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THE OPERATIONS OF THE 9TH ARMORED DIVISION
AT THE LUDENDORF BRIDGEHEAD, REMAGEN, GERMANY
7 MARCH - 17 MARCH 1945
(RHINELAND CAMPAIGN)
(Personal Experience of the Division Traffic Control Officer)

Type of operation described: BRIDGEHEAD OPERATION

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BIBLIOGRAPHY

- A-1 History of III Phantom Corps
Pages 17 - 24 (TIS Library)
- A-2 The Rhine Crossing
18th Army Group Engineer Operations
By Brigadier General P. E. Timothy (TIS Library)
- A-3 History of the 78th Infantry Division
Chapter Six, pages 181 - 202 (TIS Library)
- A-4 Report of The Supreme Commander To The Combined Chiefs of
Staff on Operations in Europe of The Allied Expeditionary Force
6 June to May 1945, page 91 (TIS Library)
- A-5 Report of Rhine River Crossing
First U.S. Army # 4891 (The Engineer Center Library,
Fort Belvoir, Virginia)
- A-6 First U.S. Army, Report of Operations
23 February - 3 May 1945 #4260
(The Engineer Center Library, Fort Belvoir, Virginia)
- A-7 ASF Report #128 The Collapse of Remagen Bridge #4694
(The Engineer Center Library, Fort Belvoir, Virginia)
- A-8 History of The 9th Infantry Division
Pages 50 - 57 (TIS Library)
- A-9 The War (Sixth Year) by Edgar McInnis
Pages 126 - 131 (TIS Library)
- A-10 Onward From D-Day
By Major General H. Rowan Robinson
Pages 25 - 26 (TIS Library)
- A-11 A Record of The War, Twenty Second Quarter
By Philip Graves
Pages 24 - 30 (TIS Library)
- A-12 The Field Artillery Journal May 1945
Perimeters in Paragraphs by Colonel Conrad H. Lanza
Pages 269 - 270 (TIS Library)
- A-13 Time Magazine, 19 March 1945
The Bridge
Page 15 (TIS Library)
- A-14 Time Magazine, 19 MARCH 1945
Ten Minutes to Make Good
Pages 25 - 26 (TIS Library)
- A-15 Newsweek, 19 March 1945
Fighting Fronts
Pages 27 - 29 (TIS Library)

A-16 Newsweek, 12 March 1948
The Ruine Crossing
Pages 29 - 30 - 31 (WIS Library)

A-17 The New York Times, 10 March 1948
Pages 1 - 2 - 3 (WIS Library)

THE OPERATIONS OF THE 8TH ARMORED DIVISION AT THE LUDENDORF
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INTRODUCTION

This report covers the operations of the 8th Armored Division at the Ludendorf Bridge, Remagen, Germany, from the period 7 March to 17 March 1945.

Throughout history, rivers have played important roles in the defense plans of many military forces. The best known and one of the largest of these rivers is the Rhine River in Germany.

The Rhine River flows generally west from Lake Constance, located on the German, Swiss Frontier, for approximately 100 miles along the border between Switzerland and Germany. Then it turns sharply and flows northward for about 320 miles (running a short distance east of the German, French Frontier) and finally it empties into the North Sea. (1) See Map A

Along the 320 mile northward course of the Rhine the normal width of the river varies from 700 feet to about 1200 feet and in some places it is as wide as 2000 feet. (2) At no place along the northward course can it be forded at any time, even in the low water season. Its width, its swift current and its high, steep banks make it easy to defend, but extremely difficult to cross against resistance. (3)

In the past the Rhine River has helped to discourage many invaders and would-be conquerors of Germany.

Military Engineers have worked many map problems on crossing the Rhine, usually in selected areas where the river banks

(1,2) A-2, p.5 (3) Personal Knowledge

and the approaching road nets favor a river crossing. They have agreed, however, that even under favorable conditions the operation would be extremely difficult. (4)

Prior to World War II the only outstanding forced crossing of the Rhine was in 1813 when Napoleon made a crossing in his Russian Campaign. (5)

Therefore, it is not surprising that we find the German High Command had again incorporated the Rhine River in its World War II defense plan for the German Homeland.

THE GENERAL SITUATION

After stopping the German Ardennes Counter-Offensive, a venture in which the German Military machine had expended a great deal of strength, the early spring of 1945 found the Allied Forces on the offensive. They were advancing very rapidly into Germany against scattered opposition.

The enemy did not appear to be committing any new divisions west of the Rhine, thus indicating that he intended to withdraw to the high ground on the east of the river. It was expected he would destroy all bridges in his wake and take full advantage of the natural barrier which the Rhine offered. It was further expected he would attempt to hold this line at any cost.

The Germans had been falling back rapidly and retreating across the Rhine, taking with them all they could carry. However, the Allied advance was so rapid that the enemy was forced to abandon large amounts of supplies and vehicles. (6)

The enemy was making an all-out attempt to withdraw all of his troops to utilize in the defensive works on the eastern bank. The high, steep banks on the eastern side afforded

(4) A-1, p. 22; (5) A-1, p. 22; (6) Personal Knowledge

excellent observation of the river and the western bank, thus giving the defender the advantage.

On the allied side detailed plans were in the making for the breaching of the Rhine River, the last large barrier in the German defense line.

The area selected for this forced crossing of the Rhine River was in the north near the Ruhr River. The troops selected for this operation were the Ninth American Army and the Second British Army under the Twenty-first British Army Group. A large number of small naval craft and a vast amount of bridging equipment and materiel had been brought into the vicinity of the planned crossing. (7)

Another detail in the plan for the Rhine Crossing was the clearing of all German resistance from the west bank of the river, leaving the Allied Forces free to work on bridging operations without danger of a possible attack from either flank or the rear.

On 7 March the First U. S. Army, engaged on this mission, was advancing with 3 corps abreast, the III, V, and VII Corps. (8) (See Map B)

The 9th Armored Division, then assigned to the III Corps, was employed on this mission covering the center of the III Corps area. The 1st Infantry Division and the 9th Infantry Division were on the left flank, and the 78th Infantry Division was on the right flank. (See Map C)

The 1st Infantry Division was advancing on the city of Bonn. The 9th Infantry Division was advancing on Bad Godesberg and Burkum, while the 78th Division was advancing on Arweiler. (See Map C)

(7) A-3, p. 163; (8) A-5, p. 1

THE DIVISION SITUATION

The 9th Armored Division during this phase was assigned the mission to seize Remagen, Germany, and vicinity, to establish crossings over the Ahr River (a tributary of the Rhine south of Remagen) and to seize crossings at Bad Neuenahr and Neimersheim. (9) A general mission to seize any bridges over the Rhine remaining in the Division Zone had been given to all troops.

