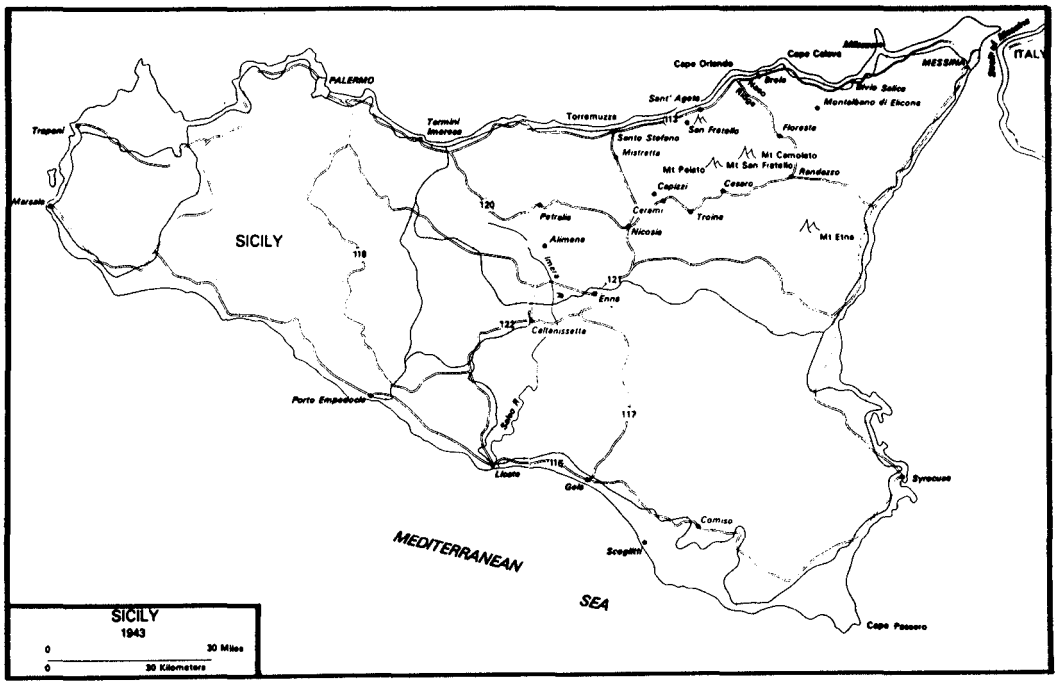
Engineers in Sicily

by James W. Dunn

The British and American Chiefs of Staff agreed at Casablanca in January 1943 that Sicily would be the next target in the Mediterranean theater upon completion of the Tunisian campaign. By that time in the European war, the Allies had the initiative. Before, they had been reacting to Axis moves, but with El'Alamein, Stalingrad, and the expected successful completion of the campaign in North Africa, the Allies were ready to make the Axis react.

With the British not ready to cross the Channel in 1943, the move against Sicily would continue the indirect approach through the Mediterranean to the continent, keep the pressure on Germany, help the Russians by diverting German forces from the eastern front, and make use of the Allied forces available in the Mediterranean theater. Seizure of Sicily would secure the line of communication through the Mediterranean Sea and intensify the pressure on Italy, possibly knocking it out of the war.



Sicily, 1943

Sicily, 90 miles across the Mediterranean Sea from North Africa, was only two miles across the Strait of Messina from the Italian peninsula. Shaped like a great triangle, it encompassed an area of about 10,000 square miles, roughly the size of Vermont. Mountains, which made up most of the island terrain, dropped abruptly to the sea in the north but sloped gently toward the south. The Plain of Catania in the southeast was the only sizeable stretch of flat land, and on the north it abutted Mt. Etna, a 10,000-foot-high volcano.

