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THE OPERATIONS OF THE 17TH AIRBORNE DIVISION  
IN THE CROSSING OF THE RHINE RIVER, 24 MARCH 1945  
(OPERATION VARSITY) (CENTRAL EUROPEAN CAMPAIGN)  
(Personal Experience of the Aide-de-Camp to the Commanding General)

Type of operation described: AIRBORNE ASSAULT BEHIND A RIVER LINE

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## PREFACE

Since this monograph concerns the operations of a division and it is treated mainly from the point of view of the division staff, considerable attention is devoted to the initial plans, preparations, and staff coordination as well as to the actual narrative of D-Day. Prior planning is essential to any military action, but its importance is greatly magnified in an airborne operation, where almost every detail of preparation, rehearsal, and briefing must be covered ahead of time in order to gain maximum success.

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CHAPTER I - INTRODUCTION

In the spring of 1945 the Rhine River was the last great barrier between the conquering armies of the western Allies and the heart of Germany. Once Von Rundstedt's fierce thrust through the Ardennes had been stopped, the Allies had resumed the offensive, smashing the Siegfried fortifications in their drive to the east. The fight through these defenses and through the melting snows of the Roer Valley had been a hard one, but by March the Allied armies were ready to storm across the Rhine and destroy the last center of German resistance. (1)

The Germans could be counted on to contest the crossing bitterly. Since the early days when the Teutonic tribes under Arminius had pushed the Roman legions across the river into Gaul, the Rhine had become a defensive landmark for the German people. Revered in their folklore and literature, it was the historic line where the invader must be turned back from the heartland of Germany.

As an introduction to the Rhine crossing, some consideration should be given to the disposition of the Allied armies along the river and to the situation in Germany. British and American leaders did not underestimate the magnitude of the problem confronting them. As General Eisenhower said, "The task of the armies assaulting across the Rhine represented the largest and most difficult amphibious operation undertaken since the landings on the coast of Normandy". (2) In recognition of the stupendous task, various army headquarters had been preparing

(1) A-11, p. 1310-1311; (2) A-11, p. 1312, col. 1

detailed plans for the crossing for many months. (3) These preparations involved careful hydrographic studies of the river, the accumulation of immense stores of bridging materials, and even troop rehearsals in Belgium along the Meuse. (4)

Although this was to be the greatest river crossing in history, (5) many factors promised success for the operation. One of these was the depletion of German reserves. After the failure of the Ardennes offensive, the Germans had decided to hold along the Siegfried Line. Once this line was penetrated, they made the mistake of fighting for every foot of the Rhineland instead of withdrawing for a strong stand at the Rhine. (6) This stubborn refusal to give ground enabled the Third Army to cut off and destroy thousands of enemy reserves. In the last month of the drive to the river, the Allies had captured the equivalent of twenty divisions. (7) When the enemy was finally compelled to pull back across the river, he had to spread his remaining forces thinly along the entire line. On the other hand, the Allies were now in a favorable position for the all-out attack into the center of Germany. With a broad river between them and the enemy, they could concentrate their troops where they were needed for the main effort, leaving the rest of the front lightly manned without fear of another German breakthrough. (8)

In addition the Allies had already secured two bridgeheads across the Rhine. (See Map A) The first one was made possible by the unexpected capture of the Ludendorff Bridge by the 9th Armored Division on 7 March. (9) Within two days the First Army had five divisions across the river. In a desperate

(3) A-8, p. 199; A-4, p. 291; (4) A-4, p. 314; A-8, p. 206; (5) A-10 Introduction, p. 1; A-15, p. 34; (6) A-11, p. 1311 col. 1; A-1, p. 382; (7) A-1, p. 386; (8) A-11, p. 1309 col. 1; A-1, p. 370, 394; (9) A-5, p. 126; A-4, p. 310

attempt to contain the bridgehead, the Germans diverted troops from the northern Rhine, where the main allied crossing would be made. (10) In spite of these counterattacks the bridgehead continued to expand until by 24 March it was 25 miles long and 10 miles deep, and three corps had been pushed across into the salient. (11) Another small bridgehead was secured by General Patton's Third Army further south in the vicinity of Oppenheim on 22 March. (12) (See Map A)

When the Battle of the Rhineland ended, the Allies had closed up to the river throughout its length, and the enemy had withdrawn to the east bank. (13) The Allies now had almost 4,000,000 men in western Europe for the assault on Germany. (14) In the south the French First Army and the U S Seventh Army held the upper Rhine. The U S First and Third Armies held the center. In the north Field Marshal Montgomery's 21st Army Group, consisting of the U S Ninth, the British Second, and the Canadian First Army, stretched from the Ruhr along the river to Nijmegen. (See Map No. A)

#### The Situation in Germany

The plight of Germany appeared desperate. The Russian armies were pushing relentlessly toward Berlin, while the western Allies marshalled their forces for the final onslaught. Allied bombings had so crippled German industry that there was a great shortage of weapons, ammunition, oil, and transportation. The German decision to hold the Rhineland at all costs had whittled down their manpower until they had become more and more dependent on the poorly-trained Volksturm for their reserves. Even these

(10) A-5, p. 131; A-11, p. 1311 cols 2-3; (11) A-11, p. 1310 cols. 2-3; (12) A-11, p. 1310 col. 4; (13) A-4, p. 310; A-11, p. 1310 col 4; (14) A-11, p. 1311 cols 2-3

inadequate reserves were often immobilized by the lack of transportation and spare parts. Behind all of these reverses there was a slow deterioration in morale. (15)

The war, however, was not yet won. In December the Germans had proved to the world that they could strike back when all seemed lost. As long as the heartland of Germany remained, the Nazis would fight on fanatically, hoping that somehow a turn of events would preserve the German Reich, which Hitler had promised would endure for two thousand years. As long as the industrial Ruhr remained in their hands, they could forge the weapons of war. In dispersed underground factories they were producing jet planes which might offset Allied aerial supremacy if produced in sufficient numbers. (16) In spite of their set-back in the Rhineland, the German forces had not been annihilated. They were determined to make a final stand at the Rhine. (17)

The problem of bridging the river against a determined enemy was not an easy one. The British attempt to cross at Arnhem in the fall of 1944 had failed. This time the build-up of men and materials must be so great and the plans so carefully made that there could be no stemming of the tide and no turning back. This was to be the German *Götterdämmerung*, the twilight of the gods, when the Nazis in their fall from power would carry Germany with them to destruction.

(15) A-13, p. 9-10; A-5, p. 113; A-1, p. 368-369; (16) A-11, p. 1309 col. 1; (17) A-5, p. 130

## CHAPTER II - THE PLAN OF OPERATION "PLUNDER"

The general plan for the crossing of the Rhine had been formulated even prior to the invasion of Normandy. The strategy was to cross at points which would permit encirclement of the industrial Ruhr and a break-out across the plains of northern Germany. (18)

The war-making capacity of Germany was concentrated in three great industrial centers, the Saar, eastern Silesia, and the Ruhr. The Saar had been lost by the Germans in their retreat to the Rhine; Silesia had fallen about the same time to the Russians; but the Ruhr still stood unconquered. This was the heart of the German war machine, from which pulsed the stream of coal, steel, tools, locomotives, munitions, planes, and tanks without which Germany could not hope to continue the struggle.

The Allies realized that a frontal assault against the Ruhr would be costly because of the congestion and the strong defenses in this urban center. Instead they planned a double envelopment, with the main thrust over the Rhine and across the flat open plains near Wesel, while the second prong drove across the river in the vicinity of Frankfurt and flanked the Ruhr from the south. (19) The main effort was to be made north of the Ruhr because the level terrain there and the fine roads leading east offered the best chance for an armored penetration toward Berlin.

It is surprising how little the overall concept of the crossing had changed by the time the Allies reached the Rhine. The only essential difference was that the Remagen bridgehead fixed the exact location of the southern pincers and facilitated

(18) A-1, p. 229; (19) A-11, p. 1308 col. 2, p. 1311, col. 3; A-1, p. 228

the encirclement of the Ruhr. (20) (See Map A) It also diverted German forces which otherwise would have been available to dispute the crossing at Wesel. Speed was now essential to deal Germany the coup de gr<sup>^</sup>ace while she was reeling from the February offensives.

The original plan for the crossing had envisaged a simultaneous airborne drop and ground assault to secure a bridgehead near Wesel. However, General Dempsey of the British Second Army insisted that in this case the airborne landings should be made several hours after the initial ground attacks had begun. (21) The British wanted to start the crossing at night under the covering fires of their artillery. To drop the airborne troops just across the river at the same time would have necessitated early lifting of the artillery support and would have been accompanied by the usual confusion of a night airborne operation. (22) However, intelligence reports indicated that enemy artillery a few miles east of the river could shell the bridging sites and that the enemy could counterattack once the crossings had been located. (23) Consequently, Marshal Montgomery insisted on airborne support for the operation. He decided to employ the airborne forces after the ground attack was under way and to drop them on the enemy positions in order to destroy the artillery and impede the movement of reserves against the crossing sites. This was indeed an innovation in airborne doctrine, which had previously stipulated that the airborne landings should be made far behind the enemy lines prior to the ground attack. It was also the

(20) A-11, p. 1311 col. 3; (21) B-9, p. 2; (22) A-4, p. 321; (23) B-8, p. 1, 2

first time airborne troops were to be employed within supporting distance of friendly artillery.

The overall plan for the crossing of the Rhine north of the Ruhr was known as Operation "Plunder". The airborne phase of this assault was called "Varsity". It was hoped that the airborne troops would insure an adequate bridgehead, adding speed and impetus to the attack.

Operation "Plunder" was to be executed by Field Marshal Montgomery's 21st Army Group consisting of approximately thirty divisions plus corps and army troops. (24) The main crossings were to be made between Rheinberg and Rees with the initial objective of securing a bridgehead and the all-important highway and railroad hub of Wesel. (See Map B) This city, normally of 25,000 population, controlled the road net leading into northern and central Germany. Opposing 21st Army Group were an estimated ten enemy divisions, including elements of the First Parachute Army and the XLVII Panzer Corps, plus perhaps 30,000 men of the Volksturm. (25)

The main effort in the crossing was to be made by British Second Army in a definite time sequence: (See Map B)

1. The 51st British Division was to launch the first crossing at 2100 hours on 23 March after an intensive artillery preparation all along the army sector. This first wave was to cross in the vicinity of Rees. The XXX British Corps would then push through to the northeast to capture Emmerich. The 15th Scottish Division would lead the main thrust over the Rhine near Xanten 5 hours after the initial wave.

(24) A-4, p. 318-319; (25) B-8, p. 6; A-4, p. 318; A-15, p. 33

2. At 2200 hours the 1st British Commando Brigade would sneak across the river about two miles above Wesel, then turn and attack the city from the north.

