. 3 lost a tank soon after the action started. This tank advanced with its infantry's first wave, successfully attacked several machine gun nests and portions of the trenches, but soon thereafter it struck a hole and turned over on its side. According to the account of this action, the British troops had started to lay down their arms and the tank commander had ordered his crew out of the tank to support the infantry troops on foot, when the British took up their arms and shot most of the tank crew. One member of the crew succeeded in getting back to the German lines and one was captured by the British. The captured man gave information to the British concerning the German tank troops. The German infantry retreated at this point and the tank was blown up by a German officer since it could not be brought back. Apparently this officer did not make a good job of it for the tank was later captured by the British in fair condition.

Tank No. 2 moved toward Cachy and attacked several machine gun nests including one which had held up the infantry advance for over an hour. This tank then advanced to a point about 700 yards from Cachy, firing on the British position at the village. At this point British tanks appeared and the first, and much discussed, tank-against-tank action occurred. The German account states that one of the German tanks was stopped by artillery fire and another one was forced to retreat in the initial encounter. As the second tank was moving back, it was put out of action by a direct hit from the right. Another shell struck the oil tank. However, the commander finally succeeded in saving the tank and moved it back, a little over a mile, to the German lines.

The British counter attack won back part of the ground captured by the German advance and this caused a change in the plans for using tank No. 3. It was intended that this tank should support the attack on Gentelles, but, since this failed, the tank was sent against Cachy. There it fired upon the eastern edge of the village. Later, however, since the German infantry did not plan to storm Cachy, the tank was released, whereupon it returned to the assembly point.

Tank No. 4 was also used in the attack on Cachy. It succeeded in cleaning out several machine gun nests and got into position where it could enfilade a 200-yard trench, thus causing some casualties and driving the remainder of the garrison back. Toward noon the tank commander noticed that the German infantry were retreating from the direction of Cachy. He turned his tank in that direction, stopped the retreat, and moved his tank toward the village. When within about 900 yards of Cachy, he came upon a number of British tanks which were approaching from the German right flank. Shortly afterward other British tanks made a frontal attack. The British tanks opened fire with their machine guns and the German tank replied with its heavy gun. The second shot struck a British tank and set it on fire. Soon thereafter this gun struck another British tank. The crew of one of the British tanks evacuated their tank and were shot down. The other British tanks left the field, being followed by machine gun fire to within 200 yards of Cachy. During this action the German cannon failed after the second British tank was struck, so, had the British

known it, they were on even terms as regards type of weapons. The German infantry again moved against Cachy but, as they did not enter the town, this tank was released and returned to its assembly point after having been in action eight hours.

These detachments entered the action with 22 officers and 403 men. Of this force, one officer and eight men were killed, three officers and 50 men were wounded, and one man was captured. Twelve of the 13 tanks were brought back to the German lines.

An account of the use of German tanks,¹ written by an English officer who commanded a front line company which was attacked by these tanks on April 24th states that unusually accurate machine gun fire was being received on his support trench and that orders were given for his men to keep their heads down. When this fire ceased he stood up to observe the sources of the fire and saw an enormous and terrifying iron pill-box with automatic weapons bearing down upon him. He got down in the trench and the tank passed over him. The tracks of the tank were within three feet of his face as he lay in the trench. After it had crossed he stood up and fired his pistol at the water jacket of the rear machine gun. Being warned by his men, he looked around quickly and saw a large German crash into the trench, his bayonet sticking into the parapet. Several other Germans ran toward the trench but they were all shot down by the garrison. Next, another German tank appeared, moving along and shooting the men in the front trench, crushing them, or firing into them if they tried to leave it. In this advance, the tanks were aided by German light automatic gunners who followed the tanks. In addition to these light guns, the German foot troops carried flame throwers which they used on the trench garrison. However the flames only reached to the parapet, so that men were not severely burned. They were scorched, however, and had to throw off their equipment. Having cleared up the first line trench, the tanks went on to the second trench, and now a third German tank appeared followed by German infantry. These troops bayoneted the remaining members of the first trench garrison. When the third tank started for the second trench, the officer and the garrison of the second trench retreated. All but five of this group were shot down before a nearby railway cut was reached. The first tank approached the cut firing on the group at this point as they ran down the railway. These shots went over their heads, however, as the machine gun in the tank could not be depressed enough to strike them. Removing his collar and tie for easier breathing, the officer reporting this action, a member of this group of five, outran the German infantry. He organized a counter attack later with men from various regiments. He was wounded during this affair and, while on his way back to the first aid post, met a tank company commander to whom he related the attack by the German tanks. This officer at once ordered British tanks forward to attack the German tanks.

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¹From an account published in the British Army Quarterly.

CHAPTER 2

WORLD WAR II



UK: "Cromwell" 157mm 28t



UK: Mk.III "Valentine" IV 40mm 17t



UK: Mk.VI "Crusader" I 40mm 19t



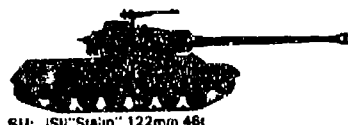
UK: M4 Sherman VC "Fire Fly" 76.2mm 35t



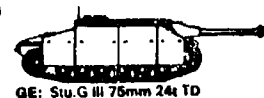
SU: T34/76(A) 76.2mm 28t



SU: T34/85 86mm 32t



SU: JSII "Stalin" 122mm 48t



GE: Stu.G III 75mm 24t TD



GE: PzKpfw III(D) 37mm 20t



GE: PzKpfw IV(D) 75mm 19t



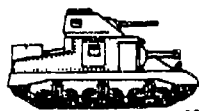
GE: PzKpfw V "Panther" (G) 75mm 46t



GE: PzKpfw VI "Tiger" (E) 88mm 55t



US: M3A1 "Stuart" 37mm 14t



US: M3A5 "Lee" 76mm 33t



US: M5A1 37mm 17t



US: M4A4 "Sherman" 75mm 36t



US: M10A1 76.2mm 31t TD



US: M26 "Pershing" 90mm 46t



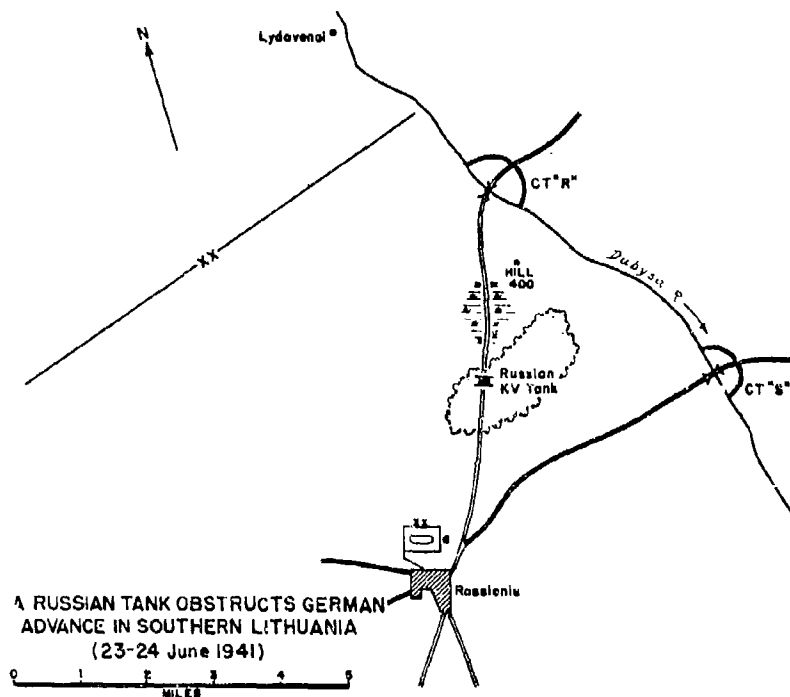
US: M24 "Chaffee" 75mm 20t

"THE PRIMARY MISSION OF ARMORED UNITS IS THE ATTACKING OF INFANTRY AND ARTILLERY. THE ENEMY'S REAR IS THE HAPPY HUNTING GROUND FOR ARMOR. USE EVERY MEANS TO GET IT THERE."

-GEN. GEORGE S. PATTON

THE ARMORED ROADBLOCK (June 1941)

When Germany launched her attack against Russia on the morning of 22 June 1941, Army Group North jumped off from positions along the border separating East Prussia from Lithuania. On D plus 1 the 6th Panzer Division, which was part of Army Group North,



was ordered to occupy the Lithuanian town of Rossienie and thence to seize the two vehicular bridges across the Dubysa River north-east of the town (map). After Rossienie was taken the division was split into combat teams R and S, which were to establish two bridgeheads, Combat Team R being assigned the bridge nearest Lydavenai, a village situated almost due north of Rossienie. By early afternoon both columns had crossed the river and contact was established between the two bridgeheads.

Mopping-up operations around its bridgehead netted Combat Team R a number of prisoners, about 20 of whom, including a first lieutenant, were loaded onto a truck for evacuation to Rossienie. One German sergeant was placed in charge of the group.

About half-way to Rossienie the truck driver suddenly noticed a Russian tank astride the road. As the truck slowed to a halt, the prisoners pounced upon the driver and the sergeant, and the Russian lieutenant lunged for the sergeant's machine pistol. In the struggle that ensued, the powerful German sergeant freed his right arm and struck the lieutenant such a hard blow that he and several other Russians were knocked down by the impact. Before the prisoners could close in again, the sergeant freed his other arm and fired the machine pistol into the midst of the group. The effect of the fire was devastating. Only the lieutenant and a few others escaped; the rest were killed.

The sergeant and the driver returned to the bridgehead with the empty truck and informed their commanding officer that the only supply route to the bridgehead was blocked by a heavy tank of the KV type. The Russian tank crew had meanwhile severed telephone communication between the bridgehead and the division command post.

The Russian plan was not clear. In estimating the situation, the bridgehead commander felt that because of the encounter with the tank an attack against the rear of the bridgehead was to be expected; accordingly, he organized his force immediately for all-around defense. An antitank battery was moved to high ground near the command post, one of the howitzer batteries reversed its field of fire so as to face southwestward, and the engineer company prepared to mine the road and the area in front of the defense position. The tank battalion, which was deployed in a forest southeast of the bridgehead prepared for a counterattack.

During the rest of the day the tank did not move. The next morning, 24 June, the division tried to send 12 supply trucks from Rossienie to the bridgehead. All 12 were destroyed by the Russian tank. A German reconnaissance patrol sent out around noon could find no evidence that a general Russian attack was impending.

The Germans could not evacuate their wounded from the bridgehead. Every attempt to bypass the tank failed because any vehicle that drove off the road got stuck in the mud and fell prey to Russians hiding in the surrounding forest.

On the same day, an antitank battery with 50-mm. guns was ordered to work its way forward and destroy the tank. The battery confidently accepted this mission. As the first guns approached to within 1,000 yards of the KV, it remained in place, apparently unaware of the German movement. Within the next 30 minutes the entire battery, well camouflaged, had worked its way to within firing range.

Still the tank did not move. It was such a perfect target that the battery commander felt that it must have been damaged and abandoned, but nevertheless decided to fire. The first round, from about 600 yards, was a direct hit. A second and third round followed. The troops assembled on the hill near the combat team's command post cheered like spectators at a

shooting match. Still the tank did not move.

By the time the eighth hit was scored, the Russian tank crew had discovered the position of the firing battery. Taking careful aim, they silenced the entire battery with a few 76-mm. shells, which destroyed two guns and damaged the others. Having suffered heavy casualties, the gun crews were withdrawn to avoid further losses. Not until after dark could the damaged guns be recovered.

Since the 50-mm. antitank guns had failed to pierce the 3-inch armor, it was decided that only the 88-mm. flak gun with its armor-piercing shells would be effective. That same afternoon an 88-mm. flak gun was pulled out of its position near Rossienie and cautiously moved up in the direction of the tank, which was then facing the bridgehead. Well camouflaged with branches and concealed by the burned-out German tanks lining the road, the gun safely reached the edge of the forest and stopped 900 yards from the tank.

Just as the German crew was maneuvering the gun into position, the tank swung its turret and fired, blasting the flak gun into a ditch. Every round scored a direct hit, and the gun crew suffered heavy casualties. Machinegun fire from the tank made it impossible to retrieve the gun or the bodies of the German dead. The Russians had allowed the gun to approach undisturbed, knowing that it was no threat while in motion and that the nearer it came the more certain was its destruction.

Meanwhile, the bridgehead's supplies were running so low that the troops had to eat their canned emergency rations. A staff meeting was therefore called to discuss further ways and means of dealing with the tank. It was decided that an engineer detachment should attempt to blow it up in a night operation. When the engineer company asked for 12 volunteers, the men were so anxious to succeed where others had failed that the entire company of 120 volunteered. He ordered the company to count off and chose every tenth man. The detachment was told about its mission, given detailed instructions, and issued explosives and other essential equipment.

Under cover of darkness the detachment moved out, led by the company commander. The route followed was a little-used sandy path with led past Hill 400 and into the woods that surrounded the location of the tank. As the engineers approached the tank, they could distinguish its contours in the pale starlight. After removing their boots, they crawled to the edge of the road to observe the tank more closely and to decide how to approach their task.

Suddenly there was a noise from the opposite side of the road, and the movement of several dark figures could be discerned. The Germans thought that the tank crew had dismounted. A moment later, however, the sound of tapping against the side of the tank was heard and the turret was slowly raised. The figures handed something to the tank crew, and the sound of clinking

dishes could be heard. The Germans concluded that these were partisans bringing food to the tank crew. The temptation to overpower them was great, and it probably would have been a simple matter. Such an action, however, would have alerted the tank crew and perhaps have wrecked the entire scheme. After about an hour the partisans withdrew, and the tank turret was closed.

It was about 0100 hours before the engineers could finally get to work. They attached one explosive charge to the track and the side of the tank and withdrew after lighting the fuse. A violent explosion ripped the air. The last echoes of the roar had hardly faded away when the tank's machineguns began to sweep the area with fire. The tank did not move. Its tracks appeared to be damaged, but no close examination could be made in the intense machinegun fire. Doubtful of success, the engineer detachment returned to the bridgehead and made its report. One of the twelve men was listed as missing.

Shortly before daylight a second explosion was heard from the vicinity of the tank, again followed by the sound of the machinegun fire; then, after some time passed, silence reigned once more.

Later that same morning, as the personnel around the command post of Combat Team R were resuming their normal duties, they noticed a barefoot soldier with a pair of boots under his arm crossing the bivouac area. When the commanding officer halted the lone wanderer, all eyes turned to watch. The colonel was heard asking the soldier for an explanation of his unmilitary appearance. Soon the sound of their voices became inaudible as the two principals in the little drama engaged in earnest conversation.

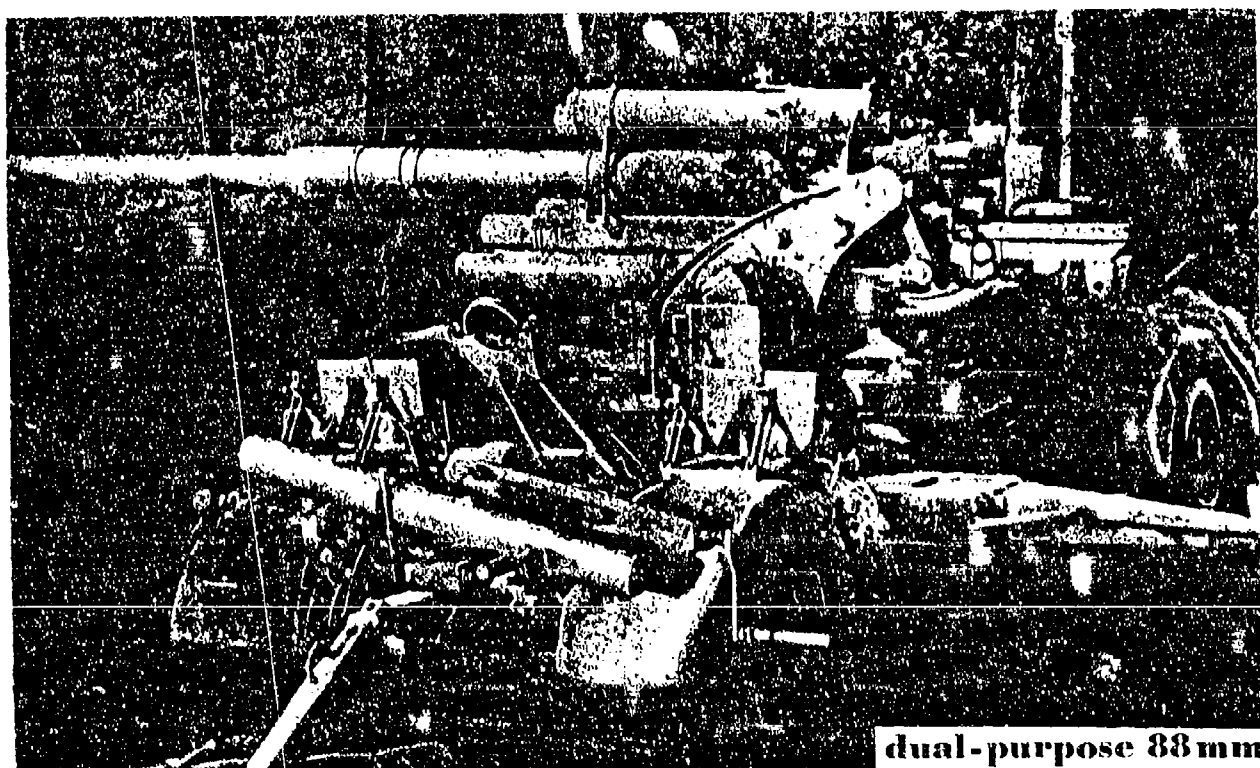
As they talked, the colonel's face brightened, and after a few minutes he offered the soldier a cigarette, which the latter accepted, visibly embarrassed. Finally, the colonel patted the soldier on the back, shook his hand, and the two parted, the soldier still carrying his boots. The curiosity of the onlookers was not satisfied until the order of the day was established, together with the following extract from the barefoot soldier's report:

I was detailed as an observer for the detachment that was sent to blow up the Russian tank. After all preparations had been made, the company commander and I attached a charge of about double the normal size to the tank track, and I returned to the ditch which was my observation post. The ditch was deep enough to offer protection against splinters, and I waited there to observe the effect of the explosion. The tank, however, covered the area with sporadic machinegun fire following the explosion. After about an hour, when everything had quieted down, I crept to the tank and examined the place where I had attached the charge. Hardly half of the track was destroyed, and I could find no other damage to the tank. I returned to the assembly point only to

find that the detachment had departed. While looking for my boots I found that another demolition charge had been left behind. I took it, returned to the tank, climbed onto it, and fastened the charge to the gun barrel in the hope of destroying at least that part of the tank, the charge not being large enough to do any greater damage. I crept under the tank and detonated the charge. The tank immediately covered the edge of the forest in machinegun fire which did not cease until dawn, when I was finally able to crawl out from under the tank. When I inspected the effect of the demolition, I saw, to my regret, that the charge I had used was too weak. The gun was only slightly damaged. Upon returning to the assembly point, I found a pair of boots, which I tried to put on, but they were too small. Someone had apparently taken my boots by mistake. That is why I returned barefoot and late to my company.

Here was the explanation of the missing man, the morning explosion, and the second burst of machinegun fire.

Three German attempts had failed. The tank still blocked the road and could fire at will. Plan 4, calling for an attack on the tank by dive bombers, had to be canceled when it was learned that no such aircraft could be made available. Whether the dive



dual-purpose 88 mm

bombers could have succeeded in scoring a direct hit on the tank is questionable, but it is certain that anything short of that would not have eliminated it.

Plan 5 involved a calculated risk and called for deceiving the tank crew. It was hoped that in this way German losses would be kept to a minimum. A feint frontal attack was to be executed by a tank formation approaching from various points in the forest east of the road while another 88-mm. gun was to be brought up from Rossienie to destroy the tank. The terrain was quite suitable for this operation; the forest was lightly wooded and presented no obstacle to tank maneuver.

The German armor deployed and attacked the Russian tank from three sides. The Russian crew, clearly excited, swung the gun turret around and around in an effort to hit the German tanks which kept up a continuous fire from the woods.



RUSSIAN KV TANK demolished by the Germans, July 1941

Meanwhile, the 88-mm. gun took up a position to the rear of the tank. The very first round was a direct hit and, as the crew

tried to turn the gun to the rear, a second and third shell struck home. Mortally wounded, the tank remained motionless, but did not burn. Four more 88-mm. armor-piercing shells hit their mark. Then, following the last hit, the tank gun rose straight up as if, even now, to defy its attackers.

The Germans closest to the tank dismounted and moved in on their victim. To their great surprise they found that but two of the 88-mm. shells had pierced the tank armor, the five others having made only deep dents. Eight blue marks, made by direct hits of the 50-mm. antitank guns, were found. The results of the engineer attack had amounted to only a damaged track and a slight dent in the gun barrel. No trace of the fire from the German tanks could be found. Driven by curiosity, the Germans climbed onto the tank and tried to open the turret, but to no avail. Suddenly, the gun barrel started to move again and most of the Germans scattered. Quickly, two engineers dropped hand grenades through the hole made by the hit on the lower part of the turret. A dull explosion followed, and the turret cover blew off. Inside were the mutilated bodies of the crew.

The Germans had come off poorly in their first encounter with a KV at this point of the front, one single tank having succeeded in blocking the supply route of a strong German force for 48 hours.

ANALYSIS

A fascinating account of the holdout of one well-trained tank crew. Had the crew used their mobility to escape after the first day, they almost certainly could have done so; possibly they had orders to stand and die in position.

TASK FORCE TURNER

The German-Italian Panzerarmee Afrika under Field-Marshal Erwin Rommel conducted a successful offensive across North Africa from mid-January through early September 1942. Their drive carried them 600 miles from El Agheila in Libya to the vicinity of El Alamein in Egypt. The advance was blunted by the British Commonwealth's Eighth Army, under its new commander Field-Marshal Bernard Montgomery, at Alam Halfa. The extended German lines of communication (LOC) and supply and dwindling combat strength forced Rommel to halt his offensive. He selected Qattara Depression, protecting his left (north) and right (south) flanks respectively. Across his front he emplaced a vast minefield varying 2 to 4 miles in depth and extensively outposted by his infantry. In a second echelon, his antitank units and remaining infantry were positioned to contain any breakthrough, while from a third echelon his armor poised a counterattack. It was Rommel's conviction that his position must "be held at all costs." This priority was emphasized in his instructions to GEN George Stumme, who replaced Rommel on 22 September when the latter was evacuated to Germany for treatment of an intestinal ailment.

With this respite from German attack and behind their own defenses, the British began a tremendous resupply, reorganization, and training program to support a counteroffensive. Montgomery would not be rushed. He sought a decisive combat advantage and intended to completely defeat the Panzerarmee when he attacked.

Montgomery opened the battle on 23 October with Q on LIGHTFOOT. The British held the advantage in air superiority 3:1 and ground superiority by 2:1 in men, tanks, artillery AT guns.

On 25 October, the British attack bogged down; so to the momentum, Montgomery committed the X Armored Corps and his infantry. In the north, 1st Armored Division of X attacked an XXX Corps sector between the 9th Australian and Highland Divisions and advanced across Phase Line OXALIC "Kidney Ridge."

The 1st Armored Division commander, MG Raymond Briggs, intended to penetrate Rommel's defensive lines and advance across the Rahman Track, which served as the Afrika Korps lateral supply route. There he felt that the 1st Armored Division could win a battle of maneuver on terrain of his own choosing, free of the constrictions of the German minefields.

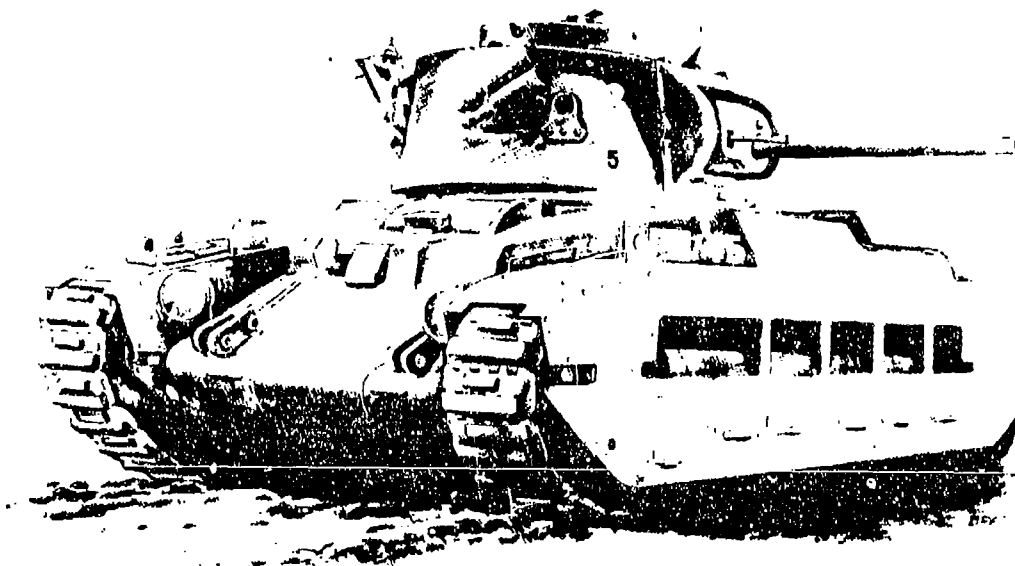
On the 25th and 26th, the 1st Armored Division's attack was contained, as were other British efforts. At Hitler's insistence, Rommel had returned on the evening of the 25th from his convalescent stay in Germany and counterattacked sharply on the 26th against the 1st Armored's sector. His antitank weapons covering the slope of Kidney Ridge, west of PL OXALIC, exacted a

heavy toll of British armor. To the south, 51st Highland Division gained PL OXALIC at objectives Stirling and Nairn on the night of the 25th, with infantry. It should be noted that when the 1st Armored Division launched its attack through the XXX Corps, the 9th and 51st Divisions continued to hold their original line in the 1st Armored Division sector. Thus when the 1st Armored Division attack failed, the division passed back through the XXX Corps Divisions that still maintained the original line.

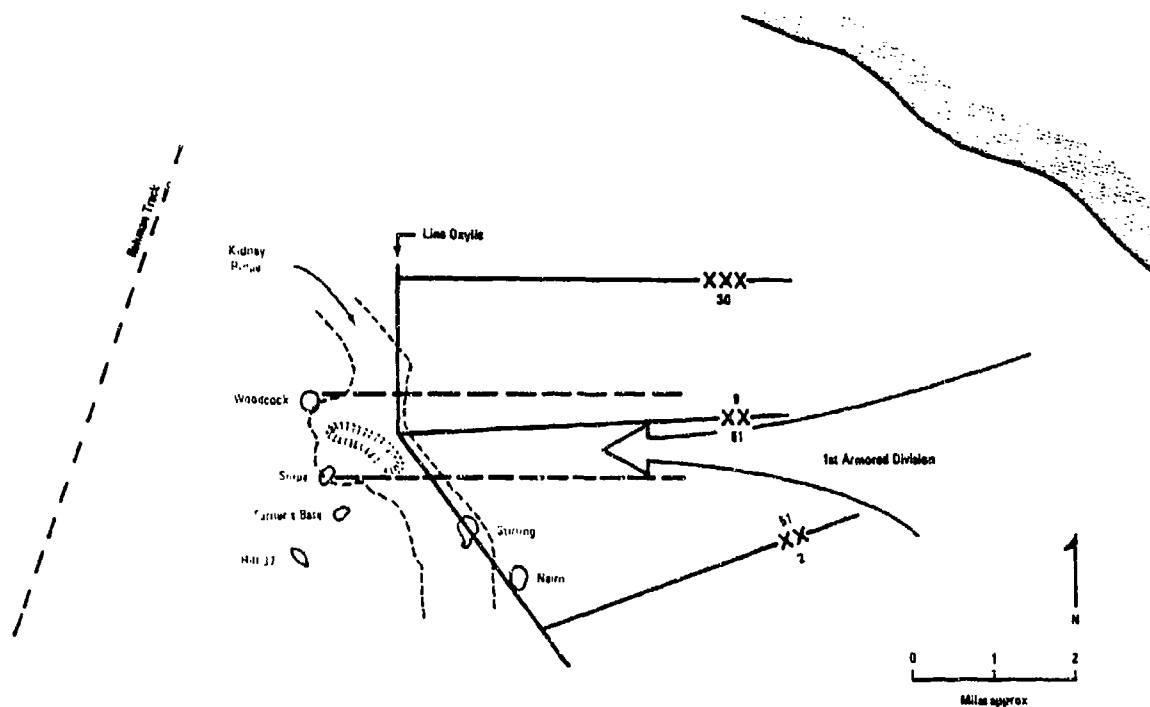
Briggs of 1st Armored Division was impressed with the successes on his flank and modified his plan of attack. He saw that he must offer cover to his advancing tank columns as they traversed the minefields. To do this, he planned infantry night attacks to seize positions that would secure a line of departure (LD) for his advancing tanks and protect their flanks. The objectives were designated WOODCOCK and SNIPE. The mission to secure SNIPE was given to the 2d Battalion of the 1st Armored Division's 7th Motorized Rifle Brigade.

The experienced 2d Battalion, 7th Motorized Rifle Brigade, was commanded by LTC Victor Turner, a veteran of 15 months' service in the desert. The battalion was reinforced for its mission and referred to as Task Force (TF) TURNER.

On the 25th and the morning of the 26th, 2d Battalion operated as a mine field (clearing) task force. As tank units were unable to advance without infantry support, the 2d Battalion remained the vanguard of the attack, suffering heavy casualties.



The combat elements of TF TURNER were to attack at 2100 hours 26 October, behind a rolling artillery barrage that would commence at H-5, to secure SNIPE, reducing obstacles and outposts during their advance. The advance was to be on an azimuth of 233 degrees but could be corrected to follow the barrage should there be a deviation. On reaching their objective, a flare signal would start the advance of the support elements: AT guns, medical section, and ammunition and supply trains under MAJ Tom Pearson, the executive officer. Pearson was to return the transports to friendly lines as soon as they were unloaded. About 0700 hours 27 October, the 24th Armored Brigade, 1st Armored Division, was to link up with TF TURNER and then attack to the Rahman Track in coordination with the advance of the 2d Armored Brigade, 1st Armored Division, from Woodcock. TF TURNER was to "make a night dash through enemy-held country, to establish an island of resistance until the arrival of 24th Armored Brigade next morning and to continue holding it while the tanks operated forward."



Kidney Ridge Sector.

Brigadier T.J.B. Bosvile, the commander of 7th Motorized Rifle Brigade, coordinated a line of departure in 51st Highland Division's sector. The attacking elements of the task force were to cross the line of departure in a movement-to-contact formation. The mounted scout platoons of A and C Companies were to lead abreast, followed by their companies, dismounted in open column-A Company to the right (north) and C Company left (south). The command-communication group and engineers were to march between these companies. B Company, dismounted, was to follow in the center rear, its scout platoon remaining at the line of departure to lead the follow-on support elements.

The barrage commenced on schedule, and the task force crossed its line of departure in premoonlight darkness without incident. After a short march, it was apparent that the barrage was falling more west than southwest, and a few minutes was lost in reorienting the columns. The advance was unopposed, but on several occasions the scouts engaged small groups of retreating enemy. A group of 20 German engineers was captured without resistance, about 3,000 yards out.

Lieutenant Colonel Turner became increasingly apprehensive about his location, having changed direction to follow the barrage; so he called for smoke on the objective. The round landed within 300 yards of his position and, when unable to discern any terrain advantage at its point of impact, Lieutenant Colonel Turner adjusted his unit dispositions and established a perimeter without further advance. However, in the featureless desert, neither TF TURNER nor the artillery spotter round had hit objective SNIPE. Turner's base was actually about 900 yards south-southeast of SNIPE.

At 0015 hours 27 October, the task force radioed and signaled by flare, "position secured." Major Pearson moved out with the support elements. His group had been under intermittent artillery fire since 2345. At 2330 an aircraft had attacked his position under flare illumination and destroyed several vehicles including prime movers of the antitank company. En route their move was unopposed; but, owing to the air attack, only 19 of the 22 6-pound guns and a small portion of the medical section closed on Turner's base. Dr. Arthur Picton, the task force surgeon remained at the line of departure with his ambulances treating casualties of the air attack.

The rifle companies had taken up positions around-the-clock: A Company, 7-12, C Company, 4-7; and B Company, 12-4. Telephone lines tied each company command post to the task force command post. Scout platoons of A and C Companies moved out to probe northwest and southwest respectively. The antitank guns were dispersed around the oval perimeter, by the 239th Battery (-) on the northeast end and the guns of 2d Battalion's antitank company completing the ring. The scouts of A Company returned without incident, but those of C Company engaged and dispersed an enemy platoon on the east slope of Hill 37 and before their withdrawal

had surprised with hasty fires a force of some 35 tanks and support vehicles on the western slope of the same hill. This unit was later identified as a mixed German-Italian force designated the Stiffelmayer Battle Group. Moonlight and poor enemy light discipline revealed a second large tank park at approximately the northeast edge of objective SNIPE, probably a battalion of the 15th Panzer Division. Except to the east, numerous other enemy positions were also identified by their campfires and vehicle lights. By 0345 Major Pearson completed offloading supplies and returned to friendly lines at 0545 with the nonfighting vehicles and prisoners.

In the moonlight, Lieutenant Colonel Turner was able to assess his situation. W TURNER's perimeter was a slight depression about 900 yards long (SW-NE) by 400 yards wide. The area had formerly been a German supply point. The loose sand made the preparation of firing positions a nightmare.

The almost flat scene, stretching for a mile and a half all round, shadowed by the faint anonymous folds and ripples of the desert, was overlooked by the slight elevations that formed the horizon on all sides except the south. Patches of low, scrubby, camel's thorn stippled and darkened the desert canvas here and there, affording some exiguous cover for those who knew how to use it.

This scrub extended into the shallow oval in which the garrison had taken station and they had been quick to dig trenches, knowing well, however, that full daylight would show the need to alter their dispositions. The excellence of their concealment and digging, indeed, saved them from a great many casualties...The gun-pits were never really pin-pointed by the enemy. Turner noted, however, that the faint undulations the scrub provided some strips and zones of dead ground which an equally experienced enemy could put to advantage in an attack upon him.

0345 hours marked the initial antitank engagement. A small group of tanks was seen advancing from Hill 37 toward SNIPE on a route that would carry them through Turner's Base. In the darkness the first tank was allowed to approach to a range of 30 yards before it was engaged by the right-flank gun in C Company sector. "The shot glowed red-hot as it sunk into the armour-plate and the tank burst into flames. At the same time a Russian 7.62-mm self-propelled gun was likewise knocked out and 'brewed up' on A Company's sector..."

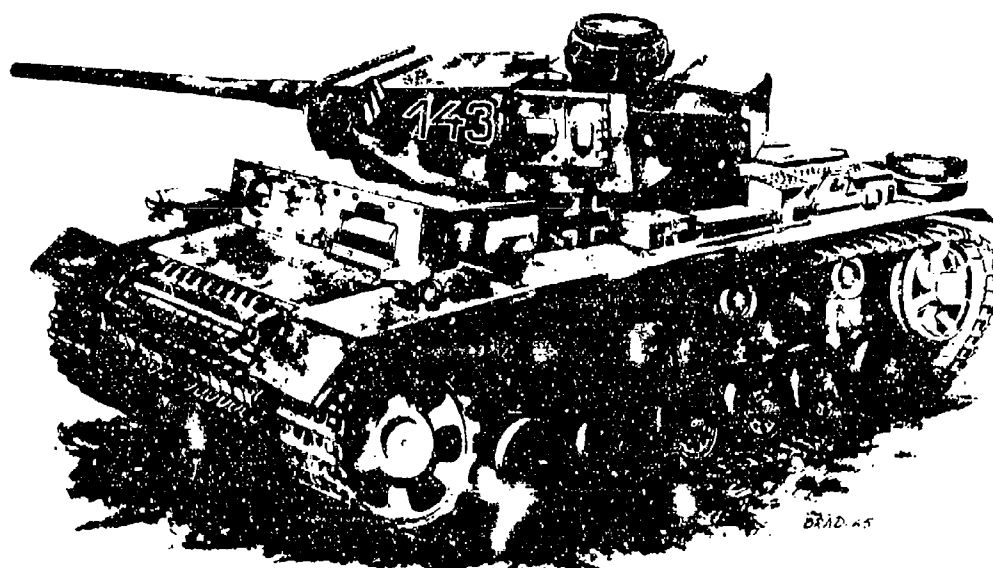
At 0400 hours Turner's artillery forward observer left the base to find a site from which he could adjust fire. He became lost; and though he returned to British lines, he was unable to return to Turner's base. W TURNER was severely handicapped.

The first major tank engagement at Turner's base occurred at dawn. When the German armor began to move from their night placement to daylight positions, many moved toward Turner's base.

The dawn was shattered as eight or nine guns barked with the

6pdr's sharp, high velocity crack. The results were spectacular. Eight tanks and self-propelled guns were destroyed to the north (all being found derelict on the battlefield subsequently) and a further eight were claimed from Teege's battle group to the southwest of which three were still derelict on the ground a month later. Upon the unfortunate crews who attempted to escape the machine-guns poured their streams of bullets.

At 0730 hours, 24th Armored Brigade crested Kidney Ridge along Line OXYLIC.



Two thousand yards ahead they saw a strongpoint of guns and weapon pits among the camel's thorn, with a sprinkling of burnt-out German tanks hard by. Not recognizing what was intended to be their own 'pivot of manoeuver,' they promptly opened fire on it with high explosive.

Turner's intelligence officer contacted the leading squadron, which ceased fire; however, the remainder of the brigade continued to shell Turner's base.

As 24th Armored Brigade began to move toward him at 0800 hours, Turner saw about 25 German tanks moving into firing positions on Hill 37. The antitank guns of TF TURNER took them under fire; and after they had destroyed three of them, the elements of the 24th Armored Brigade that were still firing on the task force finally recognized their friends and shifted their fires to the enemy positions.

One-half hour later, the 24th Armored Brigade closed on Turner's base. In the open terrain the partially massed British tanks offered a lucrative target, and all available German guns fired on them. Within 15 minutes, seven British tanks and two antitank guns had been destroyed. The 24th Armored was forced to withdraw.

The fierceness of the fighting that ensued throughout the day and the courage with which the men of TF TURNER faced the enemy are characterized by the efforts of an antitank gun crew:

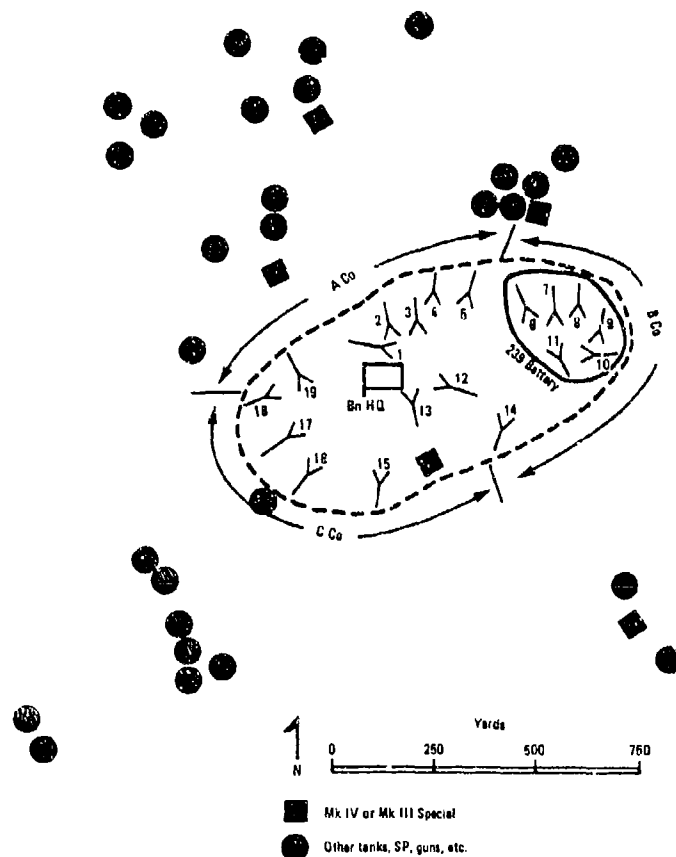
The three remaining Italian tanks, their machine-guns blazing, were now within 200 yards. The silent gun seemed to be at their mercy. Their bullets were beating like rain upon the gun-shield and kicking up spurts of sand in the shallow pit. Calistan, who all this time had been keeping them in his sight with utmost concern, while he waited for the ammunition, laid with coolness and deliberation. With three shots he killed all three tanks, which added their conflagrations to those of the other six.

At 1700 hours, the final thrust of the German counterattack in the Kidney Ridge sector advanced from SNIPE on a west-to-east axis past the northeast tip of Turner's base, toward positions now occupied by the 2d Armored Brigade along Kidney Ridge. The lead element of the German force consisted of 40 tanks accompanied by self propelled guns. This formation unwittingly exposed its southern flank to the antitank guns of the 239th Battery in the north east sector of Turner's base. The 239th Battery opened fire at ranges between 200 and 300 yards. All four guns scored hits.

In two minutes a dozen tanks were crippled, half of them in flames.

These few guns it was, therefore, that brought Rommel's counterattack to a standstill on this sector. Surprised and shaken, with half his forty tanks halted in confusion and several of them burning fiercely, and finding himself now attacked frontally by 2d Armoured Brigade as well, the enemy

commander called off his attack, withdrew and took cover in low ground to the west of Kidney Ridge, twenty-five minutes after he had begun his intended attack.
TF TURNER was withdrawn to British lines at 2315.



The guns of 'SNIPE' and their victims.

ANALYSIS

TF TURNER occupied a position for approximately 23 hours on 27 November. During that period it destroyed a confirmed total of 32 tanks, 5 self-propelled guns, and several miscellaneous tracked and wheeled vehicles. A conservative estimate places at 20 the number of additional tanks and self-propelled guns hit, but recovered from the battlefield. The total of 57 (+) enemy armored vehicles destroyed was not without cost to the British.

Of the total task force strength of approximately 300 men and 19 antitank guns, only 200 men and 1 antitank gun returned. Five operational antitank guns had to be destroyed by Turner's men.

The German forces were negligent in their light discipline, which must be strictly enforced in a desert environment.

The British force suffered from several instances of misnavigation throughout the battle. The loss of the forward observer could have been more critical than it was. His difficulty in addition to the fact that SNIPE was never reached merely illustrates the extreme difficulty in night navigation on flat desert terrain.

The need for close coordination between the advance party and the 24th Armored Brigade was graphically illustrated by the near-tragic friendly fire upon TF Turner.

Meanwhile, the German counterattack's failure at 1700 hours on the 27th was a direct result of their having flanked themselves to TF Turner. This is inexcusable considering the first German tanks fell prey to TF Turner at 0345 hours earlier that day. Counterattack forces must have access to accurate enemy information from the units in contact.

The story of TF Turner illustrates many of the difficulties and mistakes which one can encounter in desert warfare. In particular, the importance of combined arms is reaffirmed; without infantry and artillery support, the German armor fell easily to the dug-in guns of TF Turner.

Action at Schmidt

Tanks Try to Cross the Kall

Before daylight the next morning (4 November), the tankers of Captain Hostrup's Company A, 707th Tank Battalion, warmed up their motors for another try at traversing the precipitous trail across the river. The 1st Platoon, commanded by 1st Lt. Raymond

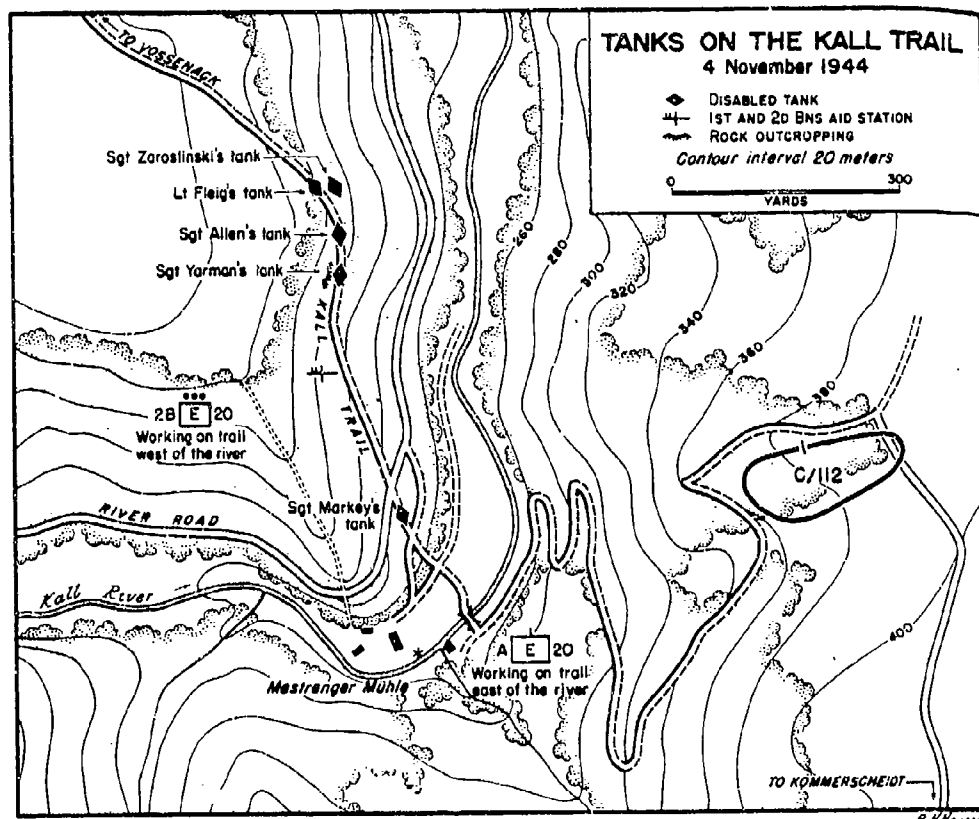
E. Fleig in the forward tank, was to lead.

Lieutenant Fleig's tank had only just entered the woods and begun to advance along the slippery narrow woods trail when it was jarred suddenly by an explosion. It had struck a mine which had evidently gone undetected when the engineers had swept the road. Although no one was injured, the mine disabled a track, and the tank partially blocked the trail. (Map 24)

The platoon sergeant, S. Sgt. Anthony R. Spooner, suggested winching the other tanks around Lieutenant Fleig's immobilized tank. Using the tow cable from Fleig's tank and the tank itself as a pivot, Spooner winched his own second tank around and back onto the narrow trail. Fleig boarded what now became the lead tank and continued down the trail, directing Sergeant Spooner to repeat the process to get the remaining three tanks of the platoon around the obstacle.

As Lieutenant Fleig continued to inch his tank down the dark trail, sharp curves in the road which had not been revealed in previous map studies necessitated much stopping and backing. The lieutenant noticed that his tank was tearing away part of the thin left shoulder of the trail but considered the damage not serious enough to hold up vehicles in his rear. With slow, painstaking effort, he made his way toward the river, crossed the bridge, and proceeded up the opposite slope. There the route presented little difficulty except for three switchbacks where Fleig had to dismount and direct his driver. It was just beginning to grow light when his tank churned alone into Kommer-scheidt.

Back at the start of the wooded portion of the trail, Sergeant Spooner succeeded in winching the three remaining tanks of the platoon around the disabled tank. Sgt. Jack L. Barton's tank in the lead came around a sharp bend made even more precarious by a large outcropping of rock from the right bank. Despite all efforts at caution, Barton's tank partially threw a track and was stopped. Captain Hostrup came forward to determine the difficulty and directed the next tank in line under Sergeant Spooner to tow Sergeant Barton's lead tank back onto the trail. The expedient worked, and the track was righted. Using Spooner's tank as an anchor, Barton successfully rounded the curve. When he in turn anchored the rear tank, it too passed the obstacle and both tanks continued.



Map 24.

Making contact with Lieutenant Huston, whose engineer platoon from Company B, 20th Engineers, was working on the trail, Captain Hostrup asked that the engineers blow off the projecting rock. The lieutenant had no demolitions, but he made use of three German Teller mines that had previously been removed from the trail. The resulting explosion did little more than nick the sharpest projection of rock.

The last tank in line, Sgt. James J. Markey's, in spite of difficulty with a crumbling left bank, arrived at the rock outcropping a few minutes later. The engineer platoon assisted in guiding it safely around the bend. Although four tanks were now past the initial obstacles of the narrow trail, the last three had some distance to go before they would be in a position to assist the defense of Kommerscheidt and Schmidt. It was still not quite daylight.

Action at Schmidt

Sunrise on 4 November was at 0732. A few minutes before came the noise of enemy artillery pieces opening fire, and a hail of shells began to crash among the hastily prepared defenses in the southern edge of Schmidt. The shelling walked back and forth through the town for more than thirty minutes. Coming from at

least three directions--northeast, east, and southeast--the fire was so intense that it seemed to many of the infantry defenders to originate from every angle.

In line to meet the expected enemy counterattack the 3d Battalion, 112th Infantry, as previously noted, was in a perimeter defense of the town. To the east and southeast Company L defended the area between the Harscheidt and Hasenfeld and Strauch roads. Company I, with only two rifle platoons and its light machine gun section, had its 2d Platoon on the north and its 3d Platoon on the northwest. A section of heavy machine guns from Company M was with Company L and another with Company K, while the remaining heavy machine gun platoon was on the north edge of town covering an open field and wooded draw to the north near the 2d Platoon, Company I. The 81-mm. mortars were dug in on the northern edge of town near the machine gun platoon, and the battalion command post was in a pillbox just west of the Kommerscheidt road 300 yards from Schmidt. Antitank defense consisted of uncamouflaged mines hastily strung across the Harscheidt, Hasenfeld, and Strauch roads and covered with small arms and organic bazookas.

Probably the first to sight enemy forces was Company I's 2d Platoon on the left of the Harscheidt road. Shortly after dawn a runner reported to Capt. Raymond R. Rokey at the company CP that observers had spotted some sixty enemy infantry in a patch of thin woods about a thousand yards northeast of Schmidt, seemingly milling around forming for an attack. Having no communications with his platoons except by runner, Captain Rokey left immediately for the 2d Platoon area. Although the artillery forward observer at Company I's CP promptly put in a call for artillery fire, for some reason the call produced no result until much later.

Company M machine gunners with the left flank of Company L on the east fired on ten or fifteen enemy soldiers who emerged from the woods and dashed for a group of houses at Zubendchen, a settlement north of the Harscheidt road. From here the Germans evidently intended to regroup and make their way into Schmidt. A section of 81-mm. mortars directed its fire at the houses, scoring at least one or two direct hits, and observers saw Germans crawling back toward the woods.

Other enemy infantrymen continued to advance from the northeast. Company I's 2d platoon employed its small arms weapons to repulse a wavering, uncoordinated effort, preceded by light mortar fire, which was launched against its northeast position, possibly by the group seen earlier readying for an attack.

A heavier assault struck almost simultaneously against the right-flank position of Company L along the Hasenfeld road on the southeast. Automatic riflemen with the defending platoon opened up as the enemy crossed a small hill to the front. A German machine gun less than fifty yards away at the base of a building in the uncleared southeastern edge of Schmidt returned

the fire. When a squad leader, S. Sgt. Frank Ripperdam, crawled forward with several of his men until he was almost on top of the enemy gun, five enemy soldiers jumped up, yelling in English, "Don't shoot! Don't shoot!" Sergeant Ripperdam and two other men stood up to accept the expected surrender, only to have the Germans jump back quickly into their emplacement and open fire with the machine gun. Dropping again to the ground, the sergeant directed a rifle grenadier to fire at the machine gun. Ripperdam saw the grenade hit at least two of the Germans, but still the machinegun fired. One of the Company L men suddenly sprang erect and ran forward behind the slight concealment of a sparse hedgerow, firing his rifle in a one-man assault. The Germans shifted their gun and raked his body with fire, killing him instantly. Sergeant Ripperdam and the remaining men withdrew to their defensive ring, but the Germans too had evidently been discouraged, for there was no more fire from the position.

Holding the enemy to their front with small arms and mortar fire, the men on Company L's right flank could see Germans infiltrating on their right through the Company K positions. An enemy machine gun opened fire from a road junction near the uncleared houses on the Hasenfeld road and prevented even the wounded from crossing the street to the north to reach the company medics. On all sides of Schmidt except the north the enemy was now attacking.

Supporting artillery of the 229th Field Artillery Battalion was engaged in harassing fires until 0823 when the air observation post called for and received twelve rounds on enemy personnel in the vicinity of Harscheidt. A previous call from the forward observer with Company I still had produced no results. At 0850 American artillery joined the battle with its first really effective defensive fires, 216 rounds of TOT on a concentration of enemy tanks to the east, just south of Harscheidt-Schmidt road. From that time on, artillery played its part in the battle, the 229th alone firing 373 rounds until 1000, and supporting corps artillery and the 108th Field Artillery Battalion of 155's joining the defense.

Enemy tanks suddenly entered the battle, obviously determined to exploit the minor successes won by the advance infantry. With the tanks came other German infantry: five tanks and a battalion of infantry along the Hasenfeld road.

The defenders of the two main roads opened up with their rocket launchers, but the enemy tanks rumbled effortlessly on, firing their big guns into foxholes and buildings with blasts whose concussion could kill if the shell fragments did not. On the Hasenfeld road, at least one Company L bazooka scored a hit on one of the tanks; it stopped only briefly, swung off to one side, and clanked on its methodically destructive way. Such seeming immunity demoralized the men who saw it.

The attack against Company K on the south spilled over to the southwest, and was joined by the other enemy infantry attacking

from the west. Company I's 3d Platoon on the right of the Strauch road found itself under assault. A runner reported the situation to Captain Rokey, the company commander, who was still with his hard-pressed 2d platoon on the north. Rokey sent word back for the 3d Platoon to withdraw from its foxholes in the open field to the cover of the houses.

Along the Harscheidt and Hasenfeld roads the German tanks spotted the feeble row of mines, disdainfully pulled off the sides, and skirted them. Then they were among the buildings of the town and the foxholes of the defenders, systematically pumping round after round into the positions. On the south and southwest the situation rapidly disintegrated. Company K's defenses broke under the attack.

American riflemen streamed from their foxholes into the woods to the southwest. As they sought relief from the pounding they moved, perhaps unwittingly, farther into German territory. They were joined in their flight by some men from Company L.

Another Company K group of about platoon size retreated into the Company L sector and there told a platoon leader that the Germans had knocked out one of Company K's attached heavy machine guns and captured the other. The enemy had completely overrun the company's positions.

The Company L platoon leader sent three men to his company command post in the vicinity of the church in the center of town to get a better picture of the over-all situation. They quickly returned, reporting that they had been prevented from reaching the company CP by fire from Germans established in the church. The three men had the impression that everyone on their right had withdrawn.

The enemy tanks plunged directly through the positions of the 1st Platoon, Company L, in the center of the company's sector on the east. They overran the company's 60-mm. mortars and knocked out two of them with direct hits from their hull guns. Notifying the company command post that they could not hold, the Americans retreated to the woods on the southwest where they had seen Company K troops withdrawing.

Now the retreat of small groups and platoons was turning into a disorderly general mass exodus. Captain Rokey ordered his 2d Platoon, Company I, to pull back to the protection of the buildings, but the enemy fire became so intense that control became virtually impossible. The men fled, not to the buildings as they had been ordered, but north and west over the open ground and into the woods in the direction of Kommerscheidt, there finding themselves intermingled with other fleeing members of the battalion. It was difficult to find large groups from one unit. In the Company K sector, 2d Lt. Richard Tyo, a platoon leader, had noticed the withdrawal of the company's machine gun section and 1st Platoon. On being told by the men that they had orders to withdraw, Lieutenant Tyo took charge and led them back through the houses of Schmidt toward the north and Kommerscheidt. On the

way they passed two men from the company's 3d Platoon, one with a broken leg and the other lying wounded in his foxhole. The wounded men said their platoon had gone "that way" and pointed toward the woods to the southwest. Tyo and his group continued north, however, and joined the confused men struggling to get back to Kommerscheidt. There was no time to take along the wounded.

The headquarters groups of Companies L and K tried to form a line in the center of Schmidt, but even this small semblance of order was soon confusion again. Someone in the new line said an order had come to withdraw, the word spread quickly, and none questioned its source. A Company K man remembered the forty-five prisoners in the near-by basement, and the two men headed them back double-time toward Kommerscheidt. The other men joined the mass moving out of Schmidt.

The 81-mm. mortar platoon on the northern edge of town had received its first indication of counterattack shortly after daybreak when a round from an 88-mm. gun crashed against the house near the dug-in mortars, seriously wounding a man outside the small building in which the mortar men were sleeping. The mortar men then joined in defensive fires on call from the rifle companies and were so intent on their job they did not notice the rifle companies withdrawing. Well along in the morning a lieutenant from Company I stopped at their position and told them the rifle companies had all fallen back and enemy tanks were only a few houses away. Carrying the seriously wounded man on a stretcher made from a ladder, the mortar men withdrew. Once the withdrawal had begun, it lost all semblance of organization; each little group made its way back toward Kommerscheidt on its own.

The time was now about 1000, and with or without orders Schmidt was being abandoned. The battalion commander notified those companies with whom he still had contact that the battalion CP was pulling its switchboard and they should withdraw.

Little could be done for the seriously wounded unable to join the retreat. The battalion aid station was far back, at the moment in the Kall River gorge. Several company aid men stayed behind with the wounded to lend what assistance they could. The bodies of the dead were left where they had fallen.

Most of the American troops who were to get out of Schmidt had evidently done so by about 1100, although an occasional straggler continued to emerge until about noon. By 1230 the loss of Schmidt was apparently recognized at 28th Division headquarters, for the air control officer directed the 396th Squadron of the 366th Group (P-47's) to attack the town. The squadron termed results of the bombing "excellent."

Struggle With the Main Supply Route

While the 3d Battalion, 112th Infantry, was engaged in its battle for survival in Schmidt, other troops of the regiment and supporting units were engaged in activity which weighed heavily on the 3d battalion's battle.

The 3d Battalion aid station had received a message from Colonel Flood, the battalion commander, at 0500 to displace forward from Germeter where, except for a forward collecting station under Lieutenant Muglia, it had remained even after its battalion had taken Schmidt. The aid station troops responded to the order by establishing themselves at the church in Vossenack while Muglia took some of the equipment and personnel on the edge of the woods alongside the Kall trail. He had left one litter squad there the night before. Sending all available litter bearers to comb the area for casualties, the lieutenant and T/3 John M. Shedio reconnoitered for an aid station site.

