3rd Company, S.T.R.
Fort Benning, Georgia
25 May 1947

Subject: Insertion to Monograph

To: Military History Committee
The Infantry School
Fort Benning, Georgia

1. At the time I prepared my monograph for delivery in February or March I had not received authentic information on one phase of the action described. Reference had to be made to a sometimes inaccurate Regimental History. Other officers questioned were also ignorant of full details.

2. Because my monograph was used as part of source material for a lecture on an airborne operation and might sometime be used again, I request that the following letter excerpts--received long after the monograph was submitted--be attached to each of the two copies along with this explanatory letter.

B. F. Delamater, III
Major, Infantry

DATED 7 APRIL 1947
EXTRACTS OF LETTER FROM MAJOR J. E. ADAMS, JR. WHO
IN SEPTEMBER 1944 COMMANDED CO. A, 508 PRCHT INF, 82 ABN DIV
DURING THE HOLLAND INVASION, NIJMEGEN, HOLLAND

1. "A" Company had no incidents to speak of concerning the loading and take off. There was plenty of time allotted so that there was no last minute rush. I do remember that after my jumpmaster reported to me that all planes were O.K. I checked and found that about half the para-racks were cocked. The only formal class I can remember on para-racks was held at Camp Mackall. (OTHERS HAD BEEN HELD BUT CAPT. ADAMS, WOUNDED IN NORMANDY ON 2 JULY, RETURNED TO THE UNIT SHORTLY BEFORE THIS SEPTEMBER OPERATION.)

2. The briefing was the best I have attended. Particularly so because of the attitude of the pilots. When we left the briefing room I believe the jumpmasters had great confidence in the job the Air Corps would do. This is in contrast to Normandy where the pilots seemed to take the briefing as a big joke. (A DEFINITE CHANGE FOR THE BETTER IN ATTITUDE HAD ARISEN IN THESE TROOP CARRIER PILOTS; MANY OF US NOTICED, PROBABLY BECAUSE THEY NOW REALIZED THAT FIGHTER PILOTS WERE NO MORE IMPORTANT THAN THEY.)

3. The flight in was uneventful until we reached Hertogenbosch. As we were told in the briefing we got some very heavy flak. "A" Co. being second in the column seemed to catch most of it. Two planes were hit so badly they had to fall out of the convoy. These were the two that jumped in Germany. By the time they regained jumping altitude they were past the DZ and just inside Germany. All paratroopers got out except for one man and they all eventually got back to 508. As they had about fifty prisoners from Ack Ack crews I would say they did a darn good job. One of the planes crashed with loss of all the crew. I have never heard about the other plane.... With the ex-

ception of the two planes the jump was excellent and we were assembled, with the above exception, and on our way inside of an hour.

4. Within a half hour after the jump "A" Co. had two patrols on their way to the objective as planned. Contact through 536's however lasted only about ten minutes. (EN CO, BN EXEC & RIFLE CO CO'S HAD JUMPED SCR 536'S FOR INITIAL USE.)

5. The march to the objective was (almost) uneventful.... Everyone started digging in. I soon found out that the company was not in the best training shape.... I found that I was one of the few who still had a (AT) mine in his possession on the (first) objective.... Everyone had the idea that the rest of the job would be as easy as it had been up to that point. That was somewhat my own impression and I still believe if we had marched straight to the bridge from the DZ we would have had it without a fight. (BECAUSE OF THE GREAT NUMBER OF REPLACEMENTS AFTER NORMANDY AND THE SHORT TIME TO TRAIN, MANY, MANY, DETAILS OF TRAINING WERE WEAK. CONFIDENCE AND ESPRIT, HOWEVER, WERE GROUP QUALITIES THE BN CO WAS ABLE TO INSTILL IN LARGE MEASURE. I BELIEVE AT LEAST 90% OF US FULLY BELIEVED THEN WE COULD TAKE THE BRIDGE WITH ONE BN HAD WE BEEN ABLE TO REACH IT BEFORE DARK. I, PERSONALLY, HAVE SINCE CHANGED MY MIND TO THE EXTENT THAT WE COULD NOT HAVE TAKEN AND HELD THE BRIDGE EVEN ONE DAY.)

6. At about six P.M. I was called up to the Bn CP. We were told that a Dutch underground man had just given the location of the Hqrs of Dutch underground and the control station for blowing the bridge. The plan was to contact the underground, capture the control station, and capture the bridge. We were to start immediately, "A" Co. leading and "B" Co. behind.

7. ... About ten o'clock (EIGHT O'CLOCK?) I was told to pro-

ceed (without "B" Co.) anyhow.... The Dutchman said he would go forward alone to contact the underground. No one opposed this plan and that was the last we saw of him. (WE OFTEN WONDERED WHETHER THIS CIVILIAN, ARMED WITH THE BN CO'S 45 PISTOL, WAS NOT CAPTURED AND QUESTIONED...) I was (finally) to go ahead until I reached the Circle.

8. At this time it was pitch black and visibility was less than ten yards. When we got two blocks from the circle we ran into some Krauts. Neither of us knew of the others presence until the lead scouts actually bumped into the Germans. In the ensuing fire fight the platoon leader was wounded and assistant platoon leader killed. The company was deployed on either side of the street. Both sides started firing blindly. "B" Co. just about that time reached the tail of my company and started firing through the middle of the street. ... My lead platoon was so poorly organized I had to pass Lamm's platoon through it.... All this time we could hear German trucks unloading men. We were unable however to direct any effective fire on them....

9. (Unable to locate the Underground Hqs and after two visits to the Bn CP) I was told to send the patrol to capture the control station and have the patrol proceed to the bridge. If there was no opposition to follow it up with the rest of my company.... As time was getting precious (and Lamm could not seem to follow my verbal directions on a small map) I undertook to guide the patrol to the control station. I don't believe this was a tactical blunder. However, I failed to notify Foley that he was to assume command of the company....

Lamm's patrol proceeded almost to the theoretical control station without any trouble. We had almost reached it when the Krauts opened up on us. It certainly looked as though this was a German strong

point. We had our first contact here with a panzerfaust but we did not know what it was. There was grazing fire coming down the street between us and the building. However, Lamm and six other men managed to close, got in the building, killed a mess of krauts and got back with the loss of only one man. As they left they set the building on fire. Lamm reported to me that there were some switches in the building but that they could very well have been just ordinary light switches. I personally believe this was a German headquarters of some sort.