3. At 1000 hours 24 March the 17th U S Abn Division and the 6th British Abn Division would land about five miles north-east of Wesel to disrupt the defense of the city, deepen the bridgehead, and assist the advance of Second Army. (26)

The northern flank of the river crossing would be secured by the First Canadian Army with the mission of holding the line from Emmerich to the sea. (27) On the south the Ninth U S Army would hold opposite the Ruhr and cross just south of Wesel to protect the right flank of the bridgehead. This Ninth Army attack was to be executed by the 30th Division at 0200 and by the 79th Division at 0300 hours on 24 March. Ninth U S Army was also to assume operational control of the 17th Abn Division as soon as it was released by British Second Army. (28)

The main bridges for the drive into Germany were to be constructed at Rees, Xanten, Wesel, and Rheinberg. (See Map B) Once the bridges were secure Ninth Army would thrust a reserve corps through the Second British Army crossing to open up the way to the north German plains. (29) Of all the bridge sites the one at Wesel possessed such priority that the entire plan, including the use of airborne power, was designed to secure success at this point. The Germans must not be allowed to barricade themselves in the city and delay the crossing. This key communication center was absolutely essential to the Allied plans to encircle the Ruhr on the north and drive across Germany.

(26) A-4, p. 319-321; (27) A-4, p. 320; (28) A-8, p. 223-228;  
(29) A-4, p. 320

2  
The highway from Wesel through Geldern and Venlo across the Netherlands to Antwerp was to be the Main Supply Route for the operation. (30) Plans were already started to span the Rhine with a railroad bridge at Wesel to link up with the rail net on the east bank.

Since 10 March when the British had reached the Rhine, great efforts were made to bring up the huge quantities of amphibious and engineering materials needed for the operation. Elements of both the American and British navies were used to assist in the crossing. Large bridge parks and depots were constructed as close to the river as possible. In order to deceive the Germans as to the crossing sites, the British unfurled a smoke screen along nearly seventy miles of the entire front. (31) Ninth Army employed all sorts of deception to convince the enemy that the attack was to be made opposite Dusseldorf to the south. These stratagems included dummy supply points, parks of inflated rubber vehicles, aggressive patrolling, construction of faked approaches, and even the use of sound effects. (32)

At 1530 hours on 23 March Marshal Montgomery ordered that Operation "Plunder" would be launched as planned. While this buildup was in progress, the 17th Airborne Division was preparing for its role in "Varsity", the airborne phase.

(30) A-8, p. 211-212; (31) A-8, p. 216-219; A-15, p. 34;  
(32) A-8, p. 236-237

## CHAPTER III - PREPARATIONS AND PLANS FOR "VARSITY"

### Preparations

Since 4 January the 17th Airborne Division had been fighting in the Battle of the Bulge. When the German withdrawal began, the division kept up the pressure on the retreating columns until by early February it had reached the border between Luxembourg and Germany. There on 6 February the division received its first warning that it was to be ready for an airborne operation about the first of April. (33) It was to move on 10 February to the vicinity of Châlons-sur-Marne, France, and prepare for the operation. The troops closed into the new area on the 14th. (34)

The difficulties now confronting the division seemed almost insurmountable. During the fierce fighting in the Ardennes the 17th had lost nearly 4,000 officers and enlisted men. As replacements arrived, they had to be assigned to fill up the ranks and trained for the task to come. Since no airborne training had been conducted for over two months, an intensive refresher program had to be started at once on glider loading and lashing, parachute jumping, and reorganization problems.

Even the billeting of troops presented a serious problem. The brick caserne at Châlons for Special Troops was dilapidated, dirty, and equipped with defective plumbing. Tents had to be erected for the regiments in the fields west of Châlons at a time when spring thaws left the ground soft and muddy. (35)

Five hundred plane loads of parachutes were still back in England with the Parachute Maintenance Company and had to be

(33) B-3 Forward by CG; (34) B-3, p. 3; (35) B-21

brought to the continent. Weapons, transportation, and organizational supplies were badly in need of repair or replacement.

Most of these housekeeping problems were solved by 20 February so that the training program could begin. Mud was drained away from the camps, tents pitched, stoves installed, latrines built, and hard standing hauled in for the motor parks. The Parachute Maintenance Company was set up in an old warehouse near the caserne and was fully equipped for packing and servicing the parachutes.

During this period the division was also reorganized under the new Tables of Organization and Equipment which called for one glider and two parachute regiments. The 193d Glider Infantry was de-activated and the personnel incorporated into the 194th Glider Infantry Regiment, which now had three battalions instead of two. The glider field artillery battalions were also reconverted with three firing batteries, and a new parachute field artillery battalion was assigned just ten days before the operation. At this time an additional rifle squad was added to each parachute infantry platoon. During the change-over, complete show-down inspections were held, new equipment was issued, and weapons and vehicles were put in first-class condition. (36)

The division then focussed its energies on training. Ranges were constructed for familiarization firing of individual and crew-served weapons. Newly assigned individuals were trained to take their place as specialists or members of gun crews.

About this time the division learned that it was to have a chance to try out the new 57mm and 75mm recoilless rifles

(36) B-3, p. 10; B-21

on this operation. Special crews were immediately trained on these weapons as this was to be their first combat test, and it was hoped that they would reduce the vulnerability of the airborne troops to tank attack. Improvised wooden paracrates were constructed so that the rifles would not be damaged in descent. Ten 57mm rifles were issued to each infantry regiment. The regiments either issued the guns to battalions on the basis of three per battalion or formed provisional regimental anti-tank platoons. Two 75mm rifles were issued to the 155 AA Battalion to be used alongside their regular 57mm AT guns. (37)

In order to conserve gliders for the operation, only one company of gliderists was taken up for a flight at one time. In addition arrangements were made through IX Troop Carrier Command to have glider frames which had been used in Holland brought to Châlons for loading and lashing practice. (38) When it was discovered that one regiment would have to use the new C-46 aircraft because of the shortage of C-47's, the 513th Parachute Infantry Regiment was given the opportunity to make a practice drop, jumping simultaneously from the twin exit doors. (39)

Once individual refresher training was completed, all units began rigorous company and battalion problems to make sure that the new men would function smoothly as a team. Unit training culminated about the middle of March in a full-scale rehearsal by each regiment for the drop across the Rhine. These exercises were tied together by a CPX called "Token" under control of the First Allied Airborne Army. They were a replica in miniscule of the operation to come, even to marshalling, briefing, flight

(37) B-18 Scene II, Scene IV, p. 1-2; B-21; (38) B-18 Scene I; (39) B-21

over the river (Marne) and drop near the city (Châlons). (40) These rehearsals served to iron out in advance many last minute problems of all echelons and to gear the men psychologically for the real task ahead. Jump refusals were transferred from the division immediately since they were a hazard to other men on the team.

About 16 March the division was notified that D-Day had been advanced from 1 April to 24 March. (41) The division was thoroughly trained and ready, and morale was at a high pitch. A few days remained for final checks of clothing, weapons, and equipment, the rolling of bundles, and the storage of items to be left at base camp. On 20 March the division began its move to the marshalling areas. (42)

#### Plans

Meanwhile the division and unit staffs had been working feverishly on plans for "Varsity". In airborne warfare prior planning and coordination must be faultless if success is to be achieved.

From the very beginning Field Marshal Montgomery had felt that airborne support was so essential for the river crossing that he would postpone "Plunder" for five days if weather should ground aircraft on 24 March. (43) If the weather did not clear in that time, the crossing would be made without the air lift. In that case the airborne landings would be made deeper into Germany in the vicinity of Erle as soon as weather permitted in order to seize the high ground there until British Second Army could link up with Ninth Army at that point. Although

(40) B-8, p. 5; B-21; (41) B-9, p. 2; (42) B-3, p. 11;  
(43) B-8, p. 4

alternate drop and landing zones were selected near Erle about 15 miles east of Wesel, this alternate plan was never used. (44) In addition the British had originally asked that the American 13th Abn Division be dropped east of Wesel, but this scheme was abandoned because of shortage of aircraft for a three division operation. (45)

High level planning by First Allied Airborne Army and XVIII Airborne Corps for an airborne crossing of the Rhine had been in progress for several months. By 10 February the directive of First Allied Airborne Army was complete. (46) This army was to control the marshalling and delivering of the troops to the target area. After landing, XVIII Airborne Corps would assume control of the two airborne divisions under British Second Army. Within six days XVIII Corps would withdraw, turning the 17th Abn Division over to Ninth Army and the 6th Abn Division over to Second British Army. (47) The 17th Abn Division was given its mission in "Varsity" toward the end of February. (48)

From this time until D-Day the G2 Section of 17th Airborne Division devoted its attention to securing information of the enemy in the Wesel area, procuring aerial photographs of the drop zones and landing zones, and making a terrain analysis. At Wesel the Rhine River was about 350 yards wide with low banks which could be easily flooded. (49) The east bank just northwest of Wesel was a soggy mud flat. The Issel Canal, running from the city to the northeast, was a tank obstacle and a natural barrier to an advance to the east. (See Map C) About 3 miles east of the Rhine and flowing

(44) B-8, p. 4, 11; (45) B-8, p. 11; (46) B-8, p. 4; (47) B-10 Introduction p. 2; (48) B-18 Scene I, Intro. p. 1; (49) B-5 See overlay "P.I. Study of Waterways and Forests"; A-4, p. 315

parallel to it into the Issel Canal was the Issel River. Just east of the river was the autobahn leading north and west. The airborne drop was to be made north of Wesel between the Issel River and the Rhine. The terrain was suitable for airborne landings, but by no means ideal. It consisted of pasture lands and cultivated fields, broken up by orchards, drainage ditches, wire fences, small hedges, and farm houses. (50) Photographic interpretation showed no attempt to construct artificial obstacles. In the middle of the area was the Diersfordter Wald, a dense pine woods,  $3\frac{1}{2}$  miles long by  $1\frac{1}{2}$  miles wide. Diersfordt Castle was located in the western part of the forest. Along the eastern edge of the woods ran the railroad from Wesel to Emmerich. The highway between the two cities ran through the center of the forest.

