THE OPERATIONS OF THE 30TH INFANTRY DIVISION
IN BREAKING THE SIEGFRIED LINE, 2--16 OCTOBER 1944
(RHINELAND CAMPAIGN)
(Personal observations of an Aide-de Camp to the XIX Corps Commander)

Type of operation described: INFANTRY DIVISION IN
ATTACK OF A FORTIFIED POSITION

Captain Lloyd L. McDaniel, Infantry
TABLE OF CONTENTS

Index................................................................. 1
Bibliography.......................................................... 2
Introduction.......................................................... 3
American Troop Disposition and Situation in 30th Infantry Division Sector............... 4
Enemy Situation and Troop Disposition.................................. 5
Description of the Siegfried Line........................................ 7
Decision for Site of Break-through........................................ 10
Division Plan of Assault................................................ 11
Preparation and Training for the Assault................................ 11
Artillery and Air Support................................................. 13
Engineer Support for the Assault......................................... 16
The Infantry Assault on the Siegfried Line................................. 18
The Battle to Close the Aachen Gap....................................... 24
Analysis and Criticism.................................................. 30
Lessons Learned.......................................................... 34
Map No. 1 - First Army, XIX Corps and 30th Infantry Situation, 2 October 1944
Map No. 2 - Detail Map, Rimberg - Palenberg Fortifications
Map No. 3 - 30th Infantry Division Plan and Daily Progress for Operation
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INTRODUCTION

This monograph covers the operations of the 30th Infantry Division from its attack to break the Siegfried Line at Rimberg and Palenberg, Germany, in the XIX Corps Assault Area, 2 October 1944, until contact was secured with elements of the U. S. VII Corps in the encirclement of Aachen, Germany, northeast of that city, 16 October 1944.

For purpose of orientation, it is desired to review events leading up to the disposition of allied troops opposite the Siegfried Line in the latter part of September 1944.

In conformity with the strategic plans for operations into the heart of Germany, General Eisenhower decided that the main effort in the Allied operation west of the Rhine was to be in the Northern Sector, with a view to seizing crossings north of the Ruhr. All operations were designed primarily to assist this northern operation to gain secure flanks, so as to permit the heaviest concentration with which to force a crossing in the north, and eventually to provide bases for a secondary effort which would again assist the planned main effort. The U. S. First Army was to seize the line of the Erft River west and northwest of Cologne, insuring security of communications between Aachen and Munchen-Gladbach. Concurrent with these operations, breaches in the Siegfried Line were to be widened. (1)
AMERICAN TROOP DISPOSITIONS AND SITUATION IN THE
30TH INFANTRY DIVISION SECTOR

A letter of instructions issued by First Army, commanded by General Courtney H. Hodges, on 27 September 1944, provided for an advance by First Army to capture Aachen and to protect the right flank of the British 21 Army Group which had been directed to make the main Allied effort from the vicinity of the Arnhem bridgehead and envelope the Rhur from the North. A new letter of instructions on 29 September directed that First Army conduct limited operations from the vicinity of Deurne (approximately 40 miles north of Maastricht, Holland) to protect the right (south) flank of British 21 Army Group, while the remainder of the Army launched a coordinated attack about 1 October, with the object of reaching the Rhine and capturing Cologne and Duren. (2)

To accomplish the Army mission the XIX Corps, commanded by Major General Charles H. Corlett, and consisting of the 29th Infantry Division, the 30th Infantry Division, the 2nd Armored Division, and normal Corps troops, together with the U. S. 7th Armored Division and the Dutch Brigade, under operational control of the Commanding General, XIX Corps, was directed to protect the right of the British 21 Army Group by:

(a) operations east of Deurne with the 7th Armored Division and the Belgian Brigade, which, as stated above, had been placed under operational control of Commanding General, XIX Corps; (b) the Corps, less these two units, was further instructed to launch a coordinated attack on or about 1 October, with the mission of penetrating the Siegfried Line, gaining contact with the U. S. VII Corps, by seizing and securing
The VII Corps was ordered to establish contact with XIX Corps northeast of Aachen and clear that city. (4)

Orders of the XIX Corps directed that the 30th Infantry Division, commanded by Major General Leland S. Hobbs, from position on a north—south line, generally one half mile west of the Wurm River between Kerkrade and Tevern, attack east 2 October 1944, and breach the Siegfried Line south of Geilenkirchen. The 2nd Armored Division, commanded by Major General Ernest N. Harmon, was directed to pass through the 30th Infantry Division when the Siegfried Line was broken and move toward the Roer River between Linnich and Julich. Following the passage of the 2nd Armored Division, the 30th Infantry Division was to move directly south to secure the objective on the Corps boundary, to include the high ground between Alsdorf and Wurselen. (5)

By 29 September 1944 the 29th Infantry Division, commanded by Major General Charles H. Gerhardt, following operations in the Brest Peninsula, had closed into the Corps area. On 30 September it relieved the 2nd Armored Division in the wooded positions west of Geilenkirchen and took over a zone which fanned out northeast, leaving the major portion of the Corps zone of action to the 30th Infantry Division. Thus by 30 September, the attacking divisions were in position to begin the planned operation. (6)

ENEMY SITUATION AND TROOP DISPOSITION

The slowdown along the front facing Germany was due to the Theater Commander's decision to employ the greatest strength.
in the north to attain flanking bridgeheads across the lower Rhine beyond the main fortifications of the Siegfried Line. General Eisenhower stated that the attractive possibility of quickly turning the German north flank led to approval of the temporary delay in freeing the vital port of Antwerp, the seaward approaches to which were still in enemy hands. (7)

