The 631st Engineer Light Equipment Company

My Father and Other US Army Engineers in World War II



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Like so many other veterans of World War II, my father, William T. Kepp, known as Bill, seldom talked much about the war. When asked directly what he had done in the army, he would simply say something like, "Oh, I was in charge of getting heavy equipment where it needed to go for building roads and bridges."

His summary was right on the mark. Researching his war experiences many years after his death, I learned that my father served in France, Belgium, Germany, and the Philippines with a specialized unit called the 631st Engineer Light Equipment Company. The 631st's work in building and rebuilding roads and bridges behind the front lines in western Europe formed part of the indispensable but relatively little-known role that Allied army engineers played in winning the war.

By the time Germany surrendered in May 1945, one in every ten men in the European theater of operations was a combat engineer—more than 320,000 of them.¹ Over the roads and bridges they built, repaired, or cleared of land mines passed soldiers on foot, in trucks, and on tanks. More trucks hauled over them every imaginable sort of supply, from field artillery guns to water purification equipment, from tent poles to typewriters, from gasoline to the nonperishable boxed meals that became infamous as K rations. Without roads and bridges, the Allies could not have moved farther than their beachheads when they invaded France in June 1944. Without engineers—just as without infantrymen, paratroopers, cooks, clerks, quartermasters, artillerymen, radio operators, and many others—the front could not have advanced.

The US Army Corps of Engineers constituted the 631st Engineer Light Equipment Company on February 25, 1943, and activated it at Camp Breckinridge, Kentucky, the following May 8. The word *light* in the name seems odd at first, because there was nothing lightweight about the company's tractors, rock crushers, cranes, and bulldozers. But when the Corps of Engineers proposed creating such companies in August 1942, the name implied that the unit would be "light on its feet"—small and able to move around quickly. With trained operators maintaining a fleet of trucks and construction machines, the company would supply nearby combat engineer battalions with specialists and equipment as needed, thereby avoiding duplication and increasing the engineers' efficiency and flexibility on the battlefield.²

The War Department authorized the formation of light equipment companies only in January 1943, so the 631st must have been one of the earliest ones created. War Department planners defined the company in a "Table of Organization and Equipment," or T/OE: "The engineer light equipment company is a flexible equipment pool with operators to augment division equipment for construction and demolition work. This unit can work in shifts giving 24-hour performance." I don't know how many light equipment companies existed altogether, but they seem to have been relatively few. Normally, the T/OE said, one light equipment company would meet the needs of six engineer combat battalions. The 631st seems to have been the only light equipment company attached to its engineer group.³

The T/OE provided an astonishingly detailed list of the personnel, vehicles, machines, and supplies each company was to have. The unit's commander was to be a captain, under whom would serve three platoon leaders, two of them first lieutenants and one a second lieutenant. The equipment supervisor would be a master sergeant, and the list continues with other sergeants, two corporals (one the company clerk, whom we no doubt have to thank for the typewritten records that now exist), and 104 privates, for a total of 118 men. The privates were assigned specialties such as "Driver, truck, heavy," "Operator, road grader," "Mechanic, tractor," and "Clerk, automobile parts."

Among the heavy equipment assigned to a light equipment company, the T/OE listed trucks ranging from one-half ton to a six-ton "prime mover," several tractors and road graders, a truck-mounted crane, and, more ominously, armaments including twelve grenade launchers, five .50-caliber machine guns, and five anti-tank rocket launchers, or bazookas. Nearly every member of the company would be issued a .30-caliber M1 carbine. No detail was overlooked. Among other things, the company got 56 canvas water buckets, 19 wrist compasses, 11 entrenching axes, 4 hair clippers, 3 steel tape measures, and 1 latrine screen. Each enlisted man received a canteen, a field pack, a pair of rubber hip boots, and a bayonet knife.

When the 631st formed at Camp Breckinridge, its commanding officer was in reality a first lieutenant with about a year's experience as an officer. Its other four commissioned officers, including my father, were all second lieutenants. Two of the others were as green as my dad was, all three newly minted by the Corps of Engineers' Officer Candidate School (OCS) at Fort Belvoir, Virginia. Fort Belvoir, which had been an army engineer training site since before World War I, became the Corps of Engineers' main training center before and during World War II.

Having lived from the age of twelve in the small central-Florida town of Wauchula, my father enlisted in the army as a private at Camp Blanding, Florida, near St. Augustine, on July 20, 1942, less than a week after his twenty-eighth birthday. Camp Blanding was one of the largest army training bases in the country, so he probably did his basic training there. (I have no record of this; most of what I know about my father's service comes from military records, with their inevitable gaps.) Next came OCS, for which he would have qualified by scoring among roughly the top one-third of inductees on the Army General Classification Test. Unlike many other new soldiers at the time, Dad was a high-school graduate who could read and write well.

Even so, it was relatively unusual for someone with only a high-school diploma to be selected for Engineer OCS. The Corps of Engineers looked first for candidates who held college degrees, preferably in engineering or some related subject, and next for men who had at least some college education. Only then, driven by the pressing need for more officers as the war-time army grew, did the Corps accept men of "intelligence and native ability" who had completed only high school.⁴ At the time my father attended Engineer OCS, that would have been roughly 25 to 30 percent of his candidate class.



Bill Kepp in uniform, October 18, 1942.

One of his previous jobs might have worked in his favor at selection time. His discharge record lists his civilian occupation as "manager retail automotive service." The Corps of Engineers, short on specialists, was looking for men with any relevant skill, and perhaps it was enough that someone had managed a gas station.

The twelve-week Engineer OCS course included both academic and practical training but emphasized leadership ability; its goal was to "teach the candidate how to lead enlisted men in the performance of engineer duties." In order to graduate, the candidate had to score well "in both academic subjects and leadership qualities." But the course was so short that "the graduate of OCS was not expected to know much." The new officers would gain more knowledge and experience later, while training with their units.⁵

On February 3, 1943, Bill Kepp became one among the roughly 75 percent of candidates in his OCS class to graduate and be commissioned as second lieutenants in the US Army. His discharge record gives his military occupation specialty as "engineering equipment maintenance and repair officer." Also graduating that day were Eugene Evans and Albert Manovill, who, along with my father, were about to be assigned to the newly activated 631st. Lieutenants Kepp and Evans would be the only two commissioned officers to serve continuously with the 631st from its formation to the end of the war.

The commissioned officers were all present at Camp Breckinridge by May 8, 1943, together with fourteen noncommissioned officers assigned to the 631st, forming its core: eleven sergeants, two technicians, and a corporal. The sergeants and technicians probably had the experience and training needed to instruct both the new inductees and the lieutenants. From some hard-to-read handwritten records, it appears that additional groups of enlisted men joined the company on May 11 and 19 and at intervals afterward. One of them was Frank Timmer, a veteran of the 631st with whom I spoke by telephone in 2014–2016. In May 1943 he was eighteen years old, newly graduated from high school, drafted into the army, and sent immediately to Camp Breckinridge for basic training with the rest of the 631st. His discharge papers suggest that, much like my father, he was chosen for engineer training because, as he put it, he had "six to eight months' experience working part-time as an auto mechanic."

Camp Breckinridge was almost as new as the light equipment company itself. Construction began on the thirty-six-thousand-acre camp in 1942 and continued throughout the war, part of the Corps of Engineers' vast job of building barracks, airfields, munitions and ordnance plants, hospitals, supply depots, and much more in the United States and abroad. Breckinridge served as a training center for as many as forty thousand soldiers at a time, and from 1943 to 1946 the army also used it as a prisoner-of-war camp for German soldiers. Frank Timmer remembered seeing POWs marching in the prison section of the camp, counting cadence and looking "big, tough, and intimidating." He thought they had been troopers of Hitler's Afrika Korps, taken prisoner during the Allies' North Africa campaign.

The few records I was able to obtain for the 631st during its time at Camp Breckinridge are pages from daily "morning reports" kept by the company's commanding officer (CO). They reveal little about the engineers' training, instead recording mostly information about personnel. Typically, the morning reports describe each day's activities as "usual camp duties." Only occasionally did the CO mention a specific training event. On July 27, 1943, for example, he wrote, "Left camp for bivouac, marched 6 miles, clear hot weather, arrived at bivouac 1500 [hours], morale excellent." On October 19, "this company moved out to bivouac area to improve 3 miles of road." One big training action saw the 631st travel on November 17 and 18, presumably by truck, to an army maneuver area at Lebanon, Tennessee. There the men constructed a runway at the Lebanon airfield, returning to Breckinridge on December 15.

As Frank Timmer recalled—and as army histories describe for engineers in general—the enlisted men of the 631st underwent basic training at Breckinridge as a unit. The Corps of Engineers gave them an overview of their mission in its book *Basic Field Manual: Engineer Soldier's Handbook*, published in June 1943. The first paragraph, headed "What It Means to Be an Engineer," told the new recruit:

"You are an engineer. You are going to build bridges and blow them up. You are going to stop tanks and destroy them. You are going to build roads, airfields, and buildings. You are going to construct fortifications. You are going to fight with many kinds of weapons. You are going to make sure that our own troops move ahead against all opposition, and you are going to see to it that enemy obstacles do not interfere with our advance. You are an engineer."

For about twelve weeks the men of the 631st spent most of their time marching in close-order drill, exercising to build strength and stamina, and, Timmer said, learning to follow orders immediately and without question. They learned to shoot rifles, handle grenades and land mines, and use explosives. Among other things, Timmer remembered learning how to cut a block of TNT and not feel fear while hitting it with a hammer. Once, his squad created a tank trap by drilling holes in the ground with an earth auger and detonating explosives in the holes, leaving craters that could have blocked the advance of oncoming tanks. The blast was rumored to have ruptured the camp's sewer line.

After basic training, following the standard pattern for engineer companies, the men began learning the kinds of work they would do as engineers, such as repairing roads and building fixed and floating bridges.⁶ Timmer remembered training with the types of machinery the company would use once it was shipped overseas. Often, men were sent elsewhere for specialized education. Timmer himself spent several months at the Atlanta



Army engineers being trained as specialists in auto mechanics, Fort Belvoir, Virginia. (*Corps of Engineers: Troops and Equipment*, 248.)

Ordnance Depot attending a course in servicing diesel tractors and bulldozers, from which he emerged as a Technician Grade 4.

On September 27, the morning report shows, two privates and a corporal returned from the Engineer Replacement Training Center at Fort Belvoir. The record says nothing about what they learned there, but at Belvoir the Corps of Engineers conducted five-week courses training men to specialize in everything from driving trucks and operating heavy construction equipment to making maps, creating camouflage, and painting signs. On October 29 my father left Breckinridge at 0600 hours for "Engr Sch Fort Belvoir," returning on December 2. I wish I knew what extra training he received there.

I do know that he served as acting CO of the company for about a month in the winter of 1943–44. The morning report for December 22 shows that the original commanding officer had gone into the hospital, and apparently he never returned to the unit. On the December 31 roster, his name is crossed out and replaced by that of a new officer, Captain Bryce Black. But Black seems not to have arrived at Camp Breckinridge until January 31, when the log shows him assuming command and my father being relieved of that duty. Perusing the morning reports for the intervening month, I felt a thrill the first time I saw my dad's handwritten signature at the bottom as "Acting CO."

IN MARCH 1944, after ten months of training, the 631st finally received orders to ship overseas. Captain Black wrote in his morning report for March 9, "Left Camp Breckinridge Ky 1845 via Troop Train #9661." Fortyone hours later the men arrived at Camp Myles Standish, Massachusetts. From there, on March 24, they boarded the troop ship *James Parker* for England. After a rough twelve-day crossing, they landed on April 4 at Newport, Wales, "with all personnel in good condition."

The next day the men boarded another troop train for the relatively short trip to Chiseldon Camp, near the town of Swindon in Wiltshire, England. Chiseldon Camp was an important training facility for soldiers during both the First and Second World Wars. Until 1942 it hosted only British forces, but late that year it became the first camp in Britain to receive regular American troops. Chiseldon also became home to a 750-bed American hospital, built in the spring of 1943, where many casualties would be treated after the Allies invaded France.⁷

Most of my information about the 631st from this time forward comes from the company's "after action" reports—daily logs kept by the commanding officer telling briefly where the unit went and what it did every day from June 1944 through April 1945, the months when the US Army was officially in "action," or combat, in Europe. The first monthly afteraction report, for June 1944, briefly summarizes the 631st's earlier time at Chiseldon.

Upon arriving there, the CO recorded, the men began "setting up kitchen, supply and command post." On April 18 they were put on alert "for departure to the combat zone." Around the same time, the unit received its engineer and ordnance equipment, including twenty-five trucks ranging from quarter-ton cargo trucks to a ten-ton wrecker, six air compressors, six road graders, six tractors, and two truck-mounted cranes. Frank Timmer said that members of the 631st convoyed north to Birmingham to get the equipment and drove it back to Chiseldon. The slower-moving vehicles must have been carried on the beds of the trucks, the same way they would be transported later in the war.

Another veteran of the 631st, Gene Fiducia, remembered Chiseldon Camp clearly. Before his death in 2009, he posted his recollections on an engineer website, and his page there was the first search result I got when I began this project.⁸ I still remember the excitement I felt when I scrolled down the page and saw a photo of some men in uniform standing in front of an enormous rock crusher (next page). There, on the far right of the back row, stood my father, complete with a name label over his head. It was the first photo I had ever seen of him in Europe.



Engineers of the 631st pose with one of their rock crushers. (Courtesy Deborah Fiducia.)

Fiducia described his two months at Chiseldon as an interesting and exciting time. "The preparation consisted of many dry runs packing and unpacking and driving the back roads in England. [There were] talks given to us by our officers, who had no idea of what to expect and had not experienced preparing for an invasion. They knew about prophylactic kits but little else."

At Chiseldon, wrote Fiducia, "we lived in pyramid tents with a soft coal (coke) burning stove in the center which had a small chimney that vented at the top of the tent flap. We were issued impregnated clothing and an armband to detect gas." The armbands proved useful, for the nights were foggy and cold, and in spite of its vent pipe, Fiducia's tent was almost airtight with all its flaps closed. At first, he and his tent mates awoke in the mornings feeling "dizzy and woozy." Then, he said, "I noticed that my armband had turned red, as it should in the presence of gas, and realized that we were being gassed by our coke-burning stove. The next night we slept with the tent flaps open at the entrance, which ventilated our tent properly."

Fiducia recalled that Chiseldon Camp offered facilities where the men could watch movies and hear lectures when off duty, and "we were served the best food we ever had, including steak, fresh milk and fruits, fresh eggs, almost anything we wanted."