Beside the trail about 300 yards from the Kall River, Muglia found a log dugout approximately twelve by eighteen in size. (See Map 24.) The entire dugout was underground except for a front partially barricaded with rocks. The roof had been constructed of two layers of heavy logs, this providing excellent protection from all shelling except direct hits. While the runner went back to Vossenack for the battalion surgeon, Capt. Michael DeMarco, and the remainder of the 3d Battalion medical personnel, Lieutenant Muglia displayed a Red Cross panel at the cabin and patients began to collect. An ambulance loading point was established at the trail's entrance in the woods.

The three-weasel supply train which had reached Schmidt after midnight had been under the command of 1st Lt. William George, the 3d Battalion motor officer. Just before dawn the three weasels returned to Germeter, carrying those men who had been wounded in the Schmidt capture and mop-up. Lieutenant George then agreed to return to Schmidt with the battalion Antitank Platoon leader to take back a miscellaneous load of ammunition. On reaching the entrance of the main supply route into the woods southeast of Vossenack shortly after dawn, the party found the trail blocked by Lieutenant Fleig's abandoned tank. Although other tanks had previously passed this obstacle, the group gave up its supply attempt when the enemy shelled the area and one of the supply sergeants was killed.

The abandoned tank gave trouble as well to those tanks of Company A, 707th Tank Battalion, which had not yet passed the initial obstacles of the supply route. Four had managed to get through (at least one was in Komerscheidt at dawn), but the rest were still struggling with the narrow trail. The 2d Platoon, which had only three tanks left, began its journey before daylight. In S. Sgt. Anthony S. Zaroslinski's lead tank rode Lieutenant Clarke, whose own vehicle had been immobilized by a mine the day before in Vossenack. When his tank reached Fleig's abandoned tank, Sergeant Zaroslinski, unaware that the 1st Platoon had successfully bypassed the obstacle by winching its tanks around it, attempted to pass on the left. The venture ended disastrously: Zaroslinski's tank slipped off the road, and the sergeant found himself unable to back it up because of the steep and slippery incline. The crew dismounted to investigate,

and enemy shells struck home, killing Zaroslinski and wounding Lieutenant Clarke.

Sgt. Walton R. Allen, commanding the next tank in column, decided to try squeezing between the two disabled tanks, using Sergeant Zaroslinski's tank as a buffer on the left to keep his own tank from sliding into the draw. Succeeding, he dismounted and turned his tank over to Sgt. Kenneth E. Yarman, who commanded the next tank in the column. Allen then led Yarman's tank through, boarded it, and continued down the trail.

Sergeant Yarman, now commanding the lead tank of the 2d Platoon, reached the bend where the rock outcropping made passage so difficult. As he tried to pass, his tank slipped off the left of the trail and threw its left track. The next tank under Sergeant Allen reached a point short of the outcropping and also slipped off the trail to the left, throwing both its tracks. About the same time, Sergeant Markey, who commanded the last tank of the leading 1st Platoon and was presumably already past the Kall, reported back to his company commander, Captain Hostrup, at the rock outcropping. His tank had gotten stuck near the bottom of the gorge and had also thrown a track.

Only one tank, commanded by Lieutenant Fleig, had reached Kommerscheidt. Two others were now past the river. But behind them and full on the vital trail sat five disabled tanks. Still farther to the rear and waiting to come forward were the four tanks of the 3d Platoon. While the armor remained stymied on the Kall trail, precious time was slipping by. For some time now the crewmen had been hearing the battle noises from Schmidt, and by 1100 occasional stragglers from the Schmidt battle had begun to pass them going to the rear.

Still working with hand tools on the Kall trail were Lieutenant Huston's platoon from Company B, 20th Engineers, and all of Company A, 20th Engineers. Five Germans surrendered voluntarily to Company A's security guards as the unit worked east of the river. Occasional enemy artillery fire wounded six of its men. Huston's Company B platoon, informed by the tankers that they thought they could replace the tracks on their disabled tanks without too much delay, worked to repair the damage done by the tanks to the delicate left bank of the trail. Although almost twenty-four hours had elapsed since Company K, 112th Infantry, had first entered Schmidt, higher commanders still seemed unaware of the poor condition of the Kall trail. Only one engineer company and an additional platoon, equipped with hand tools and air compressor but no demolitions, were working on the trail, and no one was blocking the north-south river road, both ends of which led into enemy territory.

While the struggle with obstacles on the supply route went on and while the battle raged in Schmidt, the 2d Battalion, 112th Infantry, continued to hold its Vossenack ridge defenses. An enemy patrol in force hit Company F at approximately 0630 but was beaten off with small arms fire and artillery support on call.

from the 229th Field Artillery Battalion. When daylight came, the defenders had to steel their nerves against relentless enemy shelling. It seemed to the soldiers forward of Vossenack that the enemy concentrated his fire on each foxhole until he believed its occupants knocked out, then moved on. The shelling forced the 2d Battalion to move its command post during the day to an air-raid shelter about a hundred yards west of the church on the north side of the street. The companies initiated a practice of bringing as many men as possible into the houses during daylight leaving only a skeleton force on the ridge.

In the western end of Vossenack, troops carried on their duties and traffic continued to flow in and out of town. Someone coming into Vossenack for only a short time, perhaps during one of the inevitable lulls in the fire, might not have considered the shelling particularly effective. But the foot soldiers knew different. To them in their exposed foxholes, a lull was only a time of apprehensive waiting for the next bursts. The cumulative effect was beginning to tell.

The Battle for Kommerscheidt

At dawn on 4 November, just before the Germans counter-attacked at Schmidt, the officers of Companies A and D, 112th Infantry, took stock of their defensive situation in Kommerscheidt and made minor adjustments to the positions they had moved into the night before. The Americans found themselves situated on the lower portion of the Kommerscheidt-Schmidt ridge, with dense wooded draws on three sides, and another wooded draw curving around slightly to their front (southeast). Their defenses were generally on either flank of the town and south of the houses along the town's main east-west street. Lack of troops had caused them to forego occupying the houses along the southern road toward Schmidt. Company C was in a reserve position in the edge of the woods to the rear, and Company B and a platoon of Company D's heavy machine guns were still back at Rechelskaul. They had tank support initially from only one tank, that of Lieutenant Fleig, Company A, 707th Tank Battalion, but just before noon Fleig's tank was joined by those of Sergeants Barton and Spooner. The battalion command post was in a shallow, partially covered dugout in an orchard just north of the town, and the aid station was in the cellar of a house on the northern edge of town. After daylight the enemy harassed the Kommerscheidt positions with occasional light artillery and mortar concentrations, but it was from the direction of Schmidt that the men could hear the heavier firing.

By midmorning it was evident that something disastrous was happening in Schmidt. Small groups of frightened, disorganized men began to filter back through the Kommerscheidt positions with stories that "they're throwing everything they've got at us." By 1030 the scattered groups had reached the proportions of a demoralized mob, reluctant to respond to the orders of the officers, non-commissioned officers, and men of Companies A and D

seeking to augment the Kommerscheidt defenses.

Within the mass of retreating men there were frantic efforts to stem the withdrawal, and when the enemy did not immediately pursue his Schmidt success groups of 3d Battalion troops began to reorganize to assist the 1st Battalion. Company I, withdrawing through the wooded draw southeast of Kommerscheidt, found it had about seventy-two men, and, with a few stragglers from other companies, stopped in Kommerscheidt and joined the center of the defense on the south. Approximately twenty-six men with Sergeant Ripperdan of Company L, augmented by a small group of battalion headquarters personnel, went into position to the northwest fringe of town, facing slightly south of west, on the right flank of 3d Platoon, Company A. The remnants of Company K, including the group which had retreated with Lieutenant Tyo, were organized into two understrength platoons: one, with a strength of about fourteen men, dug in to the rear of Kommerscheidt (north); the other faced the northeast to guard the left flank. The Company D commander, Capt. John B. Huyck, made contact with Captain Piercey, Company M commander, and co-ordinated the fire of Company D's weapons with those surviving from Company M, three 81-mm. mortars without ammunition and three heavy machine guns. The latter went into position on the southwest edge of Kommerscheidt. Despite these efforts at stopping the retreat, many men continued past Kommerscheidt. Some were stopped at the Company C woodline position, but others withdrew all the way to Vossenack and Germeter. Rough estimates indicated that only about 200 men of the 3d Battalion were reorganized to join Companies A and D in defending Kommerscheidt.

Even as the 3d Battalion was being knocked out of Schmidt, the battalion's assistant S-3, 1st Lt. Leon Simon, was making his way forward with a regimental order which instructed the 3d Battalion to hold temporarily in Schmidt while the 110 Infantry continued its attack against Raffelsbrand. Lieutenant Simon got no farther than Kommerscheidt and there was directed by Colonel Flod, the 3d Battalion commander, to return and tell regiment he absolutely had to have more tanks. Despite radio communication with Kommerscheidt, the Schmidt action was a confused blur at regimental headquarters west of Germeter along the Weisser Weh Creek. Before Lieutenant Simon returned, the regimental executive officer, Lt. Col. Landon J. Lockett, and the S-2, Capt Hunter M. Montgomery, accompanied by two photographers and a driver, went forward in a jeep in an effort to clarify the situation. When Simon returned to regiment, there had been no word from Colonel Lockett's party. Colonel Peterson, the regimental commander, told Simon to lead him to Kommerscheidt; and shortly after they left, the assistant division commander, Brig. Gen. George A. Davis, and his aide also departed for Kommerscheidt.

Although the enemy did not immediately pursue his attack against Kommerscheidt, artillery fire and direct fire from tanks in Schmidt harassed attempts at reorganization. Then, about

1400, at least five enemy tanks, accompanied by a small force of infantry, attacked from the wooded draw on the southeast. There could be no doubt now: Kommerscheidt held next priority on the German schedule of counterattacks.

The enemy tanks, Mark IV's and V's, imitated the tactics they had used so effectively earlier in the day on Schmidt, standing out of effective bazooka range and firing round after round into the foxholes and battle-scarred buildings. Artillery observers with the defenders called for numerous concentrations against the attack, but the German tanks did not stop. From Schmidt other German direct-fire weapons, possibly including tanks, supported the assault. From 1000 to 1700 the 229th Field Artillery Battalion fired at least 462 rounds in the vicinity of Kommerscheidt-Schmidt, and fires were further augmented by the 155-mm. guns under corps control and the 108th Field Artillery Battalion. Capt. W.M. Chmura, a liaison officer from the 229th Field Artillery Battalion, said these supporting fires were "terrific."

As the attack hit, Lieutenant Fleig (whose tank had been the first to arrive in Kommerscheidt) and the two other tankers of Company A, 707th Tank Battalion, were in a partially defiladed position in a slight draw in the open just northwest of Kommerscheidt near the western woods line. The tankmen pulled their Shermans up on a slight rise and fired at the enemy tanks, Fleig claiming two of the attackers knocked out and his companions a third. Noticing that the infantry was retreating from the left flank of the town, Fleig moved in that direction into a sparse orchard just in time to see a Mark V Panther coming into position. At a range of 200 to 300 yards, Fleig fired, hitting the German tank twice; but he was using high explosive ammunition, and the Panther's tough hide was not damaged. The lieutenant discovered then that he had no armor-piercing ammunition available, all of it being outside in the sponson rack. When the German crewmen, evidently frightened by the high explosive hits, jumped out of their tank, Fleig ceased firing and turned his turret to get at his rack and the armor-piercing ammunition. The Germans seized the opportunity to re-enter their tank and open fire, but their first round was a miss. Working feverishly, Lieutenant Fleig and his crew obtained the armor-piercing ammunition and returned fire. Their first round cut the barrel of the German gun. Three more rounds in quick succession tore into the left side of the Panther's hull, setting the tank afire and killing all its crew. Fleig returned to the fight on the town's right flank.

The surviving enemy tanks continued to blast the positions around the town. One tank worked its way up a trail on the southwest where Sgt. Tony Kudiak, a 1st Battalion headquarters man acting as a rifleman, and Pvt. Paul Lealsy crept out of their holes to meet it with a bazooka. Spotting the two Americans, the German turned his machine guns on them, then his hull gun, but both times he missed. Kudiak and Lealsy returned to get riflemen

for protection, and then came back. While they were gone, the tank approached to within twenty-five yards of a stone building in the southern edge of town, a second tank pulling into position near where the first had been initially. Just then a P-47 airplane roared down and dropped two bombs. The first German tank was so damaged by the bombs it could not move, although it still continued to fire. Sergeant Kudiak finished it off with one bazooka rocket which entered on one side just above the track, setting the tank afire. The second German tank backed off without firing.

The supporting P-47's were bombing and strafing so close to Kommerscheidt (the German tank was knocked out virtually within the town) that the riflemen felt that the pilots did not know the American troops were there. They welcomed the support, but they threw out colored identification panels to make sure the pilots knew who held the town. The P-47's were probably from the 397th Squadron, 368th Group, which was over the Schmidt area from 1337 to 1500. The squadron reported engaging a concentration of more than fifteen vehicles, and claimed one armored vehicle destroyed and two damaged.

In the midst of the battle, Colonel Peterson arrived on foot at the northern woods line. He had abandoned his regimental command jeep just west of the Kall River because of trail difficulties. At the woodline he took charge of about thirty stragglers who had been assembled there from the 3d Battalion and led them into Kommerscheidt.

With the arrival of air support and the continued hammering by artillery, mortars, small arms, and the three tanks, the German assault was stopped about 1600. The defenders sustained numerous personnel casualties, but in the process they knocked out at least five German tanks without losing one of their own three. Just how a big a role a small number of tanks might have played had they been available for the earlier defense of Schmidt was clearly illustrated by the temporary success at Kommerscheidt.

General Davis, the assistant division commander, who had also come forward during the afternoon, conferred in Kommerscheidt with Colonel Peterson and the battalion commanders in order to get a clearer picture of the situation. He then radioed information to division on the condition of men and equipment involved in the fight beyond the Kall. He spent the night in a Kommerscheidt cellar and returned to the rear the next morning.

As night came, the men of Companies A and D and the remnants of the 3d Battalion worked to consolidate their Kommerscheidt positions in the face of continued enemy artillery harassment. Colonel Peterson, also deciding to spend the night in Kommerscheidt, warned Lieutenant Fleig not to withdraw his tanks for any reason, including servicing. He feared an enemy counter-attack that night and was concerned that, if even this small tank force were withdrawn, the nervous infantry might pull out too.

About 1500 that afternoon division had ordered the units in Kommerscheidt to attack to retake Schmidt, but apparently no one on the ground had entertained any illusions about compliance. The problem then had been to maintain the Kommerscheidt position.

ANALYSIS

The German combined-arms counterattack on Schmidt showed how important discipline and command and control are. The American withdrawal quickly became a rout.

The dependence on the inadequate Kall supply trail probably doomed the Schmidt penetration from the beginning. Besides being extremely difficult to traverse, as evidenced by all the thrown tracks, it was never provided adequate security.

The failure of the first German counterattack can be directly attributed to Lt. Fleig's destruction of the enemy armor which spearheaded the attack, even though his ammunition load plan left something to be desired.

RECONNAISSANCE IN FORCE BY RUSSIAN ARMOR

Early in October 1943, the German 196th Infantry Regiment occupied defensive positions within a forest about 20 miles north of Kiev. Although both flanks were well protected, the positions themselves were vulnerable because the soil was loose and sandy. The Germans neglected to plant antipersonnel mines but did lay antitank mines across roads leading toward their main line of resistance. Behind the MLR they erected roadblocks, covered by dug-in 50-mm antitank guns.

The ground sloped gently upward in the direction of the Russian MLR, which was then located along the crest of a flat ridge about 2,000 yards north of the German MLR (map 16).

On 5 October the Russians made the first of a series of forward moves. These movements remained undetected until German observers discovered that the ground had been broken in the vicinity of Advance Position A. Later in the day Russian artillery fired smoke shells on such known German targets as the forester's house and the road intersections. German artillery and mortar fire against the Russian forward positions were ineffective. The patrols that probed the enemy during the night were repulsed.

During the following 2 days the Russians moved their positions forward over 500 yards to Position B. Again the movements remained unobserved because the intermittent rain restricted visibility. Heavy German mortar fire succeeded only in drawing more violent Russian mortar and artillery fire on the road intersections near the fringes of the forest. As German night patrols probed forward, they began to encounter Russian patrols in increasing numbers.

By 10 October the Russians had succeeded in establishing themselves along Advance Position C, only 500 yards from the German MLR. Under the protective cover of mortar and artillery fire, reinforced German reconnaissance patrols were sent out during the day to determine the strength and disposition of the Russian forces and positions and to occupy the latter, should they be found deserted. However, after advancing scarcely 100 yards the patrols came under such heavy mortar fire that they were forced to turn back with heavy casualties.

When the weather cleared, the Germans were able to observe all three Russian advance positions, but could not spot any further movement. During the night the Russian positions were placed under harassing mortar and infantry weapon fire. While three German patrols were being driven off in front of Position C, numerous Russian reconnaissance parties infiltrated the intermediate area and at some points approached within a few yards of the German main line of resistance.

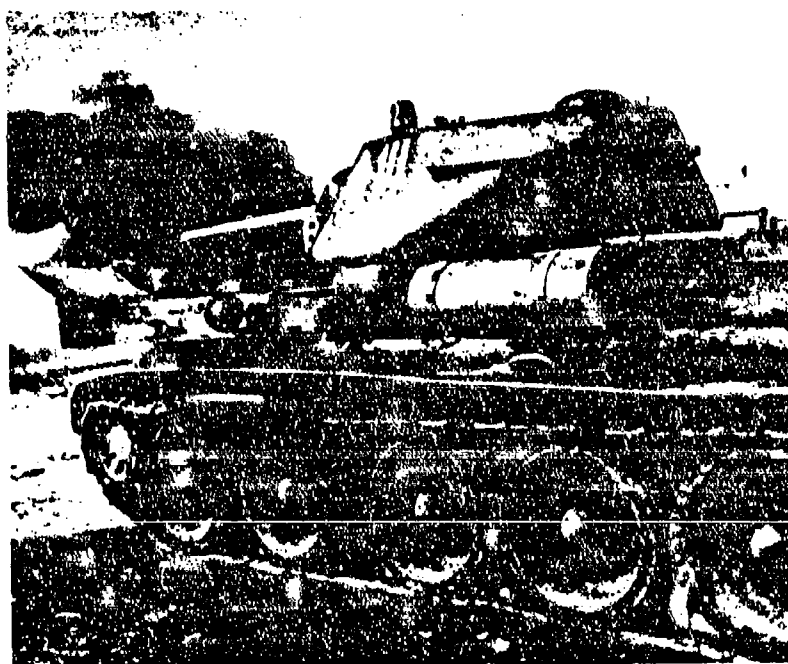
For the next three nights the Russians were busy digging in along Advance Position C. Heavy rains helped dampen the noises of their intrenching activities. Shortly after dusk on 12

October, a German patrol finally succeeded in reaching the fringes of Position C. After having spotted some hasty intrenchments, all of which appeared deserted, the Germans were driven back to their lines by three Russian patrols which, supported by nine light machine guns, suddenly appeared from nowhere.

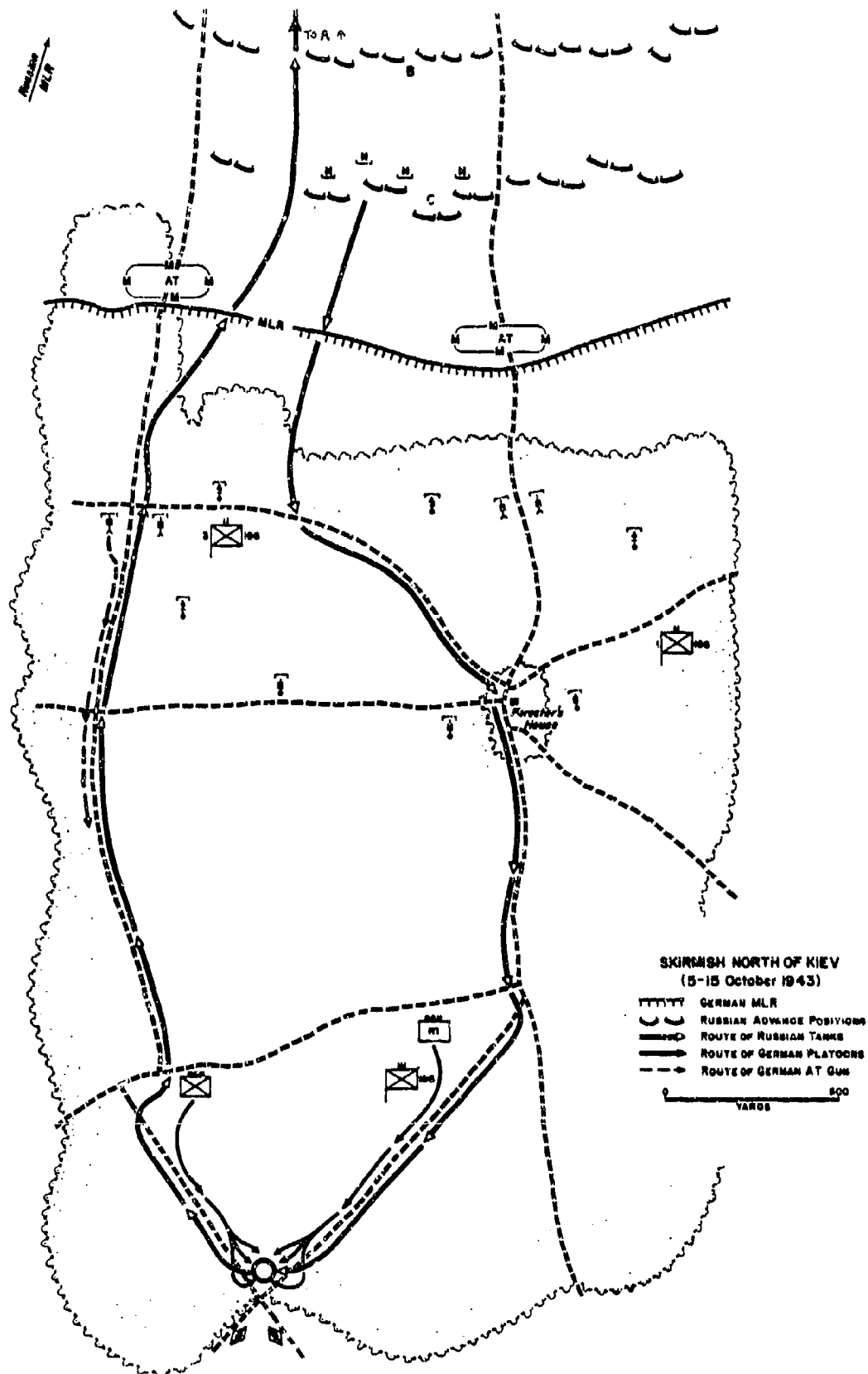
Heavy rains fell again in the evening of 13 October. At 2300 the Russians began to rake the entire German sector with a savage artillery barrage which lasted two hours. Over the din of exploding shells the sound of approaching tanks could be distinguished in the German forward area. However, the tank noise soon faded away, giving every indication that the armor had been withdrawn.

Toward noon of the next day, in a driving rain, a 3-man German patrol succeeded in crawling into the forward Russian positions. They were still deserted and gave the appearance of having been occupied for only a very short time. The Germans concluded at once that these were dummy positions. Unknown to the members of the patrol at the time was the fact they had been closely observed by the Russians, who nevertheless permitted them to reconnoiter the positions unmolested, feeling certain their true intentions would not be revealed.

Meanwhile, the Russians were proceeding with preparations for their reconnaissance mission inside the German lines.



RUSSIAN T-34 in action.



During the afternoon of 14 October, a 20-man patrol, including an officer and two noncommissioned officers, was selected from a Russian rifle company which had been resting in a village behind the lines. These men were all specially selected, veteran fighters familiar with the terrain since all of them had originally come from the Kiev region. Each man was provided with 2 days' rations, 1 1/2 days' ammunition supply, and 6 hand grenades. The officer was issued a two-way radio. He and his noncommissioned officers carried submachineguns while the rest of the men were armed with automatic rifles. After reaching a trench in the vicinity of Position A, the patrol was met by a Russian officer who briefed them as follows:

You will move out and proceed to Advance Position C where you will join four tanks that have been dug in. Tomorrow you are to mount the tanks, advance on the German positions facing us, penetrate them, and drive into the wooded enemy rear area. Nothing should be allowed to delay your progress since everything depends on lightning speed. Knock down whatever gets in your way but avoid any prolonged encounter. Remember your primary mission is to gain information about German positions, how they are manned, and where the enemy artillery, mortars, and obstacles are emplaced. Don't stop to take prisoners until your return trip; one or two will suffice. You must create fear and terror behind the enemy lines and then withdraw as swiftly as you came.

Late that evening the patrol moved out toward the German lines. Despite enemy harassing fire it reached the tanks in Position C at 0100. The tanks, with their crews inside, had been dug in by engineers and were well camouflaged. The entrances to the pits sloped upward toward the rear.

The infantry patrol was now split into squads of five men and each squad was assigned to a tank. The men were ordered to dig in close to their tanks, maintain absolute silence, and remain covered, especially after daybreak.

At dawn all was quiet and well concealed. A light haze hovered over the area in the early morning hours and toward afternoon turned into fog, limiting visibility to about 300 yards. At approximately 1600 an officer suddenly up from the direction of the Russian MLR and ordered the patrol to mount at once. The engines were quickly started and, as the camouflage nets were removed, the infantrymen jumped on their respective tanks. Within a matter of minutes the tanks backed out their pits, formed a single column to the front, and raced toward the German line at top speed. After the tanks had overrun several trenches, the first German soldiers could be seen. However, none of them made any attempt to fire but scrambled for cover at the unexpected sight of the tanks.

Having penetrated the center of the German MLR the tanks moved cross-country through heavy underbrush before taking to the

road. As they neared the forester's house, a German water detail was spotted running for cover in great haste. The tanks upset two ration trucks that were blocking the road and sped deep into German lines. About 1,000 yards beyond the forester's house the Russians suddenly turned half-right and followed the road leading into the woods. After proceeding another 1,000 yards they approached a crossroad and decided to stop. Enjoying a commanding view of the road intersection, the Russians dismounted and prepared all-round defenses right in the midst of the German positions, hardly 700 yards away from the regimental CP. The tanks formed the core of the position; the infantrymen dug in around the cluster of armor. The Russian officer quickly established radio contact with his lines and exchanged messages.

Before long German infantry assault and combat engineer platoons, equipped with close-combat antitank weapons, moved in from two directions and surrounded the Russians. However, they could approach no closer than 150 yards from the tanks because the sparsely wooded forest afforded the Russians excellent observation and permitted them to fire at anything that moved. Finding themselves pinned down, the Germans sent a detail to the left flank of their MTR for one of the 50-mm. antitank guns. Since the static gun was dug in and had to be pulled by hand, its arrival would be delayed. Finally, at 1800, two self-propelled assault guns from division moved into position to the south of the tanks, opened fire, and wounded a number of Russian riflemen.

Leaving their wounded behind, the Russians within 10 minutes mounted their tanks and sped off in a northerly direction toward their own lines with tank guns blazing in all directions.

Darkness was setting in when the 50-mm. antitank gun detail spotted the approaching Russian tanks. The German crew had no opportunity to fire their piece and barely succeeded in getting off the road. They remained under cover until the last Russian tank had passed. After quickly pulling their gun into position the Germans fired at the rear tank and scored a direct hit, killing two of the mounted infantrymen.

When it had become quite dark the Russian lead tank turned its headlights on and, with the other three tanks following closely behind, sped unmolested across the German main line of resistance. After they reached open terrain the Russians dimmed the lights and raced northward into the night in the direction of their positions.

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This was a daring Russian undertaking, meticulously prepared and executed with boldness and speed. However, it was crowned with success primarily because of the inadequacy of the German antitank defenses. The Russians must have been aware of the sparse minefields and the shortage of self-propelled antitank guns.

The Russians spent a great deal of time on preparations by

allowing themselves an interval of several days between their advances from Position A to B and from B to C. Then there was still another interlude of several days before the tanks moved into position; finally two more days elapsed before the action was actually launched.

The Russians were extremely adept in carrying out and concealing large-scale intrenching activities, such as the digging of tank pits.

In making their positions appear totally deserted during the daytime and by creating dummy positions which patrols were purposely induced to reconnoiter, the Germans, if not completely misled, were at least left in doubt as to the true Russian intentions.

Still another safeguard that the Russians used again and again to insure maximum surprise was to move up their infantry at the latest possible moment, usually not until the night preceding an operation. In this manner they eliminated the possibility of capture by enemy patrols and the potential disclosure of their plans.

Three weeks after the action just described, the Germans discovered how skillfully the Russians had camouflaged the approach movements of their tanks. A Russian prisoner told of how the tanks were moved forward, masked by the noise of the artillery barrage. Since this concealment was not fully adequate they went a step further. By initially sending six tanks and then immediately withdrawing two the Russians strove to create the impression that all tanks had been pulled back. This ruse was employed with complete success.

That the Russians decided to stop at the road crossing seemed a blunder. The ensuing loss of time might well have led to the annihilation of the patrol had the Germans employed their assault guns from the north rather than from the south and had they been able to block the roads leading northward to the MLR with mines and antitank guns. Why the Russians suddenly stopped and dug in is not specifically explained. The stop, however, did permit them to establish radio contact. It is therefore reasonable to assume that in this instance, as in so many others, the Russian lower echelon command lacked the imagination and initiative necessary to continue the action beyond its immediate scope.

TECHNIQUE OF THE TANK PLATOON AS THE POINT IN AN EXPLOITATION

The writer was a tank platoon leader in an Armored Division and, as such, was often called on to be the point commander in exploitation missions.

The division used a "married" formation throughout. Consequently, when a tank platoon was assigned to the point, the armored Infantry counterpart also became part of that point.

Riding in the leading vehicle in an armored exploitation can, and often has proved to be, rather deleterious to one's health. At the very best, it is something of a strain on the nervous system. Of course, there is no way to make this task just wholesome, clean fun such as would appeal to any red-blooded American boy. However, certain techniques learned over a long period of time, by trial and error, and from watching and noting the trials and errors of others, (coupled with an abundance of the "luck of the Irish") have worked well for the writer.

Ordinarily it was left to the tank platoon leader to command this group and to decide on the formation to be used. Many, many variations were tried out by platoon officers. Several factors had to be considered.

Flexibility was an important item. Terrain, weather, expected enemy resistance, and speed of the advance all entered into the picture.

One very troublesome factor was the lack of communication between the half-tracks of the Infantry platoon. If a fight developed and these half-tracks were scattered, the problem of control was acute, (particularly after replacements had been made).

As has been previously stated, several variations became somewhat standard. One of these was tank and half-track alternately. This formation has several disadvantages. For example, it spreads the tank fire power out too far and makes the platoon leader's control problems more difficult. Then, too, the Infantry control problem is extremely arduous. An outstanding tank platoon leader used this formation, however, and it worked pretty well while he lasted. His chief argument for it was the fact that each infantry squad could protect the tank ahead of it from close-in antitank measures.

However, the writer believes the disadvantages outweigh the advantages in this case.

Another formation used by many platoon leaders, was three tanks, the Infantry platoon leader's half-track, the other two tanks, then the four other half-tracks of the Infantry platoon. This system enabled the Infantry platoon leader to be far enough forward to see and size up the situation or confer with the tank platoon leader when necessary. In addition, his platoon was all together and far enough back so that it wasn't necessarily under fire and could form and attack as a unit.

This formation worked out quite successfully but it left a

thin-skinned vehicle rather far forward and the Infantry platoon leader was still too far from his platoon. Then, too, the half-track hampered, to a degree, the firing of the two tanks behind it. The writer used this formation for several months but finally lined up with the tanks in front and the Infantry behind in column and all together.

This formation put all the tanks up where they could be fired and maneuvered at will. Each tank supported the one in front, each had its sector to cover and the opposition quickly felt the weight of the combined fire. Several instances occurred when a tank was hit but seldom did the antitank weapons get more than one.

The Infantry riding as a group were in good order and could, and did, dismount and get into action quickly on several occasions. A feat seldom, if ever, achieved by the other formations which have come to the writer's attention.

A great deal of eyewash has been written and spoken about the subject of riding infantry on the tanks. This was the rule in certain outfits. It was not uncommon to see a half dozen thoroughly uncomfortable doughboys, often wet, often cold, and always unhappy, clinging precariously to the deck and sponsons of the leading tanks.

They were there as close-in anti-tank protection. Peculiarly, many died when the bazooka hit. Others were killed by anti-tank gunfire, machine gun fire, et cetera. If they hadn't been there the tanks by using wing man tactics and reconnaissance by fire had little or nothing to fear from bazooka men. If you were bazookaed in an exploitation, you were sleeping!

Of course, in a night movement, two or three doughboys on every tank is a good idea and will offer some protection to the tank when it is standing still. Even then they should be relieved often so that they will be alert and energetic in playing this role.

In this advance party, where should the platoon leader ride? In our division and others, he rode the lead tank. As the late General Patton said, "You can't push a piece of spaghetti, you've got to pull it." Actually, of course, there were several advantages, chiefly the ones of officer prestige and platoon morale. However, it was not good for the morale of the platoon leader's crew necessarily, although the writer detected a bit of quiet swagger cropping out in his own.

Also, a trained officer should have been able to follow a prescribed route more easily. Unfortunately, this wasn't always the case. In fact, it is the writer's firm conviction that had the Germans torn down the sign posts, half the American armor would have been lost, or at least, noticeably slowed down.

The "Book" says the point should be a tank section, then the platoon leader, then the other tank section. This is a good idea. It is sound and workable. Too often when the platoon officer was in the leading vehicle, he became embroiled in a fire

fight and was too busy properly to employ his platoon. Too busy, in fact, to report the situation to his company commander. This was confusing, ineffectual, and time wasting all around.

If the platoon leader was riding third he might have that moment or two in which to make his dispositions and to report, before becoming locked in the old 'do or die' business.

Another advantage is one of rotating the point job among all the tanks, keeping a fresh, alert man in front. Then there is the obvious saving in platoon officers, to train whom the government spends certain sizable sums.

Once the formation or order of march is decided upon the question arises: how should this advance party move? In the exploitation phase speed is of paramount importance. Speed makes for surprise and saves lives and cannot be underestimated. The fact that a swift, aggressive advance actually saves lives in the long run is indisputable. Nevertheless, there are certain methods of movement the advance party can use which will offer a better chance for survival, while accomplishing the mission, than others.

In short, there are certain small techniques which, if employed meticulously, contribute to a fast, uninterrupted advance and minimum losses. The most commonly overlooked of these techniques, apparent in many of our Armored Divisions, was caused by self styled 'aggressive' commanders, who in a mistaken lust for speed 'threw the book away'. This error, which has caused needless confusion and actual loss of time, was the one of allowing no distance between elements of the advance guard.

What occurred was this. When the leading element ran into fairly stiff resistance it was committed piecemeal, chopped up, and a delay was occasioned by the resultant confusion. If there had been an interval, that is to say, a distance between the point, the advance party and the rest of the advance guard, the situation would have developed more slowly and clearly, and the commander of each element would have had time and space to exercise his command function and use his troops in a deliberate, sound, and tactical manner. Thus he could have brought to bear the necessary force quickly to overcome the resistance.

Of course, the distance between elements should not be great, as one of the precepts of exploitation is to hit 'em hard and quick. However, a blind hammering, taking unnecessary losses, is not a part of the art of war, dependent, as it is, on tank production capacity of the home front.

How should the point platoon move? Should it move in column down the road at a uniform pace? This was the usual manner in most divisions in exploitation phases. However, it is not the most intelligent and it is not the fastest. Furthermore, it is not the steadiest.

The best method in every sense is a movement by bounds; that is, within the advance party. The way it has worked superbly is this: the Advance Guard commander (leading tank company comman-

der) rides behind the point platoon at some distance. This distance, of course, varies with the terrain, but usually should be sight or not more than five hundred yards. This Advance Guard commander rides at an even pace (often set by the combat commander). He is accompanied by an artillery forward observer, and possibly, by a forward air controller.

In front of him the point platoon works. The leading three tanks moving rapidly from cover to cover under protection of the second section. Great speed can be obtained by making these bounds in an alternate manner. When resistance is met the Advance Guard commander stops, sizes up the situation and takes action immediately. There is a distance between him and the point and he is free to employ his support intelligently or to by-pass obstacles or strong points without the necessity of back-breaking and reversing the column.

This system was employed by the writer in the latter stages of the war during the advance to the Elbe River. It was discovered that by moving this way the Advance Guard actually had to be requested to slow down by an exceptionally fast moving Combat Commander.

While on the point of movement let us consider the method of advance employed by this lead platoon. As has been stated, the lead three tanks move quickly from cover to cover under the support of the other section. By quickly is meant top speed. In addition, these moving tanks should take what might be called evasive action (only, of course, if contact is believed imminent). If possible, terrain and weather permitting, these tanks should move abreast or in a modified wedge formation. Usually one on either side of the road and one continually criss-crossing the road. The writer has said they move from cover to cover. Naturally the distance from one covered position to another may be great, in which case the length of the bound is limited to good fire support from the stationary section. Better not make it more than six hundred yards. These tanks now halt suddenly and the other section moves up fast.

The fastest method is for the platoon leader to pull out in front of this second section and lead it in a fast alternate bound. The safest way is to displace forward successively because the forward section, while halted, has had a chance to size up the route ahead, pick the next stopping place and perhaps reconnoiter by fire. This seems a good place to take the small matter of the use of binoculars.

The writer feels he can state without fear of contradiction that binoculars intelligently, quickly, and ceaselessly used by tank commanders saved many and many a tank. As is readily apparent to anyone who has tried they cannot be employed in a moving tank, even on the smoothest of roads. All of which is one of the greatest arguments for movement by bounds. A hasty reconnaissance through the glasses saves many a round of ammunition as the alternative is reconnaissance by fire. This, too, is the

reason the writer stresses the fast move and sudden stop.

Early in the writer's experience, in fact, during his first hour or two of combat, he made the discovery that his driver was too well trained in the smooth stop. When ordered to halt, he coasted to a nice, easy stop. The writer put his binoculars to his eyes as the tank slowed and tried to observe ahead. The vibration made this absolutely impossible until the vehicle actually came to rest. During this fifteen or twenty yards of coasting, the writer was virtually blind and the tank was an easy target, not having even the small advantage of relative speed. Needless to say, it became a part of the driver's technique to halt as abruptly as possible when commanded.

This mention of binoculars leads naturally to a discussion of reconnaissance in general. In the exploitation phase of an armored advance, speed and surprise are essential ingredients. There will be no covering force, no reconnaissance ahead of this leading tank platoon. However, if this platoon leader wants to give himself a chance for survival, he resorts to three types of reconnaissance (always remembering, though, that speed and surprise are potent advantages for him and must not be marred by wishy-washy, over cautious progress). These forms of reconnaissance are: use of binoculars, reconnaissance by fire, and personal dismounted reconnaissance. Added to these might be a fourth. This fourth is beyond words to describe. It is incredible to many people. This is the much sneered at "Nose for Krauts", which many of us believed, and still believe, we had.

Be that as it may, we can discuss the more orthodox methods. The use of binoculars has already been discussed to some extent. It is nearly superfluous to say that scrupulous care must be taken care of them. Cleaning material must be handy to wipe away dust and rain. There is a nice, very precise length of the neck strap. Naturally the focus settings must be known, in fact they must be instinctive. It might be mentioned here that, as he moves, the tank commander picks his danger spots and as soon as he stops, quickly scans each one, then goes back over them again more slowly.

We come to that highly controversial subject: reconnaissance by fire. On this subject the writer had two complete changes of opinion. During his first days in combat, he employed it extensively. Later it seemed distracting, to destroy the element of surprise. Then he gaily rode into a neat ambush just across the Rhine. From there on he fired on everything remotely suspicious on the ground that it was German in any case. Of course, the life span of tractors and other farm vehicles of suspicious silhouette was short indeed.

More seriously it should be said that reconnaissance by fire is almost a necessity if moving steadily. It is sometimes a waste of ammunition, but it has a decided morale factor. It is good for your morale and decidedly disturbing to the other fellows. However, it should be carefully controlled and done

intelligently. A movement by bounds, permitting a good look through the glasses eliminates much firing. It is good also to have some sort of signal to notify those behind you that you are merely reconnoitering by fire. Say two short bursts from the co-ax. If this isn't done some of the Infantry behind in the half-tracks will start shooting thirties, fifties, and rifles at everything in sight, thereby thoroughly confusing the issue (which last phrase is a very polite way of saying FUBAR). Certain conditions call for fire reconnaissance such as heavy woods, hedge lined roads, isolated buildings on the flanks and others. The ammunition supply, particularly that readily available in the turret must not be depleted and in some cases may be an important factor restricting this probing fire.

The third type of reconnaissance is the one most often overlooked by tank officers. That is the dismounted personal reconnaissance. Often there wasn't time. More often the writer is inclined to believe it was merely an unwillingness to leave that steel shell and expose one's person in that lonely, lonely and so very quiet no-man's land. Drawing again from his own experience, the writer became a believer on the third of August, 1944 when in Yvre, France, he turned a right angle corner in a narrow street and came face to face with a MK IV tank at the ridiculous range of thirty yards. The tank was manned and obviously waiting. Thanks to a gunner who needed no urging or even a command, the writer is presently able to pen this paper.

Thereafter, the writer dismounted and took a peek whenever it seemed indicated. It is better to sneak a peek over the crest of a hill and around the corner than to barge over or around with a tank. You can stretch your luck just so far!

Much has been said about control. Control of the individual tank, the platoon and the company. First things must come first. Until one is able to control a tank almost as readily as a good rider controls a horse, he is not ready for designation, Tanker. This control is by interphone but that doesn't tell the whole story. First there must be a system, a code, a standard procedure. Incidentally this should be standard in the platoon and the company at least. Actually it should be standard throughout the Armored Forces. Coupled with this procedure are certain other factors less tangible but mainly based on a close understanding of each other by the commander and driver. This obviously can only be achieved through long practice and, while highly desirable, is not necessary as long as there is a standard procedure. That this procedure pays off was evidenced to the writer during the recent misunderstanding in Europe when, because of breakdowns and losses, it was necessary for to fight with seven entirely different crews for varying short periods.

Once this control of the individual tank is achieved (incidentally it involves set procedures between the turret crew members as well, (a gesture or a poke or a slap is quicker than the interphone) we move into control of the section and platoon.

For speed and ease hand and arm signals are a must and are only limited by the intelligence, state of training and ingenuity of the people involved. Another factor which makes these signals a necessity is the constant radio failure. This ever present failure was due not to design but to the tremendous abuse it was necessary to give the tank radios in pursuit of operations. They were turned on constantly and no time was available for maintenance.

Closely coupled with hand and arm signals was the setting up of simple but rigid standard operating procedures. Some of these were simple plays something like the plays used in football. Others were the sectors of responsibility. Each tank commander had his own and stuck to it. A system the writer employed involved his tank and the first section. When he halted or signalled a halt, the #2 tank habitually pulled up abreast, if possible, and on the right and immediately scanned in that direction. The #3 tank performed in like fashion on the left. The following section took the responsibility for the extreme right and left flanks and prepared to move in either direction upon receiving a signal.

Connected with this is a lesson we learned through bitter experience. The German anti-tank guns, whenever possible, were sited to be mutually supporting and designed to suck one in, that is to say, to mousetrap the unwary. At first while using the system outlined above the #2 and #3 tanks would pull into their positions in good style. However, if the platoon leader was firing to his front their attention naturally was attracted and without order they began to fire at targets to the front. Some of our people then got knocked out by fire from the flanks--the worst part of which was the fact that no one saw where the shot came from. This experience made it necessary for the #2 and #3 tank commanders to ignore the front and to cover their own areas. Naturally they glanced quickly every moment or two towards the platoon leader for orders but rigidly covered the sector for which they were responsible.

It can be said that control within the platoon depends on many things. Experience and practice, of course, are the best ways of developing this control. Then there is the method of control often listed as the final resort in the texts. This is usually referred to as 'example of the Commander'. Nothing can take the place of this method. However, it will have no effect unless the Commander has achieved a reputation for intelligence, for skill and has been able to inculcate in his people an unswerving all for one, one for all spirit. While the writer does not necessarily advocate this policy for units larger than a platoon, he is convinced that nothing short of unqualified respect will do. If coupled with this respect, he can generate a spirit of absolute, utter comradeship his path will be easier; his chance for success then will be most likely.

The tank platoon leader is faced with a situation unique

among officers. Each crew has five men. He is part of the crew of his tank. Obviously as a tank commander he has many menial, purely physical duties to perform. He must help with the refueling. He must clean guns. He must help change tracks. He stands guard duty in combat. It is necessary for him not only to perform these duties but he must do them expertly. He cannot ever exhibit fear for he must zealously guard the morale of his men. During an exploitation when men and machines are pushed to the limit, his job is multiplied many times. These are the times when his good nature cannot, even momentarily, fail. All this can be accomplished easily if the leader has a genuine affection for his men and thoroughly understands their weakness and their strength and respects their inherent nobility.

This paper has no footnotes, no references but is the result of one man's research, his trials and errors and the trials and errors of many others who are now represented by a white cross somewhere in Europe.

ANALYSIS

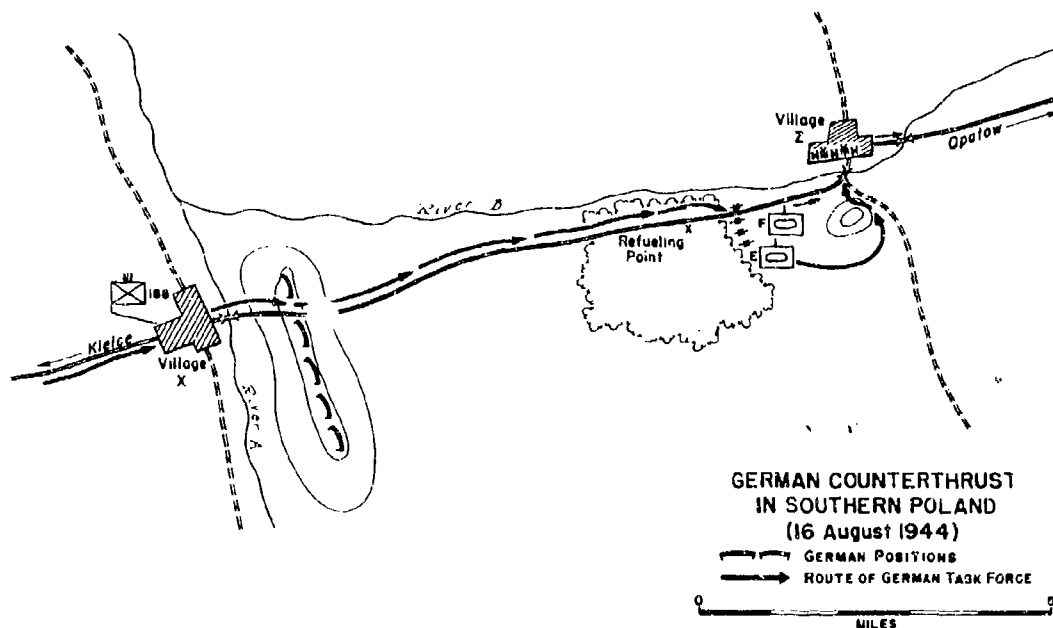
This is a very useful piece of firsthand advice to armor platoon leaders. The author learned after many months of combat the soundness of bounding overwatch, recon by fire, leading by example, hand and arm signals, and the value of dismounting for reconnaissance.

AN ARMORED TASK FORCE SEIZE TWO VITAL BRIDGES (August 1944)

In those isolated instances in which German armored units were at full strength, they were still able to attain local successes, even in the summer 1944. During the nights of 13 and 14 August 1944 the 3d Panzer Division detrained at Kielce in southern Poland. The division's mission was to stop the advance of Russian forces that had broken through the German lines during the collapse of Army Group Center and to assist the withdrawing German formations in building up a new defense line near upper Vistula.

In order to allow all units of his division the time needed to prepare for their next commitment and at the same time secure his route of advance, the division commander decided to form an armored task force from the units that had detrained first. The force was to be led by the commander of the 2d Tank Battalion and was to consist of Tank Companies E and F, equipped with Panther tanks, one armored infantry company mounted in armored personnel carriers, and one battery equipped with self-propelled 105-mm. howitzers. The task force was to launch a surprise attack on Village Z, situated approximately 30 miles east of Kielce, and seize the bridges south and east of the village in order to permit the main body of the division to advance along the Kielce-Opatow road toward the Vistula (map 26).

Map 26



The attack was to be launched at dawn on 16 August. According to air reconnaissance information obtained at 1800 on 15 August, Village Z was held by relatively weak Russian forces and no major troop movements were observed in the area. The only German unit stationed in the area between Kielce and Village Z was the 188th Infantry Regiment, which occupied the high ground east of River A and whose command post was in Village X.

The terrain was hilly. Fields planted with grain, potatoes, and beets were interspersed with patches of forest. The weather was sunny and dry, with high daytime temperatures and cool moonlight nights. The hours of sunrise and sunset were 0445 and 1930, respectively.

The task force commander received his orders at 2000 on 15 August and immediately began to study the plan of attack. Since the units that were to participate in the operation had not yet been alerted, the entire task force could not possibly be ready to move out before 2300. The maximum speed at which his force could drive over a dusty dirt road without headlights was 6 miles an hour. The approach march to Village Z would therefore require a minimum of 5 hours. Taking into account the time needed for refueling and deploying his units, the commander arrived at the conclusion that the attack could not be launched before dawn. Since the operation might thus be deprived of the element of surprise, he decided to employ an advance guard that was to move out one hour earlier than the bulk of his force, reach Village X by 0200 at the latest, and cover the remaining 9 miles in 1 1/2 hours. After a short halt the advance guard could launch the attack on Village Z just before dawn.

At 2020 the task force commander assembled the commanders of the participating units at his CP and issued the following verbal orders:

Company F, 6th Tank Regiment, reinforced by one platoon of armored infantry, will form an advance guard that will be ready to move out at 2200 in order to seize Village Z and the two bridges across River B by a coup de main. A reconnaissance detachment will guide the advance guard to Village X. Two trucks loaded with gasoline will be taken along for refueling, which is scheduled to take place in the woods two miles west of Village Z.

The main body of the task force will follow the advance guard at 2300 and form a march column in the following order: 2d Tank Battalion Headquarters, Company E of the 6th Tank Regiment, Battery A of the 75th Artillery Regiment, and Company A of the 3d Armored Infantry Regiment (less one platoon). After crossing River A, the tank company will take the lead, followed by battalion headquarters, the armored infantry company, and the artillery battery in that order.

The task force will halt and refuel in the woods 2 miles east of Village Z. Radio silence will be lifted after River A has been crossed.

The commander of Company F will leave at 2100 and accompany me to the CP of 188th Infantry Regiment and establish contact with that unit. Company E's commander will take charge of the march column from Kielce to Village X.

Upon receiving these instructions the commander of Company F, Lieutenant Zobel, returned to his unit, assembled the platoon leaders, the first sergeant, and the maintenance section chief and briefed them. He indicated the march route, which they entered on their maps. For the march from Kielce to Village X, the headquarters section was to drive at the head of the column, followed by the four tank platoons, the armored infantry platoon, the gasoline trucks, and the mess and maintenance section. The ranking platoon leader was to be in charge of the column until Zobel joined it in Village X. Hot coffee was to be served half an hour before the time of departure, which was scheduled for 2200. The reconnaissance detachment was to move out at 2130 and post guides along the road to Village X.

After issuing these instructions to his subordinates, Zobel rejoined the task force commander, with whom he drove to Village X. When they arrived at the CP of the 188th Infantry Regiment, they were given detailed information on the situation. They learned that, after heavy fighting in the Opatow region, the regiment had withdrawn to its present positions during the night of 14-15 August. Attempts to establish a continuous line in conjunction with other units withdrawing westward from the upper Vistula were under way. The Russians had so far not advanced beyond Village Z. Two Polish civilians who had been seized in the woods west of the village had stated that no Russians were to be seen in the forest.

The task force commander thereupon ordered Zobel to carry out the plan of attack as instructed. Zobel awaited the arrival of the advance guard at the western outskirts of Village X. When the column pulled in at 0145, Zobel assumed command and re-formed the march column with the 1st Tank Platoon in the lead, followed by the headquarters section, the 2d and 3d Tank Platoons, the armored infantry platoon, the wheeled elements, and the 4th Tank Platoon. A guide from the 188th Infantry Regiment rode on the lead tank of the 1st Platoon until it reached the outpost area beyond River A. The column arrived at the German outpost at 0230. The sentry reported that he had not observed any Russian movements during the night. Zobel radioed the task force commander that he was going into action.

To permit better observation the tanks drove with open hatches. The tank commanders stood erect with their heads emerging from the cupolas, listening with a headset. The other apertures of the tanks were buttoned up. Gunners and loaders stood by to open fire at a moment's notice. In anticipation of an encounter with Russian tanks the guns were loaded with armor-piercing shells.

At 0345 the advance guard reached the wooded area in which it

was to halt and refuel. The tanks formed two rows, one on each side of the road, while armored infantrymen provided security to the east and west of the halted column. Sentries were posted at 50-yard intervals in the forest north and south of the road. Trucks loaded with gasoline cans drove along the road between the two rows of tanks, stopping at each pair of tanks to unload the full cans and picking up the empties on their return trip. The loaders helped the drivers to refuel and check their vehicles. The gunners checked their weapons, while each radio operator drew coffee for his tank crew. Zobel gave the platoon leaders and tank commanders a last briefing and asked one of the returning truck drivers to hand-carry a message on the progress of the operation of the task force commander in Village X.

According to Zobel's plan of assault, the advance guard was to emerge from the woods in two columns. The one on the left was to comprise the 1st Tank Platoon, headquarters section, and the 4th Tank Platoon, whereas the right column was to be composed of the 2d and 3d Tank Platoons and the armored infantry platoon. The 1st Platoon was to take up positions opposite the southern edge of Village Z, the 2d at the foot of the hill south of it. Under the protection of these two platoons the 3d and 4th Platoons were to seize the south bridge in conjunction with the armored infantry platoon, drive through the village, and capture the second bridge located about half a mile east of the village. The 2d Platoon was to follow across the south bridge, drive through the village, and block the road leading northward. The 1st Platoon was to follow and secure the south bridge. The tanks were not to open fire until they encountered enemy resistance.

Zobel did not send out any reconnaissance detachments because he did not want to attract the attention of the Russians. In drawing up his plan Zobel kept in mind that the success of the operation would depend on proper timing and on the skill and resourcefulness of his platoon commanders. Because of the swiftness with which the raid was to take place, he would have little opportunity to influence the course of events once the attack was under way.

At 0430, when the first tanks moved out of the woods, it was almost daylight and the visibility was approximately 1,000 yards. As the 1st and 2d Platoons were driving down the road toward Village Z, they were suddenly taken under flanking fire by Russian tanks and anti-tank guns. Three German tanks were immediately disabled, one of them catching fire. Zobel ordered the two platoons to withdraw.

Since the element of surprise no longer existed and the advance guard had lost three of its tanks, Zobel abandoned his plan of attack and decided to await the arrival of the main body of the task force. He reported the failure of the operation by radio, and at 0515 his units were joined by the main force. After Zobel had made a report in person, the task force commander decided to attack Village Z before the Russian garrison could

receive reinforcements. This time the attack was to be launched from the south under the protection of artillery fire.

The plan called for Zobel's company to conduct a feint attack along the same route it had previously taken and to fire on targets of opportunity across the river. Meanwhile Company E and the armored infantry company were to drive southward, skirt the hill, and approach Village Z from the south. While the 3d and 4th Platoons of Company E, the armored infantry company, and Company F were to concentrate their fire on the southern edge of the village, the 1st and 2d Platoons of Company E were to thrust across the south bridge, drive into the village, turn east at the market square, and capture the east bridge. As soon as the first two platoons had driven across the bridge, the other tanks of Company E were to close up and push on to the northern edge of the village. The armored infantry vehicles were to follow across the south bridge and support the 1st and 2d Platoons in their efforts to seize the east bridge. Company F was to annihilate any Russian forces that might continue to offer resistance at the southern edge of the village. The artillery battery was to go into position at the edge of the woods and support the tanks.

No more than two tank platoons could be employed for the initial thrust because the south bridge could support only one tank at a time. All the remaining fire power of the task force would be needed to lay down a curtain of fire along the entire southern edge of the village. This was the most effective means of neutralizing the enemy defense during the critical period when two tank platoons were driving toward the bridge. To facilitate the approach of the tanks to the bridge, the artillery battery was to lay down a smoke screen south of the village along the river line. Having once entered the village, the two lead platoons were not to let themselves be diverted from their objective, the east bridge. The elimination of enemy resistance was to be left to the follow-up elements. The attack was to start at 0600.

The tanks of Company E refueled quickly in the woods, and the battery went into position. The task force was ready for action.

Company F jumped off at 0600. The task force commander and an artillery observer were with the company. The battery gave fire support against pinpoint targets. At 0610 the tanks of Company E emerged from the woods in columns of two, formed a wedge, turned southward, and made a wide circle around the hill. The vehicles of the armored infantry company followed at close distance. As the tanks and armored personnel carriers approached the hill from the south, they were suddenly taken under Russian machinegun and antitank rifle fire from the top of the hill. The commander of Company E slowed down and asked for instructions. The task force commander radioed instructions to engage only those Russians on the hill who obstructed the continuation of the attack. The tanks of Company E thereupon deployed and advanced on a broad front, thus offering protection to the personnel

carriers which were vulnerable to antitank grenades. Soon afterward Company E reported that it had neutralized the Russian infantry on the hill and was ready to launch the assault. The task force commander thereupon gave the signal for firing the artillery concentration on the southern edge of the village. Three minutes later the 1st and 2d Platoons drove toward the bridge and crossed it in single file, while Company F's tanks approached the crossing site from the west.

As soon as the last tank of 1st and 2d Platoons had crossed the bridge, the other two platoons of Company E and the armored personnel carriers closed up at top speed. The two lead platoons drove through the village and captured the east bridge without encountering any resistance. The 3d and 4th Platoons overran the Russian infantry troops trying to escape northward and knocked out two retreating Russian tanks at the northern edge of the village. Soon afterward all units reported that they had accomplished their missions.

The task force commander then organized the defense of Village Z, which he was to hold until the arrival of the main body of the 3d Panzer Division. Two tank platoons blocked the road leading northward, two protected the east bridge, two armored infantry platoons set up outposts in the forest east of River B, and the remaining units constituted a reserve force within the village. The artillery battery took up positions on the south bank of the river close to the south bridge. Its guns were zeroed in on the northern and eastern approach roads to the village.