Between 18 and 31 September the enemy had been able to stabilize his line on the front of First Army. The temporary lull in the fighting afforded the German Seventh Army, facing U. S. First Army, an opportunity to withdraw its armor from the line. The 116th Panzer Division had gone northward, to return a few weeks later; the 2nd SS Panzer Division and the 9th Panzer Divisions were withdrawing their elements as rapidly as they could be replaced by Fortress Battalions and other assorted units. 1st and 12th SS Panzer Divisions were withdrawn and sent east of the Rhine to refit. (8)

The opening days of October 1944 were to find Germany reaping the benefits of the drastic manpower comb-out and total mobilization program which had been launched during the two previous months. During September an estimated 230,000 men were brought up to take over defense of the Siegfried Line. Of these, 100,000 formed fresh divisions and between 10,000 and 20,000 for GHQ troops. 50,000 were products of the high-pressure replacement system, and more than 50,000 were members of Fortress Battalions. The effect of this infusion into the defense of the border was particularly noticeable on the U. S. First Army front, where the deepest penetrations into the Reich had been made. After the haphazard and uninspired
action put up by the German Army in France following the St. Lo and Mortain break-throughs, a stiffening of resistance at the frontiers of Germany was very apparent. Of seventy Fortress Battalions, approximately twenty were committed to defense of the Siegfried Line in the First Army zone of action. (9)

Principal divisions of the German Army facing XIX Corps were as follows:

- Erdmann Division (4 -- 6 battalions)
- 176th Infantry Division (8 -- 9 battalions)
- 183rd Infantry Division (8 battalions)
- 246th Infantry Division (7 battalions)
- 49th Infantry Division (6 battalions)
- 12th Infantry Division (9 battalions). (10)

**DESCRIPTION OF THE SIEGFRIED LINE**

A study of the Siegfried Line is desirable in order to appreciate more fully the problems faced by the 30th Infantry Division. The Siegfried Line, called by the Germans the "West Wall," was a continuous series of pillboxes, reinforced by tank obstacles and troop implacements, extending along the western boundaries of Germany from Kleve, on the Dutch Frontier, to Lorrach, near Basle on the Swiss border. It had been constructed in 1939 and 1940, before the development of the German military doctrine of "strong points," as illustrated by the heavy defenses along the Atlantic and English Channel coasts. It had been completed before Russia taught the Germans the principles of all-around "hedge hog" defense. The line consisted mainly of numerous reinforced concrete pillboxes

(9) A-4, p. 57. (10) A-6, p. 35.
machine guns and 37 millimeter antitank guns. There were a few pillboxes in the 30th Infantry Division zone that could house up to 105 millimeter cannons. Pillboxes were clustered and linked together by communication trenches. Pillboxes also were linked by buried telephone cables (6 feet deep). O P's from underground emplacements with 7 inch steel cupolas occurred roughly every kilometer. They were linked by telephone to pillboxes and nearby villages, and housed 30 to 40 men with adequate inside living space provided. Surrounding these were extensive infantry field fortifications and a limited preparation of open earth works, for heavier artillery. (11)

The Siegfried Line was built on the first natural barrier east of the German frontier. Pillboxes and antitank barriers were situated to augment the defensive characteristics of the terrain. Concentration of pillboxes was increased in those sections where the natural barriers were weakest. (12)

The dimensions of the pillboxes were generally 20 to 30 feet by 40 to 50 feet and 20 to 25 feet in height. At least half, and often more, of the structure of the pillboxes was underground. The walls and roofs were 4 to 8 feet thick and generally lined with steel or plastic. The purpose of the lining was to prevent injury to the crews from flying particles of concrete in event of non-penetration strikes by projectiles on the outside of the structure. Interiors of pillboxes provided living quarters for the troops. Ventilation included chemical filters in event of gas attacks. Pillboxes were mutually supporting, but the field of fire of any one

port seldom exceeded 50 degrees of arc. The pillboxes had excellent natural camouflage, as undergrowth and turf had four years of growth during the period of German conquest and consequent disuse. French and British Intelligence had done considerable photographing and plotting during the period of construction of the pillboxes, however, and this, together with recent photography, was of assistance in locating the installations. (13)

The Siegfried Line in the 30th Infantry Division sector was a continuous obstacle and extended across the entire Corps front. Natural obstacles in the Division zone were the Wurm River, and in the north 5 kilometers, the Wurm and Roer Rivers. Here the Siegfried Line had been built to implement these natural boundaries. The portion of the line immediately north and west of Aachen was not behind a river barrier, but to make up for this, the line included dragon's teeth and antitank obstacles. In addition to the water obstacles, a railroad line runs generally north from Aachen following the valley of the Wurm. The numerous cuts and fills required along the stream bed form a further antitank obstacle. The pillbox line extended, roughly, 3 kilometers, or 1.8 miles in depth behind this river line -- railroad line obstacle. (14)

The Wurm River was approximately 30 feet wide and 4 feet deep in the Division sector. Wet weather and marshy ground offered additional serious obstacles to rapid exploitation. The River and banks were covered by prepared fires. Bridgings would have to be made under observed direct fire. Several patches of dense woods in the sector opposite the 30th Infantry
Division added to the antitank obstacles previously enumerated. (15)

DECISION FOR SITE OF BREAK-THROUGH

The decision for the 30th Infantry Division to attack in the Palenberg -- Rimberg sector was based on consideration of the road net, pillbox density, and opportunities for exploitations of a break-through without running into another terrain or fortification obstacle. (16)