Exact information of enemy strength and dispositions was never secured. However, it was known that the German 84th Infantry Division was defending near Wesel with elements of the 7th Parachute Division further west. The XLVII Panzer Corps with about 70 tanks was reported in reserve near Bocholt about 10 miles from the DZ's and LZ's. (See Map B) In addition the enemy had moved several artillery and antiaircraft battalions to the vicinity and had perhaps 8,000 to 10,000 Volksturm to help out. (51)

There is no doubt that the Germans expected an airborne assault between Emmerich and Wesel, although they did not know the precise location of the landing area. Prisoners captured after the operation stated that they had been alerted against

(50) B-5 See overlay Areas F, E, K; B-21; (51) B-8, p. 6-7; B-18 Scene II

airborne attack on the 23-24th and had been ordered to sleep at their gun positions. (52) A German document captured by XVI Corps on 22 March indicated that the German defense was organized to repel an airborne drop in this general area. (53) The Germans were constantly strengthening their flak positions here, and it was learned later that some of the gunners had had orders to hold their fire until the airborne armada arrived. (54) On 22 March Gunther Weber, Berlin radio commentator announced over the German radio, "Allied airborne landings on a large scale to establish bridgeheads east of the Rhine must be expected. We are prepared". (55) Some information may have been obtained by the Germans from agents in France, but in general, security for such a large operation was good. Apparently the Germans expected that the landings would be made closer to Emmerich than to Wesel. (56)

Because of a shortage of planes the Germans were almost completely dependent on antiaircraft batteries. It is estimated that with their light and heavy antiaircraft weapons, the Germans had almost 1,000 flak barrels ready to fire at the sky train. (57)

A study of aerial photographs showed numerous trenches and gun emplacements around the DZ's and LZ's. Most of these were of the hasty type, and it could not be determined whether they were actually manned at all times. (58)

The First Allied Airborne Army planned to drop the 17th Abn Division just north of Wesel and the 6th British Abn Division further north in the same airhead. The mission assigned to the

(52) B-6, p. 6; B-16, p. 36; (53) A-9, p. 38; (54) B-17, p. 104-105; (55) A-2, p. 403; (56) B-9, p. 3; (57) B-17, p. 104; (58) B-21

17th Abn Division by XVIII Airborne Corps was: (See Map C)

1. To drop at P-Hour, D-Day.
2. To seize, clear and secure the division area with priority to the high ground just east of Diersfordt.
3. To seize and secure the bridges over the Issel River.
4. To protect the right (south) flank of Corps.
5. To establish contact with the 1st Commando Brigade northeast of Wesel, and with the 15th Scottish Division and the 6th British Abn Division. (59)

D-Day was 24 March; P-Hour or time of the parachute drop was 1000 hours. It will be remembered that the 1st Commando Brigade was to attack Wesel the night before, and the 15th Scottish Division was to cross the Rhine near Xanten and push east to link up with the airhead. The 6th British Abn Division on the north was to be responsible for the high ground near Hamminkeln and bridges over the Issel River in its sector. (See Map C) Liaison officers were immediately sent from the 17th to all of these organizations and went into combat with them. (60) Corps also designated phase lines London and New York well to the East of Wesel, which were to be seized only on corps order after contact had been made with the ground forces and the push to expand the bridgehead had begun.

Information concerning suitable general areas for drop and landing zones was also received with the mission. The Commanding General and G-3 immediately began selecting the exact DZ's and LZ's, making their estimates, and preparing operation plans. Close liaison was maintained with IX Troop Carrier Command throughout this phase. As part of this coordination a joint conference was held at St. Germain, France, about 25 February between Major General William M. Miley, the division commander,

(59) B-3 FO #1, p. 1; B-13, p. 3; (60) B-3, p. 11; B-21

and Major General Paul L. Williams, commander of IX TCC. At this meeting many important decisions were reached; namely, the number of aircraft and gliders to be used, the take-off airfields, construction of marshalling areas, communication between the airfields, aerial re-supply, and the final choice of DZ's and LZ's. (61) This gave G3 sufficient information to start work on loading plans, the Air Movement Table, and the composition of the Land Tail. Within a very short time the general plan for Operation "Varsity" was fixed. For the organization of combat teams and participating troops see Annex No. 1.

The 507th Combat Team, led by Col. Edson D. Raff, was to jump first on DZ "W" in four serials. (See Map C) This CT was to seize the high ground near Diersfordt, assist by fire the advance of the 15th Scottish Division, and protect the southern perimeter of the airhead. (62)

The division commander and a small headquarters group would jump with the fourth serial of the 507th CT. They planned to set up a temporary division CP on the southern edge of Diersfordt Forest just off the drop zone. (63) (See Map C)

Sixteen minutes later the 513th Combat Team, commanded by Col. James W. Coutts, was to jump on DZ "X" in the center of the airhead. The 3d Battalion of the 513th Parachute Infantry Regiment was to reorganize and move out to the OPLR along the Issel River where it would prevent the enemy from crossing. The remainder of the regiment was to seize the high ground just north of Diersfordt. (64) (See Map C)

At P Hour plus 36 minutes the 194th Glider CT was to land on LZ "S" followed by the glider elements of Division Artillery. The

(61) B-3, p. 11; B-18 Scene I; (62) B-3 FO #1, p. 2; (63) B-21; (64) B-3 FO #1, p. 2

194th was ordered to defend the line of the Issel River and Issel Canal and to hold one battalion as Division Reserve to be committed only on division order. (See Map C)

Gliders carrying the 139th Engineer Battalion, Division Signal Company, the 224th Medical Company, and Batteries A and C of the 155th Antiaircraft Battalion would begin to land on LZ "N" at P plus 2 hours. The Engineer Battalion, initially attached to the 513th CT, was to clear and defend the glider landing zone "N". Later it was to be ready to clear roads of mines, to construct crossings over the Issel River or Canal, and to keep open the MSR. Batteries A and C with their 57 AT guns were to join the 507th CT and the 513th CT as soon as possible. This meant that for most of D-Day the two parachute regiments would have to rely on rocket launchers and the new 57mm recoilless rifles for antitank protection.

The glider echelon of the division headquarters under the Chief of Staff, Col. Willard K. Liebel, was to land with these serials and establish a command post in the woods south of LZ "N". The division commander would then close his original CP near DZ "W" and join the rest of the command group in this location. (65) (See Map C)

The 1st Commando Brigade was to pass to control of the 17th Abn Division immediately after the division landed and was to hold the city of Wesel between the 194th CT and the Lippe River. (66)

Glider pilots were organized into combat groups similar to companies and were equipped to help defend the division perimeter.

As soon as the last gliders had landed, B-24 bombers from England were to drop 270 tons of supplies for the next day's

(65) B-21; (66) B-3 FO #1, p. 3

operation. In this way the division would still have its basic load of resupply on the second day even if the river crossing was delayed. (67)

On 1 March unit commanders were summoned to the Division War Room to be briefed on Operation "Varsity". (68) Regimental commanders thus were given adequate time for their own plans and orders. Most units of the division had their own war rooms or tents where briefing of key personnel could be carried out without breach of security. Usually briefing down to and including company commanders was completed before the move to the marshalling areas. (69) This insured that prior planning was complete except for the very lowest echelons, and permitted almost immediate briefing of enlisted men once they arrived in the marshalling areas.

On 21 March the Division Land Tail of 2,005 vehicles left for the west bank of the Rhine under command of Brigadier General Whitelaw, the Assistant Division Commander. Since only organic  $\frac{1}{2}$ -ton trucks and trailers could be carried in the CG4A gliders, the other vehicles of the division, plus various attached non-airborne units, had to move overland prepared to join the division as soon as ground contact could be made. In order to avoid warning the enemy where the attack would come, every effort was made to preserve secrecy during this move. Vehicular markings were effaced, troops were dressed in O.D. uniform without airborne patches or insignia, and drivers were briefed on the route only as far as Brussels. Attached units moved directly to Issum, Germany, while the division vehicles moved to a number of assembly areas near Bree, Belgium to prevent congestion at the river bank.

On D-4 the move to the marshalling areas began. (70)

(67) B-3, p. 13; (68) B-1, p. 50, Col. 1; (69) B-1, p. 51, Col. 1; B-18, Scene II; (70) B-21; B-3, p. 19

#### CHAPTER IV - MARSHALLING

The division was to emplane at 12 departure airfields scattered throughout central and northern France. (See Map D) At each of these airfields a tent camp had been constructed for marshalling. Since the entire 513th Parachute Infantry was to take off from the same field, two separate camps had to be constructed at airport B54 for this regiment, making a total of 13 camps. These had been built by Base Section of Communication Zone. (71)

Housing from 1,200 to 2,400 troops, the marshalling camps had adequate facilities both for briefing and for recreation during the three to four days that the troops were to be sealed in. Troop briefing tents contained aerial photos of the LZ's and DZ's and realistic sand tables for terrain familiarization. Hours were spent instructing the troops so that each individual soldier knew the general picture as well as the part he was to play in his own platoon and company plan.

Larger tents were provided for the joint briefing between the pilots and jump masters. During this phase all details were carefully coordinated between the Air Corps and the airborne troops to eliminate any possibility of misunderstanding. These details included flight pattern, jump altitude, check points, routes, timing, and jump signals. (72)

Special pains were taken to adequately instruct all glider pilots. After they had been oriented by Troop Carrier Command on the rendez-vous and flight plan, they were briefed for four hours on the plan of ground action. The lessons of Holland had been well learned. Since then most of the glider pilots had

(71) B-18, Scene I, p. 2; B-18, Scene II; B-21; (72) B-21

received training in infantry weapons and tactics with the 82d and the 101st Airborne Divisions. For "Varsity" they were organized in combat groups of company size, and were to assemble after landing under the senior pilot of each group. It was hoped that these pilots, armed, organized, and briefed for ground combat, would add the weight of almost two additional battalions to the defense of the airhead until they could be evacuated. (73)

The comfort of the individual soldier was not forgotten in the marshalling camps. Food in the field messes was excellent, PX rations were issued, athletic fields and tent theatres were provided, and most of the time music was being broadcast over the out-door loudspeakers. Weather throughout the staging phase was warm and sunny, making life in the tent area no hardship.

Every effort was made to maintain security. All personnel were sealed in the camps, which were surrounded by wire and patrolled by military police or Com Zone guards to prevent unauthorized entrance or exit. Communication between division headquarters and the various camps was by telephone, liaison plane, and jeep messenger service. (74) Briefed personnel were segregated from service troops. Men sent to hospitals were even kept separate from other patients to prevent leaks of information.

For ease in friendly identification of members of the division each man was furnished a yellow celanese triangle which was to be displayed only if he were fired on by friendly troops. Since the British airborne soldiers with red berets would be on the north of the division and the Commandos with green berets would be in Wesel, each trooper tied his first-aid packet to the front of his helmet net to give the Americans a distinctive silhouette readily recognizable at night. (75)

(73) B-18, Scene I, p. 6-7; (74) B-3, p. 11; (75) B-21

During the last two days final checks were made of all equipment, ammunition was issued, bundles were tagged and marked for identification, parachutes fitted, British type leg-bags packed, glider loads inspected, and last minute revisions made in the emplaning rosters. When D-Day arrived, the men were confident of their equipment, thoroughly informed, and in high spirits. (76)

While final preparations were being made for "Varsity" in the marshalling areas, higher headquarters were taking steps to soften up resistance near the drop and landing zones. For a month the British and American Air Forces had been striving to isolate the battle zone by bombing key bridges and rail centers leading out of the Ruhr. (77) During the period 21 February to 21 March approximately 37,000 tons of bombs were dropped on bridges and transportation lines in this area. German jet airfields in northwest Germany were bombed and strafed to keep the fast jets grounded. (78)

Beginning on D-3 the strikes were narrowed down to enemy antiaircraft and artillery positions in the crossing area and to barracks housing possible enemy reserves. (79) At 1730 hours on 23 March Wesel was bombed. (80)

A half hour later the artillery opened up with a roar all along this sector of the Rhine, pounding the east bank from Wesel through the drop and landing zones. (81) Special precautions had been taken in the fire plans not to crater the glider fields.

