WWII QUARTERLY

JOURNAL OF THE SECOND WORLD WAR

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WWII QUARTERLY • SUMMER 2014 Volume 5, No. 4

D-DAY!

Deadly Mission on Omaha Beach

Commando Attack on Juno Beach

Hitler's Blitzkrieg IN THE WEST

45TH DIVISION
Deadly Fight in Alsace-Lorraine

B-29S OVER JAPAN
Tokyo Firebomb Mission

PT Boat Action in the Pacific

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What sunk HMS *Hood*?

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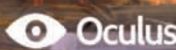

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COVER: Royal Marine Commandos of 1st Special Service Brigade, photographed in a French village on D-Day. See story page 30. Photo: Imperial War Museum

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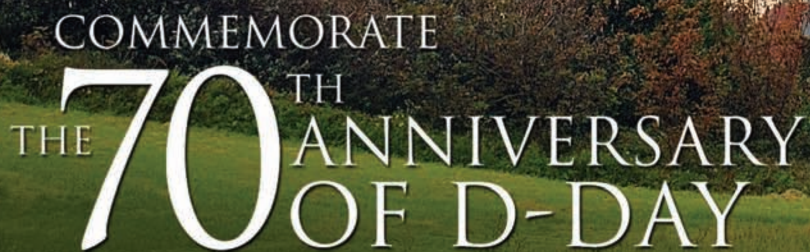

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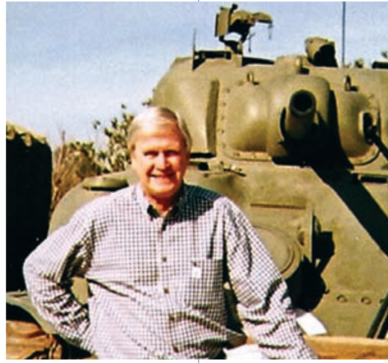
"The light of battle was in their eyes."



This year, 2014, marks the 70th anniversary of Operation Overlord, commonly known as "D-Day." Of course, every military operation had a "D-day," which simply means the date that the operation is scheduled to begin.

Although Overlord was not the largest military operation in history, nor did it result in Nazi Germany's immediate surrender, it remains particularly significant because it put the forces of the Western Allies (the United States, Great Britain, and Canada) onto the mainland of Europe. Many D-days preceded—and followed—June 6, 1944, and each one of them was another nail in the coffin of Hitler's evil Third Reich.

But it was the D-Day of June 6, 1944, that truly sealed Germany's fate. It was literally the beginning of the end.

Viewing D-Day in the rear-view mirror of history, some have proclaimed that victory along the 60-mile-long stretch of the northern French coast was a foregone conclusion, but it was anything but.

True, years of planning and the building up of millions of men and millions of tons of supplies were essential to success. This overwhelming tide of men and material performed superbly on June 6 and over the next 11 months, but there were also many lesser known heroes and incidents that were crucial to victory.

For example, there were Percy Hobart's innovative inventions such as tanks that could swim, explode enemy minefields, and fill in tank traps. There was the incredible, brain-busting work at Bletchley Park that led to the breaking of the German codes and enabled the Americans and British to do everything but read the minds of Germany's leaders.

There was the absolutely brilliant deception plan known as Fortitude that had Hitler and many of his generals convinced long after Overlord was over that Normandy was just a large-scale diversion, and that the real invasion would come at the Pas de Calais and George Patton would lead it.

There were wonderful acts of good fortune, such as a storm in the English Channel that nearly fouled up all of the Allies' plans but, in the end, lulled the Germans into a false sense of security.

There were also plans that seemed to go haywire, such as the scattered, chaotic airborne and glider landings that caused the Germans to believe that the invasion was even more widespread than it actually was and to have little idea how, or where, to respond.

There were also such failures as the sending of the 2nd U.S. Ranger Battalion to scale the cliffs of Pointe du Hoc only to discover that the guns they risked (and gave) their lives to knock out were not there.

And there were the poorly executed naval and aerial bombardments of Omaha Beach that completely overshot their marks and left the Germans' prepared defenses unscathed.

In the end, though, it was the courage of the individual Allied soldier that made the difference. As Ike wrote, "The enthusiasm, toughness, and obvious fitness of every single man were high, and the light of battle was in their eyes."

And because of the courage of those men, the Atlantic Wall defenses on which the Germans had spent so much time, energy, and money were defeated in the span of a morning. May we never forget.

— *Flint Whitlock, Editor*

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When a massive explosion shook Port Chicago, a key naval depot near San Francisco, the shockwaves set off the largest mutiny trial in U.S. history.

IN THE SUMMER OF 1944, with American forces battling their way ever closer to the Japanese home islands, the need for ammunition in the Pacific was hitting its peak. Port facilities along the U.S. West Coast were running at full capacity, and few military facilities were busier than Port Chicago, a town of about 1,500 located 40 miles northeast of San Francisco, on the southern shore of Suisun Bay, near the city of Concord, California.

On July 17, 1944, two ammunition ships were being loaded with explosive cargo at Port Chicago's twin docks: the 7,500-ton Liberty ship SS *E.A. Bryan* and the 10,000-ton SS *Quinault Victory,* the latter preparing to make her maiden voyage. The munitions had been manufactured at the Naval Ammunition Depot at Hawthorne, Nevada.

Everything seemed normal during the loading operations that day; 4,600 tons of high-explosive and incendiary bombs, depth charges, detonators, powder, and large- and small-caliber ammunition of all types were being inserted into the *Bryan*'s cargo holds, while another 429 tons were standing on the pier in 16 rail cars waiting to be loaded into the *Quinault Victory.*

Sailors inspect the ruins of the pier where two ammunitions ships exploded on the night of July 17, 1944, killing over 320 Navy and Coast Guard personnel—the largest U.S. home front disaster of World War II. This view looks north toward Suisun Bay, showing the wreckage of Building A-7 (Joiner Shop) in the center and ship pier beyond.

In the port area were 320 sailors, crewmen, and cargo handlers; all of the cargo handlers were African American, as the U.S. military was then racially segregated. The men and their white officers had been trained in general cargo handling but not in the specific craft of loading ammunition.

The officers frequently had contests to see whose crew of stevedores could work the fastest during their eight-hour shifts. Safety was not of paramount importance during these contests, and the officers often used threats of punishment to spur their men on.

After sundown on July 17, something happened at the port that, despite official inquiries, has never been fully explained. The *Bryan* had been loading for four days; 98 black enlisted men were on board, continuing to stack ammunition into the hold. Also on board were 31 Merchant Marine crewmen and 13 armed guards.

Moored next to the *Bryan,* the *Quinault Victory* also teemed with activity as loading was about to get under way; 100 black stevedores, 36 crewmen, and 17 armed guards were preparing for their shift.

At 10:19 PM, a mighty blast erupted in the port area when one of the ships blew up, followed five seconds later by the other. The night sky was lit up by a gigantic fireball and structures close to the *Bryan* and *Quinault Victory* vanished in a blinding flash; the *Quinault Victory,* in fact, was raised into the air by the force of the double explosions and its bow catapulted 500 feet into the bay. The *Bryan* was virtually vaporized.

A naval aviator flying at 8,000 feet above the port at the moment of detonation had to quickly climb to 10,000 feet to avoid the fireball and debris hurtling up at him. A 200-pound fragment from one of the ships landed over two miles away. The seismic shock wave was felt 125 miles away.

Hundreds of civilians in the area were injured, including six at the Benicia Arsenal, located to the west across Suisun Bay, where $150,000 in damage was done to arsenal buildings. Buildings in the nearby towns of Martinez and Pittsburg suffered

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ABOVE: This view looks south from Ship Pier #1 toward what was once the port facility. BELOW: Looking southwest, showing collapsed Building A-14 (Garage) in the center. Virtually every building at the port was either damaged or destroyed.

broken windows and cracked walls. At the Port Chicago Theater, a crowd of 195 patrons were watching a late-night war film when, at the moment a scene of a bombing came on the screen, the shock wave of the explosions hit the side of the building, caving in one wall; no one was seriously hurt.

But the devastation at the port was astounding. Buildings were leveled, vehicles and railroad cars were tossed about like toys, and fires were burning everywhere. Secondary explosions were also taking place. The town of Port Chicago was left without gas, electricity, or running water, and every building was either destroyed or damaged. Many survivors initially thought that the Japanese had just launched a sneak attack on the area.

A newspaper reporter noted, "Acres of pier had been blown away, leaving the tops of piles sticking out of the water." An underwater crater measuring 66 feet deep, 300 feet wide, and 700 feet deep bore mute testimony to the force of the blasts.

The human toll was also great. Three civilian workers riding on a cargo-moving locomotive and 16 cars at the port "were never seen again, and pieces of the train were scattered over a wide area," said one news report. Seventy Maritime Commission seamen died instantly, as did 15 Coast Guardsmen and nine Navy officers. Another 225 sailors—all African Americans working as stevedores at the port—also perished with barely a trace. The disaster accounted for almost 20 percent of all black naval casualties during all of World War II. Property damage, military and civilian, was estimated at more than $12 million.

The next day, about 200 of the black enlisted men volunteered to remain at the base and help with the cleanup operation. A search began to recover the bodies but there wasn't much left to recover. One survivor recalled, "I was there the next morning. We went back to the dock. Man, it was awful; that was a sight. You'd see a shoe with a foot in it…. You'd see a head floating across the water—just the head—or an arm. Bodies—just awful."

Of those killed, Rear Admiral Carleton H. Wright, commandant of the Twelfth Naval District, remarked, "Their sacrifices could not have been greater had [the disaster] occurred on a battleship or a beachhead…. Their conduct was in keeping with the highest traditions of the United States naval service."

An investigation was begun immediately into America's worst home front disaster. A naval court of inquiry convened on July 21 to determine the cause, but Captain N.H. Goss, commanding officer of the naval ammunition depot at nearby Mare Island, stated, "We have no basis for giving any cause, as there are no close survivors to give evidence of what happened."

The court of inquiry identified several possible causes of the first explosion, which touched off the second: "(1) Presence of a supersensitive element which was detonated while handling. (2) Rough handling by a person or individuals. This might have happened at any stage of the loading process from the breaking out of the cars to the final stowage in the holds. (3) Failure of handling gear, such as the falling of a boom, failure of a block or a hook, parting of a whip, etc. (4) Collision of the switch engine with an explosive-loaded car, possibly in unloading. (5) An accidental incident to the carrying away of the mooring lines of the *Quinalt Victory* or the bollards to which the *Quinalt Victory* was moored, resulting in damage to an explosive component. (6) The result of an act of sabotage. Although there is no proof to support sabotage as a possible cause, it cannot be

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eliminated as a possibility."

Others expressed an opinion that the explosion could have been sparked by a careless match or discarded cigarette, but no definitive cause has ever been established.

A memorial service for the 322 victims was held on July 30, during which Navy planes scattered flowers on the water.

That might have been the end of the matter except for the fact that—less than a month after the disaster—a crew of black Navy stevedores refused their commanding officer's orders to resume the handling of ammunition and the loading of cargo ships, this time at the Mare Island naval facility.

Racial tensions in the military had been simmering for quite some time, and many African American sailors objected to their being treated as second-class citizens while the United States was supposedly fighting a world war to free millions of people from Axis oppression.

Of the 328 African American sailors in the ordnance battalion at Mare Island—many of whom had been at Port Chicago and had been buddies with those who died—some 250 refused to touch the ammunition. Of those 250, 200 of them faced summary courts-martial and were sentenced to bad-conduct discharges and the forfeiture of three month's pay for disobeying orders. To make an example of them, the remaining 50, including one with a broken arm, were charged as being ringleaders of the refusal to obey an order and received a general courts-martial on the charge of mutiny, for which the maximum penalty is death.

All 50 were found guilty. Five men were sentenced to eight years in prison, 11 men got 10 years, and 12 received 24 years, in addition to dishonorable discharges. In January 1946, however, after a storm of public criticism, all the men were granted clemency but were required to remain in the Navy and were assigned to bases in the Pacific for a one-year "probationary period."

Not long after the disaster, the ruined base was rebuilt, but the Navy eventually purchased the town of Port Chicago and demolished the remaining buildings. The ammunition depot there was later incorporated into the Concord Naval Weapons Station.

All images: National Park Service

ABOVE: Before the explosion, African American stevedores unload munitions from a railcar that will be transferred to a ship. The blast's cause was never conclusively determined. BELOW: The crushed roofs and sides on steel railway cars on a revetted siding give stark visual evidence of the power of the blast that was heard and felt in San Francisco, 40 miles away.

In 1999, President Bill Clinton pardoned former sailor Freddie Meeks, one of the few still-living members of the original 50.

The official Navy history notes, "The explosion and later mutiny proceedings would help illustrate the costs of racial discrimination and fuel public criticism. By 1945, as the Navy worked toward desegregation, some mixed units appeared. When President Harry Truman called for the armed forces to be desegregated in 1948, the Navy could honestly say that Port Chicago had been a "very important step in that process."

Even that is not the end of the story, for much speculation after the war has postulated that a nuclear weapon was in the hold of one of the two ships and accidentally detonated; the *Bryan* was destined for the island of Tinian—the same island from which the B-29 *Enola Gay* would take off on its atomic bombing of Hiroshima more than a year later.

If this is true, the full story of Port Chicago may never be known.

Not much is left of Port Chicago. The town was purchased by the U.S. government in 1968 and all the buildings were torn down to create a safety and security zone around the Concord Naval Weapons Station. The site is located between Martinez and Pittsburg and north of Concord, and it can be difficult to gain access to the area as it is still a semi-active military base (Military Ocean Terminal—Concord); clearance to enter must be obtained from military authorities.

The Port Chicago Naval Magazine National Memorial—one of only 29 areas around the country officially known as "national memorials"—is located near the waterfront. The names of those who died are listed on four memorial tablets. Remnants of the pier can still be seen in the water nearby.

Ed Bastien, a U.S. National Park Service ranger at Port Chicago and a Vietnam veteran, said, "I served in an integrated military, and I did so because of the actions of the men at Port Chicago."

Bastien said he hoped that the National Park Service would eventually be allowed to build a visitors center here and spread the word about those who died at Port Chicago. "When I tell a vet that the round they chambered in their M-16 came through this very site," he said, "their feet all of a sudden have a different feel on the soil."

Guided tours are available at 1:30 PM Thursdays through Saturdays. Visitors are driven to the memorial by a shuttle provided by the National Park Service. Information, including details on how to register to visit the memorial, is available on the National Park Service Port Chicago Naval Magazine National Memorial website or by calling 925-228-8860. Reservations must be made at least two weeks in advance. □

ullstein bild / The Granger Collection, NY

To this day, the cause of the sinking of the HMS *Hood* during the hunt for the *Bismarck* is still disputed.

The British Admiralty Board of Enquiry into the loss of the battlecruiser HMS *Hood,* presided over by Vice Admiral Sir Geoffrey Blake, concluded, "The sinking of *Hood* was due to a hit from *Bismarck*'s 15-inch shell in or adjacent to *Hood*'s 4-inch or 15-inch magazines, causing them to explode and wreck the after part of the ship."

Director of Naval Construction Sir Stanley Goodall, however, found this conclusion unsatisfactory and in his report pointed out the explosion was observed near the mainmast 65 feet further forward from the aft magazines. A second board of enquiry was convened under Rear Admiral H.T.C Walker. Even given eyewitness accounts that described fires on deck, that board still found a hit by *Bismarck* being the likely cause, although finishing with, "The probability is that the 4-inch magazines exploded first."

In May 1941, Admiral Sir John C. Tovey, commander of the British Home Fleet at Scapa Flow in Scotland's Orkney Islands, was ordered to attack the German battleship *Bismarck* and heavy cruiser *Prinz Eugen* that had just been spotted in the Denmark Strait. Tovey's fleet consisted of two new battleships, *King George V* and *Prince of Wales,* the battlecruisers *Hood* and *Repulse,* and the aircraft carrier *Victorious,* plus many additional cruisers and destroyers. Also hurrying north to join him was the older battleship *Rodney,* mounting nine 16-inch guns, the largest caliber in the fleet.

Of all the German surface warships, the British feared *Bismarck* the most. Her size, speed, and firepower made her a definite threat to Allied shipping in the Atlantic, and it was imperative that she be neutralized.

On May 21, 1941, *Hood* and *Prince of Wales* left Scapa Flow with six destroyers under the command of Admiral Lancelot Holland flying his flag in *Hood,* their mission to provide heavy support to the cruisers *Suffolk* and *Norfolk* covering the Denmark Strait between Greenland and Iceland—one of the likely routes the German naval squadron would take to reach the North Atlantic. The rest of the fleet was gathering to cover the area between Iceland and the Orkney Islands.

Early on the evening May 23, *Suffolk* made contact with the enemy ships, quickly turning away toward the coast of Iceland and into a fog bank. *Suffolk* immediately transmitted a sighting report to the Admiralty and then came around astern of the German ships to shadow them on radar.

Imperial War Museum

Norfolk came up as well, a little too boldly, for *Bismarck* opened fire on her; like *Suffolk,* she raced for the fog bank. The blast from *Bismarck*'s 15-inch guns disabled her own forward radar, and overall German commander Admiral Gunther Lütjens ordered *Prinz Eugen* to take the lead.

The Germans had picked up the sighting report from *Suffolk* and advised their own high command. Lütjens was shocked their presence had been discovered so easily and had little intelligence on what his two warships might face.

As the two forces moved toward each other, Holland had a marked two-to-one superiority in firepower. However, this was offset by the age of the *Hood* (commissioned in 1920) and the newness (commissioned in January 1941) and lack of combat readiness of *Prince of Wales,* which was still having trouble with her main armament.

Holland soon realized he was in a favorable position to bring the enemy to action that evening, sailing northwesterly toward the Denmark Strait with the enemy on a southwesterly course. He hoped to catch

An artist's depiction of the German battleships *Bismarck* and *Prinz Eugen* firing on battlecruiser HMS *Hood* and battleship *Prince of Wales* during the Battle of Denmark Strait, May 23, 1941. Both British ships were hit and *Hood* was sunk but *Prince of Wales*, although damaged, survived for a few more months.

OPPOSITE: The battlecruiser HMS *Hood*, launched in 1918. She was sunk under still-unexplained circumstances with substantial loss of life.

BELOW: *Bismarck*, pride of the German Navy, shown during sea trials, March 1941.

the Germans just before sunset at around 2 AM at 65 degrees north latitude. He also hoped to cross the German squadron's "T," which would give him a great advantage. "Crossing the T" is a tactic in naval warfare in which a line of warships crosses in front of a line of enemy ships, allowing them to bring all their guns to bear while receiving fire from only the forward guns of the enemy.

During the evening of May 23, the forces converged. *Suffolk* continued to shadow and update the Admiralty, Holland on *Hood,* and Tovey on *King George V.*

Around midnight, *Suffolk* lost contact because her radar was blinded by a snowstorm the German ships had entered. Holland waited an hour but, hearing no news, turned more northerly in case the enemy turned south. He could not afford a German breakout into the North Atlantic. At 2 AM, still with no news, he turned southwesterly hoping to cut off the enemy before total darkness.

About an hour later, *Suffolk* regained radar contact and discovered the German ships were still on their original course. Holland must have cursed his luck, for his maneuvering had lost time and space, and the opportunity to cross the T was gone; this would prove critical in the coming battle.

Not wanting a night engagement, Holland brought his ships onto a course to intercept the German squadron at first light, keeping up a good speed but in the heavy seas dropping the escorting destroyers astern. By dawn, the destroyers were an hour behind.

Lookouts scanned the horizon for a glimpse of their quarry. At 5:37 AM the two ships were spotted to the northwest, 30,000 yards (17 miles) away. The heavy guns could fire that far but the chance of a hit was remote; they needed to reduce the range to 25,000 yards or less—and quickly.

Prinz Eugen had already picked up the sound of ships with her underwater detection gear at some 20 miles to the southeast. At about the same time as the British lookouts spotted them, the Germans spotted smoke on the horizon. Lütjens believed that these were likely more cruisers, and he was under orders to avoid contact with British warships. He turned to starboard and headed almost due west, confident that he could outrun them.

National Archives

Holland was soon aware the enemy had turned away, but he had to maintain his intercept course. Turning toward them would merely put his ships behind the Germans and make it a chase.

By 5:50 AM, the range was down to 26,000 yards, and Holland would soon give the order to open fire. He was fully aware of *Hood*'s vulnerability to plunging fire at long range and wanted to pass through the critical zone as fast as possible. Therefore, he compromised by turning 20 degrees to starboard on a new course of 300 degrees toward the enemy. This would close with the enemy faster but make it impossible for the rear turrets of the British ships to bear on the Germans.

At 5:52 AM, Holland designated the lead ship as the target and gave the order to open fire. This caused Captain John Leach of *Prince of Wales* a few anxious moments,

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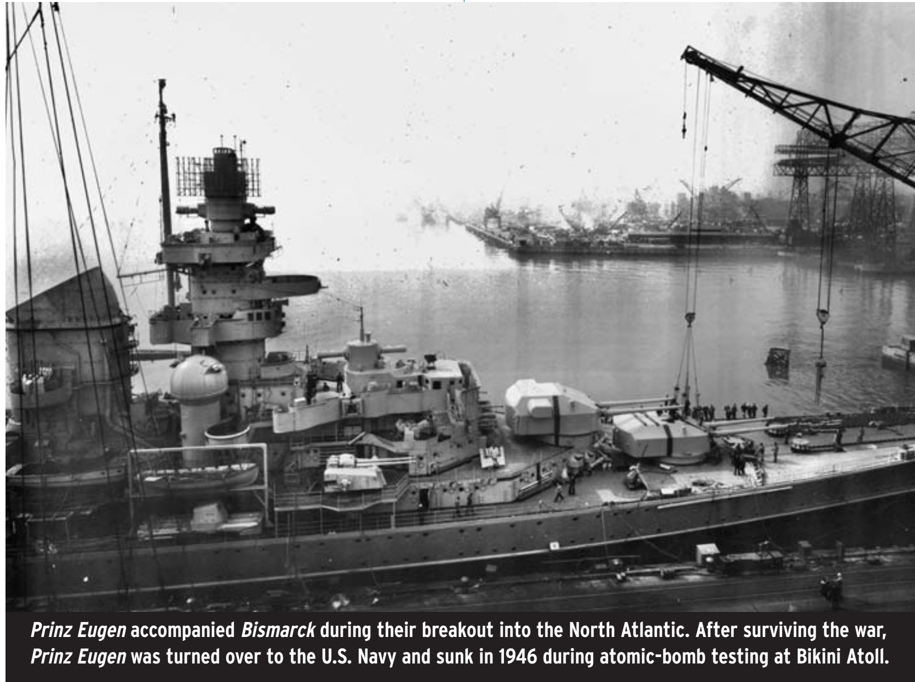


Prinz Eugen accompanied *Bismarck* during their breakout into the North Atlantic. After surviving the war, *Prinz Eugen* was turned over to the U.S. Navy and sunk in 1946 during atomic-bomb testing at Bikini Atoll.

for he was convinced that the rear ship was *Bismarck,* posing the greater threat. He ignored the orders from Holland and concentrated on B*ismarck*.

In seconds, huge columns of water erupted around *Prinz Eugen,* followed seconds later around *Bismarck*. Lütjens now had no doubt about what he faced. However, the British angle of approach still made identification difficult.

Marking the fall of shots, the British ships fired another salvo still firing at different targets. Leach had not informed Holland of his opinion and later had not been informed by his own gunners that *Prince of Wales* was firing at the second ship.

The range was down to 24,000 yards when Lütjens ordered his ships to turn 65 degrees to port toward the British on a new course of 200 degrees and directed his ships to open fire as soon as they had turned. Lütjens was now on course to cross the British T and would be able to employ all his ships' heavy guns.

Prinz Eugen opened fire first at 5:53 AM, concentrating on the lead British ship, *Hood,* with her fast-firing 8-inch guns at four salvos per minute; she was firing high-explosive, not armor-piercing shells. After a few ranging salvos, *Prinz Eugen* hit *Hood,* her shells starting a large fire amidships among the ammunition lockers of the 4-inch antiaircraft guns, as well as ammunition for the unrifled projectile launchers used for defense against aircraft. Attempts to put out the fire were frustrated by the exploding ammunition.

Both British ships were still firing but at different targets. As yet, *Bismarck* had not opened fire. By now the range was down to 22,000 yards. After turning, *Bismarck* opened fire on *Hood* at 5:55 AM with all eight 15-inch guns. Her first salvo fell close to *Hood.* At last *Hood*'s gunners realized they had been firing at the wrong ship. About this time, Holland ordered another 20 degree turn to port. This turn still would not allow the British ships to use their rear turrets.

At 5:59 AM, Holland ordered another 20-degree turn to port, which would finally allow his ships to bring their full armament to bear. The range was now down to 18,000 yards. *Bismarck* fired three salvos in rapid succession about 30 seconds apart. The first, the fourth in total, again straddled *Hood,* but the fifth hit with devastating effect at about 6 AM.

For the sailors aboard *Hood,* their worst nightmares were about to come true.

Ted Briggs had joined *Hood* as a signal boy on March 7, 1938, at just 15 years of age. Three years later he was an ordinary signalman on *Hood*'s compass platform, manning the voice pipe to the flag deck.

During the battle, *Hood*'s X Turret fired for the first time, but Y Turret was silent. Seconds later, Briggs saw a blinding flash sweep around the outside of the compass platform. However, he said there "was not a terrific explosion at all regards noise." He felt the ship "jar" and begin listing to port. The "jar" was the ship breaking in two. The list got worse, and the men began leaving his area. By the time Briggs climbed down the ladder to the admiral's bridge, the icy sea was already around his legs.

Eighteen-year-old Midshipman William Dundas had the duty of watching *Prince of Wales* to make sure she was keeping station; he was not far from Ted Briggs on the compass platform. He remembered bodies falling past his position from the higher spotting positions—the result, he felt, of *Bismarck*'s shells hitting without exploding. He recalled a mass of brown smoke just before the list to port began. Dundas escaped by kicking out a window on the starboard side of the compass platform. Even so, he was dragged under the water by the sinking ship but miraculously regained the surface.

Twenty-year-old Able Seaman Robert Tilburn was stationed at *Hood*'s aft-port 4-inch antiaircraft gun and witnessed the fire started by *Prinz Eugen*'s shells. The heat of the blaze made fire fighting impossible as the flames were being fanned by *Hood*'s 28-knot speed. Then he said, "The ship shook like mad" and began listing to port. Tilburn got onto the forecastle but was washed over the side by a great wave.

At the second board of enquiry, Tilburn told the admirals, "The *Bismarck* hit us. There was no doubt about that. She hit us at least three times before the final blow."

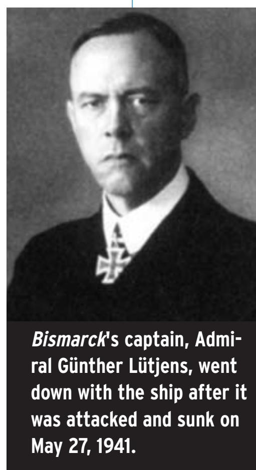
Briggs, Dundas, and Tilburn were the only survivors from *Hood*; her 1,415 other crewmen were lost. But there were other witnesses, such as Lieutenant Esmond Knight. Aboard *Prince of Wales* observing *Hood,* he remembered thinking, "It would be a most tremendous explosion, but I don't remember hearing an explosion at all." Chief Petty Officer French, also on *Prince of Wales*, said that the middle of the *Hood*'s boat deck appeared to rise before the mainmast.

Leading Sick-Berth Attendant Sam Wood, also on *Prince of Wales,* observed,

"I was watching the orange flashes coming from *Bismarck*, so naturally I was on the starboard side. The leading seaman who was with me said, 'Christ, look how close the firing is getting to *Hood*.' As I looked out, suddenly *Hood* exploded. She was one pall of black smoke. Then she disappeared into a big orange flash and a huge pall of smoke which blacked us out.... The bows pointed out of the smoke, just the bows, tilted up, and then this whole apparition slid out of sight, all in slow motion, just slid away." Within three minutes *Hood* was gone.

So what did happen to *Hood*? Were the boards of enquiry right that a 15-inch shell from *Bismarck* had hit close to her 4-inch and/or 15-inch magazines, causing an explosion that wrecked the after part of the ship?

What evidence we have would seem to shed some doubt on this. First, *Hood* was about 17,000 yards from *Bismarck* by 6 AM. By that time, the heavy shells from both sides were travelling on a fairly low trajectory. As the range decreased, the guns would have been progressively depressed. Therefore, any hit would have been more likely to strike the belt. *Hood*'s belt armor was 12-inches thick and superior to any ship in the fleet; it was also inclined at 12 degrees.


Bismarck's captain, Admiral Günther Lütjens, went down with the ship after it was attacked and sunk on May 27, 1941.

It is still possible a shell could have hit the deck with its thin armor of three inches, but not with the plunging effect Holland had feared at long range. The shell likely fell at a rather oblique angle, which would make penetration of four decks to the main magazine under X Turret unlikely.

Also, it was witnessed aboard *Hood* and *Prince of Wales* that *Bismarck*'s 15-inch shells were likely defective, that most failed to explode.

Could there have been some sort of cordite flash explosion similar to those that destroyed three British battle cruisers during the battle of Jutland in May 1916?

This again seems highly unlikely as *Hood*'s shell-handling rooms were situated well below the X and Y Turrets' magazine and the engine room thanks to lessons learned from that tragic Jutland episode. Also at Jutland, all three battlecruisers were destroyed by massive explosions, and there was none audible on *Hood*. One question about the magazine theory is why Y Turret did not fire like X had. Was something already happening there?

Imperial War Museum

HMS *Prince of Wales* was completed a month before her engagement with *Bismarck* when the ship was severely damaged. On December 10, 1941 she was sunk by the Japanese along with HMS *Replulse* near Singapore on December 9, 1941.

Then there is the fire started by *Prinz Eugen*'s 8-inch shells. Captain Leach of *Prince of Wales* described the fire as "a vast blowlamp." The fire consumed much combustible material on the deck and upper superstructure, but the two- and three-inch deck armor and forecastle armor prevented this fire from penetrating below. The ventilation systems were fitted with gas-tight flaps and, at action stations, all should have been closed. Thus, it is fairly certain that the deck fires could not have resulted in *Hood* breaking in two or could even have contributed to this significantly.

The second board of enquiry did look at the possibility of *Hood*'s own above-deck torpedoes causing her to sink. Sir Stanley Goodall, who had supervised *Hood*'s design, believed an enemy shell could have detonated the torpedo warheads in their tubes.

Four 21-inch MK IV torpedoes were kept in tubes, two on either side of the mainmast, and four reloads were nearby in a three-inch armored box. These torpedoes were certainly capable of breaking *Hood*'s back and could have been set off either by a direct hit from an enemy shell or by an intense fire. the TNT in the warheads would ignite at around 250 degrees Fahrenheit and explode at around 280 degrees. Again, however, there was no explosion. It is worth noting that similar torpedo tubes on the battlecruisers *Repulse* and *Renown* were later removed.

Was there some sort of underwater penetration? This seems even more unlikely. *Hood* was outside torpedo range of the German ships. One of *Bismarck*'s 15-inch shells could have penetrated the side and exploded in or near *Hood*'s shell-handling rooms—again unlikely without evidence of a massive explosion.

The final theory or possibility is that *Prinz Eugen*'s 8-inch guns, firing at over half their maximum range, would have been falling on the target at a much steeper trajectory than *Bismarck*'s 15-inch guns and that one of her high-explosive 8-inch shells might have gone down *Hood*'s after funnel. If this did happen, it would have been just before Lütjens ordered *Prinz Eugen* to shift her fire to *Prince of Wales*, about the time *Hood* was engulfed.

The wire cage that covered the top of the funnel would not stop a shell and would be unlikely to explode it. The next obstacle on

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Photo taken from *Prinz Eugen* shows *Bismarck* firing on HMS *Prince of Wales.* The British ship was hit and badly damaged but did not sink.

a shell's journey would have been a steel grating positioned in vents at the level of the lower deck to protect the boiler room. If an 8-inch shell exploded here, it would have detonated in the boiler room. A high-explosive shell bursting in one of the boiler rooms or nearby might have resulted in an enormous buildup of pressure, resulting in an explosion inside the ship. The line of least resistance to this would have been up through *Hood*'s thin decks, not through the heavily armored sides or bottom.

Was this the result, a muffled explosion within the ship only heard below decks, the flash seen above decks near the mainmast with the propellers still turning driving the rear into the severely weakened midsection and breaking *Hood* in two parts? Could it have been a fatal combination of two of these theories?

In July 2001, the wreck of the *Hood* was found 9,334 feet below the surface of the Denmark Straight. She lies in three sections with the bow on its side, the mid section upside down, and the stern speared into the seabed. In 2013, the wreck was more fully explored with a remote-control vehicle. The exploration appears to confirm a massive explosion had taken place in the magazine feeding Y Turret and breaking the back of the ship. However, it remains a mystery, given the low trajectory of any shell, how one could have passed through four decks and the magazine armor. It must have been a lucky shot, indeed.

After the loss of the *Hood,* the battle continued. *Prince of Wales* was about 1,000 yards astern of *Hood.* Seeing the flagship explode, Captain Leach ordered a hard turn to starboard to avoid the wreckage. *Hood* was engulfed in smoke, but the stern was still above the water. The forward section still had some momentum but was listing to port and sinking rapidly. After clearing the wreckage, Leach swung *Prince of Wales* back onto 260 degrees, bringing his full broadside to bear.

The turn of *Prince of Wales* disrupted the gunners on *Bismarck* and *Prinz Eugen*, but they soon found the range again. With the range down to 15,000 yards, the fire from both sides was finding its mark.

A 15-inch shell from *Bismarck* hit the bridge of *Prince of Wales*. Although it did not explode, it killed several key personnel, and for a short period disrupted command of the ship. Direction was transferred to the aft position. She was also hit by an 8-inch shell from *Prinz Eugen,* knocking out fire control of several 5.25-inch guns, and two more hits caused minor flooding. At 6:03 AM, *Bismarck* passed the port beam of *Prinz Eugen,* causing that ship to temporarily cease fire. The heavy cruiser had turned away because of suspected torpedoes.

Leach did not close the range. *Prince of Wales* had managed to hit *Bismarck* three times, although no explosions had been observed. *Bismarck* struck back, hitting the starboard crane of *Prince of Wales,* causing much splinter damage. Another shell hit amidships below the rear funnel under the waterline but failed to explode. It did cause some flooding and required the ship to counter flood to maintain trim.

Leach felt his ship was taking heavy damage—it had been hit four times by *Bismarck* and three times by *Prinz Eugen*. His own ship's main armament was still not working properly, and his crew lacked the experience to adjust for this. Believing his ship might suffer serious damage, Leach ordered *Prince of Wales* to withdraw behind a smoke screen at 6:05. Also, *Bismarck* had completed passing *Prinz Eugen* so that ship's guns would soon be back in action. Whether this influenced Leach is unknown.