The following is a quotation of a statement by Commanding General, XIX Corps: "The Commanding General, First Army, wanted me to drive east along the boundary (right boundary) between Corps. He reminded me frequently that the XIX Corps, in addition to assisting VII Corps, must protect the left of First Army. By this time, we had enlarged our bridgehead across the Maas to include Sittard and had closed on the Siegfried Line between Geilenkirchen and Aachen with one squadron of cavalry, two kilometers in the VII Corps zone to make the contact. This put us in close contact with the Germans on a front of approximately 30 miles. Along the boundary between Corps, two branches of the Siegfried Line must be reduced; and in this area, the Germans had the advantage of observation over the Wurm River Valley. I wanted to break the Siegfried Line farther north where it was thinner and the going appeared easier. General Hodges finally approved my plan for this and stated that it was a good plan, but with only two divisions (30th Infantry Division and the 2nd Armored Division) there was insufficient power for the break-through; to hold our own long line and back up the Belgian Brigade and the British..."
west of the Maas River. Later, when the 29th Infantry Divi-
sion returned to the XIX Corps from Brest, I immediately put
the plans into effect." (17)

DIVISION PLAN OF ASSAULT

The 30th Infantry Division planned to attack with the
117th and 119th Infantry Regiments abreast, supported by air,
tanks, tank destroyers, and artillery. The 120th Infantry Reg-
iment had the mission initially of a holding operation, and
later support of the 117th and 119th Infantry Regiments. The
following are elements of the plan of assault:

a. Prior to the jump-off time a two hour bombardment of
the objective area by medium bombers.

b. Prior and during the attack, continuous direct and
observed artillery fire.

c. The infantry assault beginning with infantry assault
teams, followed by infantry, tanks, and tank destroyers.

d. The 2nd Armored Division to follow the break-through
as soon as possible. (18)

PREPARATION AND TRAINING FOR THE ASSAULT

Units of the 30th Infantry Division participated in rig-
gorous training, including squad assault tactics, in prepara-
tion for the breaching of the Siegfried Line. All three bat-
talions of the 117th and 119th Infantry Regiments went through
a two day training period in training areas west of the line
they were holding. The 3rd Battalion of the 120th Infantry
spent most of its time in Division reserve during assault
training. The 1st and 2nd Battalions of the 120th Infantry
rotated companies in the assault training areas. Thus, despite the fact that units were in the line during the period of training, a reshuffling of reserves enabled the units to get considerable training for the assault. (19)

Training included use of demolitions, flame throwers, bazookas, tactical review of the coordination of assault detachments, practice firing of all weapons, dry runs in storming of pillboxes, and practice river crossings. Tank destroyer, tank, and engineer units rehearsed with the infantry, including rehearsal of bridge construction by the engineers, and close infantry support by the tanks and tank destroyers. Engineers constructed improvised infantry foot bridges 2 feet wide and 15 to 30 feet in length, with ridged cleats to aid in a fast assault crossing. (20)

Units built elaborate sand tables to show in detail locations of pillboxes, streams, wire, roads, ridges, houses, and trees. Zones were assigned to include companies; platoons were assigned specific pillboxes; and, prior to the attack, every man was briefed on his specific job. In addition to infantry units, all support elements studied detailed missions. Training emphasized speed in advancing to the stream line, crossing, and assaulting the fortifications. (21)

The Commanding General, XIX Corps, stated, "During the period of waiting for the 29th Infantry Division, I concentrated on training for the reduction of pillboxes. Having had experience in this type of warfare at Kwajalein in the Pacific, I believed that it could be done without great loss

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(19) X-5, p. 2
(20) X-5, p. 3
(21) X-5, p. 4, conversation with unit commander
of life if the men were properly trained. It is a slow process to reduce reinforced pillboxes, especially when artillery ammunition is desperately short and much close-in fighting in towns is involved." (22)

**ARTILLERY AND AIR SUPPORT**

The artillery preparation for the assault on the Siegfried line began on 26 September when the 258th Field Artillery Battalion, Corps Artillery, firing M-12, 155 millimeter, self-propelled guns, was given the mission of destroying all pillboxes which could be located on the 30th Infantry Division front. The Division Artillery had the following units attached:

- 258th Field Artillery Battalion (155 millimeter self-propelled gun)
- 65th Armored Field Artillery Battalion (105 millimeter Howitzer)
- 62nd Armored Field Artillery Battalion (105 millimeter Howitzer)
- 92nd Chemical Mortar Battalion (4.2 mortars)
- A Company, 823rd Tank Destroyer Battalion (3 inch gun)

The following units were in direct support: 119th Field Artillery Group, consisting of the 963rd and 967th Field Artillery Battalions, firing 155 millimeter guns. The 258th Field Artillery Battalion was determined to have the most suitable weapon for pillbox destruction, combining mobility, accuracy, and destructive power. The Battalion succeeded in neutralizing some visible pillboxes prior to the Division attack and was to continue the mission during the attack. Prior to the

(22) Statement of Major General Charles H. Corlett.
attack the Battalion had evidence of penetration of 46 pillboxes. (23)

The plan of supporting artillery fires for the assault consisted of

1. Isolation of the area to be attacked.
2. Counterbattery, countermortar, and an enemy antiaircraft artillery "Blackout."
3. Marking of air support targets.
4. Destruction of barbwire defenses.
5. Scheduled concentrations on strongpoints and fortifications, and extensive concentrations on call.
6. Successive barrage lines before the advancing infantry.
7. Continuation of destruction of pillboxes and fortifications. (24)

The air strike scheduled for H-120 was intended (1) to effect a saturation bombing of the break-through area, (2) to knock out, by dive bombing, the pillboxes immediately facing the assault regiments, and (3) to knock out all reserves which could be used for immediate counterattack. For the first mission, IX Tactical Air Command was able to supply only 9 groups of medium bombers (324 planes), while only two groups of fighter bombers (72 planes) were assigned for the second mission. The strike, as planned by XIX Corps and the 30th Infantry Division, had been predicated on the expectation of many more planes. In addition it was learned on 1 October, one day prior to the attack date, that the Air Corps planned to approach the bombing area from the west, passing over friendly troops. This