Division Headquarters had ordered Combat Command B to take Remagen, clear it of all enemy and seize the crossing over the Ahr River in the vicinity of Sinzig, Germany.

Combat Command B jumped off with 2 columns abreast, each column advancing on its objectives against light resistance. Many prisoners were taken. It was the division policy to interrogate and process prisoners of war at Combat Command Level. Interrogation of a prisoner at Combat Command B's prisoner of war enclosure revealed at 1515 hours on 7 March that the Ludendorf Railroad Bridge at Remagen was not to be blown until 1600 hours that day. (10)

Brigadier General William Hoge, the Commanding General of Combat Command B, immediately upon receiving this information ordered Lt. Colonel Leonard Engaman, commanding the 14th Tank Battalion, to attack and seize the bridge. His order also specified the use of white phosphorous and smoke around the bridge and the eastern approach to the bridge. In addition this area was covered with machine gun and tank cannon fire. (11) Demolition wires, fuses and explosives were to be neutralized by Company E of the 9th Engineer Battalion. The Engineers

(8, 10, 11) A-5, p. 1

were also instructed to make a report on the railroad bridge as to its serviceability for vehicular traffic. At 1835 hours a force made up of B Company of the 9th Armored Engineer Battalion and elements of the 27th Armored Infantry Battalion started across the bridge. One sharp explosion had occurred near the center of the bridge, but the charge apparently wasn't heavy enough to completely destroy the span. All wires in sight were cut as the party advanced across the bridge. Hasty examination showed that the bridge had many demolition charges placed on important structures; however, no attempt had been made to detonate them.

Throughout this action division artillery units laid smoke on the far shore in an attempt to conceal the operations on the bridge, however, a strong wind reduced its effectiveness. (12)

The members of the 27th Armored Infantry Battalion pushed out to extend the bridgehead and engage the enemy troops which were delivering a large volume of small arms fire.

The engineers remained on the bridge to complete the cutting of demolition wires and removal of mines, and started to repair the damage done.

Although the bridge had been hit by some artillery fire and one demolition charge had been detonated, it was found that it could be made serviceable for traffic within a few hours. The span was a railroad bridge of steel construction and although the Germans had partially decked it over, it still required some additional timbers to be placed on its floor. By 2400 hours that night the bridge was open to some light traffic and by 0400 hours on the morning of 8 March it was reinforced enough to hold tanks and tank destroyers. (13)

(12) A-5, p. 1; (13) Personal Knowledge

In the meantime additional engineers were detached from Combat Command R and ordered to the area to aid in maintaining the bridge and its approaches.

Meanwhile upon confirmation of the capture of this installation, Colonel Johnson, Chief of Staff of the 9th Armored Division, called Colonel James H. Phillips, Chief of Staff of the III Corps, and notified him of the capture of the bridge. (14) The III Corps headquarters ordered the 47th Infantry of the 9th Infantry Division and the 311th Regimental Combat Team of the 78th Infantry Division to be motorized and moved to the bridgehead area to be attached to Combat Command B. Combat Command B engaged the enemy on the eastern bank. The news of the capture of the bridge went back through official channels to General Eisenhower. He ordered 5 divisions be committed to the bridgehead area without delay.

The two remaining Combat Commands of the 9th Armored Division were stripped of many of their combat units, which were attached to Combat Command B and committed as rapidly as they could get across the river. (15)

In the early hours of the bridgehead the action consisted mostly of very fierce close-in small arms fighting, during which the enemy was successfully driven further back from the bridge. However, the lack of infantry was a drawback to the attacking force. During this period the enemy troops were made up chiefly of Engineer and Anti-aircraft Artillerymen who had been initially assigned to protect the Ludendorf Bridge. They were supported by well implaced 20 MM Anti-aircraft weapons and mortars, but did not have sufficient strength to contain the bridgehead.

(14) A-1, p. 31; (15) A-9, p. 127; (16) Personal Knowledge

The delivery of mortar fire upon the bridge was effective, but within a short time the positions were overrun.

The railroad tracks across the bridge ran into a tunnel at the base of a large mountain, which rose from the eastern bank to a height of approximately 190 meters. (See Map D)

The railroad tunnel was searched and found void of any heavy weapons. This tunnel would have been an ideal spot for a heavy caliber artillery piece or an anti-tank gun. It would have had a field of fire almost the entire length of the bridge and it is believed that an anti-tank gun dug in or sand bagged within that tunnel could have denied our crossing of the bridge. (17)

(See Map D) Early on 8 March troops assigned to reinforce and expand the bridgehead began arriving in the vicinity of Remagen. At first the existing road nets were thought to be capable of handling this traffic; however, it soon became very evident that one-way traffic circulation plans would have to be placed in effect and a rigid traffic control system exercised on all roads leading into Remagen. (18) A paved two-lane highway led into Remagen from the north. The road from the south was also a two-lane paved highway. The road from the west was a two-lane improved gravel road which, it was felt, should be immediately made into a one-way east bound road. Two-way traffic was to be permitted on both the north and south highways. A west bound route was then posted as follows: South to Sinzig and west through Bad Neuenahr, Gelsdorf to Stadt Meckenheim. Two-way traffic was resumed again west of Stadt Meckenheim. (19)

By this time all roads into Remagen were rapidly being

(17, 18, 19) Personnel Knowledge

passed with increasing traffic and the sound of German artillery could be heard throughout the area. As the artillery increased convoys were slowed down and at times halted. It was very evident that the enemy had artillery observation on the bridge, the town of Hoesgen and on all the roads leading into this vicinity. The very high ground in the vicinity of the eastern bridge approach, while aiding the enemy in affording him an excellent observation post, hindered him by shielding most of the bridge from his direct artillery fire. From his defilade position he was unable to depress the muzzles of his weapons to bring fire to bear on the eastern section of the bridge, however, he was able to lay in very effective interdictory and harassing fire on the western approach and the road nets leading into the critical area. (20)

As the German artillery shells fell in the vicinity of the convoys, the drivers abandoned their vehicles. When the enemy fire lifted it was very difficult to locate the personnel and get traffic moving again. In some cases drivers had become casualties and replacement drivers had to be located rapidly in order to keep traffic flowing. (21)

At one point a direct hit was scored on an ammunition truck, setting it on fire and blocking one of the main arteries of traffic for several hours. (22) Another ammunition vehicle was hit on the eastern bridge approach and would have denied use of the bridge for several hours except for quick action by the engineers in pushing it off the road with a bulldozer.

