

BUILDERS AND FIGHTERS:
U.S. ARMY ENGINEERS
IN WORLD WAR II

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General Editor

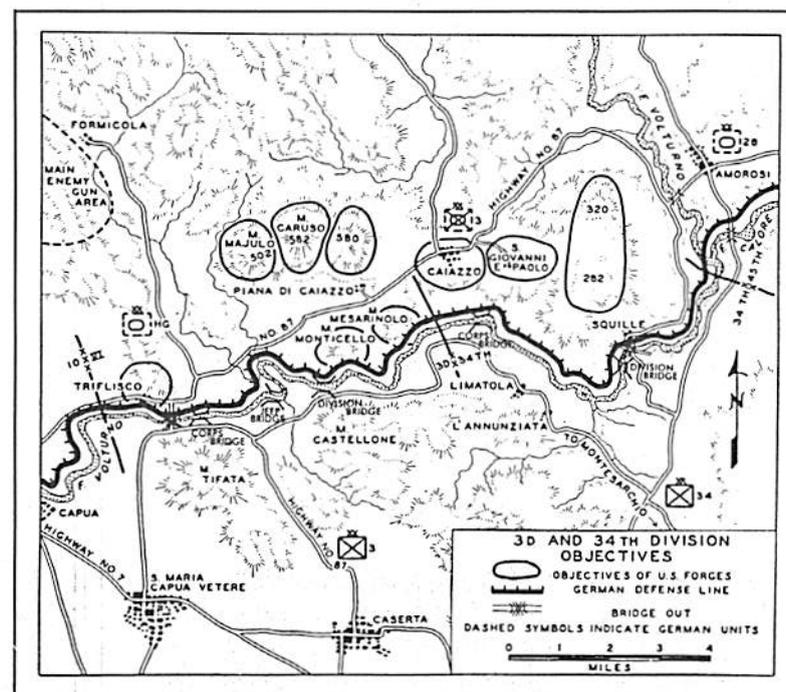
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The Volturno River Crossing

by James W. Dunn

The seizure of Sicily in August 1943 provided the Allies several possible alternatives for future operations in the Mediterranean theater. They could attack into southern France or they could go farther east and invade the Balkans. A third possibility, and the one chosen, was to continue the advance north into the Italian peninsula. The attack, which would probably knock Italy out of the war, would gain airfields in the south of that country from which the Allies could attack Germany.

The Germans, realistic about the Italian situation, expected them to surrender if the Allies invaded. In that event,



Volturno River, Italy

they had a choice to make regarding future actions: they could defend all of Italy, withdraw completely, or defend in the north using the Apennines. Hitler initially opted to defend in the north; but his commander in southern Italy, Field Marshall Albert Kesselring, wanted to defend the whole country. He convinced Hitler to allow him to keep in southern Italy the troops withdrawn from Sicily. When they had more success than expected in defending against the Allied landing at Salerno, Hitler agreed to reinforce Kesselring and allow him to fight a campaign south of Rome.

General Dwight D. Eisenhower, Allied Mediterranean theater commander, felt that after Salerno, the Germans would withdraw north of Rome and that the Allies had to advance to at least Pisa to defend the southern airfields. Therefore, he ordered a fall 1943 campaign in the south of Italy, thereby setting the stage for an attack across the Volturno River—the first American attack of a defended river line in the war against Germany.

For the Germans fighting a delaying action, the terrain of southern Italy and the fall weather gave every advantage to the defense. The Volturno River, forming a continuous obstacle directly in the path of the American advance, was the first good defensive position north of Naples. The river was a particularly strong position to defend when heavy rains put it in flood; and, in the event, the rains in the fall of 1943 transformed the Volturno into a major obstacle. The Germans felt that the rain-swollen river would require the Americans to pause, bring forward bridging equipment, and prepare for a coordinated attack.