There were numerous beaches of sand and shingle, but high ground behind dominated most exits. The best roads were near the coast with interior roads being narrow and winding. The best airfields were also near the coast; none were more than 15 miles inland. The four major ports were Messina in the northeast, Catania and Syracuse on the southeast coast, and Palermo in the northwest corner. Minor ports such as Gela and Licata on the southwest coast were not capable of handling the tonnage necessary to support a major military operation.

Summer weather in Sicily was hot and dry with temperatures often nearing 100 °F. There was little rainfall, and dust rather than mud would be a problem for the engineers. While dry riverbeds would prove no hazard to movement, the lack of rainfall would require the engineers to supply significant quantities of water.

In Sicily, the Italian Sixth Army commander, General Alfredo Guzzoni, had four field divisions and six static coast defense divisions. Added to this force were the militia, air, and naval personnel for a total of about 200,000 Italian troops available for defense. The Allies rated the combat effectiveness of this force as poor.

As the Tunisian campaign came to a close, Mussolini asked the Germans to reinforce the Sicily defense force; and Field Marshall Albert Kesselring, Commander in Chief, South, sent the 15th Panzer Grenadier Division and the Hermann Goering Panzer Division. Both units were reconstituted from troops that had not been able to get to Tunisia before the surrender, but their combat effectiveness was considered to be good. While the Germans were officially under Guzzoni's command, General Fridolin von Senger, the German liaison officer, was really in command. There was only cooperation with the Italians.

The Italian coast defense divisions, organized in a widely separated system of forts, were not expected to put up much of a fight; so Guzzoni placed two field divisions in the west and two in the east as counterattack elements. At Guzzoni's request, von Senger placed the Hermann Goering Division, with its battalion of Mark VI "Tiger" tanks, in the southeast and the 15th Panzer Division in the northwest.

General Dwight D. Eisenhower, Supreme Commander, Mediterranean Theater, commanded the Allied forces involved in the Sicily operation. His ground element, General Sir Harold R.L.G. Alexander's 15th Army Group, contained General Sir Bernard Montgomery's British Eighth Army and Lieutenant General George S. Patton's American Seventh Army. Patton organized his army into two operational units. The II Corps had the 1st and 45th Infantry Divisions, while the 3d Infantry Division was separate and reported directly to Patton.

For the landing phase, engineer units of Colonel Eugene M. Caffey's 1st Engineer Special Brigade supported the assault divisions. The 36th Engineer Combat Regiment, under the command of Lieutenant Colonel George W. Gerdes, was with the 3d Division, while Colonel Roland C. Brown's 531st Engineer Shore Regiment supported the 1st Division and Colonel Charles H. Mason's 40th Engineer Combat Regiment supported the 45th Division. Colonel George W. Marvin's 540th Engineer Combat Regiment was in Seventh Army reserve.

The engineers had much better beach assault equipment in Sicily than they had the previous year for the North African landing. The new landing craft were flat bottomed, which allowed them to get close enough to the shore to put men and equipment into shallow water. The landing ship, tank (LST) could carry 1,900 tons or 20 medium tanks and used the landing craft, tank (LCT) as a lighter. The landing craft, vehicle and personnel (LCVP) could carry 36 combat-equipped infantrymen or 8,000 pounds of cargo. Bridging the gap between the supply ships and the dumps on the beach was the 2 1/2-ton amphibious truck (DUKW). It could carry 25 troops and their equipment or 5,000 pounds of general cargo. Capable of speeds up to five knots in water and 50 miles per hour on land, it proved of great benefit to the 1st Engineer Special Brigade.

D-day was set for 10 July 1943 when at 0245 the Allies would begin the simultaneous landing of eight divisions across a 100-mile front in the southern corner of Sicily. While Messina was considered too strong for a direct attack, the Eighth Army zone on the southeast side in the Gulf of Noto did have the major ports of Catania and Syracuse. Patton's Seventh Army, landing across the Gulf of Gela beaches on the southwest side, would have to use minor ports and over-the-beach supply for a time.