As additional motorized infantry began arriving, a detrucking point was set up at the intersection where the three roads

(20, 21) Personal Knowledge; (22) A-5, p. 6

joined west of Remagen. Here the troops dismounted and the prisoners of war were loaded on the returning vehicles and routed south to Simain and west on the one-way road as designated in the traffic circulation plan. This plan worked well with few exceptions. (23) For example, Executive Officers of the various units arriving at the bridgehead area had received orders to rendezvous at the intersection of the three roads at Remagen (which at that time was undoubtedly one of the busiest road junctions in Germany). One-way east bound traffic was in effect on the bridge to insure that the maximum number of troops and materiel were moved into the newly gained bridgehead. This meant that commanders who had crossed the bridge to reconnoiter assembly areas could not be permitted to come back across the bridge again with a vehicle. In order to reach the intersection commanders would have to go back approximately 2 miles through the artillery impact area on foot. Most commanders chose to remain on the eastern bank and their troops had to be persuaded to leave their designated rendezvous to cross the bridge. To expedite the troop movement mission, General Hoge assigned his Executive Officer, Colonel Hamilton. (24)

Meanwhile Division Headquarters had ordered Combat Command B Headquarters, commanded by Colonel Burnside (former Chief of Staff of the 9th Armored Division), to set up in Remagen and to supervise the movement of troops to the bridgehead area. (25)

Division Headquarters and Combat Command A Headquarters moved to Bad Neuenahr where they set up administratively to await further developments.

On 9 March a marshalling yard was put into operation on the

(23, 24, 25) Personal Knowledge

eastern bank to assist in sorting out the vehicles of the various units. This consisted of a large field which had been divided into many lanes. One of these lanes was designated for the vehicles of each unit known to be operating in the area. All traffic was directed through a traffic control station and drivers who were lost or separated from their units were sent to the marshalling yard. Once in the marshalling field these vehicles were diverted into the lanes assigned to their units. The units were notified and requested to send a guide to escort them to their proper organizational assemble areas. When personnel was available and the exact location of the parent unit was known an escort was furnished for these vehicles by the traffic control personnel. This aided materially in that it prohibited drivers of straggler vehicles from wandering aimlessly up and down the highway, blocking traffic when they attempted to secure information as to the location of their organizations.

The weather generally favored the operation by being cold and rainy, with low hanging clouds which reduced the effectiveness of the German Air Corps against this vital target. (26)

Very early in the operation it was seen that additional bridges would be needed, as traffic was piling up and back-logging on all roads leading to the bridgehead to an extent where vehicles were lined up bumper to bumper for many miles and though vehicles were pouring in on three roads, they had to be infiltrated out on one road leading across the bridge. In addition, vehicles were coming up in close column and when reaching the bridge they had to be extended out to allow a 75 year safety load

(26) A-1, p. 21

interval between vehicles. This was due to the weakened condition of the bridge and the intense amount of enemy artillery fire being placed upon the area.

With the rapid increase of vehicular traffic the requirements increased for trained traffic control personnel. A call to Division Headquarters made by the Traffic Control Officer resulted in members of the Division Band being dispatched to Remagen to aid in traffic control work. These men were sincere and attempted to carry out the task assigned them, but they were not trained in traffic control and in several instances their best efforts only ended in causing severe traffic jams. (27)

As the weather cleared the German Luftwaffe finally showed its hand by sending dive bombers into what turned out to be suicidal runs in attempts to knock out the bridge. A few of these planes scored hits on the bridge, denying use of it for short periods. The bridge engineer maintenance personnel rapidly repaired the damage. Company C of the Division Engineer Battalion, under the command of Captain Ellis Fee, were able to make sufficient repairs to enable traffic to continue its flow with a minimum amount of delay.

In order to reduce the number of vehicles and personnel from piling up in the impact area during these halts it became necessary to draw radio equipped vehicles from the 9th Armored Division's 89th Armored Reconnaissance Squadron, to work in conjunction with the traffic control section. The SCR 536 radio hand set which the traffic control section attempted to use for communication between traffic posts became useless with the amount of interference caused by extremely large number of vehicles

(27) Personal Knowledge

passing through this area.

As the shelling became intense these radio vehicles working in the bridge area would inform other radio vehicles stationed at key points along the route of advance. When necessary, incoming columns were halted at these outposts. To some extent this alleviated the congestion and undoubtedly did save the loss of vehicles and personnel. (28)

In addition a SCR 399 radio was set up at the bridge site. This worked in conjunction with a similar type radio at Division G-4 Traffic Control Office which in coordination with III Corps Headquarters allotted all priorities to incoming columns. (29) These priorities were continually changing as the need for different types of equipment became acute in the bridgehead area. For instance, in the early part of the operation engineering and bridging materiel were given top priority. This meant Divisional Military Police Motorized Patrols would screen the motor columns for vehicles carrying the engineer equipment specified and when they found this equipment they double banked the column and brought the engineer equipment to the area needed. This priority was changed from time to time, shifting from engineer materiel, to personnel, to ammunition and to medical supplies; depending on the special needs and requirements of the operation. This procedure was enforced throughout the entire operation and worked very well. (30)

An army bridge unit arrived in Remagen on 8 March to start construction on the additional bridge which had been asked for. A bridge site was selected approximately 500 yards north of the railroad bridge and work was started in the face of strong

(28, 29, 30) Personal Knowledge

artillery fire. The German Artillery was well served in by this time and the engineer casualties ran high in equipment and personnel. The situation on the bridge and its associates that their effective work value was greatly reduced. It was decided to begin work on another bridge in the vicinity of Kripp, some 5 kilometers south of Remagen, where the artillery fire was less intense. (See Map D) A second bridge unit was assigned this task.