As usual the 536 wasn't any good when we needed it the most, so we started back to the park. We had two badly wounded men so our progress was slow. We had almost gotten to the part when Germans opened up on us and we found that we were cut off. We then started to circle around thinking we could pass the Germans. However, every street we entered had Germans in it. As it was beginning to get light it was apparent we couldn't wander around much longer, so we started to look for an appropriate place to hole up. To make a long story short we didn't get out until the British made contact with us on the morning of the 20th at which time we started back to locate the battalion.

At no time did we get within sight of the highway bridge. We could see the railway bridge but were at least a half mile from it. (CONTRADICTS STATEMENTS OF MORE IMAGINATIVE MEMBERS OF THE COMPANY.)

We reached the battalion on the drop zone late in the afternoon of the 20th and were told to rejoin the company on Devil's Hill. By dusk we had just reached the position of the Engineer Platoon. The platoon leader told me they were being attacked at that particular moment. From what we could see and hear, nobody was firing a shot. (AS INFANTRYMEN THIS ENGR PLATOON WAS NOT TOO GOOD EARLY IN THE CAMPAIGN.)

Our group then started out to contact Foley. We just missed him in the dark and when dawn broke we were not more than 100 yards away. (VERY THICK BRUSH.)

We had no sooner gotten things reorganized on Devil's Hill when the Germans attacked. It was a foolish move as they came straight up the sides of the hill. Still it is surprising just how far up they did get. This was their last attack and the remainder of our time on Devil's Hill was spent on patrols and maintaining contact with other units and killing cows and chickens.

During this time I saw plenty of places we could have used our 60 mm's to advantage. However, either a mortar wasn't around at the time or there wasn't enough ammunition to be effective. Somehow a mortar squad seems to receive the most casualties and a two or three man squad can carry just about enough for one target.

THE INFANTRY SCHOOL
GENERAL SECTION
MILITARY HISTORY COMMITTEE
FORT BENNING, GEORGIA

ADVANCED OFFICERS COURSE
1946-1947

# THE ACTION OF THE 1ST BATTALION, 508TH PARACHUTE INFANTRY (82ND AIRBORNE DIVISION) IN THE HOLLAND INVASION, 15-24 SEPTEMBER 1944 (RHINELAND CAMPAIGN, EUROPEAN THEATER OF OPERATIONS) (Personal Experience of the Battalion Executive Officer)

Type of operation described: PARACHUTE BATTALION IN AN AIRBORNE INVASION

Major B. F. Delamater, Infantry

TABLE OF CONTENTS


| | PAGE |
|---|---|
| Index ..... | 1 |
| Bibliography ..... | 2 |
| Introduction ..... | 3 |
| Geographical Features ..... | 4 |
| Final Preparations and Briefing ..... | 4 |
| Takeoff and Flight to Combat Area ..... | 6 |
| Accomplishment of the Initial Mission ..... | 9 |
| Counterattack of the Drop Zone ..... | 11 |
| Subsequent Actions (D+2) 19 September ..... | 15 |
| Subsequent Actions (D+3) 20 September ..... | 17 |
| Subsequent Actions (D+4) 21 September ..... | 20 |
| Subsequent Actions (D+5) 22 September ..... | 22 |
| Analysis and Criticism ..... | 23 |
| Lessons ..... | 28 |

Map - Allied Armies on 15 September 1944

Map - General Map Nijmegen Area

Maps - Action Vicinity Voxhil-Teufels Berg

## BIBLIOGRAPHY


A-1 82nd Airborne Division Report - Operation "Market"

A-2 Regimental Report, 508 Parachute Infantry, 7 December 1944

A-3 First Allied Airborne Army Report - Operation "Market"

A-4 British Airborne Corps Report - Operations "Market" and "Garden"

A-5 The Brereton Diaries - First Allied Airborne Army Section

A-6 The Invasion of Western Europe, Part I, USMA History Department

A-7 Letter Enclosure from Commanding General, 82nd Airborne Division to Commanding General XVIII Corps (Airborne) dated 3 December 1944

A-8 Report of a General Board, ETO. Organization, Equipment, and Tactical Employment of Airborne Divisions

A-9 Statement from Colonel Roy E. Lindquist, Commanding Officer, 508 Parachute Infantry

A-10 Letter from Captain Frank Schofield, Commanding Officer, Company C

A-11 Recent Statements by Captain Woodrow Millsaps, Commanding Officer, Company B

A-12 Recent Statements by Captain John Foley, Acting Commanding Officer, Company A

A-13 Recent Statements by Captain Peter Kelley, Battalion S-4

A-14 Recent Statements by Lt. John Epps, Jr., Platoon Leader, Light Machine Gun Platoon

A-15 To War By Air - Tompkins - The Marine Corps Gazette - January, 1947

A-16 Airborne Armies of the Future - Gavin - The Infantry Journal - December, 1946

THE ACTION OF THE 1ST BATTALION, 508TH PARACHUTE INFANTRY
(82ND AIRBORNE DIVISION)
IN THE HOLLAND INVASION, 15-24 SEPTEMBER 1944
(RHINELAND CAMPAIGN, EUROPEAN THEATER OF OPERATIONS)
(Personal Experience of the Battalion Executive Officer)

## INTRODUCTION

This monograph describes the action of the 1st Battalion, 508 Parachute Infantry Regiment, 82nd Airborne Division, during the period 15 September to 24 September, 1944, on which date the airborne phase of the Holland invasion may be said to have terminated for this battalion.

It is my intention to do three things during this monograph:

1. To relate the events that took place, fitting in the battalion's action to that of the division overall plan.

2. To reveal some of the faults and virtues of the persons making up such airborne units at that time.

3. To point out some lessons we in the battalion learned and several lessons commanders on a higher level learned about the employment of airborne troops.

The action will be discussed in seven parts:

1. The final preparations and briefings at the departure airfields in central England.

2. The take off and flight to the combat area.

3. The parachute drop on Drop Zone "T" and the regimental assembly.

4. The accomplishment of the battalion's initial mission.

5. The attempt to capture the Nijmegen highway bridge.

6. The countermarch and recapture of our own drop-zone (DZ).

7. The action by days during subsequent missions in that first week prior to our relief by 1st Battalion, 504 Parachute Infantry Regiment.

## FINAL PREPARATIONS AND BRIEFING

On 15 September the 1st ("Fireball") Battalion was billetted in part of an unused hangar at Langar Field in central England. Officers and key non-commissioned officers were issued several maps of different scales and the Battalion S-2 section was busily preparing sand tables for the more detailed briefing of every man.