The Volturno River, where American forces approached in October 1943, was from 150 to 220 feet wide, from 3 to 5 feet deep, and fordable at some points. The fall rains made the current swift and dangerous. The banks, 5 to 15 feet high, were steep and rain slick and would hamper boat launchings. The high ground on the north shore gave the Germans excellent artillery positions and observation posts that would have to be eliminated before the engineers could attempt to emplace any vehicle bridges. Brush and olive groves on the north shore provided concealment for the defenders, while the open fields south of the river offered the attackers no covered approaches to crossing sites. Moreover, the south shore

road net was inadequate for rapid movements of large bodies of men and equipment. In addition to swelling the river, the fall rains turned the roads into muddy quagmires.

As the Germans withdrew north, they destroyed all bridges along those roads capable of handling military traffic. Indications of a stiffening German resistance included air photos of the Volturno River line which showed Monticello and Monte Mesarinolo on the north shore fortified for a strong defense. American patrols reaching out towards the river found German patrols active on the south bank but managed to determine that the river line defense included minefields, machine gun nests, and observed artillery fire.

The German forces providing the defense were from the Tenth Army commanded by General Heinrich von Vietinghoff. He gave the XIV Panzer Corps responsibility for the Volturno River line. The corps included the Hermann Goering Division of four infantry battalions, an armored force, and a large number of motorized assault guns. The other division in the corps defense was the 3d Panzer Grenadier Division with an attached reconnaissance battalion from the 26th Panzer Division.

The Germans laid extensive minefields, organized a system of machine gun nests sited to cover the riverbank with interlocking bands of fire, and zeroed in artillery on the most likely bridging sites. They then waited in the heights overlooking the swollen, racing Volturno River, prepared to repel any crossing attempt.

The American forces which approached from the south were from Lieutenant General Mark W. Clark's Fifth Army. Clark chose the VI Corps, commanded by Major General John P. Lucas, to make the crossing. From his corps, Lucas decided to use the 3d Infantry Division commanded by Major General Lucian K. Truscott, Jr., and the 34th Infantry Division under Major General Charles W. Ryder. Engineer support for the crossing included the two divisional battalions, the 10th Engineer Combat Battalion of the 3d Division and the 109th Engineer Combat Battalion of the 34th Division. Corps engineer support came from the 16th Armored Engineer Battalion and the 36th and 39th Engineer Combat Regiments. Weather, the terrain, and German defensive tactics would combine to test the river-crossing capability of these American engineer units.

Kesselring ordered Vietinghoff to contest every foot of territory and hold the Volturno line until at least 15 October to provide time for construction of the main defense line south of Rome. Supported by the bad weather and good defensive terrain, Vietinghoff used delaying tactics to slow the American advance from the south. In the time gained, he reinforced his defenses along the Volturno River.

For the Fifth Army, speed was essential to deny the Germans time to build up their defenses along the river. However, Clark's hope for a rapid crossing of the river by 6 October foundered on the severity of the fall rains and the quality of the German defensive tactics. It was not until 9 October that he could order Lucas to conduct a corps attack across the Volturno. Again, the weather and German delaying actions intervened, and Lucas did not have his two divisions on line and ready to attack until 12 October.

As all hope for a quick jump across the Volturno vanished, Lucas planned a coordinated attack against a fortified river line. Along a 15-mile front between Capua and the junction of the Calore and Volturno rivers, he prepared a two-division attack with the 3d Division on the left as the main attack and the 34th Division on the right as the supporting attack.

General Truscott planned a feint opposite the Triflisco Gap on the left of his 7-mile 3d Division front. He felt the Germans expected the main attack there because that area had good roads and a narrow river course. Rather, he planned his main attack in the center of the line with a supporting attack on the right. The division's initial objective, needed to facilitate early bridge construction, was the high ground north of the river. Truscott was concerned about getting armor, artillery, and heavy equipment across the river to support the infantry; so he wanted the bridges in as soon as possible.

