INSTRUCTOR THAINING DIVISION GENERAL INSTRUCTION DEPARTMENT THE ARMORED SCHOOL Fort Knox, Kentucky

## ADVANCED OFFICERS CLASS #1

## 25 FEBRUARY 1947

## MILITARY MONOGRAPH

- TITLE: AN ENGINEER'S REPORT OF THE ROER RIVER CROSSING AT LINNICH, GERMANY
- SCOPE: A report of the planning, preparation, and crossing phases in which the 171st Engineer Combat Battalion, XIII Corps, was involved while in direct support of the 84th Infantry Division in its assault crossing of the Roer River at Linnich, Germany.

Period covered: 2 December 1944 to 24 February 1945.

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Then commanding the 171st Engr. Combat Bn.

AL FOR MILT 1- Roct Ctoal IMPLY FACTUAL WAS IVER CROSSING AT LINNICH. GERMANY Charles R. Keasus unterant Co lonel The Roer River rose to historical prominence in the winter of 1944-1945 when it became an integral part of the German western border defenses. It effectively closed the twenty-five>mile gap in the Siegfried Line which the American advance through Aachen had made. For the Ninth U.S. Army, Jour a

of the Roer River."

Roughly, the Roer River runs parallel to the German frontier from Roermond in the north, where it joins the Maas to Duren in the south. It also parallels the Rhine about 25 miles further east and is an effective barrier to any attack from the west aimed at the Ruhr industrial area. The advance to the river had been a slow fight against determined resistance and the enemy was quick to respond to any probing of the east bank. The situation called for the build-up of a powerful attacking force before a crossing could be forced.

a further invasion of Germany to reach the Rhine depended upon the forcing

Detailed plans for the Roer crossing were formulated early in December after elements of the XIX Corps and the XIII Corps in the Ninth U.S. Army zone reached the river at Julich and Linnich. However, the operation was delayed for more than a month by the German counter offensive in the Ardennes. A further delay was caused when the enemy blew the gate valves of the Schwammanuel Dam south of Duren as they retreated before the First U.S. Army which took the dam on 9 February.

Lt. Gen. W. H. Simpson, "Rehearsal for the Rhine", Military Review, (October 1945) p. 20.

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As a result, the Roer River north of Duren rose to a flood height of ten to twelve feet and to a width of 200 to 260 feet in the channelized portions and 1000 to 3000 feet where the river overflowed its banks. The current in the channelized portions of the river also increased in swiftness to (5) to (9) feet per second. Heavy thaws which started late in January added to the flood conditions which remained throughout most of February.

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As a result of these delays the planning, preparation and training phases of the crossing were continued. As the river itself now became the main obstacle to the crossing an engineer combat group was assigned to support each assault division. Each engineer combat group was to consist of three engineer combat battalions and supporting engineer bridge companies. River crossing schools were set up along the Maas River and Infantry-Engineer teams rehearsed assault crossing while supporting engineers increased their technical proficiency in bridge construction in swift water.

On the Ninth U.S. Army front the XIX Corps was to cross on the right with its main effort at Julich, the XIII Corps in the center with its main effort at Linnich, and the XVI Corps on the left to cross at Hilforth and Linnich after the XIII Corps had created a bridgehead for it. The Second British Army was to the left of the Ninth U.S. Army and the First U.S. Army was to the right of it.

The XIII Corps planned to cross with two infantry divisions abreast, the 84th Infantry Division on the left and the 102nd Infantry Division on the right with the 5th Armored Division in reserve. Both divisions were to make their main effort at Linnich as the river above and below the town had flooded the lowlands to some 1500 to 3000 feet in width while in the

3-Roer Cod

channelized section in and near Linnich the width varied from 200 to 250 feet.

The 84th Infantry Division planned to cross on a one-battalion front in two waves of two companies each. Local conditions along the river dictated such a plan. The divisional engineers, the 309th Engineer Combat Battalion, were assigned the responsibility of the assault boat crossing.

The 1149th Engineer Combat Group was placed in general support of the 84th Infantry Division and the 171st Engineer Combat Battalion was placed in direct support of the division with responsibility for the assault bridges.

Plans, as finally developed in conferences between the 84th Infantry Division, the 1149th Engineer Combat Group, the 171st Engineer Combat Battalion and the XIII Corps Engineer, called for six bridges to be constructed in the division zone.