ANALYSIS

In this action the task force commander made the mistake of ordering Zobel's advance guard to hold and refuel in the woods 2 miles west of Village Z. In issuing this order he applied the principle that tanks going into combat must carry sufficient fuel to assure their mobility throughout a day's fighting. Although this principle is valid in general, it should have been disregarded in this particular instance. Since the element of surprise was of decisive importance for the success of the operation, everything should have been subordinated to catching the Russians unprepared. If necessary, the advance guard should have been refueled as far back as Village X or shortly after crossing River A. Since the woods actually used for the refueling halt was only 2 miles from Village Z, the German commander should have foreseen that the noise of starting the tank engines would warn the Russian outposts who happened to be on the hill south of the village. A surprise attack must be planned so carefully that no such risk of premature discovery is taken.

Moreover, the task force commander should not have stayed in Village X, but should have led the advance guard in person. By staying up with the lead elements, he would have been able to exercise better control over both the advance guard and the main

body of his force.

The attack by the fully assembled task force was properly planned and its execution met with expected quick success.

TANKS IN ROUGH TERRAIN

One often hears the statement, "This is not tank country", applied to rough or mountainous terrain. Tanks can be used in any terrain if the need for them is great enough to make the expenditure of time and labor profitable. The tank can be maneuvered into some position from which it can fire into almost any spot on the earth that an enemy would elect to defend if sufficient time is allowed for reconnaissance.

The basic concepts and principles of the use of armor, speed of maneuver, tremendous fire power, violence, and shock action are the same whether in rough, mountainous country or level and gently rolling country. The differences are minor changes in technique of employment dictated by the terrain and the fact the officers probably fight the terrain harder than the enemy.

The limited space that is passable to tanks generally reduce the number that may be employed. An armored division would look quite ridiculous strung out along a mountain road fighting on a one or two tank front. One company of tanks with attachments on a given route or road is, ordinarily, the best employment. A company gives good tactical and administrative control and provides as many tanks as can be used in the most circumstances.

Tanks should not be assigned the dominant offensive or defensive role in mountainous area. This role should go to the infantry with tanks attached for support. This support may include their use as a major striking force for limited objectives when the opportunity presents itself but the infantry must be prepared at all times to press on alone when difficult terrain delays or temporarily halts the progress of the tanks. Infantry must seize a bridgehead across serious obstacles. Engineers can then prepare a crossing for the tanks.

Mountains offer a great variety of natural obstacles and numerous places where movement is restricted to such an extent that effective man-made obstacles can be prepared. Major C. J. Madden, commander of the armor attached to the 10th Mountain Division during the attack on Mt. Belvedere in Italy states, "As usual, aside from the eternally restrictive terrain, the armor was delayed by mines and demolitions." (*1) This calls for extensive use of engineer troops. Since the demand on divisional engineers is always heavy, it is advisable to obtain these troops from corps engineer units.

The 760th Tank Battalion operated for about two months in 1944 with a company of the 19th Engineer Regiment attached. An engineer platoon was sub-attached to each medium tank company. The engineers were parceled out in this manner because the battalion had the three medium companies attached to different regimental combat teams with the battalion headquarters and light

*1. Major C. J. Madden, "Report of Action - Mt. Belvedere Attack", USA-1653.

tank company under division control. The medium companies attached their tank-dozer to the engineer platoon which greatly increased the platoon's efficiency and furnished direct radio communications. This set-up materially speeded up the advance of the tank companies and enabled them to give more continuous support to the infantry.

Most of the work done by the engineers for the advancement of armor will be of value in the movement of supplies. On the other hand, the movement of large numbers of tanks over narrow and often thinly surfaced mountain roads often weakens these roads so much the movement of supplies is impeded.

Civilians can sometimes be used to good advantage in combat areas. The road between La Spezia and Genoa, Italy winds along the coast through jagged, barren masses of igneous rock that rise several thousand feet abruptly out of the Mediterranean. Through a number of fortunate circumstances, the German Army was not able to defend these hills with any strength and a hastily organized team of one tank company and a motorized battalion of infantry was able to make the entire distance in two days. About 1500 hours the first day, the force was halted by a large crater in the road. The crater was approximately fifty feet long and thirty feet deep, and on one side of the road the mountain ascended in a vertical cliff, on the other side was an almost equally abrupt drop of one hundred feet. It was near a small town and not covered by fire, so many civilians came out to see what would happen. The one tank-dozer was incapable of doing anything about the crater, which was blasted out of solid rock, and the engineer bulldozers had been far outdistanced. The task of filling the hole by hand looked like a hopeless job but about one hundred civilian men, women, and children and as many soldiers were put to work carrying the blasted-out rock back into the crater. In an hour the first tank tried it and made it. Before dark the engineers had the road passable to trucks.

The Germans were continually surprised at the places the American tanks could get to in World War II. This failure to anticipate and prepare adequate defense against armor in these places cost them at least one major defeat when General George S. Patton made his classic break-through the Eiffel Forest and many minor local defeats.

One notable example was the battle for Terracina during the 5th Army's "march on Rome". The mountains came out to meet the sea at Terracina and drop precipitously from a height of 650 feet to the water's edge at the eastern extremity of the city. The road entering from the American side or eastern side was out into the cliff. On top of the hill, Mt. Teodorica, which overlooked the sea, was Palazino Teodorica, which the enemy used as an artillery OP; and rising behind that, the mountains stretched higher and higher. Northwest of Terracina about twenty miles was the southern end of the Anzio Beach-head and the Germans elected to hold here to prevent the main body of the 5th Army from

joining with the Anzio forces. They put a deep crater in the road at a point where it was impossible for tanks to bypass it and covered it heavily by fire. They put a strong infantry force on Teodorica and the surrounding hills and sat down in their holes to wait for us.

The infantry and tanks reached the road block at approximately 0100 on 22 May 1944. Not an enemy shot had been fired since the previous afternoon. Quite a large number of tankers, infantrymen, and engineers assembled around the crater to see what could be done about it and then the enemy opened up. When dawn came it was found that the road was covered by snipers in the hills for two miles back. On the other side of the road was the sea. Attempts were made to fill the crater during the day of the 22nd but to no avail. Two tanks that tried to cover the engineer's efforts were knocked out in the road which further blocked it. On the morning of the 23rd, two determined infantry attacks on Teodorica were repulsed.

In the meantime Lt. Col. Swift of the 48th Engineer Battalion discovered a stretch of the ancient Via Appia that lead up to the top of Teodorica. The ancient Romans, without dynamite, found it easier to build their roads over the mountains than through them. This old ruin of a road was not on the map and was barely discernable on the ground. A light tank company equipped with M5 tanks was alerted to attack up this road and capture the mountain. Terracina lay directly at the foot of this mountain and beyond that were the Pontine Marshes and the beginning of the flat land similar to the Anzio beachhead area.

The engineers commenced work immediately clearing and improving the old Roman road. The tanks started up after about four hours of bulldozer and demolition work by the engineers. The lead tank threw a track at a point where it was impossible to bypass it so an engineer bulldozer, which was still ahead, pushed the tank almost over the cliff. At about 1700 on 23 May the tanks finally reached the top.

This turned out to be a small plateau with two large, strongly constructed, stone houses on the palacial order and a cemetery, la Delibra. One of the houses was Palazzino Teodorica which was on the highest part of the mountain at a point where it dropped very abruptly into the sea and directly above the road block on the modern road into Terracina. The other house was La Casina and sat on the Via Appia Antica which was quite distinct on the plateau and was directly in front of the tanks.

The first platoon fanned out and formed a base of fire. The other two platoons moved to the left and right spraying the rocks with machine guns. The 1st Platoon moved up to La Casina. The small arms fire there was heavy and the 37mm guns, which were the heaviest armament carried on the M5 tanks, did no apparent damage to the heavy walls. A platoon of M4 tanks reached the top at this time and their heavier 75mm guns knocked great holes in the walls of la Casina and quickly silenced the opposition there.

The M4 tanks then turned their guns on Palazzino Teodorica while the light tanks sprayed the rocks and countryside in general.

Within an hour the mountain was completely secured. After such stubborn defense, a counterattack was expected and as it was nearly dark, the infantry dug in and reorganized. The enemy put an intense artillery concentration on the hill during the night but the counterattack did not materialize. Under cover of darkness and the artillery, the enemy all withdrew from Terracina and the next day overland contact was made with the Anzio Beachhead.

The Germans were so certain that tanks could never get at them on Mount Teodorica that they did not have their individual antitank weapons, bazooka and panzerfaust with them. They failed even to get artillery support in time. As a result, when tanks did get on the mountain, they faced only small arms and mortar fire which did no damage. The mountain was captured without the loss of a tank or infantryman except for those casualties suffered in the two previous all infantry attempts.

Tremendous casualties can be inflicted on the enemy when he is surprised and caught off guard. An interesting example can be found in the attack on Albanete House near Cassino, Italy. At the height of the attacks on Cassino in February 1944, a British Indian Sapper unit built a road under cover of darkness part way up Monte Cassino, overlooking the town. A plan was developed to send an infantry force reinforced by a light tank company up this route to their objective, Albanete House.

Colonel Devore reports the experiences of one tank crew of this force in detail. (*2) He attributes them with killing 50 to 75 enemy. The tank commander, Sgt. Lawrence M. Custer, states, "...just as I got to the top and could look down the way for maybe seventy-five yards, I ran over a mine...when the smoke and dust cleared away, I had my head out watching and saw a mule train coming up the trail. There were a lot of Germans with the train and I let loose with the machine gun and also with the 37mm. They were all standing still looking at the tank, apparently with lots of surprise and it took them awhile to realize we were their enemy. By that time I had gotten at least 15 of them and 5 or more of the mules."

Sgt. Custer stayed with the disabled tank despite the fact that an enemy artillery battery was in position only 300 yards away and continued firing until his ammunition was exhausted. He and one other member of his crew were successfully rescued by another light tank.

This attack was repulsed and one of the principle reasons was the inability of the M5 light tanks to negotiate the rough terrain without throwing off tracks. Ten of the seventeen tanks

*2. Col. Devore, AGF Observer, "The Attack on Albanete House", USA-385.

that made the attack were lost: five threw tracks, two became stuck, two hit mines, and one was knocked out by an antitank gun. The present track with center guides has proven much more effective and efficient. If this attack had been made with M24 tanks, which had not then been developed, it is possible only three tanks might have been lost and the superior fire power of the 75mm gun might have turned the tide of the battle.

Another outstanding, although not typical example of what can be gained from surprise comes from the attack of the 1st Battalion, 6th Regiment, 1st Brazilian Infantry Division along Highway 62 against Fornova, Italy. Fornova lies in a small valley opening into the Po Valley with mountains on either side about 1000 to 1500 feet high.

One platoon of medium tanks was attached to this battalion for armor support. The attack commenced on 28 April 1945. Antitank, 20mm, mortar and artillery fire held up the advance of the tanks and infantry along the road and mines greatly limited the opportunities for deployment of the tanks. The drive was stopped at Giano.

The tank company commander lead another unattached platoon without infantry support into the high ground southwest of Fornova. This encircling movement apparently caught the enemy completely unaware and about twelve trucks were destroyed by fire from high ground. It was impossible to get down into Fornova from that point. The enemy began milling about in complete confusion and the tanks fired 300 rounds of 76mm and 10,000 rounds of 30 caliber ammunition into the positions in the valley before dark.

The enemy, thinking he was completely cut off, sent emissaries that night to the tanks to negotiate a surrender. The emissaries were conducted to the Brazilian Command Post. The next day, 29 April 1945, 13,879 enemy troops, including 820 officers, with over 4000 horses and 1000 assorted vehicles surrendered to the Brazilian forces. (*3).

One tank of the encircling platoon was destroyed by an enemy bazooka.

The surrender of so large a force to so small a unit is not typical; it happened at a time when resistance was beginning to crumble all over Italy. The enemy commander probably grasped at the first half-way honorable opportunity to surrender.

Tanks are primarily an offensive weapon and in the defense, their offensive qualities should be utilized to the utmost by holding tanks in reserve to be used as a counterattacking force. The tanks' mobility enables them to reach any threatened point quickly and they can be employed in mass only when so held in reserve.

Mountain terrain may place such limitations on the mobility of tanks that it will be impractical to use them for a counter-attacking force due to the lack of suitable routes to all points

*3. After Action Reports, 760th Tank Battalion: "Report of Action from 1 April thru 30 April 1945".

on the front of the supported unit. Their fire power may still be utilized to great advantage by placing the tanks in selected firing positions on the infantry front. Reconnaissance for positions should begin as soon as the ground is captured to give sufficient time to maneuver the tanks into position. This operation should be a part of and coordinated with the infantry's organization for holding the ground.

This type of employment will fall into two classifications; one, tanks outposted and protected by infantry to form strong points, and two, tanks used merely to reinforce and add volume to the fires of the infantry. Strong points are only of value when placed in likely avenues of approach.

Speed of movement is one of the chief protective means of the American tank; but in this type of employment, movement must be kept to a minimum so special emphasis must be placed on camouflage and concealment. Alternate positions nearby should be prepared. The enemy will make every attempt to bring antitank guns to bear on the tanks if they locate them.

The 88th Division, with a tank battalion attached, was advancing slowly and with great difficulty through mountainous terrain south of Bologna, Italy in October 1944. The division's boundaries led it along the route Mt. Grande, Monte Calderaro, Mt. Vedriano, then several miles of diminishing foothills and the Po Valley. Capturing the Po Valley would deprive the enemy of a valuable source of supply as well as excellent routes of supply and communications, therefore it was the objective of the entire 15th Army Group in Italy. Moreover, to the mountain weary soldier in Italy, the flat land of the Po Valley seemed like the Promised Land. Everyone from generals to privates earnestly desired to get there quickly. The Germans on the other hand desired desperately to hold it.

The division's attack on Mt. Grande was made with very little effective support from tanks since there were no roads, and the terrain was rough and steep, and the ground too soft for tanks to negotiate it. Initially one medium company was employed along an unimproved road on the division's right flank, one medium company plus one platoon fired indirect fire reinforcing division artillery, and the other medium company less one platoon did practically nothing.

The mountain was captured at dawn on 21 October 1944, a medium tank company, less one platoon, (eleven tanks) and a tank recovery vehicle started up the mountain by a very round-about, previously reconnoitered route lead by a bulldozer. The mission of the tanks was to take positions on the mountain to support the infantry. The lead tank belonging to the company commander rolled into a ravine when the newly made trail gave way on the outside edge.

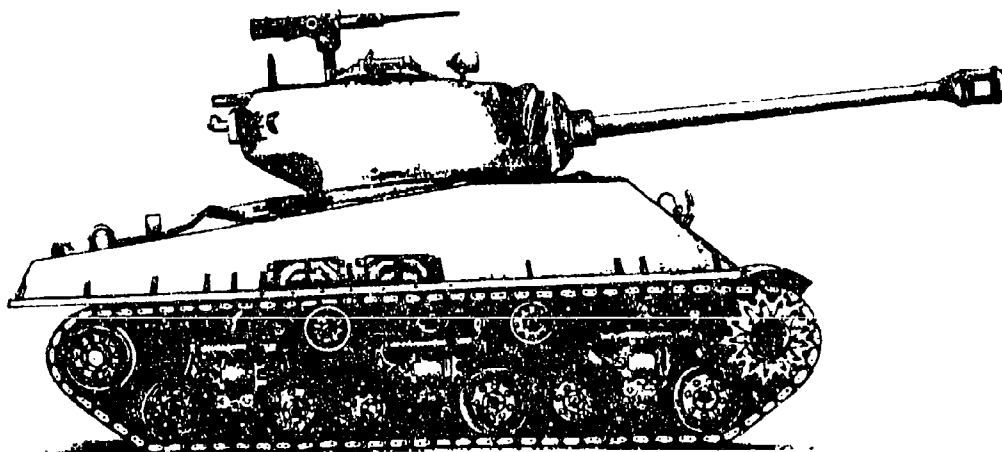
The tanks proceeded on and reached the crest of a ridge

leading into Mt. Grande by mid-afternoon. There was a cart trail along the top of this ridge. The infantry was dug in on the reverse or south slope of this ridge and the cart trail generally marked the line of outposts. The plan required the tanks to proceed over this trail to Mt. Grande.

A heavy rain commenced just as the tanks reached the crest of the ridge and the trail. The lead tank slipped off the trail and became stuck in the mud 1000 yards west of Farneto. Attempts to pull it out with other tanks were unsuccessful. The tank recovery vehicle had stopped to retrieve the company commander's tank without success and had been caught by the rain and could not climb the slick mountainside. Two more tanks were stuck in by-passing the one west of Farneto.

It was now night, and to complicate matters, the rain had changed to a heavy fog. Visibility was zero. The lead tank of the column ran off the road at Farneto and rolled onto its right side. An inspection of the trail ahead, made on hands and knees, indicated that it had become too narrow for a tank to negotiate in the daylight and certainly too narrow for a foggy night. Another by-pass was attempted and four more tanks were stuck; two got through.

These two tanks successfully reached the side of Mt. Grande and backed a short distance up a trail leading to the top. Visibility improved at dawn and the platoon leader with the two tanks attempted to move them fifty yards to a more concealed position. The lead tank threw a track, hopelessly trapping a second tank behind it. Of the eleven tanks, none now remained mobile.



With dawn came more rain.

Seven of the tanks stuck along the Farneto ridge trail were recovered with the help of an engineer bulldozer but one became mired in the mud again on the way to Mt. Grande and could not be retrieved. The remaining six were assembled in the only available concealed place on the side of the mountain.

Two of these tanks assisted in the capture of Monte Calderaro by firing from the road. They remained in position just north of Casa la Costa.

The attack on Mt. Vedriano began next. Two tanks got as far as Casa Cola but, after one entire infantry company was lost, a withdrawal was ordered by night to Casa il Vezzola. One tank slipped off the road, becoming hopelessly stuck, and was destroyed to prevent capture. There was room for only two tanks at Casa il Vezzola so the remaining three were sent back to Casa la Costa. The trail caved in under the last tank out and the two tanks in Casa il Vezzola had no means of withdrawal. Four tanks were now operative, two sealed in at Casa il Vezzola and two at Casa la Costa.

Two nights later at 1830 hours an enemy battalion attacked Casa il Vezzola but the attack was repulsed by a company of American infantry supported by the two tanks there. The enemy battalion leader was killed by one of the tank commanders as he was trying, apparently, to get on the tank. Rocket anti-tank weapons were fired at the tanks from a building twenty feet away but none scored hits. It is doubtful if the position could have been held against such a superior force of enemy without the fire support of the two medium tanks.

The two tanks at Casa la Costa fired on enemy positions around Monte Calderaro whenever they could be located and when visibility permitted.

ANALYSIS

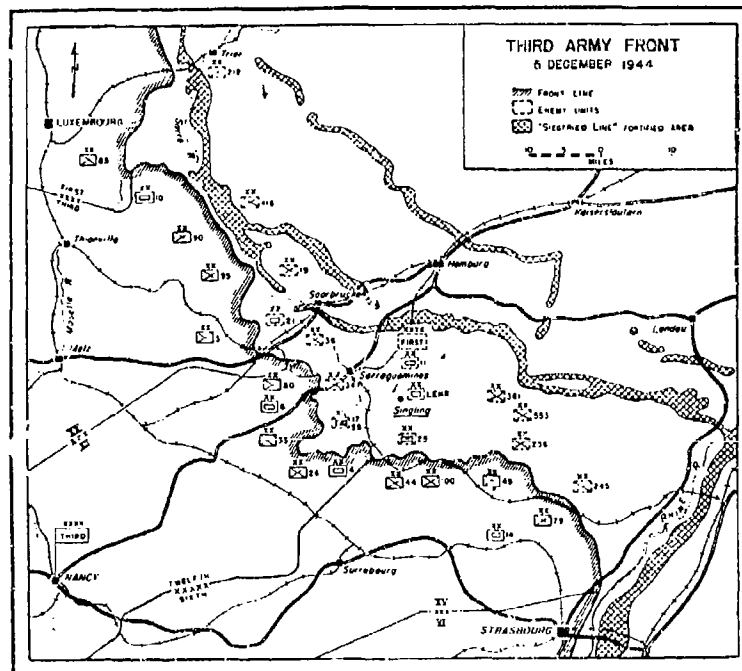
Armor can be employed in virtually any terrain if the necessary time is spent in putting it into position. Extra engineer attachments to armor in mountainous terrain is mandatory and adjustments will have to be made to strengthen tank-recovery capability. The dividends from surprising an enemy who is not prepared for armor, thinking it unemployable, can mean the difference between victory and defeat.

SINGLING (DEC 1944)

Lt Gen Fritz Bayerlein, Commanding General of the crack Panzer Lehr Division, was on a hill north of Singling on 6 December 1944, when tanks of the 4th Armored Division broke across the open hills to the south in a frontal attack on the town. After the war ended he remembered that sight and spoke of it with professional enthusiasm as "an outstanding tank attack, such as I have rarely seen, over ideal tank terrain."

General Bayerlein could afford a detached appreciation. At the moment when he saw the American tanks in motion, the attack was not his problem. His division, after ten costly days of trying to drive south to cut off the rear of advancing American forces, had just been withdrawn, relieved by the 11th Panzer Division. Bayerlein himself had remained behind only because some of his tank destroyer units had been attached temporarily to the relieving forces.

The attacks on Singling and Bining which General Bayerlein so admired were the last actions in Lorraine of the 4th Armored Division commanded after 3 December by Maj Gen Hugh J. Gaffey. For nearly a month the division had been fighting in the most difficult terrain and under the most trying weather conditions of its entire campaign in France. Casualties in men and material had been very heavy, largely because constant rains prevented air cover and because swampy ground either confined the tanks to the roads or so reduced their



MAP NO. 1

maneuverability in cross-country attack that they fell an easy prey to the enemy's prepared defenses.

Throughout the Lorraine campaign the division practice was to operate in small, flexible task forces (generally two to a combat command) which themselves were constantly broken up into smaller forces of company strength of tanks or infantry or both. These smaller "teams" were generally formed at need by the task force commander to deal with a strongpoint of enemy resistance which was holding up the advance of the main body, or to clean out a village or hold high ground to safeguard such advance. In this sense, the attack on Singling, though inconclusive, was typical of the campaign tactics. It shows some of the difficulties of the use of armor in terrain which naturally favored the defense, and which the Germans knew thoroughly and had ample time to fortify. In respect to weather, however, which all the tankers said was their toughest and most memorable enemy during the campaign, Singling was not typical. The day of the battle was overcast, but there was no rain. Mud, except during the assembling stage, had no influence on the course of the action.

One feature of interest in the detailed narrative of the action lies in the picture of battle confusion, which extends to higher headquarters. At Corps nothing at all was known of the engagement described in the following pages, and the day's events were represented to the higher command substantially as the realization of the original plan. The G-3 Periodic Report (XII Corps) Number 115, 071200 December 1944, reads:

4th Armored Division - Combat Command A began their attack on Bining around noon. The 38th (sic) Tank Battalion and 53d Infantry formed a base of fire to the south of town and the 37th Tank Battalion hit Bining from the west. As the attack on Bining (Q6549) progressed, Combat Command B passed Combat Command A and attacked Singling (Q6249). The opposition here consisted of infantry, tanks, and antitank fire from numerous pillboxes, and artillery fire which came in 30- to 40- round concentrations. The fighting at Singling and Bining was very difficult, but by nightfall Combat Command A was in Bining and Rohrbach (Q6549). Singling was not clear as of 1730....

In actual fact, as the narrative will show, Combat Command A attacked Singling and secured the southern and eastern portion of the town before Combat Command B came up; the attack on Bining did not begin until late in the afternoon and was made by only the light tanks of the 37th Tank Battalion supporting a battalion of the 328th Infantry; and, finally, no elements of Combat Command A ever reached Rohrbach.

Background of the Attack

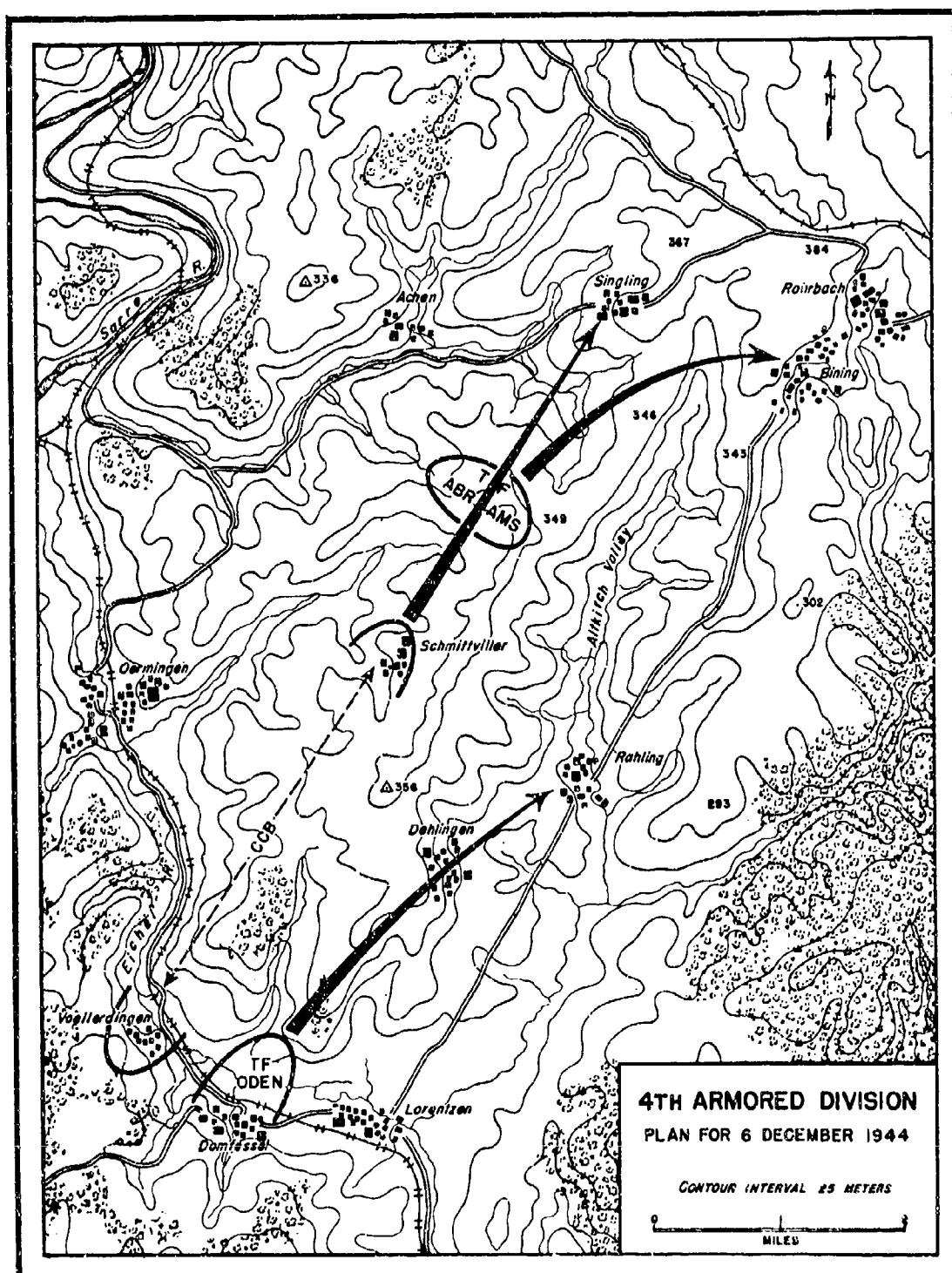
The impromptu attack on Singling, 6 December 1944, by Company B of the 37th Tank Battalion and Company B of the 51st Armored Infantry Battalion represented the farthest advance northeast of the 4th Armored Division in its slow, difficult drive toward the German border which began 10 November from assembly areas just east of Nancy. From the military standpoint, Singling is important not as a town but as a terrain feature. An agricultural village of some 50 squat stone houses, it is strung along about half a mile of the highway from Achen (near the Sarre River) east to Bitch and the German border. Around the simple square church, the brown stone schoolhouse, the market square, cluster the houses whose concreted walls are painted white, red, yellow, blue, pink, and roofed with red tile. As in most Lorraine villages, the stables are on the main street and the manure piled in the front yards. But the picturesque insignificance of Singling conceals a military reality. Some of these farm houses have 3-foot reinforced concrete walls; the garden walls are high and thick; concrete pillboxes stand guard at the entrances to town east and west, on the hills and in the valley north, and on the ridge south. For Singling is in the Maginot Line, and its position along a southwest-northeast ridge is tactically important. In the Maginot fortification scheme, oriented north and east, Singling was a focal point in the secondary system of forts. For the Germans defending south and west, it was admirably placed as a fortified outpost for the defense against attack from the southwest toward the cities of Rohrbach, an important rail and road center and military barracks area, and Bining, which controls the approaches to Rohrbach from the south.

Rohrbach and Bining, both located in the valleys dominated on three sides by high ground, are themselves tactical liabilities. But control of the cities through occupation of the ridge to the north was especially important at this time both to XII Corps, which ordered the attack, and to Seventh Army (XV Corps), which was on the 4th Armored Division's right flank (Map No. 1). The principal objective of the XII Corps was Sarreguemines, an important city on the Sarre River and the German border. Through Rohrbach pass a railroad and one of the main highways east out of Sarreguemines. Rohrbach had an additional importance as an objective at the time, because it was a focus for roads north out of the large forest area (including the Forêt-de-Lenberg and Forêt-de-Montbronn) then under attack by XV Corps units.

But Rohrbach as an objective could not be separated from Singling (Map No. 2 and Map No. 3). The main road into Rohrbach from the south follows high ground, but passes by a series of small knobs which makes it unusable for attack. The alternative is the ridge west of the Valee d'Altkirch. The east slopes of

this ridge are, of course, enfiladed by the same hills that control the Rohrbach road. The west side, on the other hand, comes under direct frontal fire from Singling, which, by reason of a few feet additional elevation, and its position on the curving nose of the ridge, commands this approach route for three or four kilometers to the south. Neither route, therefore, was satisfactory, since tanks on both would come under enemy observation before they were within range to attack, but the west side of the ridge with comparative freedom from flanking fire seemed to offer the best hope for success. To use it for attacking Bining, however, it was first necessary either to take or to neutralize Singling. The ridge configuration and the impassability of flooded terrain in the Vallee d'Altkirch compelled the attacking force to come up east of Singling and then make a ninety-degree turn southeast on the high ground into Bining. Assault of Singling was rendered difficult not only by the canalized approach but also by the fact that the heights it occupies are themselves dominated by a ridge 1,200 yards to the north which is in the main defenses of the Maginot Line.

Just how difficult the task was had been discovered on 5 December by the 37th Tank Battalion, commanded by Lt Col Creighton W. Abrams, when it attacked from Schmittviller under orders to advance as far as possible, with Rimling as a limiting objective. In fact, the attack carried only to within 1,000 yards of Singling and was there stopped by difficult terrain and by heavy artillery and direct fire from Singling and beyond. Fourteen medium tanks were lost to mud and enemy guns. Five were hit almost simultaneously on topping a ridge south of town; others bogged in the sticky ground and were destroyed by artillery or temporarily disabled. The battalion, reduced in effective strength to two medium companies and unable to advance, reassembled northwest of Hill 349. That night (5/6 December), Combat Command A Headquarters received from Division the plan of attack for the next day. Combat Command B was to advance from Schmittviller to take Singling and the high ground to the east. Task Force Abrams (of Combat Command A), whose principal combat elements were the 37th Tank Battalion, 51st Armored Infantry Battalion, 94th Field Artillery Battalion (105-mm howitzers), and Company B of the 704th Tank Destroyer Battalion (less one platoon), was to attack Bining and Rohrbach and reconnoiter the high ground to the north. Task Force Oden (of Combat Command A) meanwhile would push on from the Eichel River bridgehead at Domfessel to take Dehlingen and Rahling, and be in the position to support Abrams (Map No. 2).



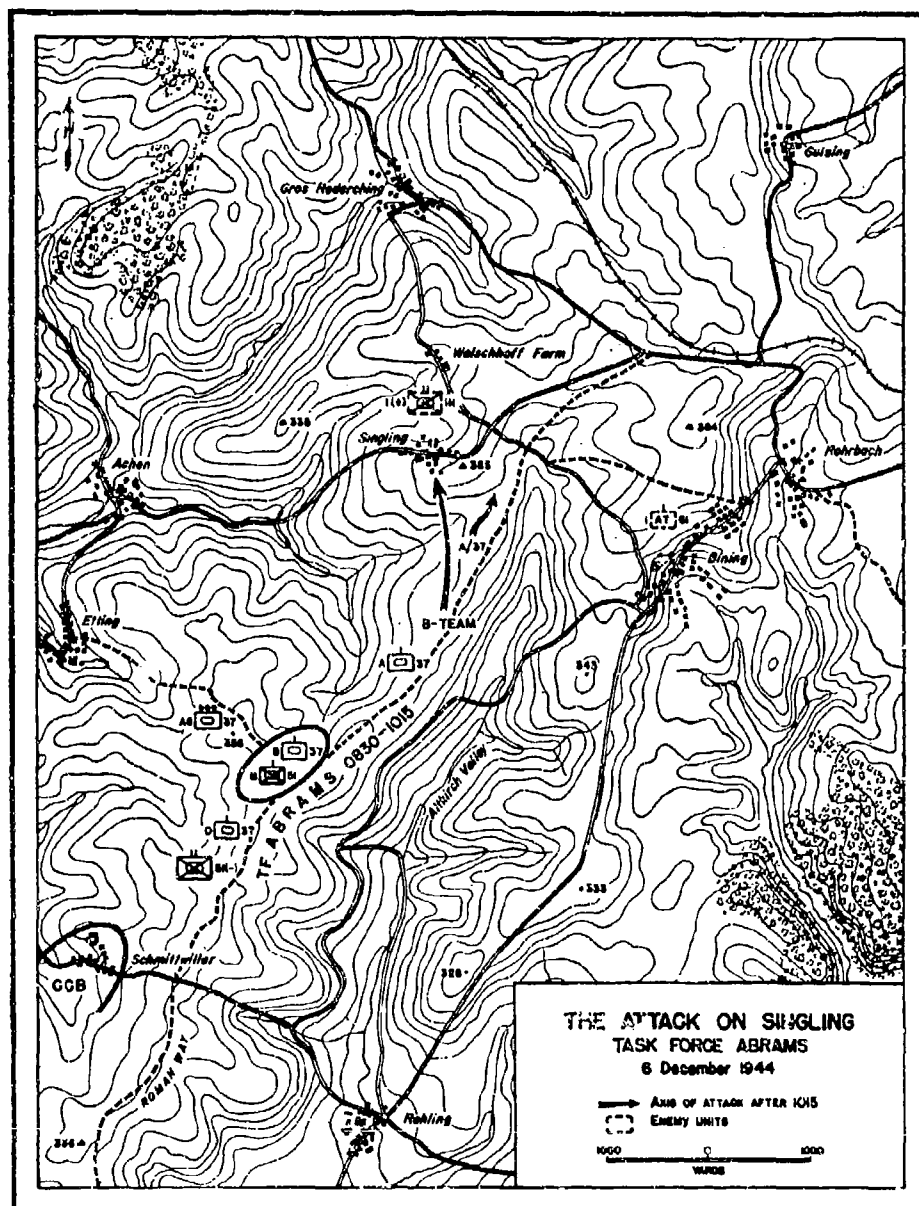
MAP #2

2-63

Colonel Abrams recommended to Combat Command A that he be allowed to attack Singling first. Combat Command B was still in the vicinity of Voellerdingen and Schmittviller, and, though they could march as far as Abram's assembly area without opposition, he knew that they would be unable to come up in time to jump off abreast with Combat Command A in the attack. This would mean that Abrams would have to turn his flank to Singling in attacking east. If that turning had to be made, he asked Combat Command A for the support of at least six battalions of artillery. (In fact, when he attacked the next morning, all artillery battalions except the 94th were, unknown to him, on the road.) Abrams sent his recommendations as to objectives and artillery support to Combat Command A by liaison officer, along with a plan for attack on Bining if his preferred plan were not accepted.

A Change in Plan

The 51st Armored Infantry Battalion commanded by Maj Dan C. Alanis, at 0700, 6 December, left bivouac areas in the vicinity of Schmittviller to meet the tanks for the jump-off at 0800. The plan, as far as it concerned Team B, was to advance in column of alternating tanks and infantry carriers up to the outskirts of Bining. But the soaked ground even on the hills proved too sticky for the half-tracks, and they were left in the bivouac area with their drivers while the riflemen rode the rear decks of the tanks. When they mounted at 0835 (Lieutenant Belden looked at his watch and was worried because they were late in starting), the plan still called for Team B to attack Bining. They were then just west of the Roman Way, still in the immediate vicinity of the battalion assembly area, 3,000 yards from Singling. Company A of the 37th Tank Battalion at the head of the column was a mile to the north, and had been stopped by direct and indirect fire from Singling as heavy as that of the day before. At 0830, Batteries B and C of the 94th Armored Field Artillery Battalion began firing smoke concentrations north and east of Singling. On 6 contiguous target areas they fired 131 rounds, but, although a gentle southwesterly breeze drifted the smoke perfectly across Singling, enemy fire continued heavily, and for the next hour or so the column made no attempt to advance. Company A, 37th Tank Battalion fired into the town, although targets were seldom visible. Company B of the same battalion shot occasionally at targets of opportunity at extreme range and without observed effect. Of the enemy ahead in Singling, Company B observed two tanks in the orchards west and east and a gun firing from the center of town. This turned out to be a self-propelled gun which later engaged the attention of the assaulting companies most of the day.



Map #3

Convinced that enemy guns in Singling could not be neutralized by a fire fight, Colonel Abrams decided on his own initiative to attack the town and attempt to hold it with one tank company and infantry, while the remainder of his force turned east into Bining. He assigned the mission of taking the town to Team B (Map No. 3), which had no time to make detailed plans.

Captain Leach was given the order to attack; he informed Lieutenant Belden but, as the infantry were already mounted, Lieutenant Belden could not pass the word on even to his platoon leaders. (One of them thought until that night that he had been in Bining. The tank commanders were so sure of it that they mistook Welschoff Farm north of Singling for the barracks they had expected to find at Bining.) Captain Leach deployed his tanks, putting the 2d Platoon under 2d Lt James N. Farese on the left; the 1st Platoon, commanded by 1st Lt William F. Goble, on the right; and the 3d Platoon, under 1st Lt Robert M. Cook, in support. The command tank moved between the 2d and 1st Platoons in front of the 3d. As the 2d Platoon tanks carried no infantry, the three infantry platoons were mounted on the remaining 11 tanks (5 in the 1st Platoon, 4 in the 3d, the commanding officer's tank, and the artillery observer's). The infantry platoons were widely dispersed; the 11 men of the 2d rode on four tanks. Before the attack at 1015, Batteries A and B of the 94th Field Artillery Battalion put 107 rounds of HE on Singling, of which 3 rounds were time-fuzed, the rest impact. The assault guns of the 37th Tank Battalion took up the smoke mission and continued to fire north of the town until the tanks got on their objective. Company A of the battalion turned east and throughout the day fired on the Singling-Bining road and to the north. One platoon of tank destroyers, in position to support the attack, actually did little effective firing during the day because heavy enemy artillery forced the guns back. The other platoon remained in the assembly area and was moved into Bining the next day.

Company B tanks advanced rapidly toward Singling, immediately after the artillery preparation, and fired as they moved. But the planned formation was soon broken. Sgt Joseph Hauptman's tank (2d Platoon) developed engine trouble, ran only in first gear, and so lagged behind; S/Sgt Max V. Morphew's (3d Platoon) radio failed and he did not bring his tank up at all. The other three tanks of the 3d Platoon crowded the first two until their firing endangered the lead tanks, and they were ordered to stop shooting. As far as the tankers noticed, there was no appreciable return fire from the enemy. As the company approached the town, the 1st and 2d Platoons swung east and west respectively, and the 3d Platoon moved in through the gap to come up substantially on a line. The effect then was of an advancing line of 13 tanks on a front a little less than the length of Singling, or about 600 to 700 yards. Only Lieutenant Farese's tank was notably in advance. Leading the tanks of S/Sgt Bernard

K. Sowers and Sgt John H. Parks by about 50 yards, Lieutenant Farese moved up the hillside south of Singling and turned left into an orchard (Map No. 4). As his tank topped the crest of a slight rise just south of a stone farmyard wall, it was hit three times by armor-piercing shells and immediately was set on fire. Lieutenant Farese and his loader, PFC William J. Bradley, were killed. The gunner, CPL Hulmer C. Miller, was slightly wounded. The rest of the crew got out. Sowers and Parks backed their tanks in defilade behind the rise and radioed Hauptman not to come up.

The shells that hit Lieutenant Farese were probably from a Mark V tank which was parked beside a stone barn, though they may have come from a towed 75-mm antitank gun in the same general vicinity. In any case, what Lieutenant Farese had run into was a nest of enemy armor and defensive emplacements—a perfect defensive position which the enemy used to the fullest and against which Team B fought and plotted all day without even minor success.

Here, just south of the main road and 75 yards from the thickly settled part of town, are a substantial two-story stone house and stone barn and two Maginot pillboxes. One large-domed pillbox, constructed to house an antitank gun defending to the north, is just to the west of the barn. Two concrete buttresses fanned out to the northeast and southeast to form a good field emplacement for an antitank gun defending southeast. The towed antitank gun may have been emplaced there. The orchard southeast is thin, the slope of the hill gentle, so that the turrets of tanks attacking from that direction are enfiladed from the pillbox position at 150 yards. The other pillbox is much smaller, designed probably as a machine-gun outpost to cover the main road. It juts out into the road and, together with the high walls of the farm buildings to the east, provides cover from the town square for a tank parked behind it on the south side of the road. The main street of town makes a broad S-curve which serves to conceal guns on the south side from observation of an attacking force entering the center of town from the south, yet still permits those guns to command the full length of the street to the main square.

In this area at least three Mark V tanks two SP guns, one towed antitank, and one machinegun (German .42- or possibly an American .50-cal.) successfully blocked every attempt at direct assault or envelopment, and during the day fired at will at all movements across or along the main street and to the south and southeast. Sergeant Sowers and Sergeant Parks found that if they moved their tanks only so far up the slope as to bare their antennae masts they drew armor-piercing fire.

For some time, however, Parks and Sowers were the only ones who suspected the strength of this thicket of enemy defensive armor. They knew that they could not advance, but they had seen only one tank and one gun. The destruction of Lieutenant

Farese's tank was, of course, reported to Captain Leach, but Captain Leach at the moment was preoccupied by another more immediately pressing problem, an enemy SP 50 feet in front of him.

The Infantry Attack

When two tank platoons carrying the infantry reached a hedge just south of Singling, they slowed up to let the infantry dismount. Lieutenant Belden got off ahead of his platoon leaders. First to reach him was 2d Lt William P. Cowgill, whose platoon assembled most rapidly because the men happened to be riding on tanks relatively close together. Lieutenant Belden told Cowgill to take the left side of town, disregard the first three houses on the south, and move in; 2d Lt Theodore R. Price was ordered to take the right side. Belden said to 1st Lt Norman C. Padgett, "Follow up after Cowgill." Padgett commented drily afterwards, "I was in support." That was the plan. Neither leaders nor men had any knowledge of the town or of the enemy. They were to clean out the houses, splitting the work as circumstances dictated. Though all the platoon leaders and a good percentage of the men were recent replacements,¹ they had all had combat experience and had fought in towns before.

Considering its depleted strength (150-200 men), the enemy battalion was well armed. The three companies actually in contact at Singling had one towed 75-mm antitank gun, at least five 81-mm mortars, eight to ten light machineguns, one heavy machinegun, three 20-mm antiaircraft guns, and a wurfgeraet, an improvised rocket launcher of steel-supported wooden frames, capable of firing two 200-pound, 36-inch projectiles at a time.

¹From 9 November to 6 December, the company had received 128 replacements and had suffered 100 percent officer casualties. Lieutenant Belden took command 25 November but had been in the company before; Padgett, Price, and Cowgill were all replacements who had joined the company 13, 16, and 21 November respectively.

An indication of the relative importance of Singling and Bining in the enemy's defensive plan is the fact that while a battalion with tank and artillery support held Singling, the defense of Bining was entrusted to a single company (the 1st) of the 61st Antitank Battalion (11th Panzer Division). This company had about 50 men and 8 old-type 75-mm antitank guns mounted on Mark IV chassis, which a prisoner of war testified could not penetrate a Sherman tank from the front at more than 600 yards. Near Bining, exact location undetermined, were one or possibly two companies of the 2d Battalion, 11th Panzer Grenadier Regiment, whose presence was apparently unknown to the men of the 1st Battalion of that regiment. Probably at least a company of

tanks was in the area, though no identifications were made. Finally, the enemy was employing Marsch Battalion B - a collection of some 250 overaged, crippled, or otherwise unfit personnel - as labor troops to dig defenses.

The enemy facing Team B was thus stronger and better armed (particularly in respect to heavy weapons) than the attackers. Nevertheless, before the battle was joined some of the enemy troops had been warned by their own officers that they were facing the 4th Armored Division, "one of the best divisions in the American Army." This they had a chance to discover for themselves in both Singling and Bining as the day wore on.

Lieutenant Cowgill (3d Infantry Platoon) with PFC John T. Stanton, his radio operator acting this day as runner, came into town ahead of his platoon. They made their way nearly up to the main square before spotting an enemy SP parked beside No. 44. The building, burning from shell fire, clouded the square with thick smoke. Cowgill turned and shouted back a warning to the tanks not to come up. Padgett with two men of his 1st Squad was nearby. He had not waited to assemble his platoon as they were trained to watch him, when they dismounted, and to follow. This they did, though the 2d Squad was actually held up most of the morning by some house-cleaning (see below). At Cowgill's shouted warning, Captain Leach dismounted and advanced along the street ahead of his tank. The SP up to this point was apparently unaware of them, though the commander's head was out of the turret. Padgett, Leach, Cowgill, and the two men started firing to make him button up. Then the SP moved. It backed across the street to the church preparatory to heading west. In the meantime more infantry had come up from the south. When Lieutenant Belden approached, the street was crowded. Annoyed, he shouted at the men to clear off and fan out into the houses on either side. His shout was less effective than a burst of machinegun fire from the SP which followed the shout by a matter of seconds. The 1st Squad of the 3d Platoon (Lieutenant Cowgill), which, for the first half hour or so that it remained together, was under command of CPL Ralph R. Harrington, ducked into houses on the west side of the street. The 2d Squad, under SGT John McPhail, retreated hastily into No. 45 on the east, and the street was nearly clear.

Belden could not see the SP. He stopped a soldier to ask what they were getting ahead. The answer was: "Machinegun." "If it is a machinegun nest," said Belden. "we'll bring up a tank." In the mysterious pathways of rumor, this remark traveled rearward, lost its "if," and resulted in the ordering of the last tank under SGT Kenneth L. Sandrock of the 1st Tank Platoon to clean out an enemy machinegun nest. Sandrock moved west from his platoon which had driven into the orchard east of town, fired pot

shots at the church steeple on the chance that it might be an enemy OP, went on up the south street, and found no machinegun nest. Then, meeting Captain Leach, Sandroock drove his tank in behind No. 6, where he remained separated from his platoon the rest of the day.

In the meantime the enemy SP at the square had completed its turning and headed west along the main street. Leach continued to fire his tommy gun at it. But in so doing he blocked the line of fire of his own tank behind him, and the SP escaped. Leach did not attempt to follow. He had received the report about a tank that had knocked out Lieutenant Farese, and decided that it would be wiser to attempt to get the escaping SP from the flank by moving the 3d Platoon tanks through the west end of the town. He therefore had his own tank back between buildings No. 6 and No. 7, where he was covered from the west and could command the square, and called Lieutenant Cook. Cook's three tanks, his own, the one commanded by SGT Giles W. Hayward, and the 105-mm assault gun, commanded by SGT Robert G. Grimm, were advancing on the town between the two southern trails. In front of them the large farm building (No. 11) was on fire and clouds of smoke reduced visibility to the north to a few feet. Cook led his tanks to the right of the burning farm with the idea of cutting across the main street in pursuit of the enemy SP. As they approached, PVT Charles R. McCreer, Cook's loader, saw Farese get hit in the orchard to his left. He may have informed Cook, or may have assumed that Cook had seen it too. In any case, Cook did not absorb the information and made his next moves in ignorance of the existence of enemy tanks on his left flank. He drove his tank between the corner of the burning barn and the house north of it, No. 9. Between these buildings, invisible in the smoke, was a low stone retaining wall and about a 2-foot drop into the walled garden in front of No. 11. Hitting this unseen barrier at a 45-degree angle, Cook's tank teetered dangerously on its left tread. For a moment it threatened to overturn, then lumbered on, righting itself. Grimm and Hayward, following, had little trouble as the first tank had broken down the bank.

The garden in which the three tanks found themselves was enclosed on the north and west by a 4-foot concreted stone wall, stepped up to 6 feet high around the northwest corner. Despite this inclosure, they felt, on emerging from the smoke pall, as naked as if they had suddenly come up on a skyline. In fact, their position was seriously exposed from the north, for the continuous slope of the ground northward for several hundred yards canceled out the wall as a screen. Immediately across the street were two smaller gardens with low stone walls, and a dirt trail leading down into the valley. Originally, Cook had no intention of staying there. He planned to cross the road, then work around to the west still intent on trapping the SP which he

knew was somewhere on his left. He did not know that its gun now commanded the street, and he would have found out too late if Lieutenant Cowgill had not appeared at that moment to warn him.

Cowgill's platoon had set out immediately after the escape of the SP from the square to move into the west side of town. Cowgill, himself, with two men of his 1st Squad (Harrington and PVT Grover C. Alexander), moved along the south side of the street. (The other four men of the squad stayed behind near No. 7 from which later on they undertook an independent mission to the north.) Cowgill, Harrington, and Alexander made their way to No. 10 and from there could see two German SP's parked on either side of the street 200 yards to the west. It was then that Cowgill, coming around No. 10 into the garden into which Cook's tanks had just driven, found Cook and warned him of the enemy. Cowgill said, "There is a Kraut tank behind the third building down to the west." Cook got the impression that the "tank" was located behind a house which he could see on the north side of the street. He therefore had his tank and Grimm's 105 chop down the corner of the wall in front of them. This fire probably nettled the enemy into replying, and a round of 75-mm struck the northwest corner of No. 10 not far from where Cowgill was standing. Cook dismounted and with Cowgill walked around to the east side of the building which had been hit.

In the meantime the 2d Squad of Cowgill's platoon under Sergeant McPhail had moved on from No. 45 into which the SP's machinegun at the square had driven them. Satisfied that there were no enemy in No. 45, the seven men crossed the square and entered No. 28, a handsome low-lying stone house set back from the street and surrounded by a 2-foot wall, surmounted by an iron railing. In this house McPhail and his men discovered twelve civilians sheltering in the cellar. A few minutes were consumed in searching them, then the squad set out to continue the sweep of the north side of the street. McPhail and Tech 4 Ben A. Todd emerged through the front door of No. 28 and made a dash to the schoolhouse. A third man tried to follow but ducked back when machinegun bullets spattered in the front yard. Then and for the rest of the day, No. 28 was under direct fire from the enemy tanks on the west. McPhail and Todd reached the school; the rest of the squad stayed in No. 28. Lieutenant Cowgill, standing on the other side of the street, shouted across to ask McPhail whether he could see the enemy SP's. He could. Cowgill ordered him to fire. Lieutenant Cook, having seen the true location of the SP's, returned to his tank and backed it into an alley between No. 9 and No. 10, just wide enough to let him through. He told Grimm and Hayward about the enemy SP's, asked Grimm whether he thought he could get out of the garden if necessary, and Grimm thought he could. Cook then called Captain Leach and asked whether tanks could be sent around to hit the enemy guns from the southwest. Leach radioed orders to Sowers (2d Tank

Platoon) to try to go through the burning barn (No. 11) and find a way to attack the SP's. Sowers tried, but got only a few yards. Just beyond the wall, the nose of his tank, exposed through the gate to the west, was shot at. Convinced that advance was impossible, Sowers returned to the orchard.

Every attempt to deal with the enemy so far had been made in ignorance both of the layout of the town and of the enemy position. This Lieutenant Cowgill set out to remedy and, while Cook maneuvered his tanks, Cowgill and his two men started on a devious exploratory journey through the houses to the west.

At the same time McPhail and Todd, who had fired a few rounds at the SP's, discovered what seemed to them more profitable targets in enemy infantry in the valley to the north. This enemy was also occupying the attention of two other groups of men in town. The four men of Cowgill's 1st Squad (PVT Joseph C. Bridges, PVT William M. Convery, PFC Frank M. O. Asplund, and PFC L. W. Battles) who had stayed at the square when the squad leader, Harrington, had accompanied Lieutenant Cowgill, spotted 15-18 Germans near a pillbox in the valley. They crossed the street, took up firing positions in the yard of No. 28, and shot into the Germans. They thought two were hit before the group dispersed. They continued to fire until an officer across the street by the church shouted at them to stop.

The officer was Lieutenant Price (1st Platoon), whose men had come last into town because they had stopped at two small pillboxes south of Singling to take and disarm 11 unresisting Germans. Although Price's mission had been to occupy the east end of town, when he arrived at the square he could see Lieutenant Padgett's (2d Platoon) men already moving along the houses to the east. Lieutenant Cowgill's men were on the west. Price decided to go north. Tech/Sgt Lovell P. Mitchell with four men cleaned out the houses on the southeast corner of the square while S/Sgt John Sayers and six men took over No. 35. Price with the rest of his platoon crossed the street to the back of the church, moved along the hard-surfaced alleyway between the church and No. 35. Posting PVTs Rudolph Aguilar and Randall S. Brownrigg at the northeast corner to watch in that direction, Price and four men followed the alley around the north side of the church. At the corner they could see the Germans at the pillbox who had already been spotted by the four 3d Platoon men. A burp gun was firing from somewhere to the northwest. The steep drop of the Singling ridge to the north made it possible for Price's men to return fire over the roofs of the houses in back of No. 28.

Under cover of this Lieutenant Price and SGT Elmer White planned to work their way into the valley behind the northeast

row of houses. But they were checked at the outset by a heavy wire fence which, hooked to the corners of No. 34 and No. 35, inclosed the alleyway. It was at least six feet high and too exposed to enemy observation to be scaled. It would have to be cut. The platoon wirecutters, however, had been entrusted to a man who two days before had been evacuated, taking the cutters with him. White went into No. 34 to look for tools. While he was in there, the Germans in the valley were getting ready to give up. They were encouraged in this not only by the continuing small-arms fire of Price's men and the four men of the 3d Platoon, but also by machinegun and HE fire from Lieutenant Cook's tanks. Sergeant Grimm started it by dispatching a lone German a few hundred yards away with 100 rounds of .30-cal. Minutes later, Grimm saw six Germans jump up and run into the valley pillbox. In his own words, he "closed the door for them with HE." All three tanks also periodically fired HE at the ridge 1,200 yards to the north, more to register the range of the skyline on which German tanks were likely to appear than to engage specific targets. The total effect, however, was to throw a large volume of fire in the direction of a handful of enemy, and shortly Lieutenant Price saw white cloths wave from the pillbox. It was then that he ordered the men across the street to cease fire. Twelve Germans walked up the hill and surrendered to Price. One who spoke some English reported that there were five more in the valley who were anxious to surrender but were afraid to come out. After all the Germans had been disarmed, Price sent one back down the hill to corral his comrades.

At that moment, however, a volley of enemy mortar and artillery struck the square. One shell hit No. 34 and Sergeant White inside was wounded in the head by fragments and wood splinters. Sayers and PVT Randall S. Brownrigg outside and CPL Frank B. McElwee in No. 43 were slightly wounded. Price and his men ducked back from the alley, and began occupying houses on the square where they were to remain all day. Although Price believed that enemy held the houses to the north, he decided not to attack them, because by advancing north he would move out of contact with the platoons on his flanks. No more was seen of the German emissary or the five volunteers for capture. The 11 still in the possession of the 1st Platoon were sent down the road south. Just as these started off, two more walked up the hill to the schoolhouse and surrendered to McPhail and Todd. McPhail escorted these two across the square to the street south. There, seeing Price's 11 walking down the street, he motioned to his 2 to fall in with them, and, himself, returned to the school. He and Todd then climbed to the second story, and resumed the business of shooting enemy in the valley. The four men of the 1st Squad decided then to go down to the pillbox to get whatever Germans might still be in it. They found none, but did draw machinegun fire from the direction of Welschoff Farm. Battles

was wounded in the leg and the squad was pinned in place for several hours.

From the east end of town, Lieutenant Padgett (2d Infantry Platoon) had also seen the enemy infantry in the valley, but he had seen two other things which worried him far more—a rocket launcher (wurfgeraet) firing from about 800 yards west of Welschoff Farm, and seven enemy tanks on a ridge northeast. Padgett was in No. 39, which he had reached with his 1st Squad without difficulty after going through the three small houses to the west. These houses were occupied only by a few scared civilians who were rounded up and sheltered in No. 39. House No. 39 was a fine place to be. Outwardly just another farm house, it was actually a fortress, with walls of 3-foot concrete reinforced with steel girders. Nevertheless, Padgett was still worried. Protection enough from artillery and the wurfgeraet (which Padgett decided was shooting short anyway), the house would not be of much avail against the enemy tanks. More reassuring were the four tanks of the 1st Platoon (Lieutenant Goble) which pulled into position in the orchard opposite No. 39 about the same time that Padgett arrived there. The enemy armor, though threatening, was still too far away for direct action. Padgett sent his runner to report the situation to Lieutenant Belden and also to find the 2d Squad of his own platoon and bring them up. When the runner failed to return in what seemed to Padgett a reasonable time, he sent out another man, PVT Lonnie G. Blevins, on the same mission.

Blevins left on his run under the impression that the infantry company CP was at No. 3 where it had first been set up by Belden on entering the town. Actually Belden had stayed in that house less than half an hour, only long enough to set up the radio and notify the 51st Infantry Battalion that he was in town. He then moved to No. 28. Blevins reached No. 44, where he met a man of Price's platoon and was warned not to cross the square which enemy guns to the west covered. Blevins went around No. 44 and on up the road south to No. 3. Finding no one, he returned along the west side of the street and got as far as No. 5. A tanker, one of Sandrock's or the forward observer's crew, waylaid Blevins and told him to take charge of a prisoner who had just walked up to the tank and surrendered. At No. 7 Blevins with his prisoner met Battles who had not yet started for the valley pillbox. Battles took temporary charge of the prisoner while Blevins dashed through a burst of machinegun fire across to No. 28. In a few minutes he reappeared in the door and motioned to Battles to send the prisoner over. Half his mission accomplished, Blevins still had to find the 2d Squad. By luck he met them near No. 44 and delivered his message to PFC Phillip E. Scharz in charge.