When on duty, the engineers underwent serious training designed to prepare them for the possibility of having to engage in combat. Frank Timmer told me, for example, how he and his fellow engineers were taken out into a field and taught how to hunker in foxholes while tanks ran over them. Each tank had a trapdoor in its underside, he said, so that it could rescue soldiers stranded in foxholes during battle without exposing them to enemy fire.

On May 3–5, the CO wrote in his June after-action report, "a mine school was conducted by the 1110th Engineer Combat Group for two officers and fifty-two enlisted men in the uses of American, British, German, and Foreign mines and booby traps." A few days later, ten enlisted men from the 631st were detached to the 300th Engineer Combat Battalion (ECB) for training in the use of .50-caliber anti-aircraft machine guns.

By this time the 631st had been formally attached to the 1110th Engineer Combat Group (ECG), with which it would work throughout the war in Europe. Combat engineer groups were another army innovation in World War II, each one a "tactical headquarters" to which several engineer combat battalions and other units could be attached as needed, rather than permanently. ECGs "allowed the rapid transfer of specialty units in and out of the command for specific tasks."⁹ The 631st was one such specialty unit; others included light and heavy pontoon battalions, dump truck companies, and camouflage companies. At Chiseldon Camp, besides the 631st, the 1110th encompassed the 148th, 207th, and 300th Engineer Combat Battalions and the 989th Engineer Treadway Bridge Company.

The men's training at Chiseldon also involved engineering work. During May and June the 631st "conducted schools for the combat battalions to train operators for road graders, D-7 tractors, shovels, and road scrapers." On May 7, one officer and four enlisted men from the 631st "went on detached service to the 512th Engineer Light Ponton company for instructions in waterproofing equipment" (the army used *ponton*, the French spelling of *pontoon*). Waterproofing of vehicles and heavy machinery with a "gooey compound of grease, lime, and asbestos fibers" was a key task all engineers would have to carry out before loading their equipment to cross the English Channel.¹⁰ Gene Fiducia remembered: "Every vent on the engine had to be covered with a special compound, and all air intakes had to be vented by a flexible pipe attached so that it was above the vehicle, so that we could drive through water and not flood the engine." Once on shore, the men would have to remove the waterproofing quickly before the vehicles could be driven toward the front.

That moment was nearly at hand. On June 3, 1944, the company commander ordered his platoon leaders to "divide the unit into three increments for the coming operations." The men would cross the English Channel to Normandy in three groups, sailing several days apart. They would land at what the US Army had code-named Utah Beach. The army's VII Corps, part of First Army under General Omar Bradley, had been tasked with capturing Utah Beach, and the 631st, together with the 1110th ECG, was attached to VII Corps for the Normandy operation.

By June 5 the men had finished packing, crating, and waterproofing their equipment, and on June 11 the first detachment received orders to depart for Camp Peddlehenton in Dorset, England, eighty miles away, at ten o'clock in the morning. That first group, consisting of forty-one enlisted men—Frank Timmer and Gene Fiducia among them—was led by my father and a master sergeant named James P. Keeley Jr. Together with Eugene Evans, my father had been promoted to first lieutenant on May 16.

From Camp Peddlehenton, the first increment traveled to Portland Harbour, site of a large British naval base, where the men loaded their gear and equipment—about a third of that allotted to the 631st—onto three boats of the type called "landing craft, tank," or LCT. The LCT was an awkward, flat-bottomed craft, capable of little more than three knots (three nautical miles an hour) in a heavy sea.¹¹ But with a shallow draft and a hinged ramp at the bow, it could come in close to shore and offload troops and equipment, including tanks, into shallow water or even directly onto the beach. Gene Fiducia remembered being issued seasickness pills before sailing. He was told to take one upon boarding the LCT and another four hours later. "I was so frightened," he wrote, "that I took the first tablet and forgot to take any more, but I did not get sea sick."

Neither the morning reports nor the after-action reports reveal exactly when the first increment left Portland for France, and the two sources are slightly contradictory about when the group landed. The summary section of the June after-action report says, "The [first] detachment arrived at Utah beach, France, on the 16th of June 1944 at 1430 hours." The morning report for July 5, 1944, agrees, saying retrospectively that "Detachment A left Camp Peddlehenton 1800 [hours] enroute to France as of 14 June 44" and "arrived Beaumont France [the group's first bivouac] 1800 as of 16 June 44." Yet on June 15, when the CO began keeping daily log entries for the after-action reports, he wrote that the unit was already bivouacked in France on the fifteenth itself.

Perhaps the discrepancy lies in a change of command. In late September 1944 Captain Black was transferred to the 1110th ECG's headquarters staff and was replaced by Captain John Conchelos, who would stay with the 631st through the rest of the war. It appears to have been Conchelos who prepared the after-action reports for June through September, having them typewritten as a single document. Perhaps he was working with unclear or internally contradictory records made during a hectic time.



Map 1. Route of the 631st Engineer Light Equipment Company through western Europe, 1944–45. National borders are pre–World War II. Map by W. Powers.

In any case, the 631st was relatively lucky to have landed at Utah Beach, the westernmost of the five French beaches targeted by Allied troops on D-Day, June 6. Situated at the eastern base of Normandy's Cotentin Peninsula, it lay just west of the better-known and harder won Omaha Beach (map 3). Army engineers played vital parts in taking both beaches on D-Day, destroying German-emplaced obstacles, clearing mine fields, grading roads off beaches, and fighting as infantrymen when needed.¹² But Utah Beach, flatter and less heavily defended than Omaha, had fallen to the Americans more quickly and with fewer casualties than Omaha did. Even before the infantry landed, paratroopers of the 82nd Airborne and 101st Airborne, despite taking heavy losses during a predawn drop, had captured, respectively, the key coastal towns of Pouppeville and Ste.-Mère-Église. By the end of the day on June 6, engineers had already laid a "crude sod airstrip" alongside Utah Beach.¹³ Once the first group of the 631st arrived on the French coast, the after-action report says, its "equipment was unloaded and driven through the shallow water up to and on the beachhead. Detachment then proceeded to VII Corps transit area, where dewaterproofing was performed, then proceeding to Beaumont, France, where the detachment set up bivouac." The village of Beaumont lay inland roughly ten miles southwest of the beach. The "front lines were about three miles from this location," the CO noted, adding that "heavy concentrations of enemy artillery fire were encountered in the bivouac area and a more secure location was being reconnoitered." Nevertheless, the 631st immediately began "dispatching equipment to combat [engineer] battalions to help perform their missions."

The second increment followed via a different marshaling area, landed at Utah Beach "without incident" on June 18, and joined the first group at Beaumont. The third detachment of the 631st, forty-five men under Lieutenant Evans, left Southampton, England, aboard a US Liberty ship on



Map 2. The 631st's route through Normandy and the rest of northern France, June–September 1944. The boxed area is enlarged in map 3. Map by W. Powers.

June 19 but immediately moved into a column of ships "awaiting favorable weather on the beachhead." The ship sat at anchor for four days while a powerful storm, exceptionally rare for June, battered the English Channel. It utterly destroyed a "mulberry," or man-made harbor, that engineers had built at Omaha Beach, largely from prefabricated parts floated across the channel after D-Day in a remarkable feat of planning and rapid construction. It had begun operating only two days earlier. Although a second mulberry, at British-held Gold Beach, was salvageable after the storm, the loss of the Omaha harbor was disastrous. The Allies held no other French ports, so capture of the port city of Cherbourg, at the tip of the Cotentin Peninsula—already a high priority—became all the more crucial.

Once the storm relented, Detachment C moved out on June 24 and arrived at Utah Beach the next day. The men unloaded their vehicles onto rafts, then drove them off into shallow water and onto the beach. Their safe landing was another episode in good luck for the 631st, in contrast to the disaster that befell two of their fellow units in the 1110th engineer group. Two hundred men of the 300th ECB and an unknown number from the 207th, together with 145 US Navy seamen, left England late on the night of June 18 and arrived about a mile off Utah Beach during the storm. Given orders to land, they were heading for shore when their ship struck an underwater mine and exploded, breaking in two at its center. Along with 117 sailors who died in the explosion, more than 90 engineers of the 300th died and at least 90 others were injured or reported as missing in action. Altogether, the 625-man battalion lost nearly a third of its engineers that day. As many as fourteen men from the 207th died as well.¹⁴ Nearly two weeks after the invasion began, Utah Beach was hardly a safe place to be.

With the third increment ashore, the whole of the 631st met up at a new bivouac near the village of Picauville. At each bivouac, Frank Timmer, said, the men put up a mess tent and a "company" tent, for the officers and the company clerk, and dug a latrine. The officers slept in their own tent while the enlisted men slept in foxholes with pup tents set up over them.

Judging from their names, the men who gathered at Picauville formed a genealogical cross section of white America at the time (the army still segregated African Americans during World War II, as it did Japanese Americans). Among the surnames listed in the after-action reports are Dawson, Pearson, and Taylor; De Luca, Fiore, and Vozza; Petersen, Sonnenberg, and Swanson; Kuschensky, Yaroscak, and Zukowski; Callahan, Daly, and McGaughan; Abramson, Goldhirsch, and Tarnow; and Faust, Kessler, and Schulte. Probably some of these men had lived their lives until joining the army in fairly homogeneous ethnic communities, never knowing many people of other national origins. Now they were all just American soldiers, sleeping two to a foxhole and grousing over the same cold K rations day after day.



Map 3. The 631st's route through the Cotentin Peninsula, June–August 1944. Map by W. Powers.

By THE TIME THE 631ST ARRIVED in France on June 16, US First Army had already seen heavy fighting as it tried to move beyond its beachheads. Although Allied bombers and French saboteurs, before D-Day, had almost completely destroyed the Germans' transportation system in France bridges, railways, and airfields—Hitler's armies had taken full defensive advantage of a man-made feature of the landscape across much of Normandy, including the Cotentin Peninsula. For centuries Norman farmers had enclosed every farm field, pasture, and orchard inside hedgerows, or walls of dense vegetation rising from a base of soil as much as four feet thick. On each wall grew "a hedge of hawthorn, brambles, vines, and trees" reaching as high as fifteen feet.¹⁵ No roads connected the fields, but merely narrow wagon trails. The hedgerows stopped tanks from moving crosscountry and offered ideal cover for German infantrymen, field artillery, machine gun nests, and snipers.

In planning the Normandy invasion, the Allies had paid too little attention to the hedgerowed landscape and were caught unprepared. Taking heavy casualties, infantrymen had to learn by trial and error how best to attack the enclosed fields one by one, advancing a few hundred yards at a time. Eventually, in mid-July 1944, a flurry of experimentation would culminate in an ordnance sergeant's inventing an effective hedge cutter, a tank with "several tusklike prongs" of scrap metal welded to the front.¹⁶ While the tank forced a hole in a hedgerow, the prongs pinned its belly to the ground, so it could not tilt upward on the wall and become vulnerable to enemy fire. Yet even as the Allies gained battle experience and improved equipment, the tactical challenge of fighting their way through the hedgerows would play a large part in keeping them bottled up in Normandy until nearly the end of August.

After D-Day on the Cotentin Peninsula, VII Corps and a newly formed VIII Corps of First Army had managed, after "ten days of hard slugging," to "break out of the ring which the Germans pressed around the D-Day beachhead."¹⁷ To the southwest, American troops had taken the city of Carentan, an immediate target because it connected Utah and Omaha Beaches and gave access to roads leading north and south. First Army troops began attacking the city on June 8 but captured it only on June 12 after encircling and heavily shelling it: "The city of Carentan blazed during the night under concentrations of naval fire, artillery, mortars, and tank destroyer guns."¹⁸

Meanwhile, divisions of VII Corp had begun advancing northward up the Cotentin Peninsula toward the key port city of Cherbourg, as well as westward from Ste.-Mère-Église toward the opposite coast. The westward push was meant to cut the peninsula in two and quash any German hope of retreating southward. By June 18, after fierce fighting, the Americans had taken the crossroads town of St. Sauveur-le Vicomte on the east-west route and pressed forward as far as Barneville-sur-Mer, near the western coast. All this action helped determine where the 631st would bivouac and work during the rest of June and July. In his first after-action log entry, for June 15, the company's CO recorded that three tractors and a Quickway crane—a truck-mounted crane manufactured by the Quick-Way Truck Shovel Company of Denver, Colorado—had already been sent, with their operators, to work with the 148th Engineer Combat Battalion. They would help clear rubble from bombed roadways and build bridges in and near Carentan, where reopening a highway was one of the 1110th group's main missions.



An important job for engineers throughout the war in Europe was clearing streets in bombed cities, to keep Allied forces moving through them. Here, a driver bulldozes rubble in Cherbourg, France, 1944. (*War against Germany*, 129.)

The job of dispatching operators and equipment to the surrounding battalions fell to my father and another lieutenant, John Spellman, who joined the 631st sometime after the Normandy landing. With the title "Engineer Operation Platoon Officer," each was in charge of one of the company's two motorized platoons, while Lieutenant Evans ran the maintenance platoon. Evans's role probably explains why Frank Timmer, a member of the maintenance platoon, did not remember my father clearly. Timmer said he thought of my dad as "a regular guy" with a ready smile and a willingness to answer questions, but beyond that he had little recollection of an officer with whom he would have had little interaction.

Although the area around Carentan and Beaumont lay in Allied hands, German troops maintained defensive lines to the east and southwest of Carentan. It must have been from these positions that Beaumont was still being shelled when the 631st arrived. Its work sites around Carentan took fire, too. On June 16 the CO wrote that equipment working there was "coming under intense enemy artillery fire." The Quickway crane at a bridge site in Carentan "was hit by shrapnel, damage was minor and no casualties were sustained." On June 19 and 20, work on the Carentan bridge "was held up because of heavy 88 mm artillery fire from across the causeway." On the twenty-fifth, a site east of Carentan where men from the 631st were helping the 300th ECB build a timber trestle bridge came under "heavy enemy artillery fire."

Snipers still plagued the area as well. On June 19 the 631st reconnoitered a bridge site at a place called Vindefontaine, but "intense sniper fire was encountered and it was found insecure to dispatch equipment to that site." Small wonder: Vindefontaine lay well to the south of the east-west line the Americans now held, in an area still firmly under German control.

Despite the shelling and sniper fire, the 631st's good luck held. So far as the records reveal, the company never had to fight, and unlike many other engineer units, it took no combat casualties. Gene Fiducia, writing about working with surrounding engineer combat battalions, said, "They did the security and fighting while we worked our machines." Frank Timmer summed up the 631st's fortunate position by saying that its bivouacs "were always far enough from the front to be out of range of machine gun fire but close enough that artillery fire went right over us."

