

H-Gram 031: Operation Neptune, 6 June 1944—Special "D-Day" Edition

6 June 2019

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75th Anniversary of World War II

Operation Neptune-the Amphibious Assault on Normandy, 6 June 1944

By H-hour on Omaha Beach (0630, 6 June 1944), pretty much everything had already gone to hell. Of 64 amphibious tanks that were supposed to land on the beach five minutes before the first infantry assault wave, 27 were on the bottom of the ocean, having sunk due to heavy seas. Four additional amphibious tanks had been destroved when LCT-607 struck a mine and sank. That 28 of the tanks made it ashore was due to Lieutenant Dean Rockwell, USN, commander of LCT Flotilla 12, who assessed the seas as too rough and on his own initiative chose to take the tanks all the way to the beach at great risk to the eight LCTs that received his order. LCT-607 was lost on the way in. Another three tanks reached the beach because Ensign Henry Sullivan, in command of LCT-600, stopped launching tanks after the first one sank and took the rest of them all the way to the beach, also on his own initiative. Of the 28 tanks launched into the water from the other



"Target of Opportunity," painting, watercolor on paper, by Dwight C. Shepler, 1944 (88-199-EX).

seven LCTs (which didn't get Rockwell's order), only two made the swim of 2-3 miles to the beach; the rest tragically sank with most of their crews.

The loss of the tanks, mostly due to sea conditions and not the enemy, wasn't all that went wrong. The shore bombardment was only 30 minutes long, inadequate to take out most of the heavily fortified and well-concealed German gun positions. The Navy was aware of this based on experience with Japanese-held islands, but the need to minimize the amount of time for the German forces in reserve to react to the landing was considered by the Army to be of overriding importance. The strike by 450 B-24 heavy bombers just before the landing missed the beach due to overcast, and 13,000 bombs went long and did nothing except add to the din. Then, eight LCT(R) "rocket ships" fired 1,080 rockets each, and almost all of them fell short of the beach. Instead of the expected understrength German garrison division, the beach was defended by the firstline 352nd Infantry Division, which had just arrived to defend a beach that was ideally suited to defense.

The first U.S. troops to land at Omaha Beach were slaughtered by the hundreds. Some landing craft never made it to the beach; in others that did, no one got off alive. Navy coxswains whose craft were disabled wound up fighting as infantrymen using weapons taken from the dead. Navy combat demolition units were in the second wave in order to blow beach obstacles; most didn't make it ashore. The same was true for the Navy beach battalions, beachmasters, and naval shore fire control teams. Navy physicians and corpsmen who went ashore in the first waves suffered high casualties, but were noted afterward to be "the bravest of the brave." By 0830, Omaha Beach was so littered with destroyed and damaged landing craft, tanks, vehicles, un-cleared German obstacles (most mined), and hundreds of dead on the beach and drowned in the rising tide that the senior surviving Navy beachmaster called a halt to any further landings other than assault troops.

Although the Germans fought ferociously at the other four Normandy beaches, those landings went relatively well. However, at Omaha, the Germans were winning when several U.S. destroyers, acting on their own initiative, closed to within 800-1,000 yards of the beach (one to 400 yards, close enough to be hit by rifle fire). They found ways to innovate on the spot to provide fire support to troops without benefit of shore spotting (most of the troops' radios had been lost in the surf). By 0950, all the U.S. destroyers plus three British destroyers were ordered to close the beach, risking mines, shore battery fire, and the likelihood of running aground in the shallows. As the fire from the destroyers finally began to take a serious toll on the German defenders, in one of the most extraordinary acts of mass courage in the history of the United States Army, with many of their leaders dead, the surviving soldiers fought their way up the 100-foot bluffs backing the beach. It was this epic bravery by the U.S. Army soldiers that carried the day at bloody Omaha Beach and their extraordinary valor should never be forgotten. However, in the words of the chief of staff of the 1st Infantry Division, Colonel Stanhope Mason, "without that gunfire [from the destroyers], we positively could not have crossed the beaches." In the words of the V Corps commander, Major General Leonard Gerow, after he finally got ashore, "Thank God for the U.S. Navy."

There are no comprehensive figures for U.S. Navy casualties on D-day that I can find, although one footnote in a medical report gives a number of 363 dead and 2,020 wounded. During the dedication of the Navy Memorial at Normandy in 2008, the figure of 1,068 Navy dead was cited, but not from an authoritative source, and that number would certainly include losses in the weeks before and after D-Day. In almost every account of D-Day, Navy losses are just rolled into overall Allied losses, generally considered to be about 10,000 casualties, of which 2,500 died (although recent research suggests a significantly higher toll of about 4,500 dead, mostly on Omaha Beach). Navy personnel climbed Pointe du Hoc with the Army Rangers, parachuted in with the airborne troops, manned the landing craft (along with many U.S. Coast Guard coxswains), and served in numerous roles in the first waves of the landing, suffering high casualties. Determining exactly how many of those men died is a challenge.

The U.S. Navy did, of course, keep an accurate count of how many warships were lost, and, in that regard, the week after D-Day was much more costly to the Navy than D-Day itself. The largest U.S. Navy ship lost on D-Day was the destroyer USS Corry (DD-463), hit by German shore fire and then probably succumbing to a mine in the opening moments of the bombardment of Utah Beach, in addition to the minesweeper Osprey (AM-56) and numerous amphibious craft, including 9 LCIs and 26 LCTs. But in the days that followed, the destroyers Glennon (DD-620) and Meredith (DD-726), destroyer escort Rich (DE-695), the minesweeper Tide (AM-125), five LSTs, and the troop transport Susan B. Anthony (AP-72) were sunk by the Germans, mostly by mines, as they protected the vital flow of more troops and supplies into the Normandy beachhead.

Although the great majority of ships involved in the invasion were British Royal Navy, and the ground troops of the United States, United Kingdom, and Canada deserve the credit for defeating the Germans ashore, the U.S. Navy played an absolutely critical part in what Supreme Allied Commander General Dwight D. Eisenhower, termed "the great crusade" to defeat Germany and rid the world of Nazi tyranny. For more on Operation Neptune, please see attachment H-031-1.

75th Anniversary of World War II

Collision of USS Frank E. Evans (DD-754) with HMAS Melbourne, 3 June 1969

In June 1969, the destroyer Frank E. Evans (DD-754) was ordered to leave the Vietnam combat area to participate in a Southeast Asia Treaty Organization (SEATO) exercise (Sea Spirit) in the South China Sea, after which she was to return to the Vietnam combat area. At about 0300 on 3 June 1969, due to error by the bridge watch, Frank E. Evans cut just in front of the Australian aircraft carrier HMAS Melbourne. At the last moment, both ships tried to avoid the collision, but it was too late and Melbourne sliced the destroyer in two. Her bow sank almost immediately while the stern half remained afloat (and was towed to Subic Bay). Seventy-four of Frank E. Evans' crew were killed.

The subsequent joint Royal Australian Navy--U.S. Navy board of inquiry proved to be very controversial, souring relations for a time between the services. The captain of Frank E. Evans (who was asleep at the time) and two lieutenants on watch were deemed guilty of negligence (the lieutenants pled guilty and the commanding officer was found guilty at court-martial). The commanding officer of Melbourne was taken to court-martial and acquitted. A training film was developed from the event, I Relieve You, Sir, which I still remember vividly from my midshipman days. The names of the 74 men lost on Frank E. Evans are not on



The heavily damaged USS **Content to Parane** (DD-754) in the auxiliary repair dry dock USS **Conduct** (ADR-22) at Subic Bay, Philippines, 6

the Vietnam War Memorial in Washington, DC, even though she was only a few miles outside the declared combat area. This was the worst loss of life aboard a Navy destroyer since the USS Hobson (DMS-26) was sunk in a nighttime collision with the carrier USS Wasp (CV-18) in 1952 with the loss of 176 crew, the greatest loss of U.S. Navy loss of life in an accident since World War II. I will write more about Frank E. Evans in the next H-gram, otherwise I will not get the attached D-Day article done before D-Day.



Caption should be "Morning of D-Day from an LST," painting, watercolor on paper, by Mitchell Jamieson, 1944 (88-193-HI).