The situation was then as shown on map 1. (1). The plan was for the British 2nd Army to skirt the north end of the German fortified lines -- assumed to end at Cleve -- and then to drive southeast to the Ruhr industrial area and east toward Berlin. Elements of the First Allied Airborne Army -- the American 101st and 82nd Airborne Divisions and the British 1st Airborne Division -- were to assist this drive by seizing and holding important bridges and road junctions on the 2nd Army's route of advance.

## GEOGRAPHICAL FEATURES

The area we are principally concerned with here is the high ground separating the Maas (Meuse) River and the Waal River (largest diverging branch of the Rhine) and is shown on map 2. The highest point in the entire sector sloping southeast is the steep Wyler Berg ridge system; southward toward Groesbeek is a less sharply defined hill system. The area, except at Wyler Berg ridge, is rolling and sandy; both areas are generally heavily wooded cedar forests and tangled underbrush. There is, however, a large cleared farming area east and south of Groesbeek which affords adequate space for glider landings and, of course, parachute drops.

Except for the tactically important Reichswald Forest area immediately south and southeast of Groesbeek, almost all of the adjacent area is typical Dutch "polder" country consisting of reclaimed drain-

(1) Miscellaneous unit reports.

age areas which are sub-divided into ditch lined pastures or small orchards. In such areas as these the rainfall and humidity conditions at this time of the year can make even light jeep traffic difficult.

A good network of roads and trails extends through most of the area. Three principal roads and two railroads converge on the beautiful, modern city of Nijmegen, whose prewar population of nearly 100,000 remained definitely pro-allied despite active occupation by German training forces.

Because of the rivers and canals, all bridges in the area assumed great tactical importance, particularly the huge five span, steel and concrete highway bridge at the northern edge of this city. (2)

The 82nd Airborne Division landing by parachute and glider was to accomplish four things: (3)

1. Seize and hold the highway bridges across the Maas River at Grave and the Waal River at Nijmegen.

2. Seize, organize, and hold the high ground between Nijmegen and Groesbeek.

3. Deny the roads in the Division area to the enemy.

4. Dominate the area outlined on map 2.

The 508 Parachute Infantry, one of the three parachute regiments in the Division, was assigned a large sector in the northern and eastern part of this perimeter with three specific missions initially:

1. To dominate the hill mass in the vicinity of Berg-en-dal, the highest ground in the 28 mile Division perimeter.

2. To block the southward move of enemy from the Nijmegen area.

3. To protect and keep open Drop Zone "T" where the Regiment was to jump. (4)

(2) 6,000 feet (including approaches), A-6, p. 58; (3) A-1; (4) A-9 and personal knowledge.

In addition, the Regimental Commanding Officer, Col. Roy E. Lindquist, knew that his unit being the closest to the vital Nijmegen highway and railway bridges probably would have a future assignment of capturing one or both of them. He also knew that the Nijmegen-Cleve highway running through Wyler as a midpoint might at that point become his concern.

The 1st Battalion, 508 Parachute Infantry had the initial mission of seizing a sector of ground about 2-1/2 miles south of the highway bridge. (See Map 2)

That was our reason for being at the departure airfield now, why for secrecy we were "sealed in" by our own guards and token barbed wire fences. Other than continual study of the sand tables, rerolling of a few A-5 containers (too hastily prepared at base camp near Nottingham earlier) and the last minute care of personal arms and equipment, few men were particularly busy after mid-afternoon of the 16th. A band concert and brief prayer service in the hangar prepared us for the next day.

After an early breakfast the officers attended a final flight briefing on weather, the route, check points, sea rescue measures, expected flak areas, and fighter protection.

The heavy bundles were then trucked out to the chalk-marked C-47's and swung into belly racks and placed in the open doorways in the case of the most important items. Until the clouds lifted enough for the ten o'clock take off, the troopers lolled on the grass, joking and bragging about themselves, their favorite "Pubs", or their English girls. Only the unusual number of latrine visits betrayed any nervousness.

## TAKE OFF AND FLIGHT TO THE COMBAT AREA

Our briefing had been clear and unhurried. For this daytime

operation all divisions had been scheduled to start appearing over their target areas about 1300 hours.

The 508 flew the 860 mile, two and one half hour northern route with the three battalions initially in parallel streams 1-1/2 miles apart. On approaching the drop zone the streams converged to column formations at four minute intervals to drop in numerical order of battalions. (5). Except for two flak-troubled planes of A Company, the first battalion commanded by Lt. Col. Shields Warren jumped right over the assigned drop zone (DZ "T").

** What hit my jaw? Oh! That carbine wasn't tucked in tight enough. Did that 536 tear away on the opening shock or is it still taped to my leg? That must be our bundle. Who are those men running down there? Nobody should be ahead of us on this field. Is that a Tommy Gun or a Schmeiser? Too slow for a Schmeiser. There's Frigo. Hope Krixer and that aid man get down O.K. Must have jumped at least a thousand feet up today. Will we never get down? Just give us thirty minutes, Lord, thirty minutes, and then let them come after us. What a helluva jolt! I know I'll never get out of this harness. Can't even get to my pistol. O.K. now. Does the radio work? "Warren, Warren, where are you? Where is the corner of woods for our assembly? Haystack? Yes, I see it and now the red cloth draped on it. Good!" "No, trooper, the 505 should have landed over a mile south of here near Groesbeek. Better stay with us a while." ** (6)

The S.O.P. assembly assisted by red smoke grenade markers and red cloth streamers was rapid except for a slight delay caused by the necessity of changing the center of the assembly area. This point was to have been a corner of woods which we soon realized existed only on our maps. To facilitate assembly each company had subsectors in

(5) Miscellaneous reports and personal knowledge; (6) Personal thoughts during descent.

prearranged compass directions from the center marker plus a sound locator, such as a whistle blast, klaxon ratchet, bugle note, and (for B Company) the facetious tenor of a French taxi horn "liberated" in Normandy.

Meanwhile, Lt. Combs and two plane-loads had jumped about 45 seconds late and landed on or over the German border probably near Wyler. This force of 22 men had quite a skirmish before rejoining us several hours later. With light losses to themselves they killed about 20 Germans and brought back 49 prisoners. (7)

Back on the drop zone recovery of bundles was good and soon we realized the Air Corps had, for a change, done a superior job. Within an hour the souvenir hunters had cut a piece of parachute nylon, the jump casualties had been gathered, equipment secured, and we were ready to go.

