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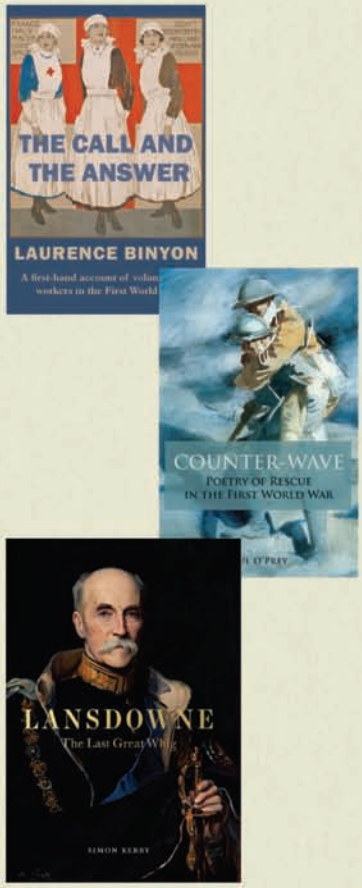

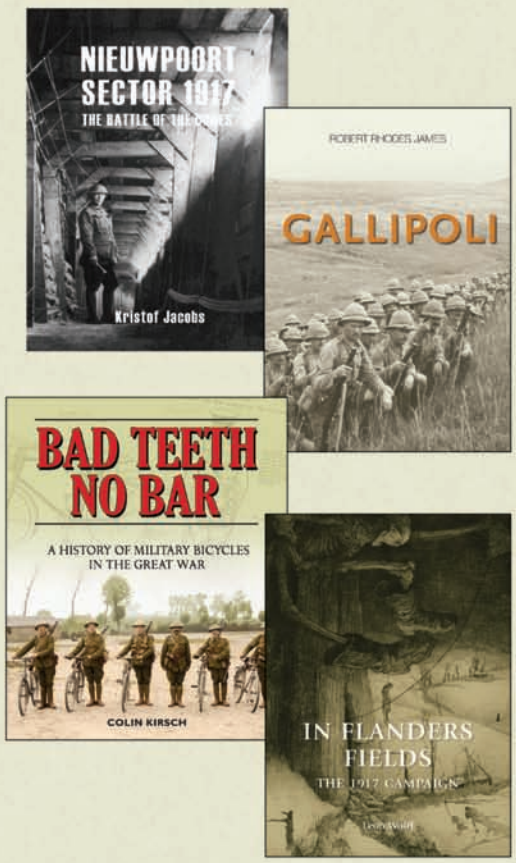

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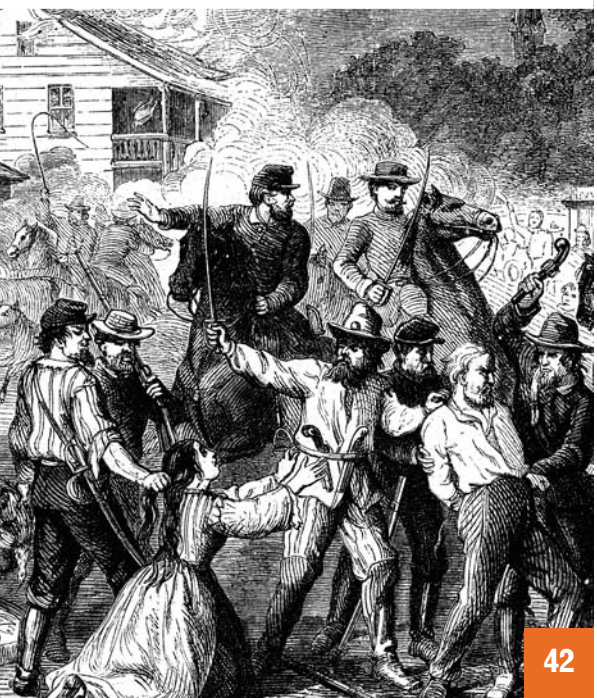

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Cover: A soldier from the 1st SS Panzergrenadier Division photographed in front of destroyed American vehicles during the Battle of the Bulge. See story page 26. Photo: National Archives

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John Hunt Morgan delighted in dangerous missions.