Admiral Lütjens was surprised to see *Prince of Wales* turn away, but he dismissed calls from some of his men to pursue the British ship. It was doubtful they would be able to catch her. Also, *Bismarck* herself had been hit. Two shells had caused minor damage. However, one 14-inch shell had struck below the waterline causing some flooding and reduction in speed. Worse, some fuel tanks had been ruptured causing the loss of several hundred tons of precious fuel oil.

Lütjens soon realized he could not continue with the mission to attack British convoys due to the loss of fuel. *Prinz Eugen* was therefore detached to proceed with raiding while *Bismarck* turned back. The battleship headed for the nearest port with a drydock big enough to take *Bismarck,* at St. Nazaire, France.

On May 26, a British aircraft spotted the battleship and radioed her position to other warships in the area. A force of 15 Fairey Swordfish torpedo planes from the carrier *Ark Royal* converged on Lütjens' ship, and one torpedo damaged *Bismarck*'s rudder so badly that all the giant ship could do was sail helplessly in a circle.

Like a pack of lions, the chasing British battleships *Rodney* and *King George V* caught and engaged *Bismarck* at a range of 16,000 yards. The German gunners' return fire was ineffective, and the helpless *Bismarck* was torn apart. At 10:40 AM on May 27, 1941, the German battleship sank some 300 nautical miles west of Ushant, France. Only 110 of her crew of 2,222 survived the sinking. Admiral Lütjens went down with the ship. □

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Cracking

Shortly after 8 AM on June 6, 1944, a German officer overlooking the Vierville Draw on Omaha Beach reported that the soldiers defending the beach were repelling the Americans: "The enemy is in search of cover behind the coastal zone obstacles. A great many motor vehicles—and among these ten tanks—stand burning at the beach. The obstacle demolition squads have given up their activity. Debarkation from the landing boats has ceased; the boats keep further seawards.... A great many wounded and dead lie on the beach."

But there was one caveat in this upbeat message: "Some of our strong points have ceased firing; they do not answer any longer when rung up on the telephone."

Vierville Draw, a road that cut between the cliffs overlooking Omaha Beach, was the Americans' most important objective within the four-mile-long, crescent-shaped shoreline. Of the five draws leading inland, only the Vierville Draw possessed a paved road, the best option for getting armor and vehicles off the beach. The road ran almost the length of the beach then turned south through the draw and continued into the small town of Vierville-sur-Mer. The hard-surfaced road eventually joined the coastal highway, offering high-speed connections to Utah Beach to the west and to the British and

the VIERVILLE DRAW

The Stonewallers of the U.S. 29th Infantry Division and the Rangers faced murderous fire on D-Day to capture Omaha Beach's most vital exit.

BY KEVIN M. HYMEL

Using bulldozers and boxes of TNT, combat engineers from the 121st Engineer Battalion and other soldiers prepare to destroy the double wall blocking the exit at the vital Vierville Draw at the western end of Omaha Beach, Normandy. After the obstacle was demolished, tanks, trucks, and other vehicles could move inland. Painting by Larry Selman.

Canadian beachheads to the east. The Germans also understood the draw's importance and built strong defenses to defeat a direct Allied assault.

Pillboxes stood on either side of the draw while a third blocked its entrance from the beach. The pillbox on the east side included an 88mm cannon, while the one on the west side housed a French 7.5cm KF 231(f) cannon. The pillbox in the center housed a 50mm gun. Atop the cliffs on either side of the draw were formidable independent strongpoints called Widerstandsnests (WN), each manned by two squads, usually armed with machine guns and mortars. WN 71 stood on the east

Painting © 2014 Larry Selman, www.larryselman.com

National Archives

explode, and Czech hedgehogs (angled iron antitank obstacles). The beach, the road, and the sloping cliff bluffs were all seeded with mines. Mortar positions were dug in behind the bluffs. To prevent vehicles from using the exit, the Germans also built two concrete walls, measuring 125 feet long, nine feet high, and six feet thick. The Americans needed to destroy both walls if they hoped to move their armor off the beach.

General Leonard "Gee" Gerow, the V Corps commander responsible for Omaha Beach, intended to give his soldiers the firepower and support they needed to crack the Vierville Draw. He and his staff designated the beaches west-to-east in front of

and WN 72 stood on the west. A third WN, designated 73, stood 200 yards west of WN 72. A fortified house stood in front of WN 73. Most of the German defensive positions fired across the beach, not out to sea, ensuring that the German gunners had enfilading fire on assaulting troops.

Between the beach and the pillboxes ran a 21-foot-high sloped seawall topped with coils of barbed wire. The beach at low tide spanned more than 400 yards, most of which was covered with Belgian gates (antitank steel gates), mines atop angled logs so landing craft would snag them and

draw as Charlie, Dog Green and Dog White. The plan of attack called for DD tanks (amphibious tanks driven by propellers and surrounded by canvas skirts) and tanks of the 743rd Tank Battalion, delivered by Landing Craft Tanks (Armored) [LCT(A)s], to land first at Dog Green, followed by the infantry.

The task of capturing the draw went to Lt. Col. John Metcalfe's 1st Battalion, 116th Infantry Regiment, 29th Infantry Division. The regiment, a National Guard unit, traced its lineage to Confederate General Thomas J. Jackson's Stonewall Brigade. Soldiers from Virginia made up most of the unit, while men from Delaware and Maryland— many of whom had drilled together long before the unit was federalized in 1941—comprised the remainder. The men, calling themselves the "Stonewallers," wore a distinctive blue and gray yin yang symbol on their helmets and left sleeves, a symbol of post-Civil War unity between the North and the South.

According to the plan, the Stonewallers' Company A would land on Dog Green Beach directly in front of the draw at 6:30 AM. Simultaneously, Company G would land on

THE CIVILIANS OF VIERVILLE

The townspeople of Vierville-sur-Mer awoke around 3 AM on June 6, 1944, to the sound of bombs. American Consolidated B-24 Liberator bombers were dropping their payloads, preparing the invasion beaches for the coming attack. "I can still see a plane with fireballs," recalled Andrée Oxeant, who was only 14 at the time. She may have been witnessing marker flares dropping from a B-24's bomb bay.

Thirty-one-year-old Michael Hardelay watched the raid from the window of his house, situated atop the cliffs, overlooking the water. "I saw a light coming from two bombs that exploded at the ridge of the cliff," he recalled. "Six more bombs had fallen down on the cliff face without killing anyone, or damaging anything."

At the sound of the bombs, most people fled their homes for their backyards, where they had dug bomb shelters, covered with logs or corrugated metal. Some ducked to their basements, a few slept through the attack. Hardelay and his parents raced for their shelter, his mother grabbing her jewelry and money before entering.

The shelters were uncomfortable. Andrée Oxeant climbed into a shelter crammed with about 30 people. "There were essentially women and children, because the husbands were fighting or captured," she reported. "There were only old men with us."

Most people brought nothing to eat or drink for their day-long stay. "We were very thirsty," recalled eight-year-old Jean-Claude Ygouf, "and our lips were swollen from the shells blasting." Twelve-year-old Jeannine Chamberlin and her parents rushed to a German horse shelter. "The German soldier took me on his lap in between the horse's legs," she remembered.

As the sun rose, people could see ships in the English Channel, but Michael Hardalay could only see fog from his bedroom window. "All of a sudden, the fog cleared up and unveiled thousands of boats: a superb and grandiose sight!" He called for his mother, then his neighbor, to admire the armada.

Twelve-year-old Suzanne Coliboef caught a view of the Channel from her kitchen door. "We came out and we saw all

Company A's left, east of the company, with F and E Companies landing farther east on Dog White, allowing all the companies to support each other. Charlie Beach, to the right of A Company, was designated for a company of Rangers.

Seven minutes after Company A's assault, demolition teams from both the 121st and the 146th Engineer Combat Battalions were to land and blow up obstacles, clearing a path for the follow-on forces. The rest of 1st Battalion—Companies B, D, and C—would follow behind Company A at 7 AM. Within a half hour, two field artillery battalions would land via amphibious trucks known as DUKWs.

The company of Rangers landing on Charlie Beach was called Ranger Force B, and consisted of Captain Ralph Goranson's Company C of the 2nd Ranger Battalion. Their mission was to capture Pointe de la Percée, a rock cliff between Omaha Beach and Pointe du Hoc to the west. Ranger Force C, consisting of Lt. Col. Max Schneider's 5th Ranger Battalion and Companies A and B of the 2nd Ranger Battalion, would be used as a reserve force for the draw, if they were not needed at Point du Hoc, which would be under assault by Lt. Col. James Rudder leading Ranger Force A.

THE OPENING ASSAULT

The Allied plan broke down almost immediately. In the predawn darkness the LCT(A)s transporting the tanks scattered and could not reorganize, forcing the infantry to land without heavy fire support. Further hampering the landings, naval preparatory salvos set fire to the grass on the sloping bluffs, obscuring distinctive landmarks, such as Vierville's church steeple. On board the landing craft, rough seas drenched the soldiers, making many seasick. The landing plan further unraveled when three landing craft, an LCT(A), and two infantry landing craft sank on the way into shore.

The strong current and grass fires pushed landing craft east and impeded visual navigation for the follow-up units. Companies G and F, 2nd Battalion, 116th Infantry, which were supposed to land adjacent to A's left flank, landed so far to the east that A Company's soldiers could not see them; the soldiers of Company G raced off their landing craft and were surprised to find themselves at the Les Moulins Draw. A few amphibious tanks landed simultane-

BELOW: Two soldiers, one armed with a flamethrower, brace themselves against the force of a TNT blast that destroyed a section of concertina wire during training in England. OPPOSITE: American bazooka teams train in England for combat on Omaha Beach. Although considerably smaller, the sand berm in the distance gave troops an idea what they would encounter on D-Day.

National Archives

these boats." Thirty-six-year-old Denise Ygouf, who reentered her home to retrieve supplies, was shocked at what she saw from the window: "I only saw boats and we could not see the sea anymore."

Then the naval bombardment began. "I looked out the window and could see the Navy shells passing by," reported Andrée Renard. The resulting shock waves shattered windows and shook home foundations. "The Navy shells were passing over us," wrote 16-year-old Albert André, "and the Germans were firing from Trévières [four miles to the south]." Unfortunately, one shell hit the town bakery, killing two people. Another shell exploded on a garden wall behind Michael Hardelay's house, killing some of Hardelay's rabbits.

Some of the locals assumed the Germans were conducting maneuvers. "Because there was a coup in 1942 [the British raid on Dieppe], we thought it was another one they were doing down there," explained Edmond Scelles, who was 16 at the time.

The Germans ran around the town yelling "Alarm! Alarm!" Michael Hardelay watched a disheveled, bare-headed German officer pass by his house, riding in a horse-drawn cart. When the German saw the fleet, he threw his arms up, jumped out of the cart, and sprinted to his post. An old woman asked a passing German what the noise was all about. He told her, "It's the landing attempt and tonight, I'll be sleeping here!" When a German fell dead with a head wound, Andre Albert noticed a little dog next to him. "He stayed beside him for eight days."

By the afternoon, American Rangers and soldiers from the 116th Infantry Regiment entered Vierville but encountered no civilians. Teenager André Renard spied his liberators from his kitchen. "From our house we could see the Americans walking in the countryside," he recalled. "But as we were not sure, we did not move."

Some Americans fired into the basement of Suzanne Coliboef's home. Her mother stormed up the stairs and confronted them. A soldier who spoke French told her the Americans were catching fire from the area. She then led them, with her daughter in tow, to a house occupied by Germans, who quickly surrendered.

ously and were masked by smoke, saving the unit from accurate enemy fire. Meanwhile, Company A landed on schedule, 6:30 AM, at the right place, Dog Green Beach, without the benefit of covering smoke and completely alone.

Six British Landing Craft Assault (LCAs) carried Company A into battle. Their armored doors, fixed onto the front ramps, allowed only a single soldier at a time to exit, unlike the American LCVP (Landing Craft Vehicle Personnel), which allowed three columns to exit together. Captain Taylor Fellers, the company commander, led the men from his craft directly in front of two pillboxes protecting the draw. Inaccurate enemy mortar rounds fell all around as they waded to the beach. The men crawled forward, staying ahead of the rapidly incoming tide. Suddenly, German machine guns raked the beach, killing Feller and all 31 men in his LCA.

The Germans then brought other landing craft under fire. Gunners targeted the craft exit ramps as they fell, killing the men as they charged forward. For the enemy, it was a shooting gallery. Laden with equipment and holding their rifles above their heads, the Americans were slow-moving targets. Some men drowned immediately after plunging off the ramp. Pfc. Gil Murdock jumped into water over his head. He inflated his life preserver belt and resurfaced, only to realize that his landing craft had backed away and was making another run at the beach, with the ramp still lowered. The ramp knocked Murdock under water. When he resurfaced a second time, he grabbed the back bumper of the craft and rode it to the beach.

Those who made it out of the water sprinted across the beach toward the seawall. Some dropped behind the German obstacles for protection. Dead and wounded men filled the beach. Men screamed at others to take cover, but their voices were drowned out by enemy fire. A soldier with a gaping hole in his head and clutching rosary beads stumbled forward and knelt in the sand to pray, only to be cut in half by German machine-gun fire.

A bullet caught Lieutenant Edward Tidrick in the head, knocking him into the sand. He raised himself up and, despite blood flowing from his throat, ordered, "Advance the wire cutters!" Those were his last words. German machine-gun fire stitched him from head to waist.

The men scrambled to stay alive along the seawall, but with enemy machine guns fir-

Companies from the 2nd and 5th Ranger Battalions and Company C, 116th Infantry Regiment, 29th Division eventually climbed the bluffs east of the Vierville Draw and took the town as well as the draw itself. Company C, 2nd Ranger Battalion secured the west side of the draw.

Map © 2014 Philip Schwartzberg, Meridian Mapping, Minneapolis, MN

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Landing Craft Vehicle, Personnel (LCVPs) churn through the rough surf toward the obstacles on smoke-shrouded Omaha Beach. The Germans had prepared a perfect killing ground for the American forces.

> "THE SADDEST RELIC OF THAT ADVANCE WAS AN ALMOST ENTIRE PAIR OF ARMY-ISSUE LONG JOHNS THAT REMAINED ENTANGLED FOR DAYS ON ONE OF OUR TANK'S TRACKS."
>
> —CORPORAL WILLIAM PRESTON

ing parallel to the beach and snipers dominating the high ground, the Americans found little safety. Men who escaped drowning when their landing craft deposited them too far from shore were killed while they tried to climb over the seawall or hide behind it. Those still alive felt alone, surrounded by so many dead bodies. The Germans killed more than 100 of Company A's 155 soldiers.

An LCT(A) landed simultaneously with Company A and immediately drew mortar and machine-gun fire. The ramp dropped and three tanks from the 743rd Tank Battalion rolled onto the beach, joining two DD tanks that had made it ashore. The Germans immediately knocked out one of the DD tanks; its dead commander hung from the turret hatch, but the other tank continued to maneuver and fire. The Germans dropped a round on the LCT(A)'s ramp, ripping it off.

Some of the infantrymen took refuge behind the tanks, but with the draw still defended, the tanks had little room to maneuver. Some of the tanks had to roll over the dead bodies of the infantrymen to survive. "The saddest relic of that advance," recalled Corporal William Preston, "was an almost entire pair of Army-issue long johns that remained entangled for days on one of our tank's tracks."

Tanks that managed to stay out of the line of fire from the 88 were still exposed to other German guns. The tanks fired tracers at the pillboxes to mark them for Navy cruisers, which shelled the targets. The tanks that survived the opening round roared back to the waterline where they plowed back and forth in the surf firing at enemy positions.

The Rangers of Captain Ralph Goranson's C Company fared better than the Stonewallers. They came ashore on Charlie Beach, just east of the Vierville Draw. Goranson had two plans for the assault. Plan One called for exiting through the draw, which the Stonewallers would have cleared. Plan Two called for scaling the cliffs of Charlie Beach, a difficult task since his Rangers lacked the specialized scaling equipment possessed by the Rangers assaulting Pointe du Hoc. He would only resort to Plan Two if the Germans still controlled the draw.

As Goranson's 65 Rangers approached the beach, enemy small arms and artillery fire splashed the water around their two landing craft. The men charged out of their boat, waded ashore, and struggled up the rocky beach as fast as their equipment allowed, all while under heavy German fire. As Goranson ran off his LCA, a German 88 shell exploded on the ramp, ripping it off. Another round tore into the center of the LCA. A mortar round that threw Lieutenant Sidney Salomon forward as he ran up the beach killed most of the men behind him. When enemy machine-gun fire began stitching the sand in front Salomon, he jumped up and ran for the safety of the cliff wall. By the time the stunned survivors reached the base of the cliff, they realized their numbers had been cut in half.

At the cliff base Lieutenant William Moody looked at Captain Goranson and asked, "Plan Two?" Goranson responded, "Right." Suddenly, a Ranger shouted out, "Mashed potatoes! Mashed Potatoes!" No one knew what he meant until a German grenade—known by the slang term "potato masher"—exploded nearby.

The Rangers began scaling the cliffs. Lieutenant Moody led a group of Rangers to the top; they made it using bayonets and hand holds to assist each other. Once on top, they dropped toggle ropes to the others below. When Goranson reached the top he made an important battlefield decision: Instead of heading west to attack the Germans on Pointe de la Percée in support of the Rangers at Pointe du Hoc, he would attack east and clear the German positions wreaking havoc on the men of the 116th. It was the right call.

The second wave of the 1st Battalion, 116th Infantry, now headed to Dog Green. Some of the men spent the journey bailing water out of their landing craft with their helmets. As 12 landing craft carrying Companies B and D approached the beach, the soldiers saw only dead bodies in the water and on the sand. The ramps lowered, and the men, who had expected the battle to have moved inland, stumbled into a live battlefield. Much like Company A, many were hit as they exited their landing craft. Only three LCA captains had the wherewithal to change course, swinging to the east to land their Company B soldiers on Dog White Beach.

Most of the men landing on Dog Green waded ashore in waist-deep water. One Company B landing craft struck a mine and exploded, showering another craft with wood, metal, and body parts. Captain Ettore Zappacosta, the company commander, exited first from his craft and was shot while on the ramp. "I'm hit!" he called out before dropping beneath the waves.

German machine gunners then targeted the tightly packed men. Only one soldier from Zappacosta's craft survived the onslaught. An explosion rocked another LCA. Someone yelled "Abandon ship!" and soldiers tossed themselves over the sides. Other LCAs' ramps dropped and the men plunged into the surf amid a storm of machine-gun fire and geysers from mortar rounds.

Two soldiers, Lieutenant Leo Pingenot and Staff Sgt. Odell Padgett, made it ashore, climbing over boulders until they reached the base of the cliff on Charlie Beach. Looking back they saw the rest of their men in the water. "Are you hit?" Padgett shouted. The men answered back no, they were just seeking cover in the obstacles. With Pingenot and Padgett's shouts of encouragement, the rest of the men made it to shore. Those who stayed behind the hedgehogs on the shoreline were easy targets for German mortars. The Company B survivors followed the Rangers up the cliff facing Charlie Beach.

The men in the water and on the beach fought back as best they could. After German machine-gun fire shattered part of Private Harold Baumgarten's rifle, he balanced it on a hedgehog and fired at a German helmet in a machine-gun nest up on the bluff. The machine gun stopped firing, but as Baumgarten tried to eject the spent casing, the rifle broke in half. Seconds later, an enemy shell explosion drove shrapnel into his cheek, tearing out teeth and gums.

Sergeant Thomas Valence fired his rifle vainly at a concrete bunker. When a sergeant asked George Roach what he was shooting at, he told him, "I don't know. I don't know what I'm firing at."

As Company D headed to the beach, one craft floundered in the surf. A German 88mm shell hit another LCA, blasting through its ramp and blowing out its interior doors. Only a handful of the Stonewallers from the craft made it to the seawall. Another landing craft dropped off its men too far from the shore, leaving them to swim to the beach. Other soldiers waded through the water, watching their landing craft attract fire.

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ABOVE: This pillbox at the center of the Vierville Draw housed a .50-caliber machine gun that fired eastward across the mouth of the draw and down the length of Dog Green Beach. A side wall screened the gun's muzzle blast from observation from the English Channel. Note a chunk of concrete missing above the gun embrasure where a shell made a direct hit. BELOW: The same pillbox today; the shell mark above the embrasure is still visible, but the side wall has been demolished. The cliffs of Charlie Beach can be seen in the distance.

Author's Photo

All: Author's Collection

When a medical LCA dropped its ramp, the Germans opened fire, killing almost everyone onboard. Their bodies drifted in with the tide. Soldiers in the water pushed the wounded ahead of them to get them to the shore. "All the Germans had to do to wipe us out was send a squad of armed men down the beach," Private Baumgarten later wrote.

A single landing craft from Company D touched down 200 yards east of Vierville. Clusters of German artillery exploded on the beach and in the water as the ramp lowered. The craft rose and fell in the waves. As the first man jumped off mid-ramp, the craft dropped on top of him, killing him instantly. The rest pulled themselves over the sides. Sergeant John Slaughter washed up to the water's edge and found himself under a mine-topped German obstacle. He watched the Germans gun down one of his comrades running across the beach, then the corpsman who ran out to help him.

Ordering the rest of his squad to follow, Slaughter charged off the beach, racing the 400 yards to the seawall. The survivors of the squad followed. Once under cover, they realized their weapons were jammed with salt water and sand. Slaughter took off his assault jacket, spread his raincoat on the sand, and began cleaning his rifle. When he saw bullet holes in his pack and coat, he became weak in the knees and his hands shook.

Also landing at the base of the cliffs where the Rangers had landed were three British LCAs, carrying Lt. Col. John Metcalfe and his 1st Battalion headquarters. Metcalf's team took heavy casualties running from the surf to the cliff and found themselves pinned down by the intense enemy fire. For most of the day, Metcalfe could do practically nothing to lead his men, but when a soldier came by looking for a noncommissioned officer to take out a sniper, Metcalf volunteered to do it himself. A medic watched as Metcalfe went forward then followed after him.

(Top Down): Captain Taylor Fellers led Company A, 116th Infantry Regiment; he was killed at Vierville; SSgt. Bob Slaughter cleaned his M-1 while under fire; Private Harold Baumgarten was badly wounded on the beach.

Sometime around 7:20 AM, less than an hour after the first wave landed, Dog Green Beach was closed. Three companies had already been decimated in less than an hour. Generals Gerow and Omar Bradley, the First Army commander, had deemed further assaults on Vierville Draw as suicidal. The beach and water were red with blood. Equipment littered the beach. Tanks burned furiously. Bodies floated in the water like driftwood, more like the results of a sinking ship than a battle.

REINFORCEMENTS ARRIVE

With Dog Green closed, the next 116th unit to land, Company C, was diverted east. Its landing craft touched down almost directly between the Les Moulins and Vierville Draws on Dog White Beach, just east of the Company B soldiers who had diverted from Dog Green. The company almost lost its commander when Captain Berthier Hawks rushed down the ramp and into water over his head, crushing his foot in the process. He climbed back on board as the boat moved closer.

Another LCA reached the shore and the men were ordered to go over the side. Most climbed over but three soldiers lay down in the craft and refused to leave. Another of the landing craft hit an obstacle that flipped it onto its side. Men spilled out and most of their heavy weapons—flamethrowers, Bangalore torpedoes, and demolition charges—fell into the water.

The Stonewallers heading into shore struggled to stay ahead of the incoming tide. Looking behind them, they saw floating dead bodies. Most of the men made it to the beach, where a soldier with a missing leg screamed for a medic. The men took cover in a number of breakwaters—rows of small wooden walls that jutted into the water, built to prevent beach erosion. These breakwaters protected them from flanking fire and gave them a chance to recover from seasickness and the ordeal of reaching the beach.

Next to touch down at approximately 7:50 AM was Lt. Col. Max Schneider's Ranger Force C of more than 600 soldiers. Having never received the reinforcement signal from Colonel Rudder on Pointe du Hoc, the Rangers headed for Omaha Beach. Schneider's 5th Ranger Battalion and Companies A and B from 2nd Battalion approached beaches straddling both Dog Green and Dog White. The 2nd Battalion Rangers landed first and struggled through waist-deep water while their landing craft came under fire. One of the craft hit a mine and blew up. The fire was so intense that the Rangers who made it ashore retreated back into the water for protection and to let the high tide carry them in. "Dead men seemed to be everywhere," said Company B Ranger Captain Edgar Arnold.

When Lt. Col. Schneider, still aboard his landing craft, saw the fire ripping apart the 2nd Battalion men, he told his British landing craft captain, "I'm not going to waste my battalion on that beach!" He decided to head farther east and landed on the heels of the Stonewallers' Company C. Men ran up the shoreline, but only half reached the safety of the breakwaters, leav-

Both: National Archives

The 29th's Colonel Charles Canham (left) and Brig. Gen. Norman "Dutch" Cota brought order out of chaos and personally led their men inland.

National Archives

ABOVE: An aerial photograph taken by a Royal Air Force reconnaissance plane shows the Vierville Draw on June 30, 1943, almost a year before D-Day. The houses around the U-bend in the road were demolished by the Germans and replaced by strongpoints, pillboxes, and Widerstandsnests. OPPOSITE: Smoke from exploding munitions blankets the entrance to the Vierville Draw on D-Day.

ing the beach strewn with dead bodies.

Only one Ranger did not charge the beach. Father Joe Lacy, the Ranger's 39-year old, overweight chaplain, remained at the water's edge, pulling wounded forward, ahead of the rising tide. He treated their wounds and calmly prayed over the dead and dying, ignoring the enemy fire. Before his landing craft had reached the shore, he had warned the soldiers that if he saw any of them praying on the beach he would kick them in their rears. "You leave the praying to me and you do the fighting." He kept his word—and then some.

Right behind the Rangers came two Landing Craft Infantry (LCIs): LCI-91 and LCI-92. LCIs were 160-foot-long craft capable of delivering 200 men via two foot ramps that dropped down from either side of the bow. LCI-91's ramps dropped and soldiers from the backup headquarters for the 116th's 1st Battalion headed into the surf until a teller mine on a pole exploded on the port bow. The ramps retracted and LCI-91 pulled away, returning 100 yards to the west to continue its job.

> "Colonel, you are going to have to lead the way. We are bogged down. We've got to get these men off this goddamned beach!"
>
> —BRIGADIER GENERAL NORMAN COTA

The ramps dropped again and the men exited. As the last of the men departed, an 88mm shell exploded the ship's fuel tanks. Then enemy fire hit a soldier armed with a flamethrower and ignited his tanks, spreading fire all over the deck. He jumped overboard with even the soles of his shoes on fire.

The ship's captain ordered everyone over the side. Men jumped in and found themselves in water over their heads. LCI-92 approached close to LCI-91 and suffered the same fate. LCI-92, carrying engineers from the 121st Engineer Combat Battalion, caught an 88 round in the midsection. The resulting explosion and fire tossed men overboard. Others, some of whom were on fire, jumped in.

Lieutenant Colonel Robert Ploger, the commander of the 121st ECG, almost drowned but inflated his life belt before the water overwhelmed him. Once ashore, Ploger ran 150 yards up the beach and had dropped into a shell hole when a German bullet hit him in the left ankle. He looked behind himself and could not see any members of his team.

Sergeant Deb Peters, who made it ashore by pulling himself along the telephone poles topped with mines, made it to the beach and hid behind a tank until an 88 round hit it, killing the men around him and embedding shrapnel in his cheek.

Six bulldozers loaded with boxes of dynamite made it ashore, two of which were

immediately disabled by artillery. The engineers who had survived their fiery and watery ordeal found their efforts to destroy beach obstacles on the waterline blocked by infantrymen hiding behind them.

Despite the massive amounts of German fire, increasing numbers of Stonewallers and Rangers assembled on the beach and were ready to fight. Finally some leadership arrived as well. As Lt. Col. Schneider's craft headed to the beach, an LVCP landed ahead of it. Aboard were Brig. Gen. Norman "Dutch" Cota, the 29th Infantry Division's assistant commander, and Colonel Charles Canham, the 116th's regimental commander, and their staffs. When they splashed their way up to the waterbreaks on Dog White, Cota knew he had to get the men moving and fighting.

Waving his pistol in the air, Cota shouted at the stunned soldiers to advance. When a lieutenant asked Cota what they should be doing, Cota told him, "Well, Lieutenant, we've got to get them off the beach. We've got to get them moving." He then made his way to the men lying on the sand, tapping them on their rears and telling them, "Twenty-Nine, let's go!"

When Cota found Lt. Col. Schneider, the two officers exchanged salutes and Cota gave Schnieder his marching orders: "Colonel, you are going to have to lead the way. We are bogged down. We've got to get these men off this goddamned beach!" Cota then turned to the Rangers and shouted, "Rangers! Lead the way!"

Meanwhile, Colonel Canham saw one of his C Company soldiers take a bullet to the chest while trying to cut through barbed wire. Canham crawled to the man, pulled the wire cutters out of his dead hand, and continued the job. As he finished, a German bullet tore though his wrist. A medic bandaged Canham's wrist as he shouted out, "All of you who want to die, stay where you are, and those who want to live, come with me."

To his officers and NCOs he said, "Get these men the hell off this goddamned beach and go kill some goddamn Krauts!" When a lieutenant colonel in a captured pillbox yelled for him to take cover, Canham shouted back, "Get your ass out of there and help me get these men the hell off this beach!" He then helped lead the men of Company C to the base of the cliff.

BACK AT THE VIERVILLE DRAW

Meanwhile, atop the cliff on Charlie Beach, and west of the draw, Captain Goranson's Company C Rangers, with the help of some Stonewallers from Company B, attacked a trench line connecting a pillbox, WN 73, and the fortified house, which had already been shattered by naval gunfire. The Americans surrounded the house and then advanced up the hill, wary of Germans lurking in the shadows. Soldiers tossed phosphorous grenades into dugouts and trenches between WN 73 and WN 72. Ranger Lieutenant Sidney Salomon reached the top of the ridge and captured an enemy soldier near an unmanned 80mm mortar position.

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German soldiers in the damaged house fired on anyone passing by. Some Rangers returned the favor. Sergeant Belcher stuck his rifle over the edge of a trench only to be confronted by a German pointing a rifle at his head. Both men fired and both weapons jammed. The German ducked back into his position, but Belcher and another Ranger leaped into the trench and gunned down the German and two of his comrades.

The men then spotted a pillbox pouring fire onto the beach. Belcher kicked open the pillbox's door and tossed in a phosphorous grenade. Flaming Germans soon poured out, screaming as the phosphorous burned their clothes and skin; Belcher and the other Rangers shot them down.

The Americans spent the rest of the day eradicating the Germans from the bluffs east of the draw. Goranson tried to contact elements of the 116th Regiment on his radio. He believed his Rangers were the only living troops on the beach until he finally reached someone in Company B.

Down on the beach, soldiers on the opposite side of the draw continued to fight. Some Company D soldiers and other survivors assembled a .30-caliber machine gun and fired it at the pillbox housing a German 88mm gun. Tracers ricocheted around the opening until the machine gun jammed and had to be moved.

THE DOG WHITE ASSAULT

Back on Dog White Beach, Schneider's Rangers, the Stonewallers of Company C, and the survivors of Company B began their assault. A soldier wielding a BAR crawled forward to where Colonel Canham had torn a partial hole through the wire. He placed a Bangalore torpedo through the rest of the wire and ignited it. The explosion cleared most of the way. The BAR man then dropped his body onto the remaining wire to form a human bridge and allowing the men to cross over.

Another Company C soldier, armed with a Bangalore torpedo, climbed through a gap in the seawall, jumped a strand of

barbed wire, and was preparing to set the torpedo off under a second double-coil line of barbed wire when a German shot him down. A lieutenant reached the torpedo and lit the fuse. After the explosion, men rushed through the second gap and across the road paralleling the beach.

The men made their way to a grassy field that led to the base of the bluffs overlooking the beach. There they found a line of German trenches that enabled them to reach the bluffs without tripping any mines. Under the cover of smoke from the grass fires, Stonewallers climbed up the bluffs diagonally to the right in single file, checking for mines as they went. A machine gun in a pillbox halfway up the hill opened fire, impeding the advance—until a soldier with a flamethrower shot a stream of flame into its firing slits, incinerating the Germans inside.

Next to advance were Schneider's 5th Rangers. They quickly blasted four lanes through the barbed wire and charged over the seawall, across the road, and to the bluffs. Like the other units, the Rangers ascended the bluffs diagonally to their right. Unfortunately, the smoke that had worked wonders covering the other forces, blew right into their faces, choking the men. Captain John Raaen put on his gas mask, only to find he had forgotten to remove the covering plug, almost suffocating himself. He finally fixed it and walked forward. After three steps he was out of the smoke, but he was so furious with himself that he kept the mask on for another 50 feet.

As more and more Rangers reached the top of the bluff, they came under crossfire from two enemy machine guns. General Cota showed up and declared "Now, let's see what you are made of. This is how ya tell the men from the boys." The Rangers headed down a ditch along a low hedge and flanked a German machine-gun emplacement. Not only did they bring it under fire, but one Ranger captured the German MG42 machine gun that had been firing on them. With this extra firepower, the men poured fire into the enemy trenches and at fleeing Germans.

Individually, the Rangers from Companies A and B, 2nd Rangers, made it to the road without having to wrestle with barbed wire—there was none in their path. They, too, ascended the bluffs. Ranger Sergeant William Courtney from Company A stood up on top of the ridge and shouted out, "Come on! The S.O.B.'s are cleaned out!" Just then an enemy machine gun opened up on him. He ducked, returned fire, and knocked out the gun nest. He stood up again, repeating his words. Other Rangers made it to the top and, in groups of twos and threes, knocked out strongpoints along the trench system and collected surrendering Germans.

As more and more troops followed up the bluff, a lost group from the 116th's Company D arrived in a Landing Craft Mechanized (LCM). The men's original LCA had been swamped and they transferred to the LCM, missing the follow-up assault. Now they joined the Rangers. Additionally, the 2nd Ranger's B Company, which had landed before Schneider shifted the rest of his force to the east, also joined the fight.

Other small groups of men began to organize themselves and climb the seawall. One group of wounded men worked their way up the bluff near the draw and headed west toward Vierville until a German machine gunner firing from behind a low wall pinned them down. But when the German poked his head up, the wounded Private Baumgarten shot him dead. The group continued to skirmish with German soldiers, shooting any who surrendered.

Another group composed mostly of Company D men ascended the bluffs, following white tape they assumed had been placed by German work crews. Sergeant William Presley found a dead American naval officer with a radio strapped to his back and used it to call a destroyer, the USS *Satterlee,* to fire on a bunker housing a battery of Nebelwerfer rockets and 105mm mortars. The Navy salvos quickly destroyed it. In all, a force of some 600 Americans made it up the bluffs east of the draw.