Three infantry footbridges were to be placed in operation, construction to be started as soon as the Infantry Assault wave reached the far shore and the bridges completed by H-plus-45 minutes in time for the Second Pattalion of Infantry to cross. An Infantry Support Bridge and an M-2 Treadway Bridge was to be started as soon as small arms and automatic weapons fire was eliminated from the sites. The estimated completion time was H-plus-5 hours for the Infantry Support Bridge and H-plus- $7\frac{1}{2}$  hours for the M-2 Treadway Bridge provided the sites were clear at H-plus-1 hour. The second M-2 Treadway bridge was to be constructed on a site approximately 2000 yards down-stream after the Infantry had cleared a bridgehead. The bridging equipment for the crossing included 100 M-2 assault boats, 432 feet of footbridge, 400 feet of infantry support bridge, 532 feet of M-2 Treadway bridge and 6 LVT's.

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After final approval of these plans the 74th Light Ponton Company and the 989th Treadway Bridge Company was assigned to the 171st Engineer Combat Battalion by the 1149th Engineer Combat Group for the operation.

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Intensive training and preparations were immediately started so that the line companies of the 171st Engineers and the attached units could perfect the details of the actual crossing. Company A volunteered for and was given the task of constructing the three Infantry Footbridges and the Infantry Support Bridge. Company B was assigned the task of constructing the M-2 Treadway Bridge at Linnich. Company C was responsible for constructing the M-2 Treadway Bridge at the Korrenzig site down stream from Linnich. One platoon of CompanyA was assigned the task of constructing approximately 100 yards of plank tread approach road for the Infantry Support Bridge.

Reconnaissance of the river line during this period was continuous. The Battalion Commander, S-3, and Company Commanders of the Line Companies and attached companies spent hours daily studying aerial photographs, the river, the current, eddies, near and far shore and approaches, and the enemy. Scale sketches were made of the area with detailed sketches of the proposed crossing sites. Final plans and orders were prepared, equipment inspected, training perfected, and reserve equipment secured and stockpiled. Only the flood condition of the river delayed the cressing.

"On 21 February the Army Engineer advised that, though the river would still be swollen, we would be able to negotiate it on 23 February. Acting on this prospectus, I (Lt. Gen. William H. Simpson, C.G., Ninth U.S. Army) issued orders for the attack on the morning of 23 February, proceeded by a forty-five minute artillery barrage."<sup>2</sup>

<sup>&</sup>lt;sup>2</sup>Lt. Gen. W. H. Simpson, "Rehearsal for the Rhine", <u>Military Review</u>, (October 1945) p. 24.

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In a sense, the operation, to be known as "Operation Grenade", started with feints on the two nights before the actual crossing. On the night 20-21 February an artillery concentration was fired from the and a two-hour smoke screen was maintained along the far shore. On the following night 21-22 February, the concentration was repeated but the time was changed to the place was changed to farther upstream and the smoke screen was maintained most of the night to allow the engineers to work near the river bank.

On the night 21-22 February, under cover of the smoke screen, the 309th Engineers were able to move the assault boats to covered positions within (1000 yards of the river and the 171st Engineers were able to place the footbridge equipment in covered positions within 1500 yards of the crossing sites.

On the night 22-23 under cover of the smoke screen the 309th Engineers cleared the routes to the river and marked them with tracing tape. Six lanes were laid out from the final assembly area to the boat group area and 35 lanes were laid out from the boat group ares to the water's edge.

It was D-Day, 23 February; at **Seco** the 309th Engineers began to carry the assault boats to the boat assembly areas. The 171st Engineers carried the footbridge to positions directly in front of the bridge sites and carried the plank 2:30 a.m.for the plank tread approach road to the proper sites. By **CR36** everything was in position.

2:15 a.m.

At **Chip** Division, Corps; Army Artillery and all supporting weapons epened up with their 45-minute preparation.

"At exactly 0330-H-Hour- the artillery barrage was shifted back a few hundred yards. The engineers rushed forward to the



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footbridge sites with their equipment. The first wave of 35 boats, carrying Companies A and C, 1st Battalion, 334th Infantry, hit the water. - - -The two companies crossed on a front of approximately 700 yards. The boat trip took about ten minutes. The second wave of boats, bearing Companies 3!#54.m. 4!654.m.B. and D, hit the water at 3!#54.m. 4!654.m.B. and D, hit the water at 3!#54.m. 4!654.m.B. and D, hit the water at 3!#54.m. 4!654.m.