Scharz's squad had already with little effort accomplished one of the most notable successes of the day. Investigating the southernmost house of town, which the rest of the infantry, entering between No. 2 and No. 3, had bypassed, they found a Frenchman and asked whether there were any Germans inside. He shook his head, but Scharz's men, noticing a radio antenna thrusting out of a cellar window, were suspicious. Four of them surrounded the house, and Scharz and PFC Lewis R. Dennis went in. In the cellar they found 28 German enlisted men and 2 officers. None offered any resistance. They were frisked and evacuated. A search of the house then revealed large stores of small arms and ammunition. When the squad emerged, they met on the road the 13 prisoners sent back by Lieutenant Price and McPhail. Having discovered enemy in one house, they searched with slow caution the others along the street, and so arrived late at the square where Blevins found them.

When Blevins had completed his mission of telling Scharz to take his squad east, the enemy artillery and mortar which had wounded four of Price's men was falling around the church. Blevins crossed the street to No. 7 to "see Battles." With Battles now was 1st Sgt Dallas B. Cannon who was on his way to the CP. Cannon sprinted across to No. 28; Blevins followed, and then worked east back to No. 39.

Cannon had not been in the CP long before a round of 75-mm hit the building. PFC John E. Tsinetakes was scratched by dislodged plaster but there were no other casualties. The fire had quite possibly been drawn from one of the enemy SP's by the recent activity in the street. In any case the shot decided Cannon to go west to where the SP's were and "get a closer look." He invited McPhail who had just come over from the school to go along. The two set out, taking almost exactly the route that Lieutenant Cowgill, unknown to them, had already followed twice.

Sergeant Grimm had started Cowgill on his first journey from the garden, which the 3d Platoon tanks occupied, by blasting open the door of No. 12 with a burst of .50-cal. Cowgill and his two men entered and climbed to the attic. They found that, although they could see the two enemy SP's through the damaged tiling on the roof, they could not see beyond. They continued exploration westward. For one reason or another they were unable to reach the roofs of the next three buildings. In the last (No. 17) they found their progress blocked by the lack of openings of any kind in the west wall. They backtracked through the courtyard between No. 16 and No. 15 and then walked through an opening in the south wall out into a garden-orchard walled with concreted stone like all the Singling gardens. They crawled to a gap in the wall and found themselves within spitting distance of the two SP's. Beyond, in an arc or line not more than 200 yards distant, they

saw the outlines of three enemy tanks. They returned at once to Lieutenant Cook's position to report. Cowgill sent word to Lieutenant Belden that there were "five enemy tanks on the west" and then he took

Lieutenant Cook back to the OP at the wall. Harrington and Alexander were left at No. 12, which Cowgill decided was the most suitable spot he had seen for his platoon headquarters.

When Cook returned from his reconnaissance, he was impressed with both the strength of the German position and the difficulty of dislodging them. Their command of the main street and of the nose of the ridge west of town made it impossible for tanks to attack them. Artillery seemed, despite the proximity of our own troops, the most logical answer, and Cook therefore went to look for the observer, 1LT Donald E. Guild. Guild was at the infantry company CP with Lieutenant Belden and Captain Leach. When Cook joined them, the four officers discussed the problem. Lieutenant Guild felt that artillery could not be brought down without unduly endangering friendly troops. Mortar fire would be fine, but the infantry had brought no mortars because they had too few men to man them and carry ammunition. The mortar squad, down to three men, were armed with a bazooka. Lieutenant Cook suggested that the street might be smoked with grenades and the tank mortars. Behind that screen the tanks might cross the street and attack the enemy from the northeast. Actually he felt that the smoke alone would be enough to force the SP's to withdraw. The proposal was not seriously considered because Captain Leach preferred to try the infantry bazookas. This was the decision, and the job was given to Lieutenant Cowgill.

He sent back to ask Belden for a bazooka, and riflemen to protect it. His plan was to shoot at the Germans from the attic of his CP. Lieutenant Guild advised that it would take the SP about two minutes to elevate its gun to fire, and that was considered ample time to launch the rockets and move out. Belden sent PFC Kenneth L. Bangert and PVT Frank LeDuc down to Cowgill with the headquarters bazooka. Headquarters runner, PFC Melvin P. Flynn, went over to No. 7 occupied by seven men of the machinegun and mortar squads. His message apparently was, "Lieutenant Cowgill wants some riflemen to protect his bazookamen." What happened was that S/Sgt John W. Herring, the two men of his mortar squad who carried the second bazooka of the company, and S/Sgt Patrick H. Dennis, leader of the machinegun squad, went down to No. 12; the other three men of the machinegun squad remained all the rest of the day at No. 7 where, having no field of fire, they were unable to set up their gun.

Stalemate in Singling

While Cowgill's men got ready to attack the German tanks on

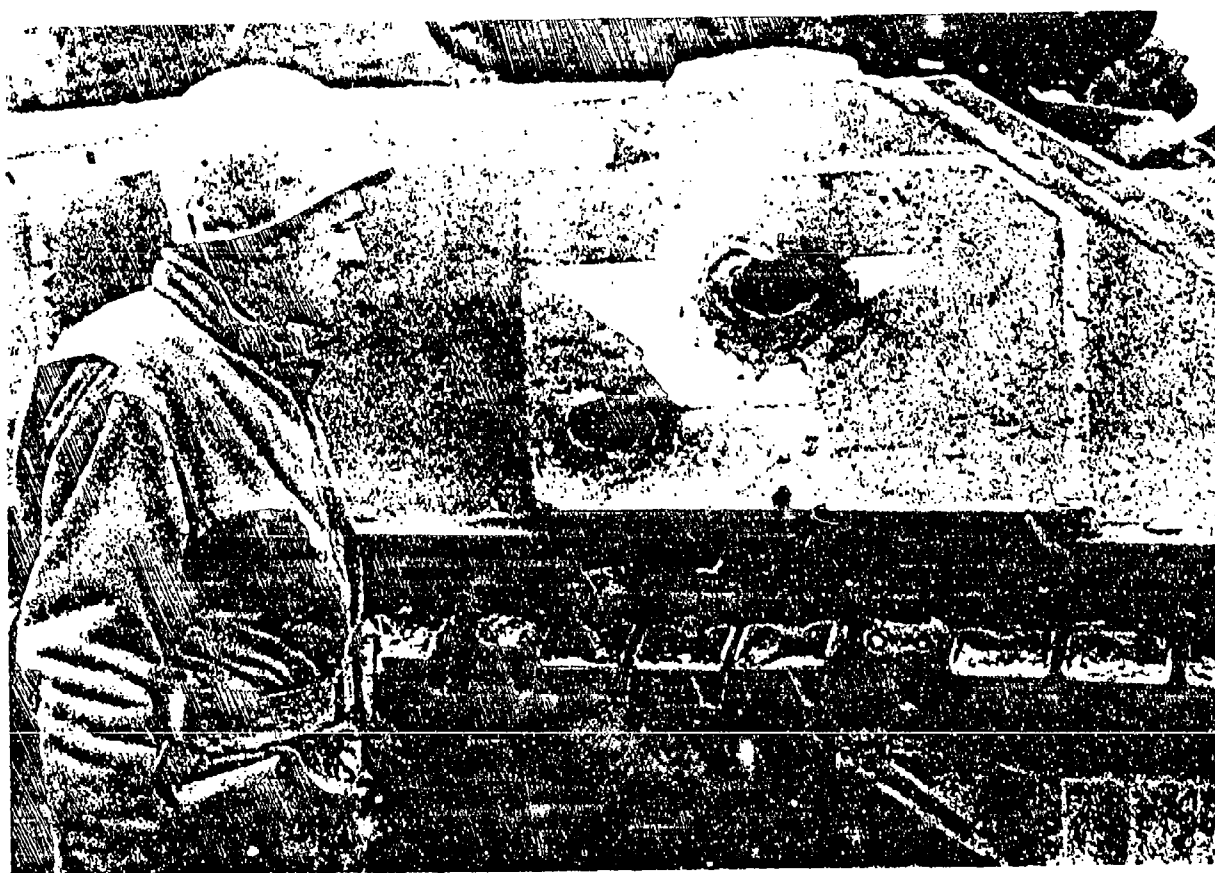
the west, a series of incidents occurred to suggest that enemy armor might be forming on the north for a counterattack on Singling. Tanks to the north were observed moving east; prepared artillery concentrations were laid on the town; the enemy on the west renewed his interest in our tanks in that sector (2d Platoon); and finally tanks came into the east side of town.

The enemy tanks (three to five) moving on the north apparently along a road were spotted and reported by Sergeant Grimm, but as the range was extreme he did not fire. Furthermore, Grimm's gun was trained through the gap in the wall to the northwest against the SP threat. Sergeant Hayward had adjusted on the north ridge and Grimm left that zone of fire to him. Lieutenant Cook moved his tank into the courtyard of the cluster of buildings (No. 8 - No. 10) where he could observe north. Suddenly just west of town a white signal flare shot upward. Almost immediately a short, intense artillery concentration rocked the town. Mixed with shells of light or medium caliber were some rockets and some mortar. The tankers' later estimate was that the fire was about equivalent to a battalion concentration of five-minute duration, that at times as many as 20 shells hit in the same instant.

In the 2d Tank Platoon sector the shelling followed by only a few minutes an incident to which the tankers paid little attention at the time. A dismounted German suddenly appeared on the rise in front of them and walked across the orchard less than 50 yards away. Before the tanks could adjust fire on him, he had gone. The intense shelling, which started almost immediately, forced the tanks to back a few yards to a cabbage patch beside the orchard trail. When the artillery fire broke off, they stayed where they were, and there by a curious freak Sergeant Hauptman a few minutes later lost his tank. A German AP shell hit the crest of the rise 100 yards in front of him, ricocheted off the ground, and plowed into the right side of Hauptman's turret. His loader, PFC William J. McVicker, was killed. If the German tanks west of town aimed that shell to carom into the tanks parked where they had been observed by the lone infantryman, the accuracy of this shot was most remarkable. The reaction of the tankers at the time, however, was that they were still not defiladed from the enemy northwest. Lieutenant Cook, to whom Hauptman reported his loss in the temporary absence of Captain Leach, ordered Sowers and Parks (the remaining tanks of the 2d Platoon) to get their tanks into shelter. Both drove up behind the 3d Platoon in the lee of No. 11.

They were moving when Grimm casually turned his field glasses to a pillbox on the ridge 1,200 yards north where he had seen a few enemy infantry minutes previously. He got his glasses on the spot just in time to see the long gun tube of the German tank's 75 flame and fire directly at him. The round hit nearby, and

Grimm had a split second to decide whether to shoot back or run for it. He figured that his 105 without power traverse could not be laid in less than 20 seconds. That was too long. He threw his tank in gear and backed out of the garden. He had just started when a second round hit Hayward's tank on the sprocket, crippling it. In the next few seconds Hayward was hit four times and the tank began to burn. Gunner Cpl Angelo Ginoli and the bowgunner PVT John H. Furlow were killed; Hayward and his loader, PFC Vern L. Thomas, were wounded. Grimm made good his escape through the opening between No. 9 and No. 11. Outside, the tank bogged down in the heavy mud, and the crew evacuated while Grimm got Sowers to pull him out.



The 2d and 3d Platoons, Sergeant Sandrock of the 1st Platoon, the command and the artillery observer's tanks were now all bunched and immobilized in the area southwest of the square which, covered on three sides by buildings, was the only relatively safe place in town for tanks. It was becoming increasingly apparent to both infantry and tanks that, with the small forces at their disposal and against an enemy who had at least equal strength and every terrain advantage, they could not hope to secure their position in town by attack. They had, instead, to make such dispositions as would complement the enemy's stalemate and wait it out. They were expecting momentarily relief by units of Combat Command B. Colonel Abrams had already called Captain Leach to tell him the relieving companies were on their way. In the meantime there was no point in incurring needless casualties. Lieutenant Price, after having four men lightly wounded by artillery, gave strict orders to his platoon to stay inside unless the Germans counterattacked. Lieutenant Padgett's men holed up in the cellar of their fortress house and the lieutenant himself found a bed which, as long as there was no place to go, he made his personal headquarters.

While the enemy tanks, however, on the north still threatened to attack, Padgett was very busy trying to find ways to deal with them. He sent his runner, Blevins, across the street to warn the 1st Platoon tanks (Lieutenant Goble) in the orchard. (Goble's vision to the northeast was obstructed by a 6-7 foot bush and apple-tree hedge, and by houses and brush on the north side of the road.) Lieutenant Padgett himself then set out to find the artillery observer to see whether a concentration could not be put on the enemy to discourage if not destroy him. He tried four times to walk down the street to the company CP; three times he was turned back by spurts of machinegun bullets on the west side of No. 37. The fourth time he got through to report to Lieutenant Belden, but he could not find Lieutenant Guild. It was late in the afternoon when Padgett returned to his own CP.

While Padgett had been trying to get to Belden, Lieutenant Guild, the observer, had already spotted the enemy tanks himself from the roof of his OP, No. 33, and had informed Captain Leach. Leach took the warning personally to Lieutenant Goble. Goble, figuring that if the Germans attacked they would come either down the road or in back of the houses opposite, had SGT Robert G. Fitzgerald on the right move his tank down the hill to within 15 yards of the edge of the road, where he could observe better to the northeast. Fitzgerald kept his gun sights at 1,400 yards, the range to the northerly ridge where the enemy was reported. The first tank to appear, however, drew up between No. 37 and No. 38 less than 150 yards away, heading toward the church. The enemy Mark V and Fitzgerald saw each other at about the same time, but neither could immediately fire. While the enemy started to traverse his turret, Fitzgerald brought his gun down.

He shot first and, at point-blank range, put the first round into the Mark V, setting it on fire. One man jumped out and ran behind one of the houses. Fitzgerald fired two more rounds into the burning tank.

Later, on warning by Lieutenant Padgett's infantry that more enemy tanks were approaching from the northeast, he drove his tank through the hedge and east along the road almost to the bend where observation north and east was clear. He saw an enemy tank, but before he could adjust his sights the German fired smoke and in a few seconds disappeared as effectively as an octopus behind its self-made cloud and escaped. Rockets then began to fall close to Fitzgerald's tank. Whether this was aimed fire from the battery near Welschoff Farm or simply a part of the miscellaneous area concentration on the town, Fitzgerald did not stay to find out. He retired westward to the concealment of the hedge, and there, leaving his tank, crossed with Lieutenant Goble to Padgett's CP. From the house they could see a Mark V in the valley northeast, apparently parked with its gun covering the road east, facing, that is, at right angles to the tankers' observation. Fitzgerald went back to try a shot at it. Again he moved his tank east, getting a sight on the enemy between two trees. The second round was a hit; one more fired the tank. He then shot a round or two at another Mark V facing him about 800 yards away, at which SGT Emil Del Vecchio on the hill behind him was also firing. Both 75-mm and 76.2-mm shells, however, bounced off the front armor plate of the enemy. Fitzgerald decided to move back to his hedge. Back in No. 39 again he saw an enemy SP moving east in the vicinity of Welschoff Farm.

Rather than risk exposing his tank again by moving it out to the east, Fitzgerald decided to wait until the SP came around behind the farm and emerged into his field of fire. But the SP did not emerge. Whether, concealed among the farm buildings, it fired into the 1st Platoon tanks cannot certainly be determined. But in any case, a short while after it had disappeared, two rounds of AP hit Lieutenant Goble's tank in quick succession. The first round set it on fire and wounded Goble and his gunner, CPL Therman E. Hale. The second round penetrated the turret, then apparently ricocheted inside until its momentum was spent, and finally landed in the lap of the driver, Tech 5 John J. Nelsen. Nelsen dropped the hot shell, scrambled out, and with the loader, PVT Joseph P. Cocchiara, ran from the burning tank. In the excitement they headed the wrong way and high-tailed up the main street into the center of town. There they paused long enough to ask some infantrymen where the tanks were. Directed southward, they eventually came on Sergeant Sowers' tank and got inside.

As soon as Lieutenant Goble was hit, SSG John J. Fitzpatrick took command of the platoon and ordered them to back over the ridge behind them into defilade from the enemy north. As they backed, a round of HE exploded in front of Del Vecchio's tank,

splattering it with fragments. The enemy continued to fire at Goble's tank, but the others reached the cover of the hill without loss.

On the other side of town Lieutenant Cowgill's bazookas in the attic of No. 12 were getting ready to fire at one enemy SP. (One of the two guns in the street had withdrawn by this time.) In the garden east of No. 12 Sergeant Hayward's tank was burning. McPhail, leader of the 2d Squad, and Company 1st Sergeant Cannon were on their way westward to have a look at the SP's, unaware that the reconnaissance had already been made and action taken as a result of it. They sprinted past the burning tank, picked up Harrington at the chapel, and followed Lieutenant Cowgill's previous route to the wall beside No. 17. Through the same gap Cowgill had used to observe, the three men fired at Germans standing near the tanks and pillboxes. They hit one who rolled down the slope. After half a dozen rounds, they moved back. Cannon and Harrington went to the basement of No. 12, where they found SSG Patrick H. Dennis and SSG Harold A. Hollands, both with rifles, preparing to cover from the basement windows the bazookamen, then getting set to fire through the roof. One of the two bazookas with the old-type firing mechanism failed to go off. From the other, the three men in the attic launched five rounds in turn at the SP. Only the last hit, and it did no more than knock a fragment off the right side of the turret. It did, however, cause the crew to jump out, and two were shot by the four men in the basement. Hardly had this happened when a Mark V drew up alongside the damaged SP and sent a round crashing into the side of No. 12. At about the same time another shell from the north struck the building at its foundations, showering the men in the cellar with plaster. It was a narrow escape on both scores, but no one was hurt. Cowgill moved his men to No. 13, which turned out to be another of Singling's thick-walled fortress-farms. Here the 3d Platoon sat out the second of the enemy's short, sharp artillery concentrations, which scored three hits on the building but did little damage.

Relief of Team B

It was now getting late in the afternoon, and still the relief scheduled to take place an hour or more earlier had not been accomplished. It was shortly past noon that Colonel Abrams had been ordered by Brig. Gen. Herbert L. Earnest, Combat Command A, to turn over Singling to Combat Command B and get ready to move on his own objective, Bining and Rohrbach. On information that his tanks and infantry were in town, Colonel Abrams told MAJ Albin F. Irzyk, commanding officer, 8th Tank Battalion, in the presence of Major Alanis, commanding officer, 51st Armored Infantry Battalion, that he was "ready to turn over to them their objective and without a fight." Despite constant fire from the direction of Singling, the relieving units henceforth acted on

the assumption that the town was clear.

Major Irzyk decided to send Company C of his battalion in with Company B of the 10th Armored Infantry Battalion. The infantry had been in assembly area 3,000 yards south of Singling for more than an hour; the tanks were moving up when orders reached the commander of Company C, 1LT William J. Marshall. The orders were to pick up the infantry, go into Singling, contact the commanding officer of the tank company in town, and take over the outposting with infantry and tanks. In addition to the outposts, patrols were to be sent out north. Marshall was instructed to enter town "as the other unit had done." With some of the 35-40 men of Company B of the 10th mounted on all his tanks, Marshall set off to carry out these instructions exactly, as his tanks moved in at about 1400 following the tracks of Company B, 37th Tank Battalion.

At the south edge of town the 1st Tank Platoon (2LT George Gray), in the the lead, turned northwest following the approach route of Lieutenant Farese. Farese's two knocked-out tanks were, of course, still where they had been hit. Although Lieutenant Gray remarked that the tank hatches were open and there was no sign of the crew, he did not suspect that the tanks were out of action. Approaching the corner of the wall at No. 14, he saw ahead of him near the road a tank which he assumed to be American since he believed no enemy were in town. When, therefore, Lieutenant Marshall called to ask how he was making out, he replied, "OK, as soon as I get around this corner." Then he was hit by two rounds of AP. The gunner, CPL Tauno H. Aro, was killed. Gray, seriously wounded, was evacuated to Lieutenant Cowgill's CP at No. 13, arriving there just as McPhail, Cannon, and Harrington returned from their reconnaissance trip to the west wall.

As soon as Gray was hit, Lieutenant Marshall ordered the 2d Platoon (SSG Edwin J. De Rosia) to move east and try to circle behind the enemy tank that had knocked out Gray. De Rosia, however, had not moved far when he reported enemy direct fire from north and east which he could not exactly locate. Marshall then ordered all tanks to withdraw to the reverse slope of the ridge south of town. Except the men who had been riding Gray's tank and who dismounted when the tank was hit to assemble near No. 49, the infantry remained on the decks of the tanks when they withdrew. 1LT Robert F. Lange, commanding officer of Company B, 10th Armored Infantry Battalion, went into town to make contact with Lieutenant Belden. At the same time Lieutenant Marshall returned with his tank to the 8th Tank Battalion to consult with Major Irzyk.

Lange found Captain Leach in a tank outside of town and together they went to No. 28 to talk with Lieutenant Belden. The decision agreed on by the three commanders was to relieve Lieutenant Cowgill and Lieutenant Padgett in place; Lieutenant Price was to be withdrawn first from the center of town without

relief. Company B of the 10th Armored Infantry Battalion had organized its handful of men into 2 platoons; about 15 men in one, 18 in the other. While Lieutenant Lange sent a noncommissioned officer to meet his platoon leaders, inform them of the decision, and guide them into town, Captain Leach went to look for Lieutenant Marshall and arrange for the relief of his tanks.

The afternoon was wearing on and Colonel Abrams began to worry; he wanted to pull his tanks out of Singling as soon as possible. He called Captain Leach to find out how the relief was progressing. In Captain Leach's absence Lieutenant Cook took the call and made a report which could not have been very reassuring. He said that there were five enemy tanks west of the town and that from three to five more had been observed moving down the ridge to their front. He said that one enemy tank had been knocked out by the 1st Platoon on the right. He detailed the disposition of his platoons and reported that they were receiving heavy enemy artillery fire and that the enemy was laying a smoke screen on the north. (Lieutenant Cook did not know at the time that this was put down by the Mark V to cover its escape from Fitzgerald's fire; he believed that it might herald a German counterattack.) He told Colonel Abrams that the 51st Infantry was still outposting the town and that the 10th Infantry was in process of relieving them. He added that he was not in contact with the infantry's commanding officer; that he had not yet heard from Captain Leach who was conferring with Lieutenant Marshall.

Colonel Abrams called back a little later and told Cook to organize the company tanks, pick up the 51st Infantry, and move out immediately whether he found Captain Leach or not. Cook notified all tanks to prepare for immediate withdrawal. In fact, however, the withdrawal was delayed about half an hour to allow the relieving infantry to consolidate their positions.

Lieutenant Lange made few changes in Lieutenant Belden's dispositions, except to post most of his men outside the buildings to guard against enemy infiltration during the night. He established his CP at No. 45 to get away from the direct fire that had been harassing No. 28 all day.

Captain Leach, in the meantime, had arrived at the Company C, 8th Tank Battalion position in the absence of Lieutenant Marshall, but was able to talk to Marshall over Sergeant De Rosia's radio. Leach reported the situation in Singling as follows: he said there were four enemy SP's in town, but he thought one had been knocked out by a bazooka; some enemy infantry occupied the northern part of the town (Lieutenant Lange, who put outposts to the north later, reported no enemy there); a Panther tank to the northeast of town had fired on our tanks when they exposed themselves in that direction. Leach then asked Marshall how long it would be before the latter relieved him. Marshall, who had just been ordered by Major Irzyk to stay put, replied that he would not come into town "until my orders

are changed."

This change in plan was not known to the infantry in town, who were completing the relief as scheduled. Most of the wounded had already been evacuated earlier on Sergeant Morphew's tank, which due to radio failure had not been in action but was brought up expressly to take the wounded back. No regular evacuation vehicles were available at battalion, as Lieutenant Cook ascertained early in the afternoon when he called just after Sergeant Hayward was hit. Some wounded nevertheless remained to be evacuated by the withdrawing infantry. Cowgill and Padgett led their men to the street south to a rendezvous with the tanks in the vicinity of No. 3. Price, who did not have to wait for relief, moved his men out first and met the tanks outside town beside the two pillboxes that had been cleaned out by Padgett's 2d Squad that morning. Here they picked up the last prisoner of the day, a sleepy German who had to be prodded into surrender. He was lying on the ground swathed in a belt of .50-cal ammunition and evinced no interest in his capture.

It was already getting dark when Cook moved his tanks out. They collected the infantry as arranged, and found Captain Leach with Lieutenant Marshall about 400 yards south of town. As the 2d and 3d Platoon tanks moved out together and the 1st Platoon on the right headed back to join them further south, another heavy enemy artillery concentration fell among them, but by a miracle caused only one light casualty, PVT Genar W. Ferguson, 2d Infantry Platoon, who was hit in the leg. To cover the withdrawal, all tanks swiveled their guns north and fired back into Singling. The enemy tanks replied and the AP tracers streaked through the gathering darkness. Two rounds landed within a few feet of Sergeant Del Vecchio's tank before the fire fight was taken up by Lieutenant Marshall's tanks and the enemy shifted his attention to them.

After Captain Leach's tanks had pulled out, the relief infantry company in Singling remained more than three hours without direct tank support. During this time the enemy on the west crept up to the two destroyed tanks of Farese's platoon and started the battery chargers. It may be that they were going to attempt to drive the tanks away. When the infantry outposts at No. 14 heard the engines, they believed them to be relieving tanks which they were expecting. 2LT Robert J. Victor, commanding the platoon which took over Lieutenant Cowgill's sector, went out with one of his squad leaders to investigate. He approached one of the tanks to within 25 feet, then stopped. The silhouette of the three figures on top of the tank made him suspicious; their overcoats were too long, their helmets too sharply beaked. As Victor and his sergeant had only one carbine, they returned to the CP to pick up weapons and another man. Approaching the tank the second time, they were fired on by a burp gun, which they answered with rifle fire and grenades. The enemy retreated but later in the night, returned to set fire to

the tanks.

Lieutenant Lange, in the meantime, worried about his thinly outposted positions in town, had gone out to see Lieutenant Marshall and, as he said, "try to move the tanks in personally." As Lieutenant Marshall had been called back shortly after dark to battalion by Major Irzyk, commanding the 8th Tank Battalion, Lieutenant Lange found Sergeant De Rosia temporarily in command. Major Irzyk and Captain Abraham J. Baum, S-3 of the 10th Armored Infantry Battalion, were also in the company area at the time.

The question of whether to attempt to hold in the town for the night or withdraw was discussed. Although Major Irzyk's first plan was to send one platoon of tanks in to support the infantry, he reversed his decision after talking to Lange. He was already doubtful, because he could see no very good reason for holding the town when the enemy occupied all the high ground north and east. Lange reported that with less than 50 men at his disposal he had had to outpost very thinly and that it would be easy for the enemy to probe out these outposts during the night and infiltrate through his whole position. Major Irzyk was also impressed by an incident which Lange related. An hour or so earlier (it was now about 2000) the east platoon under 2LT James W. Leach, had shot up and captured a German kitchen truck which they waylaid at the town square. The truck was carrying hot soup, estimated to be enough to feed at least a company. Major Irzyk, taking this to indicate that the enemy in at least that strength still held the outskirts of town, west and north, figured that the presence of our own troops in the center of town would only obstruct the use of artillery against the Germans.

Major Irzyk therefore gave the order to withdraw from Singling. To cover the withdrawal, Sergeant De Rosia jockeyed his tanks back and forth on the reverse slope of the hill to make the enemy believe that they were entering town. The infantry assembled in about an hour near No. 47 and moved back to the tank positions 400 yards to the south. They dug in and outposted the tanks for the night. During the few hours they had been in Singling they had suffered five light casualties from enemy mortar fire.

Within five minutes of the infantry report that Singling was clear of friendly troops, corps artillery put a heavy TOT¹ on the town. The next day (7 December) tanks and infantry moved back up to just short of the crest of the Singling ridge, but they were ordered not to advance as they would be relieved momentarily. Relief by units of the 12th Armored Division actually took place that night. Singling was finally taken on 10 December.

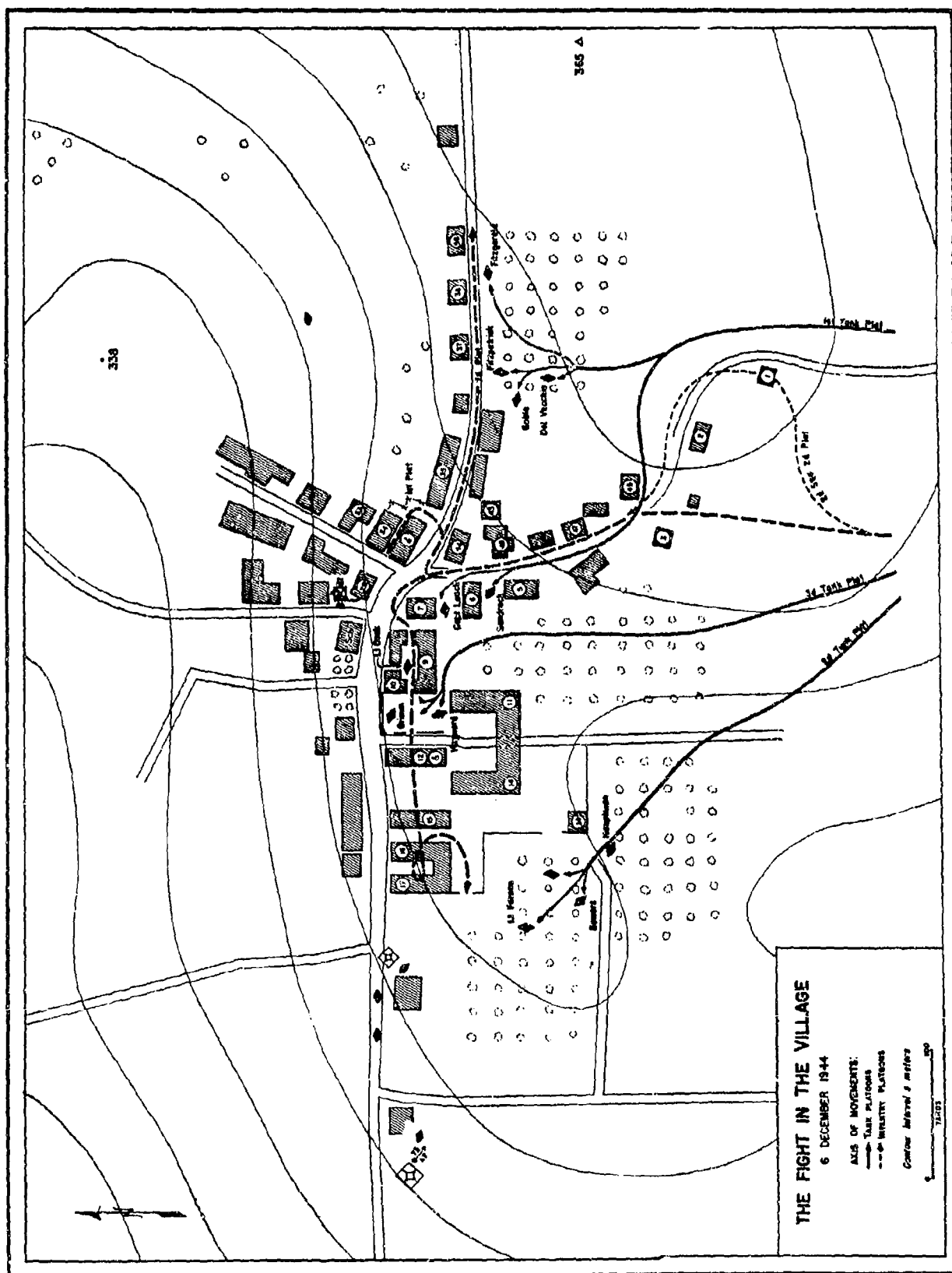
The final reckoning of the battle at Singling reveals neither a big action nor a startlingly successful one. All 4th Armored Division units directly involved suffered a total of 22 casualties, of which 6 were killed; they lost 5 medium tanks. Known enemy losses were 2 Mark V tanks and 56 prisoners.

The attack on Singling was made against heavy odds, and

attended with all the confusion of a hastily improvised maneuver. In itself, the action was a stalemate; nevertheless, it achieved immediate tactical success for Combat Command A. With the main German forces heavily engaged at Singling during the afternoon of 6 December, other elements of Combat Command A were given the opportunity to pass Singling and reach the primary objective, Bining. This was accomplished by the 1st Battalion, 328th Infantry, and Company D (light tanks) of the 37th Tank Battalion. Rohrbach, the further objective, was not entered by Combat Command A.

By probing one of the areas in which the Germans had strongest prepared defenses, the action at Singling opened the way for later advances by the 12th Armored Division.

¹A type of artillery concentration in which the shells from a number of batteries are timed to burst simultaneously on the target. Such a concentration was used for its demoralizing effect on the enemy and also to prevent enemy observation outfits from picking up the location of individual batteries.



808TH Tank Destroyer Battalion
AFTER-ACTION REPORT
1 - 4 MAY 45

During this period the battalion continued to be attached to the 65th Infantry Division and XX Corps, United States Third Army. On the 1st Division came out of Corps Reserve and went on line again joining the pursuit of the enemy. The line companies were placed in support of the infantry regiments: "A" Company supporting 260th, "B" Company supporting the 261st, and "C" Company supporting the 259th.

No resistance was encountered until the battalion reached the INN River. There on 3 May in PASSAU and SCHARDING the battalion had its last real engagement before cessation of hostilities. On that day the 3d Platoon of "B" Company with part of the 1st Reconnaissance Platoon, formed a portion of a task force consisting also of the 2d Battalion, 261st Infantry and "C" Company, 748th Tank Battalion. The task force was assigned the mission of taking the city of PASSAU and establishing a bridgehead over the INN RIVER.

The assembly point was two miles west of the city along the DANUBE RIVER. At 1000 hours "B" Company of the Infantry was dispatched to encircle the city and drive home an attack from the Southwest. At the same time the balance of the task force, with the reconnaissance elements in the lead, advanced along the South bank of the DANUBE into the city. Behind the reconnaissance elements the task force was deployed with Company "C", 748th in the lead, carrying "F" Company of the Infantry. The Tank Destroyer, carrying "C" Company, brought up the rear.

Scattered resistance was met on the march into PASSAU, but was quickly overcome. Entrance into the city met with no resistance at all. The streets were deserted, the big city seemed devoid of all life but us. Friendly troops on the North bank of the DANUBE RIVER notified our troops that the bridge across the INN RIVER was prepared for demolition and heavily mined. The platoon had proceeded about four or five blocks from the edge of the city when it paused to reconnoiter. Reconnaissance elements brought back with them eight prisoners who stated that a strong enemy force was located in the South and Southwest side of town.

It was decided that the tanks and TD's, with the tanks leading, would make a dash for the bridge in an attempt to save it from destruction by the enemy. Unloading the infantry the reconnaissance platoon leader started out, running ahead in his jeep to observe the bridge approaches and warn the rest of enemy activity. The Reconnaissance Platoon Leader came back and advised that the bridge had been blown. The tanks withdrew back to a large turnaround, firing about fifteen rounds of HE at active enemy sniper posts who were blazing away sporadically at our forces by this time.

A squad of infantry was sent out to check over enemy positions in the South and Southwest positions of the city. They went about two blocks, met heavy enemy machine gun and small-arms fire which wounded two of their men, and withdrew, leaving their wounded lying in the

street. Two German and one American medical aid man attempted to reach the two wounded infantrymen, they were all fired upon by the enemy troops and were all hit. One of the Germans was killed.

Just after the squad had departed, three infantry 1 1/2-ton trucks, dragging 57 millimeter anti-tank guns, accompanied by one 2 1/2 ton 6 x 6 and one jeep, drove on up the street, turning right on the square containing the turnaround where the tanks were stationed. They had gone about a block when a group of enemy riflemen opened up on them from a barracks at the end of this street. Two of the trucks and one gun were quickly destroyed, another was badly damaged.

The Tank Destroyer Platoon Leader ordered two of his four M-36 Destroyers forward to a point near where the tanks were assembled. Employing one destroyer to cover the other, he advanced the lead destroyer to a position near where the infantry anti-tank elements had met disaster. As he was performing this maneuver, the reconnaissance platoon leader set up an OP and three sniper posts on the South side of the street near the same spot. The Destroyer fired fifteen rounds of HE shell into the building from which the enemy had struck at the same time, the men manning the sniper posts placed heavy, accurate fire upon all visible enemy positions, protecting the destroyer from panzerfaust attack and forcing the enemy to abandon several houses from which he had been fighting. The combined result of this action neutralized the enemy fire until the infantry anti-tank elements were able to evacuate their movable vehicles and their personnel. As soon as this had been accomplished the tank destroyer platoon leader backed his destroyer down the street about a hundred yards and went in search of the infantry battalion commander to learn his future plans. He was unable to locate the battalion commander so he returned to his position.

The company commander whose squad had attempted the reconnaissance asked the Tank Destroyer leader and the Tank officers to assist him in the rescue of the two wounded infantrymen who were still lying in the street a block and a half South and West of the lead destroyer's present position. A platoon of infantry, two destroyers, and two medium tanks, with the destroyers leading and the infantry working along both sides of the street flanking the armor, were formed for the rescue. They intended to clear out about five enemy occupied houses to enable our medical personnel to reach the wounded men.

The two destroyers, with the tank destroyed platoon leader in command, drove to a point near where the two wounded men lay and the lead destroyer placed both 90 millimeter and 50 calibre machine gun fire upon the enemy positions. The tanks did not leave their assembly area at the turnaround. The infantry platoon accompanied the destroyers to the point from which the destroyers were to support them in cleaning out the enemy positions. The infantry formed on both sides of the street, advancing from house to house and alley to alley. The infantry on the left side of the street were able to work within 25 yards of the destroyer, but the infantry on the right were unable to advance, being pinned down by machine gun fire. At this time the destroyer and the OP both spotted the enemy fire, which was

immediately neutralized by 90mm and Caliber .50 MG fire. Other targets were spotted on the left and taken under fire by the destroyers. This effectively neutralized most of the enemy fire in the vicinity.

At this point the Inf. Co. Commander received orders not to go forward as negotiations were under way for surrender of the town and the infantry withdrew and took cover. As soon as the enemy saw this he opened up with everything he had. From the OP and the sniper posts set up, our men were constantly engaging enemy machine gunners, riflemen, and panzerfaust teams. The Op spotted an observer with a BC scope in a small opening by a large clock on a public building. The first round of 90mm HE hit the clock dead center. The loud noise and the dust created by the activity made accurate observation difficult; the lack of supporting foot troops for the destroyers made them very vulnerable to panzerfaust attack. The Tank Destroyer Company Executive Officer brought some personnel of the company headquarters platoon to give the destroyers flank protection from panzerfaust teams. He had spotted some enemy sniper positions and occupied one destroyer and directed fire upon them until their fire was reduced.

After this had been accomplished one of the OP's spotted an enemy Mark IV tank that had moved into position just back of a street intersection some two hundred yards in the front of the lead destroyer, from which position it was screened from observation by the tank destroyer platoon leader and destroyers. It was planned to leave the lead destroyer where it was and move the other destroyer a block South and a block East to a position between two buildings from which he could dart forth and engage the enemy tank if opportunity presented itself to catch the enemy unaware.

The encircling destroyer proceeded about halfway to his new position under heavy sniper and machine-gun fire, then it was charged by six enemy rocket grenadiers. In attempting to back into position from which to ward off this attack the destroyer driver dropped the vehicle into a large shell crater, temporarily immobilizing it. The assistant driver and loader left the destroyer and made their way back to the Tank Destroyer Platoon Leader, to whom they reported the incident. The Tank Destroyer Platoon Leader ran under heavy enemy fire to the shell crater to determine the extent of the damage. Before he arrived, however, the gunner had fought off the grenadier attack, killing all six of the enemy; firing both Caliber .50 MG and 90mm HE at point blank ranges; and the gunner, destroyer commander, and the driver had managed to extricate the destroyer from the shell crater and proceed to their destination to wait in readiness to attack the enemy tank. The Tank Destroyer Platoon Leader returned to the OP, picking up the destroyer commander along the way, and pointed out to him the enemy tank, explaining in full the plan of attack.

The Mark IV tank then started to fire at the sniper personnel located in the building, and also at the OP. He then switched his fire on the house behind which the Tank Destroyer was located and in which the Platoon Commander and destroyer commander were located. If the Mark IV tank moved out further he would expose himself to the tank

destroyer fire and if the tank destroyers moved further forward they would be exposed to his fire. The distance between the tank and the tank destroyers was about 150 yards. During this time small arms and bazooka fire was continual. Panzerfausts were spotted trying to move into position to the rear of the second tank destroyer. A machine-gun and crew were placed in a building so they covered the rear of the tank destroyer, and they were able to keep the enemy down with machine-gun fire and force them to withdraw again to the buildings.

The platoon commander exchanged fire with the enemy tank for quite sometime without result; both being in a position from which they could not be hit by the exchanged fire.

The destroyer commander of number one destroyer was then ordered to move his destroyer in the direction of the enemy tank as fast as possible, come to a halt, race his motor, then withdraw immediately. He was covered by small arms fire from the sniper posts for protection against the Panzerfausts. This maneuver persuaded the Mark IV tank crew to move their vehicle forward in order to get a shot at the destroyer. The destroyer commander of the 2d destroyer was waiting for the Mark IV tank to make this move. He fired a round of HE into the wall above the enemy tank, showering them with a blinding cloud of dust. The tank was so located that it was not possible for the destroyer gunner to place direct fire upon it, so he placed four rounds of APC in front of it on an angle that ricocheted two rounds into the tank and sent it up in flames. The destroyers then withdrew.

The engagement lasted for more than five hours, during which we used virtually all of our firepower. Our machine gunners and snipers killed a known 30 dead and wounded many more with the 90mm. An American soldier who had been captured two days before and held prisoner in one of the buildings in town reported that the first round of 90mm fired in the town went through a doorway of the German barracks and killed 6 and wounded at least 11 more.

The following day PASSAU surrendered, yielding around five hundred prisoners. It was discovered that another Mark IV tank was in the town, abandoned and burned by the crew.

ANALYSIS

This after-action report is an interesting account of an armor/infantry team clearing an urban area. Combined arms was stressed at all times, and the tank destroyers were used to great effect in Passau itself. Of particular interest was the ingenuity displayed in ferreting out the MKIV, blinding it by showering it in debris, and then killing it by ricochet fire.

FRIENDLY FIRE

On the morning of 9 July Brigadier General Bohn, the CCB commander, attempted to pass his trailing task force in column through his leading elements. The always difficult maneuver was further complicated by the heavy hedgerow terrain and extremely muddy conditions caused by several days of heavy rain. The advance of the armored forces was soon bogged down and also stymied the attempts of 30th Division units to move forward. Dissatisfied with CCB's slow progress, General Hobbs pressed General Bohn, telling him to take his objective by 1700 or surrender command of his unit. In an effort to give his impatient superior some sign of progress, Bohn ordered one of his tank companies to strike ahead without pause, cross the St. Jean de Laye-Pont Hebert highway, and move southwestward to Hill 91. The company of eight Sherman tanks soon moved off toward Hauts-Vents spraying the ditches and hedgerows with machine gun fire.

Meanwhile Bohn attempted to get the remainder of his mired combat command underway and the various elements of the 30th Infantry Division braced themselves against expected counterattacks by the 2. SS Panzer Division from the west and the Panzer Lehr Division from the east. As the day wore on the 30th Division's infantry and attached armor (743d Tank Battalion) came under increasing German pressure. Although the division generally stood firm in the face of the German counterattack, isolated units withdrew precipitately after learning of the virtual destruction of the 743d Tank Battalion in a German ambush on the division right flank.

The 823d Tank Destroyer Battalion (Towed) was attached to the 30th Infantry Division in April 1944 and landed at OMAHA Beach on 24 June 1944. Equipped with thirty-six 3-inch or 76-mm towed antitank guns, the 823d was considered a well-trained unit with high morale even though on 9 July it was still in its shakedown period. Later the battalion would hold the US Army record for tanks destroyed by a tank destroyer battalion for the period 6 June 1944 — 8 May 1945 on the Continent, having knocked out 111 enemy tanks and other armored vehicles.

Company C, 823d Tank Destroyer Battalion, had crossed the Vire River on 7 July and had supported the 30th Infantry Division's abortive attempts to continue the attack out of the bridgehead on 8 July. Its main role, however, had been to counter the German counterattacks that mounted in intensity on 9 July. By late afternoon on the ninth the company was in defensive direct-fire positions south of the St. Jean de Laye crossroads astride and east of the main highway to St. Lo. Shortly after 1635 1st Lt. Ellis W. McInnis's 1st Platoon shifted positions slightly in anticipation of an expected German armored counterattack north up the St. Lo highway. By about 1715 1st Platoon's guns were in position covered by the bazookas and small arms of the 1st Reconnaissance Platoon, 823d TD Battalion, led by 1st Lt. Thompson L. Raney.

While Lieutenant McInnis's platoon moved into position, stragglers from the 117th Infantry Regiment streamed northward along the St. Lo highway reporting that the German armor was not far behind. Air

bursts from unidentified artillery over the tank destroyer positions lent credence to the imminence of a German assault. About 1800 Lieutenant McInnis spotted a tank about 1,000 yards to his front which moved back and forth several times to look over the hilltop in hull defilade. He immediately radioed the Company C commander to ascertain whether there were any friendly tanks in the area and received the reply that "what you are looking for is in front of you."

Almost immediately the tank moved north along the highway spraying the hedgerows, ditches, and 1st Platoon positions with .30-caliber machine gun fire. It was soon joined by several other tanks which also fired their machine guns and 75-mm tank guns. Unable to visually identify the advancing tanks because of the drizzle and fog which had restricted visibility all day, Lieutenant McInnis could only conclude that the tanks firing on his position constituted the long-awaited German counterattack and gave the order to his platoon to open fire.

Sergeant Malery Nunn, who had already received a graze on the face from one of the tank machine gun bullets, issued the fire commands for his gun to engage the lead tank at an estimated range of 500-600 yards. The gunner, Corporal Clement, scored a dead center hit with the first round, and the lead tank stopped as smoke poured from it. Two additional rounds were fired, but their effect could not be observed because of smoke. The other tanks continued to advance firing, and Sergeant Nunn's gun was hit, and Corporal Clement was wounded in the leg. Sergeant Nunn assumed the gunner's position and Lieutenant McInnis loaded. Three more rounds were fired, but no hits were observed, and the remaining tanks continued to roll forward.

As the tanks closed, the tank destroyer personnel were forced to take cover in the ditches where they were pinned down by the machine gun fire from the tanks. When the tanks were about 400 yards away, Sergeant Nunn recognized them as friendly mediums, called for a cease-fire, and stood up waving at the tanks in an attempt to halt their firing. His brave attempt had no effect, and the 1st Platoon hugged the ground as several tanks, only three of which were not firing, passed through the position and continued out of sight to the north, all attempts by the tank destroyer personnel to identify themselves having failed.

Sgt. Carl Hanna, Private First Class Hardin, and Pfc. Ernie Jacobs of Lieutenant Raney's recon platoon were in the process of establishing a bazooka position in a ditch when the tanks appeared. They were pinned down by fire from the tanks, and when it became unbearably heavy, Sergeant Hanna ordered his men to take cover in the ditch on the other side of the hedgerow. As they attempted to do so, Private First Class Jacobs was hit in the head by a 75-mm tank round, which killed him instantly and knocked out Sergeant Hanna, who was hit in the back of the head by fragments of Jacob's skull.

Company C's 2d Platoon, led by 1st Lt. Francis J. Connors, also fell victim to the tankers' fire. A tank rolled up to within fifteen yards of Connor's uncamouflaged halftrack, which could scarcely have been mistaken for anything other than a US vehicle, and fired point-blank, severely wounding the halftrack's assistant driver in the

chest. Lieutenant Connors identified the tank as a 3d Armored Division tank (No. 25) and Sgt. Joseph A. Chustz, the 2d Platoon Security Sergeant, identified another by the name on its hull, BE-BACK.

During the course of the fray Lieutenants McInnis and Raney and several of their men took cover on the north side of a stone building. One of the tanks fired an HE round into the building from twenty feet away and five feet from where the party was standing. The next tank in column turned its turret toward the group but did not fire when Lieutenant McInnis waved his arms and shouted. Shortly after the offending tanks had rolled northward out of the Company C area, 1st. Lt. Neil P. Curry of the 30th Reconnaissance Troop arrived from the north and reported that the tanks had also fired on his M-8 halftrack and showed the hole in the turret ring mount.

The results of the twenty-five-minute engagement were serious but not catastrophic. Two US medium tanks were destroyed, and one 3-inch antitank gun was damaged by machine gun fire striking the recoil mechanism but was returned to service within twenty-four hours. The 823d TD Battalion suffered casualties of one man killed and three wounded (two seriously); the tankers lost six men. In his daily report for 9 July the 823d TD Battalion S-3, Maj. Ashby I. Loshe, reported the unit's combat efficiency as "satisfactory but mad as hell" and added that the unit

took two prisoners which were its first, suffered its first fatal casualties, was shot up by its own Infantry and Armored Force and in turn shot up our own Infantry and Armored Force but under all circumstances came through their first critical engagement in fairly good shape and without too serious losses.

On 10 July Major Lohse was appointed a board of one officer to investigate the incident. He identified the offending tanks as belonging to the 3d Armored Division and concluded that the US tanks were fired upon because:

- (1) enemy tanks were reported both by Higher Headquarters and withdrawing Infantry to be in the immediate front of the 3" guns,
- (2) poor visibility prevented recognition of type and nationality of tank,
- (3) no friendly tanks were known to be in that area,
- (4) because tanks were firing upon gun positions and friendly positions generally and,
- (5) because tanks were moving north while the direction of attack was south.

Despite the poor visibility and obvious stress of being under heavy fire, the tank destroyer personnel did recognize the tanks as

friendly and ceased firing when the tanks were about 400 yards away. They then attempted, often at very personal risk, to identify themselves. Under the circumstances the continued firing by the tankers is difficult to excuse. Every effort was made by the tank destroyer personnel to identify themselves, but whether out of confusion, fear, or simply lack of discipline, the tanks moved through the friendly position and well to the rear, firing continuously.

As the reader has probably already surmised, the offending tanks were the company from OCB, 3d Armored Division (probably a company of the 33d Armored Regiment), earlier dispatched by Brigadier General Bohn to proceed expeditiously to Hauts-Vents. Apparently the tank company commander either misunderstood his instructions or became confused. In any event, upon reaching the north-south St. Lo highway he turned right (north) rather than left (south) and blundered into the 823d TD Battalion position. The commander personally suffered the consequences of his error. His tank was the one knocked out at the beginning of the engagement by Sergeant Nunn's gun. Just at the moment the lead tank was hit, General Bohn was attempting to contact his wayward unit by radio and over the open radio channel heard the tank company commander's cry of pain and anguished statement, "I am in dreadful agony."

After their pass through the 823d's position, the remaining six tanks reversed direction and proceeded to the objective, Hill 91 at Hauts-Vents, which they somehow managed to reach shortly before dark. Ironically, the six tanks reached the objective just in time to be hit by an American strafing attack requested earlier but delayed by bad weather. Fortunately, there were no casualties and the remnants of the tank company spent the night on Hill 91 only to be withdrawn the following morning (10 July) when it proved impossible to reinforce them. The Hauts-Vents objective was finally secured by OCB on the afternoon of 11 July.

ANALYSIS

This incident of "amicicide" was primarily the result of the company commander's misorientation. Prearranged emergency signals may have helped; in any case, both units were lucky enough to have received as little damage as they did.

TROYES - AN ARMORED ATTACK
BY BRIGADIER GENERAL ARTHUR L. WEST, JR.
COLONEL CROSBY P. MILLER

"... GENERAL WOOD came in to state that the 4th Armored had just captured Troyes. This capture was a very magnificent feat of arms. Colonel, later General, Bruce C. Clarke brought his combat command up north of the town, where a gully or depression gave him cover, at about three thousand yards from the town. The edge of the town was full of German guns and Germans. Clarke lined up one medium tank company, backed it with two armored infantry companies, all mounted, and charged with all guns blazing."

This is General Patton's description of one of the few (probably the only) cross-country cavalrylike charges of a built-up area that occurred in World War II fighting in Europe. The men who actually made the attack know that its success was no accident. They know that it represented perfected team work; abounding confidence in other arms; complete confidence in the leadership of the combat commander who ordered the attack.

These men are proud, and with good cause, of the fact that they were the ones who rode their thin-skinned vehicles and their tanks through heavy artillery, small arms and AT fire across some 3,000 yards of unadulterated hell dismounting only to close with and destroy the enemy.

They are the men who fought in the streets against heavy odds; who were cut off for some 18 hours by a numerically superior force; who attacked the vitals of the 51st SS Brigade; and then turned and struck and destroyed the enemy in detail.

This is the story of that "magnificent feat of arms" - a story based on the notes of the task force commander as jotted down on the day after the fight.

After the fall of Orleans, France, the 4th Armored Division continued its drive to the east. As part of XII Corps, the division seized Sens and crossings of the Yonne River on 21 August 1944, and Montargis on 23 August.

CCA, 4th Armored Division, commanded by Colonel Bruce C. Clarke, received orders on 24 August to seize Troyes, France, and secure crossings of the Seine River in that locality.

The combat command was ordered to move out in two columns at first light the next morning. The northern column, Task Force Oden (Lieutenant Colonel Delk M. Oden), was given the mission of crossing the Seine River north of Troyes while the southern column, Task Force West (Major Arthur L. West, Jr.) was to seize Troyes itself and secure crossings of the Seine River within the environs of the city proper.

For this operation, the task force composition was as follows:

Task Force Oden
35th Tank Bn (-1 Co)
C Co, 10th A I B
66th F A Bn

Plat, Co. A, 24th Armd Engr Bn
Plat, Co. D, 25th Cav Rcn Sdn

Task Force West
10th Armd Inf Bn (-1 Co)
C Co, 35th Tank Bn
94th Armd F A Bn
Plat, Co A, 24th Armd Engr Bn
Plat, Co D, 25th Cav Rcn Sdn

Early on the morning of 25 August the task forces moved out abreast toward Troyes to a point about 10 miles west of the city. During the march of Task Force West, a tank from C/35 periodically left the column, knocked down a telephone pole, and broke the telephone wire with its tracks to ensure that no warning of the approach of U.S. Forces would be received in Troyes by telephone means. This practice was SOP in the 4th Armored Division.

In the vicinity of the town of Pavillon, the Combat Command Commander ordered that the main highway approaches to Troyes be avoided and the remainder of the march to be executed crosscountry and/or on secondary roads. At the same time, Colonel Clarke ordered the immediate seizure vicinity of Montgueux, four miles west of Troyes, as a base of operations prior to assaulting the town.

Task Force West moved rapidly and by 1500 hours and occupied, without opposition, the high ground of Montgueux which dominated the entire city of Troyes.

Up to this point, with no Germans in evidence, the question as to the enemy's whereabouts was uppermost in everyone's mind.

However, within 10 minutes after the Task Force occupied the high ground, sporadic artillery fire began to fall on the forward slopes of the hill mass. Thus, it was evident that Troyes was still held by the enemy and the Combat Commander ordered the city assaulted with a minimum of delay.

Reconnaissance elements were promptly dispatched by the Task Force Commander, Major West, to ascertain the degree of resistance to be expected, the best routes of approach, mine fields, barriers and the like.

Company and platoon leaders engaged in a hasty reconnaissance, the artillery forward observers registered in, and all of the minute details in preparing for an attack were attended to. The units under the command of or in support of Task Force West to carry out this attack were:

Task Force West
10th Armd Inf Bn (-Co C) - Major A. L. West, Jr.
Hq Co - Capt Howard Seavers
A Co - Capt T. J. MacDonald, Jr.
B Co - Capt Julian Newton
Svc Co - Capt Robert Bryan
Medics - Capt Isadore Silverman
Co C, 35th Tank Bn - Capt C. P. Miller
94th Armd Field Arty Bn - Lt Col Alex Graham

Plat, Co A, 24th Armd Engr Bn - Unk

Plat, Co D, 25th Cav Rcn Sqdn - Unk

The Combat Command S-2 relayed forward an estimate of 50 troops in the city composed of rear echelon elements left behind to prepare demolitions and attend to the last minute evacuation matters. Estimates of enemy opposition filtered in from patrols which indicated an aggressiveness that portended more than rear guard delaying tactics on the part of the enemy.

Liaison planes reported heavy antiaircraft fire in the vicinity of the city. The 25th Cavalry and the I & R (Intelligence and Reconnaissance) Platoon of the 10th Armored Infantry Battalion both reported heavy small arms and mortar fire on both main approaches into Troyes approximately two miles distant from the city proper, indicating an outer perimeter defense. By 1600 hours the enemy artillery fire was beginning to increase in volume and accuracy on the Montgueux hill causing 15 casualties.

Colonel Clarke, CCA Commander, arrived at the Task Force Command Post and made a rapid estimate of the situation. He then ordered a coordinated assault on Troyes to jump off at 1700 hours. His concept of the attack was a typical "desert" type attack directly into the city across the broad flat plain, which stretched for three and one-half miles between the base of the Montgueux hill and the city, using the tanks in conjunction with the infantry mounted in half tracks, moving at maximum speed to attain the highest possible shock impact on the enemy.

Last minute preparations were rapidly completed and Major West issued the following oral order to his commanders:

"This force attacks Troyes at 1700. LD forward edge of this hill (Montgueux hill mass). Boundaries: left boundary is road A (pointing to the road which runs through La Grange to the north of Montgueux into Troyes), right boundary is road B (Route 60)."

"Formation is column of companies - companies in line".

"C/35 (tanks) will lead, followed by A/10 (Infantry) with machinegun platoon attached".

"Engineer platoon with mine detectors ride in A company half tracks".

"Following A Company will be Battalion Headquarters, B/10, Mortar Platoon and Medics".

"Assault Gun Platoon (75mm Howitzers) and Reconnaissance (jeeps) Platoon will cover right flank keeping inside (left) of road B hugging our artillery fire".

"This is a mounted attack. We will stay in our vehicles until forced to dismount."

"94th Armored Field Artillery Battalion covers road B (pointing to Route No 60.) with time fire commencing 1700 and will sweep up road B as we advance, firing on targets of opportunity on call. We can get 155's on call as well."

"Maintenance/10 remain vicinity of Montgueux until called forward".

"Battalion CP behind C.35".

"Radio silence until 1700. It is now 1615."

"We will maneuver any place across the open ground that we see fit, keeping the whole force together at all times, and pushing the A/10 half tracks right up with the tanks".

"Now for the city itself. All we have is the 1/50,000 map, but you can see from her the general outline of the city. We will establish three phase lines where we can regain control when we get into town."

"The first phase line - first buildings (pointing)".

"Second - the railroad line that runs through town parallel to the river".

"Third - in the vicinity of that church steeple on the Seine River".

"In case anything prevents our coordination at each of these lines, push right on to the Seine River and get the bridges. When we initially enter the city, do not use the roads (main streets). Go in between the blocks, through yards, houses, etc., until you reach the railroad track in town. Then we will take a main road and the whole force will attack down this one road. If the Germans are there in strength, we will get in behind them and then attack their rear."