(23) 6.c. 2v. 12, 64, 65. (24) 16. 6, 64...
greatly disturbed the Division Commander as the Division Inf-
suffered 664 casualties from friendly bombs falling short dur-
ing the bomb strike northwest of St. Lo during operation "Co-
bra." Late in the evening of 1 October, the Division Command-
er telephoned the Corps Commander and stated this as a reason
for a request to have the direction of the air attack changed,
to arrive over the area from the southwest. The Corps Command-
er relayed the Division Commander's request to the Commanding
General of IX Tactical Air Command. It was agreed that the
request would be complied with, but attention was directed to
the shortage of time to change plans. (25)

On 2 October at approximately H-120 the planes appeared
over the target approaching from the west. This conflict, in
addition to the low, fast moving patches of clouds over the
target, resulted in only 4 groups of bombers dropping any bombs
in the target area. The other 5 groups were confused, and it
was not possible to make corrections from the ground. The two
groups of fighter-bombers, assisted by Division Artillery mark-
ing targets with red smoke, succeeded in dropping their "Napalm"
bombs in close proximity to their pillbox targets. The commu-
ications between planes and Corps and Division Air Support
Officers was later reported to be excellent. The Commanding
Officer, 117th Infantry, and G-3, 30th Infantry Division, re-
ported from first hand experience that the medium bombing was
ineffective. Interrogation of prisoners revealed that per-
sonnel under cover were unhurt and that many of those who were
sleeping did not know that a bombing had occurred. (26)

The Corps Commander, who personally witnessed the strike,

stated that only one group dropped bombs squarely on the tar-
get area. (27)

ENGINEER SUPPORT FOR THE ASSAULT

The plan for engineer support of the Division assault
was as follows:
a. Companies A and B to support the 117th and 119th In-
fantry Assault Regiments respectively, with the follow-
ing missions:

(1) Attachment of 3 man demolition teams to the
infantry assault teams. These 3 man teams were
armed with Bangalore torpedoes and satchel charges,
and had the missions of blowing or clearing the in-
itial breach of any personnel obstacles encountered
and assisting the infantry by further demolition and
mine clearance work.
(2) Provisions of foot crossings of the Wurm River
in each regimental sector. (Lightweight 20 to 30
foot duck boards were constructed for this purpose).
(3) The supply of assault materials (pole and sa-
chet charges and flame throwers) to the infantry as-
sault teams prior to H-hour.
(4) Continuous resupply of assault materials (pole
and satchel charges and flame throwers) to the in-
fantry.
(5) Clearance of mines and obstacles for the sup-
porting tanks and supply roads to the infantry bat-
talions.
(6) Destruction or sealing of captured pillboxes

(27) Correspondence of Corps Commander.
by welding and bulldozing.

Company C was initially to support Companies A and B with the following missions:

1. Construction of at least one class 40 tank crossing behind the assault troops in each regimental sector, and, if necessary, the roads to and from the crossings.
   a. An expedient under-fire crossing (pipe and log culverts) to be installed by tank dozers were later evolved.
   b. 40 foot log mats to lay upon a tank-dozed ford.
   c. Treadway bridges to be constructed after a bridgehead cleared of direct artillery and small arms fire and observed fire had been established.
   d. Maintenance of these crossings until relieved by the 1104th Engineer Group. Upon relief, revert to Battalion reserve, prepared to support the 120th Infantry Regiment or to support either A or B Company.

2. Additional demolitions and flame throwers to be prepared in case the 120th Infantry later had assault missions.

C. Plan of engineer support to Division Engineer by 1104th Engineer Group:

1. Construction of two Class 40 crossings, one in each regimental sector, spanning or by-passing the existing blown bridges at Marianberg and Rimberg.

2. Clearance of Regimental supply roads (one of
Supplement of gravel to locations as required by Division Engineers.
(4) Additional combat engineer support if required.
(5) All types of engineer work behind work phase lines upon call of Division Engineer. (28)

THE INFANTRY ASSAULT ON THE SIEGFRIED LINE

Following the air strike scheduled from H-120 to H-hour (1100) 2 October 1944, the 30th Infantry Division assault on Germany's vaunted "west wall" began with the two assault regiments, the 117th and 119th Infantry, attacking abreast. The 117th Infantry was commanded by Colonel Walter M. Johnson. The 119th Infantry was commanded by Colonel Edwin M. Sutherland. Colonel Hammond D. Birks commanded the 120th Infantry.

The attack was supported with strong artillery prearranged fires. The 4.2 Mortar Battalion maintained a rolling barrage in front of the assaulting infantry units and was effective in cutting barbwire emplacements. The rapid rate of advance of the 1st Battalion, 117th Infantry, across the Wurm and the railroad was credited to prior training and the Regimental plan for continuous use of all mortars until the last possible minute, as well as to the rapid shifting of mortar fires to the edge of Palenberg when the Battalion had reduced the pillboxes in its path.

The 81 millimeter mortars under battalion control fired on adjoining areas along the north edge of Palenberg. This continuous fire up until pillboxes in the zone were reduced prevented reinforcements of the pillbox complements. Mortars

(28) A-1, p. 4.
of the 1st Battalion, 117th Infantry, fired 5000 rounds on the
day of the assault. The 2nd Battalion, 117th Infantry, moved
out at 1430 on D-day. Enemy mortar and artillery fire was still
heavy on the west side of the Wurm, but the Battalion crossed
rapidly and began the assault on pillboxes in its sector. By
dark the 1st Battalion had closed on its objective east of Fa-
lenberg. Co. I pushed across the River prior to dark. On the
first day the 117th Infantry suffered 227 casualties, an esti-
mated 75%, resulting from artillery and mortar fire. The Reg-
iment had reduced 11 pillboxes. (29)