There were three bridges planned for the 3d Division area. In the Triflisco Gap on the left, the 16th Armored Engineer Battalion (-), supported by the 39th Engineer Combat Regiment, was to build a 30-ton treadway corps bridge while in the center, Company A, 10th Engineer Combat Battalion, built a light jeep bridge and Company B of the same battalion built an 8-ton division bridge capable of carrying 2 1/2-ton trucks. Truscott wanted the jeep bridge in first to

get light equipment across the river early in the operation. Next in priority was the division bridge to carry artillery, and last was the corps bridge for armor and heavy equipment.

In the 34th Division area, General Ryder planned an attack of two regiments abreast along his 8-mile front to seize the high ground quickly and deny the Germans the chance to direct observed artillery fire on the bridge sites. Company B, 16th Armored Engineer Battalion, and the division engineers were to build the corps bridge, a 30-ton treadway, on the left; while on the right, the 36th Engineer Combat Regiment, with division engineer help, built the 8-ton division bridge.

In both division areas, engineer assistance to the infantry was critical. By guiding them down the riverbanks and across the fords and operating the assault boats, the engineers would play a crucial role in the attack across the Volturno River.

The 3d Infantry Division reached the south bank of the Volturno on 6 October, and on 8 October, the 34th Division began moving toward the river. Engineer patrols determined that all bridges across the river were down, but despite the river's depth and swift current, tank and infantry fords were available. The patrols came under German machine gun fire along the riverbank and saw artillery fire hit expected crossing sites. Their reconnaissance proved that the Germans were waiting in the hills overlooking the Volturno, prepared to defend the river line.

To assist the assault troops, the engineers brought forward guide ropes and 1,000 kapok life jackets they found in a Naples warehouse. Because there were not enough assault boats, they improvised, borrowing rubber boats from the Navy, preparing 6-ton pneumatic floats for use as assault boats, and building rafts out of old water cans and oil drums. In the rear, they built and improved river approach roads and practiced bridge construction. Then they waited.

The 3d Infantry Division began the feint in the Triflisco Gap at midnight, 12 October. Two hours later, the division's 7th Infantry Regiment went forward in the main attack. Supported by the division's 10th Engineer Combat Battalion and engineers of the 1st Battalion, 39th Engineer Combat Regiment, the assault force battled both the swift current

and the German machine guns. Some troops waded the river with the aid of guide ropes while others crossed in the improvised assault boats. Guide ropes broke loose from anchors and boats broke up in the swift current as the German machine gun fire whipped the water surface. The crossing went slowly, and it was dawn before the assault battalion had crossed. Two reserve battalions quickly followed, and by 0800, the 7th Infantry reached the base of its main objective, Monte Majulo.

On the right of the division line in the supporting attack area, the 15th Infantry Regiment faced similar problems with the current and the German defenses; but by dawn, that assault force was also across the river. In the early morning hours, the regiment drove toward the high ground which dominated the site chosen for the division bridge.

With the main and supporting attacks succeeding, Truscott ordered the 30th Infantry Regiment to turn the Triflisco Gap feint into an assault across the river. The regiment made two attempts; but the Germans, knowing the value of the crossing site, reacted fiercely and repelled both attacks. A British 56th Division company-size attack in the X Corps area on the left of the 3d Division was supposed to assist the Americans, but the Germans beat it back as well. By the end of 13 October, the Germans continued to hold Triflisco Gap, thereby preventing construction of the corps bridge.

In the 34th Division area, General Ryder sent two of his regiments, the 168th Infantry on the left and the 135th Infantry on the right, across the Volturno River at 0145, 13 October. The division's 109th Engineer Combat Battalion supported the crossing as slippery and steep riverbanks and German machine gun fire made it difficult for the attack force. The swift current prevented the engineers from returning some assault boats to the south shore, so many in the following waves had to cross through chest-high water. It took five hours for the assault battalions to complete the crossing, but by dawn, the engineers were able to begin operating a light vehicle ferry in the 135th Infantry area.