H-031-1: Operation Neptune—the Amphibious Assault on Normandy, 6 June 1944

H-Gram 031, Attachment 1

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June 2019

(Note: This H-gram is not intended to be a comprehensive treatment of the Normandy landings. The great majority of the ships involved were British, as were the number of troops. Nothing can detract from the extreme heroism demonstrated by the soldiers of the British, Canadian, and American armies, especially those at Omaha Beach. This H-gram focuses on the operations of the United States Navy during Operation Neptune, the amphibious assault phase of Operation Overlord, the Allied invasion of France. Under the doctrine at the time, Navy commanders were in command until ground commanders could establish themselves ashore, so Neptune was a Navy operation.)

On 5 June 1944, after a one-day delay due to weather, 255 minesweepers (mostly British) left ports in southern England, led in a symbolic gesture by the Polish destroyer *Orp Slazak* (a British destroyer loaned to the Polish navy-in-exile; Poland had been the first country attacked by Nazi Germany). The minesweepers had the vital mission of clearing the extensive German minefields that had been laid in the English Channel. These included contact mines and magnetic influence mines, some with sophisticated ship counters and other countermeasure capabilities. The minesweepers did this deadly work with

extraordinary success, although they were aided by the fact that many German mines in the center of the English Channel had been programmed to sink, as the Germans had expected any invasion in 1944 to take place earlier than June. In addition, the Germans had held back the great majority of their new "Oyster" pressure mines, which would sit on the bottom and wait for a ship of sufficient size to pass overhead and detonate. Nevertheless, there were still thousands of German mines in the water. At 1700, the U.S. minesweeper Osprey (AM-56) struck a mine, which blew a large hole in the forward engine room and caused the ship to sink along with six of her crew. These were to be the first casualties of Operation Neptune, the amphibious assault phase of Operation Overlord, the Allied invasion of Normandy, France.

After much sometimes-acrimonious discussion between the military leaders of the United States and Great Britain throughout 1942 and 1943, and the risk that the Germans might knock the Soviet Union out of the war (and threats by Soviet dictator Stalin to drop out of the war), the Allies had finally agreed to invade northern France in 1944. The massive troop and logistics buildup necessary to do so was only possible because of considerable British and U.S. Navy success against German U-boats in 1943 and 1944.

The obvious place to invade France was at the Pas de Calais, at the eastern and narrowest part of the English Channel and the shortest distance to Germany. It had the additional benefit of a port (and was the traditional place where cross-channel invasions had been mounted going back centuries). The problem was that this was also obvious to the Germans, who expended great effort to fortify and garrison this section of the French coast. Instead, the Allies chose to invade Normandy, but executed possibly the most extensive operational deception effort in the history of warfare (Operation Fortitude) to convince the Germans that the Pas de Calais was the target.

Normandy was chosen by the Allies because it was not quite as heavily defended as the Pas de Calais, but was not so exposed to German submarine attack, or outside the range of many Allied landbased fighters as a landing in the Bay of Biscay or Brittany, nor as far from Germany as those locations. Nevertheless, there were serious problems with Normandy, especially in that there was no port; the Allies would have to land and quickly move to seize Cherbourg to the west or Le Havre to the east in order to sustain the invasion before the Germans could counter-attack. The beaches of Normandy were also subject to high tidal variations, strong currents, and frequent bad weather.

Eventually, five beaches were chosen by the Allies after an extensive intelligence collection effort. This involved the use of joint U.S. Navy-U.S. Army amphibious scouts and raiders, which conducted near-nightly intelligence collection operations, reconnaissance by British X-craft midget submarines, extensive aerial reconnaissance flights (including many flights devoted to the deception effort), radio intelligence (German army and air force enigma machine codes were not as hard to break as the German navy codes), and reporting from the French Resistance inside German-occupied France. U.S. and British bombers generally avoided bombing Normandy so as not to tip the Allies' hand, instead bombing key rail yards and lines of communication inside France, which would disrupt the German response to the invasion at a cost of many French civilians.

The selected beaches selected were given code names: from west to east, Utah, Omaha, Gold, Juno, and Sword. Utah and Omaha were assigned to the Americans and Juno to the Canadians. Gold and Sword were assigned to the British. At sea, this distinction was less clear, as there were numerous British vessels operating with the U.S. invasion forces, and some U.S. ships operating with the British-Canadian invasion forces. Of the five beaches, Omaha was clearly recognized as the toughest to take, due to its highly defensible terrain, but failure to do so would leave too large a gap between the American forces on Utah beach and the British and Canadian forces to the east, a gap that the highly capable German army would no doubt exploit.

The German Defense

Actually, the U.S. Navy had significant impact on the German's defensive strategy. The German chain of command was too convoluted to go into here (but it was one of their big problems). However, German Generalfeldmarschall Erwin Rommel, the famed "Desert Fox" of North Africa (a brilliant tactician rather than brilliant logistician), had been given the responsibility for defending northern France from an Allied invasion, sharing battlespace in a confusing way with his superior, Generalfeldmarschall von Rundstedt. Rommel reached the conclusion that because of Allied air superiority the invasion would have to be defeated at the beach if it was to be defeated at all. This flew in the face of German doctrine, which stressed mobile armored forces and von Rundstedt preferred; von Rundstedt's plan was to let the Allies get ashore wherever that might be, and then smash them with a massive armored assault before they could get their sustainment effort in place.

Rommel had made his reputation in mobile armored warfare and knew well the advantage of such tactics, but he also knew that tanks moving in the open were vulnerable to Allied air power. He wanted the tanks close to the beach, not held in mobile reserve far in the rear. Von Rundstedt countered that the tanks near the beach were vulnerable to Allied naval gunfire, citing the experiences at Gela, Sicily, and Salerno, Italy, where U.S. Navy gunfire had decimated German armored counter-attacks before they could get too close to the beach. Hitler waffled between the two concepts and kind of split the difference, and Rommel received some armored forces that would be positioned not far from the beaches, while von Rundstedt kept most of the tanks far inland as a mobile reserve. It turned out they were both right: Rommel's tanks would end up getting pounded by U.S. and British naval gunfire, and von Rundstedt's would get pummeled by Allied aircraft.

In order to defeat the Allied landings at the beachhead, Rommel determined that the most effective weapons were mines. Extensive fortifications had been built along the entire coast of France, a project termed the "Atlantic Wall" and hyped as impregnable by German propaganda. Although the fortifications were impressive, they were nevertheless spread thin along the coast except in the Pas de Calais area. Rommel understood the Atlantic Wall was not impregnable to battleship gunfire (although it turned out many of the fortifications withstood battleship gunfire reasonably well) and he ordered a massive effort to construct beach obstacles and lay mines; thousands at sea and millions along the beach. It was the mines that would prove to be most deadly to Allied ships, the intense minesweeping effort notwithstanding.

By 1944, the Allies had achieved air superiority over France. The remaining German Luftwaffe fighters of had their hands full defending Germany against around-the-clock Allied strategic bombing. About the only useful contribution of the Luftwaffe during Operation Overlord were night flights to seed the new pressure mines into areas that had already been cleared by minesweepers, although there was no good way to clear pressure mines, except under the "every ship is a minesweeper, once" concept. A number of Allied ships fell victim to these mines. Only two German fighters were noted over the Normandy beaches on D-day and another that night, giving a demonstration of the inaccuracy of anti-aircraft fire as they were fired on by thousands of guns and not hit.

The German navy was not in a good position to do much about an Allied invasion of Normandy either. There were only a handful of German cruisers and destroyers left, and they were not survivable in the face of Allied air power. The most effective German navy weapon was still the U-boat. There were about 36 U-boats based at hardened facilities on the Atlantic coast, but only the nine that were equipped with the new snorkel device (which enabled battery recharging while the submarine was submerged with only the snorkel above the surface) had any chance of surviving the constant Allied air coverage and numerous escorts of the invasion force. About 30 German S-boats (Schnellboote-Allies termed them E-boats) armed with torpedoes were based in ports along the north coast of France, including just to the west of the Normandy beaches at Cherbourg and to the east at Le Havre. At Le Havre was a force that included several larger torpedo boats (akin to U.S. destroyer escorts) and a large number of mine warfare vessels (about 40). The German naval

defense of northern France (which included naval coastal artillery and anti-aircraft guns along the coast) was under the command Admiral Theodor Krancke, commander of German Naval Group West.