General Patton planned to attack with the 3d Infantry Division, under Major General Lucian K. Truscott, Jr., on the left. Truscott's mission was to protect the left flank against counterattack and seize the town and port of Licata and the nearby airfield. In the II Corps area on the right, Major General Omar N. Bradley had Major General Terry Allen's 1st Infantry Division on the left and Major General Troy H. Middleton's 45th Infantry Division on the right. The 45th was to capture Comiso and Biscari airfields and the high ground beyond the beaches, while the 1st Division was to take the town and port of Gela and the nearby Ponte Olivo airfield. To assist the 1st Division, Patton gave to Allen Colonel James Gavin's 505th Parachute Regiment, which was to land at midnight and secure the high ground behind the beaches. Allen also had Force X, a special grouping of the 1st and 4th Ranger Battalions and the 1st Battalion, 39th Engineer Combat Regiment, under the command of Lieutenant Colonel William O. Darby. Darby's mission was to seize and hold the town of Gela.

Colonel Garrison H. Davidson's Seventh Army engineer plan included the normal missions but placed special emphasis on water and bulk fuel supply. To provide one gallon of water a day for each man in Seventh Army, the engineers equipped 20 LSTs to carry 10,000 gallons of water each and planned to pump it ashore into canvas storage tanks. For bulk fuel, the Seventh Army petroleum engineer staff officer organized a system to pump fuel from offshore tankers to beach storage tanks and thence to the airfields and inland depots. With the Seventh Army dependent on over-the-beach supply for up to 30 days, Davidson's plan envisioned that the 1st Engineer Special Brigade, once it regained control of its units when the beachhead was consolidated, would function as a base section.

The Seventh Army landings began at 0245, 10 July, with the 1st and 3d Divisions on time, but high winds and heavy surf delayed the 45th landing for an hour. The same bad weather scattered Gavin's paratroopers all across the front. All the assault divisions attached a platoon of engineers to the assault battalions to clear paths through obstacles and help move the infantry across and beyond the beaches.

The 3d Division had little trouble with the Italian defenders, and by 0500, the 36th Engineers began landing medium tanks and other heavy vehicles across the beaches north of Licata. The 36th Engineer headquarters opened at 0714, and by noon, the supply dumps were operating. Company C supported the 15th Infantry Regiment and the 3d Ranger Battalion in seizing the port of Licata and had it operational by 1600.

By the time the 45th began to land, about 0345, the Italian defenders were alert and ready. As the division's 120th Engineer Combat Battalion cleared paths through beach obstacles, the 40th Engineer Combat Regiment attacked pillboxes defending the exit roads. During this action, two officers and two enlisted men from the 40th Engineers earned the Distinguished Service Cross. At noon, the 19th Engineer Combat Regiment began landing and preparing for its mission to repair the Comiso and Biscari airfields.

In between the 3d and 45th Divisions, the 1st Infantry Division hit its beaches on time. Company C of Lieutenant Colonel William B. Gara's 1st Engineer Combat Battalion supported the 26th Infantry Regiment, while Company A worked with the 16th Infantry on the beaches south of Gela. Colonel Darby landed his two Force X ranger battalions on either side of Gela and put the 1st Battalion, 39th Engineer Combat Regiment, directly into the town. By 0325, the engineers were knocking out gun emplacements on the bluffs overlooking the beach. Entering Gela, they found that the best way to clear the streets was to throw a high explosive grenade down the street to create a dust cloud and then advance behind the cloud to attack with a fragmentation grenade. By dawn, Force X was digging in on the high ground beyond Gela preparing for the eventual counterattack.

It came about midmorning. As an Italian tank–infantry column came south on Highway 117 toward Gela, naval

gunfire stopped the infantry and hit several tanks, but about ten of them got into Gela. The rangers and 39th Engineers, reinforced by bazooka-firing engineers of the 531st Engineer Shore Regiment, disabled three tanks and the rest withdrew. Soon after this action, Italian infantry attacked from the northwest. As the Italians advanced in parade ground fashion, the rangers and engineers stopped them with heavy loses before they reached Gela.