VIERVILLE TODAY

Today the Vierville Draw is a quiet coastline in the Normandy countryside. Restaurants and shops line the beach road, while the dark green grass and vegetation have grown back along the cliffs. But there are still signs of the battle.

The pillboxes remain. The one on the east side of Dog Green with the 88 is now a memorial to the American National Guard. The pillbox in the center that housed the 50mm is somewhat hidden from tourists who do not want to climb down some steep stairs to it. The small pillbox to the west of the draw, halfway up the Charlie Beach cliff that housed the French 7.5cm cannon, is still there, although the cannon has been removed. Its muzzle break, however, has been welded into the curb of the road that leads to the beach below the seawall.

The fortified house in front of WN 73 atop the Charlie Beach cliff is gone, though explorers can still find trenches and the entrance to a bunker. The firing ports of WN 71 dug into the cliff on the east side of the draw are easily visible from the road, but there is little evidence of WN 72, which has been replaced with a restaurant.

A fishing pier stretches out into the water between Dog Green and Charlie Beaches. It was there that Private Harold Baumgarten of Company B came ashore. There are also signs along the beach delineating the lines between the invasion beaches. There are also numerous memorials to the different units that fought their way through the draw.

The true cost of capturing the Vierville Draw can be found a mile to the east at the Normandy American National Cemetery in St. Laurent where 9,286 headstones mark the final resting places for those Americans lost during the Normandy campaign and elsewhere in the drive to liberate Europe. Many of those bear the mark of the 116th Infantry Regiment.

National Archives

SOUTH TO VIERVILLE AND NORTH TO THE BEACH

Once past the bluffs, the soldiers of C Company reached a road that led them into Vierville around 10 AM. They encountered no enemy resistance, only General Cota twirling a Colt .45 on his finger and chomping on his cigar. "Where the hell have you been, boys?" he asked.

As the men dug foxholes they came under fire. Fifteen soldiers were killed by unseen German snipers until a sergeant ordered, "Fire at those trees at the other end on the right!" The men opened fire and killed two Germans strapped to tree limbs. The town was captured, effectively flanking the draw, only 200 yards away.

Meanwhile, Colonel Schneider's 5th Ranger force pushed farther south into the hedgerows, skirting Vierville as they focused on reaching Pointe du Hoc, four miles to the west. But the Rangers encountered fierce resistance. After fighting south for several hours, Schneider turned his men north to Vierville where, at around noon, they joined the Stonewallers. The combined force could not break through the Germans to their south and west. Already the hedgerow country was proving too difficult for infantrymen to maneuver.

ABOVE: Lucky to be alive, a stunned survivor tries to recover from his ordeal. Three companies were decimated in the opening hours of the fight for the Vierville Draw. LEFT: An American medic fills out a casualty report on a wounded soldier at Omaha Beach.

General Cota approached the Rangers, asking them why they were being delayed. "Snipers," one of them said. "Snipers?" retorted Cota. "There aren't any snipers here!" A shot rang out, passing close to the general. "Well, maybe there are," he said and walked off.

Colonel Canham showed up and ordered the Rangers to abandon their Pointe du Hoc mission and to spread out in the hedgerows and defend the ground taken. To Canham, it was more important to prevent the Germans from recapturing the Vierville Draw than risk a solid force of Rangers on a questionable mission.

Out at sea, the destroyers USS *McCook,* USS *Harding* and USS *Satterlee* and the battleship USS *Texas* fired continuously at the Vierville Draw's defenses. With the assistance of Navy shore fire control parties and signal men aboard landing craft close to the action, their salvos destroyed a number of bunkers disguised as houses. The *Texas* had opened the morning assault, firing over the DD tanks as they headed to shore. The *Harding* fired 40 shells at the steeple of the Vierville church, completely destroying it. The *Satterlee,* which had spent the morning firing on Pointe du Hoc, knocked out the Nebelwerfer, as requested by Sergeant Presley. Twenty minutes after noon the *McCook* fired on the cliff at Charlie Beach, knocking a large artillery piece off the cliff ledge. Unfortunately, it also caused a rock slide, killing wounded men lying below.

Some of those men were from 1st Battalion headquarters. Major Thomas Dallas, the battalion's executive officer, fired orange smoke to mark their position. The Navy misinterpreted the signal and fired on the party. "Goddamn it," Dallas yelled at his signal officers, "tell those sons-of-bitches to stop the firing!" Two signalmen fashioned semaphore flags from sticks and handkerchiefs and signaled the ship to stop firing; the crew of the *McCook* had mistaken them for surrendering Germans. Dallas later reported that more men were killed by naval fire than enemy fire.

While the *McCook* rained fire on the Vierville bluff, General Cota led his small force north to the draw where his men quickly captured a number of Germans who came out of their bunkers with their hands up or waving white flags. The naval bombardment had done its job. Cota's team led their prisoners down toward the beach, until the general spotted two Germans on top of WN 71. "Come on down here, you sons-of-bitches," he called while waving his pistol at them. They followed suit.

Cota then pointed to WN 71 on the cliff, telling his aide-de-camp to keep a sharp eye out for the enemy. Sure enough, Germans stationed inside the cliff soon opened fire, but American return fire drove five of them from their positions. Later, an additional 54 prisoners were taken from the cave inside the cliff.

Cota's group reached the pillbox on the east side of the draw (the one with the 88), but as they passed through an opening in the two antitank walls the Germans prisoners became frantic, yelling, "Minen! Minen!" out of fear of German-laid minefields. Cota dismissed their cries and ordered them forward with a sweep of his hand. The wary men obeyed and the Americans and their prisoners walked back down to the beach. The Americans now held the Vierville Draw but the double wall between the pillbox and the cliff still blocked the way for vehicles. It had to be destroyed.

Cota found Colonel Lucius Chase of the 6th Engineer Special Brigade, who offered

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NO. 48 (ROYAL MARINE) COMMANDO, THE LAST SUCH UNIT TO BE FORMED IN WORLD WAR II, WAS ONE OF THE FIRST TO LAND AT JUNO BEACH ON D-DAY.

COMMANDOS CRACK HITLER'S ATLANTIC WALL

BY MARK SIMMONS

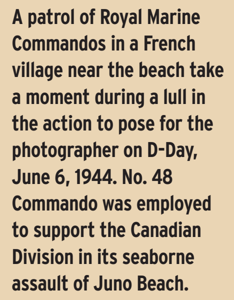
AFTER SUCCESSFULLY FIGHTING seasickness during the crossing of the English Channel, Lance-Corporal Ted Brooks of Number 48 (Royal Marine) Commando arrived on Nan Red Beach—which formed the left flank of Juno Beach—on the morning of June 6, 1944. He had, for much of that time, avoided feeling "queasy" by lying on his back—that is, until he stood up to get ready to land. This was his first time in action, but he felt "apprehensive" rather than afraid.

"It was obviously very noisy during the approach," he remembered, "but one thing that stuck in my mind was the silence on the landing craft just as we went in."

That silence was broken by a burst of machine-gun fire when Brooks's landing craft was still a few hundred yards from the beach. Ted recalled, "One man shouted with an indignant tone in his voice, 'Who the f.....g hell's firing?'" This appealed to the Commandos' black humor and somehow relieved the tension. Ted felt it was "so funny at the time."

Ted and his mates were taking part in the most momentous event in the history of combined operations. This was the day, since the dark days of 1940, that all the training and previous operations had been leading to. Theirs was a crucial mission, for without securing the beaches, the great mass of the Allied armies behind them could not begin their drive through France and into the heart of Adolf Hitler's Third Reich.

Over 16,000 Royal Marines—less than 10 percent of the entire invasion force—were about to participate in Operation Neptune, the assault phase of Operation Overlord, the largest combined aerial/amphibious operation in history. Most of the landing craft were manned by Royal Marines and all capital ships (battleships and cruisers) carried RM detachments. Five RM Commandos, grouped with three Army Commandos into two Special Service Brigade units, were scheduled to be landed during the assault phase. In addition, the Royal



A patrol of Royal Marine Commandos in a French village near the beach take a moment during a lull in the action to pose for the photographer on D-Day, June 6, 1944. No. 48 Commando was employed to support the Canadian Division in its seaborne assault of Juno Beach.

All Photos: Imperial War Museum

With one man carrying a small motor scooter on his shoulder, men of 48 Commando disembark from landing craft at Juno Beach near St.-Aubin-sur-Mer, June 6, 1944.

Marines provided a number of specialist units, including an armored support group, beach clearance and control parties, and engineers.

The Allied armies taking part in the Normandy invasion were under the overall command of American General Dwight D. Eisenhower, while the ground commander was British General Sir Bernard Law Montgomery. The plan for the invasion had been drawn up by General Sir Frederick Morgan, chief of staff to the Allied supreme commander.

Early on, Morgan had proposed that the landing should take place on a narrow front with three divisions, for he felt constricted by the limited amount of landing craft available. However, to have a chance of success, Montgomery believed that the amphibious landing should be expanded to five divisions and several Commando units. Three Army Commandos (Numbers 3, 4, and 6) and five Royal Marine Commandos (Numbers 41, 45, 46, 47, and 48) in two brigades would be landed.

The Commandos had a variety of tasks to perform, but broadly they fell into two main categories. Initially, they were to take and hold the flanks of the main beaches, allowing other troops to move inland unhindered. Then, with their light equipment and ability to move swiftly, they would support the airborne troops landing behind enemy lines.

The men of 48 Commando were part of No. 4 (Special Service) Brigade commanded by Royal Marine Brigadier B.W. "Jumbo" Leicester, along with 41, 46, and 47 Commandos. Formed in the spring of 1944 largely from 7th Battalion Royal Marines, 48 Commando was rooted in a unit that had a checkered history. It had been raised in 1941 and sent to South Africa to perform guard duties. It was not in fact needed there and thus was left idle in Durban. By 1943, it had moved on to Egypt.

Later it took part in the Sicily landings (Operation Husky), where it fought against the crack Hermann Göring Division. It reached the Italian mainland (Operation Avalanche) but was soon ordered home to England to reform as a Commando. There it had a stroke of good luck to have Lt. Col. James Moulton appointed as its commanding officer; he took command in March 1944.

Moulton was told he could have his pick of men from the 7th Battalion and from the Mobile Naval Base Defence Organisation II. Not all the men for the Commando came from these units; some were seagoing marines from ships of the fleet. All should have been volunteers, but such was not always the case.

Tony Pratt was "selected," as he explains, after having joined the Royal Naval Air Service when he was 17. "After one Sunday church parade," he said, "we were all lined up and asked for volunteers to join the Royal Marine Commandos. I thought this would be even worse and, of course, did not volunteer. The sergeant came along the ranks with his stick and began saying, 'You, you, and you' and passed me by." Pratt thought he was safe but the sergeant came back, pointed at him, and said, "And you," which is how he got into the Commandos.

All the men went to Achnacarry in Scotland's chilly, windswept western highlands for Commando training. Located on the grounds of Achnacarry Castle, the historic seat of the Clan Cameron in the Lochaher region, the Commando Training Center usually ran a six-week course that was reduced to an intensive 18 days for 48 Commando. Colonel Moulton recalled that they went through "the usual torments." The camp commandant, Colonel Charles Vaughan, had welcomed them, telling them the instructors were the best around and, "They will not ask you to do anything that they cannot do themselves."

Sergeant Joe Stringer discovered that the trainees lived in the field, even though it was

winter and they were "permanently cold, wet, and tired." Many of them had already experienced active service, but it made no difference to the instructors. Any of the men could ask at any time to be released and returned to his unit, but none ever did. At the end of training the men were awarded the coveted green beret.

Four hundred men started the course, and they finished it together emerging as 48 (Royal Marine) Commando. In early April 1944, 48 Commando moved to Gravesend in Kent, where the unit continued training with battle drills, field exercises, physical conditioning, speed marches, and assault courses. Ten days were spent on the rifle ranges at Sheerness honing their marksmanship. On May 20, secret orders arrived that told them that they would be taking part in the long-awaited liberation of France and Europe. Their objective was to land on a beach code-named Juno, near Nan Red, at the beach resort town of St.-Aubin-sur-Mer.

They would come in behind the Canadian North Shore Infantry Regiment, which was supported by the tanks of the Fort Garry Horse, 35 minutes later. Then 48 Commando would pass through the Canadian beachhead, moving east toward Langrune and taking the beach defenses from the rear before linking up with 41 Commando. That unit would be landing on Sword Beach on the right flank and would move west toward Langrune, thus linking Juno and Sword Beaches.

ABOVE: Making the initial landing at Nan Red Beach, on the left flank of Juno Beach, Canadian infantry disembark from their landing craft under German fire shortly after 8 AM on D-Day. BELOW: Wrecked landing craft provide mute testimony to the stiff defense put up by German defenders at Nan Beach. No. 48 Commando suffered heavy losses when two of its landing craft hit underwater obstacles and sank.

The Germans did not know when or where the invasion would come, so Field Marshal Erwin Rommel, in charge of Army Group B, did everything possible to fortify the likely places along the coast (See *WWII Quarterly,* Spring 2010). He had his own men, conscripted civilians, and slave laborers brought in for the job, working to exhaustion to make the French coast impervious to invasion. The workers built thousands of reinforced concrete bunkers and gun emplacements, flooded some open fields and studded others with a forest of poles to discourage glider landings, carpeted the beaches and areas inland with millions of mines, and placed fiendish obstacles along the shoreline to obstruct, impale, and destroy landing craft.

Tens of thousands of German soldiers stood guard all along the coast, which Nazi Propaganda Minister Joseph Goebbels had called "the Atlantic Wall," touting it as being impregnable. The area where 48 Commando was scheduled to land was guarded by the 736th Regiment, 716th Division, backed up by mobile units of the 21st Panzer Division.

After the invasion was delayed for 24 hours due to a fierce storm raging through the English Channel, 48 Commando embarked at Warsash, Hampshire, on June 5 and sailed for France.

Moulton's 48 Commando was transported across the Channel in LCIs, Landing Craft, Infantry (small), operated by the 202nd Flotilla from the support craft HMS *Tormentor* at Warsash. The LCIs were 104 feet long with a speed of 11 knots and could carry 96 fully laden troops along with a crew of 17. These craft had the advantage of eliminating transfers from larger ships to smaller assault craft, but that was about their only advantage. Seakeeping qualities were poor, and the LCIs were constantly rolling even in moderate seas. Made of plywood, they provided little protection from enemy fire. The engines ran on high-octane fuel from unprotected fuel tanks.

Colonel Peter Young, commanding offi-

cer of No. 3 Army Commando, described the crossing in an LCI: "The storm which had already delayed us for 24 hours had not yet abated. All through the night our small craft pitched and rolled. I found it impossible to sleep; most of us were seasick, flung about by the crazy pitching of our craft; it was a miserable night. Breakfast for me was just a mug of cocoa, which went straight over the side, but otherwise I was not unwell."

Colonel Moulton felt that LCIs were the wrong craft as they were "designed for back-up infantry, not as assault craft.... You landed by gang-planks over the bow, quite useless for heavily equipped men in rough water."

As the Commandos approached the beach, they swapped their helmets for their coveted green berets. To soften up the enemy, a tremendous aerial and naval bombardment of the coast commenced at dawn on D-Day.

"An enormous weight of bombs and shells was delivered in the space of a few hours," said Colonel Young. "It was a crucial phase of the operation and, of course, a tremendous encouragement to the men in the landing craft as they ran in, head-on, to sample whatever the West Wall might have in store for them."

What the West Wall had in store for them was a strong, well-organized defense. At first, though, as the unit's official report stated, "It appeared that the landing would be unopposed and most craft dismounted the 2-inch mortars which were prepared to cover the landings with smoke. Then machine guns opened up from the strongpoint at St.-Aubin, which was almost opposite the easternmost landing craft and perhaps 2,000 yards from the westernmost, and the craft were subjected to mortar and shell fire; the Z Troop craft received a direct hit amidships [killing six men]. The Oerlikons [20mm automatic cannon normally used aboard ships as antiaircraft weapons] replied and the craft put down smoke on the beach, with 2-inch mortars."

"THE GERMANS IN THE STRONGPOINT AT ST.-AUBIN HAD OUR RANGE AND BEARINGS, AND THE MORTAR BOMBS CAME OVER IN REGULAR WAVES. ONE BOMB LANDED RIGHT AMONG US AND I WAS HIT BY A PIECE OF SHRAPNEL IN MY BACK."
—DOUGIE GRAY, B TROOP

Colonel Moulton had the foresight to train his men to fire 2-inch mortar smoke from the bows of the craft during the run-in to the beach. The smoke screen hid the craft from direct fire, but beach obstacles and shrapnel holed the wooden hulls, killing and wounding troops and crews.

"Intelligence was poor," said Moulton. "We were told of a continuous line of fortifications along the shore, but it wasn't like that. The Germans built concrete strongpoints in the villages, and we landed right in front of one."

Harry Timmins recalled the approach on board his craft carrying A Troop: "As we got nearer the beach, the noise was more than you could possibly imagine. There were explosions all around us in the sea and the shells and mortars were kicking up sand all over the beach. A couple of buildings were on fire and, to add to the tumult, the Oerlikon guns on our boat also joined in the barrage and deafened us."

Men from 48 Commando and Canadian infantry with their bicycles take cover from German mortar fire in ditches near St.-Aubin-sur-Mer.

Most craft did not beach square on the waterline, exposing troops trying to scramble down the bow gangways that were constantly moving in the swell. Many marines were pitched into the sea to wade ashore in waist-deep water, while others were thrown in headfirst and were swept away by the fast-flowing current and drowned.

Captain Geoff Linnell, commander of the Heavy Weapons Troop, witnessed a desperate scene: "The ramps were too light for the ends to sink to the sea-bed; they floated about in the surf. As each man tried to come down them, the footway beneath him heaved alarmingly with each incoming wave. Many men were thrown completely off the sides and floundered in the water, dragged down by their heavy packs. When I got down the ramp, there was a big sea and a great undertow that nearly took my legs away.

"Some men with inflatable lifebelts up around their chests had been knocked over by the swell and were floating away upside down with their legs in the air, drowning as we watched."

The official report said, "On reaching the shore, troops made for the cover of the earth cliff and sea wall. Here they found a confused situation. The cliff and sea wall gave some protection from small-arms fire, but any movement away from them was under machine-gun fire. The whole area meanwhile was under heavy mortar and shellfire. Under the sea wall was a jumble of men from other units including many

Map © 2014 Philip Schwartzberg, Meridian Mapping, Minneapolis, MN

Landing at Langrune-sur-Mer on the left flank of Juno Beach, 48 Commando's primary mission was to protect the beachhead from counterattacks and take part in the move inland.

wounded and dead; the beach was congested with tanks, self-propelled guns and other vehicles, some out of action, others attempting to move from the beach in the very confused space between the water's edge and the sea wall. LCTs were arriving all the time and attempted to land their loads, adding to the general confusion."

Confusion reigned on the beach for quite a while. Major Derick de Stacpoole was wounded before he left his craft but managed to make it to shore; Captain Frederick Lennard, a strong swimmer, drowned in the rough surf. Lieutenant Louis Fouche was already on the beach with orders to direct men along to the right as they came ashore, but he was hit almost immediately by mortar fragments and seriously wounded; his orderly was killed. The landing of Y Troop was slow, and a few men managed to get ashore before the LCT shoved off, taking with her about 50 men of the Commando back to England, despite their energetic protests. Some jumped into the sea in an attempt to join their unit, but many who did drowned in the surf.

Dougie Gray of B Troop made his way up the beach to the sea wall, picking his way through the bodies of Canadian soldiers that had fallen during the first assault. The wall provided some cover from small-arms fire but not much from mortars: "The Germans in the strongpoint at St.-Aubin had our range and bearings, and the mortar bombs came over in regular waves. One bomb landed right among us and I was hit by a piece of shrapnel in my back. I found it hard going when I moved down the wall to try and get off the beach; my wound was slowing me down."

Gray was later picked up by Canadian medics and taken to one of their aid posts. After 48 hours he was shipped back to England and was operated on at the Canadian hospital in Basingstoke to remove the shrapnel from his back.

Harry Timmins was surprised to see Colonel Moulton walking on the beach "steadily and steadfastly, bolt upright, despite the shells and mortars dropping all around, and the ping, ping, ping of the bullets whizzing by. He stopped, looked around and, at the top of his voice, cried out, 'Four-Eight Royal Marine Commando—this way,' pointing along the beach. Everyone within earshot got up and followed him."

While Colonel Moulton was trying to rally his men, a mortar bomb landed close by, blowing him off his feet. At first he thought he had a broken leg, but on closer examination he saw he had been hit by bomb splinters in the hand and leg. Shrugging off his injuries, he was quickly on his feet and directing his men to the assembly area inland where he found much of his force was missing.

Jock Mathieson, a Headquarters Troop member, got off the beach and made it to the assembly area where he waited with others in a ditch close to the coast road. He said that in the ditch there "was the body of a young French boy no more than about eight years old. It looked as though he had been killed by blast, probably during the preliminary bombardment. The sight shook me up considerably."

Ted Brooks said that in the assembly area the group came under fire from a sniper in the tower of St.-Aubin church. However, a disabled Canadian tank came to their assistance and "obligingly put several rounds into the tower" and silenced the sniper.

Once Moulton felt he had gathered as many men as possible, he had a roll call that told him he had lost about a third of his men. Lieutenant Harold Smedley then returned with a situation report from the North Shore regimental headquarters.

After hearing the report, Moulton decided it was time to advance on nearby

Langrune, although it would leave his left flank open as the Canadian infantry was still trying to take St.-Aubin and the German strongpoints overlooking Nan Red Beach. However, he was sure, now that tanks were assisting the Canadians, it was only a matter of time before that position would fall.

Moulton now decided to split his force in half. He sent B and X Troops along the coast road toward Langrune's seafront, while he took the remainder of the unit, with A Troop leading inland, toward the church of Langrune, 600 yards from the sea. Once there he would hold the village from counterattack. After B and X Troops had cleared the coastal area, the reunited Commando would move against the strongpoint known as Wiederstandsnest 26, or WN 26.

Sergeant Joe Stringer was with B Troop as it started its advance but soon suffered from a "friendly fire" incident. He noted that the second-in-command was cut down by a burst of "Orelikon fire coming from one of the warships off the beach." They had to leave the officer there; the gunfire had also killed another marine and wounded two others.

However, the Commandos and Canadians had broken through the outer defenses of Hitler's Atlantic Wall and were moving inland to allotted objectives. Hundreds of Germans had been taken prisoner and would be sent to England on LCTs (Landing Craft, Tank).

As the Canadian North Shore Regiment was still trying to take WN 27 at St.-Aubin-sur-Mer, the marines of 48 Commando moved against WN 26, covering the eastern end of Nan Red Beach and connected to the streets and buildings with trenches and wire entanglements. The stretch of coastline between the two strongpoints was lightly held, but the 2,000 yards between them was covered by interconnecting fire.

B and X Troops were advancing along the road behind the coastline, but the closer they got to Langrune the heavier the enemy fire became and WN 26 was still under fire from supporting warships. Ralph Dye, a member of the Forward Observer Bombardment Group, recalled they ranged in the destroyer assigned to them. "The strongpoint at Langrune was battered with accurate fire from the destroyer but showed little sign of giving up," he recalled.

Typically disregarding his personal safety, Lt. Col. James L. Moulton, commander of 48 Commando, watches a Canadian M-10 tank destroyer approaching a disabled Royal Marine Centaur tank (in the distance) during the attack on the strongpoint known as WN 26 at Langrune.

Moulton's inland group made good progress toward the center of Langrune. It moved in open order taking advantage of any available cover. Heavier equipment was brought up in an odd variety of transport including a stroller and ice cream wagon.

Reaching the town, Moulton set up his headquarters in a walled manor house that he had already identified from aerial photographs. To the east was the church, beyond which were open fields. Sword Beach was just three miles farther east.

By now B and X Troops were closing in on strongpoint WN 26 and clearing the shoreline as they went; the Germans fell back in good order. The two Commando troops took turns taking the lead and providing covering fire. They cleared gardens and climbed over walls between houses until they began closing in on a minefield and wire entanglements marking the edge of the strongpoint. Here X Troop was forced to ground by well-entrenched enemy machine guns protected by concrete.

WN 26 consisted of a block of ordinary houses facing the seafront, all reinforced with concrete. The doors and windows were blocked up, and the buildings were surrounded by barbed wire. Covering the landward approach from the town were two machine guns.

Mortars inside the compound covered all approaches. Facing the beach were two guns—a 75mm and a 50mm housed in concrete four feet thick. Snipers occupied many of the outlying buildings.

With two of his Commando troops engaged, Moulton was ready to deploy his remaining force. Z Troop and the remains of Y Troop were ordered to defend the town against any counterattack from the south.

Moulton kept A Troop in reserve, and part of X Troop was ordered to keep the pressure on the enemy while the remainder moved against the western end of WN26; B Troop closed in from the south. Moulton then sent A Troop to follow B Troop and

complete the surrounding of the German strongpoint from the landward side. Meanwhile, a party from Z Troop was ordered to make contact with Sword Beach.

About this time, two Centaur (A27L) tanks of the 1st Royal Marine Armoured Support Regiment arrived at Moulton's headquarters. After the colonel sent them down the road to help B Troop, the first Centaur approached WN 26 from the east, firing its 75mm main gun and two 7.92mm machine guns as it moved and giving cover to B Troop, which took advantage to move in closer. The tank's fire smashed one machine gun and drove into the reinforced houses.

Colonel Moulton was up in the thick of the fighting. Marine Jock Mathieson was with him. "I was with the colonel when we went forward to survey the strongpoint," Mathieson said. "He wanted a tank to blast the concrete wall that spanned the road ahead. He spoke to its commander through the phone on the side, but learned that the tank could not depress its gun sufficiently low enough to hit the base, so Moulton told him to keep pounding the concrete until it broke up."

The Centaur used all its ammunition to little effect. It then pulled out, and the second tank came forward. This tank, however, was not so fortunate; it struck an antitank mine and lost a track. The crew bailed out and joined B Troop, occupying some nearby houses.

For the moment the attack was stalled. With the machine gun at the crossroads of the outer defenses destroyed, B Troop was able to get closer. However, it could not find a way into the concrete-sealed houses, and it was coming under accurate mortar fire. B Troop withdrew. Time was now running short; in a few hours darkness would descend, and losses were mounting.

Brigadier Leicester, commander of the 4th Special Service Brigade, now arrived at Langrune to confer with Moulton. He told him to call off the attack and dig in to prepare for a possible counterattack and keep the garrison of WN 26 sealed in. Reports were that the 21st Panzer Division was on the move, possibly toward Allied positions.

Thus, the longest day for 48 Commando came to a close. The unit had suffered heavy casualties.

The next day the unit succeeded in capturing WN 26 with the aid of more armored support and the use of Bangalore torpedoes—pipes packed with explosives—to blast a way in. The German defenders fought back tenaciously, but a Sherman tank physically broke into WN 26, followed by the Commandos.

Marine Jock Mathieson was one of them: "Once we were inside, many of the enemy quickly gave themselves up. I began searching the prisoners. One of them was well over six feet tall and wore an overcoat that reached down to the ground. I put my hand into one of his pockets and pulled out an English grenade. I nearly shit myself with fright, thinking he had primed it to explode." Luckily, he hadn't.

Thirty-one prisoners were taken at WN 26. For the next two days, 48 Commando policed Langrune and St.-Aubin and buried its dead comrades along with some Canadian dead. Lieutenant John Square was given the task. "We got a group of our men together and buried mainly men from our Commando," he said, "but a few others who happened to be about, including Canadians who were still lying in the garden of a large house fronting the beach. The garden was supposed to be mined, but I don't think it was. We set up a small cemetery in the garden of another house close by. We wrapped up the bodies in their gas capes and conducted a moving burial service."

After D-Day, 48 Commando captured the German strongpoint at Langrune-sur-Mer and held it until the rest of the 4th Special Service Brigade had landed (41, 46, and 47 Commandos). The first two days of the D-Day landings had cost 48 Commando 217 dead, wounded, and missing out of a strength of around 450. Only five officers were left out of 15. But their job was not yet over; more battles lay ahead.

After receiving reinforcements on June 9, 48 Commando resumed patrolling while awaiting new orders. On June 17, the unit joined with 46 Commando to take

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Canadian infantrymen from the North Shore (New Brunswick) Regiment cautiously approach another German strongpoint, WN 27, at St.-Aubin-sur-Mer.

BY JOHN BROWN

BLITZKRIEG 1940

National Archives

After invading Poland, Hitler used his stunning "lightning war" tactics against the West to defeat France, Holland, Belgium, and other countries.

THE ANCIENT CHINESE MILITARY strategist Sun Tzu wrote, "Go forth to the enemy's positions to which he must race. Race forth where he does not expect it."

There is no record that Adolf Hitler ever studied Sun Tzu's *The Art of War,* but he certainly understood many of its principles, at least during the early phases of World War II.

After Hitler bloodlessly annexed his homeland of Austria in March 1938 and bluffed the Czechs, French, and British into giving him the Sudetenland in October, in January 1939 his armies invaded and occupied Czechoslovakia. In May 1939, he

German panzers attack a French antitank position during the invasion of France, June 1940. By using air and ground forces that employed swift and violent tactics, German troops overran borders and defensive positions before their opponents had a chance to properly react. INSET: French civilians, some applauding, some crying, watch as their troops leave for French colonies in Africa, while their country is taken over by the Germans. From the U.S. propaganda film, *Divide and Conquer*.

ullstein bild, The Granger Collection, NY

BPK / Art Resource

National Archives

ABOVE: German glider infantrymen assault the supposedly "impregnable" Belgian fortress of Eben Emael near Liege, May 10, 1940. The fort's garrison surrendered after just a few hours. RIGHT: A French patrol moves through a wooded area to make contact with le Boche, June 3, 1940.

signed a "Pact of Steel" with Italy, and in August concluded a cynical nonagression pact with Soviet Russia. Then, on September 1, he launched his first blitzkrieg against Poland, causing France and Britain to declare war on the aggressor.

Blitzkrieg, or "lightning war," was an unprecedented war of movement using modern technology and methods in the form of paratroops, gliders, fast-moving tanks, mobile infantry and artillery, and aircraft, particularly the dive bomber. It was a devastating form of combined-arms warfare with an assault spearheaded by panzer (tank) divisions whose firepower and shock were magnified by their accompanying Junkers Ju-87 Stuka dive bombers.

Poland was the testing ground for blitzkrieg. It gave the Wehrmacht the opportunity of trying out and making improvements in this new type of warfare. When it proved sucessful, Hitler turned his attention from east to west.

Germany's next victims were Norway and Denmark, both invaded on April 9, 1940, in blitzkrieg-style assaults named Operation Weserübung. The countries held out briefly, then capitulated.

With European nations folding in the face of German onslaughts, the stage was then set for the pièce de résistance: Plan Sichelschnitt (the cut of the sickle), the blueprint for a blitzkrieg against Germany's old and bitter enemy, France.

At this time, Allied military strength consisted of the French with 94 divisions, the Belgians with 22, the Dutch 10, and the British Expeditionary Force (BEF) also with 10—a total of 136 divisions. The Allies had about 3,000 tanks, the Germans just over 2,400, but with better-trained crews and equipped with radios. In artillery the French were far superior to the Germans—11,200 guns of various sizes against the Germans' 7,700.

In the air the Germans dominated, able to deploy 3,000 aircraft. Unfortunately for the Allies, the education of most French military commanders had ended in 1918—they were "unable to think beyond the firm belief in a rigid linear defense." This included the supreme commander of French land forces, General Maurice-Gustav Gamelin. Neither Gamelin nor his four immediate aides, the aging Generals Henri Bineau, Alphonse Georges, Maxim Weygand, and Gaston Billotte, had any concept of armored strategy and scattered their forces in small pockets in an effort to plug holes in the national defenses.

The German plan of attack was a reworked version of the failed Schlieffen Plan of 1914, brought up to date by Generals Erich von Manstein, Heinz Guderian, Erwin Rommel, and others. It laid out that the main attack—by Army Group A of 45 divisions including seven panzer divisions and commanded by General Karl Rudolf Gerd von Rundstedt—would crash through the forested hills of the Ardennes, which the Allies believed to be "impenetrable to tanks and heavy vehicles." Army Group A would then cross the River Meuse into northen France on a front from Dinant to Sedan.

North of Army Group A, Army Group B's 29 divisions (including three panzer divisions), commanded by General Fedor von Bock, would draw off the Allies to the north and hold them there, thus securing von Rundstedt's right flank. To the south of Army Group A, opposite the Maginot Line, General von Leeb's Army Group C (19 divisions) would prevent French reinforcements from moving up from the Maginot Line to attack von Rundstedt's left flank. The operation was set to begin on May 10, 1940.

Prior to or at the beginning of "Blitzkrieg West," a number of special operations paved the way for the panzers. Most of the special operations were carried out by paracommandos of the special forces regiment Brandenburg.

Several days before the attack in the West began, German commandos posing as tourists

crossed the border into Luxembourg and, at 4 o'clock on the morning of the attack, they occupied vital road junctions and bridges and kept them open for the panzers.

Three bridges provided entry into the Low Countries for the panzers, at Gennap, Roermond, and Stavelot, and it was vital they remained open. They were known to be mined, and ruses were necessary to prevent them from being blown.

Everything fell on the shoulders of a second lieutenant named Walther of the Brandenburgers, who was ordered to seize the major railway bridge at Gennap, located on the Meuse between the German province of Westphalia and the Dutch province of Brabant, and to hold it intact until the panzers arrived.

With their weapons hidden, Walther and several of his commandos, dressed in uniforms of the Royal Dutch gendarmerie, and with seven other commandos acting the part of prisoners, arrived at the guardpost on the bridge 10 minutes before the panzer assault was to begin on May 10.

At a signal from Walther, the "prisoners" attacked the guardpost and firing broke out, wounding three of the commandos. The guardpost was captured, and Walther and two of his commandos walked along the bridge to the guardpost at the other end. The guards there, seeing three men in Dutch uniforms coming toward them, hesitated, and Walther, now close enough, tossed a grenade at them and quickly took possession of the detonator set to fire the explosives that would destroy the bridge.

At this point the first panzers arrived and began to cross the bridge. Walther ran toward them, but the tankmen, unaware of the commandos' mission, took him to be a Dutch soldier and opened fire, severely wounding him. He survived and was awarded the Iron Cross for his part in the mission.

Similar ruses were used to secure the other two bridges.

With the first faint light of dawn over Belgium, a reinforced platoon, designated "Granite," comprising two officers, 73 Brandenburger paracommandos, and 11 pilots, all under the command of 23-year-old Lieutenant Rudolf Witzig, landed in gliders on the roof of the modern fortress complex of Eben Emael (see *WWII Quarterly,* Spring 2012).

The fortress guarded the juncture of the Albert Canal and the River Maas (Meuse) on the Belgian/Dutch border just south of Maastricht. In addition to their personal weapons, the attack force carried flamethrowers, bangalore torpedoes to blast through barbed wire, and 56 highly destructive hollow-charge bombs capable of breaking through the defensive armor of the fortress.