Allied Forces and Organization

Different sources give different sizes for the Allied invasion force, depending on what size vessels are counted and whether only ships present on D-day itself are counted or whether everything involved in the subsequent cross-Channel reinforcement and logistics effort is included. Counting everything that could float (including landing craft carried by other ships) over the course of the entire operation, the number of ships and craft involved exceeded 6,000. In terms of navy warships, the number was much more modest, about 284. This included six battleships (three American and three British,) two British monitors (15-inch guns,) 23 cruisers (only three American units), about 110 destroyers (34 American units), plus a variety of frigates, corvettes, and smaller vessels.

The amphibious force for the invasion included 229 tank landing ships (LST); 911 tank landing craft (LCT) of different varieties, including LCT(A) armored versions; 200 infantry landing craft (LCI) of various types; 36 rocket-armed landing craft (LCT[R]); 481 landing craft, mechanized (LCM), known as "Mike Boats"; and over 1,500 landing craft, vehicle and personnel (LCV,) also generally known as "Higgins boats" after their U.S. designer and builder. (These numbers vary from source to source, but the point is that there were a lot of them.) The LCVP was the basic unit for the invasion, carrying 30 assault troops and their two officers, with a crew of three Navy, or in many cases U.S. Coast Guard, personnel (coxswains and machine gunners).

At the top of the Allied organization for the invasion was supreme commander of the Allied Expeditionary Force, General Dwight D. Eisenhower. The overall ground commander was British General Bernard Montgomery and the overall naval commander was Royal Navy Admiral Bertram Ramsey, embarked in the specially configured command ship HMS *Largs*. The naval force was

divided into the Eastern Task Force, under the command of Royal Navy Rear Admiral Philip Vian, embarked on the light cruiser HMS Scylla, and the Western Task Force (TF-122) under the command of Rear Admiral Alan G. Kirk, embarked on the heavy cruiser USS Augusta (CA-31). The senior U.S. Army ground commander for the invasion, Lieutenant General Omar Bradley, was embarked on Augusta with Kirk. The Eastern Task Force would execute the British and Canadian landings at Gold, Juno, and Sword beaches, and the Western Task Force would carry out the American landings at Utah and Omaha beaches. The Western Task Force included two major elements. Assault Force O (TF-124) would execute the landing at Omaha beach while Assault Force U (TF-125) would execute the landings at Utah beach. Follow-up Force B (TF-126) embarked followup forces for both beaches.

Assault Force O was under the command of Rear Admiral John Hall, embarked on the amphibious command and control ship USS *Ancon* (AGC-4). Also embarked on *Ancon* was the commander of the U.S. Army's V Corps, Major General Leonard Gerow, and the commander of the U.S. Army's 1st Infantry Division, Major General Clarence R. Huebner. (The initial assault on Omaha Beach would be executed by the 16th Infantry Regiment of the 1st Infantry Division and the 116th Infantry Regiment of the 29th Infantry Division, temporarily attached to the 1st Division.)

The bombardment group for Force O was commanded by Rear Admiral Carleton Bryant, embarked on the battleship Texas (BB-35). The group also included the battleship Arkansas (BB-33), the oldest battleship in the U.S. Navy, the British Royal Navy light cruisers HMS Glasgow and HMS Bellona, the Free French light cruisers Georges Levgues and Montcalm, along with eight U.S. destroyers and three British destroyers. Force O also included a minesweeper group; four assault groups (made up of LSTs and various amphibious craft); an escort group (which also included the destroyers from the bombardment group); a close gunfire support group (made up of amphibious craft armed as gun boats); a far shore service support group; and a shore party group that included the U.S. Navy

6th and 7th Beach Battalions and Navy combat demolition units.

Assault Force U was under the command of Rear Admiral Don P. Moon, embarked on the U.S. Coast Guard-manned amphibious command and controlconfigured attack transport ship USS Bayfield (APA-33). Also embarked on Bayfield was the commander of the U.S. Army's VII Corps, Major General J. Lawton Collins, and the commander of the U.S. Army's 4th Infantry Division, Major General Raymond Barton. The 4th Division would execute the initial assault on Utah Beach. (Also on Bayfield was Navy Gunner's Mate Lawrence Berra, later better known as New York Yankees manager "Yogi" Berra, as well as the deputy 4th Division commander, Brigadier General Theodore Roosevelt, Jr., son of President Theodore Roosevelt, who would go ashore on Utah Beach in the first boat of the first wave, die a month later from a heart attack, and be awarded a posthumous Medal of Honor.)

The bombardment group for Force U was commanded by Rear Admiral Morton Deyo, embarked on the heavy cruiser Tuscaloosa (CA-37). The group also included the Pearl Harbor survivor Nevada (BB-36), the new heavy cruiser Quincy (CA-71), the British monitor HMS Erebus, the British heavy cruiser HMS Hawkins, British light cruisers HMS Enterprise and HMS Black Prince, eight U.S. destroyers, two U.S. destroyer escorts, and a Royal Netherlands navy gunboat. Moreover, Force U also had a minesweeper group; two assault group;, an escort group (under the command of Commander William Outerbridge, who, as commanding officer of USS Ward-DD-139-had sunk a Japanese midget submarine outside Pearl Harbor before the Japanese air attack); a far shore service support group; and a shore party that included the 2nd Naval Beach Battalion and Navy combat demolition units.

Navy combat demolition units (NCDU) would play an important role in the D-Day landings, suffering high casualties as a result. Of 175 NCDU personnel, 31 were killed and 60 wounded at Omaha beach and 4 were killed and 11 wounded at Utah Beach. The NCDU teams would be awarded a Presidential Unit Citation for their heroism in the Normandy landings.

First formed in late 1943 and led by Lieutenant Commander Draper Kauffman, NCDUs typically consisted of one junior civil engineer corps officer and five enlisted men, mostly volunteers from the Seabees, although some came from the Marine Corps or Army combat engineers. Normally, they operated from seven-man LCRS inflatable boats. Many accounts refer to them as "frogmen"; however, at Normandy, they operated from boats and on the beach wearing utilities. By the time of the Normandy invasion, 34 NCDUs had been formed in England.

For Operation Neptune, the NCDUs were augmented with three additional sailors with extra explosives in backpacks specially designed to blow the numerous German obstacles on the beach. The NCDUs were then combined with five U.S. Army combat engineers into gap assault Teams (GAT). The scheme was that upon landing in the second wave five minutes after the first, the GATs would start clearing lanes for follow-on amphibious craft to land. The Navy personnel would clear obstacles to seaward (many of which were mined), while the Army would clear obstacles to landward (also heavily mined). Both Army and Navy GAT personnel were cross-trained to do each others' work, and, on D-Day, often did. Due to sea state and confusion, some of the GATs actually landed on Omaha beach just before the first wave of assault infantry and met the same fate. Most of the GATs at Omaha didn't make it to the beach.

The Army assigned two engineer special brigades to Omaha beach and one brigade to Utah beach. The Navy in turn assigned one naval beach battalion to each Army engineer brigade. The 2nd Naval Beach Battalion went ashore at Utah beach and the 6th and 7th Naval Beach Battalions went ashore at Omaha. The purpose of the battalions was to control the beaching of landing craft, clear remaining beach obstacles, quickly survey and map shores, repair damaged landing craft, and they also included medical and communications units.

Because the casualties in the landings were expected to be very high (even higher than actually

proved to be the case), extensive preparations were made to care for the wounded, in which the Navy played a prominent role. Navy physicians and hospital corpsmen were assigned to the 2nd, 6th, and 7th Naval Beach Battalions and went ashore in early waves. Time was of the essence, because the rapidly rising tide would drown any wounded that couldn't get off the beach on their own. Normandy was a rare case where wounded had to be brought closer to the enemy in order for them to initially survive.

Many of the LSTs, LCTs, and attack transports (APA) were specially configured to care for wounded. Of the U.S. LSTs, 106 of 144 had some additional medical capabilities, and 54 of them had been specially converted to handle as many as 200-300 casualties on the return trip. In addition to their normal crew and equipment, these LSTs had 147 litters in tiers, as well as a medical staff of two Navy physicians, one Army surgeon, two Army operating room technicians, and 40 Navy hospital corpsmen. The actions of the Navy medical teams on the beach and on the LSTs were responsible for saving very many lives. The cost was high. On Omaha beach, 3 Navy physicians and 30 corpsmen were killed, while on Utah beach 1 physician and 7 corpsmen died. The Navy medical personnel would be awarded two Navy Crosses, five Silver Stars, twelve Legions of Merit, and 23 Bronze Stars. The Navy corpsmen and Army medics were known as the "bravest of the brave," repeatedly exposing themselves to withering fire, including being deliberately targeted by German snipers.

