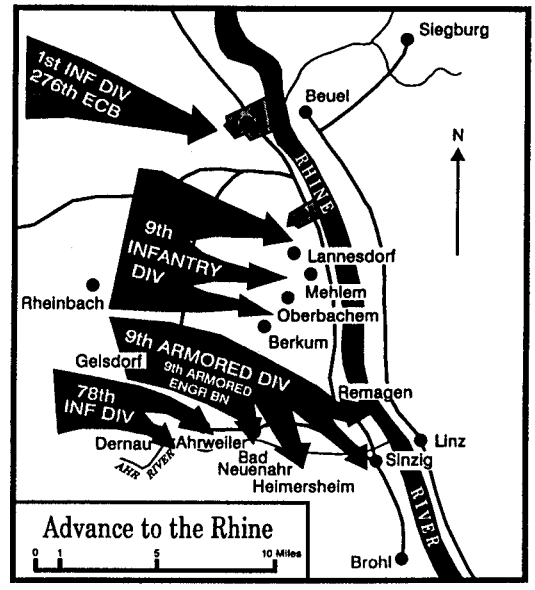
The Rhine River Crossings

by Barry W. Fowle

Each of the Allied army groups had made plans for the Rhine crossings. The emphasis of Supreme Headquarters Allied Expeditionary Force (SHAEF) planning was in the north where the Canadians and British of Field Marshal Bernard L. Montgomery's 21st Army Group were to be the first across, followed by the Ninth United States Army, also under Montgomery. Once Montgomery crossed, the rest of the American armies to the south, 12th Army Group under General Omar N. Bradley and 6th Army Group under General Jacob L. Devers, would cross.

On 7 March 1945, all that changed. The 27th Armored Infantry Battalion, Combat Command B, 9th Armored Division, discovered that the Ludendorff bridge at Remagen in the First Army area was still standing and passed the word back to the Combat Command B commander, Brigadier General William M. Hoge, a former engineer officer. General Hoge ordered the immediate capture of the bridge, and soldiers of the 27th became the first invaders since the Napoleonic era to set foot on German soil east of the Rhine. Crossings in other army areas followed before the month was over leading to the rapid defeat of Hitler's armies in a few short weeks.



Advance to the Rhine

The first engineers across the Ludendorff bridge were from Company B, 9th Armored Engineer Battalion (AEB). The 2d Platoon commander, Lieutenant Hugh B. Mott; platoon sergeant, Staff Sergeant John A. Reynolds; and a squad sergeant, Sergeant Eugene Dorland, started over to

check on the serviceability of the bridge for infantry passage. An explosion occurred about two-thirds of the way over damaging some of the decking, but the men continued, searching out explosives. They found four charges in the middle of the bridge and cut the wires. Rifle fire cut the heavy wires leading into a master switchbox, and an engineer found an unexploded 500-pound charge in a tower with the fuse cap blown, probably the result of defective TNT The team continued to examine the bridge, cutting wires where found.

As engineers arrived, they were put to work repairing the bridge and clearing mines on the east bank. By midnight, 7 March, the engineers had completed hasty repairs and traffic began to cross. Early on the 8th, engineers found and removed an additional 1,400 pounds of explosives from wells in the bridge piers. On 10 March, the 276th Engineer Combat Battalion (ECB) took over bridge maintenance.

Once the 9th Armored Division had captured and temporarily repaired the Ludendorff railway bridge, III Corps began planning for additional bridging service across the Rhine. The engineer plan, drawn up by Colonel F.R. Lyons, engineer, III Corps, called for three ferry crossings, one

The first tactical bridge across the Rhine built by the 291st Engineer Combat Battalion and two treadway companies spans the Rhine River between Remagen and Erpel, German. PFC Vernon H. Bradberry and PFC Clinton E. Farmer form a color guard, 19 March 1945.

treadway bridge, one reinforced heavy ponton bridge, and protective mine booms for the bridges. Corps gave Lieutenant Colonel Kenneth E. Fields, commander of the 1159th Engineer Combat Group (ECG), the command of the engineer units at Remagen.