During the 15-20 minute delay for the 3rd Battalion to join us we watched from Voxhil the wild entrucking and detrucking antics of several groups of Germans 1200-1500 yards to the southwest. They evidently had a preplanned anti-airborne scheme of action but lacked the courage and numbers to put their plans into effect at the most favorable time.

The strength reports indicated that about 95% of the 508 were accounted for. Earlier the three rifle companies had averaged 145 men and Headquarters Company with its C.P. group, communications platoon, supply section, light machine gun platoon, and 81 mm mortar platoon had jumped 153 men. (8). All four 81 mm mortars but only four of the eight light machine guns were found. (9)

The small battalion supply section had long since been busy gathering bundles and attempting to borrow farm carts for transporta-

(7) A-2; A-12; (8) A-1 and personal knowledge; (9) A-14.

tion. The jump casualties also were left at Voxhil with the 2nd Battalion's D Company as the 1st Battalion moved toward its first objective. (See Map 2)

## ACCOMPLISHMENT OF THE INITIAL MISSION

The column march of 3 miles led by A Company was opposed by only a few scared labor troops whose quick capture gave interest to the heavily laden paratroopers. The too rapid cross country march following the after-jump let down had begun to extract a toll of stragglers and discarded equipment. The 81 mm mortar platoon hand-carrying all its equipment and ammunition had to drop out. However, as we approached our first objective and halted a few minutes for reorganization the gap was closed.

The Regimental commanding officer with his radio operator and two Dutch interpreters from the British Army soon followed us onto our first objective -- taken with almost no opposition! The planned defenses were being set up when several civilians wearing arm bands and carrying underground credentials of some sort told the Colonel that the Germans had deserted Nijmegen, that the town and highway bridge were lightly held. (10)

The Regimental C.O. had been instructed that if the initial missions were accomplished to "go ahead and take the highway bridge if you can". (11). This division order was perfectly understood in relation to the primary missions and was not a weak, conditional order as might be supposed off-hand.

The Regimental and Battalion C.O.'s then planned to send one platoon of C Company plus the S-2 section plus two light machine gun squads on a reconnaissance patrol to approach the bridge from the south while A and B Companies with the remaining two light machine gun squads

(10) A-2 and eye-witness, self; (11) A-9.

and two 81 mm mortar squads attacked it from the southeast. (See Map 2) (12). Before these forces could even get started another C Company platoon had to be dispatched to our rear to investigate insistent Dutch reports of a large enemy force hiding in our rear. Guided by a civilian this force approached the dangerous area only to find the hiding place now in the hands of our own forces, minus Germans. This force returned to the first objective where the Regimental C.O., 1st Battalion Executive Officer, about 1/3 of Battalion Headquarters Company and C Company less 1 platoon spent an anxious but inactive night. (13)

In town the right force (East), under Lt. Weaver, initially had some success but lost all local surprise effect while ambushing a truckload of Germans. They advanced to a traffic circle south of the bridge, felt out its defenses, scouted the area for another approach and at 0600, having no radio contact, returned to the C.P. area. Among the killed in this action were several key S-2 men. (14)

During this time A Company with its three platoons stirred up plenty of trouble. Embroiled in bitter street fighting at the other main traffic circle they were soon so disorganized as to be ineffective as a fighting force. The company commander, Captain Adams, was told to organize one platoon under Lt. Lamm and -- avoiding the traffic circle defenses -- have it sneak into town. For some reason Capt. Adams went himself on this dangerous mission and when they soon became cut off from the remainder of the battalion without radio communication, A Company was without its leader. Lt. Foley, by daylight, assumed command. (15)

Meanwhile Company B was passed through Company A and succeeded in establishing themselves in and around a large three story building.

(12) A-2; A-11; A-12, and personal knowledge; (13) Eye-witness, self; (14) A-2 and verbal report to executive officer; (15) A-2; A-11; A-12.

Two 81 mortars and all available ammunition were carried to the flat roof top, set up, and zeroed in. During the early morning hours a German counterattack was stopped by rifle, machine gun and 81 mortar fire. The Germans withdrew. Captain Millsaps of B Company had been told to remain in position until attack orders reached him from the Battalion C.O. who was trying to reorganize the badly scattered A Company. (16). The above actions see-sawed from about 2000 hours 17 September to about 0800 18 September.

Back on the drop zone after daylight the situation was highly fluid but bad. One of the D Company platoons left there had been killed or captured at Voxhil by enemy infiltrating from the east and southeast which area, by necessity, was almost wide open. The regimental and battalion supply sections had been fighting a battle royal between bundle recovery forays most of the morning and were being threatened by increasing pressure. (17). All "rear echelon" elements of the regiment were told to move north from the drop zone area if necessary, but that help would be sent.

The 1st Battalion was ordered to quit the town, abandon its first objective and counterattack at once to recapture the drop zone (DZ) before the scheduled glider lift came in. (18)

At this time C Company and part of Battalion Headquarters Company were on the original objective, four miles by trail away from the drop zone. The remainder of the battalion was in or on the way into the town.

## COUNTERATTACK OF THE DROP ZONE

Bringing A Company's two platoons with him and leaving the S-3 to collect all others, Col. Warren returned to the first objective, quickly oriented Capt. Schofield of C Company and told him to counter-

(16) A-11; (17) A-2; A-13; (18) A-2; A-7 and personal knowledge; A-9.

march to the right rear (southeast), seize a designated area of departure and be prepared to attack Drop Zone "T" on order. (See Map 2). Company C made the two mile cross country march quickly and found that hill area unoccupied. Deploying his men defensively Capt. Schofield waited for the battalion.

The remainder of the now exhausted battalion (less a new group of non-walking wounded who were left in the vicinity of the former C. P.) hastily reorganized before marching to join C Company. The urgent need for speed and the promise of new action breathed spirit into the tired unit. Speed! Speed! To be late would be tragic for the gliderists soon to come in.

A brief orientation of Battalion staff and company commanders, an even briefer order, and the battalion started out on magnetic azimuth for an objective 2500 yards away. The formation adopted was B and C Companies abreast, C Company on the right, followed at 200 yards by Headquarters Company followed at 200-300 yards by A Company. The promise of action and the warm brightness of the day magically dissipated the fatigue of the previous thirty hours' almost continual mental and physical strain.

To attack without any supporting fires initially was the only possibility because conflicting reports only vaguely located the enemy somewhere toward the drop zone. Tentative map positions for the mortars were picked however.

By this time the gliders were almost due. Despite all time saving measures of battlefield leadership the battalion was still 2500 yards from an objective we were sure to fight over.