Naval shore fire control parties, usually consisting of a naval officer, an army artillery officer, and a radioman, were assigned to go ashore in the early waves to enable naval gunfire support. Some of these teams also jumped with the 82nd and 101st Airborne Divisions behind German lines during the pre-dawn hours, and at least one team climbed up Point du Hoc with the Army Rangers. Many of the teams never made it to shore, and those that did at Omaha beach were pinned down by heavy enemy fire and unable to establish radio contact with the supporting bombardment ships–most radios had been lost in the surf or their operators killed. Those with the airborne troops were able to call in a number of long-range naval fire support missions; in one case, fire from the cruiser *Quincy* obliterated a battery of deadly German 88-mm anti-tank guns.

Four squadrons of Royal Navy Seafires (operating from shore under Royal Air Force control) and five squadrons of Royal Air Force Spitfires and Mustangs provided airborne gunfire spotting during the invasion, operating in pairs (one to spot, the other to defend against German fighters) and flying in relays due to the short endurance of the Spitfires. The observation/spotting aircraft embarked on the U.S. battleships and heavy cruisers were deemed too vulnerable to German air attack and anti-aircraft fire, and were off-loaded. However, 17 of the Navy observation squadron (VOS) pilots volunteered to quickly learn to fly the Spitfire Mk. V as part of a hastily formed squadron, VOS-7 (training was provided by the U.S. Army Air Force 67th Reconnaissance Group). VOS-7 pilots flew about 200 (one source says 191, another 209) combat sorties on 6 June 1944, providing gunfire spotting over the American beaches. This was severely hampered initially by cloud cover, smoke, and haze. Nine of the VOS-7 Spitfires were shot down and one pilot from Tuscaloosa was killed when his Spitfire was downed by flak; the other pilots survived. Four VOS-7 pilots survived encounters with German fighters. The VOS-7 pilots were awarded nine Distinguished Flying Crosses and eleven Air Medals. VOS-7 was immediately disbanded after the invasion, making it probably the shortest-lived U.S. Navy squadron, and the only one to fly British Spitfires.

Operation Neptune Commences

The Allied invasion had originally been planned for 5 June 1944, but the weather forecast was bad. There was a possible chance that the weather would subside just enough on 6 June before worsening again on 7 June and later. Due to tide conditions, if the invasion didn't go between 5 and 7 June, it would need to be postponed several weeks, increasing the chance that the Germans would learn the true target of the operation, which some German commanders were already beginning to suspect. In one of the most momentous decisions in military history, General Eisenhower gambled on the uncertain weather forecast for 6 June, with an eloquent "OK, let's go."

The vast Allied armada set sail in waves from ports throughout southern England, passing through a swept area known as "Piccadilly Circus" before then transiting via swept channels to the specific beaches. "Fast" lanes had been allocated to warships, and "slow" lanes for the slower amphibious craft, all of which were battered by the rough seas, with virtually the entire Allied landing force seasick. The first to follow the minesweepers and their escorting destroyers was a wave of LCTs, each carrying four tanks. The tanks were equipped with a dual-drive (DD) system that enabled them to propel themselves through the water, and an inflatable shroud intended to keep the tank afloat. This had worked well during tests on British lakes, but a freeboard of only about nine inches would make the tanks a deathtrap in the sea states that prevailed at Omaha beach. The idea behind the amphibious tanks was that they would be launched from the LCTs about 2.5 miles off the beach, so that the vessels could then go back for more tanks without risking loss or damage at the beach. The launch would be timed so that the swimming tanks would reach the beach five minutes before the first infantry assault wave. The plan didn't survive contact with the sea state or the enemy.

Following the LCTs were additional amphibious craft under their own power and cumbersome "Rhino" barges, and amphibious ships such as LSTs and attack transports carrying 1,089 "Higgins" boats for the initial assaults on the five landing beaches. The minesweepers had done their work on the afternoon of 5 June and into the night of 5-6 June. By about 0230, the bombardment groups were reaching their assigned positions in swept areas. The battleships and heavy cruisers would actually anchor, as the threat of drifting into an unswept mine area was deemed more dangerous than German shore battery fire.

The bombardment groups included six battleships. Neither the U.S. Navy nor the Royal Navy was keen on committing battleships into the heavily mined and constricted waters. The British chose the battleships that were the most expendable: the World War I-vintage HMS *Warspite* and HMS *Ramillies*. Both had not been completely repaired from previous battle damage (*Warspite* from a German radio-controlled bomb off Salerno, Italy, and *Ramillies* from a torpedo fired by a Japanese midget submarine at Madagascar). The newer and more powerful HMS *Rodney* (which had helped sink the German battleship *Bismarck* in 1941) had significant engineering casualty issues, and even then was held back until 7 June 1944.

The United States had taken a similar approach as the British. All three battleships were from the World War I era. The battleship Arkansas (twelve 12-inch guns) was the oldest in the Navy with very few upgrades, and Texas(ten 14-inch guns) was only slightly newer. Nevada had been forced to beach herself during the Japanese attack on Pearl Harbor on 7 December; she'd been raised, repaired, and had received some modernization. The United States only committed three heavy cruisers: the 1930s-vintage Augusta and Tuscaloosa (nine 8-inch guns) and Quincy (nine 8-inch guns), a new Baltimore-class cruiser built since the start of the war (and named Quincy after the previous Quincy had been sunk at the Battle of Savo Island in August 1942).

Initially, there had been agreement between the United States and British that the Royal Navy would provide the battleships and cruisers to support the invasion. However, as Admiral Ramsey devised his plan, he determined that he needed more than the Royal Navy could provide (which wasn't exactly true since the British still had a strong force of battleships in the north of the United Kingdom guarding against a possible breakout of the German battleship Tirpitz from Norwegian fjords). General Eisenhower supported Ramsey's request, much to the irritation of Chief of Naval Operations Admiral Ernest J. King, who sent his deputy chief of staff (and primary war planner), Rear Admiral Charles M. "Savvy" Cooke to England to discuss the issue. Cooke got into a heated argument with Rear Admiral Kirk's deputy, Rear Admiral John Hall, Jr. (who would command the Force U bombardment group). Hall demanded "how in the world" CNO King could not commit adequate firepower to support the most important amphibious operation in U.S. history. Cooke

considered Hall's remarks and tone to be insubordinate, but when all the dust settled, King ordered the three battleships, plus two heavy cruisers and 20 more destroyers than what had originally been planned (bringing the total number of U.S. destroyers to 34).



D-Day, 6 June 1944–First Actions

The Germans did not have the benefit of the same weather forecast as General Eisenhower did. German weather ships and clandestine weather stations in Greenland and the Norwegian Arctic had been rolled up by the Allies earlier in the war, and reports from long-range aircraft and submarines were rare due to the risk. (In one interesting operation, however, German submarine U-537 had emplaced an autonomous clandestine weather station ashore in Labrador in 1943, the only armed landing by Germans on North American soil in World War II, which had gone dead by 1944. Also of note, U-537 was torpedoed and sunk by U.S. submarine USS Flounder-SS-251-in the Java Sea on 10 November 1944. German submarines operating in the Far East is a story for another time.) The upshot is that the Germans considered the weather to be too foul for any amphibious landing. Rommel took the opportunity to go home for a visit, and the S-boats from Cherbourg that normally would have been on patrol in the English Channel remained in port.

Despite the massive number of Allied ships in the English Channel, German shore radar detected nothing until 0309. (U.S. ships also engaged in jamming German radar.) The German reaction was relatively swift, with the first E-boats departing Cherbourg at 0348, as Admiral Krancke had raised the alert level in response to reports of Allied paratroopers landing in Normandy. Upon encountering the huge Allied fleet, these E-boats launched torpedoes at maximum range and hightailed it back to Cherbourg, hitting nothing.

The four German torpedo boats and E-boats that came out of Le Havre to the east had somewhat better luck against the Eastern Task Force. At about 0537, two German torpedo boats, Jaguar and Möwe, of a group of four got close enough to launch torpedoes. Two torpedoes passed between the British battleships Warspite and Ramillies, and narrowly missed Admiral Ramsey's flagship, HMS Largs, by a few feet. One torpedo, however, hit the Norwegian destroyer Svenner (a British vessel on loan to the Royal Norwegian navy-in-exile), and blew her in half, with the loss of 32 Norwegian and one British crewmen (185 were rescued). Svenner was the only Allied ship sunk by German surface ships on 6 June 1944. The torpedo boats and E-boats out of Le Havre would continue to harass the Allied landing force over the next days, firing over 50 torpedoes to little effect. Finally, the Royal Air Force was tasked to bomb Le Havre, which it did on the night of 14-15 June, sinking practically every German ship and boat in the harbor (why not earlier?).

