

# Chapter 11 Additional Material

## Research and Development in the U.S. Army

Apart from the formal curricula in the Engineer School, the regular Army officers took “research courses” between November 1940 and February 1941. These stand-alone courses examined assault tactics and other topics drawn from the war in Europe. The instructors showed combat engineers could learn lessons and adapt new skills for the new, modern battlefield. To the degree that funding and sourcing allowed, the student experimented with new vehicles and equipment. Then, they broke into committees to write reports on the topic studied. These were submitted to the School and Corps. One such course covered amphibious landing operations. The reality of projecting American force across the globe necessitated amphibious operations involving assaults against enemy defenses, or at the least landings on shores with no infrastructure. Because neither the Army nor the Corps of Engineers could provide this doctrine or techniques for amphibious operations, the School turned to the U.S. Marine Corps and Navy for expertise in early 1941. In two memoranda to the Chief of Naval of Operation and the Commandant of Marine Corps, Brigadier General John Kingman stated that “it is considered very desirable” that the “landing operations be authentically covered.”<sup>1</sup> He requested guest

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<sup>1</sup> John J. Kingman, memorandum for Major General Commandant, U.S. Marine Corps, Subject: Lecturer on Landing Operations, 6 January 1941, and John J. Kingman, memorandum through the Adjutant General to the Chief of Naval Operations, 6 January 1941, plus enclosures. All in USAES History Office Archives

lecturers from both seaborne services to address several issues in the Research Course at the Engineer School. Among the listed issues relevant to engineering operations were

- Organization, missions and weapons
- Desired conditions of landing
- Technique of landing
- Tactics of landing under various conditions
- Use of the “alligator” [amphibious tractor]
- Influence of bases on naval strategy
- Joint operations

Kingman wrote these requests in his role as Assistant to the Chief of Engineers for the Military Division.

### **The 1st Infantry Division at the Battle of Troina, Sicily, in 1943**

When the 1st Infantry Division advanced on the small Sicilian town of Troina in late July 1943, commanders had faith in the intelligence reports that reached their headquarters. The Germans, they thought, would simply withdraw once the Americans applied pressure, back to a known defensive line that was at the base of the highest point on the island, the volcano of Mount Etna. If the Germans could control the mountain, they could maintain ownership of the city of Messina and therefore the lifeline back to Italy. Precedence informed the intelligence estimates; after all, the Germans had been slowly retreating since the Allies landed forces on the island at the beginning of July. The estimates were wrong, however.



The view German troops saw from their positions in Troina, overlooking the direction from which the American assaults came for a week.

Credit: National Archives

In the German strategy, Troina was one of several linchpins of a defensive plan for the island. General Hans-Valentin Hube, who commanded the German defense, constructed a plan of strongpoints, rather than a final defensive line. Hube estimated that line of defenses would be weaker than creating a succession of strongpoints. With these small garrisons, the defending Germans could maintain their position until one of the flanking strongpoints fell, whereupon the soldiers could simply use very serviceable roads to fall back.

The terrain around the small Sicilian town favored the defenders. Troina sits atop a hill that dominates the treeless slopes that rise up to the town from the valley below. With their back to Mount Etna, the Germans' flanks were secured as long as other strongpoints held. Under cover of massive stone buildings, the defenders could lay down fields of fire from their unobstructed observation points, which were a church and a tower facing east. Any attacker hoping to use Sicily's road to drive east would have to advance two-and-a-half miles directly into the face of withering fire. Bypassing the roads was an equally difficult proposition, as the lack of trees offered no cover for armor and infantrymen.

The job fell to the 1st Infantry Division, who had been for two weeks steadily marching northeast from their landing point on the beaches of Gela. The first unit to advance toward Troina and take the small town of Cerami on July 30th was Combat Team 39 (CT 39) of the 9th Infantry Division, which was attached at the time to the 1st Infantry Division. The ease with which CT 39 took Cerami seemed to indicate that the intelligence estimates were correct. The next day, CT 39 advanced two miles toward Troina before being stopped by thick artillery, mortar, and machine-gun fire. Unable to break through, the combat team dug in for the night.

Attempts to push on to Troina the next morning were met with the same results as July 31st.

The commander of the Big Red One, Major General Terry de la Mesa Allen, had wanted to take Troina without overcommitting his forces. His attempts to use only the 9th Infantry Division units attached to him proved inadequate in the face of the stiff German resistance. By August 1st, it was clear he would have to bring to bear more units if he wanted to take Troina. He ordered his 26th Infantry to capture a hill outside of Troina for artillery observers to adjust fire in the town, while also sending two combat teams to remove German units from two hills north and west of the enemy stronghold.

American attacks on August 2nd lacked strength and did not produce appreciable gains, as CT 39 was too exhausted. General Allen prepared for an attack the next day with three combat teams augmented by North African troops. They would attack Troina along the town's center and left and right sides, hoping to encircle the 15th Panzergrenadier Division or, if lucky, force the Germans to retreat. CT 26, the northern pincer of the 1st Infantry Division's assault, advanced steadily when the attack commenced at 3 am on August 3rd. The combat team failed to cut the highway that was the German eastern escape route, however, as its flanks had become exposed in the advance. The frontal assault, which the 39th Infantry undertook, had made advances until German artillery stopped them. The 16th Infantry Regiment of the Big Red One made the southern attack. The regiment threatened to take a hill only one mile from Troina, but the German defenders, realizing what the Americans were attempting to do, unleashed withering fire on the 16th. The rest of the day was a slugfest for all of the 1st Division's units involved in the attack. Companies in the 16th and 26th reported that they were down to just 30 or 40 men from a normal strength of 180.