On June 20 the 631st moved about six miles northwest of Beaumont to a village called Picauville, which the CO described as "a more secure bivouac area." Picauville sat along the main east-west road between Ste.-Mère-Église and St. Sauveur-le Vicomte, by this time under American control. From there the company continued working around Carentan but also received new assignments. In Ste.-Mère-Église, Pont l'Abbé, and St. Sauveur-le Vicomte, 631st tractor and shovel operators helped clear roadways of rubble left by bombing and artillery fire. At Chef du Pont the company's road graders were needed for road repair, and at Le Vienville the company operated air compressors during bridge construction. Men from the 631st were now detached to the 207th Engineer Combat Battalion as well as the 148th and 300th. While on detached service, the operators bunked and ate with the unit they worked with, returning to the 631st's bivouac only occasionally, between assignments. As tractor operator Gene Fiducia put it, "Some of us never saw our fellow men [from the 631st] until after the war in Europe" was over.

The timing of the 631st's work at Carentan and points west marked the beginning of a pattern that would hold all the way into Germany. Carentan fell to the Americans on June 12, and the 631st was on the job there by June 16. The Germans retreated from St. Sauveur-le Vicomte on June 16, and the 631st sent its first equipment there on June 23. Consistently the unit would follow behind the front by roughly a week, moving once a newly captured place was reasonably secure. The company's course across Europe—sometimes bottled up in one area for weeks or months, sometimes moving quickly from bivouac to bivouac—tracked the course of the war itself.



"A quarry near Omaha Beach used by engineer units to supply rock and stone for the construction of roads. The tremendous amount of traffic on the roads in Normandy, as men and supplies were brought into France over the beaches, required the services of many engineer units to keep the roads in good repair." (*Corps of Engineers: War against Germany*, 160.)

In Normandy the 631st stayed stuck. Once the Americans had secured their east-west line across the Cotentin Peninsula, VII Corps pushed northward toward Cherbourg as German troops north of the line withdrew to that heavily defended city. On June 21, VII Corps laid siege to Cherbourg, and after heavy bombardment and hill-by-hill, street-by-street fighting, the city fell to the Americans on June 26. Meanwhile, VIII Corps got the task of establishing "defensive positions from Carentan west across the peninsula."¹⁹ The 631st, put temporarily "in support of VIII Corps," therefore stayed in place. Now the company began a new kind of operation, mundane but important. It opened its first rock quarry, producing gravel to be used in roadbeds and bridge approaches. This quarry lay in the vicinity of St. Sauveur-le Vicomte, but the 631st would operate gravel pits nearly everywhere it went across western Europe. The engineers blasted rock outcrops with explosives or air compressors to break the stone into sizes that could be fed onto the conveyor arms of a rock crusher. Out of another conveyor arm came the resulting gravel, which could be dropped into the bed of a dump truck and driven to a construction site. Frank Timmer said that running the quarries fell partly to the 631st's maintenance staff, who worked the rock crusher at times when they had few vehicles to service at the bivouac area. As a tractor mechanic whose machines were continually away at work sites, Timmer often drew quarry duty.

Like bridge sites, rock quarries made good stationary targets for German guns. The 631st's gravel pit near St. Sauveur-le Vicomte came under "intense enemy artillery fire" on June 29, and "work was handicapped because of this," wrote the captain. On July 2 he noted that operations continued to be hampered by "enemy fire from artillery which is coming



At a 631st rock quarry, a crane operator drops gravel into the bed of a dump truck. Bill Kepp stands in the truck bed at center foreground. (Courtesy Deborah Fiducia.)

from hills 121 and 131 overlooking the quarry." These two hills, designated by their elevation in meters, rose out of low-lying marshland about four miles south of St. Sauveur. Wherever Germans still held the hills ringing the Cotentin marshes, they "were able to mass their fires with such accuracy that American commanders warned drivers against halting their vehicles at cross roads, near bridges, or in towns. . . . Even far behind the front, care had to be exercised."²⁰

It was in the area of hills 121 and 131 that, while the Americans were besieging Cherbourg, German troops south of the American cutoff had established a defensive line using the marshland as a barrier. Their orders were to stop the Allies from breaking out of Normandy and heading south. By this time Hitler's generals in France had begun to recognize the futility of their defense. On top of the destruction of their transportation network, they were short of men and matériel. Allied bombing before D-Day had nearly eliminated the German air force, or Luftwaffe, so German ground troops enjoyed little covering support from the air. After heavy Allied bombing of German oil refineries, fuel supplies were running low, too. Yet Hitler continued to "demand an absolutely rigid defense of every inch of ground." On July 1 he ordered his generals "to hold every position then occupied and halt every threatened break-through by stubborn defense in place or local counterattack." The soldiers were to "fight to the last man and the last bullet."²¹

On July 3, the day after the 631st's CO last noted shelling of the rock quarry from hills 121 and 131, VIII Corps began a push through the hedgerows southward from St. Sauveur toward another strategic crossroads town, la Haye-du-Puits. This action was part of a larger offensive intended ultimately to break out of Normandy on multiple fronts. A day later, VII Corps began fighting its way southward from Carentan while British forces attacked the city of Caen, a stronghold from which the Germans had been blocking British and Canadian troops from advancing much beyond their D-Day beachheads. On the night of July 7, 460 British bombers dropped 2,300 tons of explosives on Caen in forty minutes.²² By July 9, British and Canadian divisions had secured most of the ruined city.

The American VII and VIII Corps offensives proceeded less smoothly. Besides meeting stiff German resistance, troops found themselves hampered by the marshy, hedgerowed terrain and by heavy rain that created immobilizing mud and kept bombers grounded. By July 7, VIII Corps had advanced only about four miles, although at the cost of heavy casualties it had taken the high ground around la Haye-du-Puits. Only some 150 Germans held the town, but they had mined its approaches, dug in machine guns, and refused to surrender. On July 8, US infantrymen made it through the perimeter, aided by engineers wielding mine detectors and bulldozing pathways for tanks. "After a bloody house-cleaning by the light of flaming buildings," VIII Corps took control of the town.²³ While the fighting dragged on to its south, the 631st moved bivouac on July 5 from Picauville to St. Sauveur-le Vicomte. There its men helped clear rubble from the bombed town while continuing road and bridge work nearby. For July 8 the after-action report noted that the company sent a tractor "to remove German ammunition wagon from highway." Another tractor went to the 1110th's headquarters for "the disposition of dead animals." The battles among the hedgerows took a heavy toll on farm animals. All across Normandy, army engineers, with their heavy digging and earth-moving equipment, had to bury the rotting carcasses of cows, horses, pigs, and other livestock killed by mortars and machine-gun fire.

The July 8 log entry also notes that two tractors detached to the 300th ECB were "awaiting word to enter Le Haye Du Puits." The 300th, after its catastrophic loss of men off Utah Beach, had continued to suffer casualties, among them its commanding officer, Major John Tucker, who died on June 30 when German tank fire struck a bridge where he was working near Carentan.²⁴ Named the Tucker Bridge in his honor, this was the one where engineers from the 631st, working on detachment to the 300th, had experienced heavy artillery fire on June 25.²⁵ Now, on July 8, both units lost their commander when an enemy machine-gunner cut down the 1110th's Lieutenant Colonel Daniel Spengler while he reconnoitered la Haye-du-Puits. The 631st's usual good luck notwithstanding, there can be no doubt that army engineers worked at great risk in Normandy.

The next day, July 9, the 631st tractor operators were still "awaiting the liberation" of la Haye-du-Puits, but by the tenth the town had been liberated and the engineers were clearing debris at its railway station. Sadly, during World War II, being "liberated" often meant being destroyed. Everywhere the 631st went, the men saw towns and villages devastated by Allied aerial bombing, by artillery shelling from either army, and by explosives detonated by advancing Americans or retreating Germans. Frank Timmer remembered seeing little left of some of the stone-built towns through which the company's truck convoys passed. Before the Normandy campaign ended, nearly four hundred thousand buildings in the region "would be demolished or badly damaged."²⁶

French civilians suffered terribly. People who had survived four years of Nazi occupation now lost not only their homes, businesses, farms, and livestock but even their lives under the bombs of their liberators. Some three thousand residents of Normandy died during Allied bombing on D-Day itself, "roughly the same number of American servicemen who would die on that day."²⁷ Before the Allies broke out of Normandy in August, the toll would reach nearly twenty thousand, and many more civilians died elsewhere in France. Survivors fled by the hundreds of thousands, refugees "bearing tattered bundles in rickety wheelbarrows, trying to avoid shells and bullets."²⁸ As the 631st convoyed through the ruined towns, "French people waved to us," Frank Timmer said, "but there weren't many of them around."



The city of Caen, France, after Allied bombing on July 7–8,1944. (US Army photo in public domain.)

AFTER JULY 9—more than a month after D-Day—the 631st worked increasingly around la Haye-du-Puits, marking the start of a slow move toward the south as VIII Corps continued its field-by-field advance. On July 12, a 631st tractor dug in a radar position on the recently seized hill 131. On the fourteenth, Bastille Day and my father's thirtieth birthday, a tractor driver dug gun emplacements for a First Army division. On the sixteenth the company moved bivouac to a village called Doville, closer to la Haye-du-Puits. From there, among many other jobs, it helped maintain "supply routes leading South from La Haye Du Puits area to front line units."

Beginning on July 10, some of those front-line units were attacking the historic, once beautiful town of St. Lô. Formerly home to eleven thousand citizens, it had been reduced to ruins during a week of Allied bombing beginning on D-Day. Nearly eight hundred civilians died, and most of the rest fled.²⁹ Yet despite being almost deserted, St. Lô offered strategic value because two main highways and five other paved roads converged there, radiating in all directions. Paved roads were scarce in Normandy most roads had only gravel surfaces³⁰—so capturing these transport routes was vital to troop movement. For the same reason, German soldiers fiercely defended St. Lô, and the fighting persisted for a week. Finally, on the night of July 17, the Germans withdrew slightly south of the town, and Americans entered it the next day.

The capture of St. Lô set the stage for the Allies' next major offensive, an enormous drive to break through the German lines west of the town and out of the Cotentin Peninsula at last. Called Operation Cobra, the offensive combined the carpet bombing of enemy positions with an overwhelming ground attack in which armored columns cleared the way for infantrymen. Allied planes dropped the first bombs of Operation Cobra on July 24 and 25. Disastrously, on both days some bombs accidentally fell on American soldiers, killing or injuring nearly nine hundred of them.³¹ Two engineers from the 300th ECB were among the dead, with another five or six injured.

The men of the 631st, who normally received little news or information about the larger war—at least those at the rank of private didn't, said Frank Timmer—heard about the "friendly fire" casualties around the same time they were "put on alert to stand by in case of a German breakthrough outside St. Lô." If that happened, they might be ordered to serve as front-line troops. Their luck held, and they were not called upon to fight, but other engineers, along with cooks, drivers, clerks, and any other available soldiers, did sometimes get put "into the line."³² That happened to an entire engineer battalion during the fighting near la Haye-du-Puits, and over the coming winter, many engineers would find themselves caught up in the Battle of the Bulge.

In late July, though, Operation Cobra succeeded quickly, in part because the Germans in Normandy were already closer to collapse than the Allies recognized. By July 27, "infantrymen of the VIII Corps were streaming south as quickly as engineers could clear paths for them through mine fields."³³ By July 31 the Allies had repelled the last German counterattack in the Cotentin Peninsula and broken free of the deadly hedgerows. The fifteen thousand engineers who took part in Cobra "had performed with distinction" their primary job of "keeping the main routes open, thereby enabling 100,000 combat troops to pour through" the last German line of defense in Normandy.³⁴ Lacking any other defensive positions in France, the Germans retreated rapidly toward their own border.

While Operation Cobra was under way, the 631st made its longest move yet—twenty-one miles southward to St.-Pellerin on July 28. Nearby it set up a "crushed rock quarry and pre mix plant." This is the first time the after-action reports mention premix, or "bituminous," which apparently was a road-paving material blending sand and gravel, or aggregate, with asphalt, or bitumen. Later log entries mention the equipment used to prepare premix: aggregate dryers, asphalt heaters, and pug mills, the last being machines that mixed the heated asphalt and aggregate to the required consistency. Perhaps the supplies needed to produce this paving material had only begun to arrive by sea in late July, or perhaps the engineers only now had time to pave roads rather than just surface them with gravel. In any case, from this time forward, supplying the surrounding engineer battalions with "bituminous ready-mix for repair and construction of main supply routes" would be another regular job for the 631st.

With the Germans in retreat after late July, the 631st's pace of movement picked up quickly. The company stayed at St.-Pellerin only two days before moving to Pont Hebert, about four miles outside of St. Lô, on July 30. On August 1 the unit was reattached, along with the 1110th ECG, from VIII Corps to VII Corps, in whose sphere of command Pont Hebert lay. A new engineer combat battalion, the 164th, joined the 1110th at this time, replacing the 300th, which had been reassigned to another engineer group a few weeks earlier. Together with the 164th, 148th, and 207th ECBs, the 631st would remain part of the 1110th ECG, of VII Corps, and of First Army for the duration of the war in Europe. Leading the 1110th now was Lieutenant Colonel (later Colonel) John T. O'Neill. On D-Day O'Neill had "commanded engineer assault troops assigned the mission of clearing the beach obstacles," for which "courageous performance" he had received a Distinguished Service Cross.³⁵

From Pont Hebert the 631st sent its first equipment into St. Lô itself, to help construct a bridge. On August 6 the company moved again, to a place called Cametours, southwest of Pont Hebert. Then, on August 13, the 631st moved to its last bivouac in the Cotentin Peninsula, at the town of Pont Brocard. By this time the Allies had repelled a German counterattack at Mortain, and on August 13, near the town of Falaise, the combined armies began encircling the surviving German units. Before the so-called Falaise Pocket was completely sealed on August 22, some hundred thousand German troops escaped the Allies' pincer movement, fleeing eastward, but the Battle of Normandy was decisively over. The Germans were pulling out of France and Belgium as fast as they could, racing to regroup behind heavy defenses on the western boundary of their own country.

The Allied armies followed apace, rolling quickly through undefended terrain, the 631st traveling in the wake of First Army. After sixty-one days in the Cotentin, the company left Pont Brocard on August 16 for a town called St. Pois, about sixteen miles southeast. There it bivouacked for five days before moving on to brief stays at places called Conde-sur-Sarthe and Préen-Pail, working at the usual sorts of jobs along the way. On August 28 the unit turned east toward Paris.