At Eben Emael, Belgian Major Jean Jottrand, alerted by a nationwide radio broadcast that German troops were crossing the frontier, had 780 troops of the garrison at action stations awaiting an attack on the ground, not from the sky. When Jottrand's men realized what was happening, it was too late—the gliders had landed on the roof of the fortress and German paracommandos were racing for their objectives.

Several of them, carrying a 110-pound hollow-charge bomb, raced unseen to one of the major artillery emplacements, placed the charge against the base, set the fuse, and ran for safety before an explo-

A German motorized column streams through the "impenetrable" Ardennes Forest in the opening days of Hitler's attack in the West, May 1940.

ullstein bild, The Granger Collection, NY

sion shook the fort. The explosion blew the 120mm gun in the emplacement off its mounts, and it fell into the shaft below it. Every defender in the emplacement was killed.

Other paracommandos set a 25-pound hollow-charge bomb against the steel doors of a 75mm gun emplacement that, on detonation, blew the gun across the casemate, wrecking the interior. The Germans then went in through the large hole torn by the blast in the casemate wall and deeper into the interior of the fort, spraying everything and everyone with their submachine guns.

Paracommandos were systematically blasting gun casemates all over the fortress roof, one of them knocking out the electric power on the first subterranean level, plunging it into darkness and leaving the Belgian defenders shocked and confused.

The finale of the assault came when paracommandos blew in the steel doors of Jottrand's redoubt in the deepest part of the fort and a bugle sounded the call for surrender.

The ultimate credit for the success of the operation at Eben Emael goes to the German Führer, Adolf Hitler, who came up with the idea of using gliders and the new hollow charges and planned the operation against the protests of most of his generals, who argued for a frontal assault on the fortress that would have taken days, if not weeks, of fighting to secure. The taking of Eben Emael in just a few hours was the key to starting the blitzkrieg in the West.

At the same time as the paracommandos were landing on the roof of Eben Emael, soldiers of the Waffen SS Infantry Regiment Grossdeutschland landed behind the Belgians west of Martelange, glider-borne troops landed around Rotterdam and the Hague, and more landed from aircraft at the besieged airfield of Waalhaven.

Throughout the morning, Heinkel bombers dropped their loads on railway junctions and air bases in northeastern France, and fighters machine-gunned the streets of the Hague and other cities. The main purpose of these activities was to draw the French and British forces' attention away from the Ardennes and the German forces coming through it.

ABOVE: Rushed to the continent to help stem the German invasion, the British Expeditionary Force soon found its positions untenable. Here British gunners shell the enemy in Belgium, May 30, 1940. BELOW: French gunners load a 12cm gun to beat back a German attack, May 22, 1940.

Both: National Archives

General Georg von Kuchler's Eighteenth Army of Army Group B, spearheaded by the 9th Panzer Division, struck across the Dutch border and headed straight for Rotterdam. South of him, General Walther von Reichenau's Sixth Army of Army Group B, led by the 3rd and 4th Panzer Divisions, crossed the Maastricht bridges and joined airborne units that had landed alongside key bridges over the canal west of Maastricht.

Believing this to be the main attack, General Gamelin immediately sent his best troops—the First, Seventh, and Ninth Armies and the British Expeditionary Force, under the overall command of General Billotte—to meet what he thought was the spearhead of the German attack in Belgium. General Giraud, commanding the Seventh Army, raced up through Belgium into southern Holland, taking with him the best of France's armored units and most of the available Allied air cover.

In Holland, the Dutch flooded the land and fought back against the Germans as best

they could, but by May 12 the situation was desperate. The Germans had reached the shore of the Zuyder Zee and, to the south, the 9th Panzer Division was linking up with the paratroops holding the bridge at Moerdijk. The Dutch Army was forced back to cover the cities of Rotterdam, Amsterdam, and Utrecht, and the Dutch Air Force was reduced to a single bomber.

Meanwhile, Rundstedt's Army Group A, led by the 5th and 7th Panzer Divisions (the 7th Panzer was commanded by Maj. Gen. Erwin Rommel) of the Fourth Army, was crashing through the "impassable" Ardennes. The Fourth Army drove through Luxembourg and Belgium, scattering all opposition, while General Georg-Hans Reinhardt's 6th and 8th Panzer Divisions and Guderian's 1st, 2nd, and 10th Panzer Divisions headed quickly for Sedan and Montherme.

Like a flood from a broken dam, the headlong advance of the panzers could not be halted, and there were rumors of German tanks everywhere. Many French units fled in panic, and thousands of civilians took to the roads of France. To the north, Giraud's French Seventh Army was being pushed in disarray from Antwerp, which the Belgians were desperately trying to hang on to, and the French First Army was near collapse.

On May 12, Rommel and his tanks, after some sharp fighting with French cavalry, arrived in the evening on the heels of the retreating cavalry at the bridge over the River Meuse at Yvoir. When his armored cars tried to rush the bridge, a Belgian officer destroyed the span with explosive charges.

The motorized infantry brigade established control of the east side of the river and during the night found an old weir connecting the east bank with an island in midstream. On the other side of the island were old lock gates and, using these and the weir, several companies of troops crossed the river and establishd themselves on the west bank. During the next two days, Rommel established two bridgeheads across the Meuse.

While this was happening, Guderian had swung his three panzer divisions westward, converging with Reinhardt's two divisions from the drive on Montherme and, with Hermann Hoth's two divisions from near Dinant, reached the Meuse just west of the fortress city of Sedan on May 12. They occupied its northern bank and captured Sedan. Fearing a German outflanking movement to isolate them, the Allies retreated from the east bank of the Meuse as far north as Dinant in Belgium.

This area of the river had been heavily bombed and strafed, and on the 13th Guderian, who had established his corps headquarters at La Chapelle, was with the first of his mobile infantry when they crossed the Meuse in rubber boats. A bridge was quickly thrown across, and tanks began crossing. French resistance began to collapse.

On May 13, the open city of Rotterdam was bombed. Many civilians were killed and, in fear of more terror bombing of cities and towns, the Dutch royal family fled to England; the government surrendered on the 14th. Casualties in the Dutch Army reached some 25 percent of its strength.

To the south the 1st Panzer Division had fought its way up the southern escarpment of the Meuse, followed by the 2nd and 10th Panzer Divisions. The 1st Panzer established a bridgehead on the south bank of the river that stretched for three miles. The French 7th Tank Battalion and 3rd Armored Division counterattacked,

In a photograph taken by Maj. Gen. Erwin Rommel, commander of the 7th Panzer Division that spearheaded one of the drives into France, German tanks roll through the French countryside.

National Archives

but they were easily dispersed by the panzers. The Allies then assembled every available tactical bomber for an attack on the bridgehead, but nearly all the planes were obsolete. German antiaircraft fire was deadly, and 150 of the attacking planes were destroyed.

On the afternoon of May 15, Guderian, leaving the 10th Panzer behind to guard the Meuse bridgeheads until relief arrived, led his 1st and 2nd Panzer Divisions west and the following day reached Marle and Dercy, 55 miles west of Sedan. At Dercy he took several hundred French soldiers prisoner and almost without incident captured a tank company from Colonel Charles de Gaulle's 4th Armored Division (see *WWII Quarterly,* Winter 2014).

To the north, Rommel and his 7th Panzer Division had crossed the Meuse at dawn on May 14 and struck the French Ninth Army, destroying its supplies and disrupting communications; by nightfall 7th Panzer was four miles west of the river with the 5th Panzer Division close behind. The French fell back before the panzers and, when the French 1st Armored Division attempted to cover the rear of the retreat, the two panzer divisions destroyed almost all of its tanks. The French withdrawal became a rout as the troops panicked in the face of fast-moving armor and Stuka attacks.

On May 15, General Gamelin reported to French Defense Minister Edouard Daladier that he had no reserves left and that the French Army was virtually finished. He was replaced as supreme commander by 73-year-old General Weygand, but the new appointment achieved nothing.

Rommel's 7th Panzer Division had reached Cambrai on the evening of May 18, and there he paused the division for rest and to bring up supplies. The following night he moved on toward Arras, where the British headquarters was being evacuated.

Lord John Gort, commander of the BEF, clearly realized that the BEF's position was perilous. Seven of his divisions were arrayed along the River Scheldt, and even if they could be moved their withdrawal would leave another gap through which the Germans could penetrate. Strong German forces were moving around the British right flank between Arras and the Somme, and Gort had only four days of supplies and enough ammunition for one more battle.

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ABOVE: German troops use inflatable rubber rafts to cross the Meuse River while under fire. BELOW LEFT: Colonel Charles De Gaulle, commander of the French 4th Armored Division, fought valiantly but unsuccessfully, then escaped to England. BELOW RIGHT: British General Lord Gort, left, commander of the BEF, observes maneuvers with British War Minister Leslie Hore-Belisha, 1940.

Both: National Archives

On May 19, he was visited by General Sir Edmund Ironside, chief of the Imperial General Staff, who told him that only a concerted attack in the direction of Amiens, supported if possible by the French, would prevent the BEF from being surrounded and either captured or wiped out.

Gort had two divisions in reserve, the 50th and the 5th. If he could get cooperation from General Weygand in attacking from the south, he might at least keep open a corridor to the coast. Ironside himself found General Billotte and General Georges Blanchard, commander of the French First Army, at Billotte's headquarters; both men were

in a state of acute nervous depression. Taking hold of Billotte, Ironside shook him and told him, "You must make a plan. Attack at once to the south, towards Amiens, with all your forces."

On May 20, the British First Army Tank Brigade and the 5th Division were ordered to Vimy, north of Arras, to join up with the 50th Northumbrian Division for an attack that would aid the garrison at Arras and attempt to hold the German advance. The group was commanded by Maj. Gen. Harold Franklyn, commander of the 5th Division, and was code-named Frankforce.

At dawn the next day, the Tank Brigade consisted of only 58 Mark I infantry tanks and 16 Mark II "Matildas." Of the 50th Northumbrian Division, only the 151st Brigade consisting of three Durham Light Infantry territorial battalions was available to support the attacking tank force in its first sweep toward Arras. It would then be joined by the 13th Brigade of the 5th Division. The French 3rd Division of the Cavalry Corps was to support the British right flank with its battered Somua S35 medium tanks.

The attack force was commanded by British Maj. Gen. Giffard Martel and consisted of 74 tanks and less than 3,500 men.

Warned by intelligence of British and French tank movements in the Vimy area, Rommel began on May 21 to move his 7th Panzer Division around the west flank of Arras, while the 5th Panzer Division deployed to the east. They were still to the south of the town when Martel's tanks attacked.

A Junkers Ju-87 "Stuka" releases its bomb on enemy positions. The Stuka dive bomber was considered "airborne artillery" in support of lightly armed paratrooper forces.

ullstein bild, The Granger Collection, NY

The tanks, unsupported by infantry, crossed the River Scarpe and took the German-held village of Duisans. Joined by several companies of the 8th Durham Light Infantry, Martel went on to take Warlus and Berneville in the face of opposition by Rommel's 7th Rifle Regiment and part of the SS Division Totenkopf.

But at Berneville the Germans, at first taken aback by the bold British thrust, began to rally. Machine guns and mortars cut down almost half of the Durhams and a Stuka raid made the rest take cover. Only the Matilda tanks kept going. As they approached the village of Wailly spraying machine-gun bullets, German artillerymen began to desert their howitzers.

Other British tanks had crossed the Arras-Doullens road and were knocking out German vehicles that had jammed the road in panic. Rommel himself ran from gun to gun, giving his gunners specific targets. He reported afterward that morale was suddenly very low.

The British force drove 10 miles into the German lines, capturing four villages, destroying a motor transport column and an antitank battery. But by now Rommel had managed to build up a line of guns from Neuville to Wailly, which sealed off the Matildas. Pounded by the guns and by Stuka dive bombers, the British beat a fighting retreat. German casualties were around 300 with 400 taken prisoner. Twenty German tanks were destroyed, and 46 British tanks were lost. The battle at Arras was a limited tactical success but worth the losses in terms of strategic and psychological advantages.

While fighting was going on at Arras, Guderian and his panzer corps were moving up the coast. By May 22, they had cut off Boulogne and by the next day Calais, while forward units were pushing on to the Aa Canal, only 10 miles from Dunkirk. The British forces in and around Arras were 46 miles away, cut off, and soon would be forced to capitulate.

But then, on May 24, came the "Führer Order." Any further advance beyond the Aa was forbidden.

Hitler and the high command, amazed at

the ease with which the Meuse had been crossed, expected Allied counterstrokes against the flanks of the panzers, which had outdistanced their infantry divisions, and feared the panzers could be cut off. Therefore, the "Führer Order" was issued, telling the panzer commanders to halt at the Aa Canal (12 miles from Dunkirk) for three days to enable the infantry to catch up and form a flank shield for the tanks.

Guderian ignored the order to halt. He was summoned to a meeting with his immediate superior, General Paul Ludwig von Kleist, who "tore a strip off him" for disobeying the order. Guderian asked to be relieved of his command, and von Kleist agreed. Guderian then sent a radio message to Commander in Chief Rundstedt telling him what had happened and received a reply to stay where he was.

Later that day, May 17, Guderian was told that his resignation would not be accepted and that the order to stop the advance had come from Hitler himself and must be obeyed. But "reconnaissance in force" could continue to be carried out by the panzers. Guderian interpreted this as an invitation to carry on his advance.

On the move again, Guderian and his 1st and 2nd Panzers reached St. Quentin and crossed the Oise and the Somme near Peronne and on May 19 drove across the World War I Somme battlefields. There, a brief attack by Colonel Charles de Gaulle's 4th Armored Division was beaten off, but no real effort was made to strike at the rapidly moving German armor. What was left of the French troops in Belgium were withdrawn in an attempt to flank the Germans to the north while Weygand's main force lined the Somme on the south side. The moves were in vain.

On May 20, the leading elements of the 2nd Panzer Division reached Abbeville on the French coast, trapping the BEF and blocking it from further withdrawal into France.

By this time, Calais, first choice as an evacuation point for the British, was under siege and Lord Gort began implementing an emergency plan—the expeditionary force would withdraw to the coast at Dunkirk, the closest point to England, for evacuation by sea.

In disarray, individual British units retreated to the coast and moved through the burning rubble of Dunkirk onto the beaches, exhausted from days of desperate fighting as they retreated in a shrinking perimeter. Supplies and rations were running out, and on the beaches the soldiers, hungry and dejected, waited under a hail of shells and bombs and hoped that rescue would arrive before the Germans did.

North of Dunkirk, the Belgian Army was pulling back and on the verge of surrender. Guderian's panzer corps had taken Boulogne and by nightfall on May 25 was within 20 miles of Dunkirk.

In England, Admiral Bertram Ramsay, Royal Navy Flag Officer, Dover, was gathering together a motley fleet of coastal ferries, coasters, barges, lighters, tugs, launches—any craft able to cross the English Channel to Dunkirk. He also had a small flotilla of destroyers to protect the evacuation craft, cover their crossings, and provide counter bombardment against the batteries on the French shore.

The evacuation, code-named Operation Dynamo, was sheduled to begin at 7 PM on

Imperial War Museum

Map © 2014 Philip Schwartzberg, Meridian Mapping, Minneapolis, MN

ABOVE: Cutting through Holland, Belgium, and Luxembourg, the Germans brushed aside sporadic opposition and soon reached Paris—something they failed to do in World War I. OPPOSITE: A German motorcycle infantry platoon knocks out a French machine-gun position on the outskirts of a village.

May 26, but before that ships of the Royal Navy had made the crossing and brought back some 28,000 soldiers. Their officers reported that Dunkirk was a shambles and the dry docks, harbor installations, and miles of quays that had once made Dunkirk the third largest port in France were now mangled masses of burning wreckage, useless for evacuation purposes.

The East and West Moles remained, the West Mole projecting from the oil-storage area would soon be unusable and the East Mole was little more than a long, narrow plank extending nearly a mile out to sea. The beaches were the only means of evacuation.

On the early morning of May 27, Hitler ordered his tanks to resume their attacks. Two task forces were redeployed; one, including Guderian's three panzer divisions, was ordered east along the coast from Gravelines and the other to advance northeast to Armentières to drive a wedge between the British and French forces. The panzers would link up with the Sixth Army, which was advancing from the east, and with the help of the Luftwaffe would overwhelm all resistance.

However, the panzers moved too late, and the British fought desperately all through the 27th, defending the bridgehead around Dunkirk and enabling the British divisions and the greater part of 5th Corps of the French First Army to get inside the perimeter.

During the battle, the 2nd Royal Norfolks, 8th Lancashire Fusiliers, and 1st Royal Scots were forced to surrender at Le Paradis, where elements of the SS massacred the survivors of the 2nd Royal Norfolks while they claimed the protection of a white flag. The SS were about to massacre the others when stopped by a senior Wehrmacht officer.

Not far away, at Wormhoudt, 85 men of the Royal Warwickshire Regiment, Cheshire Regiment, and Royal Artillery were similarly slaughtered by the SS.

While the BEF continued to pull back, during May 27 General Franklyn and his battalion of the Durham Light Infantry and his surviving tanks linked up with Maj. Gen. Bernard Montgomery's 3rd Division and others to plug the gap in the Belgian defenses, but Armentières had to be abandoned to the panzers.

By midnight on the 27th, 7,700 men had been evacuated from Dunkirk. It was anticipated in London that no more than 45,000 could be saved. That night, Captain W. Tennant, the senior naval officer in Dunkirk, having seen the unsuitability of the East Mole for mooring large ships, sent a signal: "Please send every available craft to beaches east of Dunkirk immediately. Evacuation is problematical."

At his base in Dover, Admiral Ramsay was struggling with the problem of how to rescue the troops. The shortest crossing to Dunkirk could only be used under cover of night, and other possible routes were ruled out by the danger of mines. The only route possible in daylight was 87 miles long, from Dover to the North Goodwin Light, east to the Kwinte Buoy, and back to Dunkirk. Some 6,000 troops were rescued by the Royal Navy from the beaches and 11,900 from the mole during May 28.

By now, communications in the armies had broken down, and each commander had to act on his own initiative. But by nightfall on May 28, the BEF had redeployed in good order, providing protection on all flanks.

In the French First Army, however, there was utter confusion and a sense of defeatism, but the III Corps and some cavalry units continued to give some support north of the British, and two divisions commanded by Maj. Gen. Jean-Baptiste

National Archives

Molinié kept fighting in spite of low morale. By the end of May 29, the front line was nowhere more than five miles from the sea, and by the next day the perimeter of the bridgehead was reduced to 32 miles. The French held 11 miles of it and the British the rest.

Ramsay sent a continuous stream of small ships to Dunkirk via the North Goodwin Light and Kwinte Buoy route and opened up a route through mined areas, raising the number of soldiers rescued on May 29 to some 53,800.

As soon as secrecy was lifted and news of Operation Dynamo broke at 6 PM on May 31, many private boat owners and yachtsmen set sail from the south coast of England. This huge civilian effort brought back a further 26,000 soldiers from the beaches of Dunkirk. To provide more ferrying craft, small river boats were tied in strings behind larger craft and towed over empty, but this proved disastrous as the light frames of the river boats could not stand up to vigorous towing. But "drifters," believed to be capable of carrying 100 men, limped back with 250 men on board.

National Archives

ABOVE: Dunkirk, late May 1940: British and French troops await evacuation to Britain. Churchill opined, "We must be careful not to assign to this deliverance the attributes of a victory. Wars are not won by evacuations." LEFT: Stunned by the speed of the German invasion, two French soldiers wait in their trench for the next attack. Many had no option but to surrender.

By the end of the 31st, the perimeter of the British beachhead was no more than 10 miles wide and five miles deep, but by sunset on June 1 and dawn next day, most of the British had been evacuated.

On the night of June 2, the remaining 4,000 British and more than 20,000 others were evacuated. The next night, more than 26,000 troops, mostly French, were evacuated, although many, exhausted and beaten, refused to embark, preferring captivity to further warfare.

During the evacuation, the 21 understrength squadrons of 11 Group of the RAF flew a total of 4,822 hours in support of the evacuation, destroying 258 German aircraft and damaging 119 more for the loss of 87 of their own.

When Dunkirk's remaining defenders surrendered on the morning of June 4, a total of 338,226 soldiers had been saved.They left behind a huge assortment of tanks, vehicles, and guns.

During the final stages of the evacuation at Dunkirk, General Weygand tried to organize a new defensive position in northern France, but the situation was desperate. The Belgians and Dutch had been defeated, the British, except for two divisions, had been driven from the Continent, and the French Army had lost 370,000 dead, wounded, or taken prisoner, together with three quarters of its tanks and most of its motor transport.

The morale of the army, and of the French nation itself, was close to rock bottom. The Germans had outflanked the fortifications of the Maginot Line by attacking through Belgium and Holland and were now threatening to swoop down from the north and overrun all of France. Hitler said, "Our most dangerous enemy is Britain, but we must first beat her continental soldier, France."

For the next phase of his attack on France, Hitler could call on 143 divisions of battle-hardened troops, while Weygand could muster only 65 divisions, including the 17 divisions still defending the Maginot Line. He also had the two British divisions, the 51st Highland Division and the 1st Armored Division, which had been stranded in France after the evacuation at Dunkirk.

Weygand, who had never commanded troops in combat or made any effort to absorb the new concepts of mobile, armored warfare, decided to make a stand behind the line of the Somme and Aisne Rivers stretching southwestward 225 miles from the English Channel to the northern end of the Maginot Line at Longuyon. Behind this line he organized a network of well-dug-in positions and natural tank obstacles, and behind these

he positioned his infantry reserves and scattered tank units.

As they had curled around the Allied forces at Dunkirk, the panzers had seized five bridgeheads across the lower Somme. When the final battle for France began, these advanced German positions were poised like daggers against the heart of France.

General von Bock's Army Group B was next to the Channel. On June 5 it drove across the Somme and raced for the Seine. Four days later, General Rundstedt's Army Group A, led by Guderian's panzers, attacked east of Paris, driving a wedge between the two French Army groups fighting there and pinning one of them against the Maginot Line.

One of his armies moved onto the plain of Picardy on the 5th and ran into heavy French resistance, which threatened to overrun its headquarters. But General Rommel and his 7th Panzer Division came to the rescue.

In a daring attack through a mile of swampland, Rommel drove back the French and, with the rescued army group, by nightfall was eight miles beyond the Somme. On the following day, they were 12 miles farther on and driving hard for the Seine. The French front had been torn wide open.

In the next few days, Bock swung his army group westward toward the coast, trapping part of the British 51st Division and a large French force at the seaport of St. Valery-en-Caux. The Royal Navy tried to evacuate them, but a combination of heavy gunfire from the shore and a thick fog prevented the ships from getting into the port. The troops surrendered. More than 40,000 were taken prisoner.

The German armies regrouped to complete the conquest of France. Bock's Army Group B was on the left flank, Leeb's Army Group C on the right, and Rundstedt's Army Group A again in the center. The French also tried to regroup on the Somme and the Aisne Rivers, with 40 shaky divisions attempting to hold a 225-mile front above Paris.

The new blitzkrieg began on June 5, and by June 9 Army Group B was on the Seine west of Paris and General Weygand had ordered French Army Group 3 to withdraw to the Seine. At the same time, Rundstedt's Army Group A blasted its way through the French at Châlons and surged eastward. The French were now in headlong retreat, and on June 13 Paris was declared an open city. The Germans marched in the next day.

Another photograph taken by Rommel shows his panzers advancing through a French village. The Germans marched into Paris on June 14.

National Archives

German forces fanned out west, south, and east, wheeling to pin the remnants of the French armies behind the Maginot Line. On June 17, Marshal Philippe Pétain replaced Paul Reynaud as president of France, and General de Gaulle flew to Britain to organize Free French forces and declare a French government in exile. On June 21, a massive force of 32 Italian divisions attacked in the south but was checked by six French alpine divisions.

Pétain and Weygand sought an armistice. In the railway coach where the armistice of 1918 was signed, Hitler dictated his terms. The surrender was signed on June 22 and came into effect at midnight, June 25.

Blitzkrieg West cost the Germans 27,074 dead, 111,034 wounded, and 18,384 missing. French losses for the six-week campaign were an estimated 90,000 dead, 200,000 wounded, and 1,900,000 prisoners and missing. Total British casualties were 68,111, Belgian 23,350, and Dutch 9,779. The French Air Force lost more than 560 aircraft in combat, the RAF 931, with 477 of them precious fighters. The Luftwaffe lost 1,284 aircraft.

In less than six weeks, France had been utterly routed by the blitzkrieg. The size of the achievement was measured by Guderian in an address to his victorious troops: "We have covered a good 400 miles since crossing the German border; we have reached the Channel coast and the Atlantic Ocean....

"You have thrust through the Belgian fortifications, forced a passage of the Meuse, broken the Maginot Line extension in the memorable Battle of Sedan, captured the important heights at Stonne and then, without halt, fought your way through St. Quentin and Peronne to the lower Somme at Amiens and Abbeville. You have set the crown on your achievements by the capture of the sea fortresses at Boulogne and Calais.... Germany is proud of her panzer divisions and I am happy to be your commander."

It would be four years before the Allies set foot again on French soil, but retribution was coming. □

ON AUGUST 7, 1942, PETTY OFFICER 1st Class Saburo Sakai was piloting his Mitsubishi A6M2 "Zero" fighter in the skies over Sealark Channel in the Solomon Islands. He had flown down with a group of other Zeros from the Japanese airfield at Rabaul, New Britain, that morning for the express purpose of attacking the ships supporting the first American opposed amphibious invasion of World War II, the Operation Watchtower landings at Gavutu, Tanambogo, Tulagi, and Guadalcanal.

Japanese "Zero" pilot Saburo Sakai, shot down by eight Dauntless tailgunners.

As Sakai and his wingman approached the skies above Tulagi, he spotted a group of eight American aircraft beneath him at an altitude of 7,800 feet. Wrongly assuming that they were U.S. Navy Grumman F4F Wildcat fighters, Sakai nosed his Zero over to begin an attack with his wingman obediently following.

Closing in on the American aircraft from behind at full throttle, he sensed that the element of surprise was his. But at a range of just 100 yards Sakai gazed at his targets through his gun sight and reached a sober realization: These were not fighters he was approaching. By this time it was too late to break off the attack. Sakai realized that he was attempting to pounce on a group of dive bombers. These aircraft were from the carrier USS *Enterprise* (CV-6) and were circling above Tulagi, awaiting orders to drop their bombs on Japanese targets on the island below.

Unlike the F4F Wildcat fighter, U.S. Navy dive bombers were protected from rear attack by a tailgunner's position. In the back seat of the aircraft piloted by Ensign Eldor E. Rodenburg, Aviation Radioman 3rd Class James W. Patterson, Jr., opened fire with his .30-caliber machine gun. "He came in fast! I fired at him, but I just don't know if I hit him or not," Patterson remembered.

Sakai attempted to turn sharply to the right, pull up, and use the Zero's horse-

GAME

The pilots of the Douglas SBD Dauntless dive bomber changed the course of World War II in the Pacific.

Navy Lieutenant "Syd" Bottomley, flying an SBD-3 Dauntless, attacks *Kaga,* the largest of the four Japanese carriers, during the Battle of Midway, June 2, 1942. Bottomley scored a hit before returning to find his own carrier, USS *Yorktown*, dead in the water from Japanese attacks; he landed on the carrier *Enterprise.* Note the extended "dive brakes" on the trailing edges of the wings. Painting by Jack Fellows.

CHANGER

BY MARTIN K.A. MORGAN

Painting © Jack Fellows; www.jackfellows.com

power to climb away from the Americans, but he was too close. In the rear seat of one of the other bombers, Aviation Ordnanceman 2nd Class Harold L. Jones opened fire with Sakai only 100 feet directly astern of his aircraft.

What Jones saw next was a testament to the firepower that was available to the tailgunners: “His cockpit exploded, the canopy tore, and something flew out. I could see his face clearly, his body and head forced back against the headrest of the cockpit. The plane went almost vertically upwards and then fell smoking. That was the last I saw of him.”

As the eight tailgunners followed the Zero with their machine guns, slugs shattered the canopy glass and hit Sakai. Fragments from the bullets struck him in the chest, the left leg, the elbow, and the face. One tracer round missed his right eye by less than an inch and melted the rim of his goggles. In the brief encounter, the tailgunners expended over 1,000 rounds of ammunition and seriously injured one of the best Japanese fighter pilots of the war.

Although Saburo Sakai would ultimately recover from his wounds and live to fight another day, he had been stung by one of the most lethal aircraft in the U.S. military’s arsenal: the Douglas SBD Dauntless dive bomber.

The SBD Dauntless was developed as an evolution of Northrop Aviation Corporation’s BT-1 and BT-2 dive bombers, which entered service in 1936. At that time, the U.S. Navy was transitioning from biplanes to all metal, low-wing monoplanes with retractable landing gear, and the BT series was on the cutting edge of that transition.

In 1937, Douglas Aircraft Company purchased Northrop Aviation’s El Segundo, California, factory and took over the BT program. With minor modifications by Douglas, the BT-2 Model 8 became the SBD-1 Dauntless in 1939, and deliveries of the aircraft began in June 1940. The basic airframe appearance of the Dauntless was established with the first model and would vary only slightly throughout production.

Its distinctive greenhouse canopy and

Library of Congress

ABOVE: The Douglas A-24 Dauntless dive bomber, Army counterpart of the Navy SBD, with certain modifications to meet Army requirements. It was designed for dive-bombing operations against ground troops and installations.The Dauntless was more maneuverable than the German Stuka and was capable of carrying heavier bomb loads.
BELOW: A groundcrewman loads linked M2 .30-caliber ammunition for a twin ANM2 mount into a Douglas SBD Dauntless at the USMC aerial gunnery school at MCAS El Centro, California.

U.S. Navy National Museum of Naval Aviation

Library of Congress

Three SBDs bank toward their target during a mission in the Pacific, 1943.

round-tipped wings made it an easily identifiable aircraft. But perhaps the most recognizable feature of the Dauntless was its perforated dive flaps. In a steep dive, these flaps would deploy upward and downward from the trailing edge of the wing to maintain a constant airspeed of 250 knots. The three-inch perforations in the flaps allowed airflow to stabilize the aircraft, making the Dauntless a rock-solid bombing platform.

The SBD-1 was equipped with the powerful 1,000-horsepower Wright R-1820-32 radial engine, but it had an overall flight range that was considered too modest for aircraft carrier operations. For that reason, the SBD-2 was developed with an increase of 100 gallons in fuel capacity that extended the aircraft's maximum radius from 860 miles to 1,125 miles.

The SBD was also a well-armed bomber. The pilot could control a pair of ANM2 .50-caliber machine guns mounted in the cowling, firing through the spinning propeller using an interrupter. The radio operator/tailgunner's position was equipped with an aft-facing swivel mount for the ANM2 .30-caliber machine gun to protect the aircraft from a tail attack (as Saburo Sakai so painfully learned in the skies over Sealark Channel on August 7, 1942).

Most importantly, the Dauntless was built to deliver bombs with precision, so it was equipped with underwing ordnance mounting points. A pair of 100-pound bombs could be carried on outer wing pilings, and on the aircraft's centerline a fork-shaped bomb-displacing gear allowed the mounting of 250-pound, 500-pound, and even 1,000-pound bombs. On release, the bomb-displacing gear would swing downward so that the bomb would clear the aircraft's propeller, and a telescopic sight mounted in the cockpit allowed the pilot to aim the delivery of his underwing ordnance. In all, these features made the Dauntless a simple, effective, and rugged combat aircraft.

The ANM2 .30-caliber machine gun mounted in the tailgunner's compartment was a weapon with the general physical appearance of a downsized M1919 series .30-caliber machine gun. With a smaller receiver, barrel, and barrel shroud than the M1919's, the ANM2 weighed a mere 23 pounds as opposed to the 31 pounds of the M1919A4.

In addition to having a different receiver and barrel than the M1919 series, the ANM2 was equipped with a different feed cover, extractor, barrel extension, and bolt. These parts were specially engineered to allow the weapon to feed from either the left or right side of the receiver, a feature that made the ANM2 .30-caliber versatile for use in aircraft. A 100-round fixed ammunition box was attached to left side of the weapon to keep the belted .30-caliber cartridges from snagging the inside of the compartment.

The U.S. Marine Corps began operating the SBD-1 in 1940, and the Navy began using the SBD-2 in 1941. At about that same time, Douglas produced the SBD-3 version of the Dauntless with another increase in fuel capacity, extending maximum bombing range to 1,345 miles. This third model of the Dauntless entered ser-

losses the result of action with Japanese aircraft over Oahu. In the aftermath of Pearl Harbor, the Dauntless was one third of the team of aircraft that served on U.S. Navy aircraft carriers during the first six critical months of the war. Along with fighters and torpedo bombers, SBDs flew during each of the hit-and-run raids during the opening quarter of 1942.

American counterattacks on the Marshall Islands, Wake, and Marcus, as well as Lae and Salamaua on the west coast of New Guinea, included the Dauntless. When the aircraft carrier USS *Hornet* (CV-8) carried 16 Army B-25B Mitchell medium bombers for the Doolittle raid on Tokyo in April 1942, SBDs from the USS *Enterprise* (CV-6) flew combat air patrol to protect them.

In early May, SBDs from the aircraft carriers USS *Lexington* (CV-2) and *Yorktown* (CV-5) flew combat sorties during the Battle of the Coral Sea and contributed to the notable sinking of the Japanese light carrier *Shoho* near the Louisiade Archipelago on May 7, 1942.

During the Battle of the Coral Sea, the Dauntless proved that it was effective at the job it was designed for—search and strike. In addition to that, though, SBDs in the hands of skilled naval aviators during that battle proved that the aircraft was good at something else too: air-to-air combat.

On the morning of May 8, a section of SBD-3s was flying anti-torpedo-plane patrol to protect the *Yorktown* from enemy torpedo bombers. Lieutenant (j.g.) Stanley "Swede" W. Vejtesa, one of the pilots on the patrol, had put a 1,000-pound bomb through the deck of the *Shoho* the day before and was minutes away from still more excitement. Shortly after 11 AM, the SBDs were attacked by a group of Zeros from the carrier

vice in March 1941 and also saw the introduction of self-sealing fuel tanks and armor protection for the crew.

The Navy began replacing its SBD-2s with SBD-3s immediately, handing the SBD-2s down to the U.S. Marine Corps. That process was still in motion when the Japanese attacked Pearl Harbor on Sunday, December 7, 1941, and the Dauntless went to war.

The SBD experienced combat from the very first day of the conflict, with the first

TWO LAKE MICHIGAN CARRIERS HELPED TRAIN SBD PILOTS

Far from coastal waters where they might be subjected to enemy attack, two aircraft carriers that never saw battle were the training sites for the majority of carrier-qualified American Navy and Marine Corps aviators, along with landing signal officers during World War II.