"Are there any questions?"

"Move out!"

The leading assault companies moved down around the hill into their jump-off positions by 1700 and moved out on the attack.

The medium tank company, C/35, deployed with its three platoons abreast in line with the exception that the right flank platoon, commanded by Lieutenant Grice, nearest road B, was echeloned right with orders to watch the right flank and road B.

A German armored car was encountered and quickly eliminated.

As the attack gained momentum, the enemy artillery increased in intensity, seeking out the apparently lucrative targets which were sweeping across the open ground toward the city. The enemy artillery observers must have gloated to themselves over the shambles they expected to create because in front of the advancing U.S. Forces were two major obstacles: a railroad on a high embankment running diagonally across the plain, and between that obstacle and the city, an antitank ditch of no mean proportions.

However, the tanks and halftracks went up and over the railroad embankment without a pause and again began to pick up speed.

Engulfed in enemy artillery the Americans could hardly see in any direction without facing the flame of an exploding shell.

Two tanks received direct hits. One was hit on the front slope plate without harming the tank and the crew continued to push forward despite their ringing ears. The second tank, that of Lieutenant Cline, 2d Platoon leader, was hit by an HE round on the left rear of the turret. The blast slammed the open turret hatch leaf down on Lieutenant Cline's head, peppered his neck with small fragments and smashed him down on the floor of the turret in a semi-conscious condition-but the tank crew continued on in the attack (Lieutenant Cline was up and fighting again by the time the city was reached).

To escape the accurate artillery fire, the Task Force Commander ordered the entire force to move more rapidly and to move into the bursting concentrations fell (30 seconds or so later), they fell to the rear and flank of the particular group of vehicles which had driven into the prior burst.

As Task Force West moved across country, it took up "marching fire" from the tanks and halftracks to force unseen enemy gunners and panzerfaust (antitank) gunners to keep their heads down and reduce their accuracy. This fire was extremely effective. Later Captain Miller, C/35, claimed it was too much so - a .50 caliber machinegun slug from a half-track behind him penetrated his bedroll on the rear deck of his tank and punctured his air mattress.

As TFW attacked across country it employed the technique of reconnaissance by fire from the tanks and infantry half-track. This fire is extremely effective as was learned earlier in the hedge row fights in Normandy. The expenditure of machinegun and tank-HE may appear expensive, however, the shock effect gained was tremendous. This technique was employed effectively many times throughout the war by elements of the division.

During this part of the attack one of the command jeeps of the Task Force was hit by artillery fragments. The officer occupant was knocked from the jeep and fell into a foxhole occupied by an enemy soldier. A warning was quickly flashed to the following vehicles, and it was discovered that the entire field was occupied by German infantry in partially covered foxholes. The first platoon of A/10 dismounted from their half-tracks and killed or captured over 100 Germans as they lay in their holes.

At the antitank ditch, the last major obstacle, many of the tanks, already running at their top speed in 5th gear, literally leaped the ditch, clawed at the far edge and finally churned their way out onto level ground. In some cases, the grinding tracks gouged out a precarious passage for a few of the half-tracks.

A hasty search of the antitank ditch revealed a passageway and the remainder of the force crossed in single file. In the process several Germans with radio sets were discovered hiding in well-camouflaged holes dug into the side of the ditch. They were field artillery forward observers and all were effectively dispatched. An immediate reaction was noticeable in the lessened accuracy of the enemy's artillery fire.

Small arms fire was being received from both flanks, but, due to the efficient work of the U.S. Artillery Forward Observers with the tank and rifle companies, friendly time fire was falling on both flanks and to the front. The time fire succeeded to a large extent in rendering the enemy counter fires ineffective.

Enemy antitank guns along road B, pinned down by artillery shells bursting in the trees overhead, were overrun and their crews knocked out. Thus, as Task Force West approached the city of Troyes, it became more and more evident that the German force was no 500-man rear guard demolition detachment, but a well-entrenched and well-equipped defending force.

After crossing the antitank ditch, the attack became somewhat disorganized and lost its cohesiveness due to the necessarily piecemeal crossing of the ditch and the mopping-up operations in its vicinity. Nevertheless, the assault was pushed vigorously and the outskirts of town were reached.

At the edge of the built-up area, radio orders were issued to continue through the city and secure the bridges over the Seine River with a secondary purpose of getting behind the Germans.

The Task Force was split into two attacking groups; one under the 10th AIB Executive Officer, Major Leo Elwell, consisting of two tank platoons and one infantry platoon; the other under the Task Force Commander, consisting of one platoon of tanks and the remaining two companies of infantry.

This splitting of the force was by accident and confusion - not by design. Both forces advanced independently of each other toward the river. As both groups moved out, all contact between the two was temporarily lost.

The group under Major Elwell moved in a northerly direction on a back street for a short distance then turned east on a main thoroughfare and drove straight through to the river.

One tank was rocked by a panzerfaust hit on a bogie wheel, but was able to limp slowly along behind the column.

A German antitank gun, firing blindly at the tank of the passing column from a narrow side street, eventually so irritated their intended targets that a squad of infantry stopped and knocked it out.

The column continued to roll until it entered a large square with a park-like area in the center and a large auditorium or concert hall at the east end. The rear end of this concert hall overlooked the Seine River.

A perimeter defense was set up in the square with tanks and infantry covering every street which debouched onto the square.

Patrols were sent out to locate the bridges.

A tank, which attempted to move around the rear of the concert hall onto the street running along the river bank, was driven back to cover by a tremendous blast and a shower of shattered brick masonry. It was later determined that this was the result of direct fire from a German artillery howitzer across the river.

At the moment, however, the blast cooled down the tanker's curiosity.

The infantry turned their attention to clearing out the considerable number of snipers who were harassing the force from the building surrounding the square.

The elements under the Task Force Commander advanced slowly but surely against determined opposition until the railroad station was reached. At this point, no town plan being available, the force was lost among the buildings, both as to location and direction, with increasing enemy fire harassing it.

Fortunately, at this point, radio contact was regained with the Executive Officer's group and, by the simple method of firing .50 caliber tracers into the air, the positions of both forces were

determined.

Major West's group then reorganized and began to fight its way through to effect a link-up with the Executive Officer's group.

Shortly thereafter physical contact was established between the two forces and a four-block square perimeter defense as set up. Coincident with linkup, bridges were seized intact across the Seine River, and the engineer and reconnaissance platoons moved across to outpost and secure them. The Task Force command post was established in a French house on the square.

Apparently many Germans failed to get the word that Americans were on the river and in the square - a tiny French car occupied by two Germans wheeled into the square from a small alley and skidded to a halt behind a 32-ton Sherman Tank. The surprised looks on the faces of the Germans was almost ludicrous.

Two German trucks pulled out of an alley into a street leading from the square and leisurely moving away down the street. Unfortunately for them that street was outposted by the assault gun tank (105mm) of C/35. The tank fired one round on delay fuze which passed through the trailing truck and burst in the leading truck, knocking them both out.

The sniper fire was dying out, although one sniper in a church steeple continued to fire and inflict casualties despite all efforts to dislodge him. Finally Lieutenant Grice, 1st Platoon C/35, elevated his tank's 75mm gun and effectively silenced the sniper.

Just as things seemed to be quieting down a little, a column of enemy trucks was observed in the early darkness moving along a street from the northwest leading into the square. The column was halted and the first truck set on fire by one round from a tank in the square. Half tracks from A/10 moved around behind the column, knocked out the last vehicle and trapped the whole convoy.

The trucks must have been an ammunition convoy-the burning truck exploded and continued the chain reaction. Burning trucks exploded periodically during the night, making a shambles of the street, and causing Major West to say a few well chosen words as each blast threatened to smash the glass in the tall French doors of his CP.

Medical attention, by this time, had become a vital need with approximately 30 wounded men requiring immediate care. Repeated attempts had been made to contact the Medical Detachment by radio, but to no avail. As the enemy fire indicated that the Germans had closed in behind the Task Force elements at the square, it was now assumed that the Medical Detachment had either been intercepted and captured or had halted to await relieving forces before attempting to get through. However, Captain Seavers contacted the local French authorities with a view to securing French medical assistance. By midnight a small group of French doctors and nurses were functioning and caring for the wounded.

Meanwhile, the Battalion S-2 Lieutenant Abe Baum, later Major and Commander of Task Force Baum of Hammelburg fame, had been busy contacting local French authorities and through them had discovered a baker who daily delivered his bakery products to the German garrisons.

With the baker's information, and a town plan surprisingly supplied from the baker's office, a plan of attack was formulated to break out and regain physical contact with the remainder of the Combat Command.

At 2000 hours a platoon of infantry, supported by one platoon of tanks, moved out to establish that contact.

After an advance of approximately one mile against sporadic resistance there was imminent danger of their being cut off and surrounded in the rapidly fading daylight. Consequently, they were recalled and a decision made to hold fast for the night.

At 2300 hours the Combat Commander, Colonel Clarke, called by radio and requested information as the existing situation and what assistance, if any, was needed. He was given the situation and a plan was formulated which involved the launching of an attack at first light by a CCA relieving force of one medium tank company.

This tank company was to fight towards the center of the city while elements of Task Force West were to simultaneously fight back from the river to effect a junction with the relieving force.

Secondary attacks were planned by the Task Force Commander, utilizing four tank-infantry teams, which were to assault such various centers of German resistance as were known from information supplied by the French townspeople and the baker. These attacks were designed to further disrupt the German garrison and to break the back of the enemy defense from within.

The first of these secondary attacks was to be launched simultaneously with the main link-up effort of the Task Force, while the other three were to jump off spaced 15 minutes apart, dependent upon the success of the main link-up operation.

With the plans completed for the early morning attack, the Task Force waited for dawn.

Intermittent clashes occurred throughout the night caused mainly by Germans, unaware of the exact location of the Task Force, blundering into the U.S. perimeter. However, some elements of the German force knew the location of the Reconnaissance and Engineer Platoons which had seized and outposted two bridges across the Seine River.

The Germans attacked during the night and forced the outposts back to the bridges, but were unable to take the crossings. Here the U.S. troops held until morning.

It should be pointed out here that there were two sets of bridges involved - the Seine River split within the city and formed a small island so that the U.S. troops held the western set of bridges to the island and the Germans held the island and the eastern bridges. The island was shelled intermittently by division artillery during the night.

The Reconnaissance Platoon was ordered to attack and seize the island at daylight coincident with the main Task Force attack. Upon receipt of this order Lieutenant Stan Lyons (now Lieutenant Colonel), the platoon leader turned to the Task Force Commander and stated, "What do you think I am, a G - D - Combat Commander?"

As the time for the planned attacks approached, information came in on what was purported to be the command post of the enemy 51st SS Brigade. Through the dim half light of early morning, enemy trucks were observed lined up along a street near the square. Major West quickly dispatched armored vehicles to block both ends of the street. Further action then was held up until better light.

Promptly at 0600 hours the planned attacks were launched. The Reconnaissance Platoon, moving rapidly, overran two German artillery batteries in the process of displacing and eliminated 8 howitzers and accompanying personnel. The tanks and armored vehicles covering the trucks of the suspected German command post opened fire and knocked out these vehicles. The buildings on both sides of the street erupted Germans as the firing started. These individuals were either killed or captured. Among the captured was a German general officer, the commander of the 51st SS Brigade.

The main attack jumped off and immediately established radio contact with the relieving tank company, A/35, and by 0800 hours a link-up between the two forces had been realized within the city. A platoon of A/35 was promptly dispatched to assist the Reconnaissance Platoon in its effort to clear all the enemy from the island.

Shortly after the link-up with A/35 (tanks), the three planned secondary attacks were initiated. All of these were successful and unvarying in design and execution, so the relating of one will suffice.

From information received from the French the previous evening, the location of the Gestapo Headquarters and the size of the local Gestapo force had been ascertained. The location of this headquarter was approximately eight blocks away from the Task Force perimeter.

The designated attacking force was one platoon of armored infantry supported by a platoon of C/35 tanks. The assault force moved out and traversed the eight blocks without opposition until they came to the large school building housing the Gestapo headquarters.

The tanks took up firing position and, upon signal, commenced to pour round after round of HE, AP and WP into the building followed by .30 and .50 caliber machinegun fire. The building became a holocaust within a matter of minutes.

The tanks ceased firing and the armored infantry moved in with rifle, grenade, and bayonet to complete the mission. In fifteen minutes the fight was ended with 58 German dead counted, 50 prisoners and no casualties to the assaulting infantry-tank team.

At approximately 1100 hours, 26 August, the Task Force Commander received word that his force would be relieved by the 53d Armored Infantry Battalion. By early afternoon the relief was accomplished and Task Force West moved out to rejoin the remainder of CCA northeast of Troyes.

One mine was hit while leaving the city which killed the Battalion Operation Sergeant, Sergeant Cook, and wounded several others including the Battalion S-3, Captain J. J. J. Shea. Also, the bodies of the Battalion Surgeon and several medics were found this day. Apparently they had been shot after capture by the Germans.

It will be of interest to those who participated in this battle that the city square around which Task Force West established its perimeter was as of 1960, for the most part a parking area; that the concert hall still stands; and that in the square stands a large stone monument on which is carved scenes depicting the Germans in occupation of Troyes, the fighting in the city and the Germans in flight.

Before this carved slab are two stone figures showing a French civilian grieving over the body of an American soldier. Apparently the French of Troyes have not forgotten.

ANALYSIS

The battle is a prime example of the effectiveness a combined arms team can have against an enemy force during an offensive action with the employment of tanks for concentrated shock and fire power, the employment of infantry to flush out foxholes, snipers, and areas vulnerable to tracks, and the employment of artillery to cover the enemy before the assault and destroy his avenue of escape during the assault: Each asset appearing to have been effectively used during the assault of Troyes.

An unusual point of the attack was the rate chosen across open terrain where two major obstacles had to be negotiated under heavy enemy artillery and covering fires. In many cases it would have meant certain death for a majority of the assault force, coupled with the loss, and possible halting, of the attack's momentum. However, this was not the case as the attacking force used marching fire to multiply the effects of an already determined, aggressive assault on the enemy. The leaders and soldiers of the attacking force had gained the momentum of the attack and reacted swiftly to maintain that momentum as is evident in the hasty penetration and clearing of the tank ditch.

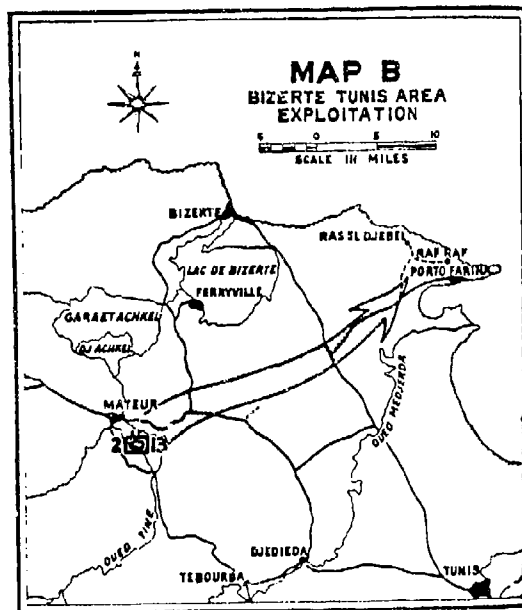
This high degree of aggressiveness won them the results they desired by shocking the enemy and creating a state of confusion in their ranks.

The fact that CCA was conducting pursuit operations helps to explain their success. Had the German defenders time to dig in and properly prepare for an assault, the results could have been drastically different. This is not saying the American commander was being foolhardy. On the contrary, his accurate estimate of the situation afforded him the opportunity to use boldness and shock action to take the town.

A Tank Platoon in Tunisia
by CAPTAIN CHARLES L. DAVIS

When the Allies made their initial invasion moves against North Africa in the Fall of 1942, the Axis had few troops in Tunisia. The landings at Casablanca, Oran and Algiers were followed by a quick allied move to put troops into Eastern Algeria and Tunisia, to prevent the seizure of this key area by the enemy. A rapid build-up of Axis forces, along with a poor road net, a wet season, and administrative problems, and the Tunisian Campaign was under way.

From a period of fighting in Southern Tunisia, extending into April of 1943, the American II Corps, consisting of the 1st, 9th and 34th Infantry Divisions, the 1st Armored Division, and Corps Troops, moved across the communications lines of the British First Army and into position on the Northern Tunisian front.



The Offensive

In late April the Allied line in Tunisia exploded into a general offensive destined to crush the Axis in Tunisia. The II Corps attack in an easterly direction, extending over a forty-mile front of mountainous terrain, was characterized by continuous heavy fighting.

The 1st Armored Division sector of this attack consisted of the Tine River Valley and the hills to the south, an area aptly named the Mousetrapp. The terrain was unsuitable for armor. Infantry fought through the hills while reconnaissance and engineer units maintained contact and cleared mines, and the tanks fired indirect fire missions and constituted a mobile reserve against counterattack.

taken most of the ground on the south side of the Mousetrap, while units north of the Mousetrap had driven the enemy back upon the last defensive positions before Mateur. The moment was at hand for the use of armor.

The Armor To Be Used

Under the organization of the time, the 1st Armored Division was composed of one infantry and two armored regiments. Each armored regiment had one battalion of light and two battalions of medium tanks. The medium companies were equipped with M4 tanks, fitted with radial engines and a 75mm gun--both underpowered and undergunned.

The Armor In This Story

During the action of late April and early May the Third Platoon of Company D, 13th Armored Regiment, operated in its organic role as a part of the 2nd Battalion tactical deployment of companies, engaging targets of opportunity, firing indirect fire missions, and standing ready against the threat of counterattack.

The enemy, having lost all of the forward slopes in the area west of Mateur, withdrew to the hills east of the city to organize his defenses for his last effective stand against the Allies in Africa. Combat Command B (less the 2nd Battalion) entered Mateur in late morning of the 3rd of May, 1943. A three-day siege of the key point was broken with the Allied attack launched on May 6.

The 2nd Battalion of the 13th Armored Regiment continued its action in the Upper Tine Valley just south of Mateur. The battalion mission was to break through the German lines east of Mateur, cut the Bizerte-Ferryville-Djedeida-Tunis road, and continue eastward to cut the main Bizerte-Tunis highway. The mission of the Third Platoon was to protect the left flank of the Battalion during the attack and reorganization.

Getting Down to Business

The attack jumped off in the small hours of the morning of May 6th, from a line of departure along the low ridge running in a northwest-southeast direction just east of Mateur. A low ground fog blanketed the valley in front of the ridge. The fifty-three tanks crossed the line of departure without artillery preparation, due to a last minute change in plan during the night, and advanced across an area suitable for the use of armor, and consequently well protected by enemy antitank guns.

In the opening moments of the attack, the only sound across the stillness of the North African dawn was the crescendo of engine roar and the squeaking of suspension systems. That didn't dominate the atmosphere for long. From the German line purple pyrotechnics arched into the air--the enemy signal of armored attack! The field erupted into full action, with antitank guns lacing out their high velocity

projectiles in a crisscross pattern, interspersed with streams of machine-gun tracers concentrated on knocked out and burning tanks. A mine field took its toll, and the battalion commander, realizing the overwhelming superiority of the defense, ordered the remaining tanks back on the line of departure. His own tank was destroyed by antitank fire before the instructions were completed.

The battalion lost seven tanks, including those of the battalion commander, the E Company commander, two platoon leaders, and three more. Three others which by-passed the mined area went into a defilade position and sat tight, well forward of the LD.

The Third Platoon of Company D moved back in defilade and joined the other elements in a detailed search by observation and fire for the well dug in and camouflaged German antitank guns. The day passed with this mission. The enemy maintained heavy artillery fire most of the time. The battalion commander, Lieutenant Colonel Henry Gardiner, wounded during the morning attack, was replaced by Lieutenant Colonel Hamilton Howze.

Renewing the Attack

About noon the battalion commander called together his staff and unit commanders and formulated plans to renew the attack. With an alteration of the original plan, and with strong artillery support, it was intended to smoke the right flank of the attack and hold the screen until the tanks were beyond the first line of ridges. Preparatory fires were planned in detail, to cover the area of German antitank defense in front of the initial objective with impact fire until the attack arrived, switching then to air burst and shifting forward as the attack progressed. In addition to artillery support, the 776 Tank Destroyer Battalion was to remain in hull defilade at the line of departure, using direct fire on selected points, and engaging targets of opportunity. They were to follow as soon as fire was masked.

There was no infantry support, due to the commitment on the south side of the Mousetrap, which resulted in heavy losses precluding the switch of troops to the Combat Command B attack.

The Third Platoon pulled out of position by sections and returned to Mateur for ammunition resupply in preparation for the late afternoon attack. With the racks full, and a few extra rounds on the floor of the turret, the Platoon Leader assembled the tank commanders to go over the plan of attack, which for the Third Platoon remained the same as in the morning—to protect the left flank of the battalion.

A few moments before jump-off time the commander of the fifth tank brought its driver to the Platoon Leader to say that he was sick, had been vomiting all afternoon, and just could not go. A replacement was not available. The driver stated that he could not go as assistant driver, and was obviously gripped more by mental fear than by an ailing stomach. The attack was set to move out. It was apparent to the Platoon Leader that it was now a question of ordering them to go at the point of a gun, or of sending him to the aid station. He

decided in favor of the aid station with the thought of dealing properly with the situation at a better moment. It was a decision he later regretted. The man's tank and tank commander were lost and two of the remaining crew members were casualties as the action developed. With a full crew the story might well have been different, especially in consideration of the fact that the lacking crew member was the driver of the vehicle, considerably more experienced than the man who took the tank into action.

The artillery laid down the smoke, and began the preparatory fires in front of the objective. The tank destroyers cut loose with their direct fire. The battalion attack of fortyfour tanks got under way.

Opening Up

Every tank opened up with every gun, except the .50 caliber machine guns, at anything even remotely resembling a target. The artillery, a bit late in lifting from impact to air bursts, dropped some rounds among the friendly armor. The consensus among the tankers seemed to be that they preferred a 105 from behind to an 88 from the front. All in all, the artillery support was near perfect, and it enabled the tanks to get on the ridges without a loss. It effectively neutralized the antitank fire in the zone of advance, and destroyed some guns. Fire from the tanks destroyed more; some still operative and with crews to man them represented a threat to supply and administrative vehicles, since there was no infantry accompanying the attack, or following it, to mop up the area.

The arrival of the tanks on the objective at the top of the ridge placed them beyond the preplanned fire area. The Germans had organized in depth, keeping considerable antitank strength in the rear. The battle became one of survival between the tanks and the antitank guns.

The mission of Company D, and of its Third Platoon, while appearing to be of secondary importance, actually was extremely important. The Germans held the hills to the north in considerable strength, particularly in armor. They had contained Combat Command A of the 1st Armored, and other troops, for about three days. In order to accomplish its mission, the Third Platoon had to hold pretty well to the skyline on a ridge generally running east and west, thus exposing the tanks to flanking fire from the extreme right of the battlefield. This proved to be more of a threat than the left flank, as a move of a few yards to the right placed the tanks in defilade from the left flank, but exposed for miles to the right.

Topping a small rise, the Platoon Leader's tank, in line with the lead tanks of the battalion, came in view of a small caliber antitank gun some fifty yards ahead, sighted down a depression running diagonally to the line of advance. The enemy crew swung their gun toward the tank, and the Platoon Leader forgot all about fire commands. Fortunately, the gunner had turned the gun to the front, and he saw the enemy gun at about the same moment the Germans saw the tank. As the tank was moving right along, it was about thirtyfive

yards from the target when the gunner fired. The shot was slightly off center, but it was low enough to explode on the near side of the gun pit, wrecking the gun as well as the crew. About this time the Platoon Leader found his voice, yelling so loudly that the driver got on the interphone to ask the gunner if the Lieutenant had been hit.

The platoon began to receive considerable fire from the right flank, making it wise to sideslip down the hill to defilade behind a secondary ridge. The terrain became rougher, the progress slower.

A Bit of Dueling

An 88mm gun came into the Platoon Leader's vision, about eight hundred yards to the right front, with the gun pointing to his right. He gave 800 to the gunner, and the round was high. He gave 700, and the round was still over. 600 was again high. The German crew began traversing to lay on the tank. About then the Platoon Leader became a bit frantic and began screaming "Four, four!" The next round was close enough to stop the gun, which got off one round that was barely wide of the tank. The gunner polished off the 88 with several more rounds.

At this moment the number two tank had to withdraw to take care of a projectile stuck in its gun. This was prior to the time the armored units began to carry 75mm howitzer cases to shoot out projectiles which became necessary to use the rammer staff for the operation, and the field of battle is no place to engage in such an activity.

The Platoon Leader moved his tank down the hill to the vicinity of the Company Commander, when both tanks came under fire from an 88mm gun some four hundred yards to the front. The Platoon Leader's tank fired a short and an over, and before he could split the bracket the Company Commander scored a hit alongside the barrel. The gun burst into flames.

As the platoon moved back up the ridge to cover the left flank, the Germans responded with high explosive and armor piercing shell. A look through the glasses showed at least one Mark VI tank firing at approximately 3000 yards, maximum range for the American tank direct fire on the inadequate sights. One round landed about three quarters of the distance to the enemy target. The Platoon Leader put his trust in mobility. He kept moving, issuing similar instructions to his platoon.

The Company Commander urged the Platoon Leader, via radio, to move higher on the hill. The Platoon Leader asked who was going to take care of the Mark VI on the right flank. "What Mark VI?" asked the CO. A moment later the Platoon Leader and his crew were hitchhiking. A near miss had struck near the right rear of the tank, breaking the track and immobilizing the vehicle. Recognizing the futility of using the 75mm gun to compete with high velocity weapons equipped with adequate fire control instruments for that range, the Platoon Leader ordered the crew to abandon the tank. The crew was formed in a diamond patrol formation and set out across the fields to the tank reorganization area, in a depression about threequarters of a mile

from the disabled tank. In a case of mistaken identity the crew was fired upon by a 75mm tank gun in the left battalion. The men hit the ground and the shell, landing some fifty feet away, did no damage.

At the assembly area the Platoon leader reported to the Company Commander and began organizing the sector for the defense, posting local security. The fifth tank of the platoon had been lost, leaving the platoon with two tanks present, one destroyed, one disabled and one at the rear.

A Rough Time

That fifth tank had been the one entering the attack with a four-man crew. When the limited supply of ammunition that could be carried in the turret had been exhausted, it had been necessary to stop the tank for the driver to pass ammo from the racks under the turret and behind the driver and assistant driver. That task is normally handled by the assistant driver while the tank is in motion. On this occasion, when the tank sacrificed its mobility to accomplish the transfer of ammo, the guns of the enemy on the right flank of the battalion laid on the tank and broke a track. Not realizing the futility of engaging in a fire fight under such circumstances, the tank commander continued to fire. The Germans concentrated on the vehicle and literally pulverized it with high explosive. First the radio and interphone were knocked out, then the turret periscopes, and finally the turret traversing mechanism, although not until the last round of ammunition had been fired.

The crew was trapped in a disabled tank, out of ammunition and without communications, while the enemy laid on the high explosives. Concussion and shock wrecked the instrument panel and all interior control mechanisms. The tank commander alerted the crew to evacuate through the top hatches rather than through the bottom escape hatch, because of the many low rounds striking under the tank. As the crew began the evacuation several more hits by German guns killed the tank commander, broke the driver's leg and wounded the loader. The corporal gunner took charge and moved the wounded from the vicinity. He managed to stop one of the rear tanks of another platoon, to place the driver on the vehicle to be transported to the reorganization area. He then took the other wounded man with him to the line of departure, during which trip, with one pistol between them, they took four prisoners.

The number two tank of the platoon, which had returned to remove the stuck projectile, also took several prisoners on the way back. The third and fourth tanks of the platoon destroyed several guns of various sizes, killing and capturing several of the enemy. Not being able to take the prisoners along, they were disarmed and sent to the rear. Some arrived, some did not. Of the latter, undoubtedly several rejoined their forces, to fight again. There was no other solution open to the tankers in view of the situation.

The attack had broken the German main line of resistance east of Mateur, with comparatively small losses. On the night of May 6th the

2nd Battalion and its attached tank destroyers bivouaced within the battle position, and made plans to exploit the breakthrough.

The Exploitation

While the battalion commander was planning the next operation, Company D was given the mission of sending out a reconnaissance patrol to reconnoiter a route to the southeast to the Mateur-Djedeida road, with the idea of moving the battalion there during darkness if the area proved suitable for the movement of tanks.

Being without a tank, the Third Platoon Leader volunteered to lead the patrol. The Platoon Sergeant and several men also volunteered to go on the patrol. Following organization and orientation, the patrol set out.

Low, black clouds reduced the visibility to nil, and occasional showers soon drenched the men to the skin. Shelling both by enemy and friendly artillery-and in particular the friendly firing of white phosphorus-along with the occasional scattered flareup from burning guns and vehicles, made it quite impossible to become accustomed to the darkness. All in all, it required five hours for the patrol to work through the German positions, avoiding two enemy patrols on the way; secure the desired information; and return to make an 0230 Officers' Call.

The Platoon leader informed the Battalion Commander that the reconnoitered area was suitable for tanks, but contained many prepared positions, several of which were believed to be antitank guns. The Company Commander of F and D both suggested that the battalion move north and disperse just prior to daylight along a high ground area that contained no antitank guns. This would enable them to defend in any direction, would move them away from known antitank and artillery positions, and would not add to the difficulties of resupply. This plan was adopted.

A German shelling made it impossible to repair the tank of the Third Platoon Leader, and succeeded in blowing a track off the number three tank of the platoon. The return of the number two tank left platoon strength at two tanks for the resupply operation and the continuation of the attack.

Continuing the Attack

The attack continued in late morning of the 7th of May, crossing the Bizerte-Ferryville-Djedeida-Tunis road, where the number two tank became a casualty, breaking the shaft on the turret traversing mechanism. The platoon continued with one tank. The action continued along the main Mateur-Djedeida-Tunis road to a junction with the road connecting the Mateur-Tunis road and the Bizerte-Tunis highway.

Earlier in the day the fighting had been against scattered strong points supported by artillery, but as the action progressed, the artillery diminished and the advancing troops found an 88mm battery abandoned. While the tankers were wondering what the Germans were up to, the enemy opened fire from a mutually supporting position. Some

of the overwatching tanks and tank destroyers quickly eliminated the threat, and the battalion moved on.

At the junction the enemy had developed a well organized and strongly defended position that was especially strong in antitank defense. A violent fire fight developed, and Lieutenant James Curry, commanding Company E, was killed when a freak hit slammed the turret hatch cover down and crushed his head. The tanks and tank destroyers deployed in particularly bad tank terrain, and reduced the resistance by fire. With the artillery in support of the other two battalions, and in view of the bad terrain for armor, the battalion made use of darkness to move onto the position.

A quick look at the field on the morning of May 8th gave evidence of the effectiveness of the tank and TD combined fires; destroyed guns and enemy dead lay scattered about the position.

From there the attack continued northeast across terrain quite unsuited to the use of armor. By midafternoon of the 8th the battalion was in sight of the main Bizerte-Tunis road, and looking for a passage down from the heights.

Moving down to the coastal plain, the battalion encountered a wadi that was a natural antitank obstacle. The tank of the D Company commander threw a track attempting to cross it. A Headquarters Company tank became stuck while trying to by-pass the first tank. The Third Platoon Leader, while trying to extricate the other two, threw a track on his own tank.

As the battalion mission was to cut the Bizerte-Tunis road at the intersection of the Porto Farina road, two or three miles to the north, the CO decided to locate a more favorable passage to the plain a bit farther to the north. The Third Platoon Leader was left to guard what had become five disabled tanks resulting from the strange track-throwing contest.

Meanwhile, the Germans had moved in a battery of 88's that had been moving southward along the main Bizerte-Tunis road. A Company D sergeant had observed the battery of four guns leave the main road, move over to a secondary road, and go into position some hundreds of yards beyond the main road. Once again the battalion was badly in need of artillery support that was not available. The fire control instruments of the tanks were inadequate for the range. The enemy could not be brought under effective fire.

The 88's opened on the disabled tanks, and the tanks returned fire. The duel did not amount to much, since neither side had good observation. Three men in D Company were wounded while in a briefing at the tank assembly area.

The Third Platoon Leader, moving on orders to the bivouac area, found three of his disabled tanks from the previous two days back and ready for action. As preparations were under way to complete the exploitation of the attack, the enemy opened up with everything he had on the coastal plain. For a while it appeared like a counterattack preparation, but the lack of damage soon made it obvious that the Germans were destroying ammunition the easy way.

At daybreak of May 9, the battalion attacked north along the

Bizerte-Tunis highway. At the Porto Farina junction, the direction was switched to enter the town. Company E captured an Italian regimental headquarters, whose commander, accompanied by the 2nd Battalion CO, induced the commander at German headquarters to surrender. The word was passed down to enemy units, so that sporadic resistance to American units along the front gradually ceased. Enemy troops began to surrender throughout the coastal area. The 2nd Battalion, 13th Armored Regiment, 1st Armored Division, took up positions along the sea between the towns of Raf Raf and Ras el Djebel, to prevent destruction of equipment and escape from Africa. Shortly after, all resistance in II Corps zone came to an end.

In this final action of the North African fighting, the 1st Armored Division had been used as a unit in an offensive role. The armor had been used in the only logical area along the forty-mile front. Lacking substantial infantry support for both Combat Commands, it had been sound logic to throw available infantry into the CCA area, to assist their attack through rugged terrain on the north. However, the absence of infantry was a serious handicap to CCB. In particular, the lack of foot troops made difficult the mopping up of the field and the handling of prisoners, many of whom undoubtedly were able to rearm and return to the fight.

Equally restricting had been the lack of artillery support in the way of preplanned fire to cover known antitank positions and a well defended zone, and to handle targets of opportunity beyond practical tank gun range. Three tank battalions had been sent on separate missions, with only one field artillery battalion to support the three.

Combat Command B violated the principle of mass in splitting the three tank battalions and sending them on separate missions. With the mission of breaking the enemy main line of resistance, cutting his communications and preventing his escape, the use of a combined force would have simplified planning and mademaxium use of the striking force.

The rapid estimate of the situation by the battalion commander on the start of the first attack, and his quick decision to return to the line of departure saved many tanks for the later successful attack. Full use of experienced subordinate commanders was a determining factor in planning for the successful attack. And the full use of support contributed to the success of what proved to be a well coordinated action.

So far as the equipment goes, the tanks had been run many miles over a normal life. The M4 tanks which replaced the M3's had for the most part been those used on maneuvers in the States by the Second Armored Division. Thoroughly worn-out equipment was kept in the line by the diligent efforts of the tank crews. That the M4 tank with the 75mm gun was obsolete before it reached the fighting forces is a well known fact. The tanks of the 2nd Battalion had no indirect firing equipment, except a quadrant, when they were received. The tanks of the Third Platoon were equipped with indirect firing equipment captured from the Germans and Italians at Kasserine Pass. The

superior armament and fire control instruments of the enemy enabled them to reach far beyond the effective range of the 75mm gun, and in the case of the Third Platoon, to disable two tanks, one of which was destroyed.

In summing up the action of the Third Platoon, it is important to remember that the platoon was part of a battalion tactical unit, and platoons were controlled through their leaders by the company commanders. Careful coordination and planning took place before the action, but once the attack was launched it was difficult to control the individual platoons. Platoons were controlled partly by radio by the platoon leaders, but perhaps more by example. In a battle for survival between tanks and antitank guns, there is little time for radio conversation.

ANALYSIS

A tank platoon in Tunisia catalogues the experiences of an armor platoon in an offensive role in the final days of the North African campaign.

While participating in a deliberate Battalion attack the 3rd Platoon, Company D. 13th Armored Regiment was given a battalion flank protection role. A costly mistake, that of permitting combat shirking prior to the attack by one experienced tank driver eventually was to cost the platoon leader 1/5 of his available strength. The slow realization that an adequate fire support plan was mandatory cost the failure of the first battalion attack and then limited the exploitation of a second successful attack because the commander had failed to plan subsequent artillery support. Mines and antitank guns were the main form of German resistance.

At the platoon level, the 3rd Platoon leader nearly lost his own life and that of his crew when in the heat of battle he forgot to issue proper fire commands. Use of hull defilade was not all that it could have been and inexperienced drivers and TC's were the cause of several tanks lost due to thrown tracks.

CALCULATED RISK: OCB, 7th AD, 18 DEC 1984

While northern and eastern flanks had been heavily engaged, the northeastern sector (A/87, A/38, and B/87) had been rather quiet. The only excitement there had been when an M8 armored car from "E" Troop destroyed a Tiger tank. The armored car had been in a concealed position at right angles to run along a trail in front of the MLR. As it passed the armored car, the M8 slipped out of position and started up the trail behind the Tiger, accelerating in an attempt to close. At the same moment the German Tank Commander saw the M8, and started traversing his gun to bear on the armored car. It was a race between the Americans who were attempting to close so that their puny 37-mm would be effective in the Tiger's "Achilles heel" (its thin rear armor), and the Germans who were desperately striving to bring their '88 to bear so as to blast these "fools" who cared to attempt to fight a 60-ton tank with their little "runabout" and its "pop gun". Suddenly the M8 had closed to 25 yards, and quickly pumped in 3 rounds... the lumbering Tiger stopped, shuddered; there was a muffled explosion, followed by flames which billowed out of the turret and engine ports, after which the armored car returned to its position.

ANALYSIS

The "little guy" can get you, too!

CHAPTER 3

KOREA



SU: T34/85 85mm 32t



SU: JS III 'Stein' 122mm 46t



US: M26 'Pershing' 90mm 48t



US: M4A3E8 'Sherman' 76mm 37t



US: M48 90mm 45t

"WE SHALL LAND AT INCHON, AND I SHALL CRUSH THEM."

DOUGLAS MACARTHUR

23 AUGUST 1950

TANK ACTION AT CHONGJU

Following the capture of Pyongyang, the enemy's capital city, in October 1950, the left-flank unit of Eighth Army hurried north to fulfill the long-range mission of reaching the Yalu River and the end of the war. The force was built around the British 27 Commonwealth Brigade which, at the time, consisted of a battalion from the Royal Australian Regiment, a battalion from the Argyll and Sutherland Regiment, and a battalion from the Middlesex Regiment. Since these infantry battalions were without supporting arms or services of their own, Eighth Army attached to the brigade U.S. artillery units, engineers, and the 89th Medium Tank Battalion. This combined force, commanded by Brig. B. A. Coad of the British Army, was under the operational control of the 1st Cavalry Division, but worked as a separate task force at a considerable distance from, and without physical contact with, that division or other friendly units.

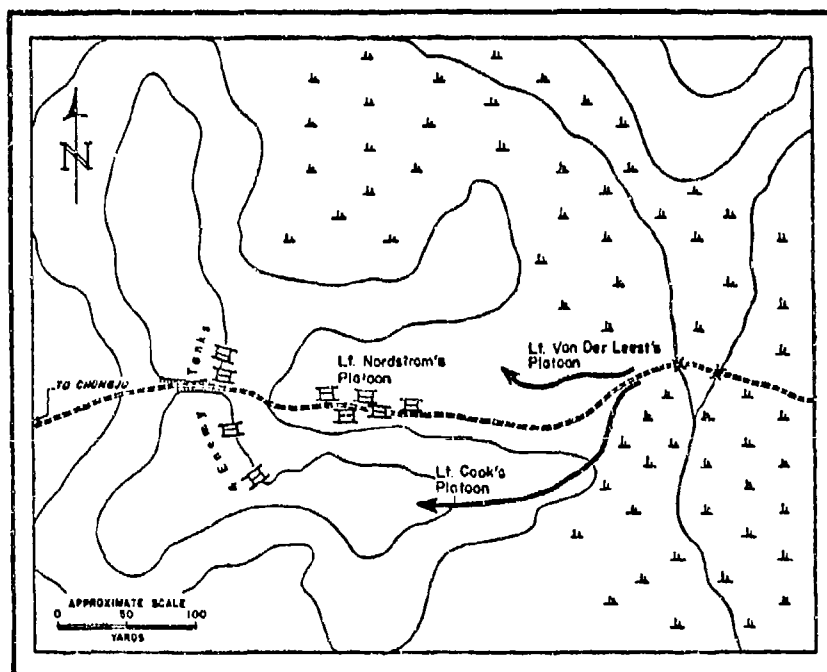
Starting early on the morning of 22 October 1950, the task force resumed its advance from Pyongyang north. Usually the infantrymen rode on the tanks or in trucks near the end of the column that stretched for two and a half to three miles. A platoon of tanks led. Nothing unusual happened until near noon of the second day, when the task force engaged a large but disorganized enemy unit at the town of Sukchon. There was no trouble the third day as the column crossed the Chongchon River at Sinanju and Anju, but at Pakchon, to the north, the bridge across the Taenyong River was destroyed, and there was a two-day delay before the column headed west toward Chongju. North Koreans offered some resistance to the river crossing at Pakchon and, more significant, there was a sudden stiffening of enemy activity. As a result, the brigade commander concluded that the days of "rolling" were over. When the advance began again at 0800 on 28 October it was with greater caution. Lead companies investigated all likely enemy positions instead of leaving them to the follow-up units, and the column therefore moved only fifteen miles during the day.

Again on the morning of 29 October the task force resumed its march westward. The day's objective was Chongju. The Royal Australian battalion and Company D, 89th Medium Tank Battalion, led the column. The infantrymen dismounted frequently to screen suspected high ground to the flanks, and the tank battalion's liaison plane patrolled the area well ahead of the column. The liaison pilot (Lt. James T. Dickson) stopped the column several times during the morning while fighter planes made strikes against enemy tanks. About noon, as the head of the column neared the top of a high hill, Lieutenant Dickson sent a radio message to the tankers warning them of enemy tanks dug in and camouflaged on each side of a narrow pass where the road cut through a low hill. This position was at the top of the ridge ahead, beyond a narrow strip of paddy fields and about two and a

half miles away over a winding and narrow road. Proceeding slowly, the leading platoon of tanks went down to the bottom of the hill to the east edge of the valley. There Lieutenant Dickson dropped a message advising them to hold up temporarily because of the enemy tanks.

After a delay of a few minutes, the tank battalion commander (Lt. Col. Welborn G. Dolvin) and the Australian infantry battalion commander arrived at the head of the column. While they were planning the next move, Lieutenant Dickson spotted what he believed to be a camouflaged tank position on the reverse slope of a low hill just beyond the next ridge ahead. The fighter planes were busy with another target, so he radioed the tankers to ask them to place indirect fire in the area. The platoon of tanks that was second in line, led by Lt. Francis G. Nordstrom, opened fire from its position on top of the hill. Nordstrom did not expect to hit anything but, after firing about ten rounds, with Lieutenant Dickson adjusting the fire, smoke started to rise from the camouflaged position. It was heavy, black smoke such as that made by burning gasoline. Lieutenant Dickson called off the firing.

Meanwhile, the battalion commanders had worked out their plan of attack. Since Lieutenant Nordstrom liked the point position where he could open the action and control it, they decided to let his platoon lead the attack. No infantrymen would accompany his tanks. The other two tank platoons, mounting infantrymen, would follow in column. This force consisted of thirteen tanks and about two companies of infantry.



Nordstrom's platoon was to head at full speed for the point where the road went through the narrow pass—a distance of about two miles. This seemed to be the most important ground since there was no apparent way to bypass it. The next platoon of tanks, under Lt. Gerald L. Van Der Leest, would follow at a 500-yard interval until it came within approximately a thousand yards of the pass, where the infantrymen would dismount and move to seize the high ground paralleling the road on the right side. The third platoon of tanks, under Lt. Alonzo Cook, with a similar force was to seize the high ground left of the road. After discharging the infantrymen, the tank platoon leaders were to maneuver to the left and right of the road and support the advance of their respective infantry units.

The attack started with Lieutenant Nordstrom's tank in the lead. Within a hundred yard of the road cut Nordstrom noticed enemy soldiers hurriedly climbing the hill on the left of the road. He ordered his machine-gunner to open fire on them. At about the same time he spotted an enemy machine-gun crew moving its gun toward the pass, and took these men under fire with the 76mm gun. The first shell struck the ground next to the enemy crew, and the burst blew away some foliage that was camouflaging an enemy tank dug in on the approach side of the pass on the right side of the road. As soon as the camouflage was disturbed the enemy tank fired one round. The tracer passed between Nordstrom's head and the open hatch cover. In these circumstances he did not take time to give fire orders; he just called for armor-piercing shells and the gunner fired, hitting the front of the enemy tank from a distance of less than a hundred yards. The gunner continued firing armor-piercing shells and the third round caused a great explosion. Ammunition and gasoline began to burn simultaneously. Black smoke drifted east and north across the high ground on the right side of the pass, effectively screening that area. Lieutenant Nordstrom ordered the commander of the last tank in his platoon column (Sgt. William J. Morrison, Jr.) to fire into the smoke with both machine guns and cannon. At the same time other tank crews observed other North Koreans left of the pass and directed their guns against them.

Lieutenant Nordstrom did not move on into the pass itself because by this time it seemed to him that the enemy would have at least one antitank gun zeroed in to fire there and could thus block the pass. He remained where he was—about seventy yards from the pass with the other tanks lined up behind his. Fire on the enemy to the left of the road tore camouflage from a second enemy tank dug in on the left of the pass in a position similar to that of the tank already destroyed. Nordstrom's gunner, firing without orders, destroyed this tank with the second round. There was another violent explosion, which blew part of the enemy tank's turret fifty feet into the air.

While this fire fight was going on at the head of the column, the Australian infantrymen were attacking along the ridges on each side of the road. There was considerable firing in both areas. Lieutenant Cook's tanks, on the left side of the road, had been able to follow the infantrymen onto the hill and provide close support.

In the midst of the fighting at the head of the column, the guns in the two leading tanks jammed because of faulty rounds. At that time a shell came in toward Nordstrom's tank from the left front. Nordstrom instructed his platoon sergeant (MSGT. Jasper W. Lee) to fire in the general direction of the enemy gun until he and the tank behind him could clear their guns. This was done within a few minutes, and Nordstrom, having the best field of fire, started placing armor-piercing rounds at five-yard intervals along the top of the ridge to his left, firing on the only logical positions in that area, since he could see no enemy vehicles. Following the sixth round there was another flash and explosion that set fire to nearby bushes and trees.

The next enemy fire came a few minutes later--another round from a self-propelled gun. It appeared to have come from the right-front. It cut across Lieutenant Nordstrom's tank between the caliber .50 machine gun and the radio antenna about a foot above the turret, and then hit one of the tanks in Lieutenant Cook's platoon, seriously injuring four men. Because of the smoke it was impossible to pinpoint the enemy, so Nordstrom commenced firing armor-piercing shells into the smoke, aiming along the top of the ridge on the right side of the road. He hoped that the enemy gunners would believe that their position had been detected, and move so that he could discover the movement. Another green tracer passed his tank, this time a little farther to the right. Nordstrom increased his own rate of fire and ordered three other tank crews to fire into the same area. There was no further response from the enemy gun and, to conserve ammunition which was then running low, Nordstrom soon stopped firing. It was suddenly quiet again except along the ridgelines paralleling the road where Australian infantrymen and the other two tank platoons were pressing their attack. No action was apparent to the direct front.

At the rear of the column, Lieutenant Cook had gone to his damaged tank, climbed in and, sighting with a pencil along the bottom of the penetration, determined the approximate position of the enemy gun. He radioed this information to Nordstrom, who resumed firing with three tanks along the top of the ridge on the right side of the road. Again he failed to hit anything. For lack of a better target he then decided to put a few rounds through the smoke near the first enemy tank destroyed. He thought the two rounds might possibly have come from this tank even though the fire and explosions made this very improbable. The third round caused another explosion and gasoline fire. With this explosion most enemy action ended and only the sound of occasional small-arms fire remained.

Shortly thereafter both Australian units reported their objectives secured. Since it was now late in the afternoon, the British commander ordered the force to form a defensive position for the night. It was a U-shaped perimeter with a platoon of tanks and an infantry company along the ridgeline on each side of the road, and Lieutenant Nordstrom's tanks between them guarding the road.

When the smoke cleared from the road cut there was one self-propelled gun that had not been there when the action commenced. It appeared that it had been left to guard the west end of the road cut and its crew, becoming impatient when no tanks came through the pass, had moved it up beside the burning tank on the right side of the road, using the smoke from this and the other burning tanks as a screen.

At 2100 that night enemy infantrymen launched an attack that appeared to be aimed at the destruction of the tanks. Lieutenant Nordstrom's 1st Platoon tanks, which were positioned near the road about a hundred yards east of the pass, were under attack for an hour with so many North Koreans scattered through the area that the tankers turned on the headlights in order to locate the enemy. The Americans used grenades and pistols as well as the tanks' machine guns. Gradually the action stopped, and it was quiet for the rest of the night. When morning came there were 25 to 30 bodies around the 1st Platoon's tanks, some within a few feet of the vehicles. At 1000 the column got under way again and reached Chongju that afternoon. This was the objective, and here the task force broke up.

ANALYSIS

This narrative illustrates the employment of a tank battalion as part of a task force equal in size to a reinforced regimental combat team. The task force successfully completed its exploitation mission by taking its objective, Chongju.

The action on 29 October brings out several techniques. The pilot of the liaison plane did more than see and tell. He also thought and acted. The task force's tanks gained a great advantage through reconnaissance by combining fire with aggressive action. In almost every instance the tanks located the enemy by observing the results of their friendly fire, rather than by waiting for the enemy to give away his location by drawing his fire.

The aggressive double envelopment against the enemy positioned around the defile near Chongju brought to bear a large part of the task force strength. Almost simultaneously the enemy was hit from three different directions. This action stands out against the background of other regimental attacks in Korea wherein only a few individuals have led the assault. Deployment for an attack takes time

and coordination, and frequently it is too hurried to be well accomplished. Horatius held the bridge because his attackers could not deploy to hit him from all sides.

The use of the tanks to place indirect fire on an area target is very questionable—if artillery support is available. The target as described seems a more logical one for artillery. A good guide to follow in this or similar situations is this: Other things being equal, use supporting fire from the weapon most easily resupplied with ammunition.

No reason is given to account for the halt of the task force on the night of 29 October. Men tire and machines exhaust fuel, but a pursuit must be pressed night and day. The enemy must be denied all chances to rally, reconstitute his lines, or recover his balance.

TASK FORCE COMBEZ

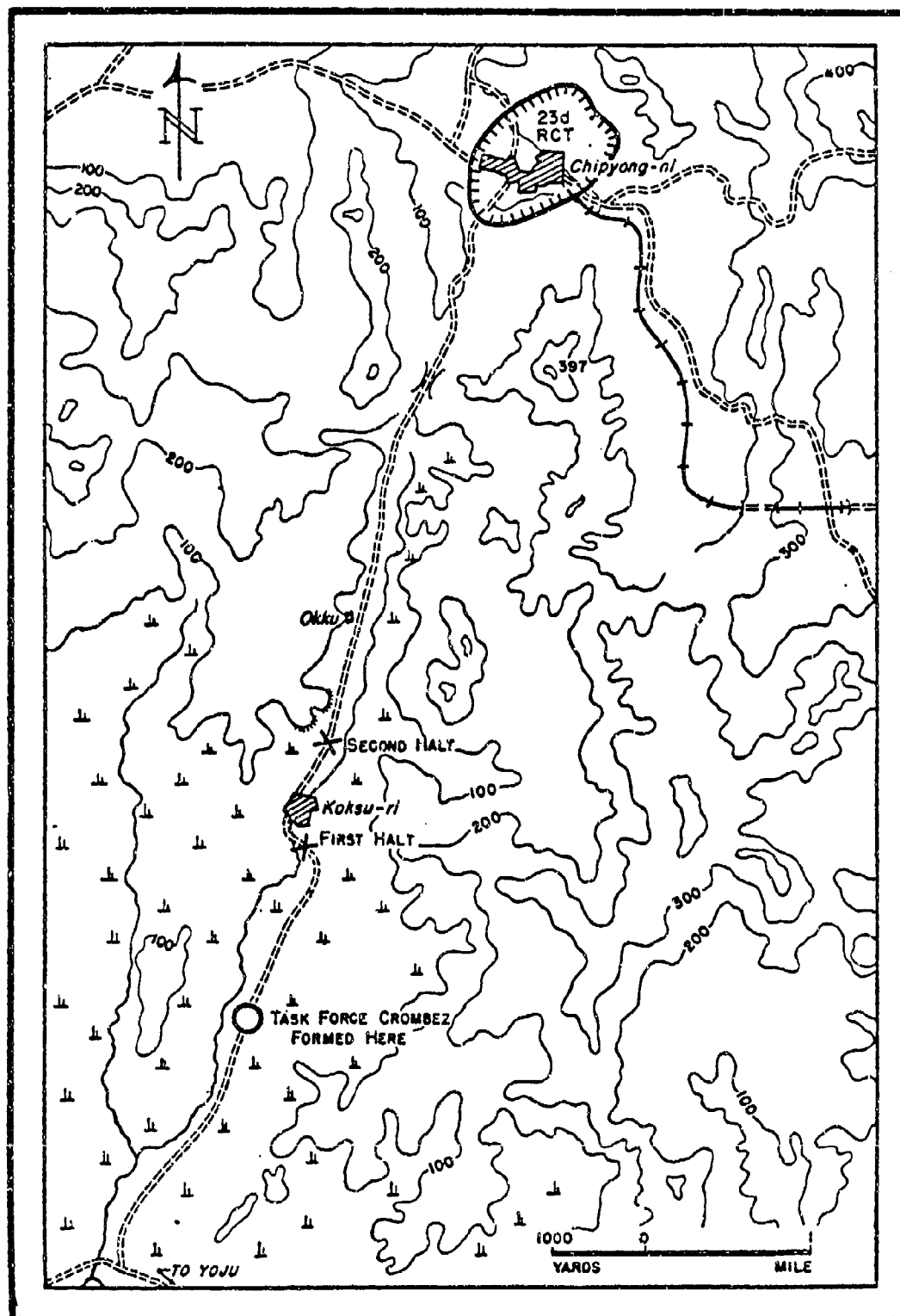
While the 23d Regimental Combat Team, surrounded by Chinese Communists at Chipyeong-ni, braced itself for the second night of the siege, a regiment of the 1st Cavalry Division set out on a sort of rescue mission: to drive through enemy lines, join the encircled unit and give it all possible assistance. Specifically, it was to open the road for supply vehicles and ambulances.

On 14 February 1951, the 5th Cavalry Regiment was in corps reserve when the commanding general of U.S. IX Corps (Maj. Gen. Bryant E. Moore) alerted it for possible action. It was midafternoon when he first telephoned the regimental commander (Col. Marcel G. Crombez) warning him to make plans for an attack along the road running from Yaju to Koksu-ri and then northeast into Chipyeong-ni--a road distance of fifteen miles. Another force, attacking along the better and more direct road to Chipyeong-ni, had been unable to make fast enough progress because of heavily entrenched enemy forces along its route.

Immediately relaying the warning order to subordinate units, Colonel Crombez organized a task force.

In addition to the three organic infantry battalions of the 5th Cavalry, he included a medical company, a company of combat engineers, two battalions of field artillery of which one was equipped with self-propelled howitzers, two platoons of medium tanks, and an attached company of medium tanks. The last named--Company D, 6th Tank Battalion--was not a part of the 1st Cavalry Division, but happened to be located closer than any other available tank company. General Moore attached Company D to 5th Cavalry and ordered it to get under way within minutes to join that unit. Company D was on the road twenty-eight minutes later. At 1700 that afternoon, the corps commander again called.

"You'll have to move out tonight," he told Colonel Crombez, "and I know you'll do it."



In the darkness, trucks and vehicles formed a column along the narrow, rutted road, snow covered and patched with ice. Moving under blackout conditions and in enemy territory, all units except the two artillery battalions crossed the Han River and advanced approximately half of the distance to Chipyeong-ni. About midnight the regimental column halted at a destroyed bridge where units formed defensive perimeters while combat engineers rebuilt the structure.

At daylight on 15 February, the 1st Battalion jumped off again--this time on foot. Its mission was to seize a terrain feature on the right which dominated the road for several miles to the north. When the battalion was engaged after moving a hundred or two hundred yards, Colonel Crombez sent the 2d Battalion to attack north on the left side of the road. Within an hour or two a full-scale regimental attack was in progress. Two artillery battalions supported the action, lifting their fire only for air strikes. Chinese resistance was firm. Observers in airplanes reported large enemy forces north of the attacking battalions.

The advance lagged throughout the morning. Sensing that the enemy offered too much opposition for the infantry battalions to be able to reach Chipyeong-ni by evening, Colonel Crombez decided that only an armored task force would be able to penetrate the enemy-held territory. With corps and division headquarters pressing for progress, Colonel Crombez separated the tanks--a total of twenty-three--from his regimental column, and organized an armored task force. The tanks came from Company D, 6th Tank Battalion, and Company A, 70th Tank Battalion. He also ordered a company of infantrymen to accompany the tanks in order to protect them from fanatic enemy troops who might attempt to knock out the tanks at close range. This task fell to Company L, 5th Cavalry Regiment. In addition, four combat engineer soldiers were ordered to go along to lift any antitank mines that might be discovered. The engineers and the infantrymen were to ride on top of the tanks.

While the tanks maneuvered into position, Colonel Crombez reconnoitered the road to Chipyeong-ni by helicopter. It was a secondary road even by Korean standards; narrow, with mountain slopes on the left side and flat rice paddies on the right, except at a deep roadcut a mile south of Chipyeong-ni where, for a short distance, steep cliffs walled both sides of the road.

Meanwhile, the Company L commander (Capt. John C. Barrett) and the commander of Company D, 6th Tank Battalion (Capt. Johnnie M. Hiers), worked out the plans at company level. The two officers agreed that when the tanks stopped, the troopers would dismount, deploy on both sides of the road, and protect the tanks and the engineers who might be lifting mines. When the tank column was ready to proceed, Captain Hiers would inform the tankers by radio; the tankers, in turn, would signal the troopers to remount.

The M46 tanks of the 6th Tank Battalion were placed to lead the 70th Tank Battalion's M4A3 tanks because the M46s mounted 90mm guns, could turn completely around in place (an important consideration in the mountainous terrain traversed by a single and narrow road), and had better armor protection than the M4A3 tanks, which mounted only 76mm guns.

Original plans called for a separate column of supply trucks and ambulances to follow the tanks. Colonel Crombez, however, doubted if such a column could get through. He decided to proceed with only the armored vehicles. When the road was clear and suitable for wheeled traffic, he would radio instructions to the supply vehicles and ambulances. By radio he informed the commanding officer of the 23d RCT that he was coming, but without the supply trains.

"Come on," the commander of the encircled force answered; "trains or no trains."