H-hour for the American beaches was 0630. Preassault naval shore bombardment on the American beaches was scheduled to commence at 0550 and last for 30 minutes. Based on experience with Japanese islands, the U.S. Navy knew this was insufficient. However, the Army was concerned that an extended shore bombardment would give away the element of surprise and give the Germans more than enough time to react and bring up additional forces. Due to tide conditions, H-hour for the British beaches was actually 0725, allowing for an additional hour of shore bombardment, which made a difference.

The bombardment targets were fixed enemy fortifications and gun positions identified by the extensive pre-invasion intelligence collection effort. The volume of fire delivered by the battleships, cruisers, and destroyers was impressive, and created a sound described as louder than anyone had ever heard. Nevertheless, the Germans were masters at camouflage and concealment, and the well-built reinforced- concrete and buried gun emplacements proved impervious to all but a direct hit through the gun ports. In many cases, near misses would stun the German gunners, who would eventually recover and resume firing.

The Germans did not wait for the Allied ships to open fire. By 0505, German guns had commenced firing at Allied ships off Omaha beach, succeeding in proving that hitting a moving ship was as difficult as a ship trying to put a round through a gun port. At 0535, German batteries at Utah beach opened fire. Battleship Nevada, although anchored, was straddled 27 times, but not hit. Less lucky was the destroyer U.S.S. Corry (DD-463). The destroyers, which were closer inshore than the battleships and cruisers, were supposed to be covered by a smokescreen laid by aircraft. However, the aircraft assigned to cover Corry was shot down by German flak, and for a time *Corry* was the only destroyer visible, which made her the target of every German gun that could reach her. Hit several times, including by heavy caliber shells in her engineering spaces, with her back already broken, Corry is believed to have hit a mine while drifting (as she lost steam) in a circle due to a jammed rudder. (Although there are accounts that dispute that it was a mine that killed her, this is what is concluded in official reports, which I remain wary of.) Corry settled in 30 feet of water, her flag still flying from the mainmast visible above the water. Of Corry's crew, 24 were killed and 60 wounded, with many of the survivors saved by USS Fitch (DD-462) in a daring rescue under fire, while others were picked up by other ships.

In some cases, such as destroyer USS *Harding* (DD-625) at Omaha beach, skippers got tired of being shot at by the Germans while waiting for the 0500 bombardment commencement time, and opened fire on German gun positions ahead of schedule, drawing German fire in return. (Locating German guns was hard, because the Germans used smokeless powder.)

Pointe du Hoc

In between Utah and Omaha beaches is a high promontory named Pointe du Hoc, on which the Germans had emplaced a heavily fortified battery of six 155-mm guns. From these commanding 100foot heights, the guns could wreak havoc on either of the American beaches. U.S. Army Rangers were given the incredibly dangerous mission of landing on the point, scaling the cliffs, and taking out the German guns. One U.S. naval officer opined that "three old ladies with brooms" could prevent the Rangers from reaching the top. However, the three old ladies didn't count on Texas and the destroyer Satterlee (DD-626), commanded by Lieutenant Commander R. W. Leach. Bombed multiple times before the invasion and at dawn on 6 June 1944, Pointe du Hoc was then subjected to a thorough bombardment by Texas that turned it into a moonscape (when the Rangers did reach the top, they had a hard time orientating). The bombardment by *Texas* with 255 14-inch rounds also collapsed a part of the cliff face, which would enable many of the Rangers who did make it to the top to do so.

The Ranger mission to take the position started out badly. The ten Royal Navy assault landing craft (LCA) carrying 225 Rangers, two carrying supplies, and four DUKW amphibious trucks carrying ladders had drifted off course due to the current and were heading to the wrong point. Navy Lieutenant William Steel was in command of the control craft off the western end of Omaha beach when one of the landing craft came alongside to ask directions to Pointe du Hoc, which Steele duly provided. However, during the extended trip, one LCA was swamped by the seas, drowning all but one on board, a second was also swamped, as was one of the supply boats, and the second supply boat had to jettison its cargo in order to remain afloat. One of the DUKWs was sunk by German fire. In addition, the Rangers didn't get to Pointe du Hoc until after the rest of the invasion had started.

Once on the narrow beach, the Rangers discovered that the DUKWs couldn't get up on the shore, and the ladders were too short. The Rangers were able to scale the pile of rock debris created by gunfire from the *Texas* and, from there, launch their rocketfired grappling hooks. Of 225 Rangers, only 108 made it to the top. Those that did owed much to gunfire from *Satterlee* that raked the top of the cliffs and kept the Germans from making it even worse. Destroyers *Thompson* (DD-627), *Ellyson* (DD-454), and HMS *Talybont* also provided fire support starting about an hour after *Satterlee*.

Once at the top of Pointe du Hoc, the surviving Rangers discovered that the German guns had been removed and replaced by telephone poles, probably in reaction to the aerial bombardment. Nevertheless, a search by the Rangers found five of the six guns not far away. These were then disabled with thermite grenades and by destroying the sights. There is currently debate as to whether the Pointe du Hoc operation was a necessity (see Washington Post, 4 June 2019). However, the guns that were found were in operational configuration, oriented toward Utah beach, complete with ammunition at the ready, missing only their gun crews, who had apparently taken shelter somewhere. Had Pointe du Hoc not been taken, those guns would have killed many on Utah Beach.

According to Samuel Eliot Morison in his *History of U.S. Naval Operations in World War II*, a naval shore fire control party, commanded by Lieutenant P. C. Johnson, USNR, was assigned to scale the cliffs with the Rangers, although I cannot find record of what happened to him. According to Steven Ambrose's book on D-Day, the Naval Shore Fire Control Party was hit by a shell from the cruiser HMS *Glasgow* that fell short and impacted just outside the Ranger command post on top of Pointe du Hoc, killing the Army team leader, Captain Howard, and wounding and incapacitating Navy Lieutenant Ken Norton. *Satterlee*'s report indicates good communications with her shore fire control party, so maybe there was more than one on Pointe du Hoc with the Rangers.

By nightfall, only about 50 of the Rangers were still fit to fight, and, because of the delay in taking Omaha beach, they were cut off from any

reinforcement via land, and had to hold off multiple German counter-attacks overnight. The next morning, *Texas* sent two LCVPs to Pointe du Hoc with additional ammunition and supplies for the Rangers, and then evacuated 35 wounded Rangers (one of whom subsequently died), 27 prisoners (twenty Germans, four Italians, and three French), and a deceased Coast Guardsman. Interestingly, the photos taken on Pointe du Hoc are official U.S. Navy photographs. An intriguing one shows Lieutenant Commander Knapper and Chief Yeoman Cook (in khakis and combo covers) of USS Texas examining a damaged German pillbox. The caption suggests the photo was taken on 6 June, although I suspect 7 June is more likely, but photo does have a dead Ranger covered in a shroud. (Of note, there are many accounts of the action on Pointe du Hoc, and many of them conflict; I don't have time to go to the original sources and resolve discrepancies, but even after all these years there is still much that is not clear.)

Omaha Beach

Things began to go wrong on Omaha beach from the very beginning, made even worse by the fact that the beach was ideally suited for defense. It was curved in the direction of the sea, meaning that German artillery situated in the high bluffs that surrounded the beach on all landward sides could fire lengthwise down the beach, greatly increasing the lethal envelopes of the guns. At low tide, the beach was 300 to 400 yards wide and covered with numerous anti-landing craft obstacles, many of them mined. At high tide, only a few yards of rocks separated the water from the bluffs. The rock mound provided only minimal cover from direct fire (and none from mortars), and the obstacles were hidden from view, making them even more hazardous to landing craft.

German pillboxes and gun positions at Omaha were well camouflaged; most were oriented to fire to the side down the length of the beach and were protected from fire coming from the sea. Worst of all, the beach was defended by a top-line German division, the 352nd, rather than what intelligence had indicated would be an understrength static garrison that included foreign troops pressed into service by the Germans, who would not be expected to put up much of a fight. The battle-hardened 352nd had only recently arrived. Although the French Resistance got word of the division's arrival to the British, via carrier pigeon, believe-it-or-not, it was too late to make major changes to the plan. Plus, the Allies had already determined that Omaha had to be taken no matter what.