To best describe a typical day at Remagen the following extract taken from a journal kept by the III Corps Engineer Section for 10 March 1945, tells the story very completely:

"100001-100300-All work discontinued at all sites due to enemy artillery action. Raking fire of several guns was sweeping roadway construction area. Great deal of air burst artillery shells being used. Appeared to be direct fire with close in observation. One compressor and two cranes knocked out; 20 floats completely assembled with tread attached were hit, which required that they be removed from the water, disassembled and patched. (This means that 312 feet additional bridging will have to be constructed and a delay in the progress of the bridge of about 5 hours).

100300-101205-Enemy artillery continues interdicting railway bridge with observed artillery fire approximately one round every 30 seconds on west abutment and west tower. Infantry crossing on foot having large number of casualties.

101205-Work stopped by enemy observed artillery fire. Railway bridge and west tower and abutment and approach catching hell. One round of heavy stuff

every 5 minutes on treadway site.

10135-Railway bridge bombed and strafed.

10136-Enemy artillery scored direct hit on treadway bridge at west end. 10 floats ruined. Going ahead and bridge to far shore as treads are holding damaged portion in place. Damaged floats will be replaced when bridge has been completed. One Brockway knocked out.

10140-Lieutenant Train, 9th Infantry Division gave us information that all enemy CP's were being smoked by the Artillery and that rope supplies were at west approach of treadway bridge. Ferry site Number 3 ready for foot troops. Seven LCVP's available.

10150-Artillery representatives called at CP. Colonel Williams, III Corps and Colonel Perry of Army. Sent message to Army Engineer by Colonel Perry for additional pontoon and treadway material for reserve.

101545-101730-Bombed and strafed.

101600-Pontoon bridge started.

101710-Treadway bridge reached far shore. Total length, 1032 feet. 17 casualties for the day and 3 air compressors.

101830-Bombed. Had 6 rounds of heavy artillery at pontoon bridge site. Continuous shelling of West bridge approach." (31)

The next problem which presented itself was safeguarding that which had already been gained. The air assault was

(31) A-1, p. 21-22

increasing in fierceness. The latest type of German jet propelled airplanes were being used on this mission. The American Air Corps kept air cover over the bridgehead during the hours of daylight and within a few days time a total of 2 anti-aircraft automatic weapon battalions and 4 anti-aircraft gun battalions had been brought in and impinged around the bridge site. In spite of all this protection enemy bombers still came in. During the first 8 days a total of 368 aircraft attacked the bridge. Out of this number 96 were destroyed and 29 badly damaged. (32) Many of these dive bombers went into their dive only to meet a sheer curtain of fire and never came out of the dive, but plunged straight into the river. One barely missed the bridge by a few yards. (33) He apparently was attempting to crash into it after realizing he was hit.

It became Standard Operating Procedure for all personnel to open fire on all low flying aircraft in the area. They employed all weapons available, including vehicle mounted machine guns, anti-aircraft battalion automatic weapons and individual arms. This was effective even though a very large amount of ammunition was wasted. Very few aircraft were able to complete a bombing run on the bridge. The main drawback to this type of firing was that a number of our own troops were hit by wild shots and falling anti-aircraft flak.

The enemy also employed V-2 rockets in an attempt to knock out the bridge. This was the first time the Germans had used the V-2 Rocket Bombs against a tactical pin point target. (34) Many landed in the vicinity of the bridge but fortunately none hit their objective.

(32) A-1, p. 23-24; (33) Personal Knowledge; (34) A-1, p. 23

Machine gun outposts along the banks were on 24 hour a day alert. Fire from high velocity guns at any suspicious items floating in the river was available on request. (35)

Large strong searchlights mounted on tanks lighted sections of the river all throughout the night to aid in detecting any water borne attempts to destroy the bridge. (36)

Engineer troops next constructed anti-mine nets and contact log booms which ran the entire width of the river. This was done in order to prevent the enemy from floating demolitions down the current to the bridge area. Small craft patrolled the stream above the bridge and dropped depth charges at the rate of 12 per hour in an attempt to discourage enemy underwater craft. (37) Although the enemy did not attempt to attack the bridge by the use of underwater craft, an attempt was made by SS "Gamm-Schwimmer" or "human sharks" (as they were called) dressed in special rubber suits swimming down stream pushing demolition charges on small rafts. It is believed that the concussion caused by dropping depth charges forced the swimmers to remain on the surface where they were spotted by the observation post and taken under fire. Of the seven swimmers known to have attempted this task none were successful in the accomplishment of their mission and were either killed or captured except one who was able to make an escape. (38)

All German civilians were evacuated from the area of operation for further security measures.

A river ferry system was placed in operation and all ammunition and gasoline trucks were required to be ferried across the river in order to prevent any additional damage to

(35) Personal Knowledge; (36) A-5, p. 22; (37) A-1, p. 24
(38) A-1, p. 23

the bridge. These same barges were used on the return trips to the west bank to evacuate casualties.

By 11 March a heavy 40 ton pontoon bridge, 1000 feet long, was completed at Remagen. (It had a noticeable upstream bow to aid in holding it against the strong current.) This meant that we should have been able to pass an average of 300 vehicles an hour over the two bridges, however, due to the extremely poor roads available to us on the eastern bank we found we were barely able to average 100 vehicles an hour per bridge. (39)

On the same day a 25 ton pontoon bridge was completed in the vicinity of Kripp. This bridge was 969 feet long and a large amount of our wheeled vehicle traffic was diverted to cross in this area. (40)

The bridgehead was rapidly being expanded and exploited by this time. It seemed pretty much of a race, with the Allied Forces pushing to get as much men and materiel across the Rhine and into the fight. On the other hand the enemy was making a desperate effort to reinforce his troops already engaged in the fight. Although we had air superiority, enemy convoys were said to be coming up at night using lights. (41)

A large increase in the amount of enemy armor was noticed. A marked difference was also noticed in the type of prisoners being taken. At an earlier date the prisoners were made up mostly of Service Troops (engineer and anti-aircraft artillerymen) but now members of the 3rd Parachute Division, the 11th Panzer Division and other crack Wehrmacht Units were identified in our prisoner of war enclosures. (42)

One of the main objectives for the Allied Troops was to

(39) A-1, p. 23; (40) A-1, p. 22; (41) Personal Knowledge;
(42) A-3, p. 125

cut the Autobahn Highway 7 miles east of Remagen and thereby deprive the enemy of this four-lane highway in his efforts to shift his troops. (43)

This was accomplished only after some of the fiercest enemy resistance encountered during the operation was subdued. In order to further delay enemy reinforcements from reaching their destination in time, supporting artillery units delivered heavy interdiction fire on key points of all road nets.