In August 1942, the U.S. Navy acquired the 1913 *Seeandbee* (using the initials of its parent company, the Cleveland and Buffalo Transit Company), the world's largest side-wheel passenger steamer, and began converting it into a training carrier. Her name was changed to USS *Wolverine* (IX-64), and she was designated an "unclassified miscellaneous auxiliary." Conversion resulted in the ship being fitted with a 550-foot-long, 98-foot-wide flight deck capable of supporting takeoff and landing operations.

Another side-wheel excursion steamer, also built in 1913, and named the *Greater Buffalo,* was acquired by the Navy on May 8, 1943, rechristened USS *Sable* (IX-81), and converted to a training carrier to serve alongside the *Wolverine.* The *Sable* was slightly smaller than *Wolverine,* with a deck 518 feet long and only 58 feet wide. Both ships were the backbone of the Navy's Carrier Qualification Training Unit (CQTU) at Glenview Naval Air Station near Chicago.

Sable and *Wolverine* were a far cry from fleet aircraft carriers but were adequate for accomplishing the Navy's purpose—that of qualifying naval aviators, fresh out of operational flight training, in carrier landings.

The two carriers had certain limitations such as having no elevators or a hangar deck, and their flight decks were smaller than those of the ocean-going fleet carriers. When barrier crashes or other mishaps used up the allotted spots on the flight deck for parking damaged aircraft, the day's operations were cancelled and the carriers headed back to their pier in Chicago.

Accidents were common. When the young,

Zuikaku. With superior speed and agility, the nimble Japanese fighters quickly brought down four of the SBDs, but then they came up against Swede Vejtasa.

After surviving the first attack, Vejtasa yelled to his radio operator/gunner: "Son, we're in for a scrap—keep your head and conserve your ammunition. I'll take care of the rest." With guns blazing, the Zeros made pass after pass at Vejtasa's SBD. Each time one of the enemy fighters attacked, Swede would turn into it and spoil the setup. Then Vejtasa would fire back at the attacker using the twin .50s in his engine cowling, while his radio operator/gunner in the back seat held off the enemy with his twin .30s.

Despite being harassed by three Zeros for an exhausting 25 minutes, Vejtasa's SBD survived. And, although he was flying a dive bomber against fighters, Vejtasa miraculously shot down one of the Zeros.

SBDs fought air-to-air engagements with the Japanese time and time again during World War II and were credited with 138 victories. Clearly, the SBD was no ordinary dive bomber.

Although it proved its mettle during the early hit-and-run raids and in history's first carrier-vs.-carrier battle in the Coral Sea, the SBD's finest hour came during the Battle of Midway in June 1942.

The Japanese descended on the battle area with naval might divided into a transport force, a main body, and an aircraft carrier striking force composed of the fleet carriers *Kaga, Akagi, Soryu,* and *Hiryu*. Their objective was twofold: capture Midway Island and lure the U.S. Navy task force off Midway into a final, decisive battle that would destroy it.

The U.S. Navy sent three fleet carriers into the battle area: the USS *Enterprise* (CV-6), *Hornet* (CV-8), and a battered and bruised *Yorktown*, each of which brought two squadrons of SBDs to meet the enemy.

The U.S. Marine Corps also contributed VMSB-241, a scouting/bombing squadron that included 19 SBD-2s. The Marine aviators who fought in the battle all flew from the naval air station on Eastern Island, Midway. They were led into combat by 39-year-old Major Lofton R. Henderson.

A 1926 graduate of the U.S. Naval

Both: U.S. Navy National Museum of Naval Aviation

ABOVE: An SBD Dauntless tailgunner loads ammunition for his twin ANM2 .30-caliber machine guns. The Stinger fed M2 .30-caliber cartridges from metallic disintegrating links. OPPOSITE: Flight-deck crew on the USS *Hornet* pushes an SBD of Bombing Squadron VB-8 into position for takeoff during the Battle of Midway, June 2, 1942.

inexperienced pilots took off or approached either of the two carriers incorrectly, they frequently had nowhere to go but into the lake. The first fatal accident occurred on October 21, 1942, when Ensign F.M. Cooper and his F4F-3 Wildcat took off from *Wolverine* and crashed into the water; neither Cooper nor the F4F were recovered.

As time went on, more and more pilots suffered training accidents. There were over 200 accidents in which 128 planes (including 38 SBD Dauntlesses) were lost and eight pilots were killed. However, some 35,000 pilots—one of whom was future President George H.W. Bush—qualified for carrier duty between 1942 and 1945.

During the war, six of the planes that crashed into the water were recovered. Today, most of the restored SBDs on display in the country's museums and airports came from Lake Michigan, and many unrecovered SBDs and other aircraft still rest on the bottom of the lake.

The Underwater Archaeology Department of the Naval History and Heritage Command says, "The aircraft assemblage in Lake Michigan represents the largest and best-preserved group of U.S. Navy, sunken, historic, aircraft in the world. From a historical perspective, the assemblage provides a wealth of knowledge about the history of naval aviation. Individually they are physical pieces of our past linked to significant people and events.

"Vast amounts of information can be gleaned from and memorialized through these special objects. Artifacts lost in the cold, fresh waters of Lake Michigan usually exhibit excellent preservation characteristics. Many of the aircraft in this assemblage have been found in good condition, tires inflated, parachutes preserved, leather seats maintained, and engine crankcases full of oil. Often paint schemes are well preserved, allowing for easier identification."

Once the war was over, the need for such training ships came to an end and, in November 1945, both the *Wolverine* and the *Sable,* which did much to prepare American naval aviators for war, were decommissioned and later sold for scrap.

Academy, Henderson flew at the front of the squadron's attack against the Japanese carrier strike force on June 4. The squadron took off from Midway at 6:10 AM and flew to the northwest side of the island. By 7:55 AM, it was within sight of the Japanese fleet and under attack by Zero fighters of the enemy's combat air patrol.

Major Henderson led VMSB-241's SBDs on a gently sloping glide-bombing attack on the aircraft carrier *Hiryu* from an altitude of 4,000 feet. His SBD was among the first shot down by the enemy's fighters—the American airfield at Guadalcanal would be named in his honor. (Today it is known as Honiara International Airport.)

Although their commander was lost early on, the men of VMSB-241 drove home the attack on the *Hiryu*. One of the bombers pressing forward in the middle of the chaos of antiaircraft fire was SBD-2 #2106 piloted by 1st Lt. Daniel Iverson, Jr. As he dove toward the target through a thin cloud, two Zeros followed him.

In the back seat of the Dauntless, Pfc. Wallace J. Reid fired burst after burst from his single ANM2 .30-caliber machine gun. With a pair of unrelenting fighters directly in his field of fire during the dive, Reid hammered away with his gun as Iverson's plane fell almost vertically toward the target. At the appropriate moment, Iverson hit the release switch at an altitude of 300 feet above the *Hiryu,* and the displacing gear dropped the 500-pound bomb away from the aircraft.

The young pilot then leveled off close to the water, closed his dive-flaps, opened his cowl flaps, and pushed the throttle forward as far as it would go. The engine surged to 2,300 rpm. As #2106 raced away from the *Hiryu,* two more Japanese fighters joined the chase as Pfc. Reid desperately struggled to hold the attackers at bay with his ANM2.

Japanese bullets peppered the SBD's horizontal stabilizer, rudder, wings, and empennage. One round slammed into the instrument panel, disabling the airspeed indicator. Another round severed the aircraft's hydraulic system. Despite Reid's best efforts to defend the Dauntless, bullet fragments wounded both him and Iverson.

After what seemed like an eternity, the Japanese fighters that had been hounding #2106 finally broke off their attack and turned back toward the fleet. A bleeding Lieutenant Iverson brought the aircraft back to Midway and made a crash landing. After he shut his engine down and he and Reid had jumped to safety, Iverson was surprised to see that there were some 250 bullet holes in the aircraft. As #2106 proved, the SBD Dauntless was rugged, reliable, and capable of absorbing lots of punishment.

VMSB-241 paid a heavy price for its attack on the *Hiryu*—eight of the 16 SBDs that flew the mission were lost to enemy action. Reid subsequently received the Distinguished Flying Cross for his persistent courage and determination during the harrowing flight. Major Henderson and 1st Lt. Iverson both received the Navy Cross for leading an attack "which contributed materially to the defeat of the enemy."

Although the *Hiryu* sustained no significant damage, VMSB-241 did indeed make a material contribution to victory in the Battle of Midway. The Marines' strike against the Japanese fleet was part of a cascading series of attacks from various land- and carrier-based Army and Navy squadrons.

Before VMSB-241 arrived on the scene to harass the Japanese carriers, Navy Grumman TBF-1 Avenger torpedo bombers and Army Martin B-26 Marauder medium bombers had already been there. After Henderson's SBD-2s made their attack and departed the area, a group of Army Boeing B-17 Flying Fortress bombers struck, followed by a group of 11 SB2U-3 Vought Vindicator dive bombers (also from VMSB-241).

All of these attacks were conducted by land-based aircraft and took place between 8 and 8:20 AM on June 4. Although brief and responsible for almost no damage, these attacks forced the Japanese ships to maneuver defensively, caused their antiaircraft gunners to expend large quantities of ammunition, and made their combat air patrol planes burn fuel. For the next hour, the Japanese carriers were able to recover aircraft and begin the process of rearming and refueling, but then American carrier-based squadrons began a new series of attacks.

At approximately 9:20 AM a formation of 15 Douglas TBD-1 Devastator torpedo planes from the USS *Hornet* began an attack on the carrier *Soryu*. With no fighter escort to protect them from the nimble Zeros, all 15 of the slow-moving TBDs were easily

The burning Japanese aircraft carrier *Hiryu*, photographed shortly after sunrise on June 5, 1942. The damage that can be seen here was caused by hits from four 1,000-pound bombs dropped by SBDs during the afternoon strike the day before; *Hiryu* sank a few hours later.

Both: National Archives

In one of the most famous images of the Dauntless from World War II, two SBD-3 dive-bombers from USS *Hornet* approach the burning Japanese heavy cruiser *Mikuma* during the early afternoon of June 6, 1942, near the conclusion of the Battle of Midway. *Mikuma* had been hit earlier by strikes from *Hornet* and *Enterprise*, leaving her fatally damaged and dead in the water. This photo was enlarged from a 16mm color motion picture film.

picked off within a matter of minutes; they did no damage to the enemy fleet. At 10 AM a formation of TBDs from the *Enterprise* commenced an attack. Fifteen minutes later, TBDs from the *Yorktown* closed in on the *Hiryu*.

Once again the Japanese fleet dodged the bullet and suffered no meaningful damage. But the cumulative effect of fighting off enemy aircraft for more than two hours stretched the Japanese to the limit. Although they had been successful in defending their carriers, their luck was about to run out.

The true decisive moment of the Battle of Midway began just as the *Yorktown* TBDs were concluding their attack. As Japanese gunners and combat air patrol fighters attempted to bring down the last of the Devastators escaping at wave-top level, lookouts on the *Akagi* noticed American aircraft high above the fleet. It was 10:22 AM on June 4, 1942, and the course of World War II was about to be changed by 48 SBD Dauntless dive bombers.

At that moment, 25 SBD-3s from the *Enterprise* entered their dives in an attack on *Kaga* that quickly resulted in four direct hits. Moments later, six more *Enterprise* SBD-3s dove on *Akagi* and scored two direct hits with lethal 1,000-pound bombs. Simultaneously, 17 *Yorktown* SBD-3s dove on *Soryu,* scoring three hits with 1,000-pound bombs.

In four minutes' time, three Japanese fleet aircraft carriers—each of which had participated in the Pearl Harbor raid—were raging infernos. A group of 13 SBDs flew from the *Enterprise* (10 of which belonged to the *Yorktown*'s air group) and found the *Hiryu* later that afternoon, hitting it with four 1,000-pound bombs, destroying it as well.

Thus the Japanese ended the day on June 4, 1942, having lost all four of their aircraft carriers to American SBDs. It was so significant a loss that it materially altered their battle plan. Admiral Yamamoto ordered a general retirement from the battle area that night.

With the cancellation of the plan to capture Midway and the obvious failure to destroy the U.S. Pacific Fleet in a final, decisive showdown, the Japanese conceded defeat. Although technically the battle was over, the Dauntless was not quite done destroying ships.

The next day, June 5, U.S. forces pursued the retreating Japanese westward as they withdrew in defeat. Since all four Japanese aircraft carriers were now on the bottom of the sea, the cruisers *Mikuma* and *Mogami* offered the most tempting targets as they limped away at 15 knots. Having collided with *Mikuma* the night before, the *Mogami* was struggling with damage that caused a dramatic reduction in speed. Accordingly, SBDs from VMSB-241 launched an attack against the two ships the morning of the 5th, but they scored only near misses that slightly dam-

aged *Mikuma*.

The following morning, June 6, a strike of 81 SBDs from *Hornet* and *Enterprise* found the two enemy cruisers and attacked them in three waves. After being hit by two 1,000-pound bombs, *Mogami* sustained additional damage but lived to fight another day. Hit by three 1,000-pound bombs, the *Mikuma* was reduced to a burned-out hulk dead in the water. The ship sank later that evening, marking the end of the battle.

The tally of Japanese losses was staggering: 248 combat aircraft and just over 3,000 men had been lost. Four fleet aircraft carriers and one cruiser had been sunk. The *Akagi, Kaga, Soryu, Hiryu,* and *Mikuma* had all been destroyed by the Douglas SBD Dauntless.

Prior to Midway, the Japanese were in the process of expanding a vast oceanic empire. After Midway, the Japanese transitioned to a defensive posture and began to fight the only war they could not possibly win, a protracted war of attrition. Together with El Alamein and Stalingrad, Midway was a turning point in World War II. The slow but deadly (SBD) Dauntless was the primary weapon that made this possible.

Although the Battle of Midway was definitely the SBD's finest hour, the aircraft continued to serve prominently through the tumultuous events of 1942. Navy and Marine Corps SBDs participated in the Guadalcanal campaign as land-based antiship and ground attack platforms during the closing months of the year.

Carrier-based SBDs from the USS *Enterprise* and the USS *Saratoga* (CV-3) fought the dramatic Battle of the Eastern Solomons on August 24 and 25. In October, SBDs from the carriers *Enterprise* and *Hornet* fought in the Battle of Santa Cruz.

Then, in November, on the other side of the globe, SBDs from the carrier USS *Ranger* (CV-4) flew air support for the Operation Torch landings in North Africa. On November 10, 1942, nine SBDs from the *Ranger* sank the moored French battleship *Jean Bart* in port at Casablanca, Morocco. With the sinking of the Japanese battleship *Hiei* three days earlier in the Pacific, this was the second enemy battleship sunk by SBDs within one week.

During the early part of the war, the Army also used the Dauntless under the nomenclature A-24 Banshee. Essentially an SBD-3 without a tail hook, the A-24 replaced the SBD's solid tail wheel with a large pneumatic tire. The Banshee entered service in March 1941 but had a far less distinguished career flying for the Army.

When the war began, the A-24 was to equip the USAAF's 27th Bombardment Group

SBD-3 Dauntless dive-bombers (without the folding wings of planes such as the Chance-Vought F4U Corsair and P-40 Avenger) crowd the deck of a U.S. Navy aircraft carrier during the summer of 1942.

Both: National Archives

An SBD releasing its bomb. The Dauntless SBD-5 had a cruising speed of 185 mph, a top speed of 255 mph, a service ceiling of 25,000 feet, a range of 1,115 miles, and could carry 2,250 pounds of bombs.

in the Philippines, but the surrender of Bataan saw the Banshee diverted to Australia, where it equipped the 91st and 8th Bombardment Squadrons of the 27th Bomb Group. The 91st Bombardment Squadron took its aircraft to the Dutch East Indies, and the 8th Bombardment Squadron operated from the north coast of Australia.

As the Navy model changed, so did the Army model. In late 1942 the Navy SBD-4/Army A-24A began to enter squadron service with only minor changes from the previous model. By that point in the war, the Army was no longer using the Banshee in combat, but the SBD-4 went into full fleet carrier service. When the Curtis SB2C Helldiver entered service in late 1943, the Dauntless was no longer the Navy's frontline dive bomber.

Despite that, the most produced variant of the aircraft was introduced at about that same time. The SBD-5/A-24B featured an increased ammunition-carrying capacity, an illuminated bombsight, and also introduced the 1,200 horsepower Wright R-1820-60 engine. A total of 3,640 SBD-5s/A-24Bs were produced during 1943 at the height of industrial production in the United States. These aircraft went on to fight some of the most dramatic encounters of the latter years of the war.

During this period, carrier-based Navy SBD-5s participated in raids against the Japanese garrison on Wake Island (October 1943) as well as the Operation Hailstone raid against the Japanese fleet anchorage at Truk lagoon in February 1944. The Dauntless also fought north of the Arctic Circle when SBD-5s from the Air Group of the USS *Ranger* participated in Operation Leader, a strike against German shipping in Bodo Harbor, Norway, on October 4, 1943.

Since the Army was no longer using the Banshee in combat, some A-24s were turned over to the USMC for land-based operations. Some of these aircraft flew antisubmarine patrols over the Caribbean from a base in the Virgin Islands, while others assigned to VMSB-236 participated in a raid on Rabaul on January 14, 1944.

The introduction of the SB2C Helldiver and the SBD's lack of folding wings resulted in its gradual disappearance from Navy carrier air groups during 1944. The last major aircraft carrier operation it flew came on June 20, 1944, when SBD-5s from the *Enterprise* and the reborn *Lexington* (CV-16) flew a strike against the Japanese during the Battle of the Philippine Sea.

The following month, when SBDs flew in support of ground forces fighting to liberate Guam, it marked the conclusion of the aircraft's shipboard service. At about that same time, the final version of the Dauntless was introduced as the SBD-6. Although the most powerful and advanced variant of the series, the 450 SBD-6s produced mostly remained stateside.

Meanwhile, SBD-5s continued to serve in land-based squadrons overseas until the end of the conflict. For example, Marine Air Group 12 (MAG-12) moved to the island of Luzon, Philippines, shortly after the amphibious landing of Army forces at Lingayen Gulf in January 1945. SBDs assigned to MAG-12's famous VMSB-241—best known for its stunning performance almost three years earlier during the Battle of Midway—flew numerous combat sorties in support of Army units on the ground until V-J Day in August.

At the end of the war, the Dauntless had many claims to fame, the most impressive of which was that it sank more Japanese shipping in the Pacific than any other Allied aircraft. The SBD Dauntless could also claim the lowest loss ratio of any U.S. Navy carrier-based combat aircraft in World War II.

When one considers that each example of the aircraft responsible for the miracle at Midway was costing the U.S. government a mere $29,000 in 1944, one must recognize that the Douglas SBD Dauntless was truly one of the greatest aircraft of World War II. □

A PT Boat SKIPPER'S LIFE

BY JOHN NIESEL

Lieutenant Hank Blake recalls PT-375's adventures and the Japanese surrender at Borneo.

WHEN THE FOUR MEMBERS OF THE JAPANESE SURRENDER delegation climbed aboard the deck of PT-375 on September 8, 1945, the boat's skipper, Lieutenant Henry "Hank" Blake, directed the men to an open area on the forward deck where the Japanese could be closely watched for any signs of treachery.

Imperial Japanese Navy Vice Admiral Michiaki Kamada—the ranking Japanese officer in Borneo—and two other Japanese officers began to proceed to the designated spot. The fourth Japanese, a stocky, muscular enlisted man, stationed himself close to PT-375's cockpit, effectively between the American sailors and the other three Japanese.

Hank, a no-nonsense PT boat captain—and a champion wrestler in college—confronted the stocky man who apparently was a bodyguard for the Japanese officers. "He was handling the officers like a bunch of chickens, taking half steps, and stopping them at certain points," Hank recalls. "I wasn't going to have any of that, so I yelled, 'Hey buddy! Get your ass up on the bow or it's going overboard! Right now! Or you're going overboard!'"

The Japanese bodyguard, whether he understood English or not, caught the gist of Hank's warning and quickly moved up to join the other three members of the surrender party. "We kept an eye on them," Hank related, "but from that point on they didn't give us any trouble."

PT-375's taxi mission, which occurred six days after the formal Japanese surrender in Tokyo Bay, was the culmination of Hank Blake's PT-boat career in World War II. Just how did the 25-year-old Pennsylvania native end up off the coast of Borneo, skipper of an 80-foot wooden boat loaded with 3,000 gallons of 100-octane aviation gasoline and bristling with weapons?

"I always loved the water—just loved the water," Hank stated. "At one time, my parents, my brother, and I lived in a little furnished apartment in Albany, New York. While we were there, the Hudson River was dredged so ocean-going vessels could come all the way up to Albany."

Motor Torpedo Boats, better known as PT boats, shown during training maneuvers off the U.S. East Coast, 1942. The small, fast, plywood-hulled boats and their crews were the pit bulls of the U.S. Navy, taking on much larger enemy ships with torpedos, machine guns, and a great deal of courage.

With big ships coming and going in his hometown, just how powerful was the pull of the sea on young Hank's impressionable mind? "I was just a kid," he explained, "and my mother wanted to be sure I received proper religious training. So she would give me a nickel for spending money and send me away, push me out the door, to go to a Baptist church that was a block down the street.

Both: Courtesy of Hank Blake Collection

National Archives

ABOVE: The gun crew on a PT boat fires one of its Oerlikon 20mm autocannons against Japanese-infested waters off New Guinea in November 1943. Note how reverberations shake the gunner's body. TOP: Lieutenant (jg) Hank Blake (left) and Lieutenant (jg) Patrick A. Requa. Requa was skipper of PT-375 when Blake reported aboard as third officer on March 8, 1945.

"But I'd take that nickel, go down to the waterfront, and buy a bag of peanuts. I'd feed the peanuts to the birds so I could be around the water! I just loved the water ... and I wanted to be in the Navy."

Hank was bitten by the sea bug, and when the United States entered World War II there was no doubt regarding which branch of the service he would be joining. Three months after the attack on Pearl Harbor, he decided to skip graduation from Lock Haven State Teachers College (now Lock Haven University) and enlist.

"Leaving college early meant I was going to miss the graduation ceremony," Hank said, "but I had enough credit hours to get my degree, and I graduated cum laude. Following my induction and basic training in March 1942, I was assigned to the midshipman's school at Columbia University in New York City. My bachelor's degree from Lock Haven was in health and physical education, so I was assigned to instruct drill, basic boat handling, physical training, and swimming. Instructing swimming was a great feature for me due to my love of the water."

Hank's skill in the water was apparent to the officer in charge of the program, and he gave Hank free rein to develop the swimming program. "They asked me to take this one platoon on a recreational swim. I think I had 36 guys in there, and 30 percent of them couldn't swim the length of a swimming pool, yet these guys were going to be naval officers!

"So I right away got busy and hustled up some other swimming pools in the Columbia University area and enlisted the help of other fellas with swimming skills equal to mine. We taught not just recreational swimming, but also what to do during evacuation and rescue in the water. There are a lot of things you can do to stay afloat using life preserving equipment once you are thrown into the water."

Hank's swimming program for the midshipmen demonstrated his initiative and organizational skills, vital wartime capabilities that did not go unnoticed by the commanding officer. Hank continued, "So on the basis of the quality of the swimming program, the CO—I don't remember his name, but he was a commander in rank—said, 'You have officer quality. Are you interested in a commission?' Well, I was happy with my situation at that point: I was married and had one child. But the more I thought about it...."

Hank seriously considered the offer to become an officer in the United States Naval Reserve. "The commander had written a letter of recommendation for me, and when he handed it to me he said, 'The day you want to become an officer, you turn this letter in and you'll have gold braid hanging from you!' And that moved me out of the physical fitness program and on into officers training."

The thought of becoming a naval officer was an exciting and interesting prospect for Hank, but the initial coursework was anything but. "I was then going to classes that I had previously been teaching," explained Hank, "so it was rather boring! But anyway, I eventually finished with officer training school. That's when I put in a request for PT-boat service."

Why did he choose the PTs? "Oh, just the excitement of it," he stated. "In school I had been active in athletics, football, and wrestling. I liked the excitement. I liked to fight. From college I also knew a lot of All-American football players who joined the PTs. I knew I didn't want to get on some tub that goes out and changes the buoy markers in a harbor or something like that! I wanted to get into the action, so I applied for PT duty and that's what I got."

If Hank's explanation of why he chose the PTs seems a bit gung-ho, it's because he was. It was just this type of aggressive, can-do spirit that the U.S. Navy looked for when choosing candidates for motor torpedo boat command.

Life on a PT boat during wartime could be perilous, and with a small crew of 14 to 17 men under one's command, leading by example and being willing to take the war to the enemy without hesitation were critical attributes for a successful PT boat captain.

Once Hank received notification of his acceptance into the Navy's Motor Torpedo Boat program, it was time to travel to Melville, Rhode Island, where the MTB School was located. As with many cities and towns with a prominent military presence nearby,

National Archives

A PT boat crew goes through final shakedown during night training exercises in 1943. The boats were powered by three Packard V-12 engines that gave them a top speed of 65 mph.

available housing was in short supply. "I moved my family up to Newport where we lived in a one-room apartment. I mean everyone was crowded! We had one of the second-floor rooms in the building," he remembered. "Melville was just up the river from Newport, but with my training I was only able to get home every third night."

Hank was busy with the numerous classes taught at the school—courses on navigation, gunnery, engine mechanics, torpedo maintenance, and boat handling among others. He did well in all of his courses, but his performance in one area really stood out. "Once our training was over, a lot of my classmates were immediately assigned to overseas boats," Hank recalled.

"But I was assigned back into Squadron 4, which was the training squadron based at Melville. I was 24 years old at the time and did some teaching of various courses, including some experimental work with radar tracking. But soon I was turned over to boat handling. I was exceptional at it, had a real knack for it. Boat handling came naturally to me. So I put up with that for a while."

Overnight trips out to sea were one reason Hank didn't make it home to his family's one-room apartment each night. "Thorough training of new recruits included a trip from Melville to Bayonne, New Jersey, where Elco was building the boats," Hank said.

"The purpose of these trips was to acquaint the rookie guys with long-distance navigation and nighttime travel with the PT. Along the way we encountered all kinds of lights, buoys, and signals of all sorts, and traveling at night was an educational experience for the recruits. Once we reached Bayonne, they got to observe the construction of new boats."

Hank continued as a boat handling instructor until he was assigned as second officer on a boat at Newport. A lot of the time his skipper was not present, so he was basically a second officer who handled the majority of the boat work. "After a given time, I was assigned to overseas duty and given notice to go from Newport to San Francisco for shipping out. I took my family home for Christmas in 1944, and on December 29, I received change-of-duty orders from Squadron 4 to Squadron 27."

Hank left in January 1945 for Subic Bay in the Philippines. He shipped out on a converted cruise ship that had a lot of soldiers but few sailors. "We went to some of the larger islands on our way across the Pacific, then to Leyte Gulf, and on to Subic where I joined Squadron 27."

At the time of Hank's arrival, Squadron 27 was under the command of Lt. Cmdr. Henry "Stilly" Taylor, a veteran of the early PT boat actions in the Solomon Islands. Ron 27 (the PT crews referred to a squadron as a "Ron") had arrived in the South Pacific in May 1944, when the boats idled into the motor torpedo boat base on Treasury Island off of the coast of Bougainville.

Over the next two months, Ron 27 engaged the Japanese in the waters around the islands of Bougainville, New Ireland, and New Guinea. In August 1944, the squadron moved to Palau in the Mariana Islands, then in late December 1944 it received orders for the move to the Philippines.

Ron 27, comprising PT-356, PT-357, PT-358, PT-359, PT-360, PT-361, PT-372, PT-

373, PT-374, PT-375, PT-376, and PT-377, saw action at San Pedro Bay and Subic Bay, where the boats engaged numerous enemy vessels and shore targets. Once Subic was clear, Ron 27 moved in.

"At one time Subic Bay had been a Navy coaling station," Hank said. "In the past, when the Navy had steamships rather than oil-fired ships, they had to have locations all over the world where the ships could fuel up with coal. Subic was one of them. Sometimes our boats would tie up to the old coaling dock if we weren't able to nest alongside our tender."

Hank's arrival at Subic Bay was quickly followed by an event that was occurring less and less frequently in the southwestern Luzon area. Even though the U.S. Army Air Forces and Navy pilots had won air superiority in the skies over the Philippines, there was still an occasional air raid.

"I remember almost the first night or close to it," Hank said. "We had a red alert and went to general quarters. A tremendous searchlight onshore was shining straight up on a Japanese bomber that was sailing over, and this P-38 went straight up the shaft of light and caught him. I'll always remember that."

From Subic the boats patrolled south to the waters outside Manila Bay, and on February 3, 1945, Ron 27's PTs became the first Allied war vessels to enter the bay since the surrender of U.S. forces on Corregidor in May 1942.

Hank was given orders to join the crew of PT-375 (an 80-foot Elco boat that was placed in service on August 10, 1943). At the time of Hank's assignment, PT-375 was under the command of Lieutenant Patrick Requa. "I was riding second officer at that time," Hank said (riding second officer meant that he was assigned to a boat with an existing skipper and executive officer), "and we did nighttime patrols, cruising work, and that sort of business around Manila Bay and Corregidor. Once Manila Bay was clear we operated out of there."

Even though the bay was in American hands, the surrounding jungle on the large island of Luzon wasn't completely clear of enemy personnel. Japanese soldiers attempting to escape from Corregidor and the shoreline surrounding Manila Bay were often spotted in the waters offshore, and the deck log for PT-375 states that in March 1945 a Japanese soldier was caught in the boat's screws while it returned from a night-time patrol. Body parts were observed in the boat's wake.

Another entry notes that five Japanese soldiers were encountered in the water during another patrol and, after refusing to surrender, "were eliminated to ensure the safety of the boat."

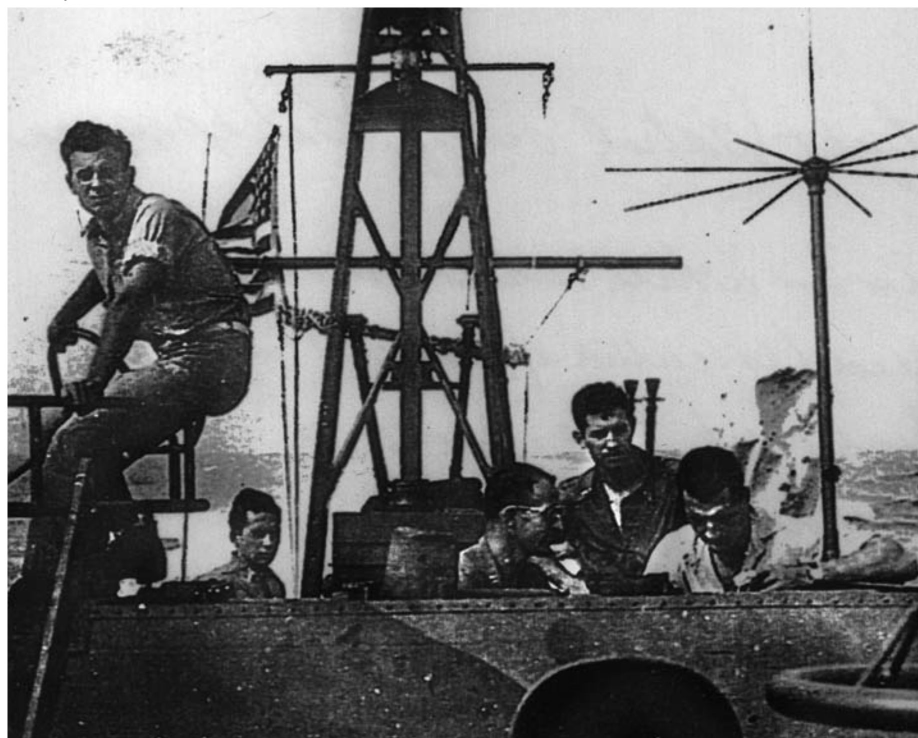
Hank also recalled seeing Japanese attempting to escape the bay area by swimming out to sea. "Corregidor was just a great big rock with a little bit of brush around it, but not much. Japanese would get out of the brush around Manila Bay and start swimming out toward Corregidor. If they reached it, there really wasn't any place to hide. They'd get ashore, then just keep a low profile.

"There was also one particular place near the bay entrance, a large rock that was about the size of an automobile, with a radio antenna tower on it. Some of the Japanese would come out of the jungle and swim out into the water. And when they didn't get picked up by a secret Japanese submarine or something, they'd get onto that rock, and, with no place to hide, start to climb that antenna pole. I don't know where the hell they thought they were going! But some of them were taken prisoner off of that rock."

Ron 27's patrols also took prisoners near the numerous sunken ships strewn throughout Manila Bay. Small groups of Japanese would sneak aboard the hulks and, using the wrecks as cover, snipe at any Americans passing by. Along with other PT boats, PT-375 would take its turn making firing runs on the ships, afterward commenting in the log book, "Run negative" or "Run positive. Observed blood in the water," or "Jap bodies visible."

As the Americans pushed farther into the island of Luzon, however, targets of all types became fewer, so the PT crews turned their attention to other tasks. "It was evident by this time in the war that gunnery was much more important than torpedoes," Hank noted. Frequent runs out to sea for gunnery practice against floating and aerial targets

Courtesy of Hank Blake Collection



Lieutenant (jg) Hank Blake (right front, with head lowered) was a champion wrestler in college. The U.S. Navy actively searched for such tough, competitive men to skipper PT boats in World War II. Blake died in December 2012.

Courtesy of Hank Blake Collection

Color photo of PT-375 at speed in the southwest Pacific, 1945. With her high-performance racing screws, PT-375 was the fastest boat in PT Squadron 27.

reinforced this emphasis on the PT's primary role as a gunboat.

For all of Hank's time on PT-375, attacks were carried out exclusively with guns, and one particular engagement stands out in his mind. "I was Pat Requa's executive officer. During a nighttime operation, under complete blackout, we engaged the enemy. I was at the wheel, and Requa was manning one of the twin .50-caliber machine guns located adjacent to the cockpit.

"There was shrapnel flying around. Even though we were under blackout conditions, I could see a rip in the knee of Pat's uniform. I put an enlisted man at the wheel and told Pat, 'We are going below to examine your knee.' There was great concern in Pat's voice—knowing he was due to go home to get married—when he told me, 'The hell with my knee ... I think my dick is gone!'

"When we got below in the light, it was obvious that a piece of shrapnel in a straight downward flight had entered the top of his fly, and produced only a blood blister right at the point where his penis was attached to his trunk. The main bleeding was coming from an injury to his leg, which was caused by a second piece of shrapnel. The blood was running out over his shoe."

Requa personally directed medical attention to his wound while Hank went back to the wheel and radioed for the location of the nearest hospital ship. He then headed the boat on a course to the ship and was able to immediately obtain full forward speed.

"We dropped Pat at the hospital ship and returned to duty. Since he was due to go home to be wedded, the path of the shrapnel entertained the crew aboard the boat for quite a while!"