The Navy wanted the landings to take place a low tide, to protect the landing craft so that they could make additional runs, and so the obstacles would be visible, allowing the NCDUs to destroy them and clear safe lanes for follow-on echelons of reinforcements. The Army, not surprisingly, wanted to minimize the exposure of soldiers having to cross an open beach under heavy fire. The result was somewhat of a compromise, with H-hour set for 0630, two hours after low tide, with high tide occurring at 1000. This gave the NCDUs less time to blow the obstacles, which proved somewhat moot since most of the NCDUs in the first waves were killed or pinned down, and the troops still had a long run across a lethal killing zone to reach the rock mounds.

As the Navy anticipated, the 30 minutes allotted for shore bombardment were insufficient. The planned cease-fire occurred at 0620, which gave the stunned (but not dead) German gunners time to gather their wits and counter the first assault at 0630. The planned aerial bombardment just before H-hour by 450 B-24 four-engine heavy bombers was even more ineffective. Bombing through the overcast by radar, the B-24s held their bombs an additional 30 seconds to be sure they didn't hit U.S. troops. The result was that 13,000 bombs fell behind the bluffs in fields, killing French cows, but few Germans. The eight LCT(R) "rocket ships" at Omaha were also ineffective. Although 1,080 rounds per ship in 90 seconds was an awesome sight, the only way to aim the rockets was to point the ship directly at the target and adjust the launcher elevation for distance. The result was that almost all the rockets landed in the surf, killing many fish but few Germans.

The fiasco of the dual-drive tanks was a terrible tragedy. Well before H-hour, the 16 LCTs under the command of Lieutenant Dean Rockwell were to

launch their 64 amphibious tanks about 2-3 miles off the beach, timed so the tanks would arrive on the beach just before the first wave of assault infantry. As the LCTs neared the launch point, Rockwell concluded that the sea state was too high to launch the tanks safely. Rockwell broke mandated radio silence to reach the battalion commander of the tanks in the left echelon of eight LCTs, who agreed that the sea was too rough. Rockwell made the decision to deviate from the plan and take the tanks all the way to the beach, at significant risk to his ships, and passed his intention via flag signals to the other LCTs.

The eight LCTs on the left got Rockwell's word and proceeded toward the beach. The eight LCTs on the right didn't get the word and proceeded to disgorge their tanks into the water, where the tanks sank one after another, along with most of their crews. Of 29 amphibious tanks launched, only two made it to shore, and then only after the first assault wave had already passed them. In the right echelon, LCT-600 launched one tank that quickly sank, and then a German shell hit the vessel, perforating the floatation shroud on the second tank. The commander of LCT-600, Ensign H. P. Sullivan, then made the decision to take his remaining three tanks all the way to the beach. As the eight LCTs that were with Rockwell approached the beach, the skipper of LCT-607 froze up. The executive officer, Ensign Sam Grundfast, took command and continued; however, LCT-607 struck a mine that killed the skipper and all but two on board (Grundfast survived) and all four tanks were lost. Of the tanks that were landed on the beach, most didn't get very far before they were destroyed by German guns firing from both directions.

The first landings by the infantry at Omaha were a bloodbath. Several landing craft never made it to shore, swamped by the heavy seas. Although German guns had been firing at the U.S. ships, the machine guns held fire until just as the ramps came down. On *LCA-1015*, everyone was killed before they even got off the landing craft. Troops that made it off the landing craft were cut down by the murderous machine-gun fire as they tried to cross the beach. Company A of the 116th Infantry Regiment, a Virginia National Guard unit, was the

only company that came ashore where it was supposed to (others were all pushed to the left by current), on the far right of Omaha Beach, and suffered over 90 percent casualties; only 18 of 230 weren't killed or wounded. Of 34 soldiers from the town of Bedford, Virginia, 19 were killed (and four more would be killed in the next days), giving Bedford the sad distinction of suffering the highest per capita loss of any town in the United States during World War II. The other companies of the 116th (29th Infantry Division) and the 16th Regiment (1st Infantry Division) fared little better. Those troops that made it as far as the rocks were completely disorganized, many having lost their weapons, and were leaderless as German snipers picked off anyone who showed an inclination to lead.

The situation continued to get worse. Very few of the naval fire control officers made it ashore, so the destroyers initially had no means to provide fire support without hitting American troops in the very limited visibility of smoke and dust. Of the 16 GATs, most didn't make it to the shore, At least one team was entirely wiped out, and, on the whole, the GATs suffered 70 percent casualties. As the onrushing tide began to cover the obstacles and drowning the wounded who could not move, only five of the planned 16 lanes through the obstacles had even been partially cleared. As a result, follow-on waves would lose landing craft that struck the obstacles, and those troops that made it ashore from wrecked landing craft usually did so without weapons, which didn't make that big a difference as there were plenty to be had from the dead.

Navy medical teams that came ashore suffered high casualties and German snipers deliberately targeted medics. (The 116th lost its entire supply of blood plasma on two LCIs that were sunk.) Losses of landing craft were extensive. Of 25 LCVPs from the transport *Thurston* (AP-77), only three were still operable after the first wave. Some Navy officers and sailors whose landing craft had been wrecked or disabled wound up fighting as infantrymen, some eventually even reaching the top of the bluffs, others pitching in with Army engineers using Bangalore torpedoes to blast paths through German barbed wire. By 0830, the situation on Omaha beach had devolved into an utter disaster. So many destroyed landing craft, tanks, vehicles, dead bodies, and uncleared obstacles blocked the way that the following waves of landing craft could find no way through, ending up circling off the beach under German fire. The surviving senior beachmaster ordered that no further vehicles were to be landed on the beach, only landing craft with more assault troops, if they could get through. Twelve of 16 Navy beachmaster teams never made it to the beach, and the other four landed in the wrong place.

As it became increasingly apparent that the landing at Omaha beach was turning into a catastrophe, several of the U.S. destroyer skippers, on their own initiative, chose to move in much closer to the beach, within 800-1,000 yards. These skippers had been frustrated as their guns had been silent since the 0620 cease-fire order, and chose to risk grounding, mines, and enemy fire so they could get close enough to see what was going on through the limited visibility. Only by coming in so close could the destroyers see where the American troops were, so they could fire on German positions.

Accounts vary as to whether Carmick (DD-493), commanded by Commander Robert Beer, or McCook (DD-496), commanded by Lieutenant Commander Ralph "Rebel" Ramey, was the first to unilaterally break the cease-fire, but both of them did. McCook came in so close that dozens of landing craft took refuge behind her, as her guns blew a couple German guns right off the side of a cliff. The destroyer skippers innovated on the spot. *Carmick* observed a tank firing on a German position and unloaded a broadside into the same position. The tank then shifted fire to another position and Carmick then fired into that one. At this point, the tank commander popped the hatch, waved at the destroyer, and then proceeded to act as a "spotter" for the ship. Wherever the tank fired a round, Carmick would pour in more. Frankford (DD-497), commanded by Lieutenant Commander James Semmes (and with the Destroyer Squadron 8 commander, Captain Harry "Savvy" Sanders, embarked), closed to 400 yards off the beach, close enough to be hit with rifle fire. *Harding* (DD-625,) commanded by Commander George Palmer, also

came in close. Once the destroyers could see that U.S. troops had not reached the top of the bluffs, the destroyers pummeled the German positions along the ridgeline.

At 0856, Harding was ordered to proceed to the Force O flagship, Ancon, to pick up Rear Admiral Charles M. Cooke and Major General Thomas Hardy, who were aboard Ancon as observers, and bring them into the beach for a closer look. Although Admirals Kirk and Hall remained outwardly calm, and maintained that everything would work out when follow-on waves of troops hit the beach, Cooke had already pronounced the landing "a disaster" (and it was hard to argue his point). The senior Army commanders were far less sanguine than the Navy commanders (but until the Army generals could get ashore, the Navy admirals remained in command of the operation). British Admiral Ramsey, in overall command of the naval operation, was so concerned about what was happening on Omaha beach that he disembarked his flagship onto a British destroyer and sailed over to Augusta to confer with Kirk and General Bradley. Kirk assured Ramsey it would all work out. Besides, there was little choice, since halting the landing or trying to shift it would only result in an unmitigated disaster.