The support given to this operation by the air force was of tremendous value. They had bombed railroads, bridges, highways and very effectively aided in the attempt to isolate the battle field.

The Germans had sufficient tactical reserve to defend their position; however, they concentrated farther to the north to meet the expected Rhine River crossing in the vicinity of the Ruhr River.

Although the enemy was fighting savagely and desperately, its strongest efforts to contain the bridgehead failed due to his inability to get sufficient forces to the points where they were urgently needed.

ANALYSIS AND CRITICISM

After making a study of this operation it is my opinion that our lack of ready tactical reserve was one of the greatest drawbacks to the operation. Although the capture of the Ludendorf intact was more than we had hoped for, the fact still remains that the bridge was known to be standing and in usable condition the day before its capture. While it was

(43) A-3, p. 154

only a wild hope, its capture was one of our capabilities. We should have had tentative plans made and a tactical reserve set aside to exploit the bridgehead in the event of the successful capture of the bridge. Had this been done it would have been possible to exploit the bridgehead much more rapidly.

The initial lack of radio communication in the traffic section resulted in the loss of a large amount of personnel and materiel. The effectiveness of this section was greatly reduced because an individual on one traffic post had no idea of what was happening or the conditions existing on another post. If radios had been provided at the start of the operation we could have moved traffic much more efficiently and could have prevented traffic from entering danger zones during the periods of heavy shelling.

The policy of unit Commanding Officers picking a road junction on a map as a rendezvous point without knowing the existing situation worked a hardship on the individuals who were presently located in the area.

The attempt to erect a pontoon bridge within 500 yards of the Ludendorf Bridge meant the same artillery pieces firing on the railroad bridge could also deliver fire into the new bridge construction area without having to shift the guns and could also use the same observation posts.

The fact that our reinforcements were arriving piecemeal instead of arriving with unit integrity, meant that peak efficiency could not be hoped for.

It has been estimated that the capture of the Ludendorf Bridge shortened the war in Europe and reduced the casualty toll. A vast saving in materiel and equipment was realized by not being forced to make a deliberate river crossing.

Many German Staff Officers started, after their capture,

that they believed the capture of the bridge at Remagen was the turning point of the war in that it did break the last and strongest link in the German line of defense. (44)

A great deal of credit is due Combat Command B for the manner and speed with which it exploited an enemy weakness once it was found. After learning that the Ludendorf Bridge was still intact, the command advanced across the bridge so rapidly that even though it was prepared for destruction, the enemy was not able to destroy it.

The protective measures taken were well worth the time and effort spent. In the early stages of the operation many officers did not realize the value of the work accomplished by the engineers in stringing log contact booms across the river and the work of patrolling the river in boats. As a direct result of this work one known water borne attack was broken up, and possible other contemplated attacks were discouraged.

In employing the V-2 Rocket, the enemy was using a weapon which had worked extremely well against large area targets. On the Ludendorf Bridge he was firing at a pin-point target and it proved quite ineffective.

The employment of individual small arms against attacking aircraft, while in itself not devastating against the enemy air, it did have a psychological value to our troops in that they felt they were doing something to protect themselves.

The use of medium and heavy corps artillery to aid the air corps in isolating the battle field proved to be a valuable aid within the range capabilities of their weapons. With their

(44) A-1, p. 23

Air observation and forward observers they were able to bring fire to bear on small bridges and other small objects that would be difficult to strike successfully from the air.

LESSONS LEARNED

The lessons emphasized by this operation are:

1. A line of defense, like a chain, is no stronger than its weakest link. By allowing a gap to remain open in the German defense line at Remagen our troops were able to reach across a barrier that in all probability would have delayed them a long time and that would have been very difficult to breach.
2. The need for additional armored infantry in an armored division was seen during the exploitation of the bridgehead. Tank crews cannot be dismounted and massed in sufficient numbers to make up for a shortage of infantry.
3. The effect of observed enemy artillery on an attacker was very clearly seen at Remagen when the enemy had the advantage of holding the high ground on the east bank.
4. To insure efficient cooperation Commanding Officers should be oriented as to the existing situation when possible before being sent into a bridgehead area.
5. When a defended river line has been breached, additional bridges should be erected out of artillery range from the original bridge site, when possible.
6. The need for trained efficient traffic control personnel was shown very strongly when untrained personnel from Division Headquarters were sent to Remagen to aid the traffic section. Although these individuals were sincere and tried to carry out tasks assigned them, their lack of experience proved that

to be sure of a handicap to the traffic section than the other

7. When the enemy is in a reverse slope defense position, the attacker can expect additional security on the forward slope because the enemy cannot deliver direct artillery fire upon him.

8. Artillery and supporting air power can be combined very effectively to isolate the battlefield and impede or prohibit the progress of enemy in bringing up reinforcements to a critical area.

9. The use of a marshaling yard in an operation where a large number of non-organic vehicles are operating is the most efficient method for processing straggler vehicles.

10. The flexibility of a armored division combat command was clearly demonstrated during this operation when Combat Command B was able to absorb all combat units of the division plus two additional regiments of other divisions.

11. The responsibility for the destruction of a valuable installation which should be destroyed to prevent enemy capture must be assigned to a reliable agent and he should be physically present to insure its destruction. The Ludendorf Bridge was prepared for demolition. Had a responsible agent been present and carried out his assigned duties, the operation covered in this monograph would have never taken place.

ANNEX NO. 1

A summary of this operation was well expressed in the following verse written by Captain Noah W. Lawlin, a member of the 9th Armored Division during the period when the bridge was captured.