At the footbridge sites elements of Company A, 171st Engineers had crossed in assault boats with the first wave of Infantry and had attached the anchor cables and float cables to ample holdfasts. All three bridges were partially constructed before the enemy reacted to the attack with heavy mortar and artillery fire. Construction continued in spite of numerous casualties.

Footbridge No. 1, on the right was almost completed when enemy automatic weapons fire broke out from a stretch of shore that had not been cleared by the Infantry, causing severe casualties and forcing the Engineers from the site.

Footbridge No. 2 was completed by the but it was immediately knocked out by assault boats that drifted downstream from another crossing site.

Footbridge No. 3 was completed at approximately the same time but it was knocked out by a direct hit from enemy artillery before the Infantry could use it.

Spare equipment and equipment salvaged from the other bridges was brought up to the site of footbridge No. 2 and one instead of three footbridges was placed in operation. However, this footbridge was not completed in time for the second crossing battalion, the 3rd Battalion, 334th Infantry to use.

<sup>&</sup>lt;sup>3</sup>It. Theodore Draper, The 84th Infantry Division in the Battle of Germany, The Viking Press, 1946, pp 144-145.

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The third crossing battalion, the 2nd Battalion, 334th Infantry, was ///30 a.m. therefore, the first to use the footbridge when it crossed at 100.

The same enemy automatic weapons fire that caused abandonment of Footbridge No. 1, also caused considerable delay in starting construction of the infantry support bridge. Engineers from Company A, 171st Engineers suffered a number of casualties on the site before elements of the 3rd Battalion, 334th Infantry had cleared out the enemy pocket that had been bypassed by the 1st Battalion. However, by  $\frac{9}{2400}$ , Company A, less the platoon that was still working on the footbridge at site No. 2, restarted work on the Infantry support bridge, and, with the assistance of the platoon of Company C who had completed the plank-tread approach road to the site, completed the bridge and had traffic rolling over it by increasingly heavy mortar, rocket, and artillery fire.

Enemy resistance from a demolished factory and a partially demolished meconcrete pillbox directly opposite the Treadway Bridge site kept Company Norm B off the site until me when an assault team from the 2nd Battalion, 334th Infantry, effectively cleaned out the enemy pocket. Construction started at once and at me, just as the bridge was being completed, "enemy jet planes came over, dropped flares, circled and made a bombing run on the bridge, and then circled back on a straffing attack, causing extensive damage to both the Treadway Bridge and the Infantry Support Bridge."

As a result of this enemy action, no tanks or tank destroyers were able to cross the river D-Day, leaving the Infantry completely without armor support. However, during the two hour period that the Infantry Support Bridge had been opened, ammunition trains and some towed 57 mm, anti-tank guns had crossed to the Infantry.

<sup>4</sup>After action Report, 171st Engineer Combat Battalion, February, 1945.

The tectical situation was such that Company C, with its Treadway equipment, had to be called from the Korrenzig bridge site and its equipment used to replace the Treadway Bridge that had just been destroyed. Company C was assigned the task of replacing the Treadway Bridge, Company B took over the task of repairing the Infantry Support Bridge, and Company A. Who had suffered heavy casualties, was ordered back to reorganize.

At 0500, D-Day-plus 1, 24 February, enery aircraft and artillery again damaged the Treadway Bridge and destroyed the Infantry Support Bridge. Company & repaired the Treadway Bridge and Companies A and B combined with what effectives they had left and rebuilt the Infantry Support Bridge. By 1130 the Treadway Bridge was repaired and the first tanks, the tenks of Company A, 771st Tank Battalion, crossed the Boer River. By 1400 the Infantry Support Bridge was again opened to traffic.

After 42 hours of constant effort on the part of the Engineere, the bridges were in and in to stay, the Infantry was getting the reinforcements it meeded and had the bridgehead well under control. Anti-aircraft units hept the energy air away from the bridges and the Infantry had driven the energy beyond the range of his light and medium artillery.

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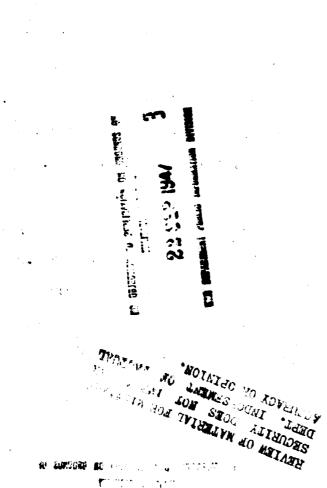
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