At 2200 hours the artillery fire lifted opposite Wesel while the 1st Commando Brigade sneaked across the river in assault boats and advanced to a point 1500 yards outside the town. (82)

(76) B-8, p. 13; (77) B-9, p. 4; (78) B-8, p. 14; (79) B-9, p. 5; A-11, p. 1311 col. 4; (80) B-8, p. 14; (81) B-10, p. 8-9; (82) A-4, p. 323

Here the Commandos waited while 200 Lancasters of the Bomber Command dropped 1000 tons of bombs on the city from 2230 until 2245 hours. Then they launched the assault, entering the northern edge of town about 0300 hours with only 36 casualties. (83)

Meanwhile the artillery preparation had not abated, but had merely shifted beyond Wesel. All night long the shelling continued against enemy flak and artillery positions, cutting communications, and harassing the enemy. (84) As P-Hour approached, these fires became so intense that a total of 24,000 rounds or 400 tons of artillery was fired between 0930 and 0952 when the first jumpers arrived. (85)

British research indicates that bombing and artillery fires were not as effective in neutralizing enemy flak as might have been expected. (86) Although these preparatory fires did not wipe out antiaircraft fire, they did destroy some of the gun positions and had a demoralizing effect on the crews. All in all prior bombing and air coverage was so effective that only 20 enemy planes rose to challenge the airborne invasion, and not one American or British plane was lost to enemy air attack. (87)

(83) A-11, p. 1312 col. 1; (84) B-10, p. 8-9; (85) B-17, p. 107; (86) B-17, p. 111; (87) B-8, p. 17

## CHAPTER V - AIRBORNE ASSAULT

D-Day, 24 March, dawned bright and crystal-clear with scarcely a cloud in the sky. There was no wind except for a slight breeze from the southeast. Most of the troopers in the marshalling areas were up by 0400 hours. After a hearty breakfast, they moved out to the aircraft, which were lined up in flight formation. (88)

The first plane of the first serial dashed down the run-way at 0717 hours. (89) Gradually the column grew as the other serials joined the flight along the way. Near Brussels the planes carrying the 6th British Airborne Division from England converged abreast of the American column. (See Map D) The sky train was now complete, consisting of 1595 aircraft and 1347 gliders, carrying over 14,000 troops. (90) The 17th Airborne Division was carried by the IXth Troop Carrier Command in 903 C-46 and C-47 aircraft and 897 CG4A gliders. (91) This was the first time gliders had been double-towed into combat. An umbrella of 889 fighter planes covered the armada as it approached the Rhine, while 900 fighters of the 2d British Tactical Air Force worked over the target area ahead. (92) British Typhoons with rockets, 20mm cannons and fragmentation cluster bombs dove on flak positions just in front of the sky train. (93) The column of planes stretched 420 miles across France and the English Channel, and was over the airhead for 3 hours and 12 minutes. (94)

The flight to the Rhine was fairly smooth. Since the jump was to be made in the center of German resistance, no

(88) B-21; (89) B-6, p. 1; (90) B-8, p. 16-17; A-6, p. 131; (91, 92) B-9, p. 7; (93) B-17, p. 105; (94) A-2, p. 406

pathfinders were dropped ahead of the column. (95) However, pathfinder units and check points were set up in friendly territory on the west side of the Rhine to help keep serials on the true course with Eureka-Rebecca equipment. (96) In addition a pathfinder team was dropped with the first serial of the 507th Combat Team to lay out panels for the aerial resupply mission. (97)

Although P-Hour had been planned for 1000 hours, the first serial reached the drop area eight minutes early because of changes in wind velocity. As the planes swept over the river, the jump masters noticed a thick haze hanging over the area. This was caused in part by the British smoke screen along the river line and in part by the preparatory bombings and artillery fires which had left some of the farmhouses smoldering. The smoke was not thick enough to completely obscure the drop zones, since the planes were flying at only 600 feet. Bands of anti-aircraft and small arms fire began to burst around the planes and chew away at the gliders. At 0952 the 507th CT began to jump. (98)

#### Action of the 507th Combat Team

The regimental plan called for the drop to be made in the order 1st, 2d, 3d Battalions, and the 464th Parachute Field Artillery Battalion on DZ-"W". The 2d and 3d Battalions would advance at once to the regimental objective with the 2d Battalion on the left and the 3d on the right. (See Map E) The 3d Battalion in particular had the mission of seizing Diersfordt Castle in the center of the objective. The 1st Battalion, in regimental reserve, was to be prepared to clear out Diersfordt Forest to the northeast. (99)

(95) B-14, p. 2; (96) B-21; (97) B-3 FO #1, Annex 2 "Air Movement Table"; (98) B-21; (99) B-22

The pilots of the first serial missed the intended DZ. As a result the 1st Battalion of the 507th CT landed in an open field about 2500 yards north and 2000 yards west of DZ-"W". Because of the dispersion in the landing pattern, the battalion tended to reorganize in two general groups; one in the southern half of the field, the other to the north. The southern team, under Major Paul F. Smith, the battalion commander, moved out at once toward Diersfordt Castle, destroying several flak guns on the way. The northern force, under Colonel Edson D. Raff, the regimental commander, cleared the edge of the woods of German machine guns and infantry. (100) (See Map E)

About this time Colonel Raff's group observed a battery of 150mm guns firing in the woods about 1500 yards to the north-east. Although this position was outside the regimental sector, Colonel Raff ordered an immediate attack to silence the guns. These guns left alone could inflict serious losses on the 6th British Airborne Division landing to the north and also impede the advance of the ground units crossing the Rhine from the west. The attack was successful, and all personnel at the gun position were captured. (101)

This group then moved back toward Diersfordt Castle and the regimental objective, mopping up along the woods as they advanced. By this time the group consisted of about 500 troopers. During a lull, two German soldiers on bicycles were seen pedaling down the road from the castle. The paratroopers immediately hit the ground and waited for the Germans to come within range. When the cyclists were within 100 yards, the Americans opened fire with every available rifle and machine gun.

(100, 101) B-3, p. 2; B-24, p. 2

Strangely enough neither of the Germans was hit. Leaping into the ditch alongside the road, they signaled surrender. One German soldier was wounded in the arm at this time before they were taken prisoner. (102)

In the first hour on German soil this group of the 507th had killed about 55 Germans, wounded 40, and taken 300 prisoners. (103) By 1100 hours they had joined forces with the rest of the battalion near the castle. An attack was immediately launched against this strong point.

In the meantime the rest of the 507th CT had landed as planned on DZ-"W". (See Map E) Here resistance was sporadic on the western side of the DZ, but troopers who were spread far up to the eastern portion of the field suffered casualties from light artillery and small arms fire. (104) Many of the troopers who landed in trees were shot before they could slip from their harnesses.

The second battalion moved out quickly against light resistance and had reached its objective by 1100 hours. Since these positions were closest to the Rhine, the 2d Battalion was the first to link up with ground units. Patrols from the 2d Battalion had established contact with the 15th Scottish Division on the east bank by 1434 hours. (105)

The 3d Battalion of the 507th organized along the northwest edge of the woods, and moved out in a column of companies toward Diersfordt at 1100 hours. Little resistance was encountered in the woods. As they approached the castle from the southeast, A Company was already attacking the building from the opposite direction. As soon as the regimental commander learned of the

(102) B-22; (103, 104, 105) B-3, p. 2

arrival of the 3d Battalion, he ordered this battalion to take the castle according to the original plan with the assistance of A Company, which was already committed. The 1st Battalion, less Company A, was withdrawn to the woods to the east to be regimental reserve. (106) (See Map E)

By this time fire from the castle was intense. The battalion commander arranged with A Company to continue its fire on the castle from the northwest while H and I Companies moved into firing position along an embankment just east of the castle moat. While the battalion was deploying, two German tanks launched a counterattack against H Company down the narrow road through the forest from the castle. The first tank was stopped by a Gammon grenade thrown by Private First Class Hutchinson of H Company. (107) Although the tank suffered only slight damage, the terrific explosion caused the tank crew to surrender. The second tank was now temporarily blocked by the first tank in the center of the road. It was immediately set on fire by the tank hunter team with the 57mm recoilless rifle in its first combat test. As the tank crew fled toward the castle, they were cut down by small arms fire.

Although surrounded, the occupants of the castle continued to fight bitterly. At 1300 hours the 3d Battalion placed all available fires on the building just prior to the assault by G Company. Under the cover of these fires against the turrets and upper windows, G Company entered the castle, fighting its way through each room until the stronghold fell about 1500 hours. (108) Approximately 300 prisoners were captured in the fortress, including many high ranking officers. (109)

(106) B-22; B-15, p. 13-14; B-3, p. 2; (107) B-15, p. 17;  
(108, 109) B-15, p. 18; B-3, p. 2

The 464th Procht FA Bn dropped on DZ-"W" immediately behind the 3d Battalion of the 507th with twelve 75mm pack howitzers. While most of the gun crews were devoting their full energies to assembling the artillery pieces, three 50 calibre machine guns were put into action to reduce enemy fire from the eastern portion of the DZ and to protect the gun crews. (110) Within a few minutes after landing, three 75mm guns had been set up and were placing direct fire on enemy positions. This sudden volume of point-blank artillery fire so soon after the first planes arrived was a shock to the German defenders. Many bundles were scattered about the DZ; some had even landed in trees. (111) The problem of assembling the guns under enemy fire and towing them by hand to pre-arranged positions was not an easy one, but by 1300 nine guns were in action. (112) Three guns had been damaged during the drop, but by salvaging parts from these weapons a tenth howitzer was in action shortly after 1300.

By 1500 on D-Day the 507th Combat Team had consolidated its objective. The feeling of isolation vanished when a patrol from Company I made contact with the 6th British Airborne Division about one mile west of Diersfordt at 1805 hours. (113) About the same time B Company was sent to mop up any resistance which might have been overlooked in the Diersfordt woods, and another company was sent to provide security for the artillery battalion back on DZ-"W". About 1900 the 2d Battalion sent a patrol to establish contact with the Commandos in Wesel. By this time the regiment was dug in for the night on the objective.

The 507th CT had now accomplished all of its assigned missions with a loss of 12 officers and 81 enlisted men, or

(110) B-3, p. 2; (111) B-21; (112) B-3, p. 2; (113) B-15, p. 18

approximately 7.3 per cent. (114) During the day's fighting a battery of artillery had been destroyed, five tanks had been knocked out, and about 1000 prisoners taken. (115)

#### Action of the 513th Combat Team

The entire 513th Parachute Infantry Regiment was to drop on DZ-"X". An assembly area was designated for each battalion adjacent to the drop zone. After reorganization the 2d Battalion was to move through the Diersfordt Forest and seize the high ground north of the castle on the right flank of the 507th CT. The 3d Battalion was to advance to the Issel River, forming the OPLR north of Wesel. The 1st Battalion in regimental reserve would protect the northern portion of the division airhead. (116) (See Map F)

As the 72 C-46's carried the 513th over the Rhine, a curtain of flak ripped up through the sky. Many planes were shot down in flames before they could bank around and make it back to the river. One plane burst into flames and crashed with a full load except for nine troopers who were able to jump. (117)

Somehow the planes had drifted slightly off course, so that the entire regiment missed DZ-"X" and landed about 3 miles too far to the north in the zone of the 6th British Airborne Division. (118) (See Map F) Enemy resistance here was intense, consisting of AA guns leveled for direct fire, small arms, and mortar fire.