B and C Company commanders deployed their units and started marching. Conferring briefly before entering the heavy woods they pushed through the cedars, tore gaps in the heavy wire fence beyond,

and fanned out into the clearing. No enemy yet! As they topped the first rise in ground a blast of 20 mm and small arms fire from Voxhil and Lagewald momentarily halted them. (19). Prodded by the leaders' shouts, small groups of both companies started forward rapidly, each bypassing Voxhil and proceeding to the objective. The enemy dead were not counted but about 16 flak guns were. (20) (See Map 4)

Meanwhile the regimental commander and battalion commander, preceded slightly by the battalion executive officer and a small command group, all gathered on a slight rise to observe the action. They, too, received 20 mm fire which wounded four of the seven men. (21). However, enough progress of action was observed from the prone position to recommend deployment of A Company around our left flank to exploit the seemingly assured success of B Company. As A Company rapdily moved south toward Lagewald they observed enemy on a ridge to their left (east) and double timed two squads off at right angles to clear up that situation. (22)

Just as the area was being cleared the gliders cut loose from the tug planes over smoke marked Drop Zone "T" (DZ "T") and Landing Zone (LZ "T") to the southwest. It was a beautiful, movie-thriller sight to watch some gliders wheel and come well into our area. Only a moment later, with a sickened, frustrated feeling, we observed many others circle to settle deep into enemy territory.

But B and C Companies had not completed their jobs. While attempting to place C Company's support platoon, Capt. Schofield's attention was called to a group of Germans at by-passed Voxhil, now to his rear. His slower moving 60 mm mortar squads, which had fallen behind in the rapid sweep and mop up, joined him about this time. These weapons were immediately set up to fire back on the plainly visible

(19) A-10; A-11; (20) A-2; (21) Eye-witness, self; (22) A-12 and eye-witness, self.

machine gun crews preparing to open fire. Quickly ranging in on the target area 200-300 yards away the mortar-men knocked out one enemy crew. The C Company platoon charged back to the farm buildings joined by Capt. Millsaps with elements of B Company. (23). After surrounding the scattered farm buildings with their small force, the two company commanders started investigating. One of our own aid men came out of a building. He stated that several of our casualties (some jump injuries left there the previous day probably in addition to some wounded from D Company) were inside and that some Germans in the cellar refused to come out. Somehow our men were brought out along with one or two English speaking Germans. (24). When the Germans remaining inside again refused to come out Capt. Millsaps heaved a Gammon grenade against the wall of one building. Falling debris and the concussion knocked him flat but unhurt to the ground. About ten Germans came running out almost trampling him in their haste. It was a game now! Several other paratroopers splattered the buildings with Gammons and the Germans poured out.

Two officers and about seventy men were captured in this area.(25) All told, during the afternoon the battalion killed about 50 enemy and captured 149. Our losses were amazingly light. About five killed and ten wounded is probably a high estimate.(26)., and nearly half of the wounded were idly watching the front line companies attacking!

During this action the battalion commander and the battalion executive were trying to reorganize the battalion along the crest of ground running north 1200 yards, and south 1000 yards through Voxhil. The companies were brought back to these positions, a C.P. set up in a draw 800 yards west of Voxhil and outposts were established by dark. Contact was made on the right flank with 505 Parachute Infantry by a

(23) A-10; A-11; (24) A-11; (25) A-10; (26) A-2.

patrol to Kamp but the left and left rear were open. (See Map 3) (27)

SUBSEQUENT ACTIONS - D+2 (19 SEPTEMBER)

During the night of the 18th or early morning of the 19th a platoon of B Company was sent to establish a road block in Wyler. They were able to establish a defensive line about 200-300 yards short of there, facing the village. (See Map 4). A platoon of Company D 307 Engineers attached the previous afternoon was put in position near A Company. (See Map 4)

About 1200 hours three fighter planes strafed the front lines plainly marked by our sand-ringed foxholes. No casualties were received by this first strafing (28) but the foxholes immediately thereafter were sunk so deep that a firing step had to be added to many of them and several double positions had to be abandoned in favor of single ones connected by a "talking" trench.

About 1600 hours Lt. Foley's A Company platoons with a platoon of G Company (3rd Battalion) and four light machine gun crews, all attached, were sent to recapture hill 75.9 (known as Teufels Berg or Devil's Hill) from which the G Company platoon had been driven earlier. (29). Dropping off one of its own platoons in an intermediate position as ordered A Company arrived near the crest of that hill without detection. (See Map 4). Two bazooka teams followed a trail to the northwest side to establish the end of a base of fire. (30) Lt. Epps set up his light machine guns to fire across the wooded hill crest. The bazooka teams were suddenly ambushed but the light machine guns firing at maximum rate sprayed the area. When their fire was stopped the platoons, now abreast, yelled and shot their way across the hill. This marching fire -- some light machine gun crews

(27) A-2; (28) Personal belief; (29) A-2; A-12; (30) A-12; A-14.

even fired from the hip -- chased the Germans right out of their defenses. (31). They fled in all directions. Immediately A Company -- as we called this composite force -- set up a tight perimeter defense which was to be its precarious hill top home for the next five days. At this time our casualties numbered about ten, mostly killed. The uncounted enemy dead littered the wooded slopes.

While A Company was making its wild attack, B Company and one platoon of C Company were in action around Lagewald-Wyler. The battalion commander in order to devote his entire attention to A Company's imminent action had hurriedly outlined to the battalion executive and commander of Company B a plan which was to be put into effect at once. Leaving one platoon on the main line of resistance, Capt. Millsaps was to take one other platoon and move to the platoon now at the Lagewald area. With these two platoons plus the battalion's two recently attached 57 mm A-T guns he was to capture Wyler and set up a road block there, thus preventing any road movement to or from Cleve. This plan involved the relief of the B Company platoon from the Voxhil area moving it to Lagewald and having it assume the responsibility of that first roadblock which, almost tragically, was not established where it had been reported. The battalion executive was to investigate the situation, coordinate the change over, see that the roadblocks were established and report back to the battalion commander when the defenses were in place.

Truly characteristic of every action during this always-fluid, ever-changing airborne phase, little was known of the enemy's exact locations or strength, but shrewd guessing about vital areas, and sudden, lashing attacks at those areas kept him knocked back for a short time at least.

(31) A-2; A-12; A-14.