The 86th Engineer Heavy Ponton Battalion, supported by a platoon from the 299th ECB, got the mission of constructing and operating three ferries across the Rhine. The first ferry, just downstream from the Ludendorff bridge, went into operation at 1100 hours on 9 March. The 86th built two additional ferries, one at Kripp upriver from Remagen and the other at Unkel just below the first ferry. It constructed all three under artillery fire, and at Kripp it encountered machine gun fire. The ferries moved vehicles across the Rhine until 13 March when an M-2 steel treadway and a reinforced heavy ponton bridge began to take most of the traffic. They operated until discontinued on 26 March.

Lieutenant Colonel David E. Pergrin's 291st ECB, supported by the 998th and 988th Engineer Treadway Bridge (ETB) Companies, got the mission of building a treadway bridge at Remagen just below the Ludendorff bridge. The battalion began work at 0830 hours on 10 March, constructing the bridge from the near shore to the far shore. Heavy artillery, sniper fire, and bombing caused 35 casualties during

The 51st Engineer Combat Battalion completed the second tactical bridge across the Rhine River at Kripp, Germany, 11 March 1945.

construction. Debris flowing against the bridge caused additional problems for the builders. The 291st completed the bridge at 1700 hours on 11 March. It was the first tactical bridge constructed across the Rhine by Allied troops.

Lieutenant Colonel Harvey R. Fraser's 51st ECB, supported by the 181st and 552d Engineer Heavy Ponton Battalions, constructed the second bridge across the Rhine. It was a reinforced heavy ponton bridge at Kripp. Bridge construction began at 1630 hours on 10 March. Initially, delays occurred because of difficulty in securing the far shore. Artillery fire and occasional bombing contributed to the problems. Major William F. Tompkins of the 552d was killed by an enemy bomb during construction. The 51st completed the bridge at 2200 hours on 11 March, and III Corps named it after Tompkins.

Once the battalions completed those two bridges, the 1159th closed the Ludendorff bridge, and Lieutenant Colonel Clayton A. Rust's 276th ECB got the job of repairing it. A technical team from the 1058th Port Construction and Repair Group assisted.

The east end of the collapsed Ludendorff railroad bridge, which spilled several hundred engineers into the Rhine River, 17 March 1945.

On the day the Ludendorff bridge collapsed, ten days after its capture, the 148th ECB began building a class 40 floating Bailey bridge at Remagen, downstream from the Ludendorff. A company of the 291st ECB assisted. The 148th started the bridge at 0730 hours on the 18th and completed it in 48 hours.

The 164th ECB constructed the protective river booms for the bridges at Remagen. It used three types of booms: an impact boom, a mine net, and a log boom. Considerable debris collected on the net boom requiring constant maintenance.

On 12 March, with the III Corps bridgehead at Remagen firmly established, First Army decided to cross VII Corps on the left of III Corps. The 78th Infantry Division, already across in the III Corps bridgehead, drove north to seize the line of the Sieg River below Bonn. The 1st Division passed through the 78th and secured its east flank. One combat command of the 3d Armored Division supported the two divisions. Colonel Mason J. Young, engineer, VII Corps, planned and supervised the construction of bridges across the Rhine in the corps zone. As the infantry cleared areas of enemy small arms and machine gun fire, engineers built bridges at desirable sites. Equipage for the construction of two M-2 steel treadway bridges and one reinforced heavy ponton bridge was available. Concurrently with the construction of each bridge, a ferry was also put into operation. The first ferry, at Rolandseck, was a standard five-ponton ferry; but the next two, at Konigswinter and at Bonn, were reinforced six-ponton ferries designed to take the M26 tank. Ferry traffic was light with loads consisting mainly of heavy tanks.

The first bridge site uncovered was at Rolandseck, at the location of an existing civilian ferry. Lieutenant Colonel John G. Shermerhorn, 1120th ECG, commanded the troops constructing two bridges. Lieutenant Colonel Julian P. Fox's 297th ECB constructed a treadway bridge on 16 March, completing the job in less than 37 hours.