The 2d and 3d Battalions were the first to jump, bailing out at 1010 hours. This particular field had been selected by the British as a landing zone for their big Hersa gliders,

(114, 115) B-3, p. 3; (116) B-3, FO #1, p. 2; B-21;  
(117) B-21; A-6, p. 135; B-4, Incl 1-A; (118) B-3, p. 3; B-21

carrying the CP of the 6th British Airborne Division, but they had not yet arrived. This was fortunate as many of the big gliders would have been destroyed by the numerous anti-aircraft weapons. (119) The parachutists were more dispersed on landing and therefore less vulnerable. Organizing quickly in small groups, they were able to destroy some of the flak positions before the British glider serial began to land. Other positions were attacked at once. The arrival of the parachutists created such consternation among the remaining German gunners that their fire on the gliders was comparatively light and inaccurate.

Ten minutes after the 1st serial had arrived, the rest of the regiment dropped on the same field. Considerable confusion resulted from the drop on the wrong DZ, the heavy resistance encountered, and the arrival of the British gliders. A few of the 513th troopers became mixed up with the British and fought with them for several days. (120) At first most of the men thought they had landed in the correct area until they were able to orient themselves on the ground or learned their true location from prisoners of war or German civilians. (121)

As soon as the DZ had been cleared, most of the 2d Battalion moved out to the southeast in the direction of the pre-arranged assembly area. Almost immediately they ran into groups of dug-in infantry who fought bitterly and caused the battalion to deploy. They were constantly held up by strongpoints of resistance as the Germans slowly withdrew. It was late afternoon before the battalion finally reached the original DZ. Finding this area clear of enemy, they swung around toward the west and moved rapidly toward the final objective. Darkness found the 2d

(119) B-21; B-9, p. 11; (120) B-21; (121) A-6, p. 136

Battalion in the forest just east of the high ground it was supposed to occupy. Since the 1st Battalion of the 507th had already cleared the objective of this battalion, they decided to dig in on their present positions rather than risk the confusion and loss of control which might result from continuing the move through the woods after dark. Patrols, however, were sent forward to the final objective about  $\frac{1}{2}$  mile to the west. (122)

The 3d Battalion organized generally in three groups. The smallest group learned its correct location at once from a German prisoner. It moved out directly for the pre-planned reorganization area near DZ-"X" and began to clear that vicinity of resistance about 1300 hours. (123)

The 2d group consisted of about 200 men under the battalion commander, Lt. Col. Kent. Thinking they were in the correct area, this group moved off to the northeast for about ten minutes until they came in sight of Hamminkeln. (See Map F) Realizing their mistake, they then turned to the south and joined the first group in clearing the battalion assembly area.

The 3d group was made up of 350 men under Maj. Anderson, the battalion executive officer. They also headed east until they oriented themselves on the town of Hamminkeln. On the way back to DZ-"X" Maj. Anderson's force was held up for about an hour clearing German snipers out of a group of farmhouses. By 1400 hours they had joined the rest of the battalion in the assembly area. The 3d Battalion then reorganized and moved out to the Issel River. By 1700 hours it had constructed a defensive position on the objective, formed outposts near the

(122, 123) B-3, p. 3

autobahn, and made contact with the 194th Glider Infantry on the right and the 6th British Airborne Division on the left. (124)

When the 1st Battalion landed, the staff was widely scattered. Lt. Cosner, the Battalion Headquarters Company commander, immediately took charge of the bulk of the troops and organized them into a perimeter defense on the southeastern edge of the field until the rest of the battalion could be collected. Gradually other elements of the regiment began to drift toward this point. About 1230 hours part of the battalion staff arrived in addition to Colonel James W. Coutts, the regimental commander. Because some of the commanders were still missing, Col. Coutts proceeded to reorganize this force. (125) An hour later this group moved out in column toward DX-"X". By this time the regimental commander had obtained radio contact with the 466th Procht FA Battalion, which had jumped to the south on the intended DZ-"X". When enemy resistance was encountered by Col. Coutt's force, artillery fire was called for on these strongpoints. This was a novel arrangement since the artillery was now firing toward the supported infantry instead of over their heads. (126) By dark the 1st Battalion had reached its planned position in regimental reserve, and communication and control was complete throughout the regiment.

The 513th Procht Infantry had accomplished its mission by the end of the day. It had captured about 1100 prisoners and destroyed one self-propelled gun and two batteries of 88mm guns. In addition it had knocked out two tanks with the new 57mm recoilless weapons. (127)

(124) B-3, p. 4; (125) B-3, p. 3; (126) A-6, p. 137;  
(127) B-3, p. 4; B-19

In the meantime the 466th Procht FA Battalion had dropped alone on DZ-"X". (See Map F) One complete howitzer section was accidentally dropped ten minutes before the flight reached the Rhine River. This error was caused by the pilot's flashing the green light too soon. The troopers and the equipment of this ship were out of the plane before the mistake could be corrected. It was fortunate that the other planes in the serial did not salvo their loads at the same time. On landing, the section sergeant commandeered two jeeps, hooked up his guns, and drove to the Rhine. As soon as a bridge was open, he pushed his way across in spite of the remonstrances of the British, and rejoined the battalion about 1800 hours on D plus 1. (128)

Dropped alone in a strongly defended area without infantry protection, this battalion had a bitter fight on its hands. Centers of resistance had been set up by the Germans in the farmhouses around the DZ. Heavy fire from 20mm and 80mm AA guns and light artillery pieces ripped into the battalion as it landed.

The first problem was to clear the DZ. To do this the battalion had to fight as infantry, assaulting the gun positions and clearing out the farmhouses. Casualties were high. In the bitter fighting for DZ-"X" all the officers of Battery A were killed or wounded. (129)

Many examples of aggressive leadership could be cited in the furious struggles raging across the field. First Sgt John Bennick and Pvt Dan Morgan of B Battery landed together on top of an old farm building and crashed through the roof.

(128) B-20, p. 1-2; (129) B-20, p. 4

Inside they found a house full of Germans firing out across that part of the field where the artillery pieces were to be set up. Attacking the enemy from the rear, the two paratroopers captured 16 completely bewildered Germans. (130)

In spite of the bitter opposition on the DZ, the battalion had three guns assembled within 30 minutes. These were used at once for point-blank fire against the farmhouses which were causing so much trouble. (131) By 1145 these three howitzers were correctly laid and ready for supporting fire. At 1330 the first fire mission was received when Capt. James Cakes, liaison officer with the 513th, radioed for fire on a farmhouse to the north. Firing white phosphorus, the artillery battalion set the house on fire with the second round, causing the occupants to surrender. (132)

By 1500 the 466th Precht FA Battalion had control of the DZ, and enemy resistance had decreased enough to allow the battalion to get twelve guns into action. (133) The battalion then dug in and formed a perimeter defense for the night. By late afternoon the wire net to Division Artillery, to the 513th Precht Inf, and within the battalion was complete. (134)

The 466th Precht FA Battalion, landing against great odds and fighting as infantry to gain their firing positions, deserved great credit. They had suffered approximately 25% casualties as compared with the division total of about 10 per cent. (135) They had killed about 50 Germans, and captured 320 PW's, 18 machine guns, eight 20mm flak guns, and ten 76mm artillery pieces. (136)

(130) B-20, p. 4; (131) B-20, p. 4-5; (132) B-20 Supporting Data, p. 2; (133) B-20, p. 3; (134) B-20, p. 1; (135) B-20, p. 7; B-3, p. 8; (136) B-3, p. 3

### Action of the 194th Combat Team

The 194th Glider Combat Team was to land on LZ-"S" in the order 2d Battalion, 1st Battalion, 3d Battalion, followed by the 681st FA Battalion and the supporting AA batteries. According to the regimental plan, the 1st Battalion was to land on the eastern section of the field, seize objective "D", hold the crossings over the Issel River, prevent a penetration from the east, and keep contact with the 513th on the north. (See Map G) The 3d Battalion was to land in the northwestern part of the field and move to assembly area "F", where it would constitute the division reserve. The 2d Battalion, after landing in the southeastern portion of the field, would hold objective "E" along the Issel Canal and maintain contact with the 1st Commando Brigade in Wesel. (137)

The 681st FA Battalion could land in the center of the field and support the regiment from positions near area "G". Batteries B and E of the 155AA Battalion were also to land in the center of the LZ. Battery B, armed with 57mm towed AT guns, would move to positions where it could stop a tank attack from the east or southeast. Battery E, armed with 50 calibre AA guns would guard area "H" from attack from the southwest. (Map G)

The gliders were to be flown in by about 875 glider pilots and co-pilots. Since this represented a potential fighting strength of one additional battalion, these men had been organized into four combat groups to assist in the defense of the regimental sector. The 435th Group was to defend the gap in the perimeter near area "H". The 436th Group was to hold area "L" just north of Wesel. The 437th Group would guard prisoners of war and civilians. The 439th would provide infantry protection

(137) B-1, p. 50-51

for the artillery at area "G". (138) The entire force was tied together as a provisional battalion under the senior Air Force commander, to whom 5 airborne officers were attached as technical advisers on infantry tactics. (139)

The first gliders cut loose at 1030 hours in a hail of flak. About 18 gliders broke loose or had to release before the Rhine was reached because of defective controls. (140) Practically all of the others came in on LZ-"S". It had been planned to fly in at 600 feet so that the gliders could swoop down quickly before they could present a lucrative target to enemy AA gunners. Because of the smoke and haze most of the gliders were released at altitudes of one to two thousand feet. As a result many of the gliders circled around slowly like hawks searching for a place to land while the flak guns chattered and spit at them. In the confusion some of the gliders missed their intended landing zone and a few even came to rest south of the Issel Canal. (141) On the other hand, the haze reduced the visibility and accuracy of the German gunners. Several gliders crashed in flames; others were destroyed on landing. (142) Almost none escaped hits by flak or small arms fire or damage in landing among the fences and farmhouses and orchards. (143) In all about four percent of the gliders were lost or destroyed, but considering the smoke and anti-aircraft fire, landings were surprisingly accurate. (144)

The 2d Battalion, arriving first, landed in the correct area with the exception of about ten percent of the gliders. (145) The glider pattern was so compact that reorganization was speedy. The German defenders were utterly stunned by the chaos

(138) B-1, p. 50-51; (139) B-1, p. 55; (140) B-3, Incl #7A; (141) B-2, p. 53; B-7, See Overlay; (142) B-21; (143) B-3, Incl #7A; (144) B-9, p. 9; (145) B-3, p. 4

of gliders dashing in from all directions and criss-crossing in apparently aimless fashion on all sides of their positions. Immediately after landing, F Company captured an enemy command post including the German colonel who commanded this sector. In his possession the colonel had maps showing all local defenses. (146)

Forty-five minutes after landing, resistance in the immediate area had been overcome, and the battalion was assembled sufficiently to move toward the canal. After destroying four enemy tanks with bazooka fire and repulsing several local counter-attacks, the battalion succeeded in taking its objective. (147)

Most of the 1st Battalion landed in the eastern portion of the LZ against comparatively light resistance. The battalion organized quickly and moved out to the east with A Company on the right and C Company on the left. A Company was on the objective by 1400, but C Company was held up initially by heavier opposition.