In this instance when the swap was about 80% completed darkness was approaching rapidly. Nobody desired another night attack in a strange village. Accordingly B Company was given the go signal with what forces were ready. Small arms fire broke out. A barn began burning. Seemingly the Germans were unprepared and surprised. This force offered some slight resistance, then broke and ran. The road-block was established, defenses around the north end of town were set up, and in the eerie stillness, low-toned plans were made to search the houses at daylight. (32). A brief report by SCR 300 radio was made to the battalion commander. The executive officer returned to the C Company platoon, told them of B Company's plan and about 2100 hours happily reached comparative safety of the Battalion C.P.

Earlier that night Lt. Kelley's supply group, and Pfc. Heinerth, a very capable and seemingly fearless wireman, spent the entire night and early morning trying to get supplies and a light wire line up to "redoubt Foley" on Teufels Berg. (33)

D+3 (SEPTEMBER 20)

At daylight on the 20th the battalion was stretched its greatest length. Quite early A Company received mortar fire and a fairly strong attack, during the middle of which A Company was called on to surrender. Curtly breaking off negotiations by ordering a burst of "Tommy Gun" fire for the peace emmissary, Lt. Foley made his intentions clear. The enemy intentions were equally clear. A terrific mortar barrage dropped into the area shortly afterward. (34)

Luckily the situation had been appreciated by the battalion commander. Part of C Company had been pulled out of the main line to raid the Teufels Berg area. (See Map 5). They had a highly successful morning sweeping the area first northwest of the hill peak for 200 yards then back, turning over to Lt. Kelley, who had accompanied

(32) A-11 and eyewitness, self; (33) A-2; A-12; A-13; (34) A-2; A-12.

them, the prisoners and walking wounded for immediate evacuation to the Battalion C.P. (35)

C Company now drove southeast down almost the entire Wyler Berg ridge toward Wyler before being hastily recalled to the battalion area to reoccupy their positions in expectation that B Company would be driven out of Wyler. (36)

Also acting at daylight on this day B Company had silently initiated its action in Wyler by searching the nearest houses. There they captured about four recently converted civilians, judging by the piles of uniforms nearby. However, all prisoners were sent back safely under guard to the Battalion C.P. (37)

About 0800 hours the roadblock garrison knocked out one truck-load of enemy but a motorcyclist got away to give warning. After a short lull an infantry attack developed from the southeast and south. A mist limited observation to about 800 yards. Capt. Millsaps adjusted artillery fire using such unorthodox terms as "traverse right"--but got the shells in and broke up this first attack.

Snipers had crept into the village. Under cover of the smoking buildings the Germans built up an estimated three company strength attack moving in principally from the open ground to the east. Again Capt. Millsaps brought the accurate supporting artillery closer and closer to his own lines. Finally he realized his position would soon be overrun. (38). He received permission to fall back onto the C Company position. (The battalion commander at least granted this permission and I believe it was discussed with the regimental commander who again was present at the Battalion C.P. visiting and listening in on the radio reports.) By long rushes across the open ground all units except one squad of B Company were able to fall back to this roadblock position 300 yards west of Wyler.

(35) A-10; A-12; A-13; (36) A-10; (37) A-11; (38) A-11 and personal knowledge

To bolster the desperate B Company situation a platoon of British tanks had been sent to the battalion, carefully briefed by Lt. Col. Warren, and moved to position in rear of B Company's new position for overhead, direct fire into the Wyler approaches. Radio contact could be made only by SCR 300 at B Company back to the Battalion C.P. "300" and then relayed forward to another "300" (from the battalion) mounted outside of one tank. (39). The tanks maneuvered into position and fired all weapons as rapidly as they could.

One, probably only one, tank for some reason was off the intended targets. (40). In one sector B Company was being ripped apart! The Company radio operator screamed for the fire to be lifted. Quickly the word was relayed but not quickly enough. Desperately Capt. Millsaps grabbed a sheet in a nearby house and, waving it, ran straight toward the tanks. (41). Amazingly enough he wasn't killed. Possibly the "cease firing" via radio was effective as he started running.

Most of the tank fire had been very effective and another try was to be made from a different position after reorientation by the battalion commanding officer. This time the fire was even rougher on B Company but was stopped more quickly. International relations withstood a severe strain. The tanks were withdrawn from the battalion area. B Company was told to hold until further orders. No daylight move was now feasible. When pressure was again put on battered B Company (and its C Company platoon) permission was granted for its withdrawal.

Under cover of darkness this exodus began. The rear of the slow moving column caught more artillery fire and casualties as it laboriously approached the battalion outpost. Limping, hobbling, carried on ladders and doorframes the wounded were a pitiful sight. (42) The wonder of it all was that they could still whisper jokes of easy

(39) Personal knowledge; (40) A-11; (41) Radio operator to battalion executive at time of incident; (42) Eyewitness, self.

Purple Hearts and tell of "liberated" Wyler chickens safely stuffed into field bags for cooking whenever a break in fighting might come.

Arrangements had been made to pass the column through the outposts and onto their old defensive positions north of Voxhil. Finally all wounded unable to occupy efficiently a place along the main line were evacuated. Apparently, the Germans soon became aware of the gap now existing between the lines but their creeping artillery barrage stopped short of the main defensive line. The remainder of the chilly night passed uneventfully.

Later we learned the day attacks were part of a coordinated Division attack intended to cut the Grave-Nijmegen road. (43)

D+4 (SEPTEMBER 21)

A heavy fog on the morning of the 21st hung over the entire area. A Company was joined by its platoon led by Lt. Havens just in time to help repel the strongest attack of any the company ever received. Nearby the engineer platoon was almost knocked out of its position and needed help badly. Part or all of C Company, which by this time had well earned the nickname of "Maneuvering C", went up to clear out the danger area there but not, I believe, before it had also been on the receiving end of a sudden strong attack in the Voxhil area.

Under cover of the very heavy fog the Germans had continued their large scale attacks of the previous day. Their advance elements in our sector loomed out of the mist almost on top of our line of defense before being discovered. Small arms fire was immediately commenced and artillery soon called for, but the only thing that prevented a breakthrough in strength, I believe, was the superb shooting by the 81 mm mortar platoon.

Lt. Stoeckert, the platoon leader, had consolidated his two sec-

(43) A-1.

tions and now had the mortars firing in battery from position near the C.P. (See Map 6). His observation post (OP) had been established near the junction of B and C Companies and salvaged assault wire pieced together to give him wire communication. He personally was conversationally fighting yesterday's struggles with Lt. Hoffman of B Company when he identified the advancing Germans. A dream target presented itself and almost instantly the 81's started dropping right in place. Finally the attack seemed stopped but all ammunition supplies were low. During the day one well located light machine gun used up 20 boxes of ammunition in stopping the attack. (44). The mortarmen were actually told to save 20 rounds, cease firing, and get their individual arms ready. Definite plans were outlined to use them as a counterattacking force. (45). However, the impetus of the attack had died and the front line companies during the remainder of the day gradually cleared the area of all but a few Germans who apparently had infiltrated through our area.