By the evening of D-day, most beaches were secure, but there was a problem in the 1st Division area. The scattered paratroopers had not been able to secure the high ground. Fearing more counterattacks, Patton ordered ashore the Army reserve, the 2d Armored Division, plus the 18th Infantry Regiment.

The next morning, with only the infantry in place, and while the 531st Engineers struggled to move the Shermans across the soft beach sand, several Axis columns approached the 1st Division area. Naval gunfire hit a force of Italian infantry and German tanks advancing along Highway 117 toward Gela, forcing the tanks to swing toward the beach. With the infantry isolated and pinned down, five engineer half-tracks sallied forth from Gela and captured over 300 Italians.

As the tanks drove toward the beach, they were joined by a column of German infantry and Tiger tanks. By this time, the engineers had moved five Sherman tanks across the beach to join a defense line manned by direct firing artillery, infantry, and engineers from the 1st and 531st Engineers. As this line halted the German attack, Colonel Gavin's paratroopers, to include members of the 307th Airborne Engineer Battalion, hit them in the flank. By early afternoon, the Germans withdrew, leaving behind 16 tanks burning on the battlefield.

In the meantime back at Gela, another Italian infantry attack developed at noon. Force X, with the help of naval gunfire, stopped the attack short of the town, and again the engineers sallied forth in their half-tracks. This time over 400 Italians surrendered. That ended the counterattacks.

By 12 July, the American beaches were linked and secure, and contact had been made with the Eighth Army on the right. With the engineers repairing ports and airfields in all

division zones, Patton pushed forward. Aggressive by nature, he was not satisfied with the rather vague mission of protecting Montgomery's left flank as the Eighth Army drove up the east coast toward Messina. When Montgomery's advance pushed west of Mt. Etna, it forced Patton to sideslip the 45th Division to the left of the 1st Division. The Seventh Army was now oriented toward Palermo, and Patton had an objective worthy of his army.

On 17 July, General Alexander authorized a Seventh Army move toward Palermo and the north coast. Patton organized the offensive with Major General Geoffrey T. Keyes' Provisional Corps of the 3d Infantry and 82d Airborne Divisions on the left and the II Corps on the right. The 2d Armored Division was in Army reserve. The 1st Engineer Special Brigade became the Seventh Army Services of Supply (SOS) with an organization that included the 36th, 40th, and 540th Engineer Combat Regiments and the 531st Engineer Shore Regiment. It was responsible for all unloading over the beaches and through the ports and for supply forward. Colonel Davidson felt that an organization that had brought ashore over 66,000 men, about 18,000 tons of cargo, and more than 7,000 vehicles in the first three days of the campaign could support the drive to Palermo and the north coast.

The attack kicked off on 19 July. The Provisional Corps pushed through mountainous terrain where the roads were easily blocked and the villages were obstacles to advance. The division engineers paced the drive as there were no corps engineers at the start. Not until 20 July did the 20th Engineer Combat Regiment join the Provisional Corps.

Against little opposition, the 82d Airborne Division moved 25 miles in the first day. The 307th Airborne Engineers built a bypass around the demolished Platani River bridge, and the next day the division moved 20 miles. On 21 July, Darby's Force X, attached to the 82d, forded the Belice River. Then the 17th Armored Engineer Battalion, 2d Armored Division, emplaced a treadway bridge.

In the 3d Division area, over even more rugged terrain, Lieutenant Colonel Leonard L. Bingham's 10th Engineer Combat Battalion cleared roads, repaired bridges, and built bypasses to pace the drive. The 3d Division took Prizzi on 20 July; and by the evening of 22 July, it was on the

outskirts of Palermo. General Keyes accepted the surrender of the city that night.