In June 1945, the boats of Squadron 27 were ordered to the southern Philippine island of Samar to prepare for patrols supporting the upcoming invasion of Borneo.

"Part of the preparations involved cleaning and painting the hull of the boat," Hank said. "Our squadron was assigned to the USS *Varuna,* an LST [Landing Ship, Tank] that was converted to PT-tender configuration. It had a cradle [known as an "A-frame"] that the boat could float onto, and we were hoisted out of the water so we could service the bottom of the boat. You were given a number of hours on the tender to clean off the tremendous growth caused by the ocean on the bottom of the hull."

If left unchecked, the growth would create enough drag on the PT's sleek hull to significantly reduce the boat's top speed, and since speed was one of the PT's primary strengths a clean hull was essential to mission success and the safety of the boat and crew.

After PT-375 was covered in a fresh coat of camouflage paint, it was out to sea for more trials. "We went out and tested our gunfire, tested the accuracy of our navigating equipment, ran the boats at different speeds," said Hank. "Got them in shape for the move to Borneo."

At this time Hank experienced a change in duty. "At Samar is where I became skipper of PT-375. What the Navy did was, they'd bring in an ensign to train, so for a short period there would be three officers on a boat. As soon as they thought the third officer was fit, the top officer would go home, the XO would be promoted to skipper, and the third officer would become executive officer. That's how I became boat captain when we were based at Samar. I was second in command, then Pat Requa got his orders to go back stateside.

"Another thing, the Navy'd send us kids, just 16 or 17 years old, never been away from home at all. When they wrote letters, an officer would have to censor them, so the crew would put the letters on my desk. This one kid from New Jersey was really

excited about being on a boat, and he wrote all kinds of letters home.

"Now, on a PT, you had all of these enlisted men using one head at the bow of the boat for shaving and toileting. It was a lot of men in a cramped, condensed area using one stainless steel sink and toilet, so it could get really messy. Cleaning the enlisted men's head was the nastiest job of anything on the boat, but everybody had to take a turn at it.

Both: National Archives

ABOVE: A PT boat's tiny "head" had to serve a crew of 14 to 17 men. OPPOSITE: Australian troops pour ashore on Borneo from an American LST (Landing Ship, Tank), July 1, 1945. The PT boats of Squadron 27 provided close-in support to the invasion force.

"I put this boy from New Jersey on there right away to break him in—and he did such a magnificent job! I put him on there, and I'm telling you, that head looked like a jewelry store when he'd come out from cleaning it!

"So when I called him up in front of the rest of the crew, complimented him, shook his hand, put my arm around his shoulder and said, 'We just haven't had anybody that liked that job,' he said, 'Well, nobody is taking it from me!' He assigned himself! And then I censored his next letter home, and you should have seen the way he boasted to his family about being captain of the head!"

Shortly after his promotion to skipper, Hank and PT-375 departed for the last major Allied invasion of World War II, the invasion of Borneo.

The ground phase of the assault began on July 1, 1945, when Australian troops waded ashore. The Aussies had requested that the United States provide naval support for the operation, and as part of that effort four PTs of Ron 27 arrived in the area on June 27 prior to the invasion. The remaining eight boats arrived with the USS *Varuna* on the day of the invasion.

Initially the boats operated out of nearby Tarakan, but once the Aussies had pushed farther inland on Borneo the PTs moved to the island itself to better provide effective, close-in support.

"The entire squadron was assigned to a base at Balikpapan," Hank related. "From there we made nighttime patrols along the coast and to neighboring islands. The strategy at that time of the war was to prevent the Japanese from supplying and rescuing some of their legions in the area. It was our duty to halt all enemy traffic, day and night, and to destroy armaments positioned along the coastline and on neighboring islands. We received specific assignments if there was a Japanese radio station or other installation that needed taking out.

"Also, it was obvious that the Japanese were supplying weapons to the native populations on the islands, and it became the duty of the PT squadrons to halt this traffic. This was done as gunboats, not torpedo boats. We made lots of nighttime raids, did practically all of our work during dark hours. From time to time the Japanese attempted to provide armaments by submarine and surface vessel. We'd encounter small Japanese ships called maru ... We'd call them 'Snafu Maru!'"

The Japanese employed all types of small craft from canoes to luggers and lighters in attempts to travel to or from the islands, but PT-375 and the other PTs drew the noose ever tighter around Borneo, choking off anything that floated.

As had occurred elsewhere in the Pacific over the previous three years of warfare, the PTs were successful at minimizing the delivery of supplies to the Japanese on Borneo, as well as preventing the escape or evacuation of the beleaguered enemy personnel.

Hank also credited the soldiers on shore with the success the Allies experienced there. "A very important element of this containment was provided by the Australian land forces," he stated.

On many occasions throughout the Borneo campaign, the Americans and Australians cooperated operationally, coordinating Aussie air, ground, and naval support with U.S. Navy forces. As the Japanese resistance on Borneo steadily declined, the PTs went hunting elsewhere for enemy targets.

"From our base at Borneo we'd go over to the Celebes Islands," Hank explained, "to clean up some things the command wanted taken out. I had one daylight patrol where they sent a fleet officer to ride along. I don't know his exact rank, he was well above my rank as a lieutenant. Anyway, he came aboard my boat and said that there was located someplace on one of these small islands a Japanese floatplane installation."

The floatplanes were a hazard for the PTs because they would fly at a high altitude so they couldn't be seen or heard, but they could spot a PT boat's wake. "We had mufflers on the boat that controlled the exhaust noise from the Packard engines. If you were rushing between islands, you would put the mufflers wide open and just roar! But if you were snooping around there at, say, six knots, you could muffle all of your sound down into the water. But the boat still left a wake, and it was that wake that was giving the Japanese a good look at PT boat traffic. So with that fleet officer aboard, we headed out to look for possible air stations for these damn floatplanes.

"As we were making headway—since it was daylight we knew we were vulnerable, so we just left the throttles wide open—we knew the Japanese knew we were there. If they wanted to come out and meet us, that was okay. So anyway, we were roarin' along,

and all of a sudden there was this awful sound coming from the stern of the boat. Now, these PT boats had direct drive; the engine output didn't go through any gear reduction at all. We had three V-12 engines, and once they were put in gear you were going either forward or you were going in reverse.

"Well, all of a sudden we heard this tremendous scream, and one of the prop shafts—the center shaft—had fatigued. When it snapped it dropped the prop off, too, so the center Packard was running at full speed with no load whatsoever on it! We quickly shut it down, turned around, and headed back toward base; we had no trouble because we still had two fantastic Packard engines.

"When I limped back into base, we went to our tender, a big, long LST that was specifically equipped to take care of two PT squadrons. We nested alongside of the tender during daylight; if you couldn't dock along shore, then you nested against the side of the tender. So I took the boat gently to the tender, and it turns out they did not have a shaft and screw that was compatible with our other two. The screws were about 28 inches broad, and the supply officer on the tender said, 'I'm sorry, I don't want to send you out with just two screws working.' He said, 'The only thing I have in stock is a set of racing screws.'

"I said, 'Put her on, babe!' That worked out all the better for me because that definitely made the 375 the fastest boat in the squadron. As a result, I got some errands to do when higher-up officers needed to be moved from place to place, or were visiting a certain ship or base. So for daytime work we did a little bit of taxi service, but then at nighttime we definitely were hooked into hits over in the Celebes Islands or hits along the shores of Borneo."

Hank also delivered native scouts to enemy-held shores. "They were Netherland East Indies Scouts," Hank recalled. "I put them ashore for intelligence gathering on the Japanese. We'd run the boat up on the shore and drop them off." Hank quickly realized that the native islanders were no fans of their Japanese occupiers. "The Japanese forced the natives to squat in their presence," he said. "They couldn't stand. That really pissed me off." The native peoples of Borneo wouldn't be squatting for long, however. Time was running out on the forces of Imperial Japan in Borneo and elsewhere.

The Japanese weren't the only threat encountered by the boats of Squadron 27. The weather in the Southwest Pacific offered challenges of its own. "When we went to attack Borneo, there was a period of time when the weather was terrible," Hank said. "Our squadron arrived at this one spot north and a little east of Borneo's shore. Every single night we had a storm there where we were anchored. When the boat was underway, there was no shelter for anybody who was at the wheel in charge of operation, or studying a map, or something like that."

The PT cockpit was open to the elements, which provided excellent visibility. However, all hands topside were fully exposed. "In the daytime," Hank continued, "the sun would be so damn hot that some of the boats rigged a canvas, like an awning, over the foredeck. If they didn't take it down before a storm hit, the wind would just take it and go!

"As for being in any stormy seas, when traveling from island to island we were used to being in some really deep swells, I mean to the point where you would start to climb steeply up the face of the swell."

Hank's experience with boat handling allowed him to stay on course while plowing through such heavy seas. "You would have a course which was in your mind and set in your compass, and you would use the wheel to keep the boat headed in the right direction," Hank explained.

"Sometimes these monster waves would come one after another, where you would be climbing, climbing, climbing, and you'd get to the top where the wave would drop out from underneath you, and then you'd slam down. There were elbows, knees, and legs broken on deals like that, and especially the filaments in light bulbs!

"Anyway, the standard technique—if

you were paying attention—was, as you're going up one of these big rollers, you get almost to the top, and then throw the boat into a right hard rudder. That would kink the head of your vessel to the right, and then you would slide down the other side of the swell on your stern instead of coming down with a slam. Otherwise it would be like being on the end of a diving board with somebody jumping behind you.

"When the next big roller hit, you'd go hard left rudder at the crest of the swell so that when you straightened out you had compensated for the last hard right you made."

"As far as storms we were in, I remember one day a member of the crew was listening to a ballgame on the radio during the afternoon, before we headed out on the night's patrol ... and we heard the war was over.

"The next day we were asked to make a run to the Celebes. So we headed out that night with another boat commanded by Mel Everingham when a hell of a storm came up. I called him up on the TBS (Talk Between Ships) and said, 'Suppose this [storm] was at Melville? Suppose we hit weather like this at Melville?'

"He said, 'We'd call base, secure from patrol, turn around, and go home." I said, 'So what the hell are we doing out here anyway? The war's over!' So he did! He called the base, we turned around, and we did not complete that patrol. Mel was one of the good guys. We had almost 100 percent good guys; no chickenshit officers, you know? If we got one coming in, we started calling him 'Chick' right away. He knew his time was limited!"

As announced on Hank's shipmate's radio, the war was indeed over. Across the Pacific, as had happened across Europe when Nazi Germany capitulated, men celebrated in various ways, some noisily, some quietly. What did Hank and his crew do?

"Well, my squadron commander, Stilly Taylor—who by the way was pretty informal—had 12 boats in his squadron," he says. "There were something like two officers and 14 or 15 enlisted men on each boat, and someplace or another he got some cases of cold beer.

"He called me in and said, 'Blake, you're the only man in the squadron who doesn't drink.' So he said, 'You're in charge. Every man in the squadron gets three or four cans of beer, but open them all! Don't give anybody else a can!' I kept it the way he wanted it; I got it all handed out. Everybody had four beers. There was no shooting—and I got drunker than a skunk!"

Courtesy of Hank Blake Collection

With Hank Blake at the wheel in PT-375's cockpit, the Japanese surrender delegation (foreground) is treated to a "rough ride" in choppy seas, bracing themselves with the gun mount and ready box, September 8, 1945.

Hank's beer delivery was no doubt gladly received by the PT crews, making him a popular guy for a day. And even though the small crews and close quarters of PT service tended to lead to informal relations between officers and enlisted men, with his own crew Hank was a by-the-book skipper, no nicknames for him.

"I was either Mr. Blake or Captain," he said. "I enforced the discipline. BUT ... we'd take a life raft and put it overboard, and I would go in the water with these guys and play 'King of the Raft.' I'd throw the raft all over the place. I was an exceptional wrestler and an exceptional swimmer."

PT-375 may have been Ron 27's beer delivery vehicle, but that's not the reason she was chosen to transport the Japanese surrender party on September 8, 1945. She was chosen for her speed. Ever since the installation of the racing screws, she had proven time and again that she was the fastest boat in the two squadrons assigned to the USS *Varuna.* "We always raced!" Hank declared. "Every morning returning from patrol we'd see which boat was the fastest. That's how I got the job taking the Japanese to the surrender ceremony."

After the Japanese surrendered unconditionally aboard the battleship USS *Missouri* in Tokyo Bay on September 2, 1945, formal surrenders had to be arranged for the Japanese forces that were still scattered across the vast Pacific. On the morning of September 8, 1945, Ron 27's commander, Stilly Taylor, led seven boats including PT-375 to Borneo's Koetai River delta for a rendezvous with the Japanese surrender party.

"The naval officer in charge of this deal called down and said he wanted the fastest boat to go pick up the Japanese surrender party," Hank remembered, "and his direct order to me was, 'Give the bastards a ride' [meaning a rough ride]. Now that was no problem because there was almost always at least a five-foot sea running between the

After the war, the U.S. PT boat fleet was either scrapped or sold to private parties or other nations. Here a flotilla of obsolete boats at an unidentified naval scrap yard wait silently to meet their doom.

coast of Borneo and the Celebes group, which was many miles away. There was a force of water down through there that poured on down into the seas below Australia. We also didn't receive any orders about being polite or anything to the Japanese.

"They were brought down the river to the delta on a little wooden Australian riverboat, and we could see four Japanese aboard—three officers and a fourth that was a bodyguard. Anyway, we had these huge mufflers on the stern, so we never wanted anybody, ever, to approach us from the stern because if they crashed out on it you had no way to silence your nighttime patrols. So sure as hell, this Australian guy who was handling the riverboat came right in and almost got on our mufflers. I waved him off and told him to get around forward on the bow.

"After he swung around, the Japanese came up off of the riverboat, and there was no saluting, no formalities. I wanted them farther up on the bow, and that's when the bodyguard started to stall along, so I was nasty with him; but I didn't get any complaints from our higher-ups afterwards. I took the Japanese to an Australian warship [the frigate HMAS *Burdekin*], dropped them off, and that was it.

"Shortly after that, we received orders to take our boats back to the Philippines for decommissioning. The sad thing about that was, you loved your boat, and you knew you were saying goodbye."

After the surrender run, Hank's time with PT-375 was limited. With her racing screws and sleek hull, he would always remember her for her exceptional speed.

"The boat and all of the armaments functioned perfectly," he stated. "Other than losing the center shaft and prop when the crystallized shaft broke, there weren't any major problems." Of course, had the shaft not failed, PT-375 would not have ended up with her racing screws.

"From a speed of seven or eight knots, she'd get up to full speed pretty damned fast, even when fully loaded," Hank recalled fondly. "And with those Packards at full throttle, it sounded like all hell broke loose!"

There was no doubt PT-375 was a good boat. However, as Hank spent much of his time at Melville as an instructor with Squadron 4 on Higgins-built PTs (Higgins and Elco were the two primary manufacturers of PT boats for the U.S. Navy in World War II), the question begs to be asked: what was his favorite attribute of the Elco PT boat? Was it the graceful lines? The speed? The drier ride as compared to the Higgins design? For Hank, it was much simpler than any of these.

"They had ice cubes," he explained. Ice cubes? Yes, the Elco PTs had small refrigerators in the tiny galley, and the availability of ice cubes to chill a drink in the heat of the tropical Pacific was an invaluable luxury for sailors with few such things, and a cooling touch of home for men at war.

Neither her speed nor ice cubes could save PT-375 from the fate that awaited her and many other PT boats at the war's end. "The Navy processed every single knife and fork and spoon, anything they could save on the boat. All processed," Hank said. "When all of that processing business was done, then they took the crew off. Now I had myself and another officer and a boat that had no equipment and no crew! After a couple of days, they took my XO away, and a couple more days and they took PT-375 away. From there I went into temporary officers quarters.

"I learned later that they took the boats around to a shoal somewhere off of Samar and set them on fire. Burned them up."

PT-375 and the U.S. Navy's more than 500 motor torpedo boats had served their country well during a time of immense danger and difficulty, and men like Hank made sure the boats were used to their full potential, thereby making an important contribution to the victory over tyranny and fascism during World War II.

"Since it had to be done, I'm awfully proud I had a chance to do it," Hank said. "I don't remember ever complaining about what I was ordered to do during my almost four years in the Navy. I just damn well did what I had to do, got it done, and figured sooner or later I'd be able to resume my life the way I wanted."

Fortunately, that is exactly how things worked out for Hank Blake, due in part to PT-375, the fastest PT boat in Borneo! □

BIG FIGHT
FOR A LITTLE TOWN

BY MID-JANUARY 1945, THE FAMOUS Battle of the Bulge, a massive and fatal failure for the Third Reich, was virtually over. Some 100 miles to the south, another German offensive was likewise failing, this one smaller, less well known, but just as furious and bloody.

Operation Nordwind began on the last day of 1944; elements of two German army groups attacked the U.S. Seventh and French First Armies in the snowy Vosges Mountains of northeastern France near the German border. Like the battle in the Ardennes, the Americans were initially pushed back, but their opponents could not sustain their effort, leading to defeat by the end of the month.

Within the wider story of that ill-fated offensive, there were many smaller stories of desperate combat; Nordwind had its own versions of St. Vith and Bastogne. One such involved the encirclement and destruction of an American infantry battalion during five days of combat so intense that even veterans of Anzio were shocked by its ferocity.

The fight took place in icy, hilly terrain near a small French town, and the battle, known only to a relative few, has since been known as the Battle of Reipertswiller. Taken in the larger context of the war, this was a small engagement easily overshadowed by events in the Ardennes. Yet, those who were there remember it vividly as a desperate struggle to stave off a German attack and rescue beleaguered comrades.

For many of the American soldiers in the Vosges Mountains that winter, January 1945 was their fifth month in combat since Operation Dragoon, the landings in southern France the previous August. The assault had started relatively easily, giving rise to the nickname "Champagne Campaign," as Allied troops quickly put the Germans to flight.

As the northward advance ground on, however, enemy resistance grew gradually heavier. Arrival in the harsh terrain of the Vosges, coupled with the onset of a fierce winter, ended any thought of a lightning thrust into southern Germany. In the simple words of American battalion commander Felix Sparks, "The war slowed down."

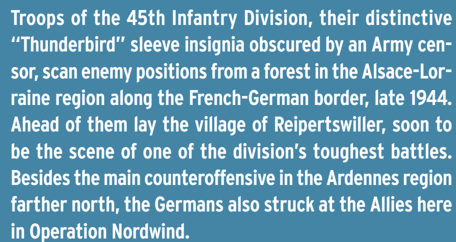
Sparks's unit would be the main American combatant in the coming fight at Reipertswiller. His 3rd Battalion, 157th Infantry Regiment, 45th Infantry Division, known as the "Thunderbirds," had been fighting since coming ashore at Sicily in July 1943. After a month of hard fighting across Sicily, followed by the amphibious landings at Salerno and then at Anzio where the division prevented German efforts to split the Allied beachhead, the Thunderbirds were nearly worn out.

Originally a Colorado National Guard outfit, this long period of combat had changed the 157th. Casualties and attrition had drained the original membership away, so many soldiers were replacements from across the nation. Only a few men remained from the regiment's muster in 1940. Sparks was one of those few.

Arriving as a new lieutenant during training at Fort Sill, Oklahoma, he had spent the entire war with the 157th except for a short time while wounded. That time was cut short when he went AWOL from the hospital to get back to his soldiers. By January 1945, he was a 27-year-old lieutenant colonel, having risen on merit to command the regiment's 3rd Battalion.

That regiment was more or less typical of many late-war American fighting formations. There were indeed many replacements, not all of them trained as infantrymen. The core of the 157th, including much of its leadership, were those who managed to survive Sicily, Salerno, and Anzio before invading France. It was an experienced regiment in an experienced division and formed the core of a regimental combat team (RCT), a combined-arms unit with the infantry as its essential center with artillery, armor, and engineers supporting them, attached to the team as the need arose.

The 157th was typically given the 158th Field Artillery Battalion, an Oklahoma National Guard unit, as its direct support artillery. Equipped with 105mm howitzers, the 158th was a skilled unit able to respond quickly to calls for fire. In addition, the RCT



Troops of the 45th Infantry Division, their distinctive "Thunderbird" sleeve insignia obscured by an Army censor, scan enemy positions from a forest in the Alsace-Lorraine region along the French-German border, late 1944. Ahead of them lay the village of Reipertswiller, soon to be the scene of one of the division's toughest battles. Besides the main counteroffensive in the Ardennes region farther north, the Germans also struck at the Allies here in Operation Nordwind.

In January 1945, an American infantry battalion fought for its life in the frozen hills near Reipertswiller in Alsace-Lorraine.

BY CHRISTOPHER MISKIMON

National Archives

normally had a company of tanks from the 191st Tank Battalion, as well as engineer, tank destroyer, and medical assets at hand. This made for a flexible and powerful organization.

Still, the 157th had the same problems as other RCTs in the winter of 1945. It was understrength; the replacement pipeline had not kept up with the needs of an army in difficult, grinding action. This was most apparent in the infantry; all the 157th's rifle companies were at two-thirds strength at most. The soldiers who were present were often exhausted and in need of rest periods that were, by necessity, infrequent and short. Winter clothing was hard to obtain, siphoned off by rear-echelon troops before it could reach the front lines. Fortunately, German units were usually in no better condition.

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Courtesy Felix Sparks

ABOVE: Members of Lt. Col. Felix L. Sparks's 3rd Battalion, 157th Regiment, clear snipers out of buildings in the Vosges Mountain region of France during the U.S. Seventh Army's drive, December 10, 1944. LEFT: Lieutenant (later brigadier general) Felix L. Sparks and his wife Mary, 1940. Sparks is regarded as the "hero of Reipertswiller" for his courageous actions.

The unit that the 157th would face at Reipertswiller had likewise traveled a long way to arrive in the Vosges Mountains in January. The 6th SS Gebirgs (Mountain) Division had formed in 1940 to guard the border between newly conquered Norway and the Soviet Union. Later it was redesignated the 6th SS Mountain Division "Nord," or North.

Until late 1944, the division spent the war in Finland and northern Russia alongside Germany's Finnish allies, in many ways isolated from what was happening elsewhere. When the Finns dropped out of the war in September 1944, the division was ordered to withdraw through Norway. A retreat lasting until November began, with Soviet troops chasing the Germans and urging the Finns to engage their former allies before they escaped the country.

The Finnish pursuit was halfhearted, and the 6th SS succeeded in reaching Norway, where it boarded trains for home. Along the way Norwegian resistance fighters considered attacking the train, including a Hollywood-style scheme to blow a bridge, sending the train hurtling to its doom. In the end the resistance decided not to attack, fearing reprisals against civilians. This decision likely saved many Norwegians but left the division on its journey to a fateful clash with the 157th.

After refitting in Denmark, the unit was earmarked for the Ardennes but was instead sent farther south for Operation Nordwind where it engaged the Americans in the Vosges. Like the American units, the 6th SS had problems with the quality of its replacements and little time to properly rest and reconstitute. It also had a hard core of experienced soldiers and leaders well versed at fighting in mountainous, forested terrain like that found around Reipertswiller.

Equipment and fuel shortages were endemic to German units at this point in the war, but high esprit de corps and commitment made units like the 6th SS a force to be reckoned with. One historian called the unit the best German infantry formation in the Vosges in early 1945, perhaps the best on the Western Front.

In the predawn hours of January 3, 1945, Operation Nordwind slammed into the American lines like a sledgehammer; German artillery punished unsuspecting GIs as infantry relentlessly attacked them. The 45th Division was bolstered with four attached infantry regiments to withstand the assault. Artillery and armored assets were also given to the division. The hard-hitting Germans managed to inflict heavy casualties and take many prisoners during the first week of fighting. The 12th SS Mountain Regiment, part of the Nord Division, extended too far and became encircled by American troops from several regiments. However, many SS soldiers were able to slip through the surrounding Yanks during the night of January 6-7 and regain their own lines.

On January 11, the German troops renewed their offensive, hitting the Americans in several forested areas north of the border village of Reipertswiller. Artillery fire was heavy, and soon two battalions of the 45th's 180th Infantry had to fall back some 600

yards. In turn, this exposed the flank of another battalion of the attached 314th Infantry, 79th Division, forcing them back as well.

This move left two hills, 343 and 388, in the hands of the enemy. The 2nd Battalion, 157th, was sent to retake the hills that night. They were successful and spent January 12 defending the two hills from attacks by SS men supported by artillery. Relieved that night, battalion commander Lt. Col. Lawrence Brown moved his men to Reipertswiller, where they collapsed into any space they could to sleep. Before long, however, they were back on the front lines.

On January 14, the Americans were ready to start pushing back against the German onslaught. The 45th Division commander, Maj. Gen. Robert T. Frederick, ordered an attack to retake the hills north of Reipertswiller. Two battalions of the 157th—Sparks's 3/157 and Lt. Col. Ralph Krieger's 1/157—were sent to carry out this mission that morning. Other units along the front would attack as well. Sparks's battalion was the left flank unit of the division, with Krieger's men to its right and a battalion of the 79th Division's 315th Infantry to its left. Most of the units were understrength; 3/157 was short about 200 soldiers in its rifle companies.

As the riflemen prepared, a platoon of 4.2-inch chemical mortars capable of firing smoke or explosive rounds set up in Reipertswiller. Machine-gun sections from the weapons companies were attached to each rifle company for added firepower. A platoon of tanks was available but held back to be used where needed; minesweeping engineers would accompany the infantry. For 3/157, Company K would advance on the left and Company L on the right with Company I in reserve. For 1/157, Companies B and C would advance with A in reserve.

Shortly before the attack, Lt. Col. Sparks climbed into his jeep to join his battalion; the young commander was known as an officer who stayed up front with his troops. With him were his driver, Albert Turk, a runner named Carleton Johnson, and a translator, German-born 19-year-old Karl Mann, who had been in a machine-gun crew until being tapped to use his fluency in German.

Mann found Sparks a curious figure. The officer was not one for casual conversation and often carried a shotgun pitched over his shoulder. Mann didn't know it, but Sparks had grown up hunting in Arizona to help feed his family during the Depression. He felt more comfortable with a shotgun than a carbine or rifle; he didn't feel he could shoot either as well. His .45 pistol had custom grips containing photos of either his wife Mary or a pinup girl, depending on which version of the story one believes.

Turk was driving the jeep down a paved road covered in a few inches of fresh snow from the night before. Mann was in the back sitting on a sleeping bag while Sparks was in the front passenger seat. Without warning an explosion tossed the jeep violently; they had struck a mine. The young interpreter was lucky. The sleeping bag absorbed much of the blast and, though in shock, he was uninjured. Sparks was thrown several yards away, flying through the air to land on pristine white snow nearby. Fresh bruises covered his body, and he was cut on his left knee and right hand. Shock overcame him.

Mann climbed out of the jeep and found a horrifying sight. The jeep's rear tire was sitting on another mine only an inch from the trigger. If that weren't enough, a W-shaped pattern of several dozen mines lay across the road, hidden by the snow but now visible upon closer inspection. Although shaken, Turk and Johnson were miraculously unharmed.

Sparks was immediately taken to the nearby battalion aid station. With their commander out of the fight, the executive officer, Captain John L. McGinnis, took over and got the battalion moving on schedule.

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U.S. Seventh Army soldiers, accompanied by an M-4 high-speed tractor, move down a wet, snowy road in northeastern France.

The American attack jumped off at 8:30 AM but immediately bogged down in the face of intense artillery fire. Shell bursts churned up the snow, mixing it with soil into a dirty brown color. All too often, the snow was stained red from the blood of wounded and dead Americans.

GIs began to filter back to the aid station; Sparks was already there, having his wounds tended and recovering from the shock of the mine blast. As he lay there, Captain McGinnis was brought in,

wounded by the heavy shellfire. Dismissing his injuries as minor, Sparks felt he had to return to his duties; he had to be with his men. He quickly returned to the front lines despite the harrowing artillery. He would later write, "It was the worst beating we ever took from terrific concentrated artillery barrages, and that includes Anzio. Men were unable to get out of their holes, even without enemy infantry in front of them."

Beyond sporadic machine-gun fire, the GIs had almost no contact with enemy infantry. Whenever they pushed forward, it seemed only more artillery and mortar fire greeted them. Despite the murderous rain of steel, the Americans kept moving; by 4 PM Sparks's riflemen had managed to advance about 1,200 yards.

Winter's early darkness descended over the thick woods, so Sparks ordered all three companies to dig in for the night. The day's results had been disappointing but understandable given the intense barrage, but none of the other attacking battalions had done any better. In fact, 3/157 had advanced farther than any of them.

Shortly after 6 PM a message came in from regimental headquarters warning of a German counterattack brewing in front of them. An estimated five German battalions would be committed in the 45th Division sector. The attack order stood; however, the regiment would resume moving forward in the morning.

While the German shelling continued through the night, Sparks planned for the coming day. Companies K and L were each assigned a hill to seize with Company I in reserve, filling the gap between the two lead companies.

The attack resumed at 9 AM on the 15th. Enemy artillery fire was still heavy but the GIs kept moving. This time they ran into a company from the German 476th Infantry Regiment, 256th Division, and routed it, sending six prisoners back to the POW pens in the rear.

The advance continued until 12:30 PM. By then both lead companies had reached their assigned hills. Company K occupied Hill 420 while Company L took Hill 410, both designated by their height in meters. Company I moved into the saddle between the two hills to form a continuous front 800 yards long.

The hills had commanding views and represented a solid position, but unfortunately the units on either flank of 3/157 had been unable to achieve their objectives and were far behind, leaving Sparks's battalion dangerously exposed. Krieger's 1/157 tried to advance to close the gap on 3/157's right flank, and Company B managed to capture a ridgeline but was quickly pushed back. Afterward, Company C sent patrols to link up with Company L along the same route 3rd Battalion had used to get to its objectives.

At 4:15 PM, a company of German troops counterattacked Company K, hitting hard on its left flank. Sparks sent the battalion's antitank platoon to shore up the beleaguered riflemen. Fighting raged for over an hour before the Germans were repulsed; 50 bodies littered the ground in front of Company K. About half of them lay together in a group, killed by machine-gun fire.

American casualties were heavy as well. A sergeant from Company K recalled, "It was the worst mess I ever saw. Dead and wounded Americans were lying all over the area. We had no way of evacuating the wounded, much less the dead, until night." GIs searched the enemy corpses and found papers showing them to be from the 12th Company, 11th Regiment, Nord Division.

Even after the attack stopped, mortar fire kept raining down as Sparks's men struggled to bring up ammunition. Friendly casualties were evacuated along with 16 prisoners, including the six taken earlier. Those half dozen were from the German 476th Infantry Regiment, 256th Division. Interrogations revealed that the unit had just relieved the 6th SS that morning. One soldier overheard an officer talking about holding a nearby American-occupied position at all costs. Another heard that the SS unit was receiving replacements so it could resume the offensive.

As the night continued, Sparks reorganized for the next day. The antitank platoon was recalled to form the battalion reserve. Headquarters company used every available man to move ammunition and food to the rifle companies. With those units in such exposed positions it was harrowing work, but they kept on through the night.

The 1st Battalion, 315th Infantry was the unit immediately to Sparks's left flank; it was ordered to cease advancing and make ready to return to the 79th Infantry Division, its parent unit. To fill the void, the 2/157 was ordered to move up on Sparks's left while Krieger's 1/157 continued to close up on the right.

The morning of January 16 saw the two battalions trying to do just that. By 11:45 AM, Company C had managed to link up with Company L's right flank. Just over an hour later, as Company G was attacking to reach Company K's left flank, a general

Sparks did what he could to consolidate. Regiment sent him 100 men from the headquarters and antitank companies as his reserve. He positioned them on the supply route to ensure it stayed open and sent every spare soldier from his own headquarters company to carry ammunition and food to his battered riflemen. Each time they returned from delivering supplies, they carried casualties.

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A few weeks after the Battle of Reipertswiller, American infantry moves into the damaged village.

German attack began along the entire local front line.

At the same time, other German troops began infiltrating around 3/157's flanks and behind it. Artillery roared overhead from both sides, and both found it punishing. By 3:40 PM, Company I had Germans behind it and apparently coming from the left flank. Company B was sent to clear those Germans out but was unable to do so. Sparks sent his reserves, the antitank and engineer platoons, to open up the supply route to his rifle companies. Two light tanks, M-5 Stuarts, went with them. This mission succeeded after a brief firefight and temporarily opened the road.

By 6 PM, Company G finally linked up with Company K. For Sparks, it seemed his flanks were finally secure, and he had a defensible position from which to continue the fight. It was thought a small number of Germans were still behind the battalion somewhere on the right, but Company B was assigned to finish them off in the morning; nothing further was done at the time.

Sparks did what he could to consolidate. Regiment sent him 100 men from the headquarters and antitank companies as his reserve. He positioned them on the supply route to ensure it stayed open and sent every spare soldier from his own headquarters company to carry ammunition and food to his battered riflemen. Each time they returned from delivering supplies, they carried casualties.

To this point, 3/157 had lost 118 soldiers over the past three days; a third of the battalion's strength was dead or wounded. Those who remained prepared for the next day.

While the Americans were consolidating and reorganizing, the men of the 11th Regiment, Nord Division were advancing. It was poor weather for a fight; snow was falling, wrapping the forest in its wintry embrace, muffling noise, and making it difficult to see. Temperatures were below freezing and showed every sign of staying there.

Johann Voss, a machine gunner who had been with the SS since Finland, remembered much the same things as his American counterparts, perhaps in reverse. He recalled the punishing American artillery, which never seemed to cease. For the Germans it was "a fierce, uphill fight." American mortars and machine guns swept them as they struggled to advance on January 16, and it didn't seem much progress was being made.

After dark, Voss and his machine-gun crew were reassigned to a different company and again sent up the hill. This time he noticed they were moving diagonally from their previous line of attack. Fighting still raged, but this company skirted around it to infiltrate around the American flanks and into their rear. Voss couldn't tell who had the upper hand in the deafening battle on the hilltop above, but he did know the enemy was determined. Slowly, he and his comrades crept on through the dark, seeking to complete their encirclement.

They had just finished moving around the American-held hill when they almost fell victim to their own artillery. With a terrifying sound, a barrage of Nebelwerfer

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rockets crashed down in front of them. The entire group threw themselves flat into the frigid snow as the rockets struck the earth a scant 30 meters in front of them. The explosions tore into the ground, raising great gouts of earth and snow, but no one was hit. After a few moments the SS men continued into the night.

After a while they reached their objective, a position directly behind Company I and near the trail the Americans were using to bring up supplies. Voss later wrote, "My gun's position was on a steep forward slope, a clearing which fell down toward a trail on the bottom of a ravine leading up to a saddle between two hilltops, one of which we had passed. We emplaced our gun under a rocky outcropping and ... started digging into the frozen ground."

Visibility improved with the dawn as the snow stopped falling, leaving the morning air crisp and cold. Voss realized the trail was the enemy supply route. He scanned it with his binoculars and saw a small bridge to his left. Somewhere out there, he knew a few soldiers had been posted along the trail with Panzerfaust antitank weapons, but he couldn't see them. Voss settled in to wait for the inevitable action to come.