In Paris the previous week, with the US Third Army approaching from the west, under command of the colorful Lieutenant General George S. Patton, and with German personnel already pulling out, forces of the French Resistance rose up on August 19 and were soon joined by civilians in skirmishes against their occupiers. By the twenty-fourth, the Second Armored Division of the Free French army had entered the city, and the next day the German military governor surrendered his garrison. For his own reasons, the Nazi governor had disobeyed Hitler's order that "Paris must not fall into the hands of the enemy except as a field of ruins."³⁶ Although Allied troops fought Germans on the outskirts of the city, Paris had been liberated with a minimum of casualties and damage.

The 631st and, apparently, the rest of the 1110th Engineer Combat Group now made a "motor march" of about ninety miles from Pré-en-Pail to the town of Bourdonné, just west of Paris. Three days later they headed on to St. Cloud, a western suburb of Paris just across the River Seine from the magnificent public park called the Bois de Boulogne, where only five days before some two thousand German soldiers had been encamped. Frank Timmer remembered convoying through the center of Paris and seeing the Eiffel Tower and the Arc de Triomphe while bystanders waved to the soldiers, much as pictured in newsreels of the time.

In St. Cloud the company bivouacked in the middle of a park covering the site where the Château de Saint-Cloud had stood until it was destroyed by fire in 1870. In this historic place, on September 1, exactly a week after the liberation of Paris, the 631st set up an asphalt plant to supply the combat engineer battalions and began sending men and equipment to work at bridge sites.

But the 631st's stay in Paris was short—just four nights. Hitler's battered, disorganized troops were now beating the most orderly retreat they could manage, while Allied troops pursued, mopping up pockets of resistance and taking prisoners. General Dwight D. Eisenhower, the Allied supreme commander, and his generals believed that if they could push across the German border to the Rhine River before the Germans had time to regroup, they might end the war by Christmas.

Eisenhower decided to move the British and Canadian armies northeast up the French coast into Belgium and the Netherlands and thence eastward into Germany. The US First Army, including VII Corps, would follow the most direct route to the Rhine, through central Belgium toward the German border city of Aachen. Meanwhile, Patton's Third Army got loose rein to advance due east toward Metz, close to the German border south of Luxembourg.

Despite severe shortages of equipment and supplies, especially gasoline, at the end of a supply chain stretching ever farther from the French coast, the Allies pushed quickly to the German border—sometimes thanks only to captured German fuel. By August 31, armored units of VII Corps were "a hundred miles beyond the Seine."³⁷ A week later, after meeting strong German defenses at several bridgeheads near the Belgian town of Dinant, VII Corps took Dinant and then moved unhampered along



Map 4. The 631st's route through Belgium, September 1944–March 1945. Map by W. Powers.

the Meuse River to the provincial capital, Liège. In less than two weeks the Allies had driven the Germans almost entirely out of Belgium and Luxembourg. By September 10 they drew up along the formidable defensive barrier blocking the Germans' western border: the West Wall, which the Americans nicknamed the Siegfried Line.

Following the VII Corps route, the 631st on September 4 moved about forty-five miles northeast of Paris to Compiègne, where it already had two pile drivers working at a bridge site. After four days of bridge construction there, the company moved northeast again, to the town of Guise for a few nights. At Guise the CO noted that his equipment operators helped clear some of the many wrecked German vehicles that were clogging the main highways. On September 12 the unit crossed the Belgian border. Its entire haul across northern France from the Cotentin Peninsula had taken just twenty-eight days.

The company's first bivouac site in Belgium, from September 12 to September 20, was at the town of Anthée, just outside Dinant. The unit's main work there, unsurprisingly, was reconstructing several bridges damaged or destroyed during the capture of Dinant. On September 21, leaving in place the men working around Dinant, the rest of the company moved for what would prove to be a stay of more than five weeks at Banneux, a village outside Louveigné, about ten miles southeast of Liège.



A rock quarry and gravel operation run by the 631st in Belgium. (Courtesy Deborah Fiducia.)

There the 631st stayed busy during the rest of September and October, sending operators and equipment to new work sites all over the surrounding area. Place names such as Pepinster, Spa, Theux, and Aywaille appear daily in the logs. Besides quarrying gravel and manufacturing roadpatching materials, much of the unit's work was the usual road and bridge building and repair. The Allied armies were pushing hard to get supplies of food, clothing, ammunition, and fuel trucked to the front along their overstretched supply lines. As one small part of this effort, in late September the 631st sent machinery to a nearby engineer battalion for use in "the construction and maintenance of a convoy supply route to the front."

In a new kind of assignment, but one that would become increasingly routine, the company sent tractors to a sawmill being operated by engineers at the town of Hotton and to logging operations elsewhere. The army was manning sawmills to produce some nineteen million board feet of lumber needed to build wooden huts and shelters for the winter, and the mill at Hotton must have been one of them.³⁸ The sawmill might also have turned out timbers to be used in wood trestle bridges, such as one on which men from the 631st worked in October at Bütgenbach, less than four miles from the German border. That bridge was 100 feet long; another, a "timber trestle and steel I-beam bridge" at Remouchamps, spanned 180 feet. The CO noted in his after-action report that those two and all other bridges on which the company worked during October were Class 70 bridges, capable of supporting seventy-ton vehicles.



Sawmill operated by an engineer forestry company, 1943. Exact location in Europe unknown. (*Corps of Engineers: Troops and Equipment,* 291.)

Possibly it was while working on the 180-foot bridge that two men from the 631st, Technician Grade 5s Virgil Crozier and Adam Wenzel, were injured in a road grader accident at Remouchamps. The morning report for September 21 records their being sent to hospital, but as in the other, fairly numerous cases of men being hospitalized for noncombat injuries and illnesses, the report gives no details. If they went to the nearest army hospital, it may have been one near the Belgian town of Eupen, which VII Corps had captured by mid-September. Two weeks later the 631st had equipment working on "road construction at hospital areas near Eupen."

The September 21 morning report noting the two injuries is the last page I have that was signed by Captain Bryce Black. The next page in my set of copies, dated September 29, was signed by the 631st's new and final commanding officer, Captain John Conchelos.

DURING LATE SEPTEMBER AND OCTOBER, while the 631st engineers played their behind-the-line roles, the American First Army began trying to breach the West Wall in the area lying directly ahead of V and VII Corps. The so-called wall was actually a chain of "more than 3,000 concrete pillboxes, bunkers, and observation posts,"³⁹ in places as much as ten miles deep, reinforced by minefields, anti-tank obstacles, barbed wire, and steep terrain. Hitler had ordered the defenses built in 1938, but in 1940, when Germany quickly overran France, the Nazis shifted their main defenses to the Atlantic and English Channel coasts, leaving the West Wall all but abandoned. Now they scrambled to man the gun emplacements again, before the Allies could punch through the line.

VII and V Corps first attacked the West Wall on September 13, but both corps were "widely extended, virtually devoid of hope for early reinforcement, and dangerously short of supplies."⁴⁰ They gained little ground. In some places they found pillboxes undefended, and in others, manned by hastily conscripted middle-aged German men and teenage boys who might be only too happy to surrender. But often enough, pockets of hardened German veterans, who held the high ground in weather that precluded Allied aerial bombardment, managed to halt the Americans' advance.

Troops of VII Corps came in for some of the worst fighting in an area known as the Hürtgen Forest, southeast of the German city of Aachen. American casualties were so high there, and conditions so miserable as winter closed in, that the struggle in the Hürtgen Forest shows up in history books in terms nearly as emblematic of the horrors of the European campaign as the later Battle of the Bulge. The attempt to breach the West Wall there was "a costly, frustrating procession of attack followed by counterattack, a weary, plodding fight that pitted individual against individual," an experience of "gloom, misery, and tragedy [now] synonymous with the name Huertgen Forest."⁴¹

By the end of September, VII Corps halted. Its commander, Major General Lawton Collins, later said, "We ran out of gas . . .; we ran out of ammunition; and we ran out of weather."⁴² Now First Army turned its attention to Aachen, a city of some 165,000 people just across the German border from Belgium. Birthplace of Emperor Charlemagne in about AD 742 and capital of his Holy Roman Empire, Aachen held enormous symbolic importance for the Nazis, and its capture would deal them a psychological as well as a military blow.

On October 2, infantry and armored divisions of VII and XIX Corps advanced on the city from different directions—slowly, against heavy resistance, one pillbox at a time. Not until October 10 was an infantry division able to capture the high ground above Aachen. The final assault, including air and artillery bombardment, began the next day, and on October 16 the two corps finally met, encircling the city. Another five days of vicious, house-to-house, cellar-to-cellar fighting followed, with heavy destruction of city. The German commander surrendered on October 21, and the Allies held their first city on German soil—at a cost of more than



A bulldozer operator seals German bunkers in the West Wall outside Aachen, Germany, 1944. (*Corps of Engineers: War on Germany*, 419.)

five thousand Americans killed, wounded, missing, or taken prisoner. Luckily for Aachen's civilians, they had earlier been evacuated on Hitler's orders.

The capture of Aachen did not, unfortunately, mean that First Army could push immediately to the Rhine. For one thing, it was severely hampered by the supply chain problem: too few ports in Allied hands, too great a distance between ports and the front, too few trucks, and too little fuel. October was "the worst month in matters of supply the Allies were to experience during the campaign on the Continent."⁴³ In addition, First Army's right flank was still exposed to German counterattack in the Hürtgen Forest.

For the 631st, though, the fall of Aachen meant the beginning of a move into Germany itself. On October 14, as the battle for Aachen approached its climax, the company sent its first equipment over the German border: a rock crusher "for operation near Zweifall, Germany." Zweifall, a village southeast of Aachen and about six miles west of the eponymous village of Hürtgen, seems to have been in American hands by the end of September. A rock quarry there, which men from the 631st would operate for the next several months, "was supplying practically the entire First Army sector with materials for surfacing supply roads," wrote Captain Conchelos.

On October 26, with Aachen securely in Allied hands, the company began moving thirty-five miles northeast, to the vicinity of Hergenrath, Belgium, adjacent to the border just south of Aachen. It would bivouac there for thirty-eight days. On November 13 the CO noted, "Shovel was dispatched to Aachen, Germany, to assist the 164th . . . in the clearance of rubble." Next, a shovel and a tractor went to a "slag pit"—something I was unable to identify precisely—near Brand, Germany, a community just southeast of Aachen that has since been absorbed into the city. Brand quickly became a consistent work site for the 631st. On November 23 the company transported a tractor, a pug mill, an aggregate dryer, and two asphalt heaters to Brand "to be used for a Pre Mix School conducted by this unit." The resulting plant commenced operation two days later.

Meanwhile, projects continued all around the area southeast of Liège. Among the company's main jobs during October and November, Captain Conchelos listed work on seven different bridges. Five were timber trestle bridges, but two were of a type new to World War II, the "Bailey" bridge. Conceived by and developed under the leadership of the British engineer Donald Coleman Bailey in 1941–42, this innovative design became "the most versatile military bridge in history."⁴⁴ It was assembled from prefabricated steel panels, each ten feet long by five feet high and braced by diagonal crossbars. Although the panels weighed nearly six hundred pounds apiece, they were light enough to be transported by truck, and teams of men could assemble them by hand. Yet the smallest Bailey bridge could support a tank, and the side panels could be stacked two or three



Engineers assembling a Bailey bridge across the Rhine at Wesel, Germany, 1945. (*Corps of Engineers: War on Germany*, 524.)

high and deep to create larger, stronger bridges. The roadway could be a single lane or two lanes wide. When supported by pontoons or barges, the Bailey made an excellent floating bridge.

So far as the after-action reports reveal, the 631st worked on its first Bailey bridge during the first five days of October 1944, at Hamoir, Belgium. For a few days in late July, in Normandy, the unit had kept several pieces of machinery on detachment to the 148th ECB for use on a Bailey bridge, but it appears that the equipment was never called into action. Captain Black, who kept the daily logs until late September, seldom mentioned what types of bridges the company helped build in France, but when he did, they were always fixed, timber trestle bridges.

This makes sense, considering the company's position behind the front lines. Closer to the fighting, "most divisions relied on steel treadway floating bridges. These were much faster to use and easier to transport than the Bailey."⁴⁵ Prefabricated in sections and laid across pontoons, treadway bridges allowed tanks to roll along two metal tracks, or "tread ways." Farther behind the lines, engineers tended to construct standard timber bridges and Bailey bridges after crews dismantled the treadways and sent them ahead to be reused.

One of the advantages of Bailey bridges was that they required little heavy equipment to erect, but the 631st sent a crane and a tractor to Hamoir for this project. Certainly a crane made the job easier, and if nothing else, bridge approaches and exits usually required roadwork. A little later in October, a crane operator and his machine from the 631st helped dismantle a Bailey bridge at Liège. This type of bridge wasn't usually permanent, either.

In mid-November at least four men from the 631st began working with the 148th ECB to erect an unusual Bailey bridge across the Meuse at Liège. In what the CO called a "training and experimental" project, they built a Class 70 bridge floated not on pontoons but on barges rounded up from the surrounding area. Lasting into the middle of December, this training exercise was part of the Corps of Engineers' preparations for ultimately crossing the Rhine into the heart of Germany. It evidently involved the whole of the 1110th ECG, whose men became First Army's Bailey bridge experts.⁴⁶

On November 17 Captain Conchelos noted that a crane, a tractor, and a road grader had been "stationed on [the] A Route for the purpose of clearing a possible snow drift." This is the first hint the after-action reports give of the arrival of the awful winter of 1944–45, which was "to produce weather of near record severity. Rainfall was to be far above average, and snow and freezing temperatures were to come early and stay for long periods." By November 11, "already rain far in excess of normal had fallen. Roads had deteriorated, streams were approaching flood levels, and the ground was . . . a morass." In the Hürtgen Forest in mid-November, "as rain and snow persisted, more than a fifth of [one infantry unit's casualties] were trench foot and frostbite cases."⁴⁷

Presumably it was by this time that the men of the 631st—unlike many of the front-line infantrymen—had gained the luxury of bunking in buildings instead of foxholes. Gene Fiducia wrote: "Since we were a small unit, many times the army found civilian homes to house us in the winter." He remembered a chateau in Seny, Belgium, where he and some fellow engineers "were billeted for three weeks and used the grounds for our equipment; the family stayed in a small building or gate house." He learned later that a German officer had lived in the chateau for four years during the occupation. Another time, Fiducia was billeted in Namur, Belgium, in the home of a couple and their two young children. He and his army colleagues "used the upper level, and the family stayed in the bomb shelter which was the basement. The house had steel roll down shutters. They had very little food and many Belgians were starving during the war."