The 294th ECB, under Lieutenant Colonel Charles A. Grennan, supported by the 86th, 181st, and 552d Engineer Heavy Ponton Battalions, began construction on the reinforced heavy ponton bridge at 2210 hours on 18 March. It was opened to traffic the next afternoon.

Colonel Robert Erlenkotter, 1106th ECG, commanded the troops building the last tactical bridge in the VII Corps area. The 237th ECB started the M-2 steel treadway bridge at 0615 hours on 21 March at the site of an existing ferry in Bonn. It completed the 1,308-foot bridge, the longest of the tactical bridges built across the Rhine at that time, in less than 12 hours. The excellent time was a direct result of experience from earlier bridges built.

Once VII Corps crossed the Rhine, V Corps was ordered to cross in the bridgehead area south of III Corps. There was equipage available for the construction of one M-2 steel treadway bridge. Colonel Lewis C. Patillo, engineer, V Corps, planned and supervised the crossing by V Corps engineers. Colonel Robert K. McDonough, commanding officer, 1121st ECG, was commander of troops; and Lieutenant Colonel Loren A. Jenkins' 254th ECB constructed the 1,368-foot bridge at Honningen with assistance from the 994th and 998th Engineer Treadway Bridge (ETB) Companies. The 164th constructed protective booms upstream from the bridge. Engineers started the bridge on 22 March from both banks and completed it 12 hours later. It was the longest in the First Army area.

Shortly after the capture of the Ludendorff railroad bridge, First Army decided to construct a two-way Bailey bridge on barges at Bad Godesberg, about 5 miles south of Bonn. On 12 March, Colonel John T. O'Neill, commander of the 1110th ECG, directed his engineers to find barges and prepare for construction. The 148th, 207th, and 1264th ECBs began work on 25 March; and on 6 April, the 1110th opened the bridge for traffic.

Engineers used two types of barges on the bridge: those with a 17-foot beam and 125 to 130 feet in length and those with a 17-foot beam and 220 to 270 feet in length. The capacity of the former was 250 tons, and of the latter, 1,500 to 2,000 tons. The builders used the large barges for landing bay piers and the smaller as floating piers.

Once the engineers completed all of the tactical bridges over the Rhine, and division and corps units moved forward, Army gave the 1110th ECG, supported by the 5th and 164th ECBs, the mission of maintaining and guarding the bridges.

Lieutenant General George S. Patton's Third Army was second across the Rhine. It initiated planning for crossings in the vicinity of Mainz in August 1944. Brigadier General John Conklin, the Army engineer, established a special staff section which formulated the engineer plan and estimated needed equipment and material. He set up schools to train engineer as well as Navy units in the use of landing craft on rivers. Toul, France, became the assembly point for stocks of needed bridging equipment. Third Army assembled a huge fleet of trucks to move equipment from the storage dumps at Toul, Esch, and Arlon to the Rhine, a 300-mile round trip, made longer than normal because of uncleared roads and a lack of bridges.

On 22 and 23 March, XII Corps crossed in the vicinity of Nierstein, where a good network of roads intersected and where hills and a town masked engineer approaches on the west bank. The 1135th Engineer Combat Group under Colonel Alfred Dodd Starbird (later lieutenant general) directed the operation, using 600 motorized storm boats and 300 motorized assault boats. Some 18 engineer units attached to the 1135th Group supported the crossing. It started at 2200 hours on 22 March with the 204th ECB paddling the 11th Infantry across in assault boats. By dawn, most of the 5th Infantry Division had crossed. The following evening, a bridge spanned the river; and within the next five days, engineers successfully executed three more crossings. At this point, all resistance along the Rhine on the Third Army front had collapsed.