The morning of January 17 brought little relief for Felix Sparks and the men of the 157th. Company G was reinforced by a platoon of men from Company E, who managed to get through to them. The rest of Company E couldn't break through, however. Likewise, Company B tried linking up with C but had no luck.

A patrol from Company B, probing toward Company C's position, came upon a disheartening sight: a group of three jeeps, shot up in an ambush, dead GIs all around. It was a resupply party, led by Company C's supply sergeant the day before. The deadly ambush had killed or captured all but two of the Americans. No one was alive at the ambush site; the survivors had long since retreated. The patrol returned to Company B just in time to man foxholes against a German attack from the northeast.

For Sparks the obvious choice was to open a path to his men and pull them back.

Gunners from a Seventh Army artillery battery pound German positions near Reipertswiller with their 105mm gun.

This wasn't a vital objective and didn't require a "last stand." He consulted with the regimental commander, Colonel Walter O'Brien, and suggested the withdrawal. O'Brien agreed and sent word to the 45th Division requesting to do so. A reply came back denying the request. General Frederick, who once commanded the 1st Special Service Force, apparently thought a retreat would show weakness.

Sparks was furious; he thought Frederick clearly didn't understand the situation. Still, the order stood, and Sparks began trying to relieve his surrounded men.

Fighting continued throughout the day. German troops hit the 1st and 2nd Battalions while they struggled to link up with their trapped comrades. These attacks were beaten back, but they distracted the Americans from the effort to relieve the five companies on the hills ahead. By late afternoon Company B was down to 22 effectives in its rifle platoons, and there were only two machine gunners left from the weapons company. Afterward, 24 men arrived from other companies to bolster them.

About the same time, Colonel O'Brien sent part of the reserve force composed of antitank soldiers and engineers to clear the area behind 2nd and 3rd Battalions. Supported by two light tanks, these troops moved along the trails behind the trapped companies but quickly ran into trouble. The infiltrated SS men poured fire into them; the American commander, Captain Robert W. Cannon, and one lieutenant were killed. The remaining platoon leader withdrew his men and the tanks back toward the road to Reipertswiller.

For the encircled GIs, the situation was getting desperate. Food and ammo were running out. The 3rd Battalion's Lieutenant Willis R. Talkington volunteered to take a pair of light tanks up the trail. A trailer was hooked to each tank to carry supplies. The freezing conditions worked against them, however. After a short distance, both tanks began slipping on the icy trail.

Things became worse when one tank slid into a ditch and flipped over. Talkington tried a new tactic. He loaded all the supplies onto the back deck of the remaining Stuart and abandoned the trailer. This enabled the tank to get moving again, and somehow it arrived in the Company I area without being attacked by the Germans. This was the last resup-

ply the trapped Americans would receive.

Just after midnight on January 18, the tank started back down the trail, but this time its luck ran out. A German ambush knocked it out and wounded three of the crew, who were captured. In the confusion, Talkington, also injured, managed to escape into the darkness.

From his vantage point overlooking the trail, Johann Voss saw some of the combat that raged during the day and night of the 18th. At one point he heard the rumbling of an engine; soon an American tank lumbered into view. Voss recalled the tank came from up the hill.

One of Voss's comrades opened fire with his machine gun. As they watched, the rounds bounced from the metal behemoth's armor and it drew closer on the trail. Suddenly a panzerfaust round came from somewhere.

"Wham! A fireball! The tank stopped cold and jerked off the road," Voss wrote. He watched the crew scramble out of the tank only to be captured within moments by SS men. Despite his experience, it was the first time the young soldier had seen a tank destroyed. While he exulted in the small victory, he wondered what would happen when the Americans sent more tanks.

An American response didn't take long. Rather than tanks, it was an artillery barrage an hour and a half long. Voss remembered it as the worst he ever experienced: "Shells rained upon us like hail in a thunderstorm." He couldn't understand how the Americans could mass such fire in one place.

The machine-gun crew doubted it would survive, but when the firing ended, the men were alive and soon saw a pair of American antitank guns setting up farther down the trail. The guns blasted away at the Germans, and before long American infantry began moving among the trees. Voss opened fire on them and eventually drove them into cover in a small hollow near the bridge. A messenger told Voss the SS troops on the hillside were mostly unharmed, but those fighting at the hilltop area had taken heavy casualties.

Down by the trail the American gunners kept firing, and more of their infantry appeared. They began pressing the Germans, and Voss feared they might break through. Suddenly, another salvo of Nebelwerfer rockets screamed in as they had the night before. The first round missed, but the next two hit the American antitank guns, destroying them.

The attack petered out soon after, GIs falling back among the same trees they used as cover while advancing. Voss could not see the American squad his fire had forced into the hollow by the bridge. He assumed they had been wounded and could not or were afraid to move. They were trapped.

For the Americans, January 18 started with the loss of Lieutenant Talkington's tank just after midnight, but the situation only got worse with the dawn. On Hill 420, Company G with its platoon from Company E now occupied positions just south of Company K.

As the sun rose over the frozen landscape, German troops attacked from close range and achieved almost complete surprise. Some of the American survivors later reported the enemy using flamethrowers.

The American position was completely overrun; only 18 men made it to the Company K lines nearby. All the rest, including the entire platoon from Company E, were lost. The encircled GIs were slowly being pushed into an ever-shrinking perimeter. Ammunition and food were almost gone and there was little to be done for the wounded. Most had to remain in place and get by as best they could.

Desperately hungry, the SS men searched Company G's lost positions for food. Picking through the scattered equipment, they happened upon a working SCR-300 radio. Their company commander, Standartenführer (Colonel) Helmut Raithel, took it back to a nearby command post. A quick search found a soldier who had lived in Chicago before the war and spoke fluent English. He set to work translating the American transmissions.

Across the 157th's lines, American counterattacks went on all day in desperate attempts to reach what was left of the five trapped companies. Company E, unaware its platoon was lost, assembled clerks and cooks for an attack that failed to make headway. What was left of the antitank

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Men of the 157th Regiment operate a M1919 Browning heavy machine gun from their foxhole, December 1944. Besides a stubborn enemy, the winter weather took its toll on the attackers.

company had been formed into a single platoon under Lieutenant William Berg. It joined with the remnants of Company B outside the encirclement; both units had about 19 soldiers left. They were later joined by two light tanks from the 191st.

These tanks moved up the trail apparently past Johann Voss's position without being engaged. In late morning the battalion antitank platoon moved up the same route, accompanied by three M-8 armored cars. As the Americans pressed forward they came under enemy fire; the lieutenant leading the armored cars was hit by a sniper while in his vehicle. The infantry continued forward until forced back. This is apparently the attack Voss recalled, since it was at this point several GIs were pinned down near the bridge.

One of them was a squad leader, Sergeant Bernard Fleming. As his squad advanced through the trees machine-gun fire tore into them. Most of the fire came in low, below the level of the low-hanging branches, known as "grazing fire." Several men were hit in the legs, likely the only part of them clearly visible to the enemy.

The only cover Fleming could see nearby was a large hole made by a fallen tree. He ordered his men into it, gaining a temporary reprieve. A few minutes later two soldiers from a different squad joined them. One of them told Fleming an order to withdraw had been given, but they couldn't get away. When they heard Fleming's men firing, they made their way over. Cut off, Fleming hadn't even heard the order to fall back.

With so many wounded men, the GIs needed help to get clear. Fleming decided to send a runner to the battalion command post. Private Emmett Neff, a radioman, volunteered to go. The young soldier took off at a sprint but got only 25 yards before a burst of fire hit him in the ankles, leaving him screaming for help on the icy ground. Fleming told his men to lay down suppressing fire; every man in the hole opened up with whatever he had. The sergeant dashed to Neff and dragged him back to the hole. As he began pulling off Neff's boots to look at his injuries, another soldier, Private Lawrence Mathiason, volunteered to go. Fleming told him to stay put. The Germans would be watching them.

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ABOVE: Seventh Army troops advance through a French village behind two M-4 Sherman tanks. Sparks used tanks to his advantage while rescuing his troops north of Reipertswiller, January 1945. BELOW: Men of a 157th Regiment pioneer squad carry rations and supplies up difficult terrain to men in foxholes in the snowy Vosges Mountains.

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Disregarding the order, Mathiason left the hole, running for the rear. After only 10 yards, he fell as bullets ripped through him. Fleming decided he had to do something personally. He took off his web gear and gave another soldier his Thompson submachine gun so he could run faster. "You guys stay here. I'm going to get help," he said.

With that, Fleming ran out to Mathiason and dropped down next to him, but the young GI was dead. Rising, Fleming ran as fast as he could through a torrent of fire from the SS troops. Bullets snapped all around him; one even went through the fabric of his pants. After terrifying moments, however, Fleming managed to make good his escape and found his platoon leader. When he told the lieutenant about the trapped men, "He told me to tell Colonel Sparks, who then took a tank and went to get the wounded out."

Sparks did indeed mount a rescue effort using a pair of M-4 Sherman tanks, which had just arrived at the command post. The narrow trail was partly blocked by the overturned light tank from the night before, so a recovery vehicle was brought in to drag it out of the way.

Once the way was cleared for the M-4s, Sparks climbed aboard and led them up the trail toward his trapped and wounded men. As the tanks clattered up the trail, Colonel O'Brien called to find out what was happening. One of the battalion officers told O'Brien about Sparks leading the tanks on a rescue effort. O'Brien told the man to have Sparks stop the effort and wait for approaching reinforcements. A battalion of the 179th Infantry was coming up to help.

Sparks apparently got the message but chose to ignore it. Time was running out, and he was notoriously stubborn. O'Brien chose to let the matter pass and allowed Sparks to continue. Given the dire situation, O'Brien figured Sparks would ignore a direct order anyway.

Up the trail, Sparks stood in the hatch of the leading tank, urging its driver forward. Several times he halted so he could get out on foot and scout the route before remounting to continue. As the tanks neared Fleming's men, German machine gunners began firing at the Shermans. Sparks fired back with the tank's .30-caliber machine gun, shooting wherever he thought enemy troops might be hiding.

He also directed the gunner to open up with the tank's long-barreled 76mm main gun. The combined effect of the tank's firepower suppressed some of the Germans, enabling other American soldiers hiding along the trail to fall back. Sparks continued to Fleming's men farther along the path.

Finally, the tanks approached the bridge near the trapped GIs. The trail steepened, making it hard to gain traction. Seconds later, Sparks's tank slid sideways, leaving its right side exposed to the enemy. A panzerfaust flashed out from the trees, and a round struck the tank on the turret with a loud bang. Sparks's luck held; he and the crew were uninjured, but the main gun was out of action. The tank was still mobile, and the machine guns worked.

Standing in the hatch and looking around, Sparks saw several men in a hole near the trail, another hiding behind a tree. The man behind the tree asked, "Can I come out?"

"Make a break for it!" Sparks replied. Running for the tank, the man got only a few yards before being gunned down. Sparks snapped. He jumped down from the tank and ran over to his men. The first was about 50 yards away, shot in the chest and too heavy to carry, so Sparks dragged him back to the tank and managed to lift him onto it. The whole time, no SS men fired at him.

Pressing his luck, the young officer ran back and got two more men, hoisting them onto the tank's rear deck. Only a few minutes passed, but they were long ones. At any second a burst of fire could cut Sparks down, but for some reason no one shot at him. "Inexplicably, the German troops did not fire at me during this recovery operation, although I was an easy target," Sparks later wrote.

With the wounded loaded, Sparks ordered the tanks back down the trail, both of them banging away with their machine guns. One soldier had a broken leg, so Sparks tied a splint to it with an ammunition belt. After going a few hundred yards, Sparks again came under fire, but aside from tearing up the external stowage on the second tank no serious damage was done. Both Shermans made it back to the command post. Sparks was exhausted and wondered how he had survived.

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ABOVE: One member of a 45th Division 3.5-inch rocket launcher ("bazooka") team loads while the other prepares to fire. BELOW: A 45th Division soldier rushes past a casualty below a road occupied by a jeep and Sherman tank near Reipertswiller, January 15, 1945.

Collection of Alvin "Bud" McMillan

Bernard Fleming, whose men Sparks had rescued, felt the morale of the unit soar after hearing what their leader had done. "Our commander had proved once again that he valued his soldiers' lives and was willing to take large risks on their behalf."

Five companies of Americans were still trapped in the hills ahead, however. Could they be rescued as well?

Corporal Johann Voss had watched Sparks's entire rescue from his machine-gun nest in the rocks overlooking the bridge. He saw the two tanks coming up

the trail toward the bridge, the lead tank firing its machine guns. That tank suddenly spun on the ice and slid sideways; an enterprising panzerfaust gunner immediately lobbed a rocket into it. Smoke poured out and Voss watched the crew bailing out and taking cover behind the second tank. The hulk of the first tank shielded the second from the German antitank fire.

In Voss's recollection, an American jumped from the second tank and sprinted to the hollow where his wounded fellows lay. He went back and forth, taking wounded soldiers and laying them on the deck of a tank. Voss viewed the man through his binoculars and thought he was an officer. Impressed by this selfless act of bravery by an officer for his men, neither Voss nor his fellow SS men fired at the American, who finished his task and left with the tanks the way he'd come. Voss later wrote, "There was no honor to be won by firing upon this death-defying act of comradeship."

A few hours passed, and the sun began to set. The Germans had no food, and everyone was hungry. One of Voss's men, a private named Stricker, asked to have a look at the tank they'd knocked out the day before. The corporal gave his assent, cautioning the soldier to be careful not to draw friendly fire and to be back within a half hour. Stricker carefully made his way down the slope. Before his half hour was up, he came back with captured cigarettes, cookies, and several C-rations for the men to share.

Sparks's act of bravery was not the end of the battle. A battalion of the 179th Infantry, another regiment of the 45th Division, was committed to the fight but also unable to break the German deadlock around the surrounded 157th troops. That essentially ended the efforts for January 18. It had been a day of frustration and courage, failure and heroism for the Americans. The encircling Germans were no better off, but for the moment they had the upper hand.

A new plan was drawn for the next day. All units would hold in place except the 179th soldiers and the 1/157. They would attack in an attempt to end the siege.

National Archives

American troops pass a destroyed weapons carrier in Reipertswiller on their way into Germany. The little-known battle was a drama of courage, misery, and struggle that cost more lives than it was perhaps worth.

January 19 began with more German shelling and small attacks by infantry designed more to keep the Americans in place than anything else. Within the perimeter the remnants of Companies C, G, I, K, and L were almost out of ammunition and had no medical supplies to treat the wounded. Some men hadn't eaten for two days. Still, they held out, refusing to give in and praying for their fellow Thunderbirds to reach them.

The attack went off as scheduled but accomplished nothing, the only tangible result being heavy American casualties. Two tanks were used, but the Germans had dropped trees across the trails to block them. One tank slid on the ubiquitous ice and flipped over into a ditch. More tanks came up and blasted away with cannon and machine guns to no avail.

In the afternoon several men evacuated earlier for exhaustion were reorganized and placed in the line to plug gaps. Cooks and clerks from the battalion headquarters company joined with Company E to attack near Hill 420, but this action failed as well. The German grip on the area seemed unbreakable.

All too aware of the plight of his soldiers, Colonel O'Brien began planning an airdrop for the next morning; it seemed the only way to get anything through. The 2nd Battalion, 411th Infantry, 103rd Division was brought in to join in the relief effort. Other rifle companies would conduct feints to distract the Germans or fire their weapons to confuse them about the main effort.

Though the batteries were slowly dying in the cold, the surrounded companies still had tenuous radio contact with their headquarters. They reported they were beating back enemy attacks but the SS were still managing to infiltrate around them. The Germans were liberally equipped with automatic weapons. Enemy artillery observers were well positioned.

The Americans knew this because each time they tried to push the enemy back concentrated rocket and artillery fire fell upon them. All the companies urged headquarters

to get to them soon. Oddly, at 4:52 PM, 3rd Battalion headquarters informed all its companies, "Russians now fighting on border of Germany."

The next morning, January 20, was cold, and before long, heavy snow began falling. The 411th Infantry's attack went in as planned but, like those before, achieved nothing. The SS troops were suffering too, but they were skilled and determined to maintain their grip on the five trapped companies. The airdrops were attempted in the morning, but with the heavy blizzard, no supplies reached the Americans.

Just after midday the SS sent a group to the surrounded GIs under a flag of truce. The senior remaining American officer, Captain Byrd Curtis of Company K, met them. The Germans showed Curtis their positions on a map to prove they were indeed surrounded. The SS officers also promised not to mistreat any prisoners. The Americans were given until 5 PM to surrender or they would be smashed.

The surviving 157th men took a vote. All 100, all that were left, voted to continue the fight. At about the same time, the regiment was ordered to prepare to fall back as part of a larger movement by the U.S. Seventh Army. Colonel O'Brien did not want to leave his trapped soldiers, so he ordered them to conduct a breakout while the other companies fired their weapons to distract the enemy. The breakout would begin at 3:30 PM.

When the time came, the remaining troops from the five companies dragged themselves out of the holes they had occupied for five days and began moving to their rear. Before long artillery started falling, sending lethal shards of shrapnel ripping through the freezing air. One officer was hit directly and just disappeared. Most of the men were already wounded, some more than once. The breakout attempt was stopped cold. Before long German infantry were taking the exhausted GIs prisoner in large numbers.

Only two soldiers made it back to the 157th's lines: Pfc. Benjamin Melton and Private Walter Bruce, both from Company I. Melton reported they set out with another man who was soon killed by machine-gun fire. The two stayed off the trails, cutting through the woods to avoid the enemy.

They saw some prints left by American shoe-pacs (winter footwear) and followed them until they saw a shelter half that appeared to cover a foxhole. Hiding, they watched it until an American soldier poked his head out from beneath it. "You can imagine how glad we were to see that guy," Melton said.

Since viewing Sparks's rescue, Corporal Voss had experienced cold, hunger, and long hours without sleep. Hiding in his foxhole from relentless artillery strikes, he dozed and dreamed of becoming a farmer after the war. Then he found out the trapped Americans had surrendered. It was over.

The next day, he and his comrades were pulled off the hill. They passed through part of the battle area and saw frozen bodies still on the ground. Voss had to be treated for frostbite to his toes.

For the captured Americans, their initial experience was surreal. SS units were infamous for brutal treatment or execution of prisoners. The massacre of GIs at Malmedy was a recent event. The captured survivors of the 157th were taken behind German lines to the SS unit's mess line and allowed to go through it. Johann Voss heard each American was given a box of German chocolate as well, leaving the SS soldiers without any.

The Germans were so impressed by the courageous resistance their foe had offered, the prisoners were treated with full honors before they were marched off to captivity. There were 25 officers among the prisoners, and they were received at the 11th Regiment headquarters with dignity. The commanding general of the 256th Volksgrenadier Division, another unit engaged in Nordwind, later met with and praised each officer for the 157th's defiant stand at Reipertswiller.

The mood on the American side was one of disappointment and anger. The 157th Regiment was pulled off the line on January 21. More snow was falling as tired soldiers staggered back from their foxholes to board trucks lined up to take them to the rear. The losses were heavy. Seven company commanders and 30 platoon leaders were gone. In total, 600 American soldiers were dead, wounded, or captured. In effect, Sparks's 3/157 had been wiped out, and the other two battalions had taken grievous casualties. In the coming weeks, other divisions of the Seventh Army were combed for replacements to rebuild the 157th to fighting strength.

Sparks had an emotional meeting with General Frederick. It quickly fell apart. A tearful Sparks told Frederick if he had to do it over, "I'd go against your orders and pull the battalion out while I could." It was enough to make the general lose his temper and Sparks fired back. An argument ensued and the two never reconciled. When Sparks was recommended for the Distinguished Service Cross for his actions on January 18, Frederick denied it.

Sparks didn't seem to care anyway. Like many officers, the traits that made him a good combat leader also made him difficult with superiors, particularly those of whom he thought little.

The 157th Regiment would be reconstituted over the following few weeks. It would go on to cross the Siegfried Line and the Rhine River before fighting at Aschaffenburg, Nuremberg, and Munich. Sparks and a company of 3rd Battalion would liberate the Dachau concentration camp. The men taken prisoner at Reipertswiller would go to various POW camps to wait out the war's end.

Sparks went on to rebuild the postwar Colorado National Guard and would eventually rise to command it.

Johann Voss became a POW himself and, as a member of the SS, looked forward to an uncertain fate. He became a clerk for the U.S. Army before going on to a career as a corporate lawyer.

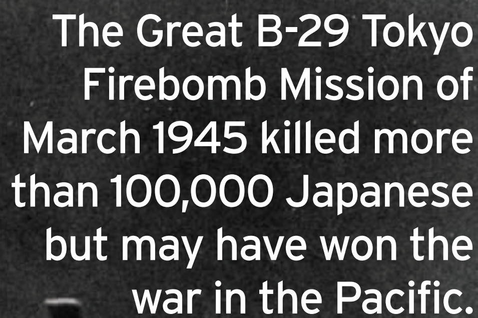
The Battle of Reipertswiller was a drama of courage, misery, and struggle. Since it was a relatively small battle coinciding with larger events, it received relatively little attention. The men who fought there remember it.

Along with Anzio and Dachau, the battle was Sparks's worst memory of the war.

Operation Meetinghouse: Part of an armada of B-29 bombers on their way to bomb Tokyo, March 9-10, 1945. With over 100,000 people killed, a million left homeless, and nearly 16 square miles of the city reduced to ashes, the raid is considered the single most destructive aerial attack of the war.

LOW LEVEL, NO GUNS

BY ROBERT F. DORR



The Great B-29 Tokyo Firebomb Mission of March 1945 killed more than 100,000 Japanese but may have won the war in the Pacific.

MAJOR SAM P. BAKSHAS WOKE UP that morning with the secrets in his head.

Bakshas was one of the men flying B-29 Superfortress bombers from three Pacific islands—Guam, Saipan, and Tinian. A writer dubbed these men "the thousand kids." There were actually several thousand, and they were giving heart and soul to bombing the Japanese home islands—what they called "the Empire"—with no success. They were dropping bombs from high altitude and not hitting much. The air campaign against Japan was failing.

Bakshas believed the situation could be turned around.

Bakshas was 34. He was older and bigger than the Superfortress crewmembers around him. He was six-feet-one and almost 200 pounds. He was from Fergus County, smack in the center of Montana, and had courted his wife Aldora with the gift of an airplane ride. Today, Bakshas commanded the 93rd Bombardment Squadron, part of the 19th Bombardment Group.

In Guam's affable climate, many B-29 crewmembers had taken scissors to their long khaki trousers to create frayed and sloppy-looking shorts. Not Bakshas. Sammy Bakshas—always Sammy, never Sam—did not understand sloppy. Bakshas was wearing long khakis and low-quarter shoes as he prepared for a day that would end with an evening takeoff.

Bakshas would be one tall guy among many today in a B-29 that was named *Tall in the Saddle* because no one in its regular crew was less than six feet in height. Bakshas was not a regular crewmember but would command *Tall in the Saddle,* relegating airplane commander Captain Gordon L. Muster to co-pilot duty.

"There was a wonderful urgency and an exhilarating secrecy about the B-29 outfits in the Marianas," wrote St. Clair McKelway in a perspective. Even after other crewmembers began learning the two key secrets—low level, no guns—Bakshas kept them locked up, much like his buttoned-up expression, as his morn-

All Photos: National Archives

ABOVE: Not all the raiders escaped scot-free. Here half a B-29 that ditched in the sea remains afloat with a surviving crew member clinging to the No. 1 engine at top. BELOW: Maj. Gen. Curtis LeMay, head of the 21st Bomber Command, observes Tokyo-bound planes lifting off from Guam.

ing unfolded.

It was 10:30 AM, Chamorro Standard Time (Guam time), March 9, 1945, the morning of the great firebomb mission to Tokyo. The B-29s would arrive over the Japanese capital in tomorrow's early hours. It was the mission for which 21st Bomber Command boss Maj. Gen. Curtis E. LeMay changed tactics in hope of changing the war against Japan.

Staff Sergeant Carl Barthold, radio operator of a B-29 named *Star Duster,* began the day in his Quonset hut on Saipan by writing a letter home. The right blister gunner on Carl Barthold's bomber crew was certain that none of them would return from tonight's mission. He stuffed everything he owned into his B-4 bag—the multipocketed, fabric-covered equivalent of a travel suitcase—and left his belongings tidily packed in the center of his cot.

"He said he was looking at his possessions for the last time," explained Barthold.

Barthold, a radio operator with the 870th Bombardment Squadron, 497th Bombardment Group—a rail-thin, 21-year-old Missouri boy at five-ten and a lightweight 142 pounds—wore underwear and clogs trudging to and from the shower, a hundred yards uphill from his Quonset.

Outdoors, he had a spectacular view of Aslito airfield, now renamed for Navy Commander Robert H. Isely, who had been killed a year earlier strafing the place when it was in Japanese hands. Isely's name was spelled wrong when the name was bestowed, and the airfield was now Isley Field. Its two parallel 8,500-foot runways were straddled by parking spots for 100 aircraft, looking like giant silvery cigars with wings.

"That guy has me spooked," Barthold said aloud when he looked at the B-4 on the cot. That's how it would have looked if Didier had gone to heaven, but as far as Barthold knew he had only gone to chow.

Two months ago, Barthold had had a bombardier die in his arms high over the Empire. Last night, Barthold and the rest of the crew of his B-29 had gotten a casual heads up from airplane commander Captain James M. Campbell, who had been told the secrets—low level, no guns. Barthold and his crew would take off this evening, climb into the night, and assault Tokyo not from the usual height of 28,000 feet—from which their bombing hadn't been accurate—but at low level at around 8,000 feet.

Saipan, with its tall cliffs from which so many Japanese had flung themselves in suicide leaps when the Marines were in the process of securing the island, was a place of raw beauty with deep blue, wave-capped ocean readily visible on all sides. And it was a place from which a B-29 Superfortress could plummet down toward the sea after leaving the runway's end, taking a pronounced dip before gaining sufficient power to climb aloft—or go smashing into an ocean that could crumple it and swallow it up.

It was 11:30 AM, Chamorro Standard Time, March 9, 1945. Within easy eyesight of Saipan was Tinian—38 square miles of coral rock, dust, jungle, and cane fields, crowded with B-29 hardstands. Tinian was a little green slab formed by prehistoric volcanoes and dead coral animals. Tinian's North Field boasted three crushed-coral runways 8,500 feet long and 200 feet wide, running parallel, with a fourth soon to be added and with parking revetments for 265 Superfortresses, making it the busiest airport in the world.

Tokyo (code name: Meetinghouse) was Japan's largest city, built along the edge of a big, gently curving bay. It was the center of Japanese life. For symbolic reasons, the Americans planned not to bomb the Imperial Palace, but the rest of the city was fair game with its military assembly plants and vehicle factories. Moreover, it was home to a cottage industry in which tens of thousands of Japanese families manufactured small parts for the military. The wood and paper houses that would fall beneath LeMay's firebombs were also factories.

About six million people lived in Tokyo on the eve of the B-29 strike that would kill many inhabitants, send more fleeing to the countryside, and reduce the city's popula-

ABOVE: Ground crewmen watch as a B-29 Superfortress takes off from Saipan. Other bombers left from Guam and Tinian and converged over Tokyo. TOP: A B-29 named A*merican Beauty* heads toward Japanese targets in June 1945.

tion by fully half. Astonishingly, the city had only a token fire department and almost no civil defense infrastructure. It was a city of fragile houses with sliding shoji screens, floored wooden roka or passageways, and fusuma, or partitions of wood and paper. It was no accident that the Americans were coming to Tokyo with fire.

On tonight's mission, E-46 chemical incendiary bombs would rain down on Japan like giant firecrackers. They came in bunches of 47 small bomblets called M69s, strapped together inside a metal cylinder fused to break open at 2,000 or 2,500 feet. Three to five seconds after the big firecrackers hit, they would go off. An explosive charge would violently eject a sack full of gel that would burn intensely.

The sack held the gel in one spot, thereby igniting a hotter fire. Other weapons being employed today were the E-28 incendiary cluster bomb and the M47, a petroleum-based bomb that would be carried by the lead B-29 piloted by the in-air commander of the mission, Brig. Gen. Thomas "Tommy" Power—and would penetrate buildings and scatter gel in all directions to burn out the insides.

It was 1 PM, Chamorro Standard Time, March 9, 1945. In the terminology of Field Order No. 43 issued at 8 AM on March 8, 1945, by 21st Bomber Command, Tokyo was "the urban area of Meetinghouse." The order tasked men like Bakshas on Guam (in the 314th Bomb Wing) to attack at 5,000 to 5,800 feet, those on Tinian (313th Bomb Wing) to strike at 5,000 to 5,800 feet, and those on Saipan (73rd Bomb Wing) to bomb at 7,000 to 7,800 feet. No armada of warplanes had ever before been launched in such numbers without flying in formation. No American heavy bomber had ever flown so low on a mission against a major target.

Depending on the island—Guam, Saipan, or Tinian—and depending on the bombardment group (a dozen in all), the briefing for the March 9-10 mission to Tokyo was held at different times throughout Friday the 9th. Most B-29 crewmembers shuffled into giant Quonset huts where crews sat together and stared up at maps and charts. The group commander, the intelligence guy, and the weather officer each took his turn to strut and fret on the stage.

At the briefing for the 19th Group on Guam, some kind of conversation with a bit of an edge took place between 93rd Squadron commander Bakshas and airplane commander Muster. Apparently, there was tension between the two over the risks in tonight's journey to the Empire.

At the 497th Bomb Group on Saipan, Carl Barthold's briefing was held inside a large concrete building. The intelligence officer talked too long about Japanese antiaircraft guns, fighters, and mistreatment of prisoners. Said Barthold, "My plane was a pathfinder and we would be taking off 45 minutes before the rest of the wing. The intel officer, who'd never seen the Empire from the air, wasn't much help."

ABOVE: Other cities were also targeted. Following up on the Tokyo raid, B-29s from 500th Bomb Group, 73rd Bomb Wing, drop incendiary bombs—dubbed "Molotov flower baskets"—on Yokohama, near Tokyo, May 1945. OPPOSITE: A B-29 Superfortress bombardier, forward of the pilot and co-pilot, is shown at work in his "office."

Similar briefings took place on Tinian. Fears were quietly discussed. Many of the "thousand kids" were terrified of the prospect of ditching at sea. Of 48 Superfortresses known to have put down in the Pacific so far with 528 airmen aboard, air-sea rescue had picked up just 164. An elaborate system that used PBY Catalina and PBM Mariner aircraft, seaplane tenders, and submarines was taking shape, but B-29 crewmembers knew that the ocean was vast and a bomber could be reduced to a tiny speck bobbing on the waves. Worse, many B-29s were short of Mae West flashlights because crewmen borrowed them for use in their quarters and forgot to bring them along.

At Saipan's Isley Field in late afternoon with the dull yellow sun sneaking in and out of tropical rain clouds, Barthold and the Campbell crew piled out of a truck at the hardstand in front of their looming, four-engined heavy bomber.

In brighter light, the plane's silver surfaces would have gleamed. It was a thing of beauty to some, but mostly, the B-29 looked functional, its cigar-shaped fuselage confronting Barthold, its 141-foot wing spread in front of him with the four-bladed propellers ready to turn. The ground crew was finishing its final checks, having spent many hours since last night inspecting systems, loading bombs, and loading fuel.

"There were 12 pathfinder planes in our group," Barthold said. "We were to take off a half hour before everybody else. We were to arrive first and put a big X across Tokyo for those coming behind us to see."

Some airplane commanders required a lineup inspection at planeside. Barthold said, "Our plane commander [Campbell] had confidence in us. We didn't hold a formal inspection. The ground crews had our gear, including our Mae Wests, already on the plane. Our plane commander let us behave like adults as we checked our own gear, climbed aboard, and prepared to take off."

With the rest of the crew, Barthold entered the aircraft by climbing up into a dark space behind the nose wheel. Once seated in his radar compartment he could hear the pilots and flight engineer on the interphone, running through the engine-start checklist.

"I was the radio operator," Barthold said. "I sat next to a bulkhead facing the right side of the plane. I had my radio, key, and codebooks. I was jammed in there. I was in a little chair that infringed on the upper and lower gun turrets, and I was facing to the right. My head pressed up against the four .50-caliber machine guns in the upper turret, and they always used to rattle in my head.

"Across from me was the navigator, who faced forward. In front of me but separated by a partition was the flight engineer, who faced to the rear. Were we all a little more nervous than usual because we were going to Tokyo at low altitude? Yes. Yes, we were."

Barthold's B-29 trembled, and the noise level went up as the engine-start procedure began. It was 5:15 PM, Chamorro Standard Time, March 9, 1945.

Takeoff was a tense time. Takeoff for Tokyo in a B-29 fully loaded with fuel, bombs, and ammo was a dangerous proposition. Almost everyone on Guam, Saipan, and Tinian had seen one crash. If you lost an engine past the halfway mark of the takeoff run, you probably would not be able to stop before the end of the runway, and the plane would crash off the cliff or go into the water and explode.

But, as Barthold was well aware, on Saipan at least there was a margin of safety if it was used correctly. At Isley Field it was common on takeoff for the pilot of a fully loaded

B-29 to hold the wheels to the runway until the final few hundred feet (the last two percent of the runway's length), hauling back at the last possible instant to lurch over the road along the cliff edge, then diving full throttle for the sea far below, gaining airspeed while retracting the wheels and finally beginning the long takeoff climb as the belly of the plane virtually skimmed the water. More than one of the crews failed at this maneuver, especially at night.

Before dusk, the pathfinders were in the air while crewmembers of the remainder of the attack force of 334 B-29s on three islands were climbing aboard their planes. Because Guam was farther from Japan, its B-29s were already taxiing out.

Closely observing the noisy, busy preparations was LeMay. To St. Clair McKelway, the general's public relations officer, there was "something deeply, bottomlessly disturbing in this stocky, plain-looking new commanding general." LeMay was only one of many who had thought of using firebombs to ignite Japanese urban areas, but he alone bore responsibility for ordering his men to attack at low level and to leave their ammunition behind.

LeMay wasn't at the controls of a B-29 for today's Tokyo mission because General Henry H. "Hap" Arnold had made him part of a small inner circle who knew about a supersecret U.S. program to create a new weapon—the atomic bomb. No one with that knowledge could be permitted to risk falling into Japanese hands.

LeMay and his chief of staff, Brig. Gen. August Kissner, were in a jeep at North Field, Guam, as late afternoon blended into evening. They watched as Power led the first B-29s into the sky. It was 5:36 PM, Chamorro Standard Time, March 9, 1945.

Tall in the Saddle, with Sammy Bakshas in the airplane commander's seat, made a smooth takeoff not far behind Power. They climbed into the early evening sky while B-29s were still warming up on Saipan and Tinian. Bakshas and Muster were now among the most experienced of B-29 pilots and, when teamed with their flight engineer 2nd Lt. Leland P. Fishback, they could make the huge bomber perform miracles. This was a B-29 crew at the top of its game.