Frank Timmer, too, recalled that he and his fellow engineers "moved into villages and lived in vacant houses" during that winter in Belgium. He remembered the terrible cold, though he said "it was uncomfortable but not miserable." Unlike some undersupplied soldiers at the front, the 631st had adequate winter clothing and "big galoshes," Timmer said.

He and his colleagues could only speculate about why some of the houses they stayed in were empty. Their neighbors, Timmer said, seemed to know that the owners weren't coming back, for most of the houses had root cellars, and neighbors would come by to take food still stored there. The former inhabitants might have been Nazi sympathizers who fled into Germany as the Allies approached, or, perhaps more likely, casualties of war. Besides draining occupied Belgium of coal and food, the Nazis deported more than half a million Belgians to work in war-related industries in Germany and France.⁴⁸ No doubt many of them died of malnutrition and exhaustion in slave labor camps. In eastern Belgium, the area along the Meuse where the 631st now worked had been the main route by which the Germans retreated in early September. Along the way, they rounded up and executed many civilians, sometimes in reprisal for being shot at by partisans and sometimes without provocation.49 Whatever the reason for their vacancy, village houses were a boon to the men of the 631st during the frigid winter of 1944–45.

As November wore on, the 631st's Bailey bridge project continued at Liège, but otherwise the company's tasks shifted more exclusively toward road work, including the operation of rock quarries, gravel pits, and asphalt plants, and to logging and sawmill projects. The CO noted that the 631st was working "in close support of VII Corps." Gradually the company's work sites shifted farther east, and new names of German towns began to appear in the daily logs: Aachen, Monschau, Vicht, Walheim, Stolberg, Rötgen.

By mid-December, with the completion of the bridge at Liège, all the company's workplaces appear to have been in Germany, in the area southeast of Aachen. As usual, the bivouac site followed the job assignments: on December 6 the 631st moved headquarters to Brand, Germany. This time, though, the unit would not stay for long. VII Corps and its engineers were about to be needed urgently back in Belgium.

EARLY ON THE MORNING OF DECEMBER 16, 1944, the Germans launched a massive counteroffensive into the heavily forested part of Belgium and Luxembourg known as the Ardennes. There, only four American divisions held an eighty-mile line. Two of the divisions were new and green; the other two were recuperating from the fighting in the Hürtgen Forest. Hitler had personally devised a plan to break through this weakest point in the Allied line and push armored columns quickly northwest to the Meuse River, capture Liège, and then retake Brussels and Antwerp. This, he believed, would split the Allied armies in two, enabling the Germans to encircle them. Remarkably, the Germans managed to keep their invasion plans and troop buildups undiscovered—or at least unrecognized—by Allied intelligence. The Allies at the time called the attack the Ardennes Counteroffensive, but news reporters soon labeled it "the Battle of the Bulge" for the westward bulge in the American line that appeared on maps as the defenders fell back under the onslaught. After D-Day, the Battle of the Bulge is probably the bestknown event of World War II in western Europe.

The Germans struck first with artillery barrages in at least eight places along the Allied front, from near Monschau, Germany, on the north less than thirty airline miles south of the 631st's bivouac—to a point along the Luxembourg border roughly east of the town of Wiltz. Infantry attacks followed quickly, intended to secure routes for German *panzer*, or tank, divisions on their drives toward Brussels and Antwerp. It took Allied commanders a full day to realize that these incursions were more than just predictable, local counterattacks in response to the Americans' ongoing assaults against the West Wall. Once they understood what was happening, they immediately began ordering reinforcements and troop movements to shore up defenses against the German attack.

On the northern shoulder of the bulge, the Germans made little headway. Hitler had meant to direct his main thrust there, along the shortest route to Antwerp, and had handpicked his Sixth Panzer Army for the task. But American soldiers held their ground at Monschau and nearby villages, and elsewhere they slowed the attacking forces and created bottlenecks on roads the Germans needed to use. Delaying the enemy offensive proved crucial to derailing it, because the Germans had too little fuel to reach Antwerp. Their plan relied on speed and the ability to capture American fuel along the way, but the Americans denied Sixth Panzer Army some 3.5 million gallons of gasoline by quickly evacuating it or igniting it to block roads.

By the night of December 17, the lead panzer column in the north was already behind schedule. Hitler had deliberately launched the offensive at a time when bad weather prevented Allied bombers from flying, but snowcovered roads, while hampering both sides, mainly helped slow the German advance. By December 23, having reached only as far northwest as Stoumont, Belgium, the disorganized German forces in the north retreated back through American lines. Only 770 men out of an original 5,800 made it back to German-held territory.⁵⁰

The Germans met similar frustration in the southern sector of their attack. American infantrymen, despite taking heavy casualties, again managed to delay the enemy's thrust. It took the invading panzer columns four days to reach the key town of Bastogne, Belgium, where the junctions of eleven paved roads would have given the Germans multiple routes to bridges across the Meuse. The delay allowed the Allies to rush reinforcements to Bastogne by December 19, and the encircled defenders resupplied by air after the weather cleared on the twenty-third—held out against a German siege until an armored column from Patton's Third Army broke through to them on the twenty-sixth. In the meantime, most of two panzer divisions bypassed the besieged town and pushed northwest toward Dinant and the Meuse.
Only in the center of the invasion front did it look for a while as if the Germans might succeed. By the night of December 17, units of the Sixth Panzer Army had surrounded most of two American infantry regiments east of the Belgian town of St.-Vith, taking approximately eight thousand prisoners. Yet even in this area, dogged defense crucially slowed the Germans' movement. Hitler's plan called for his army to take St.-Vith by December 17, but Americans managed to hold it until the twenty-first. Then, aided by an immense traffic jam that the Germans themselves created as they flooded into the town, the Americans made a slow, fighting retreat and prevented a German breakthrough farther west until the twenty-third. Nevertheless, once St.-Vith fell, German infantry and armored units pushed westward toward Marche, Belgium, from which paved roads would lead them directly to the towns of Dinant and Huy, guardians of bridges across the Meuse.

That area happened to be precisely where four divisions of VII Corps, flanked by other American, British, and Canadian reinforcements, waited to join the defense. They could "feel at home in this new sector, for the VII Corps had driven the German forces out of the area during the first two weeks of September."⁵¹ As usual, the 631st engineers were just behind the VII Corps line.

The 631st's orders to pull back into Belgium had not come until December 23, a full week after the counteroffensive began. Until December 18 the men went on working normally around Brand, Germany. The brief, matter-of-fact daily logs give no hint that something big was happening to the south. Then, on the nineteenth, the company suddenly received an "enemy air-borne alert," shut down its asphalt plant, ordered all its equipment returned to the bivouac area, and "prepared for instant movement to other areas of responsibility." The next day the alert was temporarily lifted and "all units resumed normal work activities," but fortyeight hours later the company was again ordered to collect its machinery and prepare to travel. On December 23, the CO wrote, "this unit was engaged in the movement from the bivouac area in the vicinity of Brand to a new area near Huy, Belgium," a distance of about eighty miles.

When I first read this after-action entry, I assumed that the company had simply retreated out of harm's way. But digging further into the Battle of the Bulge, I learned that the area around Aachen was never seriously threatened by the German attack. A history of the 1110th ECG reports that "no action outside of aerial bombing and strafing took place in the vicinity of Brand."⁵² Instead, the 631st and the rest of the engineer group pulled back into Belgium mainly to continue working in support of VII Corps, which had been put into the defensive line south of Liège.

From its new bivouac at Wanze, on the north side of the Meuse opposite Huy, the 631st immediately sent men and equipment to help build floating Bailey bridges over the Meuse at the nearby towns of Amay and Andenne, to supplement the one existing bridge at Huy. Working with the 148th and 164th ECBs, they completed the bridges within forty-eight hours, enabling "more rapid commitment of the British XXX Corps to the battle." Four days later the crane and tractor working at Amay moved southeast to Hamoir to help the 207th bridge the Ourthe River there, "keeping open supply routes leading to the front."⁵³ On December 30, 631st mechanics converted that crane to a pile driver "to drive metal sheath piling for [the] fixed timber bridge" at Hamoir. A Quickway crane went to Amay on the same day "for the distribution of mine booms" above the new bridge there, to protect it from floating mines. All this bridge building was part of the Allies' hurried effort to add new crossing points over the many rivers that separated their reinforcements and rear supply depots from the front-line troops.

For its work during the last week of December the 631st received a unit commendation, dated January 2, 1945, and signed by Colonel O'Neill, commanding officer of the 1110th ECG. It began: "The recent operations of all units of this group have placed additional stress on all members of your company." It singled out the 631st's long move back into Belgium and its immediate assignment to work on the Bailey bridges at Amay and Andenne. After observing that "these men were required to work without sleep or rest for over forty-eight (48) hours in extremely adverse weather conditions," O'Neill ended: "I wish to extend my congratulations and commendation to these men for the superior manner in which the assigned missions were accomplished. In spite of the handicaps they encountered these men pursued their tasks with enthusiasm and determination that is only evident in [a] well led and well trained troop."

The day before the 631st left Brand, it sent a tractor and its driver to Liège, where they would stay throughout the entire Battle of the Bulge, "clearing debris caused by flying bombs." What the GIs called flying bombs or buzz bombs were German V-weapons, the first self-propelled missiles in military history. From the French coast around Calais, Germans began firing the first version of the rocket, the V-1, at London on June 13, 1944, in retaliation for the Normandy invasion. The V-1 was a "flying torpedo" with wings and an engine—an inaccurate but hugely destructive weapon that simply fell to earth and exploded when its fuel ran out. Its successor, the V-2, was bigger, faster, and somewhat more accurately guided. Fired from mobile launch pads, V-2s began raining on London on September 8, 1944. Altogether, V-weapons terrorized London until late March 1945, an echo of the Blitz of 1940–41.

On the continent, Antwerp took the bulk of V-weapon hits, followed by Liège. Between November 19, 1944, and sometime the following January, 135 V-1s and 254 V-2s hit Liège, killing four hundred people and injuring nearly as many again.⁵⁴ The flying bombs cratered roads, too, and I presume the 631st tractor operator working in Liège helped clear debris so that other engineers could fill and repair the supply routes that crisscrossed the city.



During the Battle of the Bulge, the 631st helped build floating Bailey bridges over the Meuse River in Belgium, similar to this one over the Seine in France. (*Corps of Engineers: War against Germany*, 193.)

Frank Timmer remembered hearing the "putt-putt-putt" noise the Vweapons made overhead. One night while on guard duty, he said, he heard the characteristic sound of a buzz bomb and then, alarmingly, silence—the signal that the missile's engine had stopped and it was about to fall to earth. Thankfully for him, it passed overhead and he never heard it explode.

On December 23, the day the 631st moved to Wanze, one of its tractor operators got the assignment of helping the 207th ECB erect roadblocks and obstacles "to deny the enemy Route N-36 between Dinant and Ciney," Belgium. "The battalion met enemy resistance while placing their initial road block and were forced to withdraw to secondary positions" as American and British armored and infantry units "moved up to stop the enemy advance."⁵⁵ The records do not say who the 631st driver was, but he must have come closer to the fighting during the Battle of the Bulge than any other member of the unit. By Christmas Eve, one of the two German tank columns that had bypassed Bastogne had reached a point just five miles southwest of Ciney. For four days, four divisions of VII Corps fought Germans of the Forty-seventh Panzer Corps along a fifty-mile front in that area. I imagine the 631st engineer stationed at Ciney heard the sounds of artillery fire as he helped set up barriers along the roads north to the Meuse.

A week after the start of the counteroffensive, the skies cleared at last, and the Allies were able to bomb German troops and supply dumps. With aerial support and the addition of a quarter million reinforcements, the Allies by Christmas Eve had stopped the German advance. Yet the Germans did not give up easily, despite being critically short of fuel and ammunition. The weather turned overcast again, and the fighting dragged on for another ten days before the Allies were at last able to go on the offensive on January 3. At that point, "the majority of the German force executed a successful fighting withdrawal and escaped the battle area, although the fuel situation had become so dire that most of the German armor had to be abandoned."⁵⁶ Americans recaptured St.-Vith only on January 23, and the last German troops made it back to the West Wall on January 25, which is considered the end of the Battle of the Bulge.

THE BULGE TURNED OUT TO BE the largest and deadliest battle American forces fought during the war. With more than 19,000 Americans killed, 60,000 wounded, and 23,000 taken prisoner, "roughly one in ten U.S. combat casualties during World War II occurred in the Bulge."⁵⁷ German losses were even higher, but for Hitler the most catastrophic result of the Ardennes Counteroffensive was that it diverted vital fuel, armor, and reserve troops away from the eastern front, where the Germans were fighting the Soviet Red Army. "By January 20, the Soviet juggernaut had torn a hole nearly 350 miles wide" in Germany's eastern European defenses and was headed inexorably toward Berlin.⁵⁸

Many combat engineers ended up among the casualties of the Bulge, including some who, like the men of the 631st, were not primarily meant to fight as front-line soldiers. Before December 16, for example, the 81st Engineer Combat Battalion had been working on road repair and snow removal near the center of the Germans' planned line of attack. Company A of the 81st, billeted in the tiny village of Auw, Belgium, found itself one the first American units to meet the enemy. German tanks reached Auw about nine-thirty in the morning on the sixteenth, and the engineers held out with only rifles and machine guns until about three o'clock that afternoon, when the last platoon made a desperate dash for safety. The 81st would continue fighting and laying mines and roadblocks as the Americans in its sector slowly fell back toward St.-Vith. By the time that town fell to the Germans, most of the 81st had been killed or captured.⁵⁹

Similar stories played out for engineers all over the battle theater. The 629th Engineer Light Equipment Company, which had been doing road work near Bütgenbach but managed to pull out ahead of the German advance, received orders to join a nearby engineer battalion in defending Malmédy, Belgium. The 148th ECB, one the 631st's fellow units of the 1110th ECG, found itself temporarily attached to the 82nd Airborne Division "to serve as front line troops during the battles of Stavelot, Malmedy, St. Vith, and Bastogne," according to a veteran of the 148th. Among other things, the men planted minefields and set explosives on bridges in preparation for blowing them up. "Many of us had frost bitten feet," the veteran recalled, "because we did not have boots, just our regular issue shoes."⁶⁰

At the village of Trois Ponts, Company C of the 51st ECB blew up the main bridge into the village just as the lead column of German Sixth Panzer Army tanks approached. Then, during the night of December 18, the engineers drove their six trucks in and out of the village and concocted other ruses to convince the enemy that reinforcements had arrived. It worked, and the Germans never seriously attacked Trois Ponts.