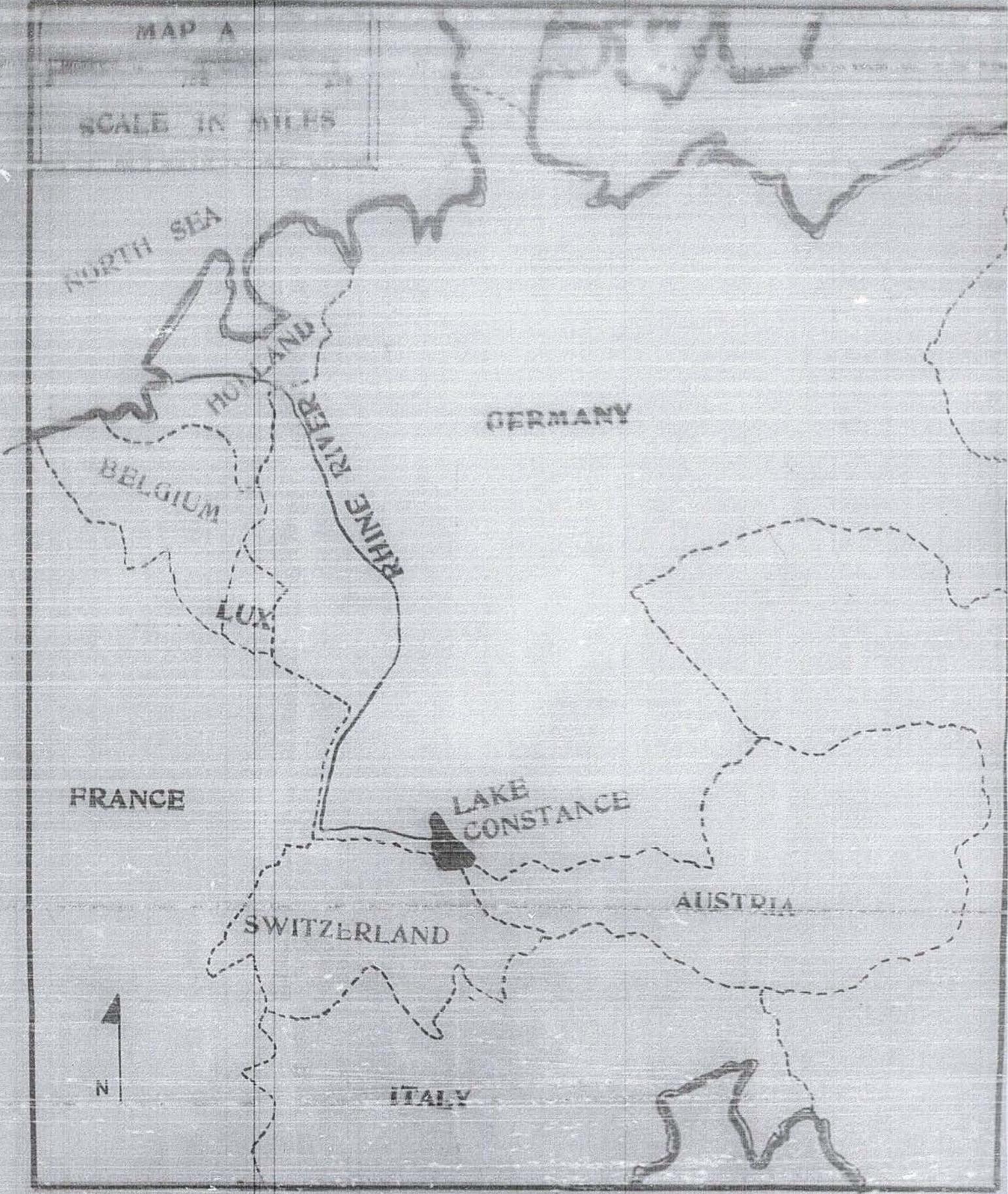
THE CROSSING OF THE RHINE

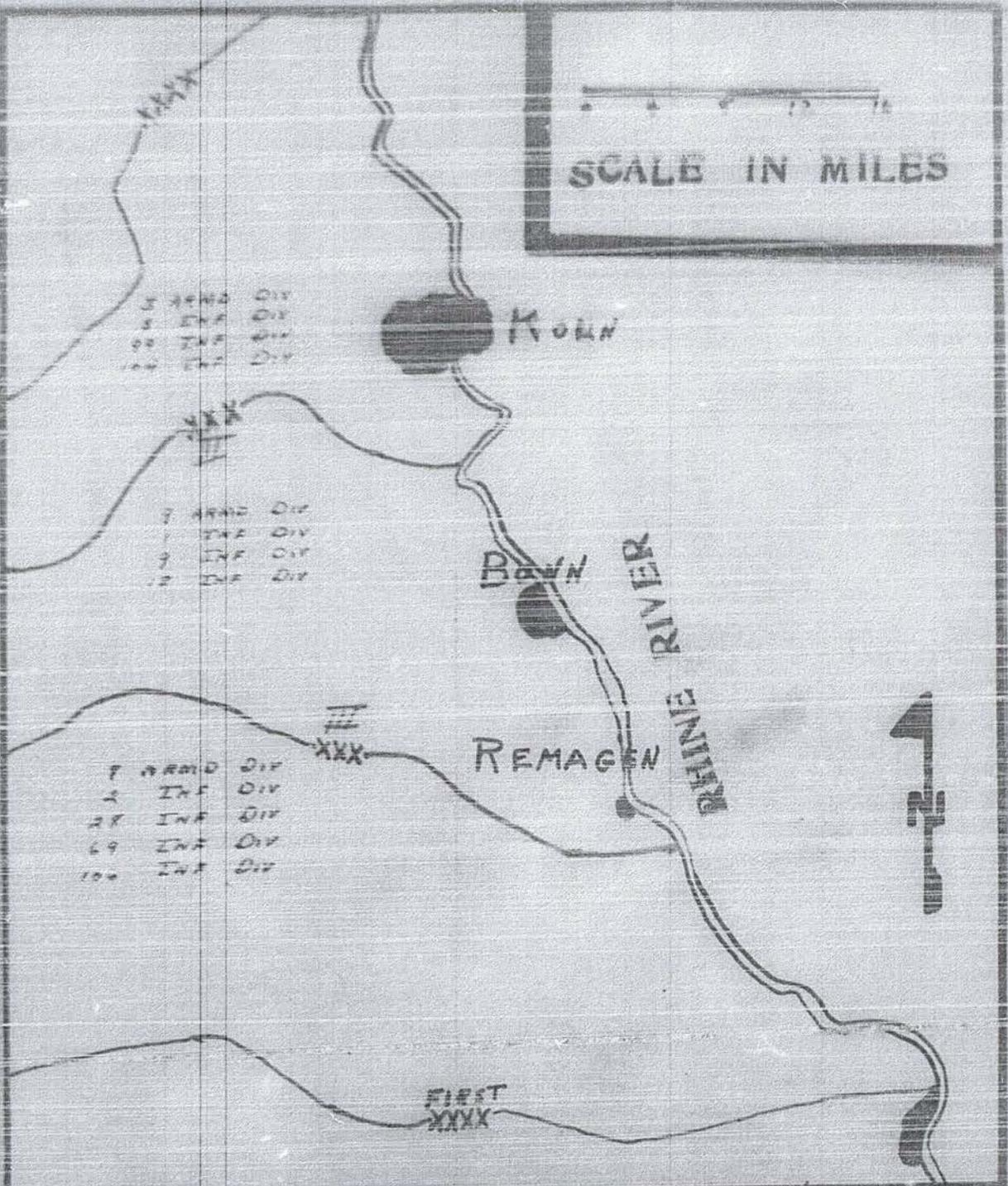
Would you like to hear the story of the Crossing of the Rhine
By the rough and ready soldiers of the famous Armored Nine?
They're the first to force its waters since that ancient by-gone day
When the armies of Napoleon stormed across with Marshal Ney.
As its lids first saw the bastions of the grim and brooding Hun
All the armies were regrouping and the war was all but won.
So they sent them to a sector in the forest of Ardennes
To a front that wasn't active, just the place to train the men.
But the wildly raging Wehrmacht turned its tigers on Bastogne
And the cleated boot fell hardest where old NINE stood all alone.
At St. Vith they struck them fiercely and at Echternach the same
And proclaimed the Ninth destroyed, nothing left but the name.
For the reddened snow told mutely of their presence on the line
In so many different places that they called the "Phantom Nine",
They threw all their hoarded power at each lightly held redoubt
And cut the Ninth to ribbons, but they couldn't drive them out.
When "Old Blood and Guts" came Northward to engage the Runstedt flanks
And relieve the Armored soldiers with their brave but thinning ranks;
They'd stood fast to end their mission, and the static Alsace Plain
Was the scene for their refitting to rejoin the fight again.
They thought long of comrades murdered by the death's head storm
troop swine
As they readied to make history at a village on the Rhine.