At 0950, having now received reports from the destroyers, Rear Admiral Bryant ordered all the destroyers in the bombardment group to close the beach, which all of them did, including the three British destroyers (Melbreak, Talybont, and Tantacide.) Carmick, McCook, and Harding (after disembarking Cooke and Hardy onto a landing craft for a really close look-both of them actually set foot on Omaha beach for the ultimate close look, and Cooke was lightly wounded by shrapnel) hammered German positions in the center of Omaha beach. Five others, including Frankford, Doyle (DD-494), commanded by Commander Clarence Boyd, Emmons (DD-45,,) commanded by Commander E. B. Billingsley, and Baldwin (DD-624), commanded by Lieutenant Commander E. S. Powell, pounded positions on the east of Omaha Beach. Satterlee from Pointe du Hoc, and Thompson (DD-627,) commanded by Lieutenant Commander Albert Gebelin, joined in the fray.

Although the destroyers were supposed to conserve ammunition in the event of an "emergency," the destroyer skippers concluded that the situation on Omaha beach was an emergency. *Carmick* fired 1,127 round of 5-inch ammunition. *McCook* fired 975 rounds, *Satterlee* 628 rounds, and most of the rest of the destroyers between 500 and 1,000 rounds. *McCook* even forced one of the first surrenders of German troops. Although the destroyers were repeatedly bracketed by German fire, only one was hit: *Baldwin* suffered two hits by German artillery, but was not seriously damaged.

As high tide reached its peak at 1000, some of the landing craft that had been held off shore decided to risk it and come ashore. At 1010, *LCT-30* drove right over a German obstacle and crushed it. Although the LCT was damaged, it was not sunk and most of its cargo got ashore. Other landing craft drew inspiration from *LCT-30* and in a classic "Damn the obstacles, full speed ahead!" form stormed the beaches. (Fifty-five "Higgins" boats were lost or wrecked at Omaha beach, and 26 at Utah. Nine LCIs and 26 LCTs, along with other various amphibious craft, would be lost at both beaches.)

As the destroyers killed, dazed, and demoralized more and more Germans, as more and more U.S. troops and tanks landed on the beach, and as the Germans began to run low on ammunition, a groundswell went through the beleaguered U.S. troops on the beach. In a scene that historian Craig Symonds likened to the Union charge up Missionary Ridge during the Civil War for raw courage, the Army troops at Omaha did the same, and, by 1300, U.S. troops were at the top of the bluffs and encircling German defenders. By 1800, 13 of 16 lanes through the obstacles had been cleared, and 19,000 men and 1,033 vehicles had made it across Omaha beach.

In the final analysis, it was the epic bravery of the Army troops that won the day on Omaha beach, but the Allied destroyers made a huge difference, which even the Army leadership clearly recognized. When V Corps Commander Major General Gerow finally made it ashore on Omaha that afternoon and took charge, he sent a message, "Thank God for the United States Navy." However, perhaps German Generalfeldmarschall Rommel should get a say: "The effects of heavy naval bombardment are so powerful that an operation either with infantry or armored formations is impossible in an area commanded by this rapid firing artillery."

Utah Beach

The U.S. landings at Utah beach hadn't started out very auspiciously either. At 0542, the lead guide ship, gunboat PC 1261, struck a mine and sank. Five minutes later, LCT-362 struck a mine and sank, taking four of the dual-drive tanks down with her. LCTs 362, 592, and 777, and flak landing craft LCF-31 were also later lost to mines that day. Two of the four control craft were out of action, one lost to a mine and the other disabled by a fouled screw. This contributed to the entire first landing wave being pushed left by the current by as much as a half a mile (this actually proved fortuitous as the German defenses were actually weaker where the first wave finally came ashore). Although the sea state was not as severe as at Omaha beach, Lieutenants Howard Vander Beek and Sims Gauthier aboard the remaining control craft (PC-1176 and LCC-60) made the decision to take the amphibious tanks much closer in than was planned before launching them into the water. This spared the tanks from the tragedy of Omaha beach, although it turned out that the tanks were so slow in the water that the first wave of infantry passed them and landed first. About the time the first troops were reaching the beach, the destroyer Corry sank as a result of her damage. At least in the case of Utah beach, the prelanding strike by 266 U.S. Army Air Forces B-26 twinengine bombers was more effective than the bombing of Omaha beach. The LCT(R) rocket ships and the naval bombardment were also more effective then at Omaha.

Fortunately for the Americans, the terrain on Utah beach was not nearly as formidable as Omaha. Although the Germans had flooded land behind the beach, which limited egress routes, there was no high ground for the Germans to occupy (so long as the guns on Pointe du Hoc were put out of action). In addition, the defenders at Utah were in fact an under-strength, under-trained, static garrison division that included a number of non-German troops with little will to fight. Nevertheless, Utah beach was defended by over 110 guns of 75- to 170-mm caliber, and some of the German troops at Utah beach did put up initial fierce resistance.

Although it looked at first as if things were going seriously awry at Utah beach, the presence of Brigadier General Theodore Roosevelt, Jr., in the first wave made a big difference (and, fortunately, he didn't get the same reception as Company A of the 116th Infantry at Omaha). Although they had landed pretty far from where they were supposed to, Roosevelt quickly made the decision that it made more sense for the follow-on waves to land in the "wrong" place, too, rather than scattering the force along the beach. This proved to be a wise decision. Within about an hour, the U.S. forces had overwhelmed the German defenders, and U.S. troops were moving of the beach, with the 4th Infantry Division having suffered far fewer casualties than during the disastrous rehearsal (Operation Tiger-see H-Gram 029) at the end of April. Within 15 hours after the first landing at Utah, 20,000 U.S. troops and 1,700 vehicles had come across the beach, and operations at Utah beach were well in hand-except for the mines in the water.

Airborne Operations

U.S. Army airborne troops from the 82nd and 101st Airborne Divisions suffered very high casualties during the night drops behind German lines in the pre-dawn hours, as well as those troops that came in by glider. There were naval shore fire control teams that jumped in with the airborne troops, but I have been able to find next to nothing about them. In one case, Navy Lieutenant Farrell jumped in with the 501st Parachute Infantry Regiment of the 101st and was able to find a radio. Working with Army Lieutenant Parker Alford, they were able to reach the cruiser Quincy via a relay on Utah beach to call in fire on a German 88-mm battery near Beaumont, France. Parker was able to authenticate his identity by passing the name of a Naval Academy football star. Other than that incident, I've so far drawn a blank.

After D-Day

By nightfall, at least 132,000 American, British, and Canadian troops had been landed on the coast of France, and had in every case cracked the vaunted German "Atlantic Wall," at a cost of about 10,000 casualties. Although the Germans put up determined resistance at all five beaches, Omaha beach accounted for more casualties than the other four combined. Unfortunately, D-Day was not the end of the fighting and the high casualties, as the Allies guickly got bogged down trying to fight their way through the hedgerow country of Normandy. (The "hedgerows" were piles of rocks and thick brambles that had accumulated over centuries around virtually every field, making every open space a veritable fortress, ideal for defense. This is why the casualty numbers for D-Day are so vague, because determining exactly who died on 6 June 1944 and who died in the days and weeks afterward is very difficult.

As for the U.S. Navy, losses were significantly higher after than during the D-Day landings, yet the mission to protect the lines of reinforcement and supply across the English Channel was arguably even more important than the invasion itself, for, if supplies were cut off, the number of Allied troops at risk was even greater. In addition, U.S. and British warships continued to provide gunfire support to troops ashore for over a week, as long as the troops were in range. These gunfire support missions were generally more accurate once shore fire control parties were in action, and a number of German attempts to counterattack, including with armor, were disrupted or halted by naval gunfire. The fire from U.S. and British battleships actually had greater effect in the week after the landings than on D-Day itself.

Morison complained that Army histories scarcely mentioned the contribution of naval gunfire after D-Day. However, the Germans were certainly impressed. A German military journal distributed to commanders on 16 June 1944 stated, "The fire curtain provided by the guns of the Navy so far proved to be one of the best trump cards of the Anglo-United States invasion Armies. It may be that the part played by the Fleet was more decisive than that of the air forces because its fire was better aimed and unlike the bomber formations it had not confine itself to short bursts of fire..... Fire power of warships must not be underestimated.... Moreover, time and again they put an umbrella of fire over the defenders at the focal points of fighting, compared with which incessant heavy air attacks have only a modest effect." In debriefings after the war, *Generalfeldmarschall* von Rundstedt stated, "Besides the interference of your air forces, the fire of your battleships was a main factor hampering our counter-attacks. This was a big surprise, both in its range and effect."