Meanwhile, II Corps attacked toward the north on 19 July with the 45th Division on the left and the 1st Division on the right. On 21 July, the 1st Engineers repaired a bridge south of Petralia to continue the 1st Division drive. The division took Petralia on 23 July and then turned east on Highway 120. Meanwhile, the 45th Division reached the north coast at Termini on the same day and turned east on Highway 113.

On 23 July, General Alexander, realizing that the Eighth Army was not strong enough to take Messina, and with the Seventh Army already in position, ordered Patton to attack east on Montgomery's left. Assigned Highways 113 and 120, Patton had room for just II Corps. The coast road, Highway 113, ran along a narrow belt between the ridge noses and the beach. The inland road, Highway 120, ran along the southern slopes of the Caronie Mountains. It was narrow and crooked with steep grades and sharp turns.

Again, the engineers would pace the drive because the rate of advance depended on their ability to clear the roads to get the armor, artillery, and supply vehicles forward. Clearing the high ground covering the roads so engineers could open and maintain the axis of advance would not be easy against a determined enemy.

This time the defending force would be more tenacious than that faced in the drive on Palermo. General Hans Hube, commander of the XIV Panzer Corps, took over tactical control of the battle on 18 July. He kept the Hermann Goering Division in the south opposite the Eighth Army, but he assigned two divisions to the north opposite Patton. When the 29th Panzer Grenadier Division arrived on 19 July, Hube placed it in defense of Highway 113 and kept the 15th Panzer Grenadier Division along Highway 120. Hube ordered a defense built around a series of strong points, with withdrawal allowed only under overwhelming pressure.

To help provide that pressure, the 1st Engineer Special Brigade would initially have to move supplies across the beaches and through the minor ports at Gela, Licata, and Porto Empedocle. On 23 July, the 20th Engineers began repairing the Palermo port to accommodate 36 LSTs and

14 Liberty ships. By 28 July, the port was operating at 30 percent capacity. That figure improved throughout the campaign as eventually the 540th Engineer Combat Regiment, the 343d Engineer General Service Regiment, and the 1051st Engineer Port Construction and Repair Group all worked on the rehabilitation.

In addition to operating the ports and beaches, the 1st Engineer Special Brigade stocked and operated Seventh Army depots. In the process, the 696th Engineer Petroleum Distribution Company erected two 5,000-barrel storage tanks at Gela and by 21 July had a 4-inch pipeline through to the nearby airfield. By 26 July, a similar pipeline was in to Comiso airfield, and a storage facility was operational at Porto Empedocle.

In II Corps, the 39th Engineers had a battalion supporting each of the division engineer battalions. A battalion from the 19th Engineers soon joined the corps and eventually each attacking division had a corps engineer regiment in support. They improved bypasses and erected Bailey bridges. On 29 July, II Corps established a bridge dump at Nicosia and organized a Bailey bridge train with a platoon from the 19th Engineers using captured four-wheeled German trailers.

At the army level, the 20th Engineer Combat Regiment worked on Highway 113 while the 343d Engineer General Service Regiment operated on Highway 120. They used captured rollers, portable rockcrushers, and stockpiles of crushed stone and asphalt to maintain the roads, build culverts, and repair railway bridges. The 20th Engineers began repairing the rail line between Palermo and Santo Stefano on 30 July. They rebuilt four bridges, opened a tunnel, and replaced a considerable amount of track. The line opened on 9 August.

The Seventh Army's drive to the east and Messina began on 24 July. By the 28th, the 1st Division was in Nicosia after an advance of 15 miles. On 31 July, it took Ceramic, eight miles further along Highway 120. As the 9th Infantry Division was to replace the 1st Division on 1 August, General Allen used a 9th Division unit, the 39th Infantry Regiment, to push on toward Troina where the relief would take place. On 31 July and 1 August, the 39th used the direct approach east on Highway 120 and was stopped cold.

Troina was an ideal defensive position for the 15th Panzer Division. The highest town in Sicily, it sat atop a 3,600-foot mountain. The Germans blocked the approach roads by demolishing bridges and mining the bypass routes.