When their losses were recovered and the bright new armor shone
They again took battle stations south and west down Cologne,
And they started driving eastward to the stream that broke the heart
Of the legions of invaders since the time of Zoubarke,
On the armor speeded eastward through the rubble laden streets
While the waster race civilians stood in doorways waving sheets,
Till at last they reached the river where they saw the Nazi line
From the heights above Remagen, keeping watch upon the Rhine.
Cried the armored doughboy's leader, "What a sight is here below,
There's a bridge of best construction that the Krauts have yet to
blow;
We can put old MINE in headlines and its place in fame make sure,
If we take that bridge and hold it so our tanks can reach the Ruhr,"
With a will they raced upon it, and the quickly redding tide
Made the river ever hallowed to the army's armored pride,
For the hail of hostile firing halted not the thinning rank,
Till their standard waved in Erpel on the Rhineland's eastern bank,
While behind them rising nobly was the prize they's fought to win,
They had forged the final bridgehead on the Highway to Berlin.
There it stood in steely glory for the troops to cross the flood
Bought by crimson coin of soldiers, for a soldier pays with blood.
Mars must give his gory blessing to the Armored Cavaliers
'cross the stream that baffled Caesar and Augustus moved to tears.
There can be no higher honor than the orders may define
Then the laurels resting lightly on the troops that cracked the Rhine.
You can tell these armored soldiers by the look that's in their eyes
By the pride that's in their bearing as their ranks go marching by.
But the proudest of the armor in the days of Auld Lang Syne
Well I know will be the veterans of the crossing of the Rhine.