Company B of the 51st ECB, defending a bridge over the Ourthe River farther west at Hotton, brings the Bulge story close to the 631st engineers bivouacked near Huy. The 51st engineers had found a tank in an ordnance shop nearby, and its crew joined the defense. When an enemy panzer column reached Hotton on December 20 and began shelling, a private from the 51st volunteered to man the vehicle's antitank gun. He and a sergeant with a bazooka took out the first three panzers, and the 51st ECB "held the bridge until reinforcements arrived."⁶¹

Hotton sits on a road leading directly toward Huy, only about twenty miles away and one of the Germans' key targets on the Meuse. If the 51st had not stopped the panzer advance at Hotton, would the Germans have reached Huy? If so, then the engineers of the 631st might well have had to fight. I like to think they would have risen to the challenge just as their comrades did, but I am glad their luck held and they did not have to. As usual, civilians were the unluckiest of all. More than three thousand of them died during the Ardennes Counteroffensive.⁶² Germans deliberately murdered some of them, especially in the area west of Malmédy, where villagers had the misfortune of being overrun by panzer troops under the command of a particularly ruthless SS officer, Colonel Joachim Peiper. His men not only massacred more than eighty American prisoners of war captured near Malmédy (leading to similar reprisals by American soldiers) but also executed some 130 Belgian civilians without provocation.

Wherever the fighting raged, civilians also suffered under bombing and artillery fire. Some fled, as many residents of St.-Vith did when Germans shelled their town on December 16, only to wander "from farm to farm, sleeping among cattle in barns" or in basements and abandoned rail tunnels. Others were unable or unwilling to leave their homes. At St.-Vith, those who stayed found themselves under bombardment by American and British air forces on December 25 and 26. "The town was set ablaze by the use of phosphorous bombs, and hundreds of residents were incinerated in their basement shelters." The bombing so utterly destroyed St.-Vith that by the time the Battle of the Bulge ended, "a town of 2,800 people had vanished."⁶³ Other contested towns suffered similarly as the Allies pushed the Germans out of Belgium and Luxembourg during January 1945.

Adding to the misery that month, the weather continued to be arctic. While the battle played out, engineers throughout the region threw themselves into clearing ice and snow from the roads to keep the troops moving. As early as December 28 the 631st's Captain Conchelos mentioned sending a mechanized shovel to a "cinder pile" near Amay that was "to be used as a center for materials to combat future ice and snow conditions on the Army road net." On January 4 he noted that all battalions of the 1110th ECG "commenced concentration on snow and ice control of the army road net." Later, in his summary for January, he wrote: "During this period heavy snow storms were encountered and equipment was dispatched for snow removal. This unit operated two snowplows and six Road Graders under very severe conditions to combat snow drifts and ice to keep the military supply routes open." Besides that, he listed as major projects for January the construction of the fixed timber bridge at Hamoir, "keeping routes N-43 and N-36 [at Liège] open from debris and craters caused by flying bombs," and the usual operation of rock quarries. The engineers were now using most of the crushed rock as "abrasive" to give vehicles traction on icy roads.

In the last week of January the Allies renewed their attacks on the West Wall, this time fighting a fatally weakened enemy. On February 5, VII Corps was reassigned to its old sector around Aachen, which it had held before the Battle of the Bulge, in preparation for the Allies' next big offensive, a crossing of the Roer River (in German, the Rur) followed by a push to the Rhine. The 631st, together with the rest of the 1110th, stayed behind in Belgium. The unit had already shifted its bivouac southeast from Wanze to Seny on January 15, and during February it would move a few



Engineers shoveling abrasive materials onto a road outside Wiltz, Belgium, during the winter of 1944–45. (*Corps of Engineers: War on Germany*, 477.)

more miles to Malmédy and then to the vicinity of Elsenborn, Belgium, right on the German border. This was V Corps territory. I have no record suggesting that the 631st was ever formally detached from VII Corps, but for six weeks the company's engineers worked mainly "in support of V Corps," concentrating on keeping the "MSR," the main supply route, open.

Road conditions remained bad during February. After a thaw began on the fifth, snow and ice turned into mud. By February 20, the CO noted, all the surrounding engineer battalions were drawing equipment necessary "to condition roads against mud." So much crushed rock was needed that supplies had to be brought in by rail to supplement the engineers' crusher units. Sadly, on February 25 the 631st suffered its only death of which I have any record. Technician Grade 5 Buckley E. Frazier "died from injuries in 50 ft fall from cliff with D-7 tractor this date Monschau Germany."

Other engineer units were about to take far heavier casualties. The Americans' next goal was to seize two dams on the Roer, which roughly paralleled the West Wall on its German side, and then cross the river, an operation heavily dependent on engineers. The Allies could not risk crossing the Roer without first capturing the dams. Otherwise, the Germans could blow them up or jam open the floodgates during the crossing, "washing out tactical bridges and isolating any Allied force that crossed the river."⁶⁴

By February 8 a division of V Corps had fought its way to the first of the dams and taken it with suspiciously little resistance. After dark the following night, troops reached the second, larger dam. About midnight, a team from a combat engineer battalion started across the top of the dam, under fire, trying to reach the entry to a tunnel leading to the dam's controls. Finding the spillway partially blown up, the engineers instead had to slide down the two-hundred-foot face of the dam to reach the lower exit of the tunnel, expecting "at any moment to be blown to kingdom come."⁶⁵ Once inside the dam, they discovered that the Germans had already blown open the discharge valves, releasing millions of gallons of water to flood the Roer Valley. The Allies' crossing, originally set for February 10, would have to wait two more weeks.

At last, on the advice of engineers, the generals set D-day for what they called Operation Grenade as February 23, a day before they expected the reservoirs to be drained. By crossing at the earliest possible moment, the planners "hoped to achieve some measure of surprise."⁶⁶ Operation Grenade was mainly an offensive of Ninth Army, which had three corps waiting to cross along a thirty-mile stretch of the Roer, but First Army's VII Corps was to cross immediately to their south, to protect Ninth Army's right flank.

The Americans did surprise the enemy, but the Germans reacted quickly from fortifications built previously by slave laborers along the east bank of the Roer. At every river crossing point, Germans poured machine gun and mortar fire on engineers trying to set prefabricated foot and vehicular bridges over the river and convoy infantrymen across in assault boats. Some boats swamped. Others, swept downstream in the swift current, hit bridges under construction and collapsed them. Sometimes German shells snapped the cables attaching foot bridges and cable ferries to the riverbanks, and the engineers had to start all over again.

Yet for all the difficulties of the river crossing, Operation Grenade succeeded. The Germans, outnumbered by about five to one, simply had "too little manpower left to put up an effective defense."⁶⁷ By the close of the first day the Americans held a bridgehead four miles deep. The accomplishment had cost the engineers high casualties relative to their numbers. I found no overall figures, but four engineer groups supporting Ninth Army lost 31 men killed and 226 wounded. Engineers constructing bridges for two divisions of VII Corps saw 8 killed and 145 wounded.⁶⁸

Once the Americans crossed the Roer—and especially once armored units followed—they began to pick up pace toward the Rhine. Fighting remained heavy in some places, especially in the VII Corps sector, but by March 1, a week after the crossing, American units had advanced seven to ten miles all along the front. That same day, a spearhead of Ninth Army reached the German town of Neuss, "within rifle shot of the Rhine."⁶⁹



Engineers attaching the cables of a pontoon-supported foot bridge across the Roer River, February 1945. (*Corps of Engineers: War against Germany*, 498.)



Tank crossing the Roer on a pontoon treadway bridge, February 1945. Shelled buildings stand on the far shore. (*Core of Engineers: War against Germany*, 340).

Over the next few days, British, Canadian, and American Ninth Army divisions neared the Rhine on the north. Third and Seventh Armies attacked toward the river from farther south, and in the middle, three corps of First Army—VII, III, and V Corps, from north to south abreast—reached the Rhine between Cologne and Koblenz, Germany. "Any town that spurned surrender demands . . . was scourged with tank and howitzer shells until eventually a white flag or two popped up; the obstinate died."⁷⁰

But even as German resistance collapsed on the west bank of the Rhine, the Allies pulled up short at the great river's edge. Their war planners held little hope of finding any usable bridges still standing, and they seemed to be right: the Nazis apparently had demolished all of the thirty-one Rhine bridges in Germany. Then, on the afternoon of March 7, the leading infantry platoon of a III Corps task force reached a bluff overlooking the town of Remagen, about fifteen miles south of Bonn. Looking down, the men saw, to their astonishment, an intact railroad bridge.

WHEN I FIRST READ THE NAME *REMAGEN* in the 631st's after-action reports, I immediately thought, "The bridge at Remagen'—why do I know that phrase?" An Internet search revealed that the dramatic capture of the bridge became so famous during World War II that in 1969 Hollywood made a movie based on the story, titled *The Bridge at Remagen*. I don't believe I ever saw the film at the time, so I still don't know why the name seemed familiar. But the Americans' discovery of this sole standing bridge quickly altered the Allies' plans and hastened the end of the war.

Officially called the Ludendorff bridge after a World War I German general, the span stretched more than a thousand feet across a deep gorge and could carry two trains side by side. The Germans were still evacuating troops across it, but they had set explosive charges to blow the bridge at the last minute. Word of the bridge's existence flew up the American chain of command, and just as quickly came down orders to try to capture it. As the III Corps infantry platoon and a supporting platoon of tanks approached the west side of the bridge at about four o'clock on the afternoon of March 7, they could see Germans on the opposite bank preparing to detonate their explosives. Just as the platoon's commanding lieutenant—a German-born American named Timmerman—ordered his men forward, they heard an explosion and watched the bridge appear to lift amid a cloud of black smoke.

As the dust cleared, to the surprise of everyone on both sides, the Ludendorff bridge still stood. Its flooring was damaged, but Timmerman could see that the walkways on either side of the railroad tracks were unharmed. He and his men set off across the bridge, dodging bullets all the way. "Close behind the first riflemen went two sergeants and a lieutenant from the engineer detachment operating with [the task force]. Working swiftly, the engineers cut every wire they could find that might possibly lead to additional demolitions."⁷¹ Once the infantrymen cleared the last machinegun nests and reach the east bank, the Germans defending the bridge quickly surrendered.

While engineers got to work repairing the damage to the bridge, First Army immediately began redirecting troops toward Remagen. Its location was inconvenient for the Allies, whose main thrust was meant to be to the north, toward the Ruhr River valley, Germany's industrial heartland. But a standing bridge was too great a prize not to exploit. By midnight on March 7 the first tanks made it across the bridge, and within the next twenty-four hours nearly eight thousand American soldiers followed, including infantry units, tank battalions, antiaircraft artillerymen, tank destroyers, and armored engineers.⁷²

As the Americans' bridgehead expanded north along the river, engineers worked around the clock, carrying soldiers across on pontoon



The Ludendorff railroad bridge across the Rhine at Remagen. By the time this photo was taken, traffic across the bridge had been halted while engineers worked on repairs. (*Corps of Engineers: War on Germany,* 501.)

ferries and erecting treadway and pontoon bridges to accommodate ever more troops and vehicles. The US Army Corps of Engineers had been planning and training for the Rhine crossing since before the Normandy invasion, and it held at the ready vast stockpiles of assault boats, outboard motors, lumber, steel I-beams, pontoons, and pilings.⁷³ The bridging of the Rhine posed an enormous engineering challenge, and the 631st was about to play its part.

On March 11 the company moved bivouac from Elsenborn, Belgium, to the vicinity of Erftstadt, Germany, a town less than ten miles west of the Rhine. Some two weeks later, on March 27, the company moved to the historic spa resort town of Bad Godesberg, now a southern part of the Bonn municipality.

Judging from the after-action reports, March 1945 was the company's busiest month of the war. Captain Conchelos listed no fewer than thirteen major construction projects on which men from the 631st worked during March. They cooperated with a record number of combat engineer battalions for one month—ten of them—as well as with another engineer light equipment company, the 626th, and with the 1128th Engineer Combat Group and a "Harbor Craft Detachment." The engineer battalions' voracious need for equipment shows up in a list of machinery the 631st borrowed from other units—something seldom mentioned previously. From other light equipment companies, from several heavy pontoon battalions, from two engineer aviation battalions, and from a port and construction repair group the 631st acquired everything from tractors and cranes to a mobile tar unit and a sheepsfoot roller, a type of soil compactor used to harden road surfaces.

With its move back into Germany, the 631st, together with the 1110th ECG, was again squarely in VII Corps territory. Nevertheless, Conchelos summed up the company's work during March by saying, "This unit was given the mission of supplying equipment for the Rhine river construction projects undertaken by 1110th Engineer Combat Group in support of III Corps, V Corps and XIII Corps. The projects were mine booms, assembly of barges for Bailey barge bridge, assembling equipment for driving pile clusters around piers of railroad bridge at Remagen, construction of Class 40 floating Bailey bridges at Remagen and the construction of dual carriage-way Class 40 and Class 70 Bailey barge bridge at Bad Godesberg, Germany."

Even before the company left Belgium, the men must have felt a sense of excitement as news from the front filtered back to them. On March 6 the CO wrote that changes in the disposition of his equipment already emphasized "the First Army breakthrough to the Rhine River and the part the 1110th Engineer Combat Group was to play in the bridging of this stream." That day the 631st sent a Quickway crane and its operator to Weilerswist, Germany, about ten miles west of Bonn, to work at a Bailey bridge "park" being operated by three battalions of the 1110th. Bridge parks



Map 5. The 631st's route through western Germany, March–June 1945. Map by W. Powers.

were places where Bailey bridge equipment was stockpiled, "neatly laid out . . . in the order in which it would be used, landing bay equipment in one stack, floating Baileys in another."⁷⁴ All month engineers from the 631st would truck material to such parks, unload it, and later reload it and transport it to bridge sites.