The continued Navy support to the troops of shore was not without significant cost, although in the larger scheme of things these losses had no serious impact on operations due to the overwhelming size of the Allied naval forces. However, mines continued to take a heavy toll on U.S. Navy forces off Normandy and in the English Channel. In what could have been the biggest disaster of the battle, the troop transport USS Susan B. Anthony (AP-72) detonated a mine about 10 miles off Utah beach on 7 June 1944. As the ship slowly settled and then took on an 8-degree starboard list, the commanding officer, Commander T. L. Gray, USNR, ordered the embarked troops to shift to the port side, which corrected the list. However, the outbreak of fire in the engineering spaces necessitated that efforts to tow her cease, and she was ordered abandoned. Other ships came alongside, and all 2,689 troops and crew were able to get aboard with no one going in the water. Gray was the last one off the ship. (This is apparently a Guinness world record for the largest rescue without loss of life.) That same day, the minesweeper USS Tide had finished sweeping an area and was recovering her gear when she struck a mine, breaking her back and killing 21 crewmen, including the commanding officer, Lieutenant Commander Allard Heyward, USNR. Tide broke in two and sank while the minesweeper Swift (AM-122) attempted to tow her. In addition, three U.S. LCTs (436, 458, 486, 586) and LCI(L)-416 struck mines and sank, most off Utah beach. Thirty-five Army troops were killed aboard LCT-458.

At 0152 on 8 June, the new *Allen M. Sumner*-class destroyer USS *Meredith* (DD-726), which had

provided gunfire support to the landings on Utah beach, detonated a mine off Utah beach, and was severely damaged with 7 men killed and over 50 wounded or missing. She was towed to an anchorage and attempts continued to save her. However, on 9 June, a bomb that missed by a fairly wide margin nevertheless caused her seams to open and she broke in two without warning and sank, although the ship's team that had gone back aboard were all able to get off. All told, Meredith lost 35 crewmen. (Accounts of the loss of Meredith vary. Morison says she was struck by a glide bomb from an He-177 bomber at 0152 on 8 June, and suddenly broke in two and sank on 9 June, after having been "prematurely abandoned." An account by the commanding officer, Commander G. Kneupfer, strongly disputes Morison's "premature" assessment, pretty convincingly, and also maintains that it was a mine. Given all the other mine strikes off Utah beach, I'll go with the mine.)

Also on 8 June 1944, the destroyer USS Glennon (DD-620), which had fired 430 5-inch rounds in support of the Utah beach landings on 6 June, was maneuvering off Utah when she detonated a mine under her stern. The minesweepers Staff (AM-115) and Threat (AM-124) arrived to assist and take Glennon in tow. Destroyer escort USS Rich (DE-695) was ordered to assist, following in the wake of the two minesweepers. The Germans began shelling the ships. Despite extra lookouts and all precautions, Rich also detonated an influence mine 50 yards off her starboard beam, which caused moderate damage, but no casualties. Three minutes later, a second mine detonated directly under Rich, blowing off 50 feet of her stern. Two minutes later, a third mine detonated under the still-floating forward section, forcing the ship to be abandoned before she sank. Rich suffered 91 killed or died of wounds. Attempts to tow *Glennon* failed as she was held fast in the muddy bottom. On 9 June, the commanding officer, Commander Johnson, and 60 crewmen came back on board in an attempt to lighten the ship and save her, but German shore batteries finally found the range and hit her three times. She had to be abandoned again and rolled over and sank. Glennon suffered 25 dead and 38 wounded.

On 8 June 1944, *LST-499* (which had survived the disaster of Operation Tiger in April 1944) also detonated an influence mine off Utah and sank. It appears her crew was able to conduct an orderly evacuation, and I can find no casualties. Also on 8 June, German submarine *U-441* was sunk in the English Channel by a British B-24 bomber.

On 9 June, 1944, four German E-boats from Cherbourg were able to get past U.S. escorts and torpedo and sink *LST-314* and damaged *LST-376*. Sixty-seven crewmen died on *LST-314*. The damage to *LST-376* was bad enough that she had to be scuttled. Forty-four crewmen were killed on *LST-376*. Also on 9 June, two German destroyers, *Z-32 and ZH-1*, were sunk by British and Canadian destroyers off Brittany while attempting to reach Cherbourg in reaction to the Allied invasion.

At 0400 on 10 June 1944, the Liberty ship SS *Charles Morgan* was bombed and sunk in the English Channel by German aircraft with the loss of eight crewmen. In addition, *LCI(L)-416* struck a mine and sank off Omaha Beach.

In the pre-dawn hours of 11 June, *LST-496* detonated a mine while maneuvering to avoid torpedoes fired from a group of five German torpedo boats. Although the crew fought for two hours to save her, the flooding was too great and the ship went down. One accounts states *LST-496* suffered 80 percent casualties. The tug USS *Partridge* (ATO-138) was hit by a German torpedo in this same engagement, which killed 35 of 90 crewmen and sank the vessel.

On 19 June 1944, *LST-523* detonated a mine and was blown in two during the onset of the great storm of 19-23 June 1944; 42 of her crewmen were lost, as well as 20 Army engineer personnel.

It should be noted that the Royal Navy suffered even greater losses during the weeks after the D-Day invasion, including seven destroyers (*Isis, Swift, Boadicea, Fury, Bickerton, Gothland*, and *Quorn*), two frigates (*Mourne* and *Trollope*), and a number of smaller vessels. Three Canadian corvettes were also lost during this period.

Wrap-up

Between D-Day and 24 June, Allied naval forces landed 715,000 men, 111,000 vehicles, and 291,000 tons of supplies onto the beaches of Normandy, a flow of forces that ultimately overwhelmed the German defenders in the Normandy region, and led directly to victory over Germany in World War II. The preceding list of ship losses is not all-inclusive, and accurate numbers are hard to come by, given varying accounting methods. The Allied navies lost on the order of 24 warships and 35 merchant ships and over 100 smaller amphibious craft. Over 100 Allied ships were damaged, hundreds of sailors killed, and over 2,000 wounded. The German snorkel submarines accounted for 7 escorts, 3 LSTs, and 13 transports, although about 18 German submarines were sunk, mostly in the Bay of Biscay, some of which were reacting to the D-Day invasion. The German "Oyster" bottom pressure mines sank four destroyers, two minesweepers, and damaged over 25 vessels and remained a dangerous threat for months.

Most of the U.S. Navy forces that participated in the landings on Normandy would soon deploy to the Mediterranean to support the landings in southern France (Operation Dragoon) in August. I will cover the great storm of 19-23 June (which destroyed more vessels than the Germans, including the huge "Mulberry" floating harbor at Omaha beach, built mostly by the Seabees of the 25th Naval Construction Regiment), the Battle of Cherbourg (25 June), and Operation Dragoon in future H-grams.

Sources for this H-gram include: Neptune: The Allied Invasion of Europe and the D-Day Landings, Craig Symonds, Oxford University Press, 2014; D-Day: June 6, 1944: The Climactic Battle of World War II, Stephen Ambrose, Simon & Schuster, 1994; History of United States Naval Operations in World War II– Vol. XI: The Invasion of France and Germany, 1944-1945, Samuel Eliot Morison, Atlantic Press, 1957; Operation Neptune: The Invasion of Normandy, Volume V of United States Naval Adminstration in World War II, United States Naval Forces Europe Histories, Naval History and Heritage Command; Dictionary of American Fighting Ships (DANFS), Naval History and Heritage Command; "Allied Naval Losses: Incidents and Losses of Allied Naval Forces from D-Day to the End of September 1944," dday-overlord.com; "SEAL History: Origins of Naval Special Warfare WWII," navalsealmuseum.org; "Remembering Navy Medicine at Normandy," André B. Sobocinski, Navy Bureau of Medicine and Surgery, 2017; "Naval Guns at Normandy," Vice Admiral Morton L. Deyo, USN, Naval History and Heritage Command; "In D-Day's Wake," Christopher D. Young, June 2009, Naval History Magazine, Vol. 23, No. 3; "The US Navy Seabees and the Invasion of Normandy," Lara Godbile, Seabee Magazine, 13 June 2013.