At the same time, even though the Germans still held the high ground and thus could bring observed artillery fire on the bridge sites, the engineers were ordered to

begin construction of the division bridge near the town of L'Annuziata in the 168th Infantry area. To save time and eliminate the noise of an air compressor, Company A, 36th Engineer Combat Regiment, inflated the 6-ton floats and attached the saddles before loading their trucks. The company operated by platoon with the first off-loading, while the second carried the equipment to the river, where the third assembled and launched the bridge.

As the company approached L'Annuziata, German artillery fire disabled three trucks and damaged several floats. The engineers pushed on and had three floats in the water when the German artillery fire increased, destroying the launched floats and driving the engineers back from the river. As bridge construction was impossible under the accurate artillery fire, the engineers withdrew to a defiladed position behind the town. Later that day, they tried again under the cover of a smoke screen, but the smoke drew fire, and once again the engineers withdrew from the division bridge site.

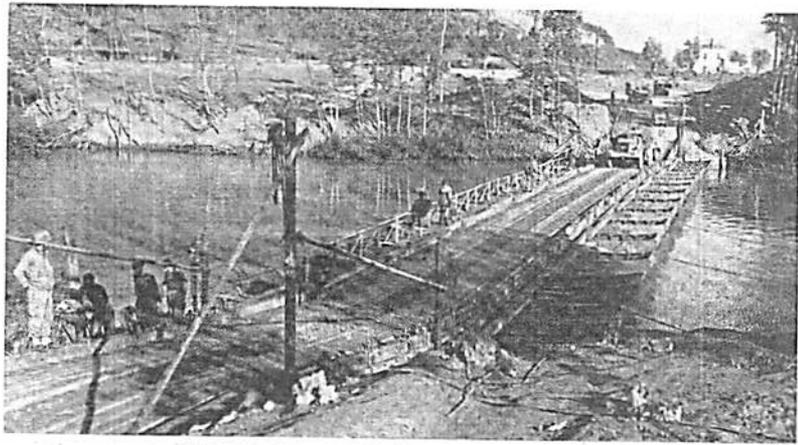
Throughout 13 October, the Germans directed artillery fire onto all potential bridge sites in the 34th Division area. In those conditions, Company B, 16th Armored Engineer Battalion, found it impossible to begin construction of the corps 30-ton treadway bridge. Something would have to be done about the observed artillery fire before bridge construction could begin.

Meanwhile, the 3d Division continued to reinforce its assault battalions north of the river. Shortly after dawn, at a ford in the 7th Infantry area, engineers using bulldozers began construction of a tank approach route; but German artillery fire caused heavy casualties among the operators, stopping the work. At the same time, General Truscott learned that German tanks were advancing on the infantry north of the river. On his way to the river, he encountered engineers moving toward the division bridge site; and he told them of the dire need for engineers, using picks and shovels under artillery fire, to level the riverbank at the tank ford so American armor could cross and assist the infantry. He said their response was immediate and inspiring as they double-timed toward the riverbank. By noon, 15 tanks and 3 tank destroyers were across the tank ford and moving to the aid of the riflemen.

As the fighting raged along the river throughout the morning of 13 October, Company A, 10th Engineer Combat Battalion, worked on the jeep bridge in the 7th Infantry area. The bridge they built was a marvel of battlefield innovation. Lacking standard equipment, they used Italian railroad track, steel runway matting, and heavy floats borrowed from the 16th Armored Engineers to build an unorthodox, but useful, light vehicle bridge. It was operational by the afternoon.

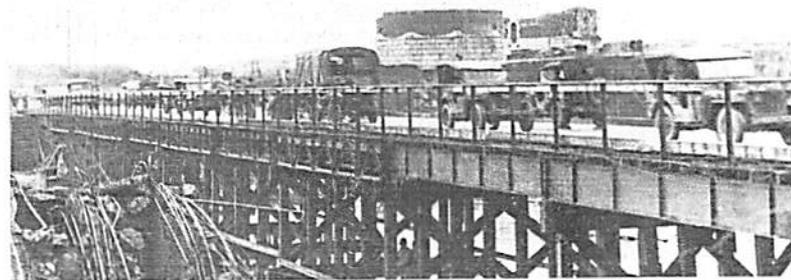
In the 15th Infantry area, Company B, 10th Engineers, was having a more difficult time with the division 8-ton pneumatic float bridge. Accurate German artillery fire damaged several floats and finally forced the engineers to halt work on the bridge. When General Truscott visited the site soon thereafter, he told them how vital the bridge was to the success of the crossing. He said they went back to work as nonchalantly as though at a demonstration. They completed construction of the bridge by midafternoon.