The next day, August 4th, saw much of the same bloody fighting as the previous day, with the Americans once again launching an attack at three in the morning. The Big Red One renewed its attacks to leapfrog hills and take Troina, but German counterattacks blunted the attempts. To augment his ground forces, General Allen called on air support. A coordinated air-artillery attack commenced at five in the afternoon, and the infantry advanced once the firing stopped. The soldiers made gains, as the enemy defense was in disarray, but slowed and stalled in the evening as the Germans recovered and put up a resistance.

Allen hoped to use another air-artillery operation on August 5th, but the commander of the 7th Army, General Omar Bradley, gave priority to the 3rd Infantry Division fighting elsewhere. The Big Red One would have to fight alone as it had before August 4th. With the objectives of the fourth not yet taken, Allen's plan for the fifth differed little. CT 26 was still to push from the north, CT 39 would stay to the right of CT 26 and push in the same direction. Two battalions of CT 16 would drive from the middle of the American attack, with the 18th Infantry operating south of Troina. As for the 1st Battalion of the 16th Infantry Regiment, it reinforced the 18th Infantry Regiment in the south, with the objectives of securing Mounts Pelegrino and Salici before turning north to thrust east of Troina, thus cutting off the Germans' escape route.

Throughout August 5th, the 1st Battalion, 16th Infantry skirmished with German units on Hill 851, a key strongpoint on the south of the ridge defending Troina. Both Germans and Americans were fighting close quarters combat on the hill, with C Company positioned on the forward slope of the hill while machine guns from the 90th Hamburg Group and 90th Infantry Regiment were dug in on the geographical crest of 851. Throughout the morning, A and C Companies attempted to dislodge the Germans from their positions on 851 with mortar fire. The Americans became pinned down by enemy machine gun and rifle fire, prompting Pvt. Stanley W. Jablonowski to take the initiative and lay a communication wire from his company's position to an observation post so that effective fire could be brought down on the enemy. Pvt. Jablonowski died on his mission, but his actions made it possible for mortars to be fired upon the German positions, thus saving his company. For his gallantry, Jablonowski received the Silver Star posthumously. Jablonowski's story was illustrative of the men of the Big Red One who fought to take Troina.

As night fell on August 5th, the regiments were exhausted after days of battle that saw progress measured in small increments. The Germans had shown that American intelligence

reports were false and that their defensible position in Troina was a formidable one. All the same, the enemy decided to withdraw from Sicily. General Hube feared the 26th Infantry would cut off the important road that would impede his retreat north of Troina, as well as the lack of German reserves to plug a possible American breakthrough, so he pulled back his badly mauled 15th and 29th Panzergrenadier Divisions. During the evening of August 5th, the Germans quietly slipped east toward Messina to steam across the straits and regroup in Italy. When the Big Red One awoke the next day, they discovered only light resistance when they commenced new attempts to take Troina. By evening, the 16th Infantry entered the town, followed by the other regiments. The Battle of Troina was over.

### **Operation TIDAL WAVE and the Tragic American Air Raid on Ploesti, 1943**

Throughout the Second World War, the U.S. Army Air Force endured losses from enemy fighter aircraft intercepting American bombers and from anti-aircraft fire from German gun positions near targets. Most of the USAAF missions were flown at high-altitudes during the daytime. But other experiments were undertaken to try to break the German aircraft and artillery defenses. One such mission occurred in Operation TIDAL WAVE, a major raid on Ploesti in August 1943 with American B-24 "Liberator" bombers of the U.S. 15th Air Force.

American airpower planners speculated that, if a massed force of 175 Liberators could fly undetected at tree-top level, they could achieve the element of surprise and do irreversible damage to the German war effort. In this case, the target would be the oil refineries at Ploesti in Romania. If the American bombers could destroy these facilities, the German tanks, aircraft, and submarines would slowly run out of vital fuel reserves.



One of the most famous images of World War II shows the B-24 nicknamed “The Sandman” as it emerges from the pyre of smoke during the TIDALWAVE mission.

Credit: National Museum of the U.S. Air Force

However, navigation problems plagued the Americans making the long flight from Egypt to Ploesti on August 1, 1943. German radar tracked the approaching American bombers. Rather than the B-24s surprising the German air defenses, the Americans fell victim to a trap. Once over the target, the squadrons faced one of the most formidable anti-aircraft defense networks in Europe, which included hundreds of 88-millimeter guns. During the mission, 53 Liberators were shot down by German fighters or ground fire, while only 33 returned to their bases in southern Italy undamaged. Of the 1,700 crewmen who participated in the raid, the Americans suffered 650 crewmen killed, wounded, missing, or captured. Although oil production slowed because of the damage caused in this very costly raid, the Germans quickly repaired the refineries and resumed fuel production. Operation TIDAL WAVE had failed in a spectacular fashion. Never again would the USAAF attempt such an ambitious low-level bombing raid.

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