The first bridge across the Rhine in the Third Army area was at Oppenheim. Begun by the 150th ECB at night on 22 March, the men inflated the floats in the rear and carried them forward on trucks. By daybreak, the engineers had assembled the floats into rafts and started work on the bridge at an old ferry site. By 1800 hours, the class 40, M-2 treadway bridge was taking traffic. The 87th Engineer Heavy Ponton Battalion began a second bridge on 23 March and completed the 1,280-foot class 24 bridge just after midnight. It was later reinforced to carry class 40 loads. To speed traffic at a faster rate, corps ordered another treadway bridge put in. The 150th started work on the 24th and opened the bridge at noon on 25 March.

By 27 March, five divisions—as well as supplies and necessary supporting troops—had passed over these three bridges. The entire 6th Armored Division crossed in less than 17 hours. During the period from 24 to 31 March, 60,000 vehicles crossed the bridges at Oppenheim.

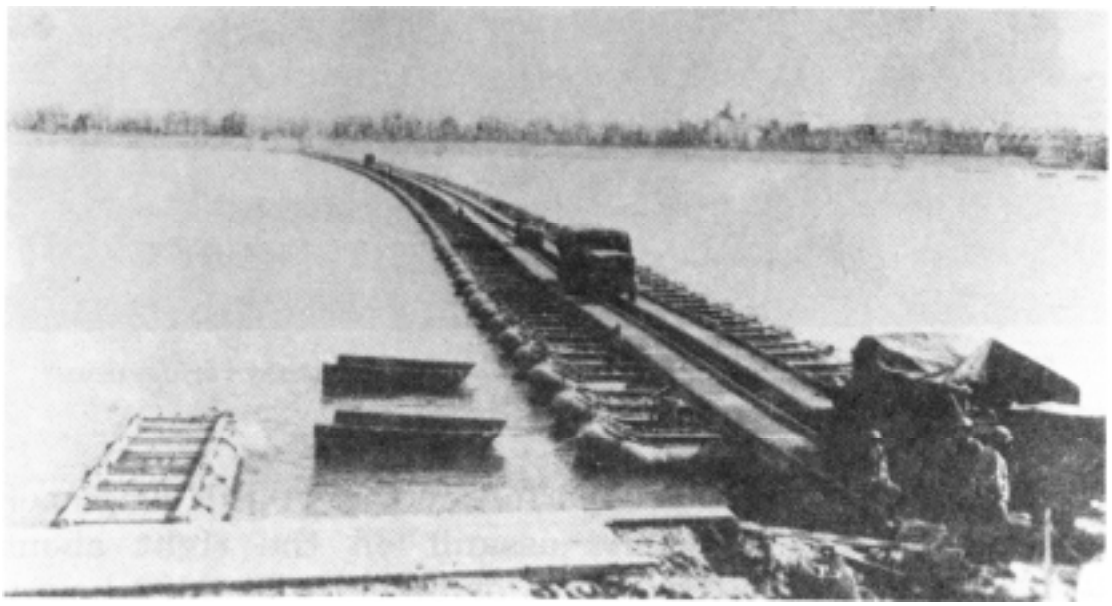
At the same time the crossing of XII Corps was under way, army made plans to support a crossing of VIII Corps in the great gorge of the Rhine which runs from Bingen to Ober Lahnstein. Ancient castles dotted the steep cliffs along the river. Crossing in this area presented a problem. The approaches to the river valley on each side were over steep, winding roads cut into the sides of the gorge, exposing any vehicle movement to the enemy on the far shore. Once reached, the river presented a problem in that it ran 6 to 8 feet per second over a rocky bottom making anchorage of floats difficult.

The VIII Corps plan called for a crossing to be made by the 87th Infantry Division in paddled assault boats on 25 March, with one run in the vicinity of Rhens and another at Boppard, the main site. The initial assault wave crossed successfully at both areas. Strong enemy resistance was encountered at Rhens and this site was abandoned when the Boppard crossing proved less difficult. Engineers constructed infantry support rafts to carry light vehicles and M-2 treadway rafts to carry tanks. An M-2 treadway bridge was started by the 44th ECB at 0800 hours on the morning of the assault and completed in less than 26 hours.