The 3d Battalion, landing on the western side of the field, met a stubborn, determined enemy. (148) Casualties were high, and re-organization as a battalion was difficult. Most of the fighting was done by groups in platoon or company size. It was 1600 before the battalion had cleared its zone, and reorganized in division reserve. That night this battalion sent patrols to establish contact with the 513th on the north, the 507th to the west, and to the Commandos in Wesel. (149)

The 681st Glider FA Battalion landed as planned. Pack howitzers were set up promptly for point-blank fire on defended farmhouses around the landing zone. As resistance weakened, the

(146) B-16, p. 40; (147) B-3, p. 4; B-16, p. 40; (148) B-3, p. 3; B-2, p. 53; (149) B-3, p. 5

guns were moved toward the pre-planned firing positions. About this time, however, the 194th Glider Infantry began to call for fire missions. One battery remained where it had first set up to deliver this fire, while the rest of the battalion moved on to the final positions. By 1600 ten guns out of the twelve brought in were ready to support the 194th, and communication was complete to Division Artillery and to the infantry.

Before dark the 439th Glider Pilot Group arrived and set up a perimeter defense around the artillery positions. It was well that this was done, for at 2200 hours that night the Germans launched a strong counterattack with infantry and tanks from the west. The glider pilots succeeded in repulsing this attack and destroyed one tank. (150) (See Map G)

Glider pilots of the 435th Group who had gone into position as planned near area "H" were also hit by this attack. They in turn held their positions, supported by Battery E of the 155th AA Battalion, and drove the enemy back with a loss of two tanks and about fifty German dead. (151) Without this defense by the glider pilots the Germans would have been able to threaten the rear of the 1st and 2d Battalions.

Colonel Pierce, the regimental commander, had been able to secure control of his combat team within two hours after landing. (152) The regiment had secured all of its objectives by dark, including bridges over the Issel River, and during the early hours of D plus 1 made contact with the Commandos in Wesel. (153) In one day the 194th CT had captured 1150 prisoners of war, and destroyed or captured 32 artillery pieces, 5 self-propelled guns, 10 anti-aircraft weapons and 10 tanks. (154)

(150) B-3, p. 5; (151) B-1, p. 53; (152) B-3, p. 5; (153) B-1, p. 53; B-16, p. 43; (154) B-3, p. 5

Action of the 139th Engineer Battalion and  
Division Glider Command Group

The last glider serials of the 17th Airborne Division landed on LZ-"N". (See Map C) They carried the 139th Engineer Battalion, Batteries A and C of the 155th AA Battalion, the glider echelon of the division CP under Colonel Willard K. Liebel, the Chief of Staff, and also the 517th Signal Company, the 224th Medical Company, the Reconnaissance Platoon, and the glider echelon of Division Artillery. (155) In general landings were very accurate in spite of flak and small arms fire.

The first serial to cut loose carried the 139th Engineer Battalion. Their mission was to clear the landing zone for the units to follow and to defend the division airhead from any penetration from the north. (156) Since there were no special airborne obstacles on the field, this meant that the battalion was to fight as infantry on D-Day.

One glider of Company C loaded with demolitions was struck by flak and exploded before it could reach the ground. Because of the wide dispersion of gliders over the field, the men drifted by squads and platoons toward their company reorganization points. The Germans had detachments and strongpoints in every barn, farmhouse, orchard, and hay stack. In overcoming this resistance the engineers attacked aggressively, hurling grenades as they closed with the enemy. The field was gradually cleared and by 1730 the battalion had occupied its defenses to the north. (157)

At 2200 hours that night B Company received a counterattack by a light German company. The Engineers waited until the lead scouts of the enemy force were within fifteen yards of their

(155) B-3, Air Movement Table; (156) B-3, FO #1 p. 3; B-3, p. 27;  
(157) B-3, p. 28-29

machine guns before opening fire. The enemy assault was finally repulsed with white phosphorus grenades. When the Germans withdrew, they left 15 dead, 23 wounded and 30 prisoners.

During the day the 139th Engineer Battalion had killed approximately 83 Germans, and captured 315 PW's in addition to one battery of 105mm artillery pieces. (158)

Colonel Liebel, with G1, G2, G3, and G4, set up a temporary CP on the edge of the LZ, and almost at once secured radio contact with Major General Miley, who had jumped with the 507th CT on DZ-"W". As soon as the landing zone had been cleared and the woods to the south had been secured, Colonel Liebel moved the Command group to the pre-arranged Division CP near the ponds in Diersfordt Forest. (159) (See Map C)

#### The Division Command Post

According to the original plan, the division commander would jump with the 507th CT at P plus 12 minutes and establish a temporary Division CP in the woods on the northern edge of DZ-"W". About one hour and 40 minutes later the glider echelon of Division Headquarters would land on LZ-"N" and open a command post near the pond in Diersfordt Forest. The General would then close the old CP and move to the new location in the north. (See Map E)

Parachute Serial A4 dropped on DZ-"W" at 1002 just behind the 507th Parachute Infantry Regiment. The division commander, Major General William M. Miley, was also commander of the ground troops of Serial A4. The first three planes consisted of the parachute echelon of the division command group with

(158) B-3, p. 5; (159) B-21

elements of the Defense Platoon and the MP Platoon. The rest of the serial was made up of the 464th Parachute FA Battalion.

The lead plane carried the jump master, a radio operator with an SCR 300 radio in a British type leg bag, General Miley, the assistant G3, the assistant G2, and other officers and enlisted men of the staff in that order. (160) The men stood up when the plane was over the Rhine. For the next two minutes the popping and cracking of small arms fire could be heard below, but the flak did not seem very intense. In spite of the haze the DZ could be seen up ahead exactly as it had appeared on the aerial photos, except that the farmhouse in the center was on fire and the field was strewn with the yellow and green parachutes of the 507th.

The ship came in on course. The pilot flicked the green light just as the plane cleared the eastern edge of the woods near Fluren, and the stick was gone. Howitzer bundles from the artillery planes ripped past the men in mid-air. The stick was on the ground in 30 seconds.

Lieutenant Hudacek of the MP Platoon and the jump master were the first to reach the designated CP area on the northern edge of the woods. They immediately began guiding the men into the area and organizing them into a perimeter defense in case of counterattack from the north.

General Miley landed slightly west of the center of the DZ. In a few moments this part of the DZ began to receive rifle fire from houses along the dirt road on the southern edge of the DZ. Gathering up a small group of men, the General personally led the assault on this position, clearing the enemy from the houses. He then moved north to the assembly area. (161)

(160) B-21; (161) B-21

By this time the assistant G3 had joined the group in the edge of the woods. The assistant G2 and another officer of the intelligence section were killed before they could reach the assembly point. The radio operator with the General's SCR 300 had also arrived, but the hand set and microphone had been damaged in the drop. Within a few minutes a spare hand set had been borrowed from the 507th Parachute Infantry. By 1300 General Miley had communication with all of his combat teams, but contact could not be gained with the Commandos in Wesel. As soon as the General was in touch with Colonel Liebel and the glider command group near the pond, preparations were made to move the CP.

Before the drop, plans had been made to send Lieutenant Brooks and Lieutenant Hudacek with part of the Defense Platoon to reconnoiter the trail leading north and then east through Diersfordt Forest prior to moving the CP. (See Map E) After the jump, however, it was decided that the platoon might be ambushed in these woods, which had not yet been cleared. Therefore, they were sent around the eastern edge of the forest which was supposedly held by the 464th Parachute FA Battalion. About an hour later they reported back that they were unable to get through to the pond because of heavy fighting on the eastern side of the woods in the 464 area.

About 1530 hours Lieutenant General Ridgway of XVIII Airborne Corps and Brigadier General Whitelaw, the Assistant Division Commander, crossed the Rhine on DUKW's and joined General Miley. Since the forest was believed to be clear by this time, the command group then started to displace along the eastern edge of the woods, receiving only sporadic artillery fire.

The Division Staff was now complete and the CP was established as planned near the Diersfordt Pond. (162)

That night the Corps Commander and General Miley made a personal visit to the CP of the British 6th Airborne Division to check positions and correlate future plans. During the trip back to the 17th Airborne Division CP they were surprised by a German patrol. The Generals were travelling in three jeeps. The first one contained General Miley and his radio operator. They were followed by a second vehicle containing two Corps MP's with a machine gun on a pedestal mount. General Ridgway rode in the third jeep.

This small convoy was moving south without lights along a dirt road leading back to the division area. As the jeeps rounded a burned-out German tank, the party came almost face to face with the German patrol. Shots from the German machine pistols cracked just over General Miley's head as the patrol took up positions in the field just off the road. The machine gun in the second jeep was unable to fire for fear of hitting General Miley to the front. After a brief fire fight the Germans fled across the field into the night. They apparently had been trying to escape from the airhead and filter back to their own lines. In the brief skirmish, General Ridgway had been slightly wounded by a German grenade. (163)

#### Division Artillery

The organic artillery of the 17th Airborne Division consisted of the 464th Parachute FA Battalion (75mm), the 466th Parachute FA Battalion (75mm), the 681st Glider FA Battalion (75mm), and the 680th Glider FA Battalion (105mm).. As previously (162) B-21; (163) B-21

described, the 466th Parachute FA Battalion was in direct support of the 513th Parachute Infantry, the 464th Parachute FA Battalion was in direct support of the 507th, and the 681st was in direct support of the 194th.