On 2 August, Allen, keeping the 1st Division in the fight, sent the 26th Infantry north of the town and the 16th Infantry across the virtually trackless, hilly terrain to the south. In support of the 16th Infantry, Company A, 1st Engineers bulldozed a road along the axis of advance. On 4 August, General Allen added another 9th Division unit to the battle when he sent the 60th Infantry Regiment wide around to the north. The division's 15th Engineer Combat Battalion, with the assistance of corps' angledozers and bulldozers, built a road across Monte Pelato toward Cesaro in support of the 60th Infantry move. In the face of this unrelenting pressure, the 15th Panzer Division withdrew from Troina the night of 5–6 August.

Meanwhile, in the north along Highway 113, the 45th Infantry Division had also started to push to the east on 24 July. By 31 July, they had advanced 15 miles to Santo Stefano against strong 29th Panzer Division defenses before the 3d Infantry Division replaced them. General Truscott's division reached a very strong defensive position along the San Fratello Ridge on 3 August. The Germans had blown the highway bridge over the Furiana River and mined the dry riverbed. They had also mined the 1½-mile stretch of land from the end of the ridge, across the road, to the water line.

On 4 August, Truscott pushed the 15th Infantry Regiment directly east along Highway 113 without success. At the same time, he sent the 10th Engineers to build a road up a mountain on the right so artillery could support an attack from that direction. The next day, while the 15th Infantry continued to attack unsuccessfully along Highway 113, the 30th Infantry Regiment had limited success moving across the hills on the right flank.

General Truscott then decided to try the left flank where he planned an amphibious attack for 7 August. A German air attack destroyed one of the LSTs, postponing the operation until 8 August. At 0315, a task force structured around Lieutenant Colonel Lyle A. Bernard's 2d Battalion, 30th

Infantry Regiment, landed in the vicinity of Sant' Agata, about five miles behind the San Fratello Ridge. In addition to his own battalion, Bernard had two batteries of self-propelled 105-mm. artillery, a platoon of five medium tanks, an engineer platoon from the 10th Engineers, and another engineer platoon from the 2d Battalion, 540th Engineers.

While the 540th Engineers used D-7 bulldozers to clear away beach obstacles, the 10th Engineer Platoon went forward with the tanks and artillery as Bernard positioned his task force to cut Highway 113 and block the withdrawal route of the 29th Panzer Division. But the 29th had already withdrawn, and by the time Bernard's force made contact with the 7th Infantry, only Italian rear guard troops were captured.

As the 3d Division continued east on Highway 113 on 8 August, the 9th Division entered Cesaro on Highway 120. The Germans had withdrawn to a defense line which ran from Cape Orlando in the north, through Randazzo in the center, to the southeast coast behind Mt. Etna. From there General Hube planned a three-phased withdrawal to Messina. It was an ideal situation as the retiring Germans required fewer and fewer troops to cover the decreasing terrain.

The 9th Division pushed east along Highway 120 toward Randazzo on 9 August. The Germans mined this area more heavily than any place in Sicily, and the metallic content of the soil rendered the SCR-625 minesweeper all but useless. Probing, although hazardous, nerve-wracking, and time-consuming, was the only solution. Company B, 15th Engineers, supported the 47th Infantry along Highway 120 as the rest of the battalion, plus corps engineers, built a parallel road north of the highway to support a flanking movement. The 9th Division took Randazzo on 13 August, and the Germans withdrew to their first evacuation phase line.

As the 9th Division was pushing toward Randazzo, the 3d Division continued to drive east along Highway 113. By 10 August, it was preparing to attack Naso Ridge, the northern end of the German defense line, which ran south through Randazzo.

With a situation similar to the San Fratello position, General Patton ordered another amphibious operation. General Truscott agreed, but he asked for a 24-hour delay as his division was not yet through Naso Ridge, and the

amphibious objective was 12 miles away. He was concerned that his land element would take too long to reach the amphibious task force and that the 29th Panzer Division could use the time to do considerable harm to the task force. Patton refused.