The 119th Infantry Regiment launched its assault at 1100,
2 October, in column of battalions, in the order 1st, 2nd, and
3rd. The 2nd Battalion was committed when the 1st was held
up by fire from thick woods to the front. The woods prevented
observation of pillboxes and enemy movement in the area. The
155 millimeter self-propelled guns working on pillboxes in the
117th Infantry sector and on the right flank of the 119th were
unable to get fire on the pillboxes obscured by the woods.
The effect of "Napalm" bombs had not been felt due to the damp
and green condition of the concealing woods and underbrush. (30)

Artillery fire on the 119th Infantry was initially light
but increased in intensity as the woods area was assaulted.
Enemy reaction to the 2nd Battalion attacking in the vicinity
of Rimberg Castle and on the ridge east of the Castle was im-
mediate and violent. The Battalion during one period received
a battery concentration every five seconds. It was necessary
to clear Rimberg Castle room by room after fighting through a
welter of artillery, mortars, machine guns, mines, and barbwire.
defense. The Castle did not fall until 3 October. Any attempt to bridge the Wurm near the Castle site was impossible during daylight. A bridge was finally installed at night but was later knocked out. The breaching of the line in the 119th sector boiled down to effecting a penetration of the woods and clearing it of enemy. Enemy and friendly lines were often 50 to 75 yards apart during this phase. (31)

Tanks and tank destroyers were of no assistance on the first day as the River was a substantial barrier. The Division Engineer had planned "expedient" bridges which were to be rolled or pushed into place by tank dozers. These had proved successful in practice crossings. The bridge consisted of several culverts reinforced and protected by logs; the whole affair was then mounted on a sled. A tank dozer was to push the sled into the River, doze the bank over the culvert and repeat the performance on the far bank. Unfortunately, on the day of the assault, neither regiment was successful in installing the bridge. Either the tank dozer mired or the "expedient" was stuck in the muddy, rain-soaked banks of the stream. The Division Engineers succeeded in emplacing a treadway in the 119th Infantry sector at 1515 on D-day, but of the first platoon of tanks across, four were mired in boggy ground. The treadway in the 117th Infantry zone was in by 1800 on D-day, but tanks and tank destroyers were too late in crossing to take part in the first day's fighting. To the credit of the engineers, both bridges were put in under artillery and sniper fire. During the night a treadway was installed at Rieberg and a Bailey at Marienberg. (32)
On 3 October the 117th Infantry, assisted by tanks of the 743rd Tank Battalion and Combat Command "B", 2nd Armored Division, widened its bridgehead and cleared the enemy from the town of Ubach. The 2nd Battalion of the 119th Infantry cleared the enemy strongpoint at Rimberg Castle and advanced to the eastern edge of the woods. The 1st Battalion, 119th Infantry, crossed the railroad tracks and attacked the north flanks of the pillboxes, holding up its eastward advance. Marshy ground precluded the assistance of tanks. (33)

Both assault regiments received serious counterattacks on 4 October; Ubach was the focal point. During the day both units repelled a series of counterattacks, none of which employed more than two companies. Enemy units identified on the Division front were from the 49th, 183rd, and the 246th German Infantry Divisions. Close support of the artillery was of great assistance in breaking up all counterattacks. (34)

The enemy shelling of Ubach on 4 October was reported as increasing in intensity. 99 countervolley missions were fired by Division Artillery. The 3rd Battalion, 117th Infantry, and the 2nd Battalion, 119th Infantry, launched a coordinated tank -- infantry attack south from Ubach. The 3rd Battalion, 117th Infantry, was held up by enemy fire on its left. The 2nd Battalion, 119th Infantry, however, was successful in reducing 11 pillboxes and reached the high ground east of Herbach. The 1st and 3rd Battalions, 119th Infantry, without tank support, made slow progress in cleaning out the woods facing the railroad tracks south of Rimberg Castle. The 2nd
On 5 October the 3rd Battalion, 120th Infantry, was attached to the 119th Infantry. At 1530, the Battalion crossed the Wurm in the vicinity of Rimberg with the mission of attacking south in the gap between the 1st and 2nd Battalions and seizing the high ground south of Herbach. When leading elements advanced to the line held by the 2nd Battalion, 119th Infantry, it was ordered to make contact with adjacent units and consolidate positions for the night. Main enemy reaction to this attack consisted of heavy artillery concentrations from the east and small arms and 75 millimeter direct fire from the vicinity of Herbach. (35)

Ammunition for support artillery was being seriously felt. (36)

The Battalion reduced 3 pillboxes in this advance but lost its Commander, Lieutenant Colonel Paul W. McCollum, who was killed by enemy artillery fire. (37)

On 6 October the Germans made their last serious attempt to hold the Siegfried Line. At 0710 2 battalions of the 148th Grenadier Regiment smashed into positions held by the 2nd Battalion, 119th Infantry. The German attack was supported by light tanks and assault guns and strong artillery and mortar fire. The counterattack carried over 800 yards in 45 minutes and the Germans re-occupied six pillboxes which they had lost the previous day. The 1st Battalion, 117th Infantry, swung to the right to help contain the counterattack. Two air strikes were obtained and artillery concentrations were delivered. By

early afternoon the 3rd Battalion, 119th Infantry, reinforced with two additional companies, was again driving south. Eight hours later all ground lost in the counterattack had been taken. During this time the 117th Infantry, supported by two air strikes and artillery concentrations, had pushed south to Zu Ubach. On the right, the 3rd Battalion, 120th Infantry, seized the high ground south of Merkstein-Herbach; the 1st Battalion, 119th Infantry, cleared the town while the 3rd Battalion cleared the pillboxes in the woods south of Himberg Castle. (38)