Tall in the Saddle, climbing, was in fine shape. Not a nick, not a scratch spoiled the smooth, natural metal skin of the Superfortress. Her four R-3350 engines, treated lovingly by the ground crew assigned to Muster, were purring smoothly—something the trouble-prone R-3350 did not always do.

It was 6:05 PM, Chamorro Standard Time, March 9, 1945.

TAKEOFF FOR TOKYO

When they began their takeoff roll, many B-29 crewmembers believed that their humorless, cigar-chomping commanding general, LeMay, was sending them to die.

Not sure they were wrong, LeMay spent the early evening hours watching B-29s take off from Guam in fading daylight. He told McKelway, "If I am sending these men to die, they will string me up for it." LeMay later told aide Lt. Col. Robert S. McNamara, "I was under pressure from people who didn't want a change in the way we were doing things. I felt I had to ignore them and take a chance."

It took two hours and 45 minutes for 334 B-29 Superfortresses to take off, one to three minutes apart, from six runways on Guam, Tinian, and Saipan. No one had ever sent this many bombers aloft in so short a span of time. Some planes were tucking in their gear and climbing out while others were still turning engines. The choreography may not have been perfect, but the beginning of the mission to Tokyo was going as smoothly as anyone could expect. The largest force of bombers ever assembled in the Pacific was off to a good start.

One of the first pathfinders to lift skyward was radio operator Carl Barthold's airplane. Once he could reassure himself that he had survived takeoff, always a

tense time, Barthold was gifted with time to do what military men have done since war was invented—hurry up and wait. His radio operator's station was a mini-office surrounded by gadgetry, wires, and codebooks. Barthold sat facing the outer skin of the fuselage with the back of the flight engineer's panel to his left and the bomb bay bulkhead to his right.

He had enough room not to feel claustrophobic but only one small aperture that gave a glimpse of the sky and sea outside, growing darker as night descended. Much of his world consisted of the wires and dials of his four-channel, high-frequency SCR-522 command radio set. He wore earphones and had a microphone handy.

Incendiary bombs rain down on the waterfront installations of Osaka, 240 miles southwest of Tokyo, in June 1945. A series of raids in March, June, July, and August 1945 caused 10,000 deaths at Osaka.

"Goddamn LeMay's going to get us killed," somebody said on the interphone.

"Cut it out," said the voice of airplane commander Campbell. "Let's have some interphone discipline, gentlemen."

The Tokyo mission was in the air. Of the 334 aircraft that took off from three islands, 279 were going to make it all the way while the remainder aborted for technical reasons.

There was no formation. Each aircraft was on its own, its airplane commander entrusted with the souls on board, its navigator and his special skills never more important than now. The pathfinders were way out in front with most of the bomb groups from Guam coming next, having taken off early enough to overtake the Superfortresses from Tinian and Saipan.

Power's 314th Wing from Guam was assigned to approach Japan flying between 5,000 and 5,500 feet. Brig. Gen. Emmett "Rosy" O'Donnell's 73rd Wing from Saipan was to fly between 3,000 and 3,500 feet while Brig. Gen. John H. Davies' 313th Wing on Tinian was to make the long journey to the Empire at 4,000 to 5,000 feet. The separation of bomb wings by height above a dark and cruel sea was the best hope of preventing air-to-air collision—and, in fact, none occurred.

Anyone familiar with precision daylight bombing formations in Europe—stepped, spaced, boxed aerial assemblages of bombers proceeding together in book-like unison—would have believed that LeMay's entire B-29 force had lost all sense of discipline or, even, of common sense. Perhaps the men at the controls of these planes were completely mad.

A B-29 gunner recalled, "Occasionally on a night I would look out my blister at the ocean down below and it would look like we were passing over a series of connected super highways with lights. What I was observing were lines formed in the currents of fluorescent sea life. It was eerie, not in a comforting way but in a troubling way." While a bomber was droning toward its target there was too much time to think. Another Superfortress gunner recalled dwelling on the terrible danger of an overwater bailout, which was even more fearsome than a ditching. "Many opened their chute harnesses early so they could get out and not be fouled by their chute in the water. The admonition was, 'Do not attempt to judge your height and jump from your harness until your feet are wet.' Over a calm sea it is very difficult to tell if you are at 100 feet or 1,000 feet—even in daylight!"

The weather in and around Tokyo painted a confusing picture. Because the bomber men planned to burn down the Japanese capital, their leaders had waited for a night when the air was dry and there was wind in the target area. The wind, of course, would spread the fire. It was indeed dry and windy at the capital, but all manner of weather conditions were roiling up in the region. Snowstorms were churning in several locations near Tokyo.

It was 9:30 PM, Chamorro Standard Time, March 9, 1945.

Boring through the night sky was *Tall in the Saddle* with Bakshas in the left front seat watching instruments, keeping a grip on the control yoke, working with Muster and Fishback, monitoring changes in the behavior of the four engines, and checking in frequently with navigator John Hagadorn. Muster was annoyed. He and Bakshas had gotten along famously until today, but Muster felt his squadron commander was overstepping by taking the pilot-in-command role.

With smoke and dust rising below, a B-29 bomber flies over Osaka in June 1945.

In many ways, the most important crewmember on the long journey toward the Empire was Hagadorn.

If he screwed up, nothing else would matter.

Hagadorn kept up with the position of the plane at all times through dead reckoning (keeping track of speed, direction, and changes in course) and making observations of celestial objects. When he wanted to make a "fix" with his hand-held sextant, Hagadorn crawled into the tunnel above the bomb bay and looked up into a transparent astrodome. It was 11:30 PM, Chamorro Standard Time, March 9, 1945.

Hours passed. The dark sea rushed beneath the B-29s. Tokyo drew nearer. On Guam, many on LeMay's staff caught up on their sleep with the general's permission. LeMay usually had no difficulty sleeping, but tonight he was wired up. He would not know until the main force began to bomb Tokyo two hours after midnight whether his shift in tactics was a brilliant stroke or a death warrant. LeMay always looked grim because of a condition called Bell's palsy, which paralyzed facial muscles near his mouth and made it almost impossible for him to smile.

The general in command of thousands of bomber crewmembers was alone in his Quonset headquarters but for St. Clair McKelway, who had become a confidant and who had been told to wait to hear the "bombs away" message expected in early morning. LeMay and McKelway exchanged small talk. Neither was good at it. Both felt the tension as they awaited news from Tommy Power at the cutting edge of the attack force.

LeMay talked of his wife and child back in Cleveland. This was out of character. McKelway wrote that LeMay had no life "beyond games of medicine ball to keep fat off a body that tends toward fat, games of poker to relax as best he can a mind that actually never stops thinking about how to do the job better the next day, and a little reading, mostly fairly serious, to improve a mind he considers inadequate."

With midnight approaching and the first pathfinders due over the Japanese capital, a curious kind of loneliness bonded McKelway and LeMay. McKelway sensed it was as if there was no difference in rank between them. "We won't get a bombs-away for another half-hour," LeMay said, looking at his watch. "Would you like a Coca-Cola? I can sneak in my quarters without waking up the other guys and get two Coca-Colas and we can drink them in my car. That'll kill most of the half hour."

They drove the hundred yards to LeMay's tent in his staff car, and he sneaked in and got the sodas. "We sat in the dark, facing the jungle that surrounds the headquarters," McKelway wrote—two men, no rank between them now, pulling on the six-ounce Coca-Colas and

knowing that within a very short time the thousand kids would be arriving over the Empire. It was 11:50 PM, Chamorro Standard Time, March 9, 1945.

TOKYO ALIGHT

So were Tokyo's streetlights really lit up before the bombers arrived? Some B-29 crewmembers said the city was aglow when they arrived, with no sign of a blackout in effect.

Some B-29 crewmembers listened to Japanese radio stations while they flew toward the Empire. A crew led by Captain Thomas Hanley of the 497th Bomb Group entered the final hours of the approach to Tokyo listening to a song whose title they would remember with irony: "Smoke Gets in Your Eyes."

The weather that night was a quarter-moon. Most B-29s were making a key turn at Choshi Point, east of Tokyo, the IP, or initial point, where they would turn west to begin their planned run-in. Crewmembers squeezed into their flak vests, heavy and cumbersome garments with steel plates that could absorb shrapnel. Some donned helmets that interfered with earphones but promised head protection. None saw any night fighters. Antiaircraft gunfire would be a formidable adversary, but the fighters were somehow missing.

The defense of Tokyo was a paradox. Americans were warned about and on occasion reported seeing barrage balloons, gas-filled aerial bags that were used to string vertical cables in the path of approaching airplanes. Yet, the Japanese had never had any. Japan had night fighters and very capable night-fighter pilots, yet most Americans never saw one. At night, Japan's network of antiaircraft guns and searchlights could be terrifying, and sphincters tightened whenever a searchlight beam locked onto a bomber, yet there appeared to be little coordination between the guns and the lights.

An intelligence summary credited the Tokyo region with 500 antiaircraft guns, "as many guns as ever protected the German capital of Berlin." Bomber crewmembers feared these guns, yet they were never as effective as their German counterparts.

Radio operator Carl Barthold remembers being briefed that the Japanese antiaircraft guns were effective from the ground up to 5,500 feet but that a "gap" existed going up to about 10,000 feet where coverage resumed. The need for coverage above 10,000 was obvious because the Americans had wasted many months flying at great heights. "We were told that we were going in through a 'window' where they wouldn't have the capability to shoot us."

Sammy Bakshas of *Tall in the Saddle* would learn that that wasn't quite true. Yet the Americans were approaching a city where every manner of lip service had been paid to defending the urban area and its population, but few practical measures actually had any impact.

Japanese cities had been equipped with air-raid sirens, blackout facilities, and underground shelters for almost 20 years, yet people at home and on the street often ignored

Tokyo night raid, May 26, 1945. The United States hoped that such massive destruction would compel the Japanese to surrender.

View from the bombardier's position in the nose of a B-29. The lead plane has its bomb-bay doors open as the Japanese coast comes into view.

them. In Tokyo, shelter construction, especially in the area near the bay, was complicated because they could not be dug more than a few feet without encountering ground water. Many people simply stayed where they were when the bombers approached. Perhaps inured by the apparent inability of the Americans to hit anything with their bombs, urban residents dismissed the appearance of the *bi ni ju ku,* the B-29, as a "mail run."

The previous day, a strong wind had been rattling the panes in doors and windows all over the city, the same wind the Americans hoped would spread the fire they were bringing, and most people had gone about their day routinely. For the past few nights single B-29s had appeared over the city, not dropping any bombs but flying very low and setting off the searchlights and antiaircraft fire. This was reconnaissance and it made many in the capital uneasy, yet routine activities continued, and after dark the lights may have stayed on.

Or they may not have. Yukiko Hiragama, called Yuki, an eight-year-old schoolgirl who happened to be outdoors that night, remembers nothing about street lights. "Before the bombers came it was a night of darkness and shadows," said Yuki. "The sirens made their powerful sounds in the evening and then night came and there were no B-29s. The sirens were silent and the lights were off when the B-29s arrived." While Yuki remained awake, most in Tokyo went to sleep after the sirens halted, many of them hungry because food supplies were short.

The bombers came, beginning with the pathfinders.

Also awaiting the arrival of the B-29s were Japan's fragmented air defense network and Tokyo's nearly dysfunctional civil defense system.

Airfields were scattered all over the Tokyo region, but the job of defending the capital belonged to the Japanese Army's 10th Flying Division, with 210 fighters. Tonight, as it would turn out, the low-level B-29 approach took the fighter force by surprise. In the early minutes of Saturday, March 10, 1945, they were receiving little direction from ground controllers, and their flights were not coordinated with searchlight and antiaircraft batteries. Fighters prowled the Japanese coast, but their pilots had no guidance from ground radar stations and never came within eyesight of a B-29.

The Army was responsible for antiaircraft gun batteries in and around Tokyo. As LeMay had hoped, they were not prepared to engage B-29s at low altitude.

It was 00:15 AM, Chamorro Standard Time, March 10, 1945.

The B-29 main force arrived over Tokyo, Barthold working his radio as part of the Campbell crew and listening in the night for signals; the Bakshas crew in *Tall in the Saddle* ... they were arriving, all of them, and as fire began to spread in Tokyo, the sound of R-3350 aircraft engines overhead grew to a rolling thunder.

LeMay's B-29s dropped nearly half a million M69 incendiary bomblets on the Japanese capital in the early hours of March 10, razing 16 square miles of the city, transforming darkness into an eerie artificial light, and immersing tens of thousands of human beings in raw heat against which there was no defense.

Joseph Coleman of the Associated Press wrote, "The M69s released 100-foot streams of fire upon detonating and sent flames rampaging through densely packed wooden homes. Superheated air created a wind that sucked victims into the flames and fed the twisting infernos. Asphalt boiled in the 1,800-degree heat. With

Japanese authorities examine the civilian casualties from the Tokyo firebomb raid, March 9-10, 1945. With most of the buildings made of highly flammable material, the toll of death and destruction was extraordinarily high.

much of the fighting-age male population at the war front, women, children and the elderly struggled in vain to battle the flames or flee."

McNamara quoted LeMay as saying, "If we'd lost the war, we'd all have been prosecuted as war criminals." "And I think he's right," added McNamara. "He, and I'd say I, were behaving as war criminals. LeMay recognized that what he was doing would be thought immoral if his side had lost."

The real crime in Tokyo on the morning of March 10 was that the authorities were unready. Civil defense, emergency response, and firefighting personnel were shamefully—criminally—unprepared to handle an all-out assault from above.

There was no defense ordinary people could take against a confetti of exploding M69s. Smothering a bomb with a blanket didn't work. In Tokyo, the authorities had sought to equip each household with a grappling hook, a shovel, a sand bucket, and a water barrel. They were useless. In all of Tokyo, there were almost no air-raid shelters.

The Tokyo fire department was pitiful. In recent months, its strength had increased from 2,000 to 8,100 firefighters. The fire department of New York, which no longer faced any likelihood of being bombed from the air, was made up of almost 10,000 firemen. In 1943, the Tokyo department had 280 pieces of fire apparatus. In early 1945 it had 1,117 pieces. A shortage of mechanics idled more than half of them.

HEAT AND HORROR

It began just after 11 PM Tokyo time, or midnight according to the Chamorro time by which the Americans set their watches. Sirens sounded.

The pathfinders, radio operator Barthold among them, began dropping the self-scattering incendiaries the Japanese called *molotoffano hanakago,* or "Molotov flower baskets," inscribing an "X" throughout the target zone. After a brief pause, the main force of B-29s—400 miles long—spent 2 1/2 hours passing over Tokyo.

They unleashed a fire that was more severe than the conflagrations that razed Moscow in 1812 and San Francisco in 1901, even the fire that followed Tokyo's terrible earthquake of 1923. Even taking the subsequent atomic bombings into account, they ignited the hottest fires ever to burn on Earth.

Once the flames came, there was no escape. In 30 minutes, the fires were out of control.

The conflagration quickly overwhelmed Tokyo's wooden residential structures. The firestorm replaced oxygen with lethal gases, superheated the atmosphere, and caused hurricane-like winds that blew a wall of fire across the city.

Kiyoko Kawasaki, a 36-year-old mother, ran into the street with two buckets on her head for protection, jogging into a sea of fire and seeing burning bodies floating in the Sumida River. "The prostitutes who hung out by the riverbank jumped into a nearby

pond," she recalled. "But the pond was boiling so they all died."

Twelve-year-old middle school student Yoko Ono saw the inferno from nearby and felt the heat. Yoko was part of the privileged elite in a society where stature meant everything, a stern-looking child whose father, a banker, was being held in an Allied prison camp in Hanoi in Indochina. She hoped to break away from the privileged class of her upbringing to become an artist.

As the firebombing progressed, Yoko took shelter with her mother and two tiny siblings in a special bunker reserved for those near the top of the social hierarchy. It was in the Azabu district of Tokyo, within eyesight of the burning carnage but at a safe distance. As soon as they could get free, Yoko's mother and the three children joined neighbors in a headlong flight away from the burning city, out into open country.

But farmers in the countryside were starving and unenthusiastic about sharing food with a horde of urban refugees. In the weeks ahead, reduced to foraging from farm to farm, Yoko's family experienced hard times. She begged for food while homeless and pushing family belongings in a wheelbarrow. "I did not need to be told about hardship," she said. "I experienced it."

Piles of charred corpses fill a Tokyo street after the March 9-10 raid. The number of dead is estimated to have been as high as 200,000, but the actual figure may never be known.

Tokyo residents flee the flames in the Ginza District.

30 SECONDS OVER TOKYO

One of the casualties in the flickering sky near a burning Tokyo was *Zero Auer,* a B-29 piloted by airplane commander 1st Lt. Robert Auer of the 19th Bombardment Group from Guam. An Auer family member later wrote of "the brute physical challenge" of controlling the 65-ton Superfortress while it was being batted around like a toy—demanding every ounce of muscle that Auer and 2nd Lt. Harold D. Currey, Jr., could muster.

An antiaircraft shell hit the *Zero Auer* dead center, possibly detonating inside the open bomb bay. *Zero Auer* traveled several miles north of Tokyo and then was seen to break into three distinct pieces, with red-orange torrents of fire pouring out of the gaps. One crewmember bailed out, but the others perished. It was 2:05 AM, Chamorro Standard Time, March 10, 1945.

A third of the way through the procession of B-29s over Tokyo, Japanese antiaircraft artillery connected with *Tall in the Saddle* and its 11-man crew.

Just after "bombs away," an exploding flak shell made a direct hit on *Tall in the Saddle*. According to the missing aircrew report, the B-29 was shot down in a location that is "unknown" and at a time that is "unknown." Directly over the gathering firestorm, the Bakshas bomber appeared to halt in mid-air, tilted strangely, and descended, fire spurting back from its wing fuel tanks.

Tall in the Saddle was the only Superfortress to be shot down directly over the Japanese capital and to fall into the center of the target area. It would have taken between 30 seconds and one minute for a B-29 to traverse the nearly 16 square miles of densely-packed Tokyo that were now white-hot with flames—burning so intensely that ashes streaked the noses of B-29s a mile overhead, while crewmembers could smell burning flesh. *Tall in the Saddle* appears to have been struck by a direct hit squarely at the mid-point of that traverse.

Brigadier General Thomas S. Power—Tommy—the overall air commander of the mission, stayed over the target for 90 minutes. Power was making red crosses on a hand-held map to show blocks where fires broke out. He wore his red crayon down. Crewmembers were becoming nervous. No one liked lingering this long over a well-defended target.

In a report, Power wrote, "The best way to describe what it looks like when these fire bombs come out of the bomb bay of an airplane is to compare it to a giant pouring a big shovelful of white-hot coals all over the ground, covering an area about 2,500 feet in length and some 500 feet wide."

Power may have been the hardest man among the thousands of Americans over Tokyo that morning, but he was not unmoved by the human suffering beneath his wings. As he kept looking down, he

Looking more like Hiroshima after the atomic bombing, Tokyo, the world's third largest city, was reduced to rubble by war's end.

occasionally wiped his eyes. One crewmember believes the words "poor bastards" escaped from his lips.

Power's was one of the last B-29s to depart the target. It was 3:05 AM, Chamorro Standard Time, March 10, 1945.

Second Lieutenant Hubert L. Kordsmeier was airplane commander of a B-29 Superfortress of the 498th Bombardment Group flying from Saipan. For reasons that may remain forever a mystery, shortly after depositing their firebombs on a burning Tokyo, three B-29s from three different bomb groups—two from Guam and one from Saipan—flew into the same mountain in Japan at about the same time. Kordsmeier's was first. It was 3:40 AM, Chamorro Standard time, March 10, 1945.

How could three planes fly into the same mountain? And how did three B-29s end up a hundred miles northeast of Tokyo? Kordsmeier and his pilot, 2nd Lt. Claude T. Dean, must have struggled with the controls before slamming into 5,657-foot Mount Fubo in the Zao Mountains.

Cherry the Horizontal Cat, commanded by Firman Wyatt of the badly battered 29th Bombardment Group operating from North Field, Guam, was the second of the three B-29s that went into the slope of Mount Fubo. Captain Samuel M. Carr was airplane commander of the unnamed third Superfortress to collide with the looming slope in darkness and swirling snow. Again, all aboard were lost.

It was 3:30 AM, Chamorro Standard Time, March 10, 1945. The great firebomb mission was wrapping up.

The "all clear" sounded at 2:37 AM Tokyo time, or 3:37 AM on the clock used by the Americans. Stacked blackened corpses were being hauled away on trucks. Tokyo resident Fusako Sasaki said she saw "places on the pavement where people had been roasted to death."

Mark Selden, who wrote in *Japan Focus,* contends that the widely seen figure of 100,000 who ultimately died in the bombing is misleading. Wrote Selden, "The figure of roughly 100,000 deaths, provided by Japanese and American authorities, both of whom may have had reasons of their own for minimizing the death toll, seems to me arguably low in light of population density, wind conditions, and survivors' accounts.

"With an average of 103,000 inhabitants per square mile (396 people per hectare) and peak levels as high as 135,000 per square mile (521 people per hectare), the highest density of any industrial city in the world, and with firefighting measures ludicrously inadequate to the task, 15.8 square miles of Tokyo were destroyed on a night when fierce winds whipped the flames and walls of fire blocked tens of thousands fleeing for their lives. An estimated 1.5 million people lived in the burned out areas."

Weeks later in an Army publication, Staff Sergeant Bob Speer wrote, "The great city of Tokyo—third largest in the world—is dead. The heart, guts, core—whatever you want to call everything that makes a modern metropolis a living, functioning organism—is a waste of white ash, endless fields of ashes, blowing in the wind. Not even the shells of walls stand in large areas of the Japanese capital. The streets are desolate, the people are dead or departed, the city lies broken and prostrate and destroyed.

"The men who accomplished the job study the photographs brought back by their recon pilots ... and stand speechless and awed. They shake their heads at each other and bend over the photos again, and then shake their heads again, and no one says a word."

Vast warehouse areas, big manufacturing plants, railroad yards, stocks of raw materials, the whole complex of home factories—all of it was gone. The broadcast studio JOAK, from which the voice of Tokyo Rose was sent out to taunt B-29 crewmembers, was heavily damaged. The Imperial Hotel, designed by Frank Lloyd Wright, needed serious repair. The biggest railroad stations in Asia—Ueno and Tokyo Central—were completely wiped out.

The torching of Tokyo and Emperor Hirohito's subsequent viewing of the ravaged sections of the city are said to have marked the beginning of the emperor's personal involvement in the peace process.

After 15 hours and four minutes in the air, the great Tokyo firebomb mission's on-scene air commander, Brig. Gen. Thomas S. Power, landed at Guam's North Field. There were dark circles around Power's eyes. The aircraft came to a halt, and two of its engines were still running when Power dropped to the ground.

LeMay greeted Power with a hint of a smile. St. Clair McKelway looked on and tried to read the two men. Power told LeMay that antiaircraft fire had been lighter than he'd expected, Japanese night fighters had not been seen, and the fires in Tokyo, which ultimately combined into a single vast conflagration, had been more devastating than anyone expected.

Three B-29s ditched after the mission to Tokyo. Of 334 bombers launched against Japan in the early evening hours of March 9, 1945, some 279 aircraft arrived over target and passed over the primary aiming point at "Meetinghouse," the center of Tokyo. B-29 Superfortress crews brought home with them the stench of burnt death.

Back from the mission, in the sunlit morning, 1st Lt. Bill Lind of the 497th Bombardment Group taxied into his parking slot, pulled back the window next to his seat, and yelled down to his ground crew, "Hey, boys! Come over to this aircraft and smell Tokyo!"

It was 8:30 AM, Chamorro Standard Time, March 10, 1945.

By the time the guns went silent, B-29s had dropped 104,000 tons of bombs on Japan, reducing to rubble 169 square miles in 66 cities. The bombing missions left homeless 9.2 million civilians, including 3.1 million in Tokyo.

Between June 1944 and August 1945, 402 B-29s were lost bombing Japan—147 of them to Japanese flak and fighters and 255 to engine fires and mechanical failures. The atomic bombings of Hiroshima and Nagasaki, when combined, inflicted less damage than the great Tokyo firebomb raid.

It is the author's opinion that the defeat of Japan without an invasion was caused by the overall B-29 campaign and not solely by the atomic bombings. Remarkably, the plan for the firebombing of Tokyo worked. U.S. casualties were painful but small in proportion to the magnitude of the mission's success.

A crew member surveys the damage to his B-29 caused by Japanese flak guns during an April 1945 raid on the Japanese capital.

Fighting ended August 15, 1945. The formal surrender was inked aboard the battleship USS *Missouri* in Tokyo Bay, on Sunday, September 2, 1945.

Speaking to Allied and Japanese officers, General Douglas MacArthur, now the supreme Allied commander for the occupation of Japan, said, "The issues, involving divergent ideals and ideologies, have been determined on the battlefields of the world and hence are not for our discussion or debate." He might have been referring to the great Tokyo firebomb mission. □

The Tank Museum at Bovington, England, holds the world's finest collection of armored vehicles from 26 countries.

IF ARMORED VEHICLES are your interest, the Tank Museum at Bovington Camp, Dorset, is your holy grail. This cavernous museum, measuring 50,000 square feet, holds the world's finest and most comprehensive collection of over 250 armored vehicles from 26 countries.

The Army base here is still Great Britain's armor training center, so you'll often see tanks swirling around in the dust on the nearby hills, or hear them off in the distance firing at targets.

With exhibits dating from 1909 to the present day, the Tank Museum tells the story of this huge, clanking, British invention and the scientific and technological developments that have marked the evolution of bigger, better, faster, and more powerful tanks. Many of the vehicles at Bovington are rare or the only remaining examples of their type.

All photos: Author's Collection

Although big and ugly, military tanks have a special attraction for fans of the steel behemoths. Here the Bovington Tank Story Hall provides, in photos and real examples, the history of armored warfare.

Some of the museum's tanks are in full working order and draw large crowds every year to the "Tanks in Action" and "Vehicle Mobility Displays" held near the museum between April and September. Bovington is literally the home of the tank—this is where the first tank regiments were mustered and where the gigantic metal beasts were tested in 1916 before being sent off to World War I.

The museum originated in 1919 when some of the tanks that had returned from France were fenced off to provide the young Tank Corps soldiers with examples of their heritage. The indoor museum was established in 1947, and the collection expanded with captured World War II enemy armor acquired from battlefields and factories.

My guide was David Fletcher, the world's leading expert on armored warfare and a walking encyclopedia on armored vehicles. We started off in the Tank Story Hall and wandered among some of the museum's finest exhibits. A few tanks that stand out are one of the very last duplex-drive Sherman tanks, modified for amphibious operations like D-Day—surrounded by a huge waterproof canvas screen to make it float.

Other classic World War II icons include the German Panzerkampfwagen II, III, IV, V, and VI models; a Soviet T-34/85-11 and KV-1B; a British Mark IV Churchill VII; and a Sherman Firefly—an "up-gunned" U.S. tank with a 17-pounder gun.

Probably the most visited tank at the museum is the legendary German Tiger. With a powerful 88mm gun and thick armor, this was much feared by the Allies. The museum's Tiger I was abandoned by its crew after being hit by a Churchill tank of the 48th Royal Tank Regiment. This Tiger's battle scars are still evident—deep scratches and gouges on the main gun and turret, where a round from the Churchill tank clipped the barrel and wedged itself in the turret mechanism. There is also another Tiger, an Sd Kfz 182 Panzerkampfwagen VI Ausf B—known as the Tiger II, Royal Tiger, or King Tiger.

The Trench Experience is a World War I diorama of a German trench being attacked by a tank, complete with noisy machine guns and battle smoke. Emerging in the World War I and Interwar galleries are a number of interesting and rare early tanks.

The World War II Discovery Center displays 77 tanks and armored vehicles. A highlight of this gallery is the A34 Comet I Tank Cruiser, which only appeared in the final months of the war. Equipped with a 17-pounder gun, this was the only British tank that could go round for round with the big German tanks.

U.S. armor displays include an M26 heavy Pershing Tank, the successor to the Sherman tank; a rare M4A4 Sherman V flail tank that was used to clear mines; a GMC DUKW Amphibian, one of the war's most famous military vehicles; and a "Weasel" Amphibious Carrier M29C, that served well in the Pacific, Italy, and the

Entrance to the Tank Museum at Bovington Camp.

European Theater.

The list of exceptional German armor includes a rare SdKfz 234/3 Schwerer Panzerspähwagen, a technically advanced eight-wheeled armored car used for close-range fire support; a SdKfz 142 Sturmgeschütz 40 Ausf G assault gun; an SdKfz 173 Jagdpanther tank destroyer; a Jagdpanzer 38 tank destroyer; and a Sd Kfz 161 Panzerkampfwagen IV Ausf D, weighing 18 tons and mounting a 75mm gun. This was the workhorse of German panzer forces.

The behemoth SdKfz 186 Jagdtiger was the most powerful tracked combat weapon of World War II; only 88 of these self-propelled guns were produced. With a mounted 128mm Pak 44 antitank gun, the ammunition was so heavy that it took two loaders to feed the gun. This particular Jagdtiger saw action in the final few months of the war and was captured near Paderborn, Germany.

The only place you'll see such a wide array of beautifully restored armored vehicles like this, up close and personal, is in the Tank Museum at Bovington. Located 125 miles southwest of London near Bournemouth, it's well worth the trip. □

Bovington Tank Museum

Bovington Camp, Bovington, Dorset (in Southwest England, about one mile north of the town of Wool and 12 miles west of the major port city of Poole).

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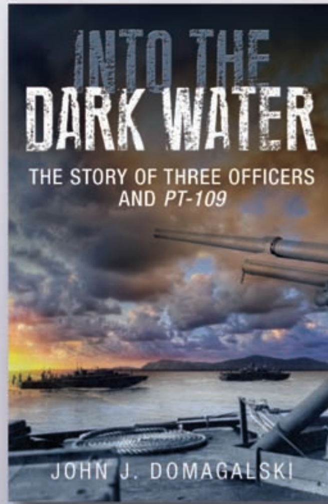

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Vierville

Contined from page 29

numerous excuses why he couldn't destroy the walls. Cota pointed to a bulldozer with 20 cases of TNT strapped to it and told him to use it. Continuing down the beach, Cota came across another bulldozer loaded with TNT and asked one of the huddled soldiers behind the seawall to drive it over to the draw. Other scattered engineers converged on the draw and prepared the wall for demolition.

First, the engineers posted men on either side of the walls to make sure no Americans would be near the explosion. Then they snaked Bangalore torpedoes through the protective barbed wire and detonated them. The walls were ready for destruction, but the engineers worried that they might be reinforced with steel rods, requiring more explosives than they possessed.

With no other options, the engineers built a short wooden platform for the TNT so the detonation would not destroy the road beneath. They laid four boxes of TNT along the bottom of the first wall, then stacked three more boxes on top of the end boxes, forming a U-shaped charge. They then opened one box, attached a blasting cap to a block of TNT, and pulled the igniter. The men rushed to safety behind the seawall. There was a huge blast.

When the rain of concrete rubble ceased and the smoke cleared, the men were surprised to discover that both walls had been destroyed. There had been no steel reinforcement. A bulldozer roared forward and cleared the debris off the road. It was 4 PM—just 9 1/2 hours after the first wave landed.

The road inland was now open. Tanks, trucks, jeeps, and other vehicles could safely roll off landing craft, cross the beach, and head up the road into the villages and towns beyond. The most important objective on Omaha Beach was now in American hands. It had been a deadly effort, but the Americans of the 116th Regiment, the Rangers, and their support units gained the initiative and drove the Germans from the vital draw. □

Commandos

Contined from page 37

the German Würzburg radar station at Douvres-la-Delivrande, between Juno and Sword Beaches. After knocking it out, the 4th Special Service Brigade moved on to the River Orne to join the British 6th Airborne Division in mopping-up operations.

Lieutenant D.C. "Tommy" Thomas, a South African serving with the airborne unit, recalled, "And were the paratroops glad to see us!" He further remarked that for the next few days none of them knew much of what was happening, and no one knew whether the invasion was a success.

On August 20, 48 Commando carried out two attacks on a hill near the town of Dozulé, about 15 miles east of Caen, held by elements of the German 711th Division. After these attacks were unsuccessful, the unit was reinforced by 46 and 47 Commandos and then bypassed the town and marched to Clermont-en-Auge, where the Commandos attacked German field batteries before midday. They later secured the high ground overlooking Dozulé.

Instead of being withdrawn, the 4th Special Service Brigade continued with the Allied advance to the Seine. It took part in liberating Pont l' Evêque, Saint Maclou, Pavilly, Yerville, Motteville, Yvetot, Bermanville, and Valmont. After 84 days in action, 48 Commando came out of the line in August.

Finally, 48 Commando returned to England to rest and refit but was back in action again during Operation Infatuate in early November 1944 to help liberate the heavily fortified island of Walcheren at the mouth of Holland's Scheldt River. Later, the unit remained in the battle in Holland, raided across the Maas River in Holland, and took part in the occupation of Germany.

In January 1946, with the war over, 48 Commando was disbanded along with all the Army Commandos and some of the Royal Marine Commandos. The men of 48 Commando had done their job to secure victory for the Allies and had done it well. □

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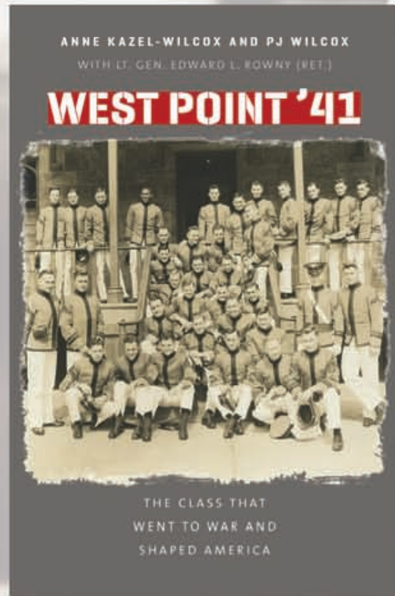

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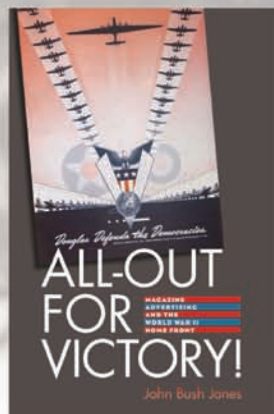

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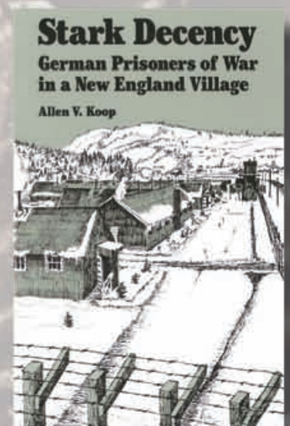

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