When C Company did go up to help the Engineers, the situation there was about the worst they, too, had encountered. I believe that this time C Company took up positions midway between Teufels Berg and Wyler. In skillfully maneuvering to this position C Company encircled a group of careless Germans and killed 25. (46) A few got away. No prisoners. By this time the constant close struggle was telling on nerves and tempers. I doubt that many prisoners would have been taken by either side.

However, the late afternoon marked the ebb of activity. C Company could be moved to Wyler Berg Ridge indirectly assisting both A Company and the engineers because of gradual build up of British troops to the west and northern sectors allowed our 2nd Battalion to take over most of the Voxhil area.

(44) A-14; (45) Personal knowledge; (46) A-10.

## D+5 - (SEPTEMBER 22)

On the 22nd Captain Adams, Lt. Lamm, and the remnants of A Company's 1st platoon rejoined the battalion. Questioning brought out the facts that they had become cut off in Nijmegen on the 17th. Helped greatly now and then by civilians they worked their way toward the highway bridge -- the last battalion objective they knew about. After a day or two of evacuating one burning, shelled building after another they had joined forces with some British "tankers" trying also to reach the southern edge of the bridge. This slow, steady advance finally brought them to the bridge area. (I believe they reported leaving the British as they crossed the captured bridge.) Prior to this they had done what may have been the most important job of all. Their mission on the 17th had been, in part, to contact certain underground personnel at a given address. Eventually a building said to control the demolitions for the great highway bridge was pointed out to them. They wrecked the place. (47). Probably nobody knows for a certainty the truth or the effect of this action but two facts were revealed later:

1. The bridge was prepared for demolition.

2. It was not blown and after its capture the Germans unsuccessfully tried even floating submarine charges to blow the supports.

But now A Company was together again and strong enough at Teufels Berg to stay there.

On the 22nd the length of the Wyler Berg Ridge was attacked but with C Company at the southwestern tip the battalion area was well secured. The new disposition with the bulk of the battalion facing northeast to southeast made the Battalion C.P. off center. Accordingly the 1500 yard northward displacement to Holthurnsche Hof was made

(47) Verbal reports to battalion executive and A-2.

by the command group. The mortars were emplaced and a British artillery liaison tank joined us. A vegetable garden and apple orchard were found. Several German motorcycles and two small staff cars were retrieved below Teufels Berg. What more did we need?

Little of importance happened on the 23rd except that the food situation improved and the replenished ammunition supply satisfied even the eager mortar platoon.

During the afternoon of the 24th the 1st Battalion 504 Parachute Infantry relieved us. A couple of days later when we again took up positions the slower, more normal type actions, the greatly improved status of supply, the definite knowledge of the strength and status of personnel, and the arrival of our kitchen truck with two days issue of American coffee -- all these changes, clearly indicated the [redacted] airborne phase of action had ended for the battalion.

## ANALYSIS AND CRITICISM

At the time this operation was launched enemy opposition had stiffened considerably and the bulk of the German forces except those on the Dutch coast has been able to fall back to the vicinity of their fortified positions, loosely called the Siegfried Line. However, it was believed a good chance still existed to defeat Germany quickly before she could recover from her summer defeats in France.

It was expected that airborne force losses would run to 33% (48) in the air but that once they were on the ground resistance would be light. (49). Greatly aided by superb air activity the losses in the air were about 3-4%. (50). On the ground the story was different and "if the success looked easy it was only because of the skill with which the operations were executed". (51)

The missions assigned the various airborne units were ambitiously

(48) A-5 and verbal statement to G-3, 82nd Airborne Division; (49) A-4; (50) A-3; A-5; (51) A-8.

planned and daringly put into action. For the first and only time in World War II did large American airborne forces have a fair chance to prove themselves as units under two conditions:

1. A drop with reasonable tactical unity, in strength, on the selected areas, and against slight ground opposition prior to unit assembly.

2. A subsequent meeting and overcoming of continued strong enemy resistance over a period of several days (for us, six) while intermittently -- if not completely -- separated from friendly forces.

If the first condition is not fulfilled the missions obviously cannot be properly performed and the smaller groups must engage in a struggle for survival. If the second is not met, I believe that the timing of the operation was not correct, that much of the potential value of airborne troops is wasted.

An analysis of the 1st Battalion's actions shows that it early encountered the three main problems likely to confront airborne troops:

1. The missions assigned become increasingly difficult as the enemy recovers from his initial surprise.

2. The job of holding off enemy reserves may interfere with the accomplishment of a mission.

3. The necessity for continual protection of the drop zone or landing zone must be considered if there is to be any build up of forces by air. (52)

This battalion's missions were sometimes too much for any unit several times its size but such assignments naturally occur many times during the airborne phase of an operation. If the full capabilities of the battalion are exploited nothing more can be asked.

For the first four days there were but few lulls during which at

(52) A-16.

least a platoon somewhere wasn't actively engaged with the enemy. Only one full battalion strength attack was made, though perhaps a dozen company or platoon strength attacks were made in accomplishing missions assigned the battalion.

During these operations the recognized procedure of troop leading was followed closely. Often only a map reconnaissance was possible because of time and space elements or enemy activity. Supporting fires, in an attack, were not available usually, except those furnished by 60 mm mortars and light machine guns. These were generally well employed. Enthusiasm, speed, and confident aggressiveness were always displayed by the troops except briefly by some elements on the occasion of that confused first night of street fighting.

The type defense during the airborne phase was of a screening and counterattack nature. That meant for us that whatever unit was not actively engaged on the line left a skeleton force in place and the composite unit thus organized furnished mass for a counterattacking force. The only formally designated reserve possible was the C.P. personnel, supply section, and mortar section, most of whom, of course, had primary duties except for last minute desperation measures. From a battalion viewpoint during this airborne phase only two of the seven recognized principles of defense were strictly upheld. These were "defense of key terrain" and "flexibility". In some sectors terrain, distance, and available means allowed "coordinated fire plans","coordinated antitank defenses", and local "mutual support". It could not be said, however, that the battalion often had "organization in depth" or "all around defense".