Failure to take the Triflisco Gap on 13 October prevented construction of the corps bridge. So, while there were two bridges operational in the 3d Division area, neither was capable of carrying armor and heavy equipment. As the 30th Infantry could not force the gap directly, Truscott sent them upstream to use the jeep bridge and flank the German high ground position. This they did after dark on 13 October, and by the morning, Triflisco Gap belonged to the 3d Division.



The corps bridge at Triflisco Gap, Italy.

The 16th Armored Engineers then began construction of the corps 30-ton treadway bridge while engineers from the 10th Battalion and the 39th Regiment prepared approach roads. German artillery fire from the British sector hampered the work, but by early afternoon, 14 October, the corps bridge was in. The bridges in the 3d Division area could now carry vehicles from a jeep to a medium tank across the Volturno River.



Fixed bridge at Capua, Italy. When the Germans retreated across the Volturno River, they destroyed every bridge in the path of the Allied advance.

Meanwhile, the engineers in the 34th Division area found a solution of sorts to the accurate German artillery fire. Prevented by the shelling on 13 October from constructing any bridges, they knew they had to emplace at least one on the 14th or the river crossing could fail. Company A, 36th Engineer Combat Regiment, found a defiladed location near the village of Squille, upstream from the original division bridge site. At this new site, the river was 70 feet wider; and that additional width, plus the earlier loss of equipment, required the use of 12-ton floats together with the 6-ton floats. A hinge at the junction of the two different-sized floats made by using one instead of two pins allowed the combination. The bridge was ready by midmorning on 14 October.

The completion of the division bridge solved some of the supply problems for the 34th Division; but until the engineers could build the corps 30-ton treadway bridge, exploitation of the river crossing would be impossible. Through the morning of 14 October, the Germans continued to direct artillery fire onto the corps bridge site from the high ground around the village of Caiazzo. As the 168th Infantry pushed forward, the Germans resisted stubbornly. They knew that once they lost the high ground, a major bridge would be built, allowing the Americans to push heavy equipment across the river. By mid-afternoon, the 168th forced the Germans off the high ground and that evening took Caiazzo. Immediately, Company B, 16th Armored Engineer Battalion, began construction of the corps bridge. With its completion by midnight, the 34th Division began to pour men and supplies across the Volturno.



A wrecked ponton bridge washed out by flood waters on the northern Volturno River.

On 15 October, the two American divisions broke out of their bridgehead north of the river and began to pursue the Germans as they withdrew to their next defensive position south of Rome. The engineers constructed additional bridges across the Volturno to support the push north.

As the Allies moved toward Germany, there would be many more rivers to cross and bridges for the U.S. Army



The 16th Engineer Battalion adds steel sections to protect a ponton bridge against the rising waters of the northern Volturno River.

Engineers to build. Ahead lay the Rapido and Po in Italy and the Seine and the Rhine in northern Europe. Some would be easier than the Volturno, but many would be harder. Engineers undertaking the subsequent crossings could and did learn from the first contested American river crossing of the European war—the fight at the Volturno River in October 1943.

Sources for Further Reading

The engineer story is found in Alfred M. Beck, *The Corps of Engineers: The War Against Germany, United States Army in World War II*. For the campaign, look to Martin Blumenson, *Salerno to Cassino, United States Army in World War II*.

A division commander's view is available in Lieutenant General Lucian K. Truscott, Jr., *Command Missions*, while the small unit level is seen in *From Volturno to the Winter Line*, American Forces in Action Series.