No sooner was the bridge at Remagen captured than the 631st sent a crane and its operator (and later a tractor and driver) to "assist the 164th [ECB] in laying mine booms across the Rhine River." Mine booms were devices meant to stop "floating mines, boats loaded with explosives, torpedoes launched from one-man submarines," and frogmen carrying explosives as Germans tried to attack bridges from below.⁷⁵ The 1110th ECG had trained as First Army's mine boom specialist unit, and now its 164th ECB was tasked with protecting the Ludendorff bridge and others being built nearby. The job of laying nets, impact booms, and log booms across the river, Conchelos wrote, "was performed under heavy artillery fire and almost nightly aerial bombardment." Between the ninth and twelfth of March, the 164th lost at least ten men killed and seven wounded while working near Remagen. On the nights of March 17 and 18, security patrols from the 164th "captured two German swimmers who were forced ashore by the concussion of depth charges" before they could set explosives to demolish the bridge.⁷⁶

On March 14 the 631st began readying two six-ton prime movers and two cranes to use in "driving pile clusters around piers of Ludendorff Railroad Bridge." The unit never delivered the equipment, because on March 17, after ten days of continuous shelling and heavy traffic, the bridge collapsed. Of some two hundred American engineers working on it at the time, ninety-three were injured and twenty-eight killed.⁷⁷ In the 631st's after-action report, the CO ended his entry for this project merely by noting parenthetically, "Incompleted because of bridge collapsing."

Three hours after the Ludendorff bridge fell, the 148th ECB received orders to build a pontoon-supported, Class 40 Bailey bridge (capable of supporting forty-ton vehicles) about a mile downstream. The 631st sent three cranes with their operators to join the project. Other engineers at Remagen were already running ferries—planks laid over small boats powered by outboard motors—and had built a floating treadway and a heavy pontoon bridge over the river nearby. But the 148th's would be the first floating Bailey bridge constructed by Americans across the Rhine in 1945, to be followed by eight more. Working flat out, under fire and against a swift current, the team completed the 1,258-foot bridge in forty-eight hours. Film footage taken at the time showed trucks and jeeps rolling across the bridge past a sign on its far side reading, "This bridge constructed by 148th Engr C Bn." A sign at the west entrance to the bridge read, "In case of air attack, keep moving."⁷⁸



Wreckage of the Ludendorff railroad bridge after its collapse on March 17, 1945. (Corps of Engineers: War on Germany, 512.)

By mid-March, American-held territory stretched far enough beyond Remagen that the army began building bridges over the Rhine farther north, in the VII Corps sector, in order to get artillery units across the river to support the infantry. Already a heavy pontoon bridge and two treadway bridges were carrying traffic in the vicinity of Bonn. Now, the 1110th ECG, including the 631st, started work on a much larger, heavier Bailey bridge at Bad Godesberg. This Bailey would be a dual-carriageway bridge, able to carry two lanes of traffic. One lane would be a Class 40 bridge, and the other, an even sturdier Class 70. Measuring almost 1,180 feet long, the bridge was designed to carry the army's "heaviest load and normal traffic at the rate of over 1000 vehicles per hour."⁷⁹

The bridge at Bad Godesberg would also be noteworthy for floating not on pontoons but on barges—the innovation the 1110th had experimented with previously in Belgium. As early as March 12 the commander of the 1110th directed his men to look for abandoned German barges along the Rhine between Remagen and Bad Godesberg and have them towed to the bridge site. Meanwhile, all units of the 1110th seem to have been engaged in a frenzy of twenty-four-hour preparation: setting up bridge parks, hauling material to them, and assembling components in readiness at bridge sites. Work began on the eastern and western approach roads for the Bad Godesberg bridge by at least March 23, the day the 631st sent its first equipment and operators to take part in the job. Two days later, work started on the bridge itself. The 148th ECB began assembling bridge parts on the east bank while the 207th did the same on the west bank, eventually to meet in midstream. Judging from photographs taken at the time, teams of engineers assembled the bridge in sections, each consisting of two barges positioned parallel to each other lengthwise. The men laid two segments of bridge side-by-side across the barges, perpendicular to their lengths. Then teams maneuvered the sections into position, anchored adjacent barges to each other, and connected the bridge segments.

The 631st detached men and machines to both battalions constructing the bridge. It also sent a tractor and a crane to the 329th Harbor Craft Detachment "for the launching of sea mules," the rectangular, flat-bottomed tugboats the army used to tow and position pontoons and barges. But the 631st's biggest contribution to the project lay in working with the 1264th ECB, which had joined the 1110th in February, to build the approach roads on both banks. By the beginning of April the 631st had twenty-one pieces of equipment—and so presumably at least that many men—engaged in "excavating, paving, rolling, bulldozing and ditching" the approach roads. As usual, the company also operated quarries to produce crushed rock to use as fill in the roadways.



Construction of the Bad Godesberg bridge in sections. ("Hodges Bridge over the Rhine.")



Construction of approach road for the bridge at Bad Godesberg. The vehicle appears to be a tractor. ("Hodges Bridge over the Rhine.")



The completed bridge at Bad Godesberg, looking east across the Rhine. ("Hodges Bridge over the Rhine.")



Sign erected at the entrance to the Hodges Bridge, Bad Godesberg, Germany, April 6, 1945. ("Hodges Bridge over the Rhine.")

The barge bridge opened for traffic on April 6, although work on the approaches went on for another ten days. The army named the span the Hodges Bridge in honor of General Courtney Hodges, then commander of US First Army. The 1110th erected a sign at the entrance reading, "The Hodges Bridge. Constructed by 1110 Engineer Combat Group. April 6, 1945." The sign also named individually the units involved, including the "631 Light Equip. Co." I wish I knew what happened to that sign when the bridge was eventually dismantled; it is not in the collections of the US Army Engineer Museum at Fort Leonard Wood, Missouri.

The 631st's CO wrote that "the construction of the dual carriage-way Bailey Barge Bridge at Bad Godesberg was the most important construction project ever undertaken by this unit." The commander of the 1110th apparently agreed and on April 7 gave the 631st its second unit commendation, preceding the award of a Meritorious Service Unit Plaque on April 25. Colonel O'Neill's commendation read:

"The units of this Group recently completed probably the prize engineering mission of Army Engineers in this theater. The dual-carriage way Class 70 and Class 40 Bailey Barge Bridge over the Rhine River at [Bad Godesberg,] Germany, marks the biggest single bridging mission that has been assigned an Army Engineer Group to date.

"This feat involved the use of a tremendous amount of heavy engineering equipment which was furnished by your unit and much more that had to be borrowed from other sources and placed under your control, maintenance, and operation. The efficient manner in which your organization performed under the strain of 24 hour daily duty and adverse weather conditions with determination and speed indicates the qualities of a superior unit in leadership and training.

"It is my wish that each officer and man be extended my congratulations and commendation for the superior manner in which they all performed the assigned mission cheerfully and enthusiastically."

When I read those words, I feel proud of my dad and of the 631st, and I hope they felt proud of their accomplishment, too. But they had little time for self-congratulation. No sooner were the bridge approaches finished than they received orders to move deep into Germany. On April 17 the unit traveled some 165 miles by "motor march" to a new bivouac at a town called Hofgeismar, leaving behind a few men and machines to help maintain and protect the Hodges Bridge. After a week in Hofgeismar the company moved another forty-five miles southeast to Eisenach, Germany, the birthplace of Johann Sebastian Bach, where they would remain through the end of their time in Europe.

THAT THE UNIT COULD MOVE SO FAR so quickly owed everything to the Allies' spectacular advance over the previous three weeks, when their troops poured across the Rhine bridges into central Germany in overwhelming numbers. Between March 22 and 28, US Third Army crossed south of Koblenz, and US Ninth Army, in tandem with British and Canadian divisions, crossed north of the Ruhr River. On March 25, US First Army, with VII Corps as its spearhead, led the breakout east of the Rhine, pushing northeast from Remagen to meet the northern armies and encircle the Ruhr Valley by April 1. Most of the nineteen German divisions trapped inside the Ruhr pocket put up a defense, having again been ordered by Hitler not to withdraw "on pain of death."⁸⁰ So the American First and Ninth Armies spent another two weeks fighting their way toward the river from south and north, respectively, until they met on April 14.

By now Hitler's armies were crumbling. Despite his orders, German soldiers surrendered to the Americans, British, and Canadians by the tens of thousands. The Soviet Red Army, meanwhile, was closing on Germany from the east. Like the western Allies, the Soviet Union had launched a wellplanned offensive in the summer of 1944 to retake Nazi-occupied Soviet territory and then push westward through Poland and Czechoslovakia into Germany itself. By the end of March, Soviet armies had crossed the Oder River to within thirty miles of Berlin.

The Soviets closed a circle around Berlin on April 23, and two days later the first Soviet and American soldiers met on the banks of the Elbe River, which would become part of the border between West and East Germany during the Cold War. On April 29 the German command in Italy surrendered, and the next day Hitler shot himself in his Berlin bunker. His successors signed an unconditional surrender on May 7, to become effective on May 8, which the world now observes as Victory in Europe, or VE, Day.

Frank Timmer could not recall being given any news about the end of the war against Germany, although he thought he and his colleagues heard about Hitler's suicide as a rumor. Yet it seemed to him that they must have been told of the surrender, because he recalled a general feeling of "Thank God, it's over and we're going home." All the GIs had access to the army's newspaper, *Stars and Stripes*, so I cannot imagine that they didn't learn the news at least in print. Even so, Timmer did not remember the 631st holding any sort of celebration of VE Day.

Since the company's assignments in bridging the Rhine, its work had reverted to the mundane: supplying crushed rock, finishing up a bridge, hauling some I-beams. One road grader operator did get to "assist in the construction of a PW [prisoner of war] enclosure near Hersfeld," but otherwise, road maintenance "became the prime mission of all [engineer] battalions in the new area of responsibility" around Eisenach. The men worked on urban roads now, including bypasses and an autobahn. Like other such roads throughout Germany, these must have churned with some of the hungry, uprooted people, victims of war in one way or another, who now sought refuge and a way home, if home still existed.

During the last months of the war in Europe, the Allies freed millions of prisoners of war, political prisoners, and slave laborers from squalid German camps. Forced laborers alone numbered an estimated 5.7 million civilians, predominantly Soviets, Poles, and French but also Yugoslavs, Czechoslovaks, Belgians, Italians, Dutch, and others. The Nazis had deported these people from their homelands and forced them to work in German war industries, together with nearly two million German-held POWs. All told, "about 11 million people inside Germany were set free by the collapse of the Third Reich." In the III Corps zone, liberated slave workers "so congested the roads that the corps commander ordered them restricted to their compound."⁸¹ One of the greatest tasks the Allies faced after May 1945 was that of housing and feeding all these people and finding transportation for them to old or new homes.

On a rare occasion when I tried to press my father for his memories of the war, he told me briefly that the worst thing he saw during his time in Europe was the state of recently released inmates of German concentration camps. I've since heard other veterans say the same thing during televised interviews; the sight obviously left them deeply shocked and moved. But where, I wondered, would my father have seen these gaunt, ragged people? The 631st wasn't among the front-line troops who liberated the camps, so I can only guess that he saw them on the roads as he traveled to work sites around Hofgeismar and Eisenach.

The freed prisoners he saw would not have been Jewish survivors of actual extermination camps, for the Nazis built all of those in Poland. But Hofgeismar, the 631st's first bivouac east of the Rhine, sat just fifteen miles north of the city of Kassel, which hosted one of more than a hundred subcamps of the Dachau system set up to provide forced workers for armaments factories. At Kassel the workers built tanks and possibly airplanes. In Eisenach, the company's next bivouac, some four thousand forced laborers had toiled in factories, and another eleven thousand reportedly worked in an underground BMW plant producing aircraft engines.⁸² It seems entirely plausible that my father saw survivors freed from some of these labor camps.

I suppose it is also possible that at Eisenach the engineers came across prisoners freed from Buchenwald, one of the Nazis' largest prison and forced labor camps, which lay fifty miles to the east. At Buchenwald, American soldiers found some twenty-one thousand survivors, "emaciated, diseased, and exhausted," including about four thousand Jews.⁸³ I suspect that few of these prisoners were able to walk very far, but I wonder if my father might have seen them in trucks being transported to hospitals or displaced persons (DP) camps. The answer may forever remain a matter of sheer speculation.

One sight the men of the 631st would have been lucky to have seen but, according to Frank Timmer, never even heard about—also lay near Eisenach, a little to the southwest at a place called Merkers. There, hidden inside a vast salt mine, Americans discovered "almost all [of Germany's] gold reserve, great stores of German and foreign currency, and hundreds of priceless works of art." The art consisted mainly of works the Nazis had stolen from Jews and from other collectors and museums throughout Europe.⁸⁴

As their role in the war wound down, some members of the 631st did get to do a bit of sightseeing. Frank Timmer remembered being taken by truck, in a group of eight or ten enlisted men, for a tour of the Wartburg, a medieval castle overlooking Eisenach. The Wartburg was where Martin Luther found refuge in 1521–22 after being excommunicated by the Roman Catholic pope, and the engineers got to see the cell where Luther translated the New Testament into German. Timmer also recalled touring an aircraft factory in a cave, which I think must have been the BMW facility at Eisenach.

While the 631st went about its routine, if diminishing, road work during April and early May 1945, the Allies' job in Europe was turning from combat to occupation, governance, and rebuilding. Yet the war against Japan in the Pacific boiled on. Americans were now fighting to capture the island of Okinawa, which would give the Allies a base within easy striking distance of the Japanese home islands for an intense air bombardment. Unlike many Germans, the Japanese seemed truly prepared to fight to the last man. On Okinawa, 94 percent of the defending Japanese soldiers would die before the Allies declared victory there on June 21.⁸⁵ The Allies still assumed they would have to augment a devastating air campaign with a slow and bloody land invasion of Japan.

The 631st was about to become a small part of that invasion plan. Although the company remained at Eisenach through the end of May, on the twelfth of the month it was relieved from its assignment to First Army and, along with the 1110th ECG, reassigned to Ninth Army. On June 3 it was detached from the 1110th and sent 136 miles southwest to Mainz, where the men were assigned to an engineer base depot "for administration." A week later they boarded trucks in a convoy bound for the port of Marseilles, on the south coast of France. The trip took four days, ending on June 13 at a staging area in a place called Calas, a few miles inland from Marseilles.

At this point, even the officers may not have known what awaited them next. Frank Timmer told me he didn't believe the men knew where they were going beyond Marseilles. Indeed, to the best of his memory, it wasn't until they reached the Panama Canal that they realized they probably weren't headed for New Jersey. On July 17, however, at Calas, the CO recorded in his morning report: "AW28 read and explained to personnel on the attached roster," which lists the names of 115 men. I don't know what "AW" stands for, but I wonder whether this was the company's new orders to sail to Manila, Philippines, in preparation for the attack on Japan.