The 680th Glider FA Battalion came in by glider with the 681st on LZ-"S" and was placed in general support of the division. It met the same resistance encountered by the 194th Glider Infantry and originally supported that regiment. (164)

In addition to its organic artillery the division received support from British artillery on the west bank of the Rhine. This was the first time in airborne history that a force had dropped close enough to the ground units to receive artillery support from them immediately after landing. In general support were three British Field Regiments, the 133d, 83d, and 81st, each equipped with twenty-four 25 pounders. These regiments reinforced the fires of the 466th, the 464th, and the 681st FA Battalions respectively. In addition there was the 77th British Medium Regiment of 5.5 inch guns in general support. (165)

Before Operation "Varsity", special forward observers and liaison officers from the 17th Airborne Division Artillery had been given a week's special training by XVIII Airborne Corps in order to call for fire from the British guns. These FO's were in addition to those of the organic artillery. One FO section was assigned to each infantry battalion and one liaison officer to each organic artillery battalion. However, since the fire orders of the American observers and the British Fire Direction Centers differed, translator teams were organized to interpret (164) B-3, FO #1 p. 5; (165) B-11, p. 2-3; B-3, p. 17; B-10, p. 9

the American sensings to the British. These translator teams were furnished by Ninth Army and remained with the British on the west bank. The forward observers and liaison officers, who went in with the division by glider and parachute, had communication with the translator team of each artillery regiment by 609 radio. Thus the FO's called for fire in the normal way, these calls were revised so they could be understood by the British, and both Americans and British were able to use their normal procedures. (166)

The Air OP sections of Division Artillery moved up to a prepared air strip just west of the Rhine on D-3. Concentrations were planned in advance, and the liaison planes were able to fly across the river and hover over the DZ's for observation shortly after the air lift was complete. (167)

The coordination with the British proved of great value to the airborne, especially during the critical period just after the drop when the organic artillery was assembling their guns and ammunition. In most cases it was not possible to call for this supporting fire immediately after landing because of the dispersion of the airborne troops and the confusion on the drop zones. However, when battalions had regained some control and had communication with the translator teams, they were able to secure support during the difficult time when their own artillery was not yet in position to fire. How effective this proved is demonstrated by the fact that one infantry regiment secured 110 fire missions fired effectively by the British during the first 36 hours after the drop. (168) It must be remembered that most

(166) B-11, p. 2-3; B-10, p. 9; (167) B-3, p. 18; (168) B-11, p. 2; B-10, p. 9

of the division artillery had to fight initially as infantry, and that when their first few guns were set up, they were used for point-blank fire on enemy strong points on the drop zones.

#### Supply and Evacuation

The plan of logistical support provided that troops would carry in with them basic loads sufficient for the first day. As soon as the troop carrier phase was complete, 270 tons of all classes of supplies would be dropped on DZ-"W". This speed in dropping supplies into the airhead would insure adequate material for D plus 1 even if bad weather should close in and ground the planes after the operation began. Since all available troop carrier planes would be used to transport the troops, these supplies would be flown in by B-24 bombers from England. (169) In order to insure that these supplies were dropped accurately, the Pathfinder Team with the 1st serial of the 507th CT was to mark DZ-"W" with panels.

Although it was hoped that ground troops would reach the airhead within 24 hours, an automatic aerial re-supply of 540 tons was scheduled for D plus 1. In case the river crossing should run into difficulties, sufficient supplies had been stacked by First Allied Airborne Army near airfields in England and France to supply the division by air for nine days if necessary. These missions, however, would have to be called for by radio. (170)

The Division Quartermaster would organize supply dumps on the southeastern edge of DZ-"W" immediately after the drop. (171) As soon as the ground forces had made contact, supplies would be

(169) B-3, p. 13; (170) B-3, p. 13; B-9, p. 45-46; (171) B-3, p. 8

procured through Ninth Army. To facilitate this, Ninth Army was to set up a dump handling all classes of supply on the west side of the Rhine near the Land Tail with three days operating level on hand. (172) A QM Amphibious Truck Company was available to ferry supplies across in case bridging of the river was delayed.

The Graves Registration Collecting Point and the PW Enclosure were also to be established in the southeastern portion of DZ-"W". It was felt that German prisoners could be used to dig the graves in case temporary burials became necessary.

In order to recover the parachutes and bundles, three officers and 57 enlisted men of the Parachute Maintenance Company would jump with the 507th CT. They would be joined by the rest of the company in the Land Tail, and would salvage as much Air Force equipment as possible. (173)

The Division Clearing Station would be set up in the center of the division sector near LZ-"N". It would be prepared to hold casualties for two days if necessary. To provide surgical attention during the time when the division would be separated from ground contact, two surgical teams were attached to the 224th Medical Company. Twelve glider pick-ups were arranged to evacuate emergency cases to Army hospitals across the Rhine. A platoon from an Army Clearing Company was to be set up on the west bank and ferry across on D plus 1. (174)

The logistical plan worked quite smoothly except for a few contingencies. At 1300 hours 240 bombers roared over the tree tops of Diersfordt Forest, pouring down hundred of bundles, which swung for a second under their colored canopies and then smashed to the ground on DZ "W". (175) Most of the bombers

(172) B-3, p. 13; (173) B-3, p. 13; (174) B-3, p. 14; (175) B-10, p. 8

came in at an altitude of about 200 feet in order to avoid flak. As a result some of the parachutes scarcely had a chance to open. Some of the bundles hit the ground with such force that they broke open, strewing equipment across the field. A few bundles landed in the trees, and others were widely scattered over the drop zone. (176) Since the pathfinders with the 1st Battalion of the 507th had jumped on the wrong DZ, they had been unable to arrive in time to display their panels. Considering the haze and the fact that the field was not marked, the resupply was surprisingly accurate. Sixteen of the bombers were shot down by AA fire, which had not yet been entirely neutralized. About 75 percent of the supplies were recovered by the 17th Airborne Division. (177) Aerial resupply for D plus 2 was cancelled.

Since most of the bundles landed in the northern and western portion of DZ-"W" where resistance had died down, the supply points, PW Enclosure, and Graves Registration Collecting Point were established near Flüren. Prisoners of war were used to gather up supplies, and carts, wheel barrows, wagons from the surrounding farms, and captured German vehicles were used to haul the material to the dumps. It was not necessary to start a cemetery, since evacuation across the Rhine was possible by D plus 2.

Medical evacuation worked satisfactorily. Gliders of the medical company landed on LZ-"N" immediately after combat elements and before the field was clear. Gliders were not marked with red crosses, and several casualties were inflicted on medical personnel, including two surgeons killed and one wounded. (178)

(176) B-21; (177) B-3, p. 14; (178) B-3, p. 26

Since ambulances were still across the river with the Land Tail, casualties had to be kept in the Clearing Station on D-Day. Prisoners of war were used as litter bearers and to dig prone shelters for the wounded. Medical supplies were furnished to captured German doctors for treating their own wounded. By D plus 1 evacuation was begun to the Army Clearing Platoon which had crossed to the east bank. From here casualties were sent across the river in DUKW's to Ninth Army through normal channels. Glider pick-up was not used.

The overland tail vehicles came across during the night of D and D plus 1, joining the division early on the morning of 25 March.

#### Summary

By the close of D-Day the 17th Airborne Division had accomplished its mission and taken all assigned objectives. The division had captured about 3000 prisoners and destroyed the combat effectiveness of the German 84th Infantry Division.

(179) Casualties for the 17th had amounted to about 10 percent.

(180) The cost of the drop in aircraft amounted to 46 troop transports and 15 bombers destroyed and 348 planes damaged.

(181) Only 51 gliders failed to reach the airhead, but hundreds were damaged in landing. (182)

As General Ridgway has said, "The impact of the airborne divisions, at one blow, completely shattered the hostile defense, permitting prompt link-up with the assaulting XII Corps, the 1st Commando Brigade, and the Ninth Army on the south". (183) The defenders of the east bank were thrown into complete confusion

(179) B-16, p. 43; (180) B-3, p. 8; (181) B-8, p. 17; B-8, App 6 "Statistics of Airborne Phase" p. 2,5; (182) B-9, p. 9; (183) B-2 p. 16

by the paratroopers landing on all sides and gliders swooping down on them from the smoke-filled skies. The airborne attack quickly destroyed the enemy artillery which could have opposed the crossing by the ground forces or delayed the bridging of the river. Finally it prevented the enemy from hurling his reserves against the crossing sites.

By 26 March the 17th Airborne Division was ready to push on to the east. As the British 6th Guards Armored Brigade streamed over the bridges at Wesel, the way was open for the great drive into Germany designed to cut off the Ruhr and strike at Berlin.

## CHAPTER VI - ANALYSIS AND CRITICISM

Operation "Varsity" was the last airborne operation of World War II. As such it marked the culmination of airborne planning and the perfection of techniques developed during the war. In the words of General Eisenhower, it "was the most successful airborne operation carried out to date". (184) The reasons for this success lay in the simplicity of the mission, the use of airborne forces in mass, careful advance planning, and vigor in execution.

"Varsity" contributed much that was new to airborne thought. Up to this time airborne theory had prescribed the dropping of paratroops in combat team or division strength in areas often separated by such a distance that they could not be mutually supporting. This sometimes led to the annihilation of these units in a piecemeal fashion as was the case of the 1st British Airborne Division at Arnhem. In "Varsity" an entire airborne corps was dropped in one airhead that was too strong to be cut off and destroyed. Thus we have a glimpse into the future of the huge airhead which might be used by airborne and airlanded armies in another war to open up an entirely new front in the interior of a hostile nation.

Previously most airborne operations had been made well behind the enemy lines so that the force would have time to reorganize and move to the objective before meeting heavy opposition. In this case the 17th Airborne Division dropped on the enemy defenses just behind the MLR. This added a stunning blow to an enemy already weakened by a series of defeats and by the intensive bombing and artillery preparation. This,

(184) A-14, p. 101

however, was a special case where such a calculated risk could be taken because of the proximity to the ground forces. On a drop far behind enemy lines it would scarcely be feasible to drop directly on a strongly defended objective unless in great strength or to secure dominating terrain.

Finally the airborne assault across the Rhine came after the initial ground attack and not before. This was done because the enemy expected an airborne attack. By waiting until the critical moment for an airborne drop had come and gone, tactical surprise was secured.

The entire plan for "Varsity" was simple and clear. Instead of taking a great risk and landing far behind the enemy lines, a smashing blow was delivered in great strength against a limited objective just five miles from the river. Although this might seem to lack vision and imagination, it was force applied where it was most needed to aid the overall plan. Thus the airborne assault added punch and drive to an attack which had already started. It was a concentration of force combined with surprise against an enemy at one critical point. It demonstrated that airborne troops can add impetus to an attack when the enemy is weakening or can block his reserves when he is ready to counter-attack.

One of the mistakes made in the airborne operation in Holland was the failure to get sufficient reinforcements and supplies to the airhead. The lesson had been well learned. No chances were taken in "Varsity" that the weather might close in and prevent aerial resupply. On the tail end of the column of troop transports flew 240 bombers carrying a total of 540 tons of supplies for the corps on D plus 1.

Again instead of feeding the airborne troops into the area in driblets or in several flights at various times, the entire corps was transported in one gigantic air lift. This added impact to shock action.

The value of prior support by aviation cannot be overestimated. Without the repeated attacks by fighter bombers on flak installations for three days prior to the drop and without the initial run-in ahead of the sky train by the Ninth Air Force and the Second Tactical Air Force, personnel and aircraft losses from AA fire would have been much higher.

There is little room for criticism in the advance planning that was done by the 17th Airborne Division. Careful coordination was made as soon as possible with IX Troop Carrier Command concerning availability of aircraft, air movement and flight plans, and construction of marshalling areas. The endless problems to prepare for the operation under most difficult conditions were solved well ahead of time. Clear-cut and logical orders were issued to subordinate commanders far enough in advance for them to make detailed plans and brief their assistants even before the marshalling phase began. Staff functioning was superior throughout.