THE DEGREE TO WHICH CONFEDERATE RAIDER JOHN Hunt Morgan set Northern soldiers on edge is seen by a story that appeared in southern newspapers in April 1862. The eerie tale describes how a tall, bearded man mounted on a fleet-footed black stallion appeared night after night to kill Union pickets in south-central Missouri. Although taken under fire frequently, the mysterious rider who struck at night always escaped unscathed. Green soldiers said it was Morgan, but that was impossible given that he did not operate in that region. But before the war was one year old, he was a household name throughout the North and South.

Morgan, whose family had moved from Huntsville, Alabama, to Lexington, Kentucky, opted to join the Confederate army when Kentucky's neutrality came to an end in September 1861. A veteran of the Mexican–American War, he enlisted in the Confederate service on October 27. Shortly afterwards, Captain Morgan began leading his cavalry squadron on hit and run raids against Union outposts and supply lines. The incident that catapulted him to national attention was the burning of the Bacon Creek Bridge on the Louisville and Nashville Railroad on December 5, 1861. A news item in Frank Leslie's Illustrated Newspaper covered the raid mentioning him by name. These and similar exploits earned Captain Morgan a promotion to colonel on April 4, 1862. His command, the 2nd Kentucky Cavalry Regiment, soon had upwards of 900 men.

The 2nd Kentucky reported to Knoxville, Tennessee, in June 1862 for a month of training with General Kirby Smith's Army of East Tennessee. During that time, several of the regiment's companies received the Enfield Pattern 1853 Cavalry Carbine, a shortened form of the full-length Enfield Pattern 1853 rifled-musket made in Great Britain. This became the preferred carbine of Morgan's Raiders. As the war progressed, many would also carry a brace of Colt revolvers. Morgan drilled his men hard using Dabney Maury's Skirmish Drill for Mounted Troops. It was a comprehensive manual that described how to fight both mounted and dismounted.

On July 4, 1862, Morgan led his 867-man mounted force on a major invasion of the Bluegrass State that would become known as Morgan's First Kentucky Raid. Morgan had resolved beforehand that where the enemy was weak he might disperse it with a mounted charge, but for that where the enemy enjoyed superior numbers or was entrenched he would fight dismounted to give his command the same advantages in discipline, movement, and firepower as that reaped by regular infantry.

Crossing the Cumberland River, the raiders headed northeast. Morgan planned to feint at Cincinnati. After fighting a large skirmish at Cynthiana, he turned south for the safety of Confederate lines. He arrived safely in Sparta, Tennessee, having covered more than 1,000 miles in 24 days.

It was a masterful campaign. To avoid being surprised by the enemy, Morgan had used scouts in front, on the flanks, and behind his main force. Moreover, he employed a system of rolling videttes by which handpicked troopers functioned as advance guards that scouted and secured every crossroad until the head of the column arrived.

The only close call occurred when Morgan decided to ride with the advance guard in the early evening on the approach to Lebanon, Kentucky. When they reached a covered bridge on the Rolling Fork River, a member of a Union patrol shot Morgan's hat off his head. The incident might have ended in tragedy for the Confederacy, but fortunately for Morgan and his men the shot made in the darkness was high.

Morgan received a promotion to brigadier general on December 11, 1862. He always wanted to up the ante by conducting a bolder, more rigorous raid than the previous one. Morgan would get that chance in 1863 when he undertook what became known as Morgan's Great Raid.

—William E. Welsh

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By William F. Floyd, Jr.

The grenade has evolved over the centuries to become an indispensible weapon for the modern infantryman.

DURING THE FIVE-MONTH JAPANESE SIEGE OF RUSSIAN-HELD PORT Arthur during the Russo-Japanese War of 1904-1905 both sides employed hand grenades. The hand-thrown explosives were particularly essential to the Japanese, who struggled to capture key strongpoints in the monumental struggle for control of the Manchurian port.

"It has been interesting to note how [the hand grenade], as the siege progressed, gained steadily increasing importance until it became the main weapon of both armies in all fighting at close quarters," said Benjamin Wegner Norregaard, a Norwegian journalist who was an eyewitness to the siege.