Thus, at 0243, 11 August, Colonel Bernard's task force, with the same organization as the previous operation, began to land on a beach near Brolo. His mission was to occupy the high ground of Monte Cipolla and position his force to control Highway 113. As the 540th Engineers cleared the beach, the 10th Engineers moved inland to help the artillery and armor into position on low ground along the highway. There was no German reaction, and by dawn, Bernard had the high ground and was in position to block the highway from both the east and west.

After repulsing an 0700 attack from the south, Colonel Bernard called on his offshore naval gunfire support to scatter a truck-borne infantry column, which came from the west about 0900. Thirty minutes later, Bernard's artillery halted a tank–infantry attack from the west. At midmorning, the cruiser, USS *Philadelphia*, and its six-destroyer escort returned to Palermo because there were no more targets.

But by this time, the 29th Panzer Division, knowing it was in trouble with a battalion-size force cutting its withdrawal route, began to react accordingly. At the same time, the 3d Division was still far from linkup with Colonel Bernard's force. The 71st Panzer Grenadier Regiment moved east from Naso Ridge to clear the division withdrawal route as a tank–infantry team assembled in Brolo for an attack west along the road. Bernard requested the Navy to return for gunfire support and asked the division for all the air and artillery support available.

It was not enough. The German armor got into Bernard's tanks, artillery, and engineers on the low ground, and at 1600, he ordered a withdrawal to the high ground for a last stand. By 1900, the Germans were in control of the highway, but they did not bother Bernard's force on Monte Cipolla because they were more concerned with retiring to their next defensive position. By the time the 3d Division reached Bernard's position at 0730 on 12 August, the 29th Panzer Division had withdrawn. All units in Bernard's task force, to include the

The 10th Engineers begin to "hang a bridge in the sky," 13 August 1943.

engineer platoons from the 540th and 10th Engineers, received a Distinguished Unit Citation for the operation.

The 3d Division continued to push east on Highway 113, but the next morning it came upon an obstacle that threatened to stop its drive on Messina. German engineers had dropped a 150-foot section of road east of Cape Calava into the sea, 300 feet below. General Truscott gave the 10th Engineers until noon on 14 August to bridge the gap.

Engineers position stringers on the sky bridge, 13 August 1943.

General Truscott takes the first vehicle across the bridge 14 August 1943.

Grading closed two-thirds of the gap, but with no Baileys immediately available, the engineers used captured lumber to "hang a bridge in the sky." Starting at noon on 13 August, Company A, although able to position only one platoon at a time due to a lack of work space, completed the foundation by dawn 14 August and nailed the last floor plank down just before noon. General Truscott's jeep was the first vehicle across. The engineers then strengthened the bridge to allow heavier vehicles to cross. The official Army history termed the bridge construction "a landmark of American engineer support in Sicily."

Pushing on to the east, the 3d Division had patrols in Messina by the evening of 16 August. When General Patton accepted surrender of the city the next morning, organized resistance ended.

The Sicilian campaign was over, and the Allies had the southern gateway to the European continent. As General Truscott returned to Palermo from Messina in a three-hour jeep ride, he remembered it had taken his division 16 days to come the other way. It had been a grueling campaign for all concerned, to include the engineers.

General Eisenhower was lavish in his praise of engineer reconstruction of demolished roads and bridges, and clearing of minefields. General Patton said, "I believe that except for

the superior manner in which the engineers of all classes functioned, the outstanding success of the Seventh Army would have been impossible."

The engineers would have to apply what they learned in the next campaign, the thrust onto the Italian peninsula against a still determined German enemy.

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 Albert N. Garland and Howard McGaw Smyth, *Sicily and the Surrender of Italy, United States Army in World War II.*

Individual engineer unit histories available include the 1st, 10th, 15th, and 120th Engineer Combat Battalions.