I believe the leadership qualities and tactics employed by the battalion commander under the circumstances we met here almost faultless. True, the unit definitely lacked considerable practical know-

ledge of fighting in cities, of working with tanks and, initially, of forward observer methods of artillery adjustment.

As for the specialized airborne aspects of small unit briefing, loading of planes, jumping technique, and assembly methods we were beyond reasonable criticism.

Air resupply was sporadic. Communication facilities and ammunition supply were always barely sufficient to meet the immediate minimum needs but at no time were we completely without either. We salvaged some resupply bundles ourselves but generally the supplies, dropped on distant fields, were doled out through regimental channels. Luckily our water supply -- a farmer's well -- was ample but food was scarce. Indeed, it seemed we hardly had time to prepare food anyway for several days. At least 85% of what we did have consisted of K rations "jumped" on the individual or items picked up in farmhouses and towns.

At all times the Regimental Commander, Battalion Commander, and Company Commanders strongly controlled the subordinate units' action by brief but frequent personal visits to the most forward positions except at Teufels Berg and Wyler. Even at those places Company Commanders and battalion staff members, with specific instructions and more free time to sneak into these isolated positions, carried out the same function. Radio messages in the clear were generally resorted to after D+1.

Detailed records of losses, prisoners, captured, etc. for this period alone are not available but it is believed that casualties in ratio of killed was very nearly five for one. The ratio of captured to "missing in action" was approximately six to one. (53)

Evacuation of prisoners was always through battalion to regiment.

(53) A-2.

Evacuation of our own casualties was to the nearby Battalion Aid Station, where the less seriously wounded remained, and then to the Regimental Aid Station which in this operation, I believe was consolidated with the Division Medical Company.

A detailed analysis of this battalion's action would necessarily involve a study of the corresponding action of the other two battalions in the regiment as well as that of the three in each of the other parachute regiments. This point was strongly brought out within our first twenty-four hours of action. The battalion was suddenly given the mission of seizing the main Division Objective, the Nijmegen highway bridge. Unexpectedly strong resistance was met at two points and the battalion's progress in any strength was halted during the night. Early next morning it seemed we had regained the initiative. Seventy-five percent of the battalion's strength was preparing to resume the attack when the mission was temporarily abandoned by the Division Commander. We did not know then that "all available men were organized into two counterattacking forces...to clear the landing zones,..and the frontier along the Reichswald Forest". (54). To us at first it seemed that we were like the football player sent in to take the ball away from the opposing team and then make a series of touchdowns. The abrupt change in orders indicated little more than a quick "benching" for failing to do that. For most of the battalion it was only when we actually attacked the landing zone area and saw the gliders take advantage of the changed plans that we realized everyone else was in the game too. Not until D+3 was the Division Commander able to gather sufficient force to seize the bridge. (55)

Meanwhile in the Voxhil-Teufels Berg area the 1st Battalion was fighting a variety of German troops. It is true that the reflection

(54) A-7; (55) A-7.

of good training habits, speed, esprit, and adequate individual weapons made our early attacks against the Germans seem easy. Their piecemeal counterattacks, however, were made promptly and usually courageously. About D+2 we first met determined resistance from German paratroopers. Thereafter they were our principal enemy until the end of this phase. It was a real satisfaction to meet and better them with our numerically inferior forces. Too much praise cannot be given groups of enemy paratroopers who repeatedly charged our Teufels Berg defenses.

The 508 Parachute Infantry accomplished all primary missions and failed in only one secondary or subsequent mission assigned it. As mentioned above that mission was changed before more than company size attacks could be launched in view of priority commitments.

By its action the 1st ("Fireball") Battalion clearly earned a full share of the praise bestowed on the 82nd Airborne Division about this time by General Dempsey, commanding the British 2nd Army, when he described it as "the greatest division in the world today". (56)

## LESSONS LEARNED

The doctrine for employment of airborne troops had been outlined in Training Circular 113 of 1943 based on the experiences gained during airborne operations through the invasion of Sicily. Only theoretically until this operation was that doctrine fully proven sound in almost every detail. We in the battalions confirmed almost in entirety the correctness of the training program, outlined even earlier, for company size parachute units.

On a battalion level we learned we could efficiently carry out any part of the specialized airborne technique of planning, briefing, loading of equipment, jumping, unit assembly, and initiation of action. We also learned we could march with heavy loads, withstand long periods of physical and mental exertion with little sleep or food, and effi-

(56) A-5, p. 67.

ciently use our individual weapons. We emphasized in our own minds that individual morale was important, that unit esprit-de-corps was of supreme importance in a unit of this type, and that the "you-volunteered-for-this-and-now-you-belong" category of our troops made them second to none anywhere. But those things we had suspected, even experienced to some degree before.

This operation opened our eyes to more prosaic matters:

1. Logistical requirements of ammunition particularly demand a steady resupply if the unit is to survive and function.

2. Time and space factors must seriously enter even a "Geronimo! Run for it!" plan of action.

3. The battalion command group must function efficiently 24 hours a day. On this level a cold, impersonal attitude in planning and operating must balance the overoptimistic enthusiasm which will and should exist in the subordinate units.

4. Leaders to include Platoon Sergeants should be capable of adjusting mortar and artillery fire.

5. Airborne troops may be quickly committed to any type of action under a variety of conditions. Therefore, a realistic and varying training program must be carried out when troops are not actually committed in combat.

6. This training should emphasize certain characteristics of an airborne operation:

A. Rapid initiation of combat immediately upon landing.

B. Retention of the initiative by all individuals and units from the moment of landing until the objective is seized or the mission accomplished.

C. Recognition of isolation as a normal battlefield condition.

D. Readiness of all units to attack or defend in any di-

rection at any time.

E. Improvisation of weapons and means, and the use of enemy weapons and defensive works to our own advantage.

F. Extending intervals and distances in the defense with a "screening and counterattack type of defense". (57, A through F)

G. Reliance to a generous degree on uncommitted neighboring units for "desperation" help.

On a higher level a great many lessons were learned about unification of troop carrier and airborne forces, the value of supporting aircraft, the strategic commitment of large size airborne units, the surprising length of time isolated airborne units can fight if resupplied, the effect of weather, and, when feasible, the value of daylight operations. All of these lessons, of course, were learned by the experience of just such battalions as this one in the invasion of Holland at Eindhoven, Nijmegen, and Arnhem. Though the overall advance of the British ground forces was a failure the American airborne forces were highly successful as they "fought their hearts out in the Dutch canal country and whipped hell out of the Germans". (58)

(57) A-7; (58) A-5, p. 371.