The Russo-Japanese War revealed the awesome potential the hand grenade had for infantrymen on both offense and defense. As a result, they became an essential weapon for Russian and Japanese infantry during the bloody siege.

The Russians crafted their hand grenades using old cannon balls or brass artillery cartridges cut into four-inch lengths, according to Norregaard. They filled the containers with dynamite and used a mining safety fuse that burned for 15 seconds. As for the Japanese, they used meat tins or bamboo sections that they filled either with the explosive material pyroxlyn or picric acid.

The grenades proved extremely useful to both sides, according to Norregaard, who was embedded as a journalist with the Japanese Army. "The terrible effect of these hand grenades against living men soon opened [the Japanese soldiers'] eyes to the value of this new weapon as a means of offense," wrote Norregaard. "It was, to them, just like carrying artillery right into the enemy's positions for use in hand-to-hand encounters where their shell and shrapnel could be of no assistance."

The Japanese in particular made noteworthy advances, including the use of handles to increase throwing distance and stabilizers to improve

The World War II-era Mk 2, commonly referred to as the "frag grenade," had grooves in its cast iron exterior to improve fragmentation and provide a better grip for handling and throwing. INSET: The Byzantines hurled Greek Fire in hand-thrown containers.

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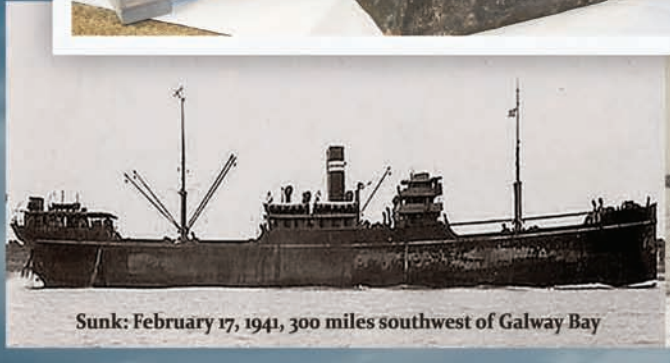
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German Submarine U-5

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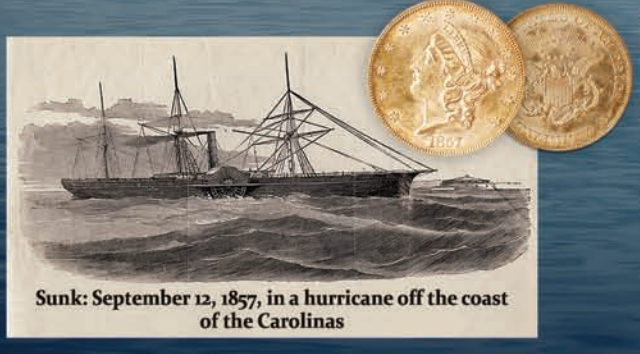
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accuracy in flight. The combatants used the hand grenades to open gaps in trenches and clear rooms, foreshadowing their use in modern warfare.

The first known use of what could be termed a hand grenade was in the 8th century AD by the Byzantines who employed Greek Fire in hand-thrown containers. Halfway around the world the Chinese and the Mongols made key advances in the use of the grenade. Both peoples regularly used incendiaries such as fire arrows and small rockets in battle. To those weapons they added metal casings that held explosive material used for incendiary grenades. The earliest description of a hand grenade being used by Chinese soldiers is attributed to the *Wujing Zongyao,* the same military text used to catalog the use and creation of the flamethrower, gunpowder, and incendiary bombs. The text states that Song Dynasty soldiers used hand-thrown explosives called Zhentian Lei, which consisted of a small ceramic or metal pot filled with gun powder. Meanwhile, the Moors in Spain made noteworthy advancements by firing rocks packed with explosive gunpowder from primitive bucket cannons.

By the early 14th century, European cannons, although not completely replacing mangonels and trebuchets, were evolving into less cumbersome rapid-fire weapons. By the end of the 15th century, the idea of using gunpowder as an explosive weapon instead of a propellant for artillery was becoming popular. The true destructive use of gunpowder came about in 1495, when Francesco de Giorgio Martine employed barrels of gunpowder to blow up a section of wall at the Castel Nuovo in Naples.