Just before the task force left, the commander of the 3d Battalion, 5th Cavalry (Lt.Col. Edgar J. Treacy, Jr.) arranged for a 2 1/2-ton truck to follow the rear of the tank column and pick up any wounded men from Company L. The Company L commander (Captain Barrett) issued instructions that any troopers who became separated from the tank column were to make their way back to friendly lines if possible, or wait near the road, utilizing the best available defensive positions, until the tanks returned from Chipyeong-ni later in the day.

About 1500 Captain Barrett mounted his company on the tanks in the center of the column, leaving four tanks at each end of the column bare. The four engineer soldiers rode on the second tank in the column. Thus, 15 tanks carried 160 Company L infantrymen. The infantry platoon leaders selected one man on each tank to fire the caliber .50 machine gun mounted on its deck. Captain Barrett rode on the sixth tank in line, along with ten enlisted men and Colonel Treacy who, at the last minute, decided to accompany the task force.

Planes strafed and bombed enemy positions along the route of march before the armored column took off. The two infantry battalions maintained strong pressure to keep the Chinese occupied and to prevent them from drawing off any strength to throw against the task force. With Colonel Crombez riding in the fifth tank, the mile-long column got under way at 1545 on 15 February. Liaison planes circled overhead, maintaining contact with the advancing tanks.

The task force, with fifty-yard intervals between tanks, proceeded about two miles--until the lead tank approached the village of Koksuri. All of a sudden, enemy mortar shells began exploding near the tanks, and enemy riflemen and machine gunners opened fire on the troopers exposed on the decks. Just then the lead tank stopped at a

bridge bypass on the south edge of Koksuri, and the entire column came to a halt. The tankers turned their guns toward Chinese whom they could see clearly on nearby hills and opened fire with their machine guns and cannons. Several troopers, wounded by the first burst of enemy fire, fell or were knocked from the tanks. Others left the tanks, not so much to protect them as to take cover themselves. Colonel Crombez directed the tank fire.

"We're killing hundreds of them!" he shouted over the intertank communications.

After a few minutes, however, feeling that the success of the task force depended upon the ability of the tanks to keep moving, Colonel Crombez directed them to continue.

Without warning, the tanks moved forward. The troopers raced after the moving tanks but, in the scramble, thirty or more men, including two officers of Company L, were left behind. The truck following the tanks picked up three wounded men who had been left lying near the road. This truck, however, was drawing so much enemy fire that other wounded men preferred to stay where they were. After both officers in the group were wounded by mortar fire, MSgt. Lloyd L. Jones organized the stranded men and led them back toward their own lines.

There was another halt just after the column passed through Koksuri, and again the infantrymen deployed. Against the intense enemy fire the tankers and infantrymen fired furiously to hold the enemy soldiers at some distance. For the second time, the tanks began moving without notifying the infantrymen, and again many Company L men were unable to remount. Some troopers were deployed 50 or 75 yards from the road and the tanks were going too fast to remount by the time the men got back to the road. Less than seventy men were left on the tanks when Task Force Crombez moved out after the second halt. Another large group of men was left to seek cover or to attempt to rejoin friendly units south of Koksuri. Several men from this group, including the commander of the 3d Battalion (Colonel Treacy) are known to have become prisoners of the Chinese.

Captain Barrett was unable to remount the tank upon which he had been riding, but he did manage to climb on the fifth or sixth tank behind it.

During the next three or three and a half miles there were several brief halts and almost continuous enemy fire directed against the column whether it was halted or moving. Several times, in the face of heavy enemy fire, tank commanders inquired if they should slow down or stop long enough to shell and silence the Chinese guns. Although

enemy fire was causing many casualties among the troopers who remained on the tanks, Colonel Crombez, speaking in a calm and cool voice over the radio network, each time directed the column to continue forward.

Task Force Crombez, in turn, maintained a volume of rifle, machinegun, and cannon fire that, throughout the six-mile attack, could be heard by members of the infantry battalions still in position at the task force point of departure. Much of this fire was directed only against the bordering hills, but there were also definite targets at which to aim—enemy machine guns, bazooka teams, and individual Chinese carrying pole or satchel charges. Even though it was difficult to aim from moving tanks, the remaining troopers kept firing—at Chinese soldiers who several times were within fifty yards of the road. On one occasion Captain Barrett shot and killed three enemy soldiers who, trotting across a rice field toward the tanks, were carrying a bangalore torpedo.

Because of the intense enemy fire on the road, Colonel Crombez decided that wheeled traffic would be unable to get through. When he had gone about two thirds of the way to Chipyeong-ni, he radioed back instructions to hold up the supply trucks and ambulances and await further orders.

The Chinese made an all-out effort to halt Task Force Crombez when the leading tanks entered the deep roadcut south of Chipyeong-ni. For a distance of about 150 yards the road passed between steep embankments that were between 30 and 50 feet high. And on each side of the road at that point were dominating hills, the one on the right (east) side of the road being Hill 397 from which the Chinese had launched several of their attacks against the Chipyeong-ni perimeter. There was a sudden flare-up of enemy fire as the point tank (commanded by Lt. Lawrence L. DeSchweinitz) approached the cut. Mortar rounds exploded on and near the road. SFC James Maxwell (in the second tank) spotted an enemy soldier carrying bazooka along the top of the embankment at the roadcut. He immediately radioed a warning to Lieutenant DeSchweinitz, but before he got the call through a bazooka round struck the point tank, hitting the top of the turret and wounding DeSchweinitz, the gunner (Cpl. Donald P. Harrell), and the loader (Pvt. Joseph Galard). The tank continued but without communication since the explosion also destroyed its radio.

The four members of the engineer mine-detector team rode on the next tank line (Sergeant Maxwell's). They clung to the tank as it entered the zone of intense enemy fire. An antitank rocket or pole charge exploded on each side of Maxwell's tank as it entered the pass and one of the engineers was shot from the deck, but the vehicle continued, as did the next tank in the column.

Captain Hiers (tank company commander) rode in the fourth tank that entered the road cut. Striking the turret, a bazooka round penetrated the armor and exploded the ammunition in the ready racks inside. The tank started to burn. The men in the fighting compartment, including Captain Hiers, were killed. Although severely burned, the driver of the tank (Cpl. John A. Calhoun) gunned the engine and drove through the cut and off the road, thus permitting the remainder of the column to advance. It was later learned that this tank was destroyed by an American 3.5-inch bazooka which had fallen into enemy hands.

With the enemy located at the top of the cliffs directly overlooking the task force column and throwing satchel charges and firing rockets down at the tanks, close teamwork among the tankers became particularly necessary for mutual protection. As each of the remaining tanks rumbled through the cut, crews from the tanks that followed and those already beyond the danger area fired a heavy blast at the embankments on both sides of the road. This cut down enemy activity during the minute or less required for each tank to run the cut. The enemy fire did, however, thin out the infantrymen riding on the tanks and, at the tail of the task force, flattened a tire on the 2 1/2-ton truck that had been gathering up the wounded infantryman who had either fallen or been knocked from the tanks. The driver had been hit near Koksuri as he was putting a wounded infantryman on the truck. Another wounded man (SFC George A. Krizan) drove after that and, although he was wounded a second time, continued driving until the truck was disabled at the roadcut. A few of the wounded men managed to get to one of the last tanks in the column, which carried them on into Chipyeong-ni. The others, surrounded by the enemy, became missing in action.

Meanwhile, within the perimeter of the 23d RCT at Chipyeong-ni, the 2d Battalion was fighting off stubborn and persistent enemy attempts to overrun the sector shared by Company G, 23d Infantry, and Battery A, 503d Field Artillery Battalion, on the south rim of the perimeter. Late in the afternoon of 15 February, after twenty hours of uninterrupted fighting, the battalion commander managed to send four tanks a short distance down the road leading south beyond the regimental defense perimeter with the mission of getting behind the Chinese and firing into their exposed flank and rear. Ten or fifteen minutes of firing by the four tanks appeared to have suddenly disrupted the Chinese organization. Enemy soldiers began running.

Just at that moment, tanks of Task Force Crombez appeared from the south. Sergeant Maxwell, in the second tank, saw the four tanks on the road ahead and was just about to open fire when he recognized them as friendly. The leading tanks stopped. For about a minute everyone waited, then Sergeant Maxwell dismounted and walked forward to make contact with the 23d Infantry's tanks. He asked them to withdraw and allow Task Force Crombez to get through.

By this time the Chinese were in the process of abandoning their positions south of Chipyeong-ni and many were attempting to escape. Enemy opposition dwindled. With enemy soldiers moving in the open, targets were plentiful for a short time and Colonel Crombez halted his force long enough to take the Chinese under fire.

At 1700 Task Force Crombez entered the Chipyeong-ni perimeter. It had required an hour and fifteen minutes for the tanks to break through a little more than six miles of enemy territory. Even though there were neither supply trucks nor ambulances with the column, and although the task force itself was low on ammunition, infantrymen were cheered by the sight of reinforcements.

Of 160 Company L infantrymen plus the 4 engineers who had started out riding the tank decks, only 23 remained. Of these, 13 were wounded, of whom 1 died of wounds that evening. Some members of that company already had returned to join the remainder of the 3d Battalion near the point of departure; a few wounded men lay scattered along the road between Koksuri and Chipyeong-ni. While crossing the six miles of drab and barren country between those two villages, Company L lost about 70 men--nearly half of its strength. Twelve men were dead, 19 were missing in action, and about 40 were wounded.

With only half of daylight remaining, Colonel Crombez had to choose between returning at once to his regiment, or spending the night at Chipyeong-ni. Any enemy opposition encountered on a return trip that evening would probably delay into darkness the contact with friendly forces, and unprotected tanks operating in the darkness, he reasoned, could be ambushed easily by enemy groups.

On the other hand, the 23d RCT was dangerously low on small-caliber ammunition, airdrops that day having contained only artillery shells. Task Force Crombez had fired most of its ammunition during the action. Officers inside the perimeter wondered if there were enough small-arms ammunition to beat off another Chinese attack.

There was another reason for returning. Seriously wounded infantrymen within the perimeter urgently needed to be evacuated. It was also probable that men from Company L who had been wounded or stranded during the attack by Task Force Crombez were waiting near the road, according to their instructions, hoping to be picked up again as the tanks made the return trip. However, weighing the two risks, Colonel Crombez chose to stay. He arranged to station his tanks around the perimeter to strengthen the defense, but no attack came. Except for a few flares that appeared over enemy territory, the night passed quietly. Toward morning it began to snow.

At 0900, 16 February, the scheduled time for return to the regiment, Colonel Crombez informed his assembled force that the return trip would be postponed because the snow, reducing visibility at times to less than a hundred yards, prevented air cover. It was 1100 before the weather cleared and the task force was reassembled. This time Colonel Crombez stated that only volunteers from the infantrymen and the engineer mine-detecting crew would ride on the tanks. None volunteered. Instead, an artillery liaison plane hovered over the column as it moved south. The observer in the plane had instructions to adjust proximity-fuzed shells directly on the column if the enemy attempted to destroy any of the tanks. On the return trip not a single enemy was seen, nor a shot fired.

Immediately upon his return Colonel Crombez ordered the assembled supply train to proceed to Chipyeong-ni. Escorted by tanks, twenty-eight 2 1/2-ton trucks and nineteen ambulances pulled out in the middle of the afternoon. For his part, Captain Barrett (the Company L commander), having returned with the task force because he wanted to find out what had happened to the rest of his company, set out in a jeep to retrace the route and search for wounded men who might still be lying at Chipyeong-ni. The ambulances and seven 2 1/2-ton trucks, all loaded with wounded men from the 23d Regimental Combat Team, left Chipyeong-ni that evening.

ANALYSIS

The few details in the narrative concerning the situation before the departure of Task Force Crombez do not permit sound criticism. However, it does appear that either the enemy was underestimated or friendly capabilities for attacking were overestimated. It hardly seems likely that foot soldiers fighting a determined enemy in the rough terrain of Korea could be expected to advance fifteen miles to Chipyeong-ni in one day.

Simplicity is a virtue applied to military operations. It means that units and individuals have but a limited number of clearly defined moves to make or jobs to do. It is not confined to brevity in orders; sometimes the simplest maneuver is simple only when detailed orders are issued to all participants. Simplicity of execution usually results from comprehensive and careful planning, which is frequently time-consuming and not simple. But the complexities of planning are relatively unimportant. It is for simplicity of execution that commanders must strive. The mission assigned Task Force Crombez was simple to state but difficult to execute. Task Force Crombez accomplished its mission but it paid an extremely high price. The cost can be attributed to inadequate planning and subsequent lack of coordination.

Plans must be based on intelligence of the enemy, an evaluation of the terrain, and a knowledge of one's own capabilities. Hindsight clearly indicates that in this instance not one soldier should have ridden on top of the tanks. Friendly artillery and the tanks with their own machine guns could have provided adequate close-in protection for the armored column. No engineers were necessary to remove mines.

Coordination is neither accidental nor automatic. It comes with training, experience, and planning. When trained and experienced troops fail to coordinate their efforts, the failure must be attributed to a lack of planning. Complete lack of artillery support contributed to the difficulties of Task Force Crombez. Coordination between the artillery commanders supporting the 5th Cavalry and the 23d Infantry could have provided artillery support over the entire distance—from the point of departure to Chipyong-ni. The absence of coordination between the tanks and their riders is outstanding. Communication failures on two different occasions further point up deficiencies in planning and coordination.

TANK SUPPORT

Members of Company A, 89th Medium Tank Battalion, crawled out of their sleeping bags at 0330 on 7 March 1951. Breakfast was scheduled at 0345, the attack at 0615.

It was snowing. The heavy wet flakes, which melted soon after they fell, made the ground wet and slippery. Through the darkness and the usual early morning fog, the drivers went off to start the engines of their tanks so that they would warm up during breakfast.

Bivouacked in the half-destroyed village of Kwirin-ni, Company A was ready to move as soon as the men finished breakfast and rolled up their sleeping bags. The company's 15 tanks and 1 tank recovery vehicle were dispersed among the buildings of the village, carefully located so that each would occupy its designated position in the column when it moved onto the road. The vehicles were already loaded with ammunition, carrying, in addition to the regular load of 71 rounds, 54 rounds that each crew had stacked on the rear deck of its tank. Fastened to the eight tanks that were to be at the head of the column were trailers, each carrying nested twelve-man assault boats.

Company A's mission for 7 March 1951 was to support the 35th Infantry (25th Infantry Division) in its assault crossing of the Han River. For the operation the tank company was attached to the infantry regiment, and further detailed to support the 3d Battalion. Orders for the crossing, originating at Eighth Army, reached the 35th Infantry on 2 March. Regimental and battalion officers had begun at once to plan for the crossing and to train troops in the use of assault boats. Commanders, flying in liaison planes above the river, had searched for possible crossing sites. The Intelligence and Reconnaissance Platoon patrolled the south bank of the river to get specific information.

Since the engineers had estimated that the Han River would be 7 to 9 feet deep at the time of the crossing, division and regimental orders included no plan to get tanks across the river during the assault phase. There was a plan, however, to construct a fifty-ton-capacity floating bridge, which the engineers anticipated would be in use by early evening of the first day of the assault. After delivering fire across the river in support of the infantry crossing, the tanks were to continue direct fire support of the ground movement until they cross on the bridge.

As the planning progressed, Lt.Col. Welborn G. Dolvin (commander of the 89th Tank Battalion) considered the possibility of getting tanks across the river in time to give close and effective support while the infantrymen were expanding their bridgehead. After reconnoitering the river bank and making several flights over the

area, Colonel Dolvin suggested this possibility to the commander of Company A (Capt. Herbert A. Brannon). He did not order Captain Brannon to attempt the crossing but only suggested that he fully investigate the possibilities, and that the advantages of giving tank support when the infantrymen most needed it warranted the risk involved.

"It's worth a gamble." Dolvin said.

Captain Brannon went to the engineers for more information about the depth of the water and the condition of the river bottom. Unfortunately, there was scant information on either, since the Chinese kept the river effectively covered with machine-gun fire both day and night. Captain Brannon studied aerial photographs of the crossing site and decided to gamble one tank on the crossing.

On 4 March Brannon moved his tank company into a forward assembly area at Kwirin-ni about two miles from the propose crossing site. That evening he called his platoon leaders to his mud hut and told them he intended to attempt to ford the river. His plan was to send one tank, towing a cable from the winch of the tank recovery vehicle, across the river. If the water prove to be too deep and the tank swamped out, the recovery vehicle on the south bank could pull it back. If the tank made it to the north bank, the others would follow the same route. The leader of the 3d Platoon (Lt. Thomas J. Allie) volunteered to take the first tank into the water.

The next morning Captain Brannon made a reconnaissance of the south bank of the Han. Hills and embankments on the right and in the central part of the regimental zone fell abruptly to the river. Only on the left, in the 3d Battalion's sector, were the banks gentle enough to permit a crossing. This area, at the point where the Pukhan River joins the Han, was of necessity the crossing site for all assault units of the 35th Infantry. About a thousand yards upstream from the confluence of the rivers, there was a small, flat island dividing the Han into two channels, the near about 250 feet wide and the far about 200.

Captain Brannon walked along the river bank until he was opposite the island or sand bar. Aerial photographs indicated he would find the most promising route at the west end of this island. After choosing a route for the tank crossing, he selected positions from which all three platoons could best support the crossing of the infantrymen.

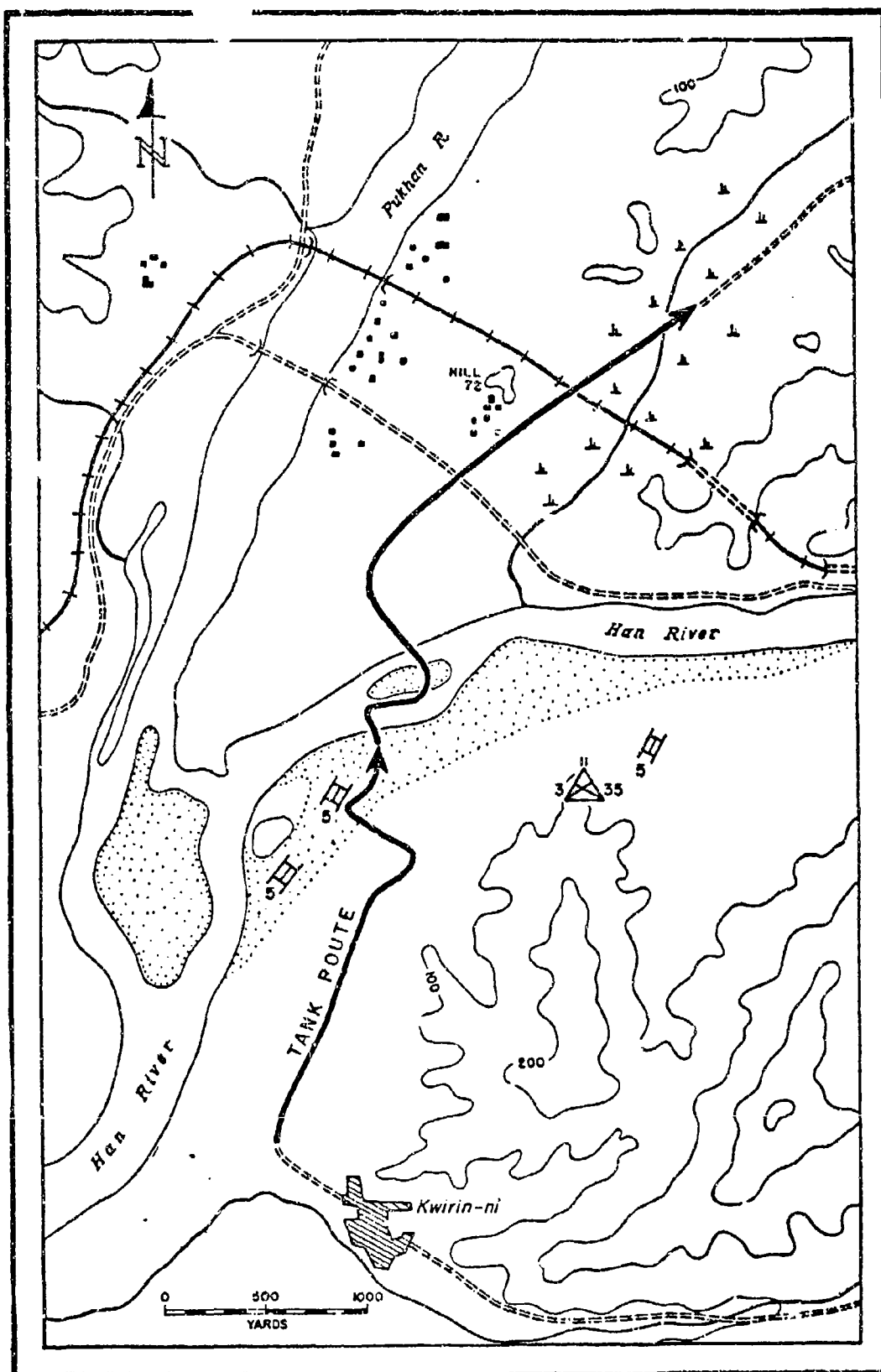
Since all movement to the river bank on 7 March would be hidden by darkness, tank platoon leaders, accompanied by Captain Brannon, made their own reconnaissance on 6 March, locating the routes and the positions they would occupy.

Engineers, responsible for furnishing and manning the assault boats, asked Captain Brannon to haul these craft to the river bank. There were two reasons for this: the engineers feared their trucks would get stuck in the loose sand near the river, and the regiment was anxious to have as few vehicles as possible on the roads leading to the crossing site on the morning of the assault. Each trailer carried five assault boats. Engineers were to ride on the trailers to the crossing site, unhook them, and then remain until the infantrymen arrived to put the boats into the water. After dropping the trailers, the tanks would proceed to their selected positions and prepare to fire. The schedule called for the tanks to fire a two-minute preparation beginning at 0555. At 0615 infantrymen of the 3d Battalion, 35th Infantry, would push the assault boats into the water and row toward the hostile north bank of the river.

Quietly, early on the morning of 7 March, Company A tankers finished breakfast, rolled up their sleeping bags, and then moved the tanks onto the road. When Captain Brannon ordered the column forward at 0430, it had stopped snowing. The tanks moved slowly; the tank commanders did not want to make unnecessary noise by racing the engines, and it was too dark at the time for the driver to see more than the outline of the road.

Exactly as planned, the tank column proceeded to the river bank, stopped only long enough for the engineers to uncouple the trailers, then continued by platoons to firing positions. It was about 0545. From across the river came the sound of occasional shell bursts. The preparation fire was not scheduled until twenty minutes before jump-off. At 0555 four battalions of 105mm howitzers, a battalion of 155mm howitzers, and a regiment of British guns commenced firing on previously designated targets. Captain Brannon's tank opened direct fire against targets on the north bank of the Han. For this fire, the crews used the ammunition loaded on the rear decks of the tanks, keeping the regular load of ammunition for use if they could successfully ford the river.

It was still so dark that the tankers could see only the hazy outline of hills across the river. At 0615, on schedule, infantrymen pushed assault boats into the water, and the assault wave, still partly hidden from the enemy by the dim half-light of early morning, started across the river. The infantrymen crossed several hundred yards below the sand bar, following a different route than that the tankers expected to take.



The crossing progressed on schedule although enemy machine-gun fire punched small holes in several of the boats, wounding some of the occupants. Once across the river, the assault companies came under concentrated small-arms fire soon after leaving the gentle rise on the north river bank. At the same time, enemy artillery fire began falling on the south bank. Besides interfering with activities on that side of the river, the fire destroyed sections of a foot bridge then under construction.

Lt.Col. James H. Lee (infantry battalion commander) and Captain Brannon watched the river-crossing operation from the battalion's observation post. At 0740, when he received word that all assault units of his battalion were across, Colonel Lee, who was skeptical of the success of the crossing, told Captain Brannon that the north bank was secure. "You can try crossing if you wish."

Captain Brannon called Lieutenant Allie, who had offered to take the first tank into the water.

Already within two hundred yards of the river, the two vehicles moved to the edge of the water and stopped to connect the winch cable from the recovery vehicle to Lieutenant Allie's tank. About 0800 Allie's tank went into the water, heading toward the west (downstream) end of the sandy island near the middle of the river. Lieutenant Allie stood erect in the open hatch, calling out instructions to the driver over the tank intercommunication system. The water was only about three feet deep, and since the Sherman tank was designed to ford water to that depth, there was no difficulty except that the speed of the tank, limited by the speed at which the motor-driven winch on the recovery vehicle could pay out the cable, was slow. After the tank had gone two thirds of the distance to the island, the winch suddenly caught. The moving tank dragged the other vehicle for several feet, and then the cable broke, pulling apart at the coupling fastened to Lieutenant Allie's tank. Relieved to find the tank able to move freely, the tank driver (Sgt. Guillory Johnson) increased his speed. Within a few minutes after leaving the south bank, the tank reached the lower end of the sand bar.

Originally, Lieutenant Allie had planned to proceed straight across, but once on the island, he could see at its east end what appeared to be footings for an old bridge. Crossing to the up-river end of the island, Lieutenant Allie turned into the water again. The tank dipped steeply into water that momentarily covered the hatches over Sergeant Johnson and his assistant driver, wetting both men. An experienced tank driver, Johnson at once increased the speed of the tank to keep the water from closing in behind the tank and drowning out the engine. The tank climbed out of the water at each of the three old earthen bridge footings but, after a few seconds, it would

plunge again into the water deep enough to come up to the turret ring. Nevertheless, after being in the water for two minutes or less, the tank reached the opposite bank.

After redicing back for the next tank in line to follow, Lieutenant Allie moved forward a short distance and then waited for the rest of his platoon. SFC Starling W. Harmon, following the same route with his tank, joined his platoon leader within five minutes. Wanting to have only one tank in the river at a time, Lieutenant Allie waited until Sergeant Harmon was on the north bank of the Han River before calling for the third tank. Because its escape hatch had jarred loose during the firing that morning, the third tank flooded out and stalled in the comparatively shallow water south of the island. Lieutenant Allie ordered his two remaining tanks, one at a time, to proceed around the stalled tank and cross.

With two tanks, Lieutenant Allie set out at 0830 to join the infantry. Having advanced a little more than a thousand yards, the infantrymen had stalled temporarily near a road that cut across the tip of land between the Pukhan and the Han. Enemy fire coming from a small hill and from a railroad embankment six hundred yards ahead had stopped them. The two tanks moved forward, directing their fire against the small hill. When fire from the hills stopped, the two tank crews turned their cannon toward the railroad embankment. There were six freight cars standing on the tracks. They had been burned and shot up, apparently during an air raid. The Chinese had placed three machine guns to fire under the cars into the area to the south. With their own machineguns and 12 or 15 rounds from their cannon, the tank crews quickly silenced the enemy guns. The infantrymen moved up even with the two tanks, a gain of six hundred yards. As the infantrymen moved beyond the railroad tracks, following the two tanks which ranged ahead, three other enemy machine guns commenced firing. Lieutenant Allie spotted one, laid on it with the 76mm gun and fired two rounds, the second of which threw parts of bodies and weapons into the air. The other two tanks of Lieutenant Allie's platoon arrived in time to take part in the firing, and a tank commanded by MSgt. Curtis D. Harrell located and silenced another machine gun. Then, all four tanks raked the enemy positions with their coaxial machine guns during a thirty-minute period while the front line advanced approximately seven hundred yards to the objective.

In the meantime, as soon as Lieutenant Allie's tanks were on the north bank, Captain Brannon started another platoon across. Within twenty minutes these five tanks were moving forward to support another infantry company and the last platoon of tanks began to cross. By 1000 all Company A's tanks except one were moving forward with the assault companies; by noon Colonel Lee's 3d Battalion had reached its objective. The remaining tank, which had flooded out earlier in the morning when its escape hatch fell out, was repaired by midafternoon and successfully crossed the river.

The river crossing was a success and, as Colonel Lee believed, the close support furnished by the tanks was a big factor in the outcome of the operation.

ANALYSIS

Too often there are recorded in tales of battle instances of commanders failing to remember the principle of the objective. Obstacles and fleeting attractions divert them from the accomplishment of their missions. A successful commander will always engage in a relentless pursuit of the end to be gained, but he will not be stubborn without reason. Rather, he tempers his tenacity with a spirit of adaptation to the fluid circumstances of the battlefield. Only explicit orders from a superior commander will relieve him from bending every effort of his command to the mission.

Captain Brannon and Lieutenant Allie were not content with a mere routine execution of close support. Once assigned their mission they showed courage, initiative, resourcefulness, and resolution in accomplishing it. When Scharnhorst was asked to comment on the appointment of Blucher to high command in the German Army, he wrote, "Is it not the manner in which the leaders carry out the task of command, of impressing their resolution in the hearts of others, that makes them warriors far more than all other aptitudes or faculties which theory may expect of them?"

COMPANY A, 72ND TANK BATTALION:
COMBAT LEADERSHIP

During the period 23 April - 30 June 1951 the 72d Tank Battalion was broken down with Company A attached to the 27th British Brigade in IX Corps, while the remainder of the battalion was with the US 2d Division in X Corps.

The action started with Company A of the 72d during the afternoon and evening of 23 April 1951, Company A (-3d Platoon) 72d Tank Battalion and the RAR Battalion of the 27th British Commonwealth Brigade moved into positions north of CHERYONG-NI, Korea, in order to cover the withdrawal of the ROK 6th Division. At 232100 elements of the ROK 6th Division began a withdrawal south through the positions held by Company A 72d Tank Battalion and the RAR Battalion. Leading elements of attacking CCF forces were in contact with the rear withdrawing elements of the ROK 6th Division.

The tank company had placed his platoons so that the 4th Platoon was in a blocking position on the only north-south road in the area. The 1st Platoon was in position on high ground flanking the north-south road on the west and south of the 4th Platoon blocking position.

The RAR Battalion was deployed on the ridge flanking the north-south road on the east. The 2d Platoon and the company commander's command tank were deployed at a crossroad to the south of the other tank positions where the north-south road joined the northwest-southeast road. The latter road was being used by elements of the ROK 6th Division as an avenue of withdrawal.

The first CCF patrol hit and was destroyed by the 4th Platoon at its blocking positions at 232100. At about 232300 large numbers of CCF heavily attacked the friendly positions. One force struck directly at the 4th Platoon positions. The platoon leader was mortally wounded. He died almost immediately, but not before issuing the order to his platoon to make a fighting withdrawal to previously prepared alternate positions with the 2d Platoon. Three other tank commanders were seriously wounded in the attack which enveloped the 4th Platoon. However, the platoon was able to withdraw to the positions designated by the platoon leader.

Concurrently with the attack on the 4th Platoon, other elements of the advancing CCF circled around the hill mass into the area west of the road. These CCF by-passed the 1st Platoon, which could not locate the enemy below because of the lack of any kind of natural or artificial illumination. This attacking force swept around the hill mass and swung again to the east to strike at the 2d Platoon positions

which were soon surrounded and infiltrated. The enemy then swept on to overrun the RAR Battalion CP that was located well to the rear of the 2d Platoon's position.

However, under orders from the company commander, the tanks remained in position. During the initial stages of this fight at the 2d Platoon position, tanks from the withdrawing 4th Platoon appeared on the scene, moving south from their former outpost position. The company commander dismounted from his tank, moved under extremely heavy enemy fire to reach the leading tank of the 4th Platoon. Upon learning of the heavy casualties in the platoon, he ordered all the wounded and dead, which included four of the five tank commanders, loaded on three of the tanks and ordered the tanks to run through the enemy force and return the wounded to the company trains area for treatment. He also instructed the ranking NCO to obtain replacement crews from the company headquarters personnel and return immediately to the scene of the battle.

The company commander then placed the remaining two tanks of the 4th Platoon in position with the 2d Platoon; and then, still under heavy enemy fire, returned to his command tank and continued to direct the action of his company. At one time the enemy succeeded in setting up a machine gun emplacement between the command tank and that of the 2d Platoon leader. This gun was reduced by the tank fire. The Chinese attempted to mount the tanks and destroy them with grenades and satchel charges but were destroyed by fire from the surrounding tanks. One tank received a direct hit from a 3.5" rocket launcher that killed the loader and mortally wounded the tank commander. However, the position of the tanks was so completely encircled by this time that it was impossible to evacuate either of these two men or any of the other less seriously wounded. The fighting continued with unabated fury until daylight.

At dawn the OCF began to withdraw. As they attempted to pull back to the west of the hill mass around which they had attacked the night before, the 1st Platoon opened fire. This placed the enemy force in a crossfire from 16 tanks, for by this time the three tanks of the 4th Platoon had returned to the 2d Platoon positions after fighting back up the entire length of the route. This crossfire into the withdrawing enemy continued until all targets were either destroyed or dispersed. It was later determined that more than 500 enemy were killed in this action.

At this time the tanks, then dangerously low on ammunition, were ordered to withdraw by the commander of the 27th BCB. The RAR Battalion was also ordered to withdraw but the enemy was still surrounding their position and prevented their movement.

The company commander led his company to the trains area. This withdrawal was conducted under automatic weapons and mortar fire from

enemy positions which had been established on the high ground flanking the road leading south to KAPYONG. At the company trains area the tanks were refueled and resupplied with ammunition.

The company commander was informed about 241000 that approximately 50 friendly vehicles belonging to the 2d Chemical Mortar Battalion and Company B, 74th Engineer (C) Battalion had been abandoned in a area immediately south of the company's previous positions. Organizing volunteer drivers and "shotgun" riders from Company B, 74th Engineer (C) Battalion for these vehicles, he had them mount the tanks and advance north to the area where the vehicles were located. On arrival at the area of the abandoned vehicles, the tank company commander deployed his company in a semi-circle to cover the manning and evacuation of the abandoned vehicles. The tank company then escorted the vehicles back to the friendly lines.

As the company was returning with the retrieved vehicles, the commander of the RAR Battalion stopped the platoon leader of the 1st Platoon and asked him to take ammunition up to cut off units of the RAR. The RAR Battalion Commander, riding as loader in the platoon leader's tank, directed them up to the surrounded positions. Then the platoon leader had his tankers pick up Australian wounded and placed them in and on the tanks of the first platoon. Some tank crewmen got onto the rear decks of the tanks to make room for the wounded inside while the tanks descended from the hills. The wounded were returned to safety. Then the 1st Platoon returned again to cut off positions, delivered more ammunition and brought out more wounded. A total of 16 wounded Australians were evacuated during this action. Two tank crewmen were wounded during this phase of the action by the heavy automatic weapons fire placed on the tanks as they moved back and forth from KAPYONG to the RAR positions at CHERYONG-NI.

About 241100 the plight of the encircled RAR Battalion was reported to the company commander. It still had been unable to disengage from the enemy and withdraw. The tank company advanced back to the CHERYONG-NI crossroads. Covering patrols were dispatched up the north-south road enabling the RAR Battalion to disengage and initiate its withdrawal. The tank company then returned to the company assembly area north of KAPYONG.

About 241300 it was apparent that some relief would have to be sent to the Princess Pat Canadian Light Infantry (PPCLI) Battalion. This unit was located on the high ground south-west of the CHERYONG-NI crossroads. The northwest-southeast road ran to the north of the PPCLI positions. At this time the CCF force had completely surrounded the PPCLI and were exerting heavy pressure on them.

Early on the afternoon of the 24th the tank company commander led a tank counterattack into the area in the rear of the CCF attacking the PPCLI. Moving directly to the north of the surrounded PPCLI under

heavy enemy fire, the tanks placed intense fire on the enemy forces and then withdrew South. Again at daylight on 25 April 1951 the company commander led two more tank counterattacks into the same area, each time directing heavy machine gun and tank cannon fire on the enemy, causing him to divert his effort. These counterattacks, coupled with the action of the PFCLI Battalion in placing continuous fire on the enemy, subsequently resulted in a lessening of enemy pressure and finally in an enemy withdrawal, freeing the PFCLI from its encircled position. The tank company returned to the company assembly area north of KAPYONG at about 251000. The enemy made no further offensive efforts in the CHERYONG-NI area on 25 April.

No tanks were lost during this period although two received AT rocket hits. Personnel casualties were 3 killed, 8 seriously wounded, and 4 slightly wounded. The 3d Platoon of Company A, 72d Tank Battalion did not participate in the action but remained in Corps Reserve at HONGCHON. The company (-3d platoon) entered the action with 19 operational tanks and finished the action with 13 operational tanks.

ANALYSIS

This action demonstrates the utility of the tank-infantry team against greatly superior numbers of light infantry. Co A took up blocking positions, moved to alternate positions made a fighting withdrawal and initiated several counter-attacks during only a several hour period. Calm and courageous leadership from the company commander probably saved one of his platoons from annihilation.

CHAPTER 4

VIETNAM



SU: PT76 76mm 16t Amph. Rct



SU: T54 100mm 38t



US: M50 "Ontos" 106mm RG 9t YD



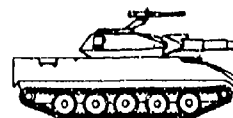
US: M113 MG 11t Amph/APC



US: M41 "Walker Bulldog" 76.2mm 25t



US: M46 90mm 48t



US: XM561 "Sheridan" 152mm 18t Rct

"...EXCEPT FOR A FEW COASTAL AREAS, MOST NOTABLY IN THE I CORPS AREA, VIETNAM IS NO PLACE FOR TANK OR MECHANIZED INFANTRY UNITS."

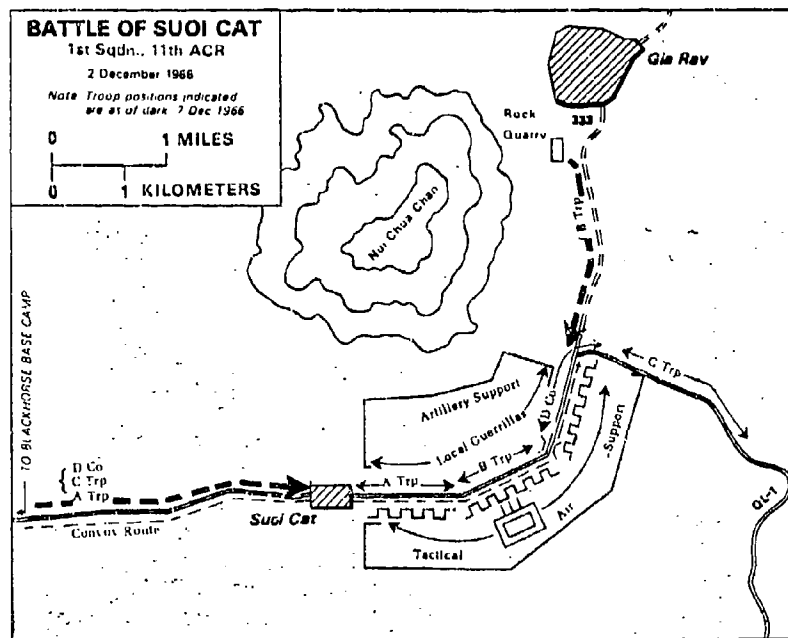
-GEN. WESTMORELAND

1965

SUOI CAT

It was during Operation Atlanta that the 11th Cavalry fought its first major battle. Twice the enemy tried to ambush and destroy resupply convoys escorted by units of the 1st Squadron, but both attempts were defeated by the firepower and maneuverability of the cavalry. The second of these two ambushes took place on 2 December 1966 near Suoi Cat, fifty kilometers east of Saigon. The steps taken in this action illustrate a procedure for dealing with ambushes that became standard in the regiment.

When intelligence reports indicated that there was an enemy battalion in the vicinity of Suoi Cat, the 1st Squadron conducted a limited zone reconnaissance but found no signs of the enemy. Shortly thereafter, on 2 December 1966, Troop A was handling base camp security, Troop B was securing a rock quarry near Gia Ray, and the balance of the squadron was performing maintenance at Blackhorse Base Camp. (Map) Early that morning a resupply convoy from Troop B, consisting of two tanks, three ACAV's (modified M113's) and two 2 1/2-ton trucks, had traveled the twenty-five kilometers from the rock quarry to Blackhorse without incident.



At 1600 the convoy commander, Lieutenant Wilbert Radosevich, readied his convoy for the return trip to Gia Ray. The column had a tank in the lead, followed by two ACAV's, two trucks, another ACAV, and, finally, the remaining tank. Lieutenant Radosevich was in the lead tank, and after making sure that he had contact with the forward

air controller in an armed helicopter overhead, moved his convoy out toward Suoi Cat. As the convoy passed through Suoi Cat, the men in the column noticed an absence of children and an unusual stillness. Sensing danger, Lieutenant Radosevich was turning in the tank commander's hatch to observe closely both sides of the road when he accidentally tripped the turret control handle. The turret moved suddenly to the right, evidently scaring the enemy into prematurely firing a command detonated mine approximately ten meters in front of the tank. Lieutenant Radosevich immediately shouted "Ambush! Ambush! Claymore Corner!" over the troop frequency and led his convoy in a charge through what had become a hail of enemy fire while he blasted both sides of the road. Even as Lieutenant Radosevich charged, help was on the way. Troop B, nearest the scene, immediately headed toward the action. At squadron headquarters, Company D, a tank company, Troop C, and the howitzer battery hastened toward the ambush. Troop A, on perimeter security at the regimental base camp, followed as soon as it was released. The gunship on station immediately began delivering fire and called for additional assistance, while the forward air controller radioed for air support.

When the convoy reached the eastern edge of the ambush, one of the ACAV's, already hit three times, was struck again and caught fire. At this point Troop B arrived, moved into the ambush from the east, and immediately came under intense fire as the enemy maneuvered toward the burning ACAV. Troop B fought its way through the ambush, alternately employing the herringbone formation and moving west, and encountering the enemy in sizable groups.

Lieutenant Colonel Martin D. Howell, the squadron commander, arrived over the scene by helicopter ten minutes after the first fire. He immediately designated National Highway 1 a fire coordination line, and directed tactical aircraft to strike to the east and south while artillery fired to the north and west. As Company D and Troop C reached Suoi Cat, he ordered them to begin firing as they left the east side of the village. The howitzer battery went into position in Suoi Cat. By this time Troop B had traversed the entire ambush area, turned around, and was making a second trip back toward the east. Company D and Troop C followed close behind, raking both sides of the road with fire as they moved. The tanks fired 90-mm. canister, mowing down the charging Viet Cong and destroying a 57-mm. recoilless rifle. Midway through the ambush zone, Troop B halted in a herringbone formation, while Company D and Troop C continued to the east toward the junction of Route 333 and Route 1. Troop A, now to the west of the ambush, entered the area, surprised a scavenging party, and killed fifteen Viet Cong.

The squadron commander halted Troop A to the west of Troop B. Company D was turned around at the eastern side of the ambush and positioned to the east of Troop B. Troop C was sent southeast on Route 1 to trap enemy forces if they moved in that direction. As

Troops A and B and Company D consolidated at the ambush site, enemy fire became intense around Troop B. The Viet Cong forces were soon caught in a deadly crossfire when the cavalry units converged. As darkness approached, the American troops prepared night defensive positions and artillery fire was shifted to the south to seal off enemy escape routes. A search of the battlefield the next morning revealed over 100 enemy dead. The toll, however, was heavier than that. Enemy documents captured in May 1967 recorded the loss of three Viet Cong battalion commanders and four company commanders in the Suoi Cat action.

ANALYSIS

The success of the tactics for countering ambushes developed during Atlanta resulted in their adoption as standard procedure for the future. The tactics called for the ambushed element to employ all its firepower to protect the escorted vehicles and fight clear of the enemy killing zone. Once clear, the cavalry would regroup and return to the killing zone. All available reinforcements would be rushed to the scene as rapidly as possible to attack the flanks of the ambush. Artillery and tactical air would be used to the maximum extent. This technique was used with success by the 11th Cavalry throughout its stay in Vietnam.

AMBUSH

Occasionally an escort or security mission was not successful, and usually intensive after action investigation revealed that the unit had been careless. Such was the case with a platoon of Troop K, 11th Armored Cavalry Regiment, in May 1967. When the smoke cleared from a well-planned Viet Cong ambush, the platoon had paid a heavy price: seven ACAV's had each been hit 10 times by antitank weapons and the lone tank had 14 hits. Of forty-four men in the convoy, nearly half were killed and the remainder wounded. Investigation revealed that the road had been cleared that morning by a responsible unit, but the fact that an ambush was set up later proved that it was dangerous to assume that one pass along a road cleared it of enemy forces. In this case there were further errors of omission. No planned platoon action was put into effect when the enemy attacked; no command and control alternatives were provided in the event of a loss of radio communication; no signals or checks were in effect to alert troop headquarters to the platoon's plight; no artillery or air support was planned for the route of march. The lesson from this disaster was that no mission should be considered routine.

Disasters were uncommon to road security missions, but much could be learned from them. On one occasion the law of averages, troop turnover, and the boredom of a routine task caught up with the 3d Squadron, 5th Cavalry, while it was on road security. This incident in late December 1967 illustrates how overconfidence, poor planning, and lack of fire support could combine to strip the cavalry of its inherent advantages. On 22 December the squadron was to assume responsibility for Operation Kitty Hawk. The squadron staff prepared its plans for convoy escort, with convoys scheduled to move on 27 and 31 December. At the last moment, the 3d Squadron's assumption of the Kitty Hawk mission was delayed until 28 December and the 11th Armored Cavalry Regiment performed the escort duty on 27 December. The two-day delay caused the staff of the 3d Squadron, 5th Cavalry, to be less attentive to the second convoy escort mission on the 31st.

On 28 December the 3d Squadron moved into Blackhorse Base Camp, and the next day the squadron operations officer was reminded of the responsibility for the escort on 31 December. Mission requirements were discussed over unsecure telephone lines by the staffs of the squadron and the 9th Infantry Division, and were then passed to Troop C, which had the mission. The squadron daily staff briefing on 30 December did not include a discussion of the escort mission and the squadron commander remained unaware of it. The Troop C commander, familiar with the area, believed the sector to be relatively quiet, a fatal assumption because combat operations had not been conducted in the area for over thirty days. He planned a routine tactical road march to Vung Tau, sixty kilometers to the south, to rendezvous with the convoy at 0900 on 31 December. Two platoon-size elements were to

make the march while the troop commander remained at Blackhorse with the third platoon, ready to assist if needed. The platoons were to leave Blackhorse at 0330 on 31 December, moving south on Route 2. One platoon was to stop along Route 2, about a third of the way to Vung Tau, and spend the night running the road back to Blackhorse to prevent enemy interference on the route. The other platoon was to continue to Vung Tau, pick up the convoy, and escort it to Blackhorse. The convoy would be rejoined en route by the platoon conducting roadrunner operations.

The column moved out on time to meet the convoy. The lead platoon, commanded by the 2d Platoon leader, consisted of one tank from the 3d Platoon, two ACAV's from the 2d, and the troop command and maintenance vehicles employed as ACAV's. The next platoon, commanded by the 3d Platoon leader, consisted of one tank from the 2d Platoon, two ACAV's from the 3d Platoon, two from the 1st Platoon, and the 1st Platoon's mortar carrier minus its mortar. The tanks, each leading a platoon, intermittently used driving lights and searchlights to illuminate and observe along the sides of the road.

About nine kilometers south of Blackhorse, Route 2 crested a slight rise, ran straight south for two kilometers, and then crested another rise. The sides of the road had been cleared out to about 100 meters. As the lead tank started up the southernmost rise at 0410, the last vehicle in the convoy, the mortar carrier, was leveling off on the straight stretch two kilometers behind. Suddenly a rocket propelled grenade round hit the lead tank, killing the driver and stopping the tank in the middle of the road. An ambush then erupted along the entire two-kilometer stretch of road. A hail of grenades quickly set the remaining vehicles of the lead platoon afire; intense small arms fire killed most of the men riding atop the vehicles. As the trailing platoon leader directed his platoon into a herringbone formation, the mortar carrier was hit by a command detonated mine, exploding mortar ammunition and destroying the carrier. The tank with the last platoon was hit by a rocket grenade round, ran off the road, blew up, and burned. The surprise was so complete that no organized fire was returned. When individual vehicles attempted to return fire, the enemy, from positions in a deadfall some fifteen meters off the road, concentrated on that one vehicle until it stopped firing. Within ten minutes the fight was over.

ANALYSIS

At daybreak on the last day of 1967, the devastating results of the ambush were apparent in the battered and burned hulks that lay scattered along the road. Of eleven vehicles, four ACAV's and one tank were destroyed, three ACAV's and one tank severely damaged. The two platoons suffered 42 casualties; apparently none of the enemy was killed or wounded. This costly action showed what could happen on a routine mission in South Vietnam. Indifference to unit integrity,

breaches of communication security beforehand, lack of planned fire support, and wide gaps between the vehicles stacked the deck in the enemy's favor. Charged with guarding a convoy, the unit leader failed to appreciate his own unit's vulnerability.

TANK TO TANK

by G.R. Cossey

There have been many occasions in the history of the Vietnam Conflict when armor and cavalry units have been called upon to demonstrate the effectiveness of the tank as a fighting vehicle, capable of performing practically any mission. Certainly the tank and, even more, the tanker have been given tasks of many varieties, both for which armor was originally developed and some previously unseen. But only once has this man-vehicle team functioned in its best role -- the destruction of enemy armor.

The date: early evening of 3 March 1969. The place: a far-flung Special Forces camp near Ben Het, South Vietnam perched in the rugged mountains of the central highlands, overlooking entrances from the Ho Chi Minh Trail in the Laos-Cambodia-Vietnam border area. On this night, North Vietnamese tanks and other armored forces attacked the joint U.S. and Vietnamese defenses dug into the barren hills of the camp. This engagement, although brief, was significantly the first time since the Korean Conflict, 16 years before, that an American armor unit had decisively engaged enemy tanks.

The North Vietnamese attack by armor units of the B-3 Front was initiated on the heels of a week-long preparation by daily Communist shellings of allied positions within the Dak To-Ben Het area and other enemy attacks throughout the whole of South Vietnam in their spring offensive beginning in latter February. Upon the initiation of this offensive, American units ordered into the tri-border area as reinforcements for local defenses included Company B, 1st Battalion, 69th Armor under the command of Captain John Stovall. Company B, headquartered near the Dak To airstrip and under the direct control of the 2d Brigade Highlanders, 4th Infantry Division, was given the mission of reinforcing the Ben Het outpost and of securing Highway 512, the only land link between the camp and the main allied positions at Dak To.

In addition to elements of Company B, allied forces at the Special Forces camp included three Civilian Irregular Defense Group companies with their Green Beret advisor team, an American 175mm artillery battery and two 40mm "Dusters." Normally the tankers were deployed in platoon strength along the camp's West Hill in partially dug-in positions. The remainder of the company occupied strong point and bridge security positions along the ten kilometers road link or were held as a ready-reaction force at Dak To.

The company had arrived in this area of operations on 25 February and had endured the nearly continuous barrages of artillery fire laid down by Communist gunners from positions both in Vietnam and from

bases across the nearby Cambodian border. Rarely had the crew members dared to move more than a few feet from their tanks as they were busily occupied either dodging artillery fragments or answering sniper fires and small spoiling attacks with maingun and machinegun fires.

Up until the first of March, the camp had received intensive fires from heavy artillery pieces located in reinforced, dug-in positions well inside Cambodia, at times taking up to one round every forty-five seconds over protracted periods. However, the enemy guns were so located that their muzzle glow could be observed from the friendly post thus allowing the allies to predict the incoming artillery in sufficient time to preclude suffering heavy casualties. In an effort to penetrate the barriers protecting these enemy pieces, the tanks were employed in an indirect fire role, using concrete piercing fuzes with the assistance of the co-located artillery battery's fire direction center and utilizing spotter aircraft for fire adjustment. This met with only limited success as the 90mm ammunition was unable to sufficiently penetrate the heavy Red defensive positions.

Around 1 March, the enemy artillery fires slackened such that incoming rounds were being received at Ben Het only around the time of the daily resupply convoy. Up until this time, Company B had sustained approximately ten casualties, most of which minor in nature and were treated on the spot. Several tankers were wounded repeatedly but they continued to return to their stations and up until the first of March, only one man was evacuated through medical channels.

On the first of March, the first platoon of the tank company held positions on West Hill with four tanks, three of which were deployed near the crest generally facing west overlooking the valley through which Highway 512 wound, approaching from the Cambodian border. Captain Stovall had come forward and established a temporary command post in a nearby bunker since his platoon leader had been evacuated to Dak To suffering from multiple fragmentation wounds. The first and second of March proved to be disconcertingly quiet, disturbed only by the mortaring of the resupply convoy and a few interspersed rounds of harassing recoilless rifle and mortar fire. Around 2200 hours that evening, PSG Hugh Havermale, the tank platoon sergeant, reported to Captain Stovall that his men could hear vehicular movement to the west of the camp. Together, the two senior tankers went forward and scanned the area with a night vision device but were unable to observe anything out of the ordinary, nor were they able to establish even a general location of the reported sounds. However they could hear the unidentified vehicles running their engines for about twenty minutes then shutting down, possibly warming their engines and performing crew checks of some nature.

Again on the third of March, the enemy activity remained at a low ebb, with only an occasional round of harassing fire being received at the allied position. During the day, three CIDG reconnaissance

patrols were dispatched from the outpost to positions about four kilometers to the north, northeast and southeast. The daily intelligence briefing by the camp commander indicated that an attack by the enemy was imminent and that the Communist forces possessed an armor capability, indications which were to be transformed into fact a few short hours later.

At 2100 hours that evening, the camp's central hill began receiving recoilless rifle fire from two locations. Between 2130 and 2200 the entire fire support base came under increasingly heavy mortar and artillery fires and the tankers again began to hear the sounds of engines coupled this time with the distinctive rumblings of tracked vehicles. The men were again unsuccessfully scanning the area with both starlite scopes and their infrared searchlights when an enemy vehicle was suddenly illuminated as it detonated some anti-personnel mines located approximately 800 meters from the perimeter and causing some portion of the vehicle to catch fire. In the light of this small fire, three tanks and an open, tracked cargo/personnel carrier were observed. Immediately the first platoon crews began taking the enemy vehicles under fire with HEAT and high explosive ammunition from their mainguns and firing final protective fires with other organic weapons. Other tank company personnel forward immediately went into action assisting the camp indigenous personnel in manning mortar and recoilless rifle pits or in transporting ammunition and treating wounded defenders. Shortly thereafter, Captain Stovall received reports of a fourth enemy tank approaching the left flank of the allied positions near the camp airstrip and a report from one of the CIDG patrols that it was observing an eight to fifteen vehicle column moving east toward the camp from the border area. He then called for illumination rounds from the camp mortar squad and upon receiving it, found that the flare was dropping behind him, clearly illuminating the friendly tank emplacements. The tankers continued their fires, making direct maingun hits on at least two enemy tanks and the carrier, causing them to burst into flame.

In the meantime, Captain Stovall had mounted one of the M-48's and as he stepped behind the turret onto the back deck, he observed a large fireball followed immediately by the concussion from an enemy tank round exploding on the glacis that flung him clear of the back deck and blew the tank commander out of the cupola and ten feet to the rear of the tank, inflicting heavy shrapnel wounds on them and instantly killing the loader and driver who had been manning an externally mounted machinegun. It became apparent that the tank had received a direct hit from one of the Red vehicles after its position was compromised by the descending flare. Nevertheless, the M-48 was again joined in battle as other crews were scrambled and sufficient crewmen were shortly made available.

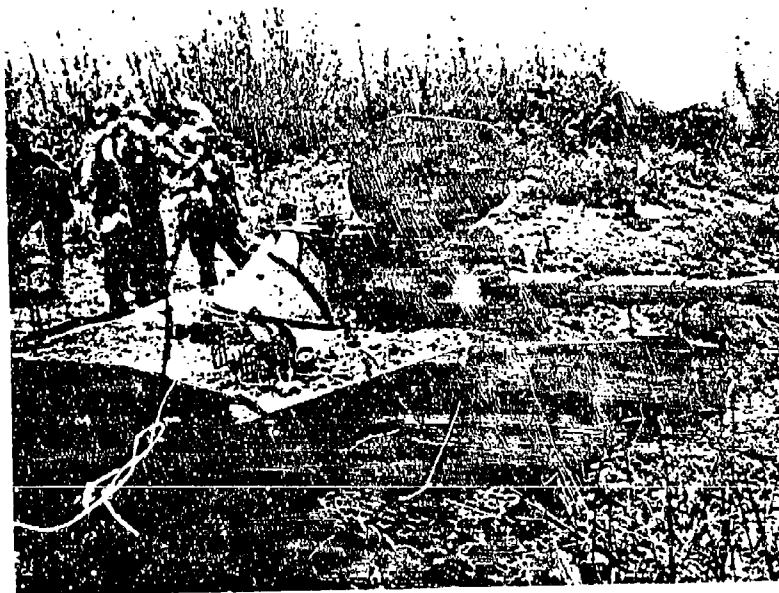
The fires continued over a short while but gradually began to dissipate as it became clear that the attacking enemy vehicles were

withdrawing and that a final assault was not going to take place. The tankers scored several more hits with HE on one of the enemy hulls reducing it to a pile of rubble. Reinforcements in the form of the tank company's second platoon arrived with platoon leader Lieutenant Ed Nickels taking charge of the company. Additionally, an AC-47 "Spooky" gunship arrived on station and began to harass the enemy's withdrawal. The rest of the evening remained quiet with only an occasional round from a jumpy rifleman and the normal artillery fires.

The next morning, an investigation of the battlefield revealed two PT-76 hulls and a burned-out carrier that had been left behind by the attacking forces. Further combat patrolling in the area closer to the border revealed an abandoned enemy motor pool but gave no further information on the enemy unit. Casualties within Company B were the two killed and two wounded, with no damage to the M-48 tank receiving the direct hit other than a broken machinegun charging handle.

ANALYSIS

The improper use of the illumination round was probably a major factor in the loss of two of the M-48's crewmen and the wounding of two other personnel. Considering the intelligence picture, the illumination should have been preregistered along likely avenues of approach.



RUSSIAN-MADE PT76 TANK DESTROYED AT BEN HET

The Rock of Dong Ha

By early morning of 1 April most of the outlying fire bases along the Demilitarized Zone and in western Quang Tri Province had been evacuated or overrun, leaving no friendly positions north of the Mieu Giang and Cua Viet rivers. Poor weather prevented air support and contributed to the relative ease with which the enemy pushed back the South Vietnamese. The North Vietnamese forces advanced south with impunity. By late afternoon on 1 April Mai Loc and Camp Carroll, south of the Mieu Giang River, were under heavy attack.

Frantically redeploying the three infantry regiments, one cavalry regiment, and two Vietnamese Marine brigades at his disposal, General Giai established a defensive line along the south bank of the Mieu Giang. In an effort to stabilize the situation, he committed the 20th Tank Regiment on the morning of 1 April with the mission of relieving the embattled 11th Armored Cavalry Regiment and attached infantry units then fighting around Cam Lo, along National Highway 9. (Map) After joining a South Vietnamese Marine battalion, the tank regiment moved north from Ai Tu along Highway 1 toward Dong Ha.