Perhaps the infinite care devoted to the briefing of every man in the marshalling areas contributed more than any other single factor to the brilliance of execution on D-Day. Each soldier had a general picture of the mission, and he knew exactly what his unit was to do and what part he personally was to play on the team. Every man in the marshalling area was able to study the ground ahead of time from terrain models or sand tables. Most jump masters carried an aerial photograph of their DZ.

Although the landings of the 17th Airborne Division were almost according to plan, the operation was not perfect. The entire 513th Parachute Infantry landed on the wrong DZ completely outside of the division sector. In addition one battalion of the 507th Parachute Infantry was delivered to the wrong area. It is difficult to understand how these navigational errors could occur in view of the clearly defined route and the check points and radar aids that were used to keep the ships on course up to the Rhine. However, it must be remembered that there were 1,595 troop transports of different types and 1,347 gliders in the air at the same time, and that the target area was somewhat obscured by smoke. Although four infantry battalions missed their intended DZ's and were unable to follow their original reorganization plans, they were able to regain control and move to their objectives within a comparatively short time. Thus another lesson was established - that in spite of careful briefing, airborne leaders must be resilient, flexible, and readily adaptable to sudden changes in the plan.

This action demonstrated conclusively that a day-time airborne operation is preferable to a night operation if friendly forces have aerial superiority. Imagine the confusion that would have occurred across the Rhine during a night drop with some of the American and British troops landing together in the same areas. The problem of regaining control by leaders immediately after the drop is much reduced by day.

Practically nothing was left undone to maintain intelligence security during the initial planning phase and at the marshalling areas. At division and regimental level planning and briefing had been done in sealed war rooms. Passes and leaves were

gradually reduced so as not to alert French civilians by the sudden disappearance of airborne troops from the towns. All airborne insignia was removed for the move to the marshalling areas, and drivers of the Land Tail did not even know their final destination. Once in the camps all troops were sealed and segregated from service troops.

In spite of these precautions it is apparent that the Germans suspected generally when and about where the airborne attack would come. Perhaps some of this intelligence stemmed from the logic of the situation and a study of the most likely terrain to be chosen. It must be remembered that this was the first time that an airborne invasion had been mounted on the mainland of Europe, and that even the most rigid security could not completely hide from enemy sympathizers in France the movement of an entire division.

Before "Varsity" it had been standard practice to drop parachutists ahead of the glider serials to clear the fields of enemy. This plan was not used by the 17th Airborne Division. Instead two separate landing zones were selected. When gliders landed alone on these fields against the fire of many anti-aircraft weapons, the men organized quickly and fought effectively in seizing their objectives.

Up to this time glider pilots had ordinarily been used to guard prisoners of war or to guard their own gliders after landing, or had wandered around aimlessly until they could be evacuated. In some cases they had of their own volition attached themselves for days to infantry units and fought with valor, but at a time when they were needed elsewhere as glider pilots. Some of them had been known to become lost after the landing and

sometimes even to resort to looting or pillaging. The 17th Airborne Division employed its glider pilots differently. Trained before the operation in infantry weapons and tactics, they were completely outfitted for combat prior to the landing, including bazookas, rifles, and machine guns. They were then organized in groups of company size and were knit together as provisional battalions under their own senior Air Force officers. Although these forces were inexperienced in this type of fighting, they added the weight of practically two battalions to the 194th CT and the 513th CT respectively. In order to offset their infantry inexperience, airborne liaison officers were attached to each provisional battalion as staff advisors. Once they had landed, the glider pilots assembled according to plan under their senior officers and were use on vital missions to assist the infantry. These included defending part of the division perimeter, providing security for artillery, and constituting vital reserves. They proved conclusively that they could fight effectively as infantry under these conditions. This was particularly revealed in the sector of the 194th Glider Regiment, where they repelled the German tank-infantry attack during the night of 24 March. Later they were used to guard many of the 3,000 prisoners the division had captured.

However, in using glider pilots as infantry, airborne commanders should realize that this is only an emergency measure. The primary mission of glider pilots is to fly gliders, and they must be evacuated as soon as possible to be available for future airborne operations.

An analysis of the ground action requires that much credit be given to the 466th Parachute FA Battalion which landed alone on DZ-"X" and fought for several hours as infantry to clear the field. Since this is likely to occur in any airborne operation, artillerymen as well as engineers should receive some preliminary infantry training.

During the critical time after landing when the artillerymen were fighting at close grips with the enemy and striving to assemble their guns and ammunition, they were able to secure supporting fires from the British artillery pieces across the river. Once their own guns were set up, they could thus be used initially for direct fire on point-blank targets. This was the first time in history that an airborne force jumped into combat close enough to the ground units to secure artillery support from them. It worked most effectively, since differences in fire control systems between the American and British had been overcome by specially trained translator teams.

The 2d Battalion of the 513th Parachute Infantry was the only unit which was not on its objective by the end of D-Day. It will be remembered that this battalion was overtaken by nightfall in Diersfordt Forest just short of its objective. Since this objective had been cleared in the morning by the 1st Battalion of the 507th when it landed on the wrong DZ, the battalion did not consider that it was important to occupy the high ground north of Diersfordt that night. Instead patrols were sent forward to the objective. This was a mistake. Although the objective had originally been cleared, and the Germans were in a state of confusion, there were many small

enemy units still filtering through the area. This failure to accomplish the battalion mission left a small gap between the 507th CT and the 6th British Airborne Division. Had the enemy possessed more strength, he might have been able to strike one of these units on an exposed flank. On the other hand, it was a clear moonlight night and the thoroughly trained 2d Battalion of the 513th CT could have pushed on through the woods in a column of companies without loss of control. In airborne attack it is imperative that all units push on aggressively to take their objectives and tighten the airhead against the time when the enemy can counterattack. Flanks must be tied in as soon as possible and no weak spot left in the defense.

During the night of 24 March both the division commander and the corps commander could have become casualties to German patrols because of lack of security on the march. Commanding officers of division level should not travel along front lines without adequate security. This protection could have been provided by having the MP jeep with the pedestal-mounted machine gun precede the staff jeep. Thus the machine gun could have opened fire at once when the patrol was encountered.

There is no doubt that the Allies could have crossed the Rhine without airborne support. In fact early on the morning of 24 March they already had nine small bridgeheads on the east bank. Therefore, there may be some who will say that "Varsity" represented a useless expenditure of men, supplies, and aircraft. This is not the case. Once the initial crossing had begun, the 17th Airborne Division struck the enemy at a time when he had abandoned the idea of airborne attack and was ready to commit his reserves against the landing. Within about three hours 14,365 men, 695 vehicles, 113 artillery pieces, and 109 tons of

ammunition were dropped into the airhead. (185) This blow from the skies added punch to the crossing, destroyed the artillery positions from which the enemy could shell the bridges, blocked his reserves, and threw him into utter confusion. Thus the bridgehead was rapidly expanded and casualties in the ground divisions and among the engineers building the bridges were greatly reduced. The rapid consolidation of the bridgehead aided the build-up of tanks and troops on the east bank in sufficient strength to push on swiftly to the open ground near Munster and thence to the North German plains. As a result the Ruhr was quickly encircled, and the drive to Berlin was begun.

(185) A-8, p. 247

## CHAPTER VII - LESSONS

The action of the 17th Airborne Division in Operation "Varsity" established the following military lessons:

1. For maximum effect airborne troops must be employed in mass on a specific mission vital to the general plan.
2. Airborne troops can be used effectively to secure a bridgehead in a river crossing.
3. Airborne assault will add impetus and shock action to an attack already begun.
4. To succeed, airborne attack must gain tactical surprise. This surprise depends upon flawless security precautions prior to the operation.
5. For a successful airborne operation the plan must be simple but complete, and all personnel must be thoroughly briefed.
6. Leaders must be trained to develop flexibility in order to adapt themselves on the spot to the vicissitudes of airborne landings.
7. A daytime airborne operation is preferable to a night operation when the attacker possesses aerial superiority.
8. The maximum number of men and supplies should be concentrated in the landing area on the initial flight.
9. Prior bombing of the landing area can soften resistance before the airborne attack. Light fighter bombers and rocket planes should precede the sky train for a final strike just before P-Hour.
10. Gliders can land on uncleared fields.
11. Airborne artillerymen should be given some training as infantrymen.
12. Division orders must be issued in time for unit commanders to make their own plans and brief personnel.

13. Once control is regained, each organization must take its objective speedily, tie in its flanks, and secure the air-head against enemy counterattack.

14. Glider pilots should be evacuated promptly in order to accomplish their primary function.

15. Glider pilots, however, can initially fight alongside the airborne troops on vital combat missions.

ANNEX 1.

Units Participating in Operation "Varsity"  
under Command of the 17th Airborne Division

- I. 507 CT
1. 507 Prcht Inf Regt
  2. 464 Prcht FA Bn - Initially Atchd, then D/
  3. Btry A, 155 AA Bn (Glider)
- II. 513 CT
1. 513 Prcht Inf Regt
  2. 466 Prcht FA Bn - Initially Atchd, then D/
  3. Btry C, 155 AA Bn (Glider)
  4. 139 Gli Engr Bn
  5. Gli Pilot Groups 440, 441, 442, 314
- III. 194 CT
1. 194 Gli Inf Regt
  2. 681 Gli FA Bn - Initially Atchd, then D/
  3. Btry E, 155 AA Bn (Gli)
  4. Btry B, 155 AA Bn (Gli)
  5. Gli Pilot Groups 437, 436, 435, 439
- IV. Div Arty
1. 464 Prcht FA Bn - D/S 507 Prcht Inf
  2. 466 Prcht FA Bn - D/S 513 Prcht Inf
  3. 681 Gli FA Bn - D/S 194 Gli Inf
  4. 680 Gli FA Bn - G/S
  5. RA 53 (W) Div (Br) - G/S from west bank
- 133 Field Regt (25 pdr) - Reinf 464 Prcht FA Bn  
83 Field Regt (25 pdr) - Reinf 466 Prcht FA Bn  
81 Field Regt (25 pdr) - Reinf 681 Gli FA Bn  
One Medium Regt (5.5" guns)
- V. Special Troops
1. 517 Abn Sig Co
  2. 717 Abn Ord Co
  3. 411 Abn QM Co
  4. 224 Abn Med Co
  5. 17 Abn Prcht Maint Co
  6. Div Hq Co
  7. Div MP Plat
  8. Div Rcn Plat
- VI. Land Tail
- A. Organic - Btrys D & F, 155 AA Bn
- B. Atchd
1. 605 TD Bn, 3" (towed) (US)
  2. 771 Med Tk Bn (towed) (US)
  3. Co A, 3 Cml Bn (Mtz) - 4.2" mortar (US)
  4. 387 AAA AW Bn SP (US)
  5. 692 FA Bn 25 Pdr (US)
  6. 144 TD Bn (SP) (Br)
  7. 398 QM Trk Co
  8. 458 QM AMP Co