The Division reported 843 prisoners taken on 7 October, a day marked by exploitation. The 117th Infantry, supported by the 743rd Tank Battalion, advanced 5000 yards south to capture Wilhelmschacht and Alsdorf on the main road between Aachen and Linnich. The 119th Infantry with the 3rd Battalion, 120th Infantry, still attached, made good progress against heavy opposition to Merkstein-Hofstadt. The 3rd Battalion, 120th Infantry, moved across country to occupy positions on the right of the 117th Infantry. The 120th Infantry, less 3rd Battalion, attached to 119th Infantry, was in Division reserve. The Regiment aided by feint attacks and by seizing the populated area of Kerkrade west of the Wurm River, and immediately south of the penetration made by the 117th and 119th Infantry. This completed the breaching of the Siegfried Line positions and made a clean break in the "West Wall" defenses. The Division Commander reported to Corps: "We have a hole in this thing big enough to drive two divisions through. I entertain no doubts that this line is cracked wide open." (39)

THE BATTLE TO CLOSE THE AACHEN GAP

On 8 October, the 30th Infantry Division continued its effort to the south to link up with the 1st Infantry Division in the VII Corps zone. The plan called for the 30th Infantry Division to make contact with elements of the 1st Infantry Division in the vicinity of Wurselen on the Corps boundary. The 1st Infantry Division was pushing around the south flank of Aachen to Crucifix Hill just north of the city.

The 119th Infantry made slow progress in the vicinity of Herzogenrath. The 120th Infantry made slow but steady progress against heavy enemy resistance in the vicinity of the Herzogenrath-Alsdorf highway. The 117th Infantry had difficult progress toward Mariadorf. The enemy put up a strong defense in Kol Kellersberg. Enemy, supported by tanks, succeeded in penetrating regimental positions and attacked the headquarters in Alsdorf. The Regiment pulled back, leaving the 1st Battalion in defensive positions in Kol Kellersberg, and the 3rd Battalion digging in on a small open rise to the northeast. Prisoner of war interrogation revealed that the Regiment had been counterattacked by two battalions of the Von Fritschen Mobile Regiment supported by seven tanks and 20 assault guns. The unit had arrived from Luxembourg 100 miles away with the mission of recapturing Alsdorf at all costs and reopening the Aachen-Linnich road. (40)

On 9 October at 0700 the 120th Infantry attacked and captured one 88 millimeter self-propelled gun and seven "pupchen," large wheeled bazookas, belonging to the German 7th Antitank Battalion. The 2nd Battalion received one serious counterattack
by infantry supported by 10 tanks. The attack came from the
direction of Euchern. Seven enemy tanks were destroyed and the
counterattack repulsed at 1845. The 117th Infantry cleared
Alsdorf of enemy, secured Schauffenberg, and improved its po­
sition facing the railroad tracks in front of Mariasdorf. The
1st and 3rd Battalions, 119th Infantry, passed through Barden­
berg, occupied North Wurselen and prepared to send patrols to
contact elements of the 1st Division.

At dusk the Germans struck again, this time at Bardenberg
against the 1st Battalion, 120th Infantry. The attack shifted
to include 1st Battalion, 119th Infantry, at North Wurselen.
The attack was repulsed but was followed shortly afterward,
according to prisoner of war reports, by 300 infantrymen sup­
ported by 5 tanks. The enemy managed to gain a foothold in
the southern part of Bardenberg. The 2nd Battalion, 119th In­
fantry, back at Herzogenrath, was not to be committed except
by Division authority. It started moving down that night, and
headquarters and service companies were alerted for line duty.

(41)

At 0530, 10 October, 1st Battalion, 120th Infantry, at­
tacked without artillery preparation, surprised the enemy, cap­
tured Birk, and cut off the enemy spearhead in Bardenberg. The
120th Infantry was now on good ground to defend itself from the
south and east. During the day the 2nd Battalion, 119th In­
fantry, attempted, without success, to dislodge the enemy force,
including 10 to 20 half-tracks mounting 20 millimeter cannon.
It was learned that the enemy force was an element of the 108th
Panzer Brigade, which had moved into the area on 5 October with

a battalion of tanks and a battalion of infantry on half-tracks mounting 20 millimeter cannon. The unit had moved from Hildegem, 80 miles to the north and had made its first attack against the 30th Infantry Division at Eischen on 9 October. (42)

Pressure was maintained against the 120th Infantry all day. Numerous attacks were repulsed. Members of the Regiment applied captured artillery and mortars against the enemy. Pressure was maintained also against the 119th Infantry units in North Wurselen. An attack by a battalion of the German 246th Division was repulsed with the aid of support artillery. The Division had been at a virtual standstill but contained the German attacks during the day of 10 October. At the end of the day more than half of the 119th Infantry remained virtually cut off in North Wurselen. XIX Corps had no additional troops available. It was therefore necessary for the Division to move the 3rd Battalion, 120th Infantry, from its position on the right of the Regiment, attach it to the 119th for the purpose of clearing Bardenberg. F Company of the 120th Infantry took over the old position of the 3rd Battalion.

On 11 October the 119th Infantry cleared the enemy from Bardenberg. All elements in the line sustained enemy counter-attacks during the day. Most attacks were by infantry supported by tanks. The Division accounted for 14 tanks during the day. Observation posts reported heavy traffic into Aachen. XIX Corps warned the Division that the 116th Panzer Division was expected on the front momentarily. (43)

12 October found the Division receiving pressure from

During the past four days the Army Commander and his staff had been putting more pressure on the Corps and Division Commander to close the Gap. (45)

During the afternoon of 12 October, the Division was informed that it was responsible for contacting VII Corps regardless of boundaries and regardless of whether the 1st Infantry Division was attacking to make the junction. (46)

The Corps Commander arranged to attach two battalions of the 29th Infantry Division's 116th Infantry and an additional company of tanks to the 30th Infantry Division to assist in