While this operation was under way, VIII Corps started another crossing the night of 25–26 March at St. Goar and Oberwesel. As with the other crossings, paddled assault boats made the initial crossing with powered assault boats carrying the troops in the succeeding waves. Infantry cleared St. Goar by the morning of 27 March, and the 243d ECB started a treadway bridge. It completed the 828-foot, class 40 treadway bridge 36 hours later. Again, the swift current and a poor river bottom caused problems with anchorage.

The XX Corps decided on two assault crossings at Mainz in a difficult and strongly resisted operation. The initial waves of the 80th Infantry Division crossed secretly in boats paddled by the 135th ECB, while the succeeding waves crossed in double assault boats and storm boats powered with outboard

motors. From the time the first craft went into operation until the treadway bridge was open some 34 hours later, the Navy transported an estimated 7,000 troops and about 600 vehicles, a magnificent job considering the river was about 2,000 feet wide at Mainz.



The 1,896-foot treadway bridge was built under fire at Mainz, Germany, 23 March 1945.

The 160th ECB, commanded by Lieutenant Colonel J. H. Jackson, began construction of an M-2 treadway bridge at Mainz on 28 March. In spite of enemy artillery action and with the help of the 997th Engineer Treadway Bridge Company, it completed the bridge in 22 hours. The engineers used 154 pontons in completing the 1,896-foot bridge, the longest tactical bridge built in the European theater of operations. In addition to serving the 80th Infantry Division, it served the entire XX Corps in crossing the Rhine. It also ended the assault phase of the Rhine operations in the Third Army area.

Ninth Army began its first crossing just south of Wesel at 0200 hours on 24 March after one of the heaviest artillery barrages of the war. The 1153d Engineer Combat Group ferried most of the 30th Infantry Division across the Rhine in four hours, using assault and storm boats. By noon, the 1153d had two Bailey rafts and several treadway rafts in operation, moving tanks across the river.

The 160th Engineer Combat Battalion built the longest tactical bridge across the Rhine at Mainz, Germany, 23 March 1945.

The 79th Division, supported by the 1148th Engineer Combat Group, began its assault on the right about 0330 hours and crossed almost as quickly. By 0600 hours, one regiment of the 79th was across, and by 1345 hours, the 149th and 187th ECBs had ferried across the last regiment. Shortly after the initial crossings, landing vehicles, tracked (LVTs) and 2 l/2-ton amphibious trucks (DUKWs) began transporting ammunition and supplies. By early afternoon, 24 landing craft, vehicle and personnel (LCVPs) and 20 landing craft, medium (LCMs) were in operation transporting vehicles, armor, and artillery across.

Bridge construction began earlier than planned on 24 March because of the light enemy resistance encountered. In the 79th Division zone at Milchplatz, the 208th ECB, under the 1103d ECG, built a 1,260-foot M-2 treadway bridge. Three runaway LCMs and enemy artillery fire delayed completion until 1800 hours on 26 March. In the 30th Division area, corps units built three additional bridges before army engineers took over bridging operations. Construction of a l,ll0-foot M-l treadway bridge was begun at 0630 hours on 24 March and opened to traffic 26 hours later. A 1,152-foot, 25-ton ponton bridge at Wallach, begun at 0600 on 24 March, opened to traffic at 0630 hours the next morning. Work on the last of the three bridges in the 30th Division area

Overnight the engineers built this ponton bridge spanning the Rhine River in the vicinity of Wallach, Germany, 25 March 1945.

began at 0630 hours on 24 March. This M-2 treadway opened for traffic at 1600 hours the same day, but a Bailey raft loaded with an M4 tank knocked it out of service until just after midnight.

Army engineer units rapidly relieved corps engineers of all responsibility for bridging the Rhine and began three floating Bailey bridges, a 25-ton ponton bridge, a treadway bridge, a class 70 ferry, and the necessary booms for bridge protection. The 172d ECB, supported by one company of the 278th ECB, began construction of a class 40 Bailey bridge on 26 March at Mehrum. At Wallach, the 1143d ECG, with its 277th, 336th, and 244th ECBs, got the mission of constructing a class 40 Bailey bridge and three protective booms. The 277th ECB built the 1,739-foot bridge in three days, opening it to traffic on 29 March.