MAP A

SCALE IN MILES





MAP B
CORP BOUNDRIES & TROOPS
LIST OF FIRST U S ARMY ON
7 MARCH 1945

MAP C

ADVANCE of III CORPS
7 MARCH 1945

1st INF DIV

BONN

RHINE RIVER

SCALE

0 2 4
MILES

9 INF DIV

BAD GODESBERG

STADT MECKENHEIM

BERKUM

9th ARM'D DIV

REMAGEN

RR BRIDGE SEIZED HERE

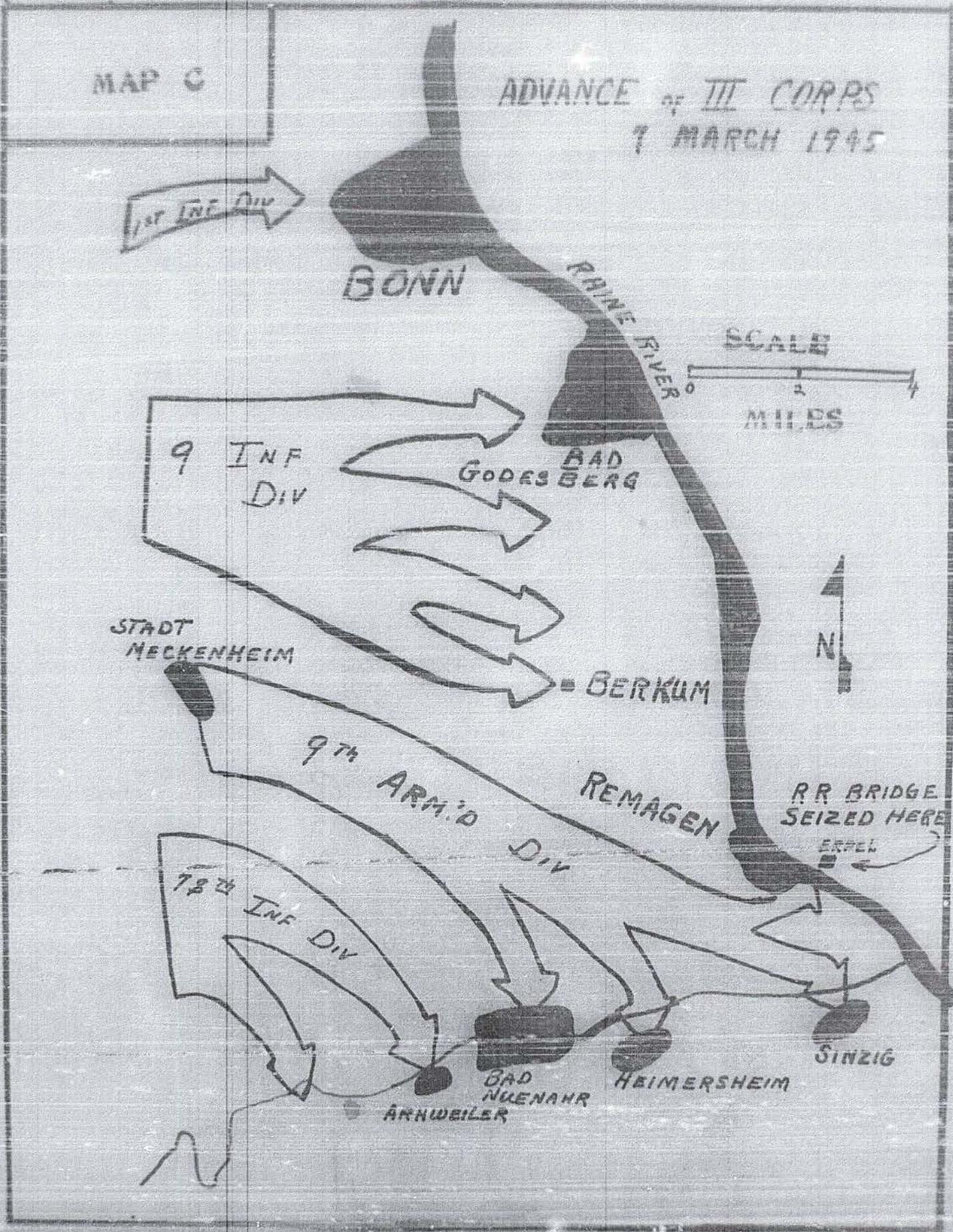
ERPEL

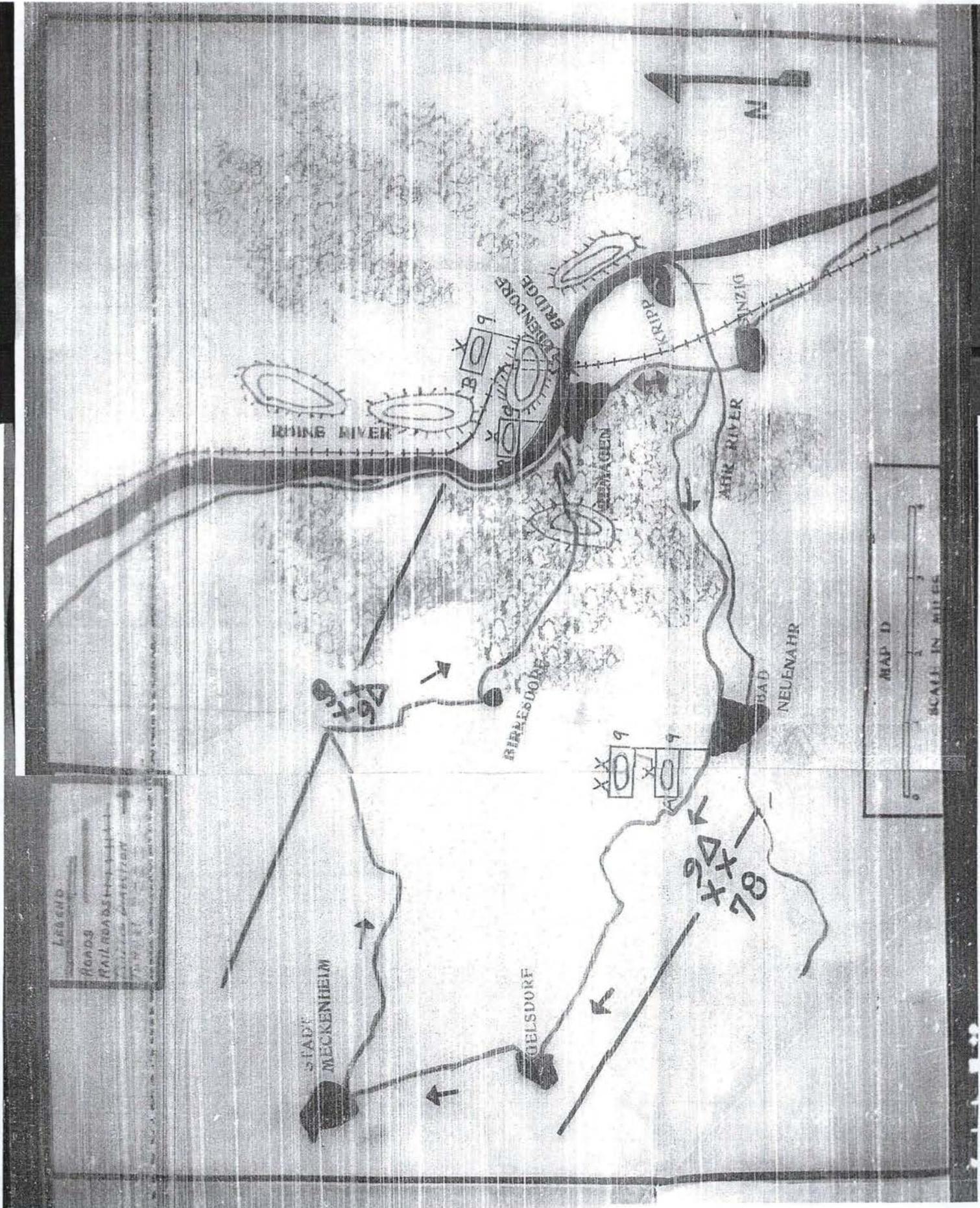
78th INF DIV

ARHWEILER
BAD NUENAUH

HEIMERSHEIM

SINZIG





Legend

Roads
RAILROADS
RIVERS

MAP D

SCALE IN MILES

RHEINE RIVER

BRISSENDORF BRIDGE

KRIIPP

SINZIG

BENNINGEN

AHR RIVER

RIRRESDORF

BAD NEUENAUHR

STADT MECKENHEIM

GELSDORF

94
X
X
78

X
9
9

N