The Division, on 13 - 14 October, faced against a tough and determined enemy. Most of the Division front northeast of Wurselen was dormant. The Corps Commander suggested a task force drive south from Alsdorf. The Division Commander, on advise from Regimental Commanders, decided that not enough troops were available for a practical assault in face of the heavy enemy resistance and the fact that the Division would be weakened and units caught in the open by counterattacks. Expansion of the assault to the west would involve another river crossing and perhaps involve reduction of a strong force at Kohlschied. Any other manner of attack in this area would mean re-breaching the Siegfried Line. (48)

Thus, success depended on a narrow front through the defense and buildings of Wurselen. As previously stated, during 13 - 14 October, little was gained. The German artillery sensing a narrow front, made the most of it. Enemy artillery and mortar fire on the assaulting units of the 116th Infantry (attached from 29th Infantry Division) slowed them down and reduced maneuverability. The engineer battalion and another armored infantry battalion of the German 116th Panzer Division were identified. Unit Commanders and staffs were decimated; resultant concurrent disorganization was an additional factor in the difficult progress. Again, the Army Commander spurred the Division Commander, in this instance by direct phone call. (49)

In addition, staff officers from Army were applying

 Attacks by the 1st and 2nd Battalions, 116th Infantry, on 15 October, supported by dive bombing missions and a time-on-target artillery preparation was not successful and indicated that a thrust through Wurselen could not be depended on. (51)

The plan for 16 October called for the 119th Infantry to sweep south on the right of the 116th Infantry, with two battalions striking across the Wurm River through Kohlscheid and the other battalion pushing down along the east bank of the stream past the Wurselen battle area to the main highway, taking in flank the pillboxes east of the Wurm River. The 119th had attached two companies from the 743rd Tank Battalion, together with the 99th Infantry Battalion, a separate unit which would be used to help hold the ground. (52)

The attack began at 0500 as the 1st and 3rd Battalions of the 119th attacked across the Wurm to secure the west flank of the main effort by the 2nd Battalion. The two battalions, together with the tanks which crossed over one of two treadway bridges constructed by the Division's 105th Engineer Combat Battalion, entered Kohlscheid at 0800 and had cleared the town by noon. The 2nd Battalion cleared 1000 yards to its first objective, Teuterhof, by 0730. (53)

During this time diversionary efforts on the eastern part of the Division front took place. A smoke screen was placed on the front of the 117th and 120th Infantry for a period of 30 minutes. Small arms, mortar, and artillery fires were placed...
It was described as some of the heaviest in the European Theater at that time. During the afternoon, flank companies of the 117th and 120th Infantry, for purposes of drawing enemy artillery fire from the main effort, attacked through 500 yards of closely held woods without benefit of prior reconnaissance. The E Company Commander was commended by the Regimental Commander, and the Company was awarded the Distinguished Unit Citation. (54)

At 1544 the 1st Infantry Division's Chief of Staff phoned the 30th Infantry Division Headquarters and stated that 1st Division observers reported friendly troops in the southern outskirts of Wuselen and that a patrol was being sent out. During the afternoon the 2nd Battalion, 119th Infantry, reached a hill south of Wuselen and across the highway from outposts of 18th Infantry, on Cemetery Hill about 1000 yards away. Physical contact between F Company, 119th Infantry, and K Company, 18th Infantry, 1st Infantry Division, was effected at 1815, 16 October 1944, and a report was made to Commanding General, First Army, that the Aachen Gap was officially closed. (55)

**ANALYSIS AND CRITICISM**

In making a study of this action it will be seen that the Corps, as well as the Division, was given a difficult mission; consequently, the Division may have inherited some of the difficulties of higher headquarters. The Corps was conducting operations some 40 miles to the flank, was carrying out an armored action to the east, and finally with one infantry division...
was breaching a formidable fortified position on a 30 mile front. The Division was faced with an extremely difficult undertaking and under harsh conditions of weather. The Division must attack to the east, make a stream crossing, assault a strongly fortified line, create a breach in the line wide enough to pass through a heavy type armored division, fight for a bridgehead through fortified towns, coordinate passage through its lines by the Armored Division; and finally, without any opportunity for reorganization, it must change direction approximately 90 degrees to the south and continue the assault against strongly defended towns and close a gap around a strongly held enemy city on a corps boundary in conjunction with a unit of the adjoining corps.

The Division planning, training for special operations, intelligence for the operation, and conduct of the attack appear to have been conducted in a manner that permits little, if any, criticism.

Conduct of the initial phase of the action was fast, vigorous, well coordinated, and went according to plan.

On the second phase, the closing of the gap, it was beyond the authority of the Division Commander, or the Corps Commander, to assume direct control of both the two units making contact. It therefore necessitated control of the most detailed nature by the Army Commander to effect a smooth working of the junction northwest of Aachen.

Of the command relationship between the Corps and the 30th Infantry Division Commanders, the writer has personal knowledge. It was completely harmonious. Direct contact between the Army and Division Commander, however, would not stand the test.
complete accord in all echelons of command. This is especially true with reference to statements of the Army Commander and his staff expressing his dissatisfaction with the rate of advance by the Division during the second phase of the operation.

The Corps Commander expressed his confidence in the command abilities of the Division and Regimental Commanders on numerous occasions to the Army Commander. It was the opinion of the Corps Commander that undue acceleration of the attack in the 2nd phase would result in a disproportionate increase in casualties. It might therefore be concluded that the Army Commander was not always fully informed of the situation in the Division zone, or did not agree in principle with the Division and Corps Commanders. This conclusion may be drawn from the fact that to the knowledge of the Corps Headquarters, neither the Army Commander nor members of his staff visited the unit during the operation.