Army assigned the 1117th ECG the missions of constructing a class 40 M-2 floating treadway, a class 36, 25-ton ponton, and a class 40 Bailey bridge at Wesel. In addition, the battalion had to construct and operate a class 70 ponton ferry, and install six booms. The 1253d ECB built and maintained the access roads to the bridge sites, and the 248th ECB constructed the M-2 treadway bridge and class 70 ponton ferry. Engineers began work on the 1,284-foot treadway at 1505 hours on 25 March and completed it in 13 hours.

The Ninth Army at Wesel cross the Rhine on a ponton bridge built by the 167th Engineer Combat Battalion, 1117th Engineer Combat Group.

The 551st Heavy Ponton Battalion, with Companies B and C of the 1253d ECB, constructed a 25-ton ponton bridge. They started the bridge at 2000 hours on 25 March and completed it in less than 23 hours. The 167th ECB built the third Bailey bridge. Construction of the 1,415-foot bridge began at 0600 hours on 26 March and opened to traffic at 1900 hours the next day.

The 1146th ECG got the mission of constructing a two-way class 40, one-way class 70, pile trestle, fixed bridge over the Rhine and Lippe rivers at Wesel. The 250th and 252d ECBs, supported by the 1053d and 1058th Port Construction and Repair Groups, built the Rhine River portion of the bridge. The 1256th ECB constructed the Lippe River bridge. The 1,700-foot bridge was finished after 21 days on 18 April.

In the Seventh Army area, D-day was 26 March with the first crossing of the Rhine scheduled for 0230 hours. On the right or south, the 3d Infantry Division made the main assault crossing in the Bobenheim area after a heavy artillery preparation. To the north, the 45th Division crossed in the Hamm-Rhein Durkheim area without an artillery preparation. Engineers encountered some resistance in the initial wave, but more in subsequent waves, resulting in the loss of nearly half the assault craft.

Engineers in both assault zones began construction of floating bridges as soon as small arms fire ceased to harass the men at the sites. The 540th Engineer Combat Group supported the 3d Infantry Division by constructing and operating two heavy ponton rafts and two infantry support rafts. By the end of the first day, the group had completed a 948-foot treadway bridge and a 1,040-foot heavy ponton bridge, the latter in just over nine hours.

In the 45th Infantry Division area, the 40th Engineer Combat Group operated two heavy ponton rafts and two infantry support rafts. Engineers started a heavy ponton bridge and a floating treadway bridge on 26 March and completed them the next day.

By 31 March 1945, all four American armies had crossed the Rhine River. The last great natural barrier protecting the German heartland had fallen. As in all other ground operations in Europe, engineers played a critical role in the planning and successful execution of the assault crossings. In 40 days, Germany would surrender, and the war in Europe would end.

Sources for Further Reading

For a general overview of the Rhine River crossings, read the representative chapters in *United States Army in World War II, The Last Offensive* Washington, DC: Office of the Chief of Military History, 1973).

Ken Hechler's *The Bridge at Remagen* (New York: Ballantine Books, 1957) gives a good description of the action leading up to Remagen and the crossing of the Rhine.

For specifics on engineers bridging the Rhine, see: *The Rhine Crossing: Twelfth Army Group Engineer Operations* by General PH. Timothy; *Report of the Rhine River Crossings: First United States Army* (Office of the Engineer, First United States Army, May, 1945); *Crossing of the Rhine River by Third U.S. Army* (Office of the Engineer); *Engineer Operations in the Rhine Crossing; Ninth U.S. Army* (Ninth U.S. Army, June *30,* 1945); and *Report of Operations: The Seventh United States Army in France and Germany* *3* volumes (Heidelberg Gutenberg Printing Company, Heidelberg, Germany, May 1946).