Poor traffic control and refugees congesting the route forced the tank regiment to move cross-country to the southwest of Dong Ha, and in so doing it surprised and routed an enemy ambush along Highway QL-9. Prisoners taken during this action were dismounted members of a North Vietnamese tank unit whose mission was to seize and man South Vietnamese armored vehicles expected to be captured in the offensive. With its forty-four operational tanks, the 20th Tank Regiment moved on toward Cam Lo, which was burning. As darkness approached, the unit set up a defensive position southeast of Cam Lo Village, withstanding enemy probes throughout the night.

At daybreak on Easter Sunday, 2 April, the 20th Tank Regiment received reports that a large North Vietnamese tank column was moving south across the Ben Hai River toward the bridge at Dong Ha. About 0900 the commander, Colonel Nguyen Huu Ly, received permission to move to Dong Ha, then north across the bridge to engage the enemy forces. When he reached the town he found enemy infantry already occupying positions on the north bank of the Mieu Giang River that prevented his crossing the bridge. He deployed the regiment around the town of Dong Ha, with the 1st Squadron in a blocking position on the high ground about three kilometers to the west, the 2d Squadron to the south, and the 3d Squadron defending positions within the town to prevent enemy elements from crossing the bridge.

About noon men of the 1st Squadron, from their vantage point on the high ground to the west, suddenly observed a North Vietnamese tank and infantry column moving south along Highway 1 toward Dong Ha. Moving their tanks into concealed positions, they waited as the enemy tanks moved closer. At a range of 2,500 to 3,000 meters, the South Vietnamese tankers opened fire, quickly destroying nine PT76 tanks and two T54 tanks. The North Vietnamese unit, which by its column formation showed that it was not expecting an attack, was thrown into confusion. Unable to see their adversaries, the North Vietnamese

crewmembers maneuvered their tanks wildly as the South Vietnamese tank gunners destroyed them one by one. The accompanying infantry dispersed, and the surviving T54 tanks turned and headed north without firing a single shot. The South Vietnamese regimental headquarters, monitoring the North Vietnamese radio net at that time, heard the enemy commander express surprised disbelief at losing his tanks to cannon he could not see.

The steady deterioration of the tactical situation around Dong Ha was arrested by the arrival of the 1st Armor Brigade headquarters. Although the brigade headquarters had been in the area solely to monitor the 20th Tank Regiment's training exercise, it was a well trained organization, possessing the armored vehicles and radios needed by General Gial to establish control of the scattered forces and direct the defense he hoped to establish at Dong Ha. General Tuan had urged its employment, and on the afternoon of 2 April the brigade, under 3d Division control, assumed command of all armored, infantry, and Marine forces in the Dong Ha area. Its units included the 20th Tank Regiment, two squadrons of the 17th Armored Cavalry Regiment, the 2d and 57th Regiments of the 3d Infantry Division, the 3d Battalion of the 258th Marine Corps Brigade, and the survivors of the 56th Regiment from Camp Carroll.

The bridge spanning the Mieu Giang River at Dong Ha afforded the enemy the opportunity to cross the river unimpeded and then drive straight south to Quang Tri City. Before the armor brigade headquarters arrived, the 3d Division engineers had made two unsuccessful attempts to destroy the bridge with explosive charges. When Colonel Nguyen Trong Luat, the 1st Armor Brigade commander, arrived he decided to leave the bridge intact for the time being, since the enemy had been stopped and the armor brigade forces were holding. Colonel Luat was preparing to make a counterattack to the north across the bridge when the bridge charges detonated and dropped the near span, putting an end to any counterattack plans.

Other enemy forces continued to move south toward Dong Ha on the afternoon of 2 April, engaged first by limited tactical air strikes and then by artillery, mortar, and tank fire. A large search and rescue effort had been launched for the crew of a U.S. aircraft downed near Cam Lo. The U.S. Air Force temporary no-fire zone was twenty-seven kilometers in diameter, encompassing nearly the entire combat area and South Vietnamese Army defenders were unable for several hours to call for artillery support or tactical air strikes against the onrushing North Vietnamese Army. The enemy therefore had an opportunity to advance artillery, tanks, and infantry until 2200, when the restriction was lifted.

During the next several days, enemy activity was relatively light, with sporadic attacks by fire and numerous small ground actions. The North Vietnamese artillery fire was extremely accurate, and although South Vietnamese units moved frequently to avoid the shelling the enemy seemed to be able to locate new positions very quickly. On 3 April a North Vietnamese vehicle with radios was captured south of Dong Ha. The observer had papers supporting several identities, and

spent his time driving throughout the area spotting and adjusting artillery fire for North Vietnamese guns near the Demilitarized Zone. Although South Vietnamese units conducted attacks to eliminate pockets of resistance south of the Mieu Giang River, the pressure from the north remained intense.

The next tank combat occurred on the 9th when all three squadrons of the 20th Tank Regiment fought enemy armor. The 1st Squadron, shifted several kilometers west of Dong Ha six days earlier, occupied high ground overlooking an important road junction along National Highway 9. Again the tank gunnery training paid dividends as the tankers engaged an infantry unit supported by ten tanks at ranges up to 2,800 meters. A few answering shots fell short, and the enemy tanks scattered, several bogging down in the rice paddies near the road. Eventually eight were destroyed. In all, the regiment destroyed sixteen T54 tanks and captured one T59 that day, in turn suffering nothing more than superficial damage to several M48's.

For the next two weeks the South Vietnamese carried out clearing operations interrupted by frequent engagements with North Vietnamese armor and infantry which normally withdrew in the late afternoon. Nights were punctuated by artillery, mortar, and rocket attacks on South Vietnamese positions throughout the area. The defensive lines established on 2 April continued to hold, and on 11 April the 1st Armor Brigade was augmented by the arrival of the 18th Armored Cavalry Regiment from Military Region 3. By 14 April the 3d Division controlled five regimental size South Vietnamese task forces, including units of the 4th, 11th, 17th, and 18th Cavalry Regiments and the 20th Tank Regiment.

On 23 April, several kilometers west of Dong Ha, the 2d Squadron of the 20th Tank Regiment was attacked by an infantry-tank force using a new weapon. For the first time the enemy employed the Soviet AT3 Sagger wire-guided missile, destroying an M48A3 tank and an armored cavalry assault vehicle was damaged. At first the South Vietnamese Army tankers seemed fascinated by the missile's slow and erratic flight. Through trial and error, however, the troops soon learned to engage the launch site of the AT3 with tank main gun fire and to move their vehicles in evasive maneuvers.

Heralded by massive artillery attacks with 122-mm. rockets and 130-mm. guns, on 27 April a new enemy offensive began against South Vietnamese Army positions all along the Mieu Giang-Cua Viet River defense line. The barrage was quickly followed by violent attacks by enemy infantry and armor, met by equally determined resistance on the part of the South Vietnamese defenders. The 3d Squadron, 20th Tank Regiment, supporting the 5th Ranger Group, received the brunt of the attack and was soon heavily engaged. By midmorning all officers of the 3d Squadron had been killed or wounded, and three M48A3 tanks had been destroyed by Sagger missiles.

All along the defensive line, units were being overrun or pushed back. Forced to yield ground, Ranger and tank elements gradually withdrew to the southeast. Although losses were heavy on both sides, the numerically superior North Vietnamese continued their drive, and

by nightfall had pushed almost four kilometers south of Dong Ha. In the early morning of 28 April, the 20th Tank Regiment had eighteen operational M48A3 tanks. During the South Vietnamese withdrawal the accurate gunnery of the 3d Squadron cost the North Vietnamese five T54 tanks.

At that point the South Vietnamese found large enemy forces to their rear and for the armored units the withdrawal became an attack to the south. The 2d Squadron of the tank regiment, attacking south to secure the bridge over the Vinh Phuoc River at midmorning on the 28th, was badly battered in an enemy ambush. The commander lost control of his unit and surviving vehicles, after crossing the bridge, continued to the south in disarray.

It was then obvious to Colonel Luat that 1st Armored Brigade units were threatened with encirclement, so the entire force began moving south. All along the way fighting was heavy for the next two days. The terrain as well as the enemy took its toll of vehicles. At the Vinh Phuoc River seven vehicles were stranded on the north shore when the bridge, struck by enemy artillery fire, collapsed. Farther south at the Thach Han River near Quang Tri City, the bridges were already destroyed. Two tanks were lost there in fording the river on the 30th.

By then the tank and cavalry units were beginning their fifth day of almost constant fighting. South of Quang Tri resupply of fuel and ammunition was nonexistent as the armored force continued its attack. Forced from the highway by a determined enemy, the tanks and assault vehicles moved cross-country, falling victim to the many rice paddies, canal crossings, and streams as well as the antitank rockets and artillery. On the first day of May the vehicles began to run out of gas.

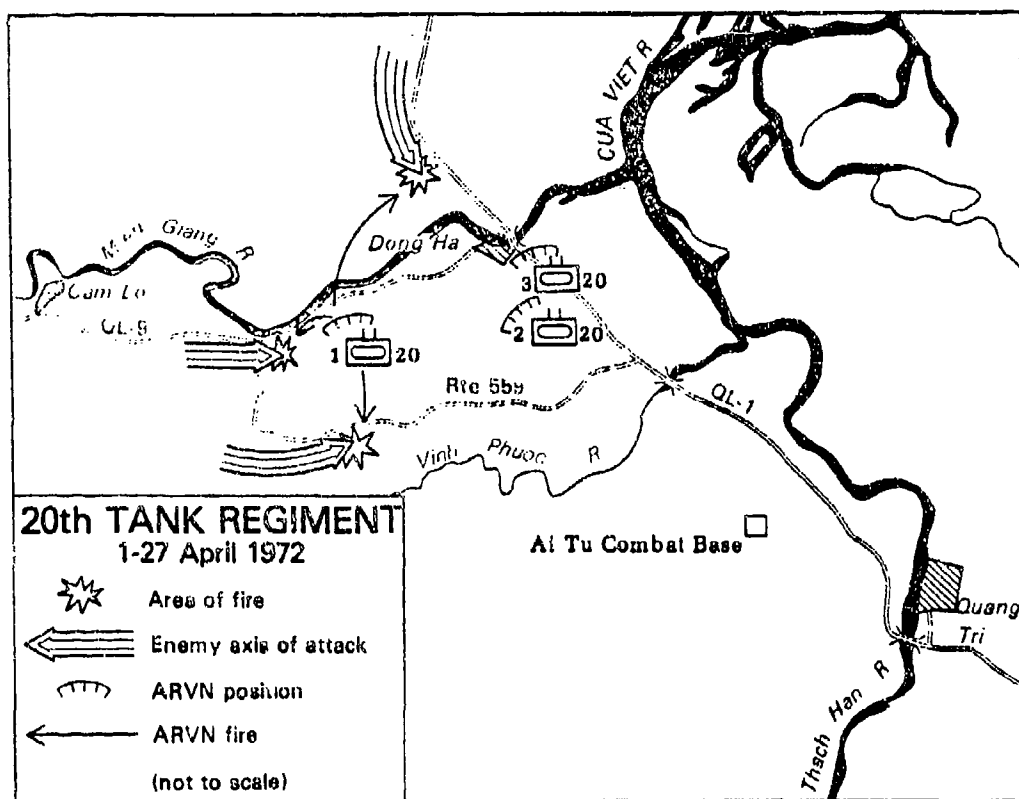
Finally, on 2 May, having fought their way through the last enemy units, the battered survivors of the armor command, intermingled with the remnants of other army units, reached Camp Evans at midafternoon. Only armored cavalry assault vehicles were left; the cavalry regiments and the tank regiment had lost all their tanks. The once proud 20th Tank Regiment was reduced to a demoralized, dismounted, and defeated unit. Employed primarily in a static, defensive role in frontline areas, the unit had steadily lost men and equipment without receiving replacements. Although vastly outnumbered, cavalry, infantry, tank, and Marine units of the 1st Armor Brigade, as well as tenacious Regional Forces and Popular Forces to the east, had succeeded in slowing the momentum of the massive North Vietnamese invasion. With assistance from U.S. and Vietnamese tactical air forces, they provided the resistance that delayed the enemy until enough reinforcements could be brought up to halt the offensive.

ANALYSIS

The 20th Tank Regiment's excellent combat gunnery can be directly traced to their demanding gunnery training. In addition, it is interesting to note they devised tactics to counteract Sagger fire

more than a year prior to the Israelis learning the hard way.

Perhaps the most important lesson to be learned from the 20th Tank Regiment is that they were not defeated by the enemy - the enemy tankers were no match for them, as they demonstrated again and again. The 20th Tank Regiment was destroyed by a lack of combat service support.



THE AFFRAY AT SLOPE 30

by Captain Ronald A. Hofmann

The first hint of trouble came at 2130 with the terse message received in Team K's command track from ambush patrol #1: "Three VC observed by starlight scope, passing by in the vicinity of our position." Ambush patrol #1 was located 700 meters to the northeast of Team K's perimeter in a stand of young rubber. It had moved to its position shortly after dusk. The patrol was led by a young and energetic Staff Sergeant Wayne Shoemaker, who with several other Team K NCOs had recently volunteered to extend his tour in Vietnam. Sergeant Shoemaker was to die that night in a bitter battle against an approaching enemy column.

The 3d Squadron of the Blackhorse Regiment was in its tenth day of Operation AKRON, a 9th U.S. Infantry Division drive that had kicked off on 9 June 1967 in the middle of the summer monsoon season. The objective was the destruction of enemy forces and installations in the traditional VC secret zone known as the HAT-DICH.

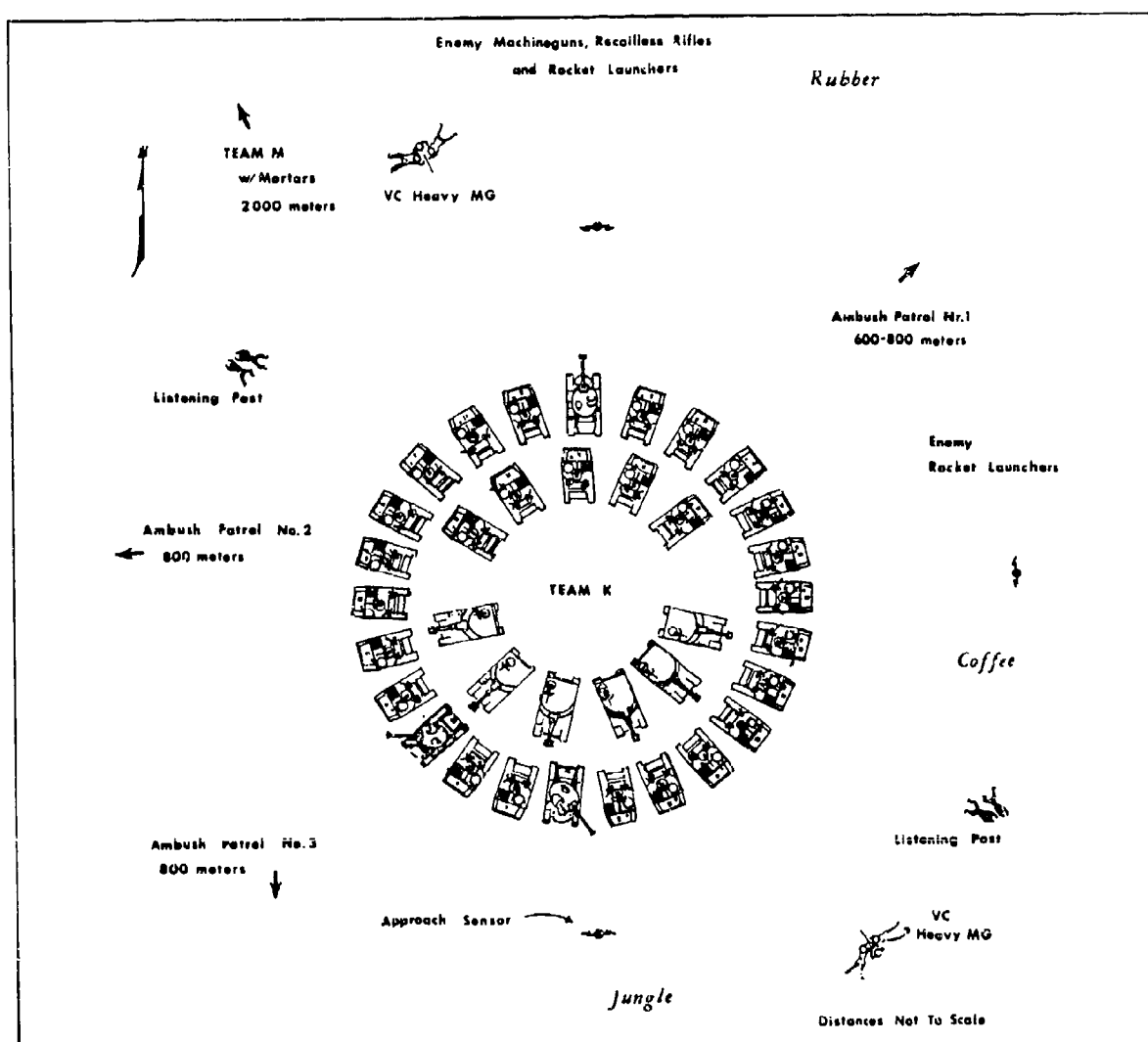
Lieutenant Colonel Arthur F. Cochran, the squadron commander, was well pleased with the performance of his four teams. The thorough and systematic search of the assigned AO (Area of Operations) had resulted in daily discoveries of extensive base camps, rice and salt caches, and equipment storage areas. Enemy contact however, had been limited to brief encounters with small reconnaissance and ambush elements. Initially the squadron had pushed deep into the primary forest and, as the operation progressed, moved further south until on 18 June it was operating in the vicinity of Slope 30 hamlet.

Slope 30 hamlet had long been a symbol of Viet Cong domination in northern Phuoc Ty Province. It is situated on Highway 2 and was astride a VC line of communications between the HAT-DICH secret zone to the west of Highway 2 and the MAY TAO secret zone to the east. It was the focal point of VC activity in the area for it not only provided a rest haven for VC troops passing through the area, but it was also the supply center for transient VC troops and Viet Cong located in nearby base camp areas. The hamlet, which closely parallels Highway 2, is bordered by a short strip of cultivated fields and rubber and coffee plantations. Beyond this two kilometer strip the primary forest takes over.

That afternoon, the squadron command post, together with the organic 155mm self-propelled howitzer battery, had moved into a relatively open area to the northwest of Slope 30 hamlet. All teams were instructed to pull back from the primary forest in the evening and to occupy separate, but mutually supporting, night defensive positions. The squadron provisional mortar battery (consisting of the

nine 4.2 inch mortars from the three cavalry troops) was ordered to laager with northernmost unit, Team M. This assured organic fire support to all four night defensive positions. Team K was given the mission of securing the squadron command post and HOW Battery.

Team K, consisting of its three organic platoons reinforced by a tank section and a flamethrower, arrived at the squadron CP location by 1730. It went to work immediately preparing the night laager position. Fields of fire had to be cut 150 meters north and east of the squadron CP. The areas to the west and south were relatively open rice fields and grazing land.



By 1945, just prior to darkness, the team's three ambush patrols were briefed and ready to depart. Around the perimeter, fields of fire had been prepared, and anti-intrusion devices and claymore mines were staked out. The perimeter was further reinforced by the armored cavalry assault vehicles (ACAVs) of the 3d platoon from the regiment's attached 919th Engineer Company. A few ACAVs from the Squadron Headquarters Troop and HOW Battery completed the ring of armor.

As the squadron CP settled down for the night, a total of 27 ACAVs and three tanks were on guard. Ambush patrols 700-1000 meters out, were in position to the northeast, the south and the west, while listening posts occupied approaches not covered by anti-intrusion devices. Defensive concentrations had been fired, and the quiet of the night was only occasionally interrupted by the howitzer and provisional mortar batteries.

The 0100 communications check with the ambush patrols was routine. But, a few minutes later word of the enemy sighting came from an excited radio operator with ambush patrol #1. He reported that enemy contact was imminent. Shortly thereafter, automatic weapons fire and grenade explosions were heard to the northeast. These were followed immediately by violent and intense antitank and automatic weapons fire against the Team K perimeter. Ambush patrol #1 not only gave Team K a few important seconds of warning, but it also prematurely triggered the enemy attack by stopping one of his advancing columns. The ensuing confusion among the enemy ranks in the darkness cost them the element of surprise.

The bulk of the antitank fire came from too great a range. While it caused some damaged and casualties, it was not fully effective. The main enemy effort during the initial attack was directed against the northern sector of the perimeter. This was followed quickly by successive attacks against the eastern and southern sectors. The latter two attacks later were found to be secondary efforts, designed to divert attention from the main attack. Outgoing red tracers crossed widely with the enemy's incoming green tracers. Based on the unusually high density of antitank and automatic weapons fire, the enemy confirmed that it was a main force battalion of the 274th VC Regiment.

While Team K was busy fighting off the attack, Team M reported incoming mortar fire. This was apparently designed to neutralize the Squadron mortars. Despite the heavy incoming fire, the mortarmen started what was to be a fire mission that would last for over an hour. Throughout this period, key personnel remained exposed to call out fire illumination in support of Team K. This was expanded quickly to both high explosive and illumination, with the HE concentrated on the rubber east of the perimeter. After the initial volleys, a young draftee from New York, Sergeant Robert B. Kennedy, a

forward observer from 3d Squadron Howitzer Battery, walked the fire through the coffee plantation and finally through the open area south of the perimeter. At the same time, HOW Battery started countermortar fire to assist Team M and the mortars.

The arrival of an Air Force flare-ship at 0135, roughly 20 minutes after the first contact, allowed the mortars to cease illuminating missions and to concentrate on defensive fires only. A flare-ship stayed continuously on station, illuminating the battlefield until first light in the morning.

Shortly after the shock of the enemy's initial burst of fire wore off, Team K gained fire superiority over the enemy by returning a devastating volume of automatic weapons and 90mm cannon fire. The outgoing fire was so intense and well directed that fire superiority was lost by the enemy, never to be regained. Major David K. Doyle, the squadron operations officer, had alerted all teams at the time of the initial contact, preparing them to reinforce Team K if necessary. However, Colonel Cochran did not find it necessary to commit additional forces during the attack.

The 11th Armored Cavalry Regiment CP, located in the Blackhorse Base Camp about 30 kilometers to the north, was alerted by a 3d Squadron radio message, and was in a position to observe the fireworks from a distance. Regiment immediately dispatched armed helicopters to the scene and at the same time prepared an emergency supply of ammunition.

Minutes later an 11th Cavalry light fire team began its attack along the edge of the perimeter. This was an extremely hazardous assignment for the gunships for it required a west to east firing pass, directly in line of the trajectory of mortar rounds falling to the east of the perimeter. The helicopter fire team never faltered, and after their last pass enemy fire decreased appreciably. On completing their fire mission, the helicopter pilots jettisoned their rocket pods, landed within the Team K perimeter, and volunteered to evacuate the first group of wounded.

Heroic action was also commonplace within and on the Team K perimeter. In the initial volley of fire, the northeast sector had been hit severely. Men who were knocked from their machinegun positions on the ACAVs, either by rocket or recoiless rifle fire, staggered back to resume their positions. If they were too severely wounded, volunteers from the inner perimeter immediately replaced them. ACAVs that had caught on fire were saved by officers and men from the squadron command post and from Team K who moved from vehicle to vehicle using anything available to extinguish the fires.

Although many vehicles were damaged, not one was lost in the two-hour action. In some cases, on seeing an adjacent vehicle hit, ACAV commanders moved to an exposed position to cover the evacuation of the wounded. When the platoon leader of the first platoon was wounded, young Sergeant Alfred Pankey, Jr., took charge and reorganized the defense of the southern perimeter.

During the action, ambush patrols #2 and #3, as well as the two listening posts, were ordered to remain in position. Radio contact with ambush patrol #1 was lost after initial warning message just prior to contact. At 0210, ambush patrol #3, 800 meters to the south, reported that it was pinned down by automatic weapons fire and requested assistance. The firing around the Team K perimeter began to slow down. Then a six ACAV force under Second Lieutenant Daniel Mullins, the third platoon leader, moved out from the relatively quiet western sector of the perimeter. The force fought its way to the beleaguered patrol #3 and back without any casualties. However, the eight man patrol had suffered three casualties, one dead and two wounded.

About 0230, the enemy started a hasty retreat. First Lieutenant Craig Farley, the second platoon leader, was given the mission to reestablish contact with the enemy if possible and to find ambush patrol #1. Even though it pushed forward vigorously, the platoon made no further enemy contact. By 0300 hours, Lieutenant Farley reported finding the ambush patrol.

Though heavily outnumbered by the enemy, ambush patrol #1 had fought the VC to a standstill, forcing them to withdraw without their dead. The ground around the patrol position was littered with enemy bodies and equipment. However, this patrol had paid a heavy price for its gallant stand. Of the ten men, the patrol leader and three others were dead. Five others were seriously wounded. Lieutenant Farley's force evacuated the patrol to the perimeter and then volunteered to go back out to recover the VC bodies and equipment. At 0400, they returned again to the perimeter with 15 VC bodies and numerous automatic weapons and documents which helped in determining the enemy's plans and unit designation.

Ambush patrol #2 to the west was not affected by the action and remained in position to monitor the open flank.

At first, when the enemy began to disengage it was assumed he was withdrawing to the northwest into the primary forest. Team I was committed to pursue in that direction. Subsequently, a captured VC operations order indicated a withdrawal route to the east, across Highway 2, into the MAY TACO secret zone. Prior to 0530, Teams L and M began pursuing the VC to the east. After Team I found no evidence of enemy activity in the area to the northwest, it was committed to join in the pursuit toward the east. Contact was never regained. However, numerous blood stained trails were discovered, together with

forward observer from 3d Squadron Howitzer Battery, walked the fire through the coffee plantation and finally through the open area south of the perimeter. At the same time, HOW Battery started countermortar fire to assist Team M and the mortars.

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Shortly after the shock of the enemy's initial burst of fire wore off, Team K gained fire superiority over the enemy by returning a devastating volume of automatic weapons and 90mm cannon fire. The outgoing fire was so intense and well directed that fire superiority was lost by the enemy, never to be regained. Major David K. Doyle, the squadron operations officer, had alerted all teams at the time of the initial contact, preparing them to reinforce Team K if necessary. However, Colonel Cochran did not find it necessary to commit additional forces during the attack.

The 11th Armored Cavalry Regiment CP, located in the Blackhorse Base Camp about 30 kilometers to the north, was alerted by a 3d Squadron radio message, and was in a position to observe the fireworks from a distance. Regiment immediately dispatched armed helicopters to the scene and at the same time prepared an emergency supply of ammunition.

Minutes later an 11th Cavalry light fire team began its attack along the edge of the perimeter. This was an extremely hazardous assignment for the gunships for it required a west to east firing pass, directly in line of the trajectory of mortar rounds falling to the east of the perimeter. The helicopter fire team never faltered, and after their last pass enemy fire decreased appreciably. On completing their fire mission, the helicopter pilots jettisoned their rocket pods, landed within the Team K perimeter, and volunteered to evacuate the first group of wounded.

Heroic action was also commonplace within and on the Team K perimeter. In the initial volley of fire, the northeast sector had been hit severely. Men who were knocked from their machinegun positions on the ACAVs, either by rocket or recoilless rifle fire, staggered back to resume their positions. If they were too severely wounded, volunteers from the inner perimeter immediately replaced them. ACAVs that had caught on fire were saved by officers and men from the squadron command post and from Team K who moved from vehicle to vehicle using anything available to extinguish the fires.

eight VC bodies that had been abandoned near the trails. Intelligence reports received shortly after the engagement indicated that the enemy had evacuated a large number of dead and wounded to the east.

Before the first light on 19 June Team K had been resupplied with ammunition, all casualties had been evacuated and the unit had been reorganized to adjust for casualties. Team K had suffered ten men killed in action and a dozen men seriously wounded but was ready for further missions. By 0600, with the sun rising, Team K began a detailed search of the battlefield.

Two wounded VC were taken prisoner. A total of 56 enemy dead were found along with numerous crew-served and individual weapons. Captured weapons and ammunition confirmed enemy use of a combination of antitank weapons in the attack. These included B40 rockets and 75 and 55mm recoilless rifles. An astounding amount of ammunition was found. Also recovered were 12.7mm machineguns, 82mm mortars and M79 grenade launchers. Every individual rifle captured was an automatic weapon, most of them AK47 Chinese-made assault rifles.

Several factors contributed to the defeat of the enemy force. The frequent moves of the squadron CP and its teams did not allow the enemy to use his cherished thorough planning and rehearsal prior to the attack. However, despite this drawback, he did relatively well as evidenced by the diversionary attack against Team M and the secondary probes against the eastern and southern sectors of the Team K perimeter.

Captured wire and communications equipment confirmed enemy use of field telephones during the attack. The contact of ambush patrol #1 with one of the advancing enemy columns appeared to have caught the enemy off guard. This caused much confusion and the VC lost the precious element of surprise.

The 11th Cavalry Regiment's SOP of massing the cavalry troop mortars in battery made it possible for Team K to receive immediate and effective indirect fire support. At the same time, HOW Battery was in position to shoot counter-mortar missions. Regimental support by armed helicopter fire, resupply and medical evacuation was timely and smoothly executed. The U.S. Air Force flare-ship support was efficient and effective.

Last but not least, the disciplined defense, rapid reaction and courage displayed by the American cavalrymen in this action played a primary role in the defeat of a numerically superior VC force.

ANALYSIS

A good example of the need for armor/cavtry units to be proficient in local security. Infantry forces will not always be available to pull night security. Had K troop not established effective security, the VC attack would have caused devastating casualties.

ONE DAY'S COMBAT: LESSONS LEARNED

by MAJ J.F. GALLE

The sun was already in the sky when the five Armored Cavalry Assault Vehicles (ACAVs) of the third platoon of the infantry brigade's separate armored cavalry troop pulled out of the friendly wire and headed northeast along the gravel road. On the ACAVs sat an infantry platoon of twenty-two men from one of the brigade's organic battalions. The mission of the tiny unnamed force, without a designated commander, was to locate an enemy battalion operating to the east.

Behind the force on a steep hill was the infantry battalion headquarters, colocated with its direct support artillery battery. Ten kilometers to the north on another steep hill was the infantry brigade headquarters and the headquarters of the armored cavalry troop from which the cavalry platoon came. Overhead in a helicopter was the infantry battalion commander and his operations officer and artillery liaison officer. There was a Forward Air Controller (FAC) in an aircraft in the area.

The tiny column moved slowly. It was confined to the road because no one knew if the heavily loaded vehicles could swim in the paddies on each side. The last vehicle was commanded by the platoon sergeant (a German-born E7 with eighteen years of service) of the armored cavalry platoon, and his vehicle had a bad transmission, the result of overloading. The verbal plan was for the platoon sergeant to continue on to headquarters for mail and resupply, and to go to the dispensary — he had skin cancer, which was aggravated by the climate of the area. The fourth ACAV also had a bad transmission.

The crews of the ACAVs numbered four instead of the authorized five — the platoon leader had a policy of sending his men to "the rear" after six months of "field" duty. Commanding the first ACAV was an eighteen-year old buck sergeant (a product of the Fort Benning NCO school) and three troopers who, with their platoon leader, had committed an atrocity a week earlier. The six riding infantry, in T-shirts and jungle hats and beads, carrying light packs, three hundred rounds of ammunition, ten hand grenades, four smokes, and their rifles, with incense in their cargo pockets, lounged against the rear gunshields. On the floor of the ACAV (the seats had been knocked out with a sledge on receipt) was a double layer of sandbags, two sheets of heavy plywood, and a double layer of ammunition (sixteen thousand rounds), in cans for the machine guns. The engine was inaccessible. There were one hundred hand grenades hanging by the spoon on wooden cabinets the crew had installed, a dozen bangalores, and various shaped charges and explosives. There were also two extra machine guns, "combat lost" earlier. All of this was felt to be necessary to survive for two hours after first contact — there was never any resupply, and the guns were coming apart. Up front on the ACAV, the splash board, with a spare road wheel bolted on, was leaned forward and secured with rope scrounged from the Navy, to allow cots,

mattresses, water, ice in mermite cans, soda, beer, and rations to be stored against the engine access hatch. The engine and transmission could not be maintained. All over the ACAV, identification was painted black -- it made it difficult for the natives to identify the unit when tolls were charged for crossing bridges. There was always charcoal for barbeques, and ice. On the splash board was painted, in black in six-inch letters, "KILL FOR PEACE". Beneath the slogan, on the rope, hung four long black hair falls -- the native women had a superstition about never cutting their hair.

Atop the second ACAV, sitting on his protective vest, wearing a Confederate flag-painted helmet and a Harley-Davidson T-shirt, sat the most decorated man in the brigade. He was a nineteen-year-old 1st Lieutenant from Atlanta, a former motorcycle mechanic. His vehicle was named (in black) "WARLORD". It was pocked with marks from RPGs and from throwing hand grenades overboard in ambushes. Just where the batteries were installed in the right rear was an RPG hole from a previous engagement, plugged with a piece of wood to keep water out -- the enemy had chosen the side away from the fuel cell. Over the platoon leader's right hip pocket was embroidered "WARLORD" -- a contribution he demanded and got from a nearby brothel, where he and his crew obtained other free services. Everyone wore name tags on their trousers, and had their ID tags in their boots. "Warlord's" unshined boots had a peace symbol carved on each toe. In front of him was his driver, a young blond fellow without helmet, protective vest, or shirt, and behind him was the left gunner, a Los Angeles Black in a black T-shirt, slave bracelets, beads and a black beret. There was no right gunner -- again, the policy. "Warlord" had his command radios evacuated for repair for over a year. The platoon was authorized eight ACAVs, but had only five: previously knocked-out ACAVs had not been replaced. There were no spare parts for the guns; but then, there were the captured AKs. No one knew the CIA was booby-trapping the enemy ammunition.

The unit proceeded north until it started into the mountains, where four ACAVs left the road and turned south along the foothills, while the platoon sergeant proceeded on to troop headquarters. The infantry lounged on the ACAVs, which forged through high, dense sugar cane and deep ravines. The rear ACAV broke down after about a half-hour and was taken in tow by the third. The force came down out of the foothills onto the flat, dry plain in late morning, with the battalion commander in the air urging them on. They entered a small village and their objective -- the enemy battalion -- found them. They received mortar and small arms fire, and the infantry dismounted to get away from the ACAVs -- if there were mortars, there were RPGs, and no one wanted near those big targets. The cavalry assaulted the enemy, driving him from the village toward the south against a jungled mountain which led to an escape route.

In the air the battalion commander assessed the situation. He had found the enemy battalion. He had one platoon from the same infantry company in reserve, and he thought brigade had a cavalry platoon in reserve. He requested lift for his reserve, control of the brigade

reserve, and armed helicopters. There was no artillery observer with the force in contact,, but the FAC could talk to the cavalry platoon leader, who began calling air strikes on the fleeing enemy. When there were no strike aircraft available, the FAC would use his marking rockets to smoke the enemy out. The guns on the ACAVs began failing, so out came the AKs. "Warlord" radioed troop headquarters — he had the command radio — asking for assistance. While the helicopters were warming up to lift the reserve infantry platoon, the armored cavalry troop commander assessed his situation.

He was brand-new to the unit, but had been through two ambushes with two ACAVs shot from under him in a week. Four days prior, he had broken his foot, and was getting by with an oversized boot — cavalry command slots were hard to come by, so he dared not seek medical aid. His vehicle (with its radio gone) was in the motor pool undergoing repairs. He had no maps, overlays, or orders, other than a telephone message. He had three ACAVs from his first platoon (with a brand-new platoon leader) in the motor pool undergoing scheduled maintenance, his ACAV with a crew of two (the driver had been wounded twice, the right gunner once, and there was a wooden plug in an RPG hole on the front slope). He had only a one-band radio. He had his third platoon sergeant's vehicle (with a bad transmission) and crew. His second platoon (50% strength) was away to the north attached to another infantry unit.

Nonetheless, when asked by brigade if he could roll a platoon, he said he could, and proceeded to the motor pool to have his ACAV put back together. On the way, he walked through the tents and grabbed everyone he could find to help — all objected because they were "off duty". By noon, a force of five ACAVs was ready to roll, and they rolled, following the third platoon sergeant, who knew where his platoon leader was. A mechanic manned the troop commander's left gun.

By 1300, the five ACAVs were within one kilometer of the force in contact, when the troop commander's vehicle failed — compensating idler wheel bearing. There had been no oil seals for months and the seals were packed with grease. The troop commander left his vehicle and limped a half-kilometer to his first platoon leader, where he thought he could find a radio to bring his two platoons together, but the first platoon sergeant had the first platoon leader's radios. The infantry battalion commander had broken for fuel.

The reserve infantry platoon was inserted to join the cavalry troop's third platoon, which on the orders of the battalion commander (back in the air) crossed a creek in column. The lead vehicle took four RPGs. Three of the crew (participants in the atrocity) were killed, and the vehicle burned. The third platoon leader took his vehicle forward and extracted the three bodies, laying them on the floor of his vehicle. He was far forward and in heavy vegetation, while the infantry stayed behind in the open, crouching behind rice paddy dikes.

At about 1400 the troop commander's four ACAVs arrived, at right angles to the force in contact. They drove the enemy flank in, but were driven back by intense anti-tank fire. The troop commander had

mounted a vehicle with inadequate radios, so he dismounted and limped to find the third platoon leader with the command radio. Enroute, he encountered the infantry company's second-in-command — the commander was "sick" — and an artillery observer, crouched behind a paddy dike. He directed the artillery observer to bring fire to block the enemy, who was fleeing up the mountain, but he was refused — "the maps aren't accurate". When he pointed out that the guns were on a hill three kilometers to the rear, they could see the landslump through which the enemy was running, and they could use direct fire, he was met with a shrug. The infantry platoons would not move forward. The troop's third platoon leader was bringing in alternating air and armed-helicopter strikes, and was down to his AK and hand grenades. The infantry battalion commander broke for fuel, so the third platoon leader was, in effect, in command of the operation. The troop commander limped to the third platoon leader's vehicle to get to his lieutenant. The troop commander maneuvered his two units into a right angle configuration. The infantry remained well to the rear. The armed helicopters and FAC were driven off by anti-aircraft fire and the battlefield was silent as the enemy withdrew up the hill. Dark was approaching, so the infantry mounted the ACAVs, which proceeded back to the infantry battalion's hill without orders, using hand-held illumination rounds — the artillery had run out of illumination. The last helicopter left, refusing to wait to carry out the dead, so the troopers put their dead in body bags and laid down to sleep beside them. The troop commander, after conferring with the infantry commander, walked the remaining three hours until first light, worrying if his ACAV would be back to him for the coming day's action.

ANALYSIS

The actual unit involved in this account will remain nameless for obvious reasons. The tactical lessons from this story are overshadowed by the grim account of the unit's situation.

Combat leadership, or rather the lack of it, is the overwhelming lesson here. Such concepts as unit cohesion, command climate, maintenance, discipline, and integrity did not exist. The action itself violated virtually every principle of war, not to mention the tactical problems with the artillery, for example.

A frightening example of how far a unit can deteriorate.

CHAPTER 5

ARAB-ISRAELI CONFLICTS



US: M4A3E8 "Sherman" 76mm 37t



FR: AMX 13 75mm 15t



SU: T54 100mm 36t



SU: T62 115mm 40t



UK: "Centurion" MK3 83 4mm 50t



US: M60 106mm 51t

"TANKS ARE THE QUEEN OF BATTLE."

-IDF GENERAL OFFICER
AFTER THE OCTOBER WAR

THE VALLEY OF TEARS

(An excerpt from FORTRESS 77, by Avigdor Kahalani, reprinted with permission from the United States Military Academy. Any other use requires the permission of the Department of History, USMA.)

KEY PERSONNEL

AVIGDOR KAHALANI - Battalion Commander of Tank Battalion 77, 7th Brigade, narrator of story.

YANOSH - Brigade Commander, 7th Brigade.

EMI - Company Commander

YOS - Battalion Commander in the 7th Brigade.

RATES - Battalion Commander in the 7th Brigade.

AMNON - Company Commander

ZAMIR - Company Commander (TIGER) (Attached)

EITAN - Executive Officer, Tank Battalion 77.

GEVA - Company Commander. (Attached)

9 OCTOBER 1973

The last hour of darkness was strangely quiet. Qunetira was quiet -- for all that flames were rising over the buildings. Yos' sector was also quiet. By the rays of first light I studied the ground ahead. There was no movement in the town. It seemed the Syrians must have laid down the barrage on the assumption that large forces were stationed there. The tank offensive against Yos began at dawn. Small enemy forces began to move forward. Yos and Eitan opened fire.

"Kahalani, Yanosh here."

"Move immediately into my area, and hold ready as my reserve."

"I'm on my way."

Yanosh's command post was on a hill west of the crossing of the Qunetira - Mas'ade and Waset junction roads -- at a place we called Yakir-Kirton. Baruchin, the Brigade Operations Officer, was there with three tanks as protection for brigade HQ.. We employed to the east of them.

"Kahalani, you will serve as second line where you are."

I didn't understand what Yanosh meant by "second line". Was he expecting me to fight the Syrians from these positions? Were we going to allow them to advance this far? Through the dazzling rays of the rising sun I could make out the shapes of some of Yos' tanks. He was reporting hits on enemy tanks but with the sun in his eyes he couldn't really judge the force that was coming at him.

"Battalion commander, may we open ration packs?"

"Are you crazy? We may move at any minute. Stay in firing positions," I said with a smile.

My crew knew me well enough by now, so the answer wasn't long in coming.

"We don't want to fight on an empty stomach."

"We'll find time for it."

I felt tense and uneasy with Yanosh's instruction to stay here. I knew I should be up there next to Yos -- who must have taken heavy losses during the night. Rates was deployed between Hermonit and Bukata, but all eyes were on the Valley of Tears. I scanned the terrain for a quick route across the road and up to the ridge, knowing that sooner or later Yanosh would have to send us there. He couldn't hold me in reserve for long.

Suddenly four helicopters -- quickly followed by four more -- clattered over Yos and down towards us. Yos' boys and mine scanned the fuselages looking for the familiar blue Star of David.

"Brigade commander, Yos here. Syrian helicopters overhead..."

The air was full of machinegun bullets, but it was useless.

"Is there a shell in the breech?" I yelled at my crew.

"Hollow charge."

For years I'd been thinking of that planes attacking tanks always came in at the right angle for it, and in a straight line till they dropped their bombs.

"Fire a shell at one of them."

"A shell?"

Kilyon was astonished.

"Yes! Quick!"

The barrel elevated as the helicopters came on towards us. We fired and waited for the aircraft to disintegrate — but nothing happened. Later I heard that one of the helicopters was hit by a tank over Yos' positions and crashed into the Valley of Tears. From the discussions over the radio, that hit had an incredible number of fathers and mothers. Meanwhile the remaining seven roared overhead. We saw our machinegun bullets ripping into them, but nothing happened. Beyond us they split into two groups, one continuing west over Kibbutz Merom Golan, and the other turning towards Waset Junction. They were dropping to land, it had to be bazooka armed infantry teams. There was no one we could send. Now we were in a trap: Syrian tanks up front, and the helicopter-borne force astride our supply lines. Yos was already down to his last third of fuel and ammunition. It was beyond my understanding how the Syrians could keep this up through four days and three nights. We had received no reserves, and I had no idea what was happening on the southern sector. Later I would hear that reservists were fighting there and pushing back the Syrians — who had reached as far as Nafa Crossroads.

I didn't know how many tanks were with Yos, though it couldn't be more than fifteen. I could hear them reporting shortages of ammunition. Yanosh allowed some of them to come down for refueling and arming, but he wouldn't let me move up. Nevertheless, I instructed Emi to be ready for it, only to find that he had been listening in to the brigade frequency — a wise thing to do, though against standing orders. Yanosh finally came through when we were tense almost to the point of breaking.

"Kahalani, Yanos here. Move out fast!"

We ploughed our way through basalt rocks and weeds to the south road travelling fast enough to throw up clouds of dust into our own eyes and nostrils. This time Yuval didn't disappoint me. He held on to the road surface.

Emi wasn't following yet. I knew he would need a few minutes before he could roll, and anyway I didn't yet know what to expect on Yos' sector. The important thing now was to get there fast, even though we could see little through our dust — the goggles would only make things worse. Once there, I would be able to guide Emi into the best place.

"How many tanks have you got?" Yanosh asked — and I didn't know what to answer. With me there were seven, but the Syrians could probably hear every word we said.

"Prepare for substitution — talk report," I said, lowering my voice and resorting to a phrase that would send any monitors scurrying for their Hebrew dictionaries — if they managed to hear it all.

"I am moving to Yos with forty," I said — then, after a short pause to let it sound natural, I added "Correction. Another has just joined. I now have 41 tanks."

"Fine," said Yanosh in a calm voice as he played along with the game.

"I'm sending you three tanks that have just arrived — so you'll have a very big force. Good luck."

The conversation lowered the tension, though there was no reason why it should.

"Battalion commander, Eni here. I'm on the road. Where do I come in?"

The distance between us was 500 yards.

"I'll tell you in few minutes." I answered, then told my crew: "Be ready to fire"

We were now very close to Yos' positions. His tanks were placed at random angles. Two tanks were moving back, apparently to refuel. But these weren't the positions overlooking the Valley of Tears. This was ploughed field 300 yards further back. I passed by a damaged tank and another that seemed abandoned, and moved into the northern sector towards the wadi through which the Syrians had come on the first night. A fifteen foot high wall of stones crossed the field. We drove round it. "Halt," I yelled at Yuval. He braked so fast that we were all jolted. Mere yards away were three Syrians — two standing and one moving — obviously on the hunt for prey. I dived down into the turret and grabbed the handle to rotate the gun on to the nearest Syrian.

"Fire Quickly!"

"What range?"

I thought I would go nuts. We were close enough that we couldn't miss and Kilyon was bothering about range. All he could see through his rangefinder was an area of green — and it never dawned on him that all he was seeing was one Syrian tank at point blank range.

"It's unimportant! Fire!"

The tank rocked as the shell left. Gideon rammed in another. I peered out. The Syrian wasn't burning, but I saw the commander leap clear and understood that he was out of it. I swung the turret round to the second enemy.

"See him?"

"Yes!"

This time Kilyon was enthusiastic.

"Then fire!"

Another shell went on its way. A hole opened up in the Syrian turret. I looked for the third — which had meanwhile stopped moving — again traversed the turret. Beyond him I could see a fourth, coming quickly, its gun pointing straight at us, the barrel opening black and huge...a T-62.

"Fire! Fire!"

"Stoppage," Kilyon responded apologetically.

The empty casing had wedged in the breech. Gideon heaved it clear as Gidi and I tried to help. I had visions of that menacing T-62 barrel and of death. My hands gripped the cupola rim, ready to heave me out if necessary. It wasn't.

Accompanied by the usual noise and recoil, a shell headed in a straight line from us to the Syrian. As flames shot up from the T-62 I swung the turret again to face the fourth tank, which was rolling

towards us. Kilyon scored a hit, but the Syrian kept coming -- till a shell from another of our tanks in the neighborhood finished him off. I was covered in cold sweat. It all seemed a nightmare. As the Syrian crews abandoned their tanks and raced for cover, I turned to find a good position from which to block the enemy advance.

I scanned the terrain, looking for the right location and watching for any other Syrians. Meanwhile, I was listening with half an ear to the brigade and battalion radios. There were plenty of conversations with forces that I didn't identify, but most of these were shut out of mind by some automatic selective hearing that only filtered through my own call sign.

Eitan came through on the brigade frequency to report that he was waging a fire fight to my right. Noting that I had come up to the line, he switched to battalion frequency and reverted to my command. Since he was already on the right flank, I turned east and deployed my tanks to hold the left. We couldn't see the Valley of Tears, and we were 300 yards back from the ramps. While I was wondering how best to cross the open field, to regain the ramp, a Syrian tank came up out of the wadi. I swung the turret and Kilyon fired. Two crewmen ran from the burning tank. Seconds later another came up only to be met by another of mine. Controlling the wadi was going to need better firing positions than these -- but, as I looked around for a tank that I could easily move to onto higher ground facing down the wadi, I realized that I didn't know who was next in line to me and who further away. So I did the obvious thing; I moved over to the opening myself. From our new spot, commanding a full view of the gully as it dropped to the valley, we hit five Syrians in as many minutes. Around me were Centurions from a number of different units. I didn't know that Yos, realizing the uselessness of remaining in an APC to face tanks, had pulled back. Eitan was still under pressure, but all in all we were now placed to catch every Syrian that came up over the ridge or through the wadi.

Whenever a Syrian fired, I found myself watching a strange sight. No sooner did the gun eject its projectile than the empty casing shot out of an aperture in the side of the turret. I was amazed at the speed of the loader/radioman. It was only later that I discovered the trick; the T-62 was equipped with an automatic ejector. One thing was becoming clear. This newest monster in the Soviet-Syrian arsenal was as destroyable as the T-54 and T-55 which preceded it.

"Kahalani, brigade here. Report your situation."

It was the voice of Shalom, Brigade Signals Officer.

"We're on top of it for the moment. More tanks are coming up and the artillery is dropping."

"Kahalani, brigade commander here. It's all your doing, believe me. My compliments to you and your deputy. I want to know how many have been destroyed in your sector."

"A rough estimate? Sixty or seventy. If you have any new force that could take the forward line and consolidate the success so far, we could destroy all of them. We can't let up for the moment now."

I knew that if we could regain the ramps victory would be ours. But

the tanks of my battalion were vulnerable and battered. It needed a fresh force to regain the few hundred lost yards.

"Hold on. I'm waiting for reinforcements, then..."

"Okay. You can relax for the moment. We're alright — and I see that more vehicles are joining me."

"Kahalani I'm making you responsible for the whole sector."

"There's a problem. Most of them aren't on my frequency. I can't communicate with the commanders."

"I'll get them over to you one by one. The only one who won't be with you is Rates. I'll be pulling him back."

"Okay."

"Brigade commander, just a moment. Baruchin here. I have wounded that must be evacuated immediately."

"Bring them out — even if it has to be on a tank."

"On one of them the tank commander and loader have been hit."

"Where are you?" I asked.

"Among the line. The damaged tank is forward. The line will have to move up if someone is to get near."

"Advance to the damaged vehicle and wave a flag. Others will move up to you."

I was worried. The brigade units were deployed in small groups, each on its own radio frequency. I even considered driving along the line, signalling that they switch to my frequency. But the Syrians were still coming, and I couldn't leave my spot over the wadi, even if only a few tanks could actually hear me. I had to wait for the Brigade Signals Officer to do the job for me. The traffic on the brigade frequency was heavy, and I barely paid attention to it. Then I heard En calling me, but I was busy on the battalion radio and didn't answer. Yanosh came through and took a report from him on a great many Syrian tanks ascending the wadi and the Hermonit. He sounded hoarse, excited and anything but clear. Yanosh asked him to pinpoint his position. Eni replied that we were close to Hermonit, and that there were tanks behind us that didn't seem to know what to do. He asked Yanosh to assign them to us to block the Syrians.

"Rates, Yanosh here."

"Rates here," came the tired weak answer.

"Are you to the right of Position Purple 426 (Hermonit)?"

"I'm in the area."

"Spread out and move forward. There are enemy tanks to your front. The force to your left has reported them. Advance."

"Where to?"

"To the positions in front of you."

"I'm in the positions, and there are vehicles of ours in front of me."

"Move in among them"

"Alright."

The conversation astonished me. I couldn't see Rates' tanks, though they weren't far behind. I tried to make contact with my neighbors but couldn't. Next to me was a burnt-out Centurion, its skin ripped by exploding ammunition from inside. My own position was good, if

dangerous. Through the opening of the wadi I could see scores of Syrian tanks moving confidently towards us. They obviously seriously intended to push us back, and equally obviously we had to have our old positions on the ramps if we were to stand. But the others probably couldn't see what Emi saw. Turning my head around, I got a sudden glimpse of the sight Emi had noticed. A line of tanks on the road behind me. I asked Yanosh who they were.

"Brigade Intelligence here," Ilan responded, "it's Rates."

I relaxed at the sight of his eight tanks rolling in to reinforce us. I called Rates and he answered after a few seconds. This was my sector, and he had come to help me. Not only that, I needed him in the area where I was standing. But I was in a quandary. I had served in this man's tank crew when he was a company commander, and I suppose I was still in awe of him. Was I to order him or ask him? The last thing I could afford was to put his back up now. The stakes were too high.

"Rates. I would ask you to take the opening to my left and keep an eye on it. I'm going on to the ridges to the right that way I would be splitting the sector between us."

"Okay," He answered slowly.

I explained carefully what I meant, then waited for him to seal the gap.

Syrians were still pouring into the wadi, but a little more hesitantly. Kilyon watched and waited for opportunities. Suddenly my attention was brought back to the brigade frequency. It was Baruchin. "I have to pull back. Wounded man in my tank—and other tank has a firing stoppage."

The Brigade Operations Officer asked him where he was.

"There are a lot of Syrians where I am. I must get him out. I don't want anything to happen to him here."

I waited on the edge for Haggai, the Operations officer, to answer. Every tank was important now.

"Evacuate them quickly to us."

Brigade signals wanted to talk to me. "I'm trying to get all the tanks in the area on to your frequency. A unit has arrived with receivers of the old type — so we'll have to change your battalion wavelength."

"Hold on," I said, switching the intercom and swinging the turret towards a tank that was trying to climb the ramps.

"Kilyon. Be prepared. Do you see him?"

"Where?"

"Behind the ramp."

"Yes."

The gun moved slightly as Kilyon made his last adjustment, then fired. The result was cloud of dust.

"You were a little in front of him."

"Short. Correcting fire," he confirmed — and the Syrian burst into flame.

That was where we should be if we wanted to stop them from occupying our positions. But it would take courage to get there. First of all

an advance in full view and head on to the enemy. Secondly, the positions were amid burning tanks, theirs and ours.

"Shalom, hold on a few moments," I told the brigade signaller. Changing frequency now was a frightening prospect. Even a few seconds without contact might be catastrophe, especially since there were too many tanks not on the frequency now.

"All 'policeman' stations, battalion commander here. Start advancing to the ramps. We must hold them because there is a large enemy force beyond."

There were heads sticking out of cupolas down the line, as tank commanders looked around for a leader. I tried to identify the battalion crews, then noticed that the tanks which had been with Rates were pulling back. I waved my arms frantically in an attempt to find out why, but the commanders ignored me. I called Rates on the brigade frequency, but there was no answer. Ilan, the Brigade Intelligence Officer, also took up the cry. Meanwhile, his tanks were still moving back and Syrians were still coming on as if we didn't exist. I was helpless as far as Rates' tanks were concerned, and would soon be for the whole sector. Without any ability to issue commands, or check on implementation, the dense Syrian mass would bring us to a breaking point. There was only one thing to do.

"'Policeman' stations. Don't lose control over your neighbors.

Move forward to the ramps! Now!"

"Annon here. Have two tanks with me. Am moving."

"Eni here. I'm on your left. All my tanks are under control."

"Knowll here. On the right flank with two tanks from last night."

"Battalion commander here. If there are tanks next to you not on the battalion frequency, get them to switch now."

I hoped that hand signals would do it. Meanwhile I went on calling Rates on the brigade frequency and Shalom kept on talking to the incoming force, trying to direct them to us. I called him, but he didn't stop his conversation with the new boys. Finally I got through.

"Shalom, please get on to Rates' frequency. He doesn't answer me. Try to talk directly to his tank commanders. Tell them that their effort must be at the wadi. The enemy is in there, and Rates' tanks aren't in good positions."

Shalom promised to try.

Brigade HQ was to my rear. I knew that the staff officers knew my situation, but imagined that they couldn't conceive all the problems of the sector. It was up to me to restore self-confidence and get this motley group into one fighting frame by giving crisp and simple orders. I told Eni to use flags to call the tanks around him up to the ramps. He straightened up in his turret and began to wave flags in both hands, but some of the tanks still took no notice. Finally he fired a machinegun burst into the ground in front of one them. The commander swung round and took notice. Eni continued to move slowly ahead, but when he saw that no one was following, he slid back into line. I was in a quandary. Making a move with those who could hear me would mean abandoning my present key position. Time was against us.

I decided to try Rates again, but Rafal was talking to Yanosh on the brigade frequency. Something about a support force on the way to us, and the fact that Yanosh was already in touch with them.

"Rates, Rates, Kahalani here."

"Kahalani, Shalom here. Rates took a direct hit. We have transferred all his force to your frequency."

A hot and cold current washed over me, ending a cold sweat. I knew I was now the last battalion commander in the field.

Rates! Wounded? Dead? I hoped not.

"Shalom, Kahalani here, over."

I couldn't afford to lose him now.

"No contact with 'egg' force," I reported using Rates' call sign.

"Perhaps I should try their frequency?"

"I got them all a moment ago and have transferred all that can be transferred to you. You'll have them in another minute."

Over the battalion frequency I tried again — and got the platoon sergeant of Rates' Number Four Platoon, call sign "Constant", who told me that in his opinion they could all hear me now.

The sergeant joined Eni's next attempt to head for the ramps, then volunteered to do the rounds of the tanks that weren't responding, to get them over to my command frequency. I liked his willingness and courage — and called him over to stand beside me.

"Sergeant, pay attention. Take the spot where I'm standing and guard the opening. Take care of any Syrian that tries to enter the wadi."

"Sergeant Number Four Platoon here. Alright, but I'm out of ammunition."

That annoyed me. How do you take tanks into action without ammunition?

"Stay where you are, sergeant."

While I was thinking of another solution, I heard Zamir and Shalom on the brigade radio.

"Tiger here," Zamir identified himself, "I'm only on the right flank..."

I tried to identify the tanks Zamir was reporting; they were from the force that was moving towards us.

"Kahalani, brigade commander here," came the expected announcement.

"Tiger here," Zamir pressed. "Request to move a little to the right to take the controlling ridge."

He meant the Buster.

"Negative! Negative! Stay where you are! Kahalani, Yanosh here, announcement."

"Kahalani here."

"Pay attention. There's an attack on tiger on the right flank. Assist immediately."

"I want to climb the right ridge", Zamir said.

"Who is that?"

Yanosh waited for an answer then continued.

"Tiger, brigade commander here. Repeat — What's the problem?"

Still no answer.

"Kahalani here. Confirm. It's only a pity that the tanks that have

joined me didn't make contact. I can't control them, and they're moving back all the time."

That point made, I started to look for Zamir. "Tiger, battalion commander here...."

"Tiger, Tiger, Kahalani is calling you." Yanosh joined in.

"Tiger, Tiger, battalion commander here...."

"Tiger, brigade commander here. An announcement."

Yanosh sounded hoarse and very tired.

"Tiger, brigade here."

This time it was Shalom calling.