Looking at the company's roster for mid-July 1945, I was surprised to find that three-quarters of the names matched those listed a year before as having crossed the English Channel to Normandy as members of the 631st. Since then, some men had been transferred to other units; apparently a few had suffered work injuries sufficient to earn them a ticket home; and at least one had died. But the company retained 87 of the 116 men named in July 1944, which seems to me a remarkable degree of cohesion.

On July 21, 1945, the engineers boarded the SS *Lurline*, a luxury ocean liner now serving as a troop transport ship. From Marseilles it crossed the Atlantic, passed through the Panama Canal, and sailed on to Manila via Pearl Harbor, Hawaii. Timmer remembered being sorely disappointed not to get shore leave on Honolulu. Otherwise, the enlisted men traveled in moderate comfort. They slept in bunk beds, six men to a stateroom, each cabin with its own bathroom. They had the whole ship to roam, and their mess hall was one of the liner's original dining rooms. Unknown to them, while they waited in France and then sailed halfway around the world during August, the course of the Pacific war had changed swiftly and unexpectedly. On July 16, 1945, amid great secrecy, the US Army successfully exploded the world's first atomic bomb during a test in the desert of southern New Mexico. It dropped another nuclear bomb on the city of Hiroshima, Japan, on August 6, and three days later a third on the city of Nagasaki. Staggered by this display of scarcely imaginable power, Japan formally surrendered on August 15. The 631st would not, after all, have to serve in Japan.

As Frank Timmer recalled it, someone announced to the enlisted men the news of the bombs and Japan's surrender a few days before the *Lurline* reached Manila. Just then, he said, the ship "suddenly stopped and turned around 180 degrees." The men briefly got excited, thinking they were headed immediately for home, but the ship, oddly, made a full circle and forged on to Manila. Timmer wondered whether the captain had been celebrating the news in his own way.

The *Lurline* chugged into Manila Bay on the afternoon of August 27, twelve days after VJ Day. All over the harbor Timmer saw what he thought were the radar or radio towers of sunken ships sticking up above the water line. The Japanese destroyed many American ships in the bay when they first attacked the Philippines in December 1941; one observer at the time commented on "the funnels of sunken ships" rising from the waters of Manila Bay.⁸⁶ Perhaps these were the same vessels Timmer saw, still lying where they had sunk.

With so many troops now surplus to requirements, the army could not quickly transport them all back to the US. The 631st would have to wait its turn. From Manila the unit boarded a train that delivered the men late that night to Angeles, an inland city about sixty miles north of Manila. During the fighting in which the Americans had retaken Manila from the Japanese the previous February, the two armies between them had so thoroughly demolished the city—besides killing at least one hundred thousand Filipino civilians—that I suspect a suitable place for housing incoming troops there simply did not exist.

Angeles, on the other hand, seems to have been spared serious damage in 1945, although Americans fought for a week to retake adjacent Clark Air Base. There, four years earlier, just hours after Pearl Harbor, Japanese bombers had in half an hour destroyed most of the United States' air power in the Asian Pacific. I don't know what the engineers did during the nearly four weeks they spent at Angeles; none of the documents I have offers more than a hint, and Frank Timmer had no recollection of the place at all. On September 20 the unit was attached to the 1067th Engineer Construction Group, so perhaps some of the men received work assignments. The 631st had left its own heavy equipment behind in Germany, Timmer said, and was to have received new machinery in the Philippines. By now that was unnecessary. On September 23 the unit left Angeles and traveled north to Caba, a municipality in La Unión province, which stretches along the coast of Luzon island north of the Lingayen Gulf. There the men seem to have enjoyed what was essentially a time of rest and recreation. Their bivouac, Timmer said, was in a field near a beach. "We lived in tents, and about all we did was go swimming. It was a memorable time." My father loved to swim, so I hope the officers got to enjoy some free time, too.



Gene Fiducia (left), Frank Timmer (right), and their friend Joe Daly on the beach in the Philippines, 1945. (Courtesy Deborah Fiducia.)

But Dad's turn to go home was drawing closer. On October 10, he and nineteen enlisted men were "relieved from assignment this organization" and attached to "Disposition Center 21 Replacement Depot . . . for readjustment to US." They were the first men of the 631st scheduled to be shipped home. Timmer recalled that the selection was made according to age and length of service, but I presume the army's "point" classification, or Advanced Service Rating System, also applied. It did not use age as a criterion but awarded points for every month of a person's service, every month spent overseas, each medal and service star awarded, and so forth. Either way, my father must have qualified to board the first ship available to the 631st. Apparently, though, the first group did not leave right away. My father's military record gives his date of departure from the Philippines as November 19, 1945, which must have seemed a long wait after October 10. When men did leave the Caba staging area, Timmer said, "there was no fanfare about it. Guys just got on trucks or jeeps and left," with no more than a few handshakes all around.

I don't know in what order or exactly when other groups of the 631st departed Caba or the Philippines, or even which port they sailed from. But Frank Timmer's papers show that he and Gene Fiducia were among a group of thirty-two who received orders releasing them "from further duty in this theater" on November 21, 1945. He thought his group was the last one to leave: "We turned out the lights," he said. They sailed for home on November 27 on the *Warwick Victory*, docking at San Francisco on December 14. From there, after keeping the men for several days of processing at a debarkation center, the army put them on trains for home. Timmer's took him to Fort Dix, New Jersey, from which he took two buses, hitchhiked, and then walked the last few miles to his parents' house. He got home at 1:00 on Christmas morning, 1945.

Evidently, Captain Conchelos had wanted his men kept together and shipped home all at the same time. In a letter to the members of the 631st on October 29, 1945, under the heading "Subject: Commendation," he thanked the men for their loyalty and devotion to the Armed Forces, which had "made this unit one of the best in the First United States Army. Five Bronze Service Stars and the Meritorious Service Plaque prove that." He added: "I am sorry and deeply regret that I can not take you men back to the United States as a unit." He said he had tried everything he could to have the company return home together, "but as you see that is impossible." He hoped that "soon all of the men of this unit are home with their loved ones, and that they will never have to leave them again."

In recognition of their service, many of the 631st's engineers received promotions before leaving the Philippines. My father used to say that he was promoted to captain while aboard ship back to the US, but his records date his promotion later, to January 4, 1946. I don't doubt his memory of such an important event; I imagine he was informed of the promotion well before it became official.

Dad's ship docked at a port on the coast of California—I believe he once told me it was Los Angeles, but I am uncertain—on December 24, 1945. I do remember him telling me that arriving on Christmas Eve, in an unfamiliar place where he knew no one, and having to find his own transportation across the continent to Florida made for a lonely homecoming. Frank Timmer thought my father's account of being left to fend for himself upon arrival could have been accurate, because the officers were "pretty much on their own. They even had to buy their own uniforms." In any case, I believe my father, too, traveled by train, and it cannot have been long before he was back in Wauchula, Florida, reunited with his family, including two brothers and a brother-in-law who had also served in the war. Soon afterward, on January 25, 1946, the army formally inactivated the 631st Engineer Light Equipment Company.⁸⁷

Like so many other returning American military men, the three I know about from the 631st quickly settled down to family life and to jobs that might have nothing to do with their army training. Gene Fiducia graduated from university, married, raised two sons and a daughter, and worked for forty-six years for a lumber company in Margate, New Jersey.⁸⁸ Frank Timmer, too, stayed in New Jersey, where he married a woman he had dated a few times before the war and went to work as an auto mechanic in garages and body shops—a profession at least somewhat related to his engineer job. The Timmers raised a daughter and a son, and from 1962 until his retirement in 1987, Frank worked as an insurance adjuster. Looking back at his army service, he said he felt "fortunate to have experienced such things without really being in danger."

My father settled in Naples, Florida, on the state's southern Gulf Coast, where I believe he had lived for a while before the war. A friend and fellow veteran hired him to work as the meat cutter in the friend's small grocery store, the only one in the tiny crossroads town that Naples was



Bill and Kitty Kepp, Naples, Florida, probably 1947.

then. One day in early 1947 a "new girl in town" walked into the store to buy groceries, having just arrived from Kentucky with her recently widowed mother. Before long Katherine (Kitty) Pow became Bill Kepp's wife, and in 1949 she became my mother. Four more children eventually followed. In 1951 Dad opened a men's clothing store on the main shopping street in Naples, which he operated until 1966, when he sold the business and retired early because of failing eyesight. To my knowledge, he never considered pursuing a job or career in any way related to his training and experience in the Army Corps of Engineers. He died in 1999, at the age of eighty-five.

Although my father seldom talked about the war, I always had the sense that he was proud of his service and that he did his job well. The more I learn about war, the more astonishing it seems to me that anything ever goes right in battle, when it appears that everything that can possibly go wrong does so. Like every other segment of the Allied military forces in World War II, the US Army Corps of Engineers struggled to prepare hurriedly for war, to recruit and train enough qualified personnel, and to do its job under tough, sometimes miserable or even horrific conditions. Yet reading about the engineers' role in the European theater convinces me that they did an enormous number of things right. All the bombed-out roads they repaired, all the blown-up bridges they rebuilt, all the mines they defused, and much, much more truly helped win the war. The road to Berlin, one might say, was paved with premix.

NOTES

1. Corps of Engineers: War Against Germany, 565.

2. Corps of Engineers: Troops and Equipment, 225.

3. At the beginning of November 1944, the entire US First Army included only four engineer combat groups, each apparently encompassing three engineer combat battalions (*Siegfried Line Campaign*, 399). Conceivably, then, there might have been no more than four light equipment companies in all of First Army. By February 1945, the after-action report for the 1110th Engineer Combat Group, of which the 631st was part, listed seven engineer battalions attached to it, but the 631st was still its only light equipment company ("After-Action Report, 1110th," 4).

4. Corps of Engineers: Troops and Equipment, 152.

5. Corps of Engineers: Troops and Equipment, 149.

6. US Combat Engineer 1941–45, 16.

7. "Chiseldon Camp,"

www.swindonweb.com/?m=8&s=116&ss=763&c=2501&t=Chiseldon%20Camp, viewed June 6, 2016.

8. Gene Fiducia page at "VI Corps Combat Engineers of WWII,"

www.6thcorpscombatengineers.com/GeneFiducia.htm.

9. Corps of Engineers: War Against Germany, 562.

- 10. Guns at Last Light, 27.
- 11. Guns at Last Light, 37.
- 12. Builders and Fighters, 449.
- 13. Guns at Last Light, 84.
- 14. "History of the 300th Combat Engineers, 1943 to 1945,"

www.300thcombatengineersinwwii.com/lst523.html; "History of the 207th."

- 15. Breakout and Pursuit, 11.
- 16. Breakout and Pursuit, 206.
- 17. Cross-Channel Attack, 386.
- 18. Cross-Channel Attack, 361.
- 19. Cross-Channel Attack, 415.
- 20. Breakout and Pursuit, 40.
- 21. Cross-Channel Attack, 413, 447, 411.
- 22. Breakout and Pursuit, 120.
- 23. Breakout and Pursuit, 124.
- 24. "History of the 300th Combat Engineers, 1943 to 1945,"

www.300thcombatengineersinwwii.com/towns.html.

25. Information from Pvt. Lawrence Page,

www.6thcorpscombatengineers.com/LawrencePage.htm, viewed May 26, 2016.

- 26. Guns at Last Light, 112.
- 27. Bitter Road to Freedom, 3.
- 28. Bitter Road to Freedom, 21.
- 29. Breakout and Pursuit, 146.
- 30. Breakout and Pursuit, 179.
- 31. Breakout and Pursuit, 236.
- 32. Breakout and Pursuit, 69.
- 33. Breakout and Pursuit, 310.
- 34. Breakout and Pursuit, 332.
- 35. "Highlights of the 1110 Engineer Combat Group," 2.
- 36. Breakout and Pursuit, 598.

37. Breakout and Pursuit, 672.

38. Siegfried Line Campaign, 388; Corps of Engineers: War Against Germany, 462.

- 39. Siegfried Line Campaign, 31.
- 40. Siegfried Line Campaign, 38.
- 41. Siegfried Line Campaign, 94.
- 42. Siegfried Line Campaign, 95.
- 43. Siegfried Line Campaign, 384-85.
- 44. Builders and Fighters, 191.
- 45. Builders and Fighters, 191.
- 46. Corps of Engineers: War Against Germany, 513.
- 47. Siegfried Line Campaign, 35, 408, 373.
- 48. Bitter Road to Freedom, 61.
- 49. Bitter Road to Freedom, 62-63.
- 50. Guns at Last Light, 462.
- 51. The Ardennes, 438.
- 52. "Highlights of the 1110 Engineer Combat Group," 3.

53. Both preceding quotations from "Highlights of the 1110 Engineer Combat Group," 3.

- 54. Bitter Road to Freedom, 68.
- 55. "Highlights of the 1110 Engineer Combat Group," 3.
- 56. "Battle of the Bulge." Wikipedia. Viewed September 25, 2015.
- 57. Guns at Last Light, 488.
- 58. Guns at Last Light, 490.

59. This and most of the following stories of engineers in the Battle of the Bulge are from *Corps of Engineers: War Against Germany*, chapter 21, "The Ardennes: Engineers as Infantry."

60. "The 148th Engineer in the Bulge." Pvt. Lawrence T. Page. Viewed April 21, 2016, at http://battleofthebulgememories.be/en/stories/us-army/200-the-148th-engineer-in-the-bulge.html.

61. Builders and Fighters, 459–60.

62. Bitter Road to Freedom, 81.

- 63. All quotations in paragraph from Bitter Road to Freedom, 85-86.
- 64. Last Offensive, 70.
- 65. Last Offensive, 82.
- 66. Last Offensive, 143.
- 67. *Last Offensive*, 139–40.
- 68. Corps of Engineers: War Against Germany, 499; Last Offensive, 161.
- 69. Guns at Last Light, 540.
- 70. Guns at Last Light, 543–44.
- 71. Last Offensive, 217.
- 72. Last Offensive, 220.
- 73. Guns at Last Light, 547–48.
- 74. Corps of Engineers: War Against Germany, 513.
- 75. Corps of Engineers: War Against Germany, 504.
- 76. Corps of Engineers: War Against Germany, 509–10; "Highlights of the

1110 Engineer Combat Group," 6.

- 77. Last Offensive, 229–30.
- 78. Builders and Fighters, 191–92; Last Offensive, 231; "Military trucks cross first Bailey bridge."
 - 79. "The Hodges Bridge over the Rhine River," n.p.
 - 80. Last Offensive, 353.

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An excellent website developed by the daughter of a veteran of the 300th ECB, together with her husband, after attending many battalion reunions. The site includes photographs and excerpts from interviews with veterans.