It can be seen that during the latter days of the 2nd phase, more troops were needed if the suggestions of the Corps Commander for a task force to attack from the vicinity of Als-dorf was to materialize. Extra troops from Army and Corps were not available. The merits of the early recommendations of the Army Commander for assaulting the Siegfried Line near the Corps boundary is mentioned as a conjecture only, following the successful attack by the Division through Kolscheid. The success of the final attack was not solely dependent on the location of the original assault of the Siegfried Line as the diversionary efforts of the troops on the Division left during the last phase must be given due credit for contributing to the accomplishment of the operation.
Final success of the operation may be attributed to the application by attacking units of surprise, deception, speed, and proper employment of combined arms. These can result only from a high degree of leadership and training in all echelons of the Division and attached units.

It is believed that proper application of the principles of intelligence by the Division Commander, his staff, and subordinate commanders contributed greatly to the success of the planning and tactics employed following the enemy drive into Bardenberg on the evening of 10 October. Conversely, the Germans did not properly evaluate the importance of this spearhead; or if they did, sufficient troops were not available to exploit the advantage gained.

Sometime prior to the assault of the Siegfried Line by the 30th Infantry Division, the first priority for enemy mobile reserves was given to the Metz - Nancy area. The priority was shifted to the Arnhem and Nijmegen crossings when airborne landings and the British 2nd Army thrust occurred in that area. This priority was then shifted to the 30th Infantry Division front, following the assault on the Siegfried Line. In two weeks the Germans rallied the equivalent of 20 battalions to contain the American assault. The 2nd and 116th Panzer Divisions, the 506th GHQ Tank Battalion, and the 106th Panzer Brigade came in from northern Holland and the Arnhem-Nijmegen area, approximately 100 miles to the north. The mobile Regiment Von Fritschen, Combat Team "Ring" 1st SS, "Trier" Volks Grenadier Regiment, and the 3rd Panzer Grenadier Regiment came from the southern front, distances as great as 260 miles. These distances for so few mobile counterattacking
Reserves, together with the piecemeal commitments of units indicates dwindling strength of the defense forces of Western Germany, or inability of German Intelligence to determine the Allied attack plans. The largest counterattack on the Americans was 2 battalions of infantry, supported by tanks. (56)

During the period of 2 -- 16 October the Division took a total of 6201 prisoners of war.

Casualties sustained by the Division during the period of the assault totaled 2030.

LESSONS LEARNED

Some of the lessons learned, or principles illustrated, during the operation are as follows:

1. The success of a static defensive system, as the pillbox-dotted Siegfried line, depends on an adequate mobile and aggressive counterattacking force with which to contain and expel an attacking force while it is slowed down by that static defensive mechanism.

2. Information of a situation can best be obtained by detailed and constant liaison from a higher headquarters in addition to timely visits by the higher unit commander. This is well illustrated by the Division -- Corps relationship during this period. The Corps Commander made frequent personal visits to the Division during the operation and also supervised close staff coordination with that of the Division to insure that the Division was receiving all assistance that the Corps echelon had available. (57)

3. Reduction of a fortified line and fortified cities is a slow process. Attempts at short cut methods or undue
acceleration of such an operation can result in undue numbers of casualties.

4. According to statements of commanders involved, the War Department and Infantry School principles prescribed for pillbox reduction are sound and vary only in detail.

5. Special operations require training, planning and rehearsal of the most detailed nature, together with most detailed orders.

6. Infantry -- tank cooperation, as illustrated by the operations of the 117th Infantry at Ueback, follow present Infantry School doctrines; they were, and are, sound.

7. The Division's methods of holding ground is in accord with current Infantry School doctrine. These were well illustrated on numerous occasions and most forcibly so by the decisions of the Division Commander while units were attempting to push the closing of the Gap on 13-14 October in the vicinity of Wurceelen.

8. Adequate alternate plans are mandatory in the scheduling of a tank -- infantry assault as illustrated in this study by the delay, during the initial assault, of tank units, resulting from heavy rains and consequent boggy ground.

9. In reduction of pillboxes of the type encountered by this unit, the most effective artillery weapon was found to be the M12, 155 millimeter self-propelled gun using concrete bursting fuses. 3 to 5 rounds were usually necessary to penetrate 6 feet of reinforced concrete.

10. Artillery is especially effective in driving enemy soldiers from support trenches into the concrete structures during an attack of a fortified position, thus permitting
assailters to close in. It is also useful in blowing away camouflage and revealing the details of the installation.

11. Aerial bombing did little damage to the pillboxes during the assault but was particularly effective on tank and counterattacking concentrations. Bombing was also effective in support of assault on towns as illustrated at Palenberg.

12. Importance of individual arms markmanship was illustrated by prisoner of war reports of gunners in pillboxes being killed by rifle fire through apertures.

13. Soundness of present doctrines on the use of tanks and bulldozers against pillboxes as taught at The Infantry School were illustrated on numerous occasions.

14. Unit commanders learned during this operation that not only the assault detachments but all personnel must be familiar with and trained with the tools of assault in order that progress is not delayed when advance elements are cut down.

15. It was graphically illustrated that the support platoon of companies and the reserve for larger units must not follow assault echelons closely enough to be affected by fire on the front line elements.

16. Present Infantry School doctrine for battalion control of mortars when possible was illustrated and commented on by Commanding Officer, 1st Battalion, 117th Infantry.

17. Units must keep moving when mortar and artillery fire is encountered. This was well illustrated when assault units arrived at the Wurm River during the initial assault.

18. Numerous unit commanders commented on the value of prior reconnaissance as the principle is taught at The
Infantry School.

19. Indirect artillery fire was found to have little effect on tanks during this operation unless the round landed on a vital spot such as a turret face.

20. Superior leadership together with courage, resourcefulness, training, and proper equipment, was the final determining factor in the success of this operation.

21. No variance with present Infantry doctrine as taught by The Infantry School was encountered during the study of this operation.