"Kahalani, brigade commander here," Yanosh said slowly as though realizing the full import of his message. "Tiger doesn't answer. He's under heavy pressure."

"Alright, I'll send one of my officers."

One more problem to add to a growing list. Shells were still raining down, looking for targets. Amnon had lost his traversing mechanism, and was now aiming by ordering his driver to turn left and right. A shell hit the turret, but Amnon didn't feel it -- until his loader/radioman flopped down inside the tank. The shell, a hollow charge, had scored a direct hit on Avi Sandler. Amnon's gunner vomited. Amnon decided to evacuate the tank and crew. His small force now remained without an officer of company rank. Second Lieutenant Noah Timienker took over.

"Deputy battalion commander, EMI's Number Three Platoon commander here."

The voice was urgent, and platoon commanders didn't usually burst into the radio net -- so I listened, even though my tank was firing.

"Deputy battalion commander here."

"The battalion commander is dead!"

There was silence on the battalion radios. Eitan didn't acknowledge the message. I was too busy controlling our fire to do more than hear any reactions. Once our shells were away, I turned to the radio.

"This is the battalion commander. I'm alive. They don't kill me that quickly."

"Eitan here. That's a stone off my heart."

Ofer Tavori, EMI's Number three, was in firing position when Major Yona was hit. Yona had stayed with EMI in charge of a single vehicle, even though I had promised him command over a force. He fought like a lion -- till he was hit in the face. Ofer transferred to his own tank and headed to the rear while calling for Dr. Alex. The doctor met him halfway and transferred the wounded major into a personnel carrier. While the medical team went to work on Yona's smashed jaw and breathing problems, Ofer moved back into the line. Working under terrific pressure and tension, Alex performed a tracheotomy. Every second now counted. Yona had stopped breathing. There were all the signs of advanced suffocation. The cut was made, the tube slid with difficulty into Yona's windpipe, and -- to the relief of the team -- the whistle of air reported that the operation was a success. All that remained now was to stitch the cut and evacuate the patient. Alex climbed to his feet with shaking hands, suddenly aware of the

shells falling all around.

A tank ground to a halt next to the APC and somebody yelled "the battalion commander's dead!" Agmon leapt on board and peered down the turret.

"He's not ours."

It was Rates.

Yanosh was frantically looking for reinforcement for me. Eli Geva's company was refuelling and rearming. Yanosh ordered Eli to move fast, but Eli reported that he hadn't finished refuelling.

"That's unimportant! Go to Kahalani immediately!"

Yanosh was already talking to another force, sent up by Raful, though I couldn't identify who they were. Since Zamir wasn't answering I ordered Emi's force to shift to the right and reinforce Zamir's sector. I had decided to wait no longer. We must have those positions on the ramps.

"Sergeant 'Matmid' Four," I called.

"Sergeant Four here."

"I know your situation. Stay where you are and keep control of the wadi. Don't let one of them through. Clear?"

"Sergeant Four here. I remind you that there is no..."

I slammed down hard on the communications override button. I didn't want the Syrians to hear that tanks of ours were without ammunition.

"I know. Stand high up where they can see you. That will keep them out."

I was ordering the impossible task, but I had no choice. The sergeant stayed where he was. I pulled out of the line to the rear and swung to the right. As we moved I scanned the area behind, looking for a suitable static line in case we needed to pull back in a hurry. I knew we mustn't give up the high ground, and the withdrawal could turn into flight in seconds, and I was shaking at the very thought of seeking a rear line. I told myself that I wouldn't let it happen. If we lost the high ground, they could pick us off like flies. But then how could we keep on repelling them. That was a question to which I still had no answer.

"Policeman stations, battalion commander here. All those who hear me — raise a pennant."

Of the ten tanks in my immediate neighborhood, most acknowledged my call.

"Allright. We must have those positions ahead of us. Otherwise...."

A plane zoomed low overhead and dropped its bombs behind us. I shot down into the turret, then peered out as a second came over to drop its load. In astonishment I caught a glimpse of the markings. As if we didn't have enough troubles already...switching to the brigade radio, I shouted. "Brigade commander, Kahalani here.. Brigade commander...The Air Force is attacking us."

"I read you," Yanosh acknowledged, then went on talking on the brigade frequency, as if expecting division to hear.

"Raful, Raful, Yanosh here. Raful, Yanosh here. The Air force is attacking us. They must be stopped immediately. Over."

"Raful here. I'm stopping them."

Anonymous voices went to work on the radio. There were a few moments of despair, as I wondered how I could keep up with this situation, then...

"'Policeman' stations. Battalion commander here. There's a large enemy force behind the ramps. We will move forward with the intent of occupying the positions to our front. Roll them." I began to move slowly, looking around to see who was joining me. I waved at a few tanks and they began to move, but agonizingly slowly. Suddenly two Syrians appeared on the ramps, seeking targets. We stopped and I grabbed the traversing controls and gave Kilyon a target. It was a terrible moment: we were completely exposed to the enemy and waiting for his shells, but the guns weren't pointing at us. Kilyon fired, as did others. I could understand my tank commanders. To reach those positions we had to cross open ground. From my previous spot above the wadi, I hadn't really appreciated how dangerous it was. Still, I was blessed with an excellent crew. Kilyon, for all his size, was fast and capable of correcting his own fire. Gideon loaded at a blistering rate, Gidi could almost read my thoughts before they were spoken. Yuval, who had improved considerably, handled the tank as if he was driving a small car. "Battalion commander, 'Tiger' here." That was a relief, but the brigade communications officer beat me to it.

"At last."

"I have three tanks in position, but I'm almost out of ammunition," he said.

"Another quarter of an hour."

"I don't know if we'll hold fifteen minutes."

"All brigade stations," Jackie's voice broke in, "evacuation of wounded to ammunition depot. Repeat, evacuation to ammunition depot."

Meanwhile I had given up the attempt to regain the forward positions. On the brigade frequency, I could hear Yanosh briefing the commander of the force that was to help me. Then Rafi told Yanosh that a battalion-strength Syrian force was grouping on "America" axis to advance in our direction, then asked whether Yanosh knew anything about Syrian tanks on the Hermonit. The brigade commander didn't believe it. That was all I needed -- enemy tanks firing down on us. Yanosh replied that he didn't know, nor did he believe it.

"Kahalani, Yanosh here. Report situation."

"Air Force attacked me -- that you know. I want to advance, but have a serious problem with the crews that aren't on my frequency. I want to move them forward, but can't control them. I've tried flags, but they advance then retire."

"I'm putting the brigade commander of 'Toffee' on your tank."

Yanosh coughed, then continued.

"Do you understand?"

The brigade commander on 'Toffee' frequency, at least before the war, had been Ben Shoham. I didn't understand what he could be doing here when there were problems on the southern sector. Was it possible that he had been attached to our brigade?

"Please repeat."

"I'm putting the brigade commander of 'Toffee' in on 'Kirton' axis. Is that clear?"

But the voice answering "toffee" wasn't Ben Shoham. Never mind. I would work the details out later.

"Morning physical training," Yanosh said — not that I had the faintest idea what he meant.

The brigade frequency was full of orders and reports to and from Yanosh. Zamir said he couldn't hold on; tanks were approaching from the eastern slopes of the Buster. Yanosh, worried, asked for details. I didn't understand what "Tiger" was afraid of. After all he was part of my force — I felt we could hold. Perhaps he was under pressure from tanks that I couldn't see—or fire at? Unclear as it may be, I had faith in Zamir. He was a good officer. Yanosh prodded the "toffee" brigade commander to move into position facing the Valley of Tears, on the right flank. Zamir was still radioing to brigade about the oncoming force, though with no details of range. He was beginning to annoy me. The brigade commander had more important things to do. Still the presence of a new force was some encouragement. I knew that, with him, we would push the enemy back.

"Kahalani, brigade commander here. Have you got colored smoke?"

"Affirmative."

"Be ready to use for Air Force."

That was better. I thought of making a fresh attempt to reach the ramps, but the radio traffic was too heavy to allow me to concentrate on it right now.

"Kahalani. Air Force coming in within thirty seconds. Where do you think the biggest concentration is?"

Yanosh was going to try and direct them. From where I was, a mere three hundred yards from the Valley of Tears, I couldn't see down. I could remember the lie of the land, and it was hardly likely that the Syrians could put any sizable force up the slopes to the ramps.

"Kahalani here. I'm not in position right now. They're coming up three or four at a time — getting their's as they reach the top line. I emphasized the Syrian vulnerability, though I knew I wasn't answering Yanosh's question.

"What's their strength?"

"Can't say...Fire at him! Fire!"

The last was to Kilyon. His round struck straight and true, and I saw the Syrian crew jump out and run.

"Kahalani here. I repeat. I can't say how strong they are, since I'm on flat ground too far back from the slope — but we are waiting for them as they come up."

"Understood. I'm checking the possibility of sending you an organized unit. Hold on...Geva, Geva brigade commander here, over... Geva, brigade commander here."

"Geva here."

"Are you ready?"

"Beginning to move. Am holding a moment to get them all on my frequency."

"I read you."

"Brigade commander, Baruchin here."

"Go ahead."

"I'm next to 'Tiger'. Need reinforcement here, urgently!"

"I'm reinforcing with 'Toffee'."

The news that Geva was coming up with a company, and that reinforcement from "Toffee" was already in the area, encouraged all of us. Just a little longer to hold on till the new force arrived. I was scared that we would run out of ammunition, and I didn't know how many shells Eitan and Emi had left.

"Brigade commander here."

"Red line. Can't hold any longer. Enemy pressing hard from the valley. One of mine destroyed, and I must evacuate in tow."

"Okay. Do you identify force coming towards you?"

"Affirmative. Warn him not to fire at us. We've got no ammunition."

"The brigade commander of 'Toffee' is calling you on my frequency."

Guide him into position."

Zamir talked to 'Toffee', but they didn't understand each other. The newcomer, not wanting to approach the positions the wrong way, began to lose his temper. Zamir, obviously drawing on the last of his strength, didn't respond to the angry comments but continued to describe the enemy location. Yair, who was down by Position Seven on "America" axis and could see the enemy entering the valley, broke into the conversation and gave directions to the incoming commander. Meanwhile Geva on his way to me, made contact and came under my command. Seeing the dust of his tanks not far behind us, I decided that this was the turning point; now we must head for the forward line on the ramps.

Worried that they wouldn't all hear me, I looked for a new way to attract the attention of all the tanks. Time was against us. The Syrians could come up — and we were unable to hit them. Withdrawal was unthinkable, as was the idea that I couldn't get our tanks up to the prepared positions on the ramps.

"'Policeman' stations, battalion commander speaking. Just look at their courage as they come up to the positions facing us. I don't understand what's happening to us. After all they're only Arabs, and we are stronger than them. Now, start to move forward and straighten the line on me. I'm waving a pennant. Move!" I had spoken quietly except for the last word. It was as if a spring had suddenly uncoiled. They were moving, some fast, some slowly — but they were moving! Yuval pressed down on the accelerator and I found myself up ahead of the line. We slowed down to let them roll into place alongside.

"Don't stop! Don't stop! Keep moving! Keep moving!"

A Syrian came up to my right. I ordered Yuval to stop. Before I could swing the turret, a tank next to mine had taken care of the problem. I felt wonderful. The whole line was at long last moving towards the ramps. Now I was praying that we would get there. With that line — we would win. Nobody would move us from there. They rolled, slowly and hesitantly, but none of them stopped. Fifty more yards to go — and we would have the high ground, from which we could

destroy everything that moved on the "Vale of Tears."

"You're doing nicely. Don't stop. Keep moving. Be ready to fire." Hands raised in turrets acknowledged my message. All I could see were the heads of tank commanders. They were scared. We were all scared — but there was no other way. Slowly I edged up into a commanding position and looked down into the valley. To my left was a burnt out Centurion — there since morning. Not far off were some Syrians that had reached the ramp only to be hit. Down below, the tanks we hit on Sunday were still in their places, and scores of others were moving through them towards us. The ranges were short — very short. Some of them were only yards from the ramps, and — given a few seconds — more would be on top. I guided Kilyon in on one of them, and he squeezed the trigger. All around, tanks were beginning to fire like animals bearing in on their prey. Behind us guns were also firing, and for a moment I was scared that we would be hit by one of our own. The hail of our shells restored confidence. Each tank commander chose a position, moved into it, and began to pick off Syrians. It was as if the gunners were settling all the scores since midday on the Day of Atonement. Syrian vehicles were burning, their crews scuttling back out of the field of fire. We paid no attention to them. The tanks were more important. Few were the Syrian guns that answered us. Taken completely by surprise, the Syrian armor raced for shelter — and there was none. We knew we had won. We had the high ground once more, and they were burning in the valley.

ANALYSIS

This is an excellent example of combat leadership and the difficulty of communications in heavy combat environment. Even without any interference or jamming, COL Kahalani almost lost control of his subelements at a critical point in the battle. It also seems difficult to imagine that COL Kahalani is a battalion commander, judging from the amount of actual fighting he conducts. The importance of coordination is pointed out by the fact that the Israeli Air Force, perhaps the best trained in the world at that time, accidentally bombed them. Yet in spite of numerous difficulties and the enormous pressure from the Syrians, the small unit leaders remained calm and held their ground.

DECISION IN SINAI

By Lt Col Moshe Rose as told to Brig Gen S.L.A. Marshall

D-Day for my brigade was 29 October and for the one battalion which was to be air-dropped, H-Hour was 1700. Dark would fall 15 minutes later.

My mission was to capture and hold the Mitla Pass and the crossroads at Nakhi; thereafter to keep open the Kuntilla-Themed-Nakhl-Mitla axis, for the passage of troops.

Just one hour before the airborne battalion dropped, at 1600, the advance guard of my main column was to cross the frontier into Egyptian Sinai.

Besides the infantry battalion and its organic equipment, the Mitla Pass drop would include four anti-tank guns, two 120mm mortars and 8 jeeps for reconnaissance.

We formed as a brigade of 4 battalions with one battalion of artillery, using 25-pounders, and one battalion of heavy mortars. Two halftrack companies were attached to carry the infantry. Also with the overland column were one light tank company using French AMXs, a surgical team, an air-strip team, three forward radio teams for dealing with the air force and two Piper Cubs.

For support we had one supply-dropping unit, a squadron of Dakotas. fighter squadrons were supposed to protect us when needed, but we were told their availability would not be constant.

From Israel's frontier to Mitla Pass, where the link-up was to take place, the road distance is 156 miles. But all of these are hard miles and much of the way there is no road. The only pavement in the area runs between Mitla and Suez.

I estimated we could travel that distance in 24 hours. It was an excessively hopeful calculation.

Mitla pass, proper, is no place for an airdrop. It is a narrow defile between ranges, the peaks of which run to 870 meters. Its clifflike sides are but 50 to 80 meters apart. So the dropped battalion was to land 15 miles to the eastward at a place called Colonel Parker's Memorial. With it would be dropped enough water, food and ammunition to stay the force 24 hours. Three days later, with time for the marking of the DZs, supporting weapons would be dropped, with basic supply for another 24 hours.

About enemy strength, we assumed these things: There was one

Egyptian brigade in Shalufa, near Suez, west of the canal.

At Nakhl -- the supply base for southwest Sinai -- we expected to find a battalion headquarters and 2 companies of infantry.

Northward, on the road to Bir Hasne, was a company position. South of Nakhl was another company position. Between the two was a vehicle park. We counted 50 vehicles in it, reading the air photo.

At Kuntilla the enemy had one infantry platoon. In positions on the fortified cliffs above Themed were 2 more companies. Their park contained 30 vehicles. Flanking the road, after it passed through a notch in the cliff wall 8 miles west of Themed, the positions ran to a depth of 2,000 yards. All of these perimeters were doubly fenced with barbed wire, which meant that they were mined.

Within Themed village itself was another enemy platoon. Themed lies 50 miles beyond Israel's frontier. More than the fortified positions there and the firepower to defend them, the dominant terrain feature west of Themed made it a formidable obstacle. There the great wadi is walled by a north-south running cliff which cannot be out-flanked. The fortified notch is the only pass through and one must go at it head on.

Kuntilla is only 8 miles from the border, though from Kuntilla to the closest road in Israel is about 35 miles. The area between is either sandhill or wadi. Old caravan tracks cut across it but they have not been used for military purposes since WWI. The passage of a few vehicles will break down such support as these tracks momentarily afford. With difficulty, trucks can get through the sandhills, but can't take the wadis under their own power.

Themed itself is in a wadi and from there the track stays in the wadi most of the way to Kuntilla. Between Israel's border and Kuntilla there is neither road nor track.

These natural considerations bore on how my force was organized. I heavily weighted the advance guard, putting in it one infantry battalion mounted on halftracks, 2 platoons of artillery. The main body was to be organized also as a combat team, though with less strength.

I proposed to take Kuntilla and Themed with my advance guard. After that, it would bypass Nakhl and go on to Parker's Monument as fast as possible. The combat team of the main body, after capturing Nakhl, would hold it, sending one company back to garrison Themed. All else in the column was to close up on the advance guard, if possible, and help establish the brigade position east of Mitla.

So much for the general plan. My brigade, minus the battalion

which was to go airborne, was supposed to be concentrated in Ein-Hotsev by 1700 on 28 October, 24 hours before I said "go."

For the movement to the border, we would have 60 miles of fair road, and beyond that 40 miles of track, or of bumping over unmarked desert, before we could hit anything.

I reckoned we could start the march within Israel at about 0300 on 29 October. During the night we could just barge ahead in closed column. There would be no chance for concealment in any case, as the country is shrubless and wide open. However, 10 miles east of the border was a formation which would give the brigade partial cover. We could refuel there and then make the final plunge in daylight. This last stage of the march was certain to be a trial. But I figured that with towing and winching, we could maintain the schedule.

Nothing went quite as planned. By dark on 28 October most of the brigade was present at Ein-Hotsev. But some of our 6X6s hadn't shown in time for the scheduled departure. Of that came the first delay. At 0700 I decided to wait no longer, and to mount one battalion on such civilian lorries as we could scrape together. The rest of the brigade was upon halftracks and the proper trucks -- well, not quite. I had to leave the battery of AA behind for lack of vehicles. One platoon of engineers was also pared off, for the same reason. In an inspired moment, I decided that I'd take along the engineer's bulldozer, anyhow.

So we started in broad daylight. Again changing plan, we refueled while on the main road, 50 miles from the border. By doing it on the run, where the roadway was still smooth, we saved maybe 2 hours. By the passage of time, we had lost our last chance for a pause during the worst part of the journey. We crossed the border at 1600 and at 1700 we hit Kuntilla.

This was the target -- a village extending about 400 yards over the flat top of a conspicuous mesa which rose sharpsided 450 feet above the surrounding desert. At either end of the village, covering the one road, was a rock-walled watchtower with fire-slotted sides. Next to the mesa, on the north side, is a Bedouin well by which the village survives.

One reconnoitering Piper Cub reported to me, we approached, that the Egyptians were running to man the towers and the nearby trenches. My people didn't stop to see. Vehicles leading the advance guard whipped around the hill and moved straight in against the most westward tower, to get the setting sun at their backs. The AMXs went first, firing on the move, and the halftracks followed close behind. We lost one man wounded. One jeep and 2 halftracks were disabled by mines.

But by this time, as dark came down, I had also lost the main body. For the time being I did not know why it had fallen behind — later I learned. The sand had proven too deep. Every artillery piece had become stuck and all but one mortar truck. Two tanks and 3 halftracks were also caught. Both tankers — one for the tanks and the other for the halftracks — were in that same situation.

To sum up, 50 vehicles could no longer move, and those which were still free could not get past the block. Night found me with an immobilized brigade strung out an unknown distance behind me. I didn't know where my most important vehicles were or how to find out.

Some inkling of the situation came to me by radio from the artillery commander. I told him to take over the job of freeing the stalled vehicles and closing the gap. Junior leaders were already at work. They had unloaded the one bulldozer and were using it to pull other machines out of the deep sand.

At the same time I asked for an airdrop of fuel for the tanks and of spare tracks for the vehicles which had thrown theirs in the sand. I told higher headquarters: "I will designate the DZ later."

My decision had already been made to press on against Themed with what I had, since that would be our point of greatest vulnerability and I did not want it reinforced.

At 2300, one lorry loaded with tank fuel, pulled by a halftrack, got up to Kuntilla. By then I had the greater part of the advance guard, the brigade HQ and most of a second infantry battalion at hand and under control. I decided to move and to leave it to the others to extricate themselves and follow me.

At 0345 on 30 October we pulled into Themed. The entrenched enemy platoon fired as we barreled through. We returned fire but didn't stop.

At 0400 I ordered the advance guard commander to take position on the high cliff beyond Themed without waiting for artillery support. He was to wait until 0545 for the rising sun — that would blind the enemy along the cliff. That was the best I could do, lacking the weapons for supporting fires. Since it would have to be a drive straight up the notch in the cliffside, he would have to lead with armor.

Except for armor and infantry, the rest of the force was told to disperse, dig in, conceal vehicles if possible and be prepared for an airstrike. Also, via the Piper Cub relay, I was hearing from the commander of the dropped battalion that he was on target, with 13 men injured in the drop. His resupply had come in. He said he had shot up numerous enemy vehicles and captured a water tanker.

As first light broke, I knew there was no chance for a major surprise. Atop the cliff the enemy already knew we were coming. Our van was still 1,800 yards or so from their forward pits on the skyline. They were already firing their machine guns and mortars, though at that range they couldn't hurt us.

I decided to try to mystify them with the novelty of the attack. This was the plan rigged on the spur of the moment: the halftracks followed by the tanks would ride along the road until the "bullet swarm" really thickened. Then our vehicles would deploy astride the road with the armor to the right. The tanks would concentrate their gunfire on the enemy pits of the opposite flank; that way, because of the perspective, they had a better chance of hitting pay targets. Then they (the tanks) would dash to within about 350 yards of the minefields covering the enemy front. There they would lay a smoke-screen, dropping smoke canisters just in front of their own hulls. That done, they would drop back just a few yards to get maneuver room, then converge on the road and charge upward through the notch in column, firing to both flanks as they came up the crest. I felt sure that the road itself was not mined and I proposed to move by that avenue.

We were still one mile away from the cliff when .50-caliber machine gun fire began bouncing off our metal. Still, the force deployed, fired, smoked, regathered and charged exactly as planned. When the AMXs topped the rise and charged past the big enemy perimeter on the left, not pausing to give it searching fire, the whole enemy position from front to rear — I mean all parcels of fortified ground — fell apart. In that charge, we lost 3 dead and 6 wounded; one half track was disabled by a mine. Otherwise, we remained sound. The enemy lost 50 killed, 15 prisoners and 11 lightly wounded. The others ran away and we did not try to pursue.

Having captured the big obstacle, the advance guard spent the next hour evacuating the wounded to Themed village. As that hour closed, 6 MiGs came over. They strafed and bombed us in pairs, making 3 passes. We lost 6 more men wounded.

My artillery was still missing. I took a good look at the men of the advance guard; most of them seemed to be drooping. Still, I decided that we were strong enough to go on and take Hakhl. No word had come that the dropped battalion was in any real danger and I was now sweating less. But it seemed wisest to "hit the road" as soon as I could complete my arrangements — they were considerable.

At Themed the advance guard had set up an air strip. On the road to Themed, at about 2300, I had asked that the air resupply be brought in soon after first light. We got it at 0700. Already we were using the air strip to evacuate our wounded in the Piper Cubs.

Then I took a second look at my force. We were having to refuel. The men went about this work haltingly and had to spell one another often. I decided we had to have a brief rest while waiting for some of the others to catch up. Right after I gave that order, a Piper Cub reported to me that the field artillery battalion and the lorried infantry were already on the road, just leaving Kuntilla. That meant they were 3 hours away. So we would wait for them.

By 1100 the camp seemed to be freshening. Then the MiGs came at us again and 6 more men were hit; by radio I learned that our own air force would be ready to protect us after 1300 hours. Then a Piper, which I had sent to look over the scene at Parker's Memorial, returned with the message: "We are being shelled by heavy mortars and have taken 2 air strikes." It has the postscript that the strike had demolished the dropped battalion's only Piper while evacuating wounded. I got yet another message from my own Piper: "There is evidence of an enemy advance from Suez." So once again I changed my mind. To wait was impossible.

The advance was ordered at 1200. We began rolling at exactly 1245. Now the road was much better. As we sped along, we had frequent encounters with enemy halftracks and armed trucks -- we finished them without stopping. It was 50 miles to Nakhl. By 1630 we were within machine gun range of it.

I had asked our high command to ready an air strike for Nakhl as we approached. By sheer chance, the air arrived above us just as we sighted the mud huts. Though the evening was not really cloudy, there was a thick overcast and the sky already was darkening. I was on the radio talking to the jets. The commander said: "We can't see Nakhl and can hardly see you." I realized nothing could be done about it. Between the overcast and the blending of the mud houses with the desert flat, our target had become invisible from above. There was no use wasting gas in vain orbiting, so I told the air commander: "Contact the force at Parker's Memorial and get mission to interdict enemy movement from Suez." They were less than 10 minutes from the dropped battalion -- I was still 4 hours away.

This switch may sound foolish, since dark was falling fast. But it was a question of topography. At Nakhl everything looked the same from the air. Between Suez and Mitla Pass, the road was a slot between hills and couldn't be missed.

Two minutes were lost in making this decision. We were still 1,500 yards from Nakhl. I issued my order to the battalion commander and he passed it to the companies: "Be ready to attack in 15 minutes."

Immediately, a very helpful thing happened; while we drew breath, at least one battery from our lost artillery battalion caught up with

us. We got the guns laid with 8 minutes to go and they opened fire. As the first round went off, another battery arrived. It opened fire with 5 minutes to go. Between them, they bracketed the town, hitting into the fortifications at both ends of it.

At 1645 we began "galloping" straight in. In the force were 2 infantry companies on halftracks, one on lorries and one platoon of AMXs. Half of the tanks and one rifle company were to go against the position at the far end of the village. The lorried company was to ride 750 yards, then dismount and attack the nearest position on foot. The others were to stand by.

It would be dark by the time we closed. The last rays of day were shining directly in our eyes. I couldn't take the chance of ranging in more artillery as it came up. I couldn't use tanks with the infantry line moving afoot, because in the dark it might breed confusion. Dusk is even more deceitful than pitch dark.

That attack, so hastily contrived, went as planned. Before we closed, we could see the Egyptians running from their positions. The shellfire seemed to bounce them right out of the ground. Our batteries sustained fire right to the moment when our own people go up there.

I could hear the enemy chatter on the radio. It was panic talk. They had heard from their own air observers. The far-strung-out state of our column, which was raising a towering dust cloud for more than 30 miles back, gave them the impression that a mighty host was advancing. There was at least that dividend from our straggling.

We captured Nakh1 without losing a man. The enemy lost 7 dead, all killed by artillery. The others ran. Next day the survivors counterattacked from out the wadi. 51 were killed and 25 taken prisoner. How many got away across the desert remains unknown.

In Nakh1 we found military workshops, large stores of ammunition and food and a sufficient arsenal to indicate that about 500 men had based there for training. There were also up-to-the-minute staff maps of Jerusalem and the Negev. We found no Fedayen — we merely found a large supply of their distinctive caps.

At Themed I had felt compelled to leave the best part of 2 infantry companies because I didn't have enough vehicles to move at the speed I wanted. Here at Nakh1 I intended to leave one artillery battery, 2 mortar batteries (if they ever caught up) and the rest of the infantry battalion which was holding Themed.

You must remember that the armored brigade at Quesima had not yet reached Bir Hasne as planned. So I had a problem; my right flank was open. The Egyptians could come at me from the north if they wanted.

Accordingly I told the battalion commander to establish an air strip in case we had to get people into Nakhil a few at a time.

Now my radio began to buzz. The Piper was again relaying to me from the dropped battalion. I said: "Tell the command that Brigade will reach there in 4 hours." The first message to me was that the battalion surgeon had been badly wounded during an airstrike. The second message was: "Enemy attacks against us have ceased as a result of the jet strike which you sent against against the road." The third message said that another Piper had landed after dark to evacuate the wounded doctor.

At 1930 the column started moving west from Nakhil. At 2330 we reached Parker's Memorial. Nothing had happened along the road. My "brigade" as I closed into the camp was composed of 2 battalions less 2 companies, 2 artillery batteries and one mortar battery.

My men had been moving and fighting for 39 hours since leaving Ein-Hotsev. Before we could enter the perimeter, the dropped battalion had to lift mines and roadblocks. These jokers had posted a sign over the entrance: "International Boundary, Show Your Passports." I noticed that no one with me laughed and I took it as a sign that we were wearing fine. Some of my officers had gone 3 nights without sleep — I hadn't closed my eyes in 70 hours.

At 2300 hours, after getting a full report on the local situation, I called all commanders together to issue orders for the organization of the expanded camp and for completing the capture of Mitla Pass. I still felt fairly good — maybe that was because I had ridden near the front of the column where the dust, and consequently, the fatigue are less. What I planned to do was to tell them what would again carry on about 0400. That would get us to the Pass by first light, and I figured that 5 hours sleep would be enough.

But I didn't get the words out. As I started speaking, I looked at the men facing me. Every man was sleeping. At that, my words blurred and I toppled over. Nature simply took over. I slept for 4 hours and 15 minutes. I could have used more but an air drop came in and one 600-pound bundle landed 3 feet from my head. That wakened me and reconvened the conference.

The nighttime drop fell directly on the camp, fortunately without hitting a man, though there were many near misses. In a way, that was my fault. Originally, we had planned to supply the dropped battalions wholly by air, while the rest of the brigade's requirements would be trucked in. My overland journey convinced me this was impossible. So from Nakhil forward I kept radioing high command that my whole force at Parker's would have to be air-supplied. They took me at my word and moved too fast.

They moved forward several hundred yards along the ridge top, then their eyes took in the problem. Looking at the opposite cliff, they could see small caves in its face, almost closed by piled-up rock. These caves were so far down the cliff wall that from the angle on the height, it was impossible to put fire into them.

Second Battalion guessed that both cliff walls had been recessed with these rockwall fire pits. So they started climbing down to get at the holes nearest them. But the cliff had an almost sheer face. To negotiate it, they had to hold with both hands, slinging their rifles. So moving, they were easy marks for the enemy riflemen on the opposite cliff. Many were shot down — others tried to keep going. It became an individual battle. Several of the enemy cave parties were mopped up. Later we found our dead and theirs, together in the holes.

I had made the mistake of calling for an airstrike. It came in while this grapple was proceeding on the cliffside and I had to wave it off lest it kill my men.

Minutes later, at 1550, 6 MiGs and 4 Meteors roared into the Pass from the west, strafed the cliffside and the column of vehicles on the road and came straight onto the brigade camp, to plaster it with rockets. Two of our Urugans came out of nowhere, took on the MiGs and diverted them from the battle. The Meteors roared back and strafed the camp again.

First sending my AT guns to the Pass to shell it directly, I ordered my men to call off the hillside scramble, hold what they had and wait for dark. Losses were mounting too fast. Accordingly, my second was told to displace the minimum distance which would take the men out of fire. There was a burning enemy vehicle just beyond the area where the Egyptians had set up their fire gauntlet. That was to be the line. Dividing, the force was told to hold the heights on either side of the Pass, even with this vehicle.

At 1730 the battle was resumed. Two companies advanced from west to east on top the cliffs. The other 2 companies advanced over the road and up the cliff face to the spider holes. That would box the enemy in. If the treatment worked on one side, we would repeat it on the other. Each force was led by its battalion commander. I had neglected to say that the man whose halftrack went into the gulley, got back to his command by walking through the fire slot.

My reasoning about the night attack was elementary: I figured that after dark the enemy would lose the advantage. His force on the opposite cliff could not see to shoot.

That operation lasted 2 hours. My men cleaned them out, using grenades, bazookas, machine pistols, clubbed rifles and boulders. By

2000 hours all firing had ceased and the Pass was ours.

During the battle I learned from POWs that I was dealing with 2 Egyptian battalions, the 5th and the 6th of their 2nd Brigade. We buried 211 Egyptian dead there a few days later. How many wounded got away I don't know; also, I missed the count of prisoners. Our side lost 34 dead and 102 wounded. It was by now a badly battered brigade and the task of evacuating casualties weighed heavily, for the men were worn down. We kept at it.

About 2300 I again got a message that the enemy armored brigade from Bir Gifgafa seemed to be headed toward me. Bir Gifgafa was 33 miles away. My problem was to organize for defense in 2 directions. Still, since we were outposting the Pass, I figured that my main danger was from the rear.

So I called my commanders together to issue orders for reorganization. It was then midnight. I started talking. Again, they all fell asleep. I gave it up and let them sleep. I too, lay down and slept until 0345 when I woke them up and gave them my orders.

The enemy armor did not come.

I formed my force into 4 small teams. One of them, formed of 2 infantry companies and a few heavy weapons, held the front where the cliffside battle had taken place. Another 2-company battalion, with 3 AMX tanks and 3 AT guns, was posted on high ground to the north of our rear. Team Three, a reinforced rifle company, guarded to the south of the main road. Team Four, 2 reduced rifle companies on halftracks and 4 AMXs, was concealed in a deep wadi to the southeast. That was my own counterpunch, my reserve.

At first light, I sent a Piper Cub out to reconnoiter the desert toward Bir Gifgafa. He saw no armor anywhere. This became our first day of rest. I suspended all activity. There was no patrolling.

On 2 November I was ordered to capture Ras-Sudr on the Gulf of Suez. Earlier I had found a track leading to this place. We took it at 0600 on 3 November. Then just after midnight came orders to move the brigade from Ras-Sudr to join the force dropped at E-Tour and carry on with it to the south tip of Sinai. We did — almost.

Another order stopped us as we drew to within 20 miles of Sharm-E-Sheikh, at which point the campaign ended for the brigade.

We had covered much ground in a few days. The general feeling of the brigade was one of chagrin or disappointment that its effort was something of a sideshow, contributing only indirectly to decision.

ANALYSIS

The brigade commander showed audacity in his execution of several hasty attacks. Although beset by transportation and vehicle recovery operations, he continued the attack with the forces remaining at his disposal.

The importance of sleep plans is illustrated by his virtual collapse during an operations briefing. Leaders at all levels must plan for their men's rest to increase their effectiveness in critical times.

TANK WARRIOR IN THE GOLAN

Brigadier General S. L. A. Marshall,
United States Army Reserve-Retired

(Brigadier General Marshall noted that the source of this material is an officer who, in 1973, was studying at a major American university and who necessarily remains anonymous.)

I arrived in Israel on 8 October and reported for duty at Lod Airport. From there, I was sent by bus to the Armored School at Julic where I marked time until mid-morning of the next day. It was a fairly quiet day in the war, and higher command and trying to get enough tankers together to flesh out one more battalion.

Those of us who had come from abroad were either officers or non-commissioned officer tank commanders. Two more flights had arrived on the 9th, one from Zurich and another from South Africa. Taken as a whole, we were 17 different countries, and I knew only two of my companions. We were not given any numbers. The unit, named after its commander, became Battalion Nati, his first name. I barely knew him and had never served with him. We went to Ashkelon to get the armor that day.

We had 24 tanks for the battalion, or eight to y, all
Centurions. I had always been a Centurion man. Mos people
had trained or served on other tanks. But these strange
Centurions even to me. They were equipped with a di. engine,
and the communications system was quite unfamiliar.

We were given no briefing on the situation. Some of the aps who filled out the Centurion crews were boys of 18 or 19; they had just finished basic training at the Armored School and had received only two days of training in the field. They alone had dog tags. No listing was made of the numbers of the tanks nor of the individuals as they were fitted into the armor. As for our so-called technicians who made up the crews, perhaps 1 in 10 was a truly qualified specialist on the gun, engine or radio of the tanks that we had been given.

The Centurions had not been supplied. The ammunition arrived on trucks though some rounds were lifted from the ammo bunkers at Julic. Most of the loading was done by recruits, with resultant damage to quite a few of the mountings which meant that some of the Centurions could not be fully loaded. We were given only antitank rounds, no smoke and no antipersonnel ammunition. We had no 9mm bullets for the machine guns, very few flares and only enough hand grenades to supply

a minority of the vehicles.

All of our interior hardware — hammers, screwdrivers, the machine gun mount, wrenches and so on, amounting to about 1 ton per tank — came to us after dark that night by truck in bulkload shipping. There was enough to supply 50 tanks, and we had 24. All items were separately cased, so we had to break open these monstrous crates and, in total darkness, try to find the necessary tools for each tank. No one directed us, and we did not even know what tools we were supposed to have. It was just a mad scramble in the dark, nightmarish but all too real. Still, trying as best we could, most of us missed essential items such as oilers. Some of the materiel we needed was not there at all; for instance, there was no oil and no grease though a tank needs one kind of oil for the gun, another for the engine and yet another for the shock absorbers. When daylight came, we left the surplus scattered far and wide, our patience run out and all of us feeling a great weariness.

Still, following sunset, we quickly moved to a small hill to check the optical equipment against a sighting through the gun barrel. That is standard practice. Next, we were supposed to fire one round at the same target, but we never got to that — no range area. On the night of 10 October, we got together for coffee, cakes and a social hour; this was our only experience in getting some feeling about ourselves as a fighting organization.

About 250 of the out-country soldiers who arrived when I did had been made instant armored infantrymen and fitted into armored personnel carriers (APCs) at Julic. So far, we had stayed together. On 11 October, just before first light, we received our movement orders. The unit commanders were to proceed at top speed to Headquarters, Northern Command, in two passenger vehicles, a quarter-ton vehicle and a staff car. The crews were to follow on buses and the tanks on lowboys. At headquarters, we were given maps and a situation briefing and were told that we were to attack toward Damascus early the next morning.

Several hours later, we joined our crews and the Centurions at the entrance to the Golan, not far from the Gadot Bridge. About 1 kilometer up the slope of the Sea of Gallilee, I saw my first Russian T62, in perfect condition, abandoned at the Syrians' farthest point of extension. I got a good feeling from it. By dark on 11 October, our battalion had closed on the western edge of the demilitarized zone (DMZ).

By daylight, I had learned that we had two divisions arrayed for the attack, the commanders being Dan Lanel and Rafal. My battalion moved through Tel Abu Khanzir and Tel Yussef as we crossed the DMZ, still meeting no resistance. Then, as we cleared the DMZ at about 0600 on 12 October, we came under intense artillery fire. It churned

up the road as we entered a small, shell-shattered village. Then, as we emerged, we came under line-of-sight fire from two anti-tank guns to our right and left. At the same time, four MiG17s working in pairs came at us firing rockets from about 60 meters up. They were so low that I saw the face of one pilot. They killed one tank and two of its crew — their only hit.

A few minutes later, one of the antitank guns killed another tank and two men. The same gun fired on me, three rounds altogether; I could tell by the sound. But I could not locate it, and the frustration was maddening. I am sure it was almost buried underground or hidden behind large boulders, for I had had the same thing happen in the 1967 war. The sensations were identical.

Between 0800 and 0900, five air attacks came at us, all either MiG17s or MiG21s. I did not see any antiaircraft gun firing from our side though one or two of the MiGs were shot down either by our air or by our tank gunners and crews who were firing with every available weapon. As the air attacks persisted, the pilots flew ever higher as if they were losing confidence. We were getting no alerts or warnings whatever about these enemy sorties. But, as we hardened to the problem, the order was passed around that, when the word "airplanes" was yelled over the radio, we were to turn all weapons skyward, then fire at will as the MiGs appeared. These massed fires seemed to turn the trick.

I had contact with all of my tanks as we tracked out of that first village where we had fought in place for half the morning. From there, we turned south, the grand object of this 90-degree wheel being to get on the rear of the Syrians in the southern Golan. But, as we turned, I lost two tanks, one from engine failure, the other from steering failure. We took the second village under the same conditions: The Syrian artillery came down on us as we entered, and the antitank guns let us have it as we emerged. It was the same at the third village. They had pretargeted the road crossings, knowing that we would be pretty much roadbound by the basaltic ribs and walls of the terrain.

As my company turned south, the other three of the battalion wheeled north to join the assault in that direction. But I did not know they were so going and thought they had fallen behind me. With the turn, moreover, I lost contact with them as with everyone above me. Suddenly, I found myself out in front with only two tanks. It was the loneliest feeling possible in this world, something close to panic. So I latched on to another tank company that I did not know at all.

Late that evening, the other companies of the battalion got into an ambush not more than 1 kilometer from me. One company of eight tanks was wiped out by antitank guns and Syrian tank fire, not by

antitank missiles. The battalion commanding officer (CO) was hit and evacuated. Then, the second in command was wounded by a shell fragment, and the third in command was shot in the leg. The second company lost two tanks, and, equally bad, one APC was hit by a shell and eight men were killed. With that, confidence in the vehicle was lost by all of the men who were riding in the APCs. They fled the carriers and, thereafter, rode on the hulls of the armor.

I kept moving until dark. As I pulled up, I heard a comforting voice speaking Hebrew over the radio. I felt saved. The voice said: "I am coming along with three and a half tank battalions." Speaking was Colonel Sharid from Bet Hashita. His was a solid, well-trained brigade and not a makeshift outfit like my own. Quickly, I joined him. By then, we were out of fuel and ammunition, and he resupplied us plentifully.

The hour was 2100. As I looked at my watch, word came over the radio that a Syrian counterattack was driving toward Division Rafal to the north of us and we were to move that way to help him. We were on the road two hours, and I was right back where I started.

There, all of our tanks formed up roughly in a laager to complete resupply along a north-south road. One side of the laager was next to the foot of a small djebel. While we were refueling, about 10 enemy tanks came up from the south, formed in line and shelled the sides of the djebel. The Syrians thought we had bivouacked on the slopes. We did nothing. These were the first tanks we had seen. As first light broke, we made a wide swingout and got on their rear. They must have been sleeping. They tried to get out but reacted very sluggishly, and we destroyed them all. At the same time, we killed a truck convoy coming north along the road.

As that action ended, five replacement Centurions appeared, and Sharid gave them to me. Two of them were the old type Centurions, and I looked at them like long lost friends.

We resumed heading south again, aiming for Tel Hara, the highest volcanic peak in the area. A Syrian division was said to be based there. So far, we had heard endless warnings over the air about missile teams but had seen none. We were told: "Watch out for two or three people moving in detachment."

When we came within easy sight of the mountain, we could see that it was crawling with people and tanks. We first spotted them through glasses from 4 kilometers' distance. We were already drawing artillery fire from the height. It was a shoot 10 minutes on, then 10 minutes off, continuing like that. It was neither highly accurate nor continuous.

Between us and the mountain was an unusually flat valley, about

400 meters broad. If we moved a man or a tank into that flat, the slopes ahead exploded with fire. We lost three tanks experimenting.

So, we held off. We were denied any airstrikes, being told that all of the air was needed in Sinai. We had no artillery. We could see their guns flash, and we later saw the missile sites open up. There were targets galore, but we could not knock them out. The djebel was a solid block in our path. Tanks could not get up the steep and rocky forward slopes. Tel Hara was a nut to be cracked by artillery, air power and airborne infantry — and we had none.

I began to lose track of time as we stalled in front of the mountain. But I think we first confronted Tel Hara on Sunday, 14 October. By then, the high command was easing off with the attack in the north. Our most forward elements were at Sasa on the road to Damascus. The Army center was bulged toward some low-lying hills to the east. Our battalion was the Army right flank, facing south. Staying there three days, we got shelled every 10 or 15 minutes; they did not hurt us much. We had three or four airstrikes against us each day, very raggedly staged. The Syrian morning flights were strictly for reconnaissance. Ground fire from troops kept them flying high. Even so, three of the MiGs were shot down by the massed fires.

It was on 17 October that the Iraqi attack came from the east, pointed in our general direction. We heard not a word about it in advance. The action boiled up around a company of Israeli Shermans positioned on a low ridge about 1800 meters to the east of where we confronted the Syrians at the mountain. The fight started at 1400 and lasted two hours. My Centurions and others sped to fill out a line north and south of the Shermans on the ridge.

Here, for the first time, I met the Sagger missiles. Syrian rocketmen had mingled with the Iraqi tankers. They were not very good. The Iraqis had come on with somewhat more than 300 tanks; all I saw were about 70 to 100 T55s, this at about 1800 meters' range, their closest approach. Of missile teams, I saw none. The words came over the radio: "Missile attack, improve positions at once." Looking across the plateau, at around 2000 meters, I could see beautiful flashes coming out of the rocks. The missiles came on in salvos, three or four at a time. Maybe 200 meters separated the several Sagger firing points. The Syrians were firing from prepared positions, and they never left them. I would guess that not more than 15 of the missiles came toward us in the first half hour. We knew we needed smoke shells for our tanks; also, artillery could have helped us. But we did not have either. One of our tanks was hit and knocked out by a rocket; most of the other rockets fell about 400 meters short. Maybe we were overcautious, but we kept moving as a safety measure though I doubt it helped us any.

Two hours after the fight began, our armor put on a pincers move

from north and south, and the Iraqis pulled back, but only to launch their own counterattack from out of the northeast. Simultaneously, our tanks countered with an enveloping movement. It was like one scissors biting upon another. I could see only part of the fight. Numerous Russian-built tanks were burning to my forefront, but I have no idea how many enemy soldiers were killed. The tanks in my sector had continued to fire at the Sagger sites, but we got no return fire from them. If the Syrian Sagger teams had moved out to help the Iraqi tanks in the counter-counterattack, we saw no evidence of it.

Then we moved back to face Tel Hara again. Our armor came under attack from the RPG7 and a long-range antitank missile, not the Sagger. We had first met the RPG7 in that fight after we had crossed the DMZ, and, though one officer had been hit by shrapnel from one the rockets, we had guessed it was a bazooka round. Now, we could see it was something different. But most of the antitank missilemen were inept, and their rounds continued to fall short.

Three days after the Iraqis tried and failed, the Jordanians came on. Though we were still engaged with Tel Hara, we had pulled back a short distance to re-equip. At last, we had some Israeli artillery forward of us and in range of the mountain. I asked the unit CO why he did not shoot. He said: "I have no ammunition."

Next, we heard that we were "to be attacked from the south." The battalion CO by this time was Ori Orr, and we were several miles north of Tel Hara. We attacked on a southeast axis off the east flank of the mountain so that, as we moved on, I could see the southern slopes of Tel Hara.

The two Jordanian brigades of Centurions — and when we first sighted the tanks we were unsure whether they were friend or enemy — came on moving from south to northeast. Initially, we saw only eight tanks that were serving as a point. Then, maybe one-half kilometer behind them, we glimpsed large numbers. We took the point under fire when its tanks were 1600 meters away. It was accurate fire, and the enemy Centurions went up in a blaze. The tank mass behind them, which was then moving downslope, started milling around as if confused. We lifted our fire to them and got no return fire whatever. It began to look like a big success.

Then, as the Jordanian armor turned and headed south, we could see a great swarm of enemy vehicles and people streaming down the southern slope of Tel Hara. We knew they were escaping right before our eyes. We believed the thing to do was go at them.

Then, we received orders from higher command to get back to our starting positions, which we did. The engagement had taken place on flat ground littered with artillery and mortar firing pits, as well as land mines and abandoned stores of rockets. To the east of Tel Hara,

we could see at about 4 kilometers distant two tall radar towers with revolving tops. We had these prizes in our hands, but we tankers were not allowed to close them. That was about 1600. We called for air and artillery strikes. Nothing was done. I have never been able to understand the politics of the decision.

I believed at the time that the Syrians were through. One big center rush and they would collapse. My body was black and blue from the lurchings of the Centurion in crossing the basaltic obstacles of the Golan. But, up until that point, it had been worth it. Enemy missiles had failed to impress men. We had moved through fields virtually littered with them, but we had seen almost no hits. And that is what counts.

Next morning, we reversed course and, instead of attacking on the southern axis, moved northeast against a hill called Tel Karim. The main body in the attack was Brigade Nine. In the course of the movement, my company linked up with the remnants of our scratch battalion. We began the assault in late afternoon and finished long after dark. The Syrians on Tel Karim were well fixed with artillery and antitank guns. They also used Katusha rockets against us; the flame seemed almost to jump toward our armor. My tank took a direct hit from a Katusha which broke the spring wheel that keeps the chain tight. That called for five hours of repair, with a part cannibalized from another tank.

We started with a double envelopment of the hill. Two of our tanks burned at once from artillery hits, but we pressed on until we squeezed out the position. Though it was dark and the Katusha bursts were raising such dust clouds that clear sightings were impossible, I could see their armor getting away to the east.

Next day, we went on defense, and the battalion was shifted to another hill a little farther to the north. From there, we had a clear view of the Damascus Road that we code-named America. It was crawling with Syrian soldiers pulling away. Artillery could have halted them in no time, but we were not using any. Enemy resistance had ceased. Our tanks could shell some of the nearer villages where they were milling around, but that was about all. A continuous clatter went on over the radio, mostly in Russian and Arabic. The word bandua came over frequently; it means "tomato" and signifies "wounded." We did not get electronic jamming at any time.

My tank fired about 150 rounds, all of it antitank. I saw some of their tanks knocked out at 2500 meters or more. But, as to penetrations of frontal armor, it is impossible to see where the hit is made at that range. One has to be lucky even to determine that some kind of hit has taken place. My second tank fired about the same number of rounds, but, under the stress of battle, a 30-percent margin of error in estimate of rounds expended is about normal. In about

three instances, we thought we were engaging T62s. But, here again, in the middle of a fight in broad daylight, it is difficult enough to identify another tank when it is only 300 meters away; the difference in the look of the gun placement is not that easy to distinguish.

My crew were all beginners who wanted to do a good job. They were religious kids, but they did not have the know-how. The driver was fairly good, the gunner mediocre. But excellence is not to be expected when combat soldiers are thrown together in such a way.

From the crews of the 24 tanks that started with my battalion, we had 22 men killed in action. The number of wounded is unknown to me; eight men were killed in one APC. Most of the casualties came from tank and antitank fire. Of the 22 dead, only two could be identified initially because of too much haste and too little care in the beginning. In the end, only eight remained unidentified. I did not get to know the members of my crew or their full names until the fighting was over. This is not a good way to fight a war.

We had no night equipment, and we fought no true night battles. We used no flares from planes or tanks. I have heard stories about Syrian commando teams infiltrating us at night. I do not believe it happened. I saw more tank treads lying in the dirt in Syria than I ever thought possible. They were everywhere. No terrain anywhere is more disabling to tanks.

We stayed in the position overlooking the Damascus Road until the cease-fire. Through the daylight hours, the Syrians continued to plaster us with artillery. We had some artillery with us, but our guns did not return fire and that was according to orders. One of our main uses of infantry in the Golan was the evacuation of our wounded, a problem for which the armored corps has no solution. There were no helicopters in the Golan for that function, or at least we saw none, and we rarely saw any of our own infantry, particularly when we needed them most.

ANALYSIS

This personal narrative is an excellent account of how confusing armored combat can be when viewed from a turret. The value of unit cohesion and team building is illustrated by this ad hoc battalion's lack of it. As the officer stated, "This is not a good way to fight a war."

ANNEX A: SOURCES

Chapter One: World War One

The First Armor Battle: The Somme, September 15, 1916. Reprinted from The Fighting Tanks Since 1916, by Jones, Raney, and Icks, 1969. (Old Greenwich, Conn.)

Combined Arms: First Battle of Combrai, November 20, 1917. Reprinted from The Fighting Tanks Since 1916, by Jones, Raney and Icks, 1969. (Old Greenwich, Conn.)

Bapaume, August 31, 1918. Reprinted from The Fighting Tanks Since 1916, by Jones, Raney and Icks, 1969. (Old Greenwich, Conn.)

Epehy, September 17, 1918. Reprinted from The Fighting Tanks Since 1916, by Jones, Raney, and Icks, 1969. (Old Greenwich, Conn.)

"Hot Work, This." Reprinted from The Fighting Tanks Since 1916, by Jones, Raney, and Icks, 1969. (Old Greenwich, Conn.)

Tank Versus Tank: Villers Bretonneux, April 24, 1918. Reprinted from The Fighting Tanks Since 1916, by Jones, Raney, and Icks, 1969. (Old Greenwich, Conn.)

Chapter Two: World War Two

The Armored Roadblock. Reprinted from DA PAM 20-269.

Task Force Turner. Reprinted from Combined Arms Actions Since 1939, USACGSC.

Action at Schmidt. Reprinted from Three Battles: Arnaville, Altuzzo, and Schmidt, CMH.

Reconnaissance in Force by Russian Armor. Reprinted from DA PAM 20-269.

Technique of the Tank Platoon as the Point in an Exploitation. Student paper 42-6, Armor School Library, 1947.

An Armored Task Force Seizes Two Vital Bridges. Reprinted from DA PAM 20-269.

Tanks in Rough Terrain. Student paper 42-35, Armor School Library, 1947.

Singling. Reprinted from Small Unit Actions, CMH.

808th Tank Destroyer Battalion. From official After-Action Reports, 1-4 May 1945.

Friendly Fire. Reprinted from Amicide: The Problem of Friendly Fire, Research Survey #1, Combat Studies Institute.

Troyes - An Armored Attack. Reprinted from the Nov-Dec 1963 Armor Magazine.

A Tank Platoon in Tunisia. Reprinted from the Nov-Dec 1949 Armored Cavalry Journal.

Calculated Risk. Northag Terrain Study, St. Vith Belgium, page 12, USA Armor School.

Chapter Three: Korea

Tank Action at Chongju. Reprinted from Combat Actions in Korea, by Russel A. Gugeler, 1954 (Washington, DC: Center of Military History).

Task Force Combrez. Reprinted from Combat Actions in Korea, by Russell A. Gugeler, 1954 (Washington, DC: Center of Military History).

Tank Support. Reprinted from Combat Actions in Korea, by Russell A. Gugeler, 1954 (Washington, D.C.: Center of Military History)

Co A, 72nd Tank Battalion: Combat Leadership. From Employment of Armor in Korea, May 1952, USA Armor School Library.

Chapter Four: Vietnam

Suoi Cat. Reprinted from Mounted Combat in Vietnam, by Gen. Donn A. Starry, 1978 (Washington, D.C.: Department of the Army).

Ambush. Reprinted from Mounted Combat in Vietnam, by Gen. Donn A. Starry, 1978 (Washington, D.C.: Department of the Army).

Tank to Tank. Reprinted from the Sep-Oct 1970 Armor Magazine.

Rock of Dong Ha. Reprinted from Mounted Combat in Vietnam, by Gen. Donn A. Starry, 1978 (Washington, D.C.: Department of the Army).

One Day's Combat: Lessons Learned. From the USACGSC, by Major J. F. Galle.

The Affray at Slope 30. Reprinted from the Jan-Feb 1968 Armor Magazine.

Chapter Five: Arab-Israeli Wars

The Valley of Tears. Reprinted from Fortress 77, by Avigdor Kahalani, with permission from the United States Military Academy.

Decision in Sinai. Reprinted from the Sep 1957 Marine Corps Gazette.

Tank Warrior in the Golan. Reprinted from the Jan 1976 Military Review.

ANNEX B: CROSS INDEX BY UNIT SIZE

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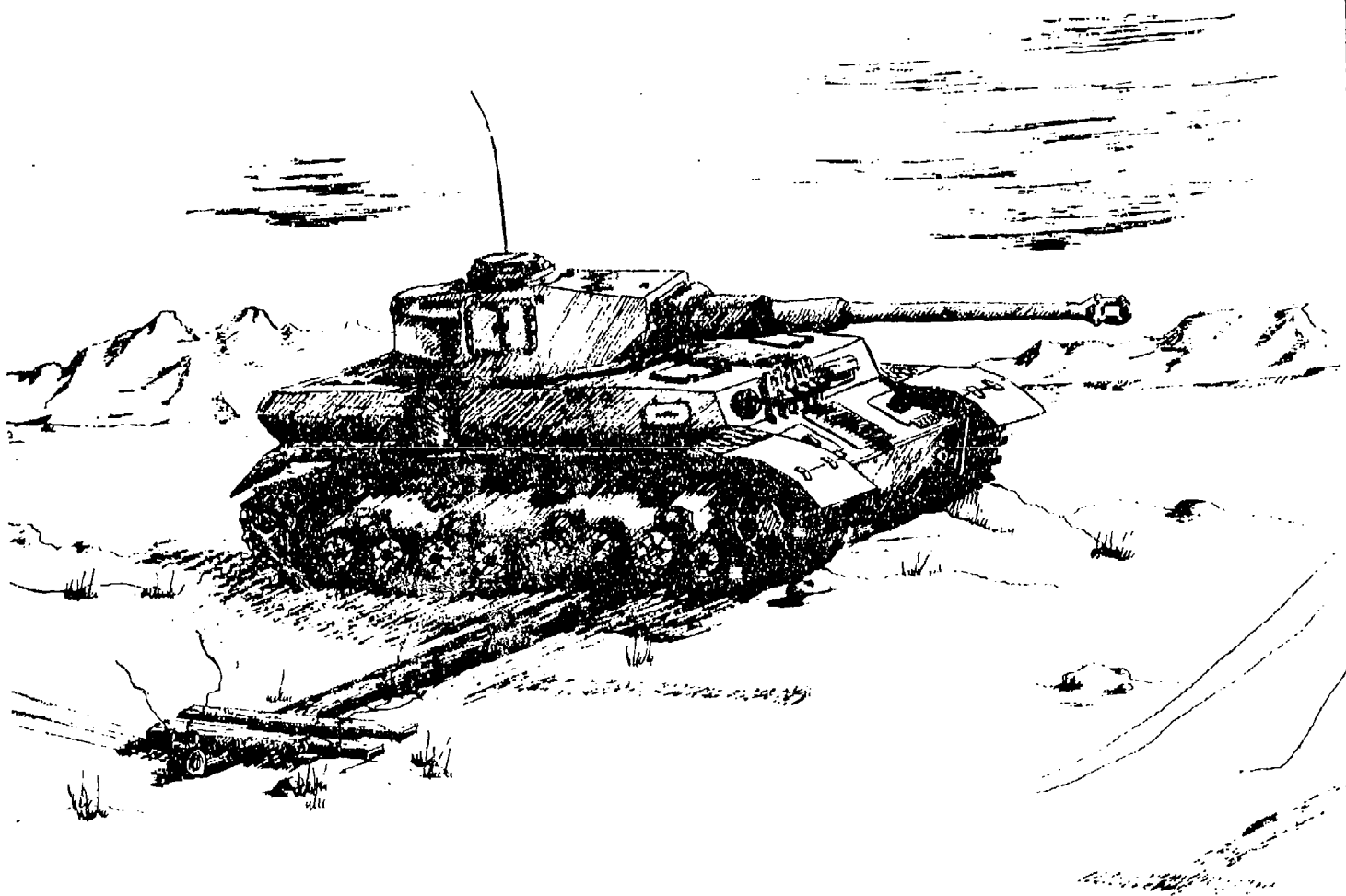
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"Mobility, velocity, indirect approach..."



-Heinz Guderian