By the early 16th century, European knights began using gunpowder as fire pots. These hand bombs were highly effective as antipersonnel weapons. The use of firearm shot in the mixture was a natural progression. This was the first instance of the use of the explosive hand grenade, which could be embedded with dozens of iron spikes. It was fired from a crossbow and stuck to anything made of wood.

Near the end of the 16th century, soldiers began to realize that hand bombs could be very effective in close-quarters combat, and their use became widespread throughout Europe. The hand grenade consisted of a cast iron sphere with an approximately four-inch diameter with a time fuse. Combatants also began using hand grenades on ships as an aid to boarding an enemy vessel or repelling enemy boarders. In the 17th century, lighter and less costly hand bombs made of thick tempered glass began to appear.

Anne S.K. Brown Military Collection

ABOVE: A British 18th-century grenadier blows on his match to rekindle it and ignite the hand grenade in his right hand. BELOW: Grenades in the American Civil War were used primarily during siege warfare such as this depiction of a Union assault during the Battle of Vicksburg.

Library of Congress

The word "grenade" is believed to have originated in 1688 during the Glorious Revolution, when cricket ball-sized iron spheres packed with gunpowder and fitted with slow burning wickets were first used against the Jacobites at the Battles of Killiecrankie in 1689 and Glen Shiel in 1719. It was during that time frame that units of soldiers, known as grenadiers, were formed who specialized in grenade throwing. From a practical standpoint, though, these grenades were not very effective. Troops in the field often made their own grenades from the materials at hand. For example, the British packed powder and nails into soda bottles during the Crimean War and hurled them into Russian trenches.

William F. Ketchum, the mayor of Buffalo, New York, patented the Ketchum Hand Grenade during the American Civil War. The Union Army adopted the Ketchum grenade in August 1861. The grenade had three parts: a plunger, a casing that contained the main charge, and a tailpiece. Ketchum grenades were available in 1-pound, 3-pound, and 5-pound sizes. They were widely used during the sieges Vicksburg and Petersburg. The Ketchum grenade looked like a cast iron ball or skinny dart with fins made of cardboard to stabilize it in flight. A key drawback to the Ketchum grenade was that it had to land on its nose to detonate. In some instances, Confederate soldiers caught the grenades in blankets and threw them back at the Yankees. The Confederates had a similar model known as the Raines grenade, which was even less effective. In most cases, the body was the same, but a long cloth streamer was substituted for the fins, and the plunger was a contact explosive.

World War I is regarded as the golden age of hand grenades for as many as 50 new designs were introduced during the conflict. As was the case on the Russo-Japanese War, the hand grenade was of great value to soldiers fighting in trenches. Hand grenades of World War I were either detonated by impact or by time fuse. Impact ignition, also known as percussion ignition, was dangerous because impact might occur before the handler got close to the enemy. For this reason, timed grenades ultimately won out.

The first modern grenade was the British Mills Bomb developed in 1915. The model had a cast-iron casing that was horizontally and vertically ribbed to form surface notches, making it the first of the pineapple-shaped fragmentation grenades. The Mills Bomb, which was constructed from ration tins, employed a spring-loaded firing pin and lever. The lever released the striker, which in turn

Top, Bottom: Wikimedia; Middle: York Museums Trust

TOP: New Yorker William F. Ketchum patented the Ketchum hand grenade for the Union Army in 1861, but it proved largely unreliable since it had to land on its nose to detonate. MIDDLE: An early British World War I grenade used by the Japanese during the Russo-Japanese War with streamers and a cast iron fragmentation ring. BOTTOM: A World War II German "potato masher" stick grenade could be thrown much farther than other designs because of the torque achieved with the hollow wooden handle.

ignited a four-second fuse. Although this model was filled with low-explosive gunpowder, the Mills Bomb was nevertheless a leap forward in hand grenade technology.

The German stick grenade first appeared in 1915 but was not perfected until 1917. This was the well-known "potato masher" Model 24, which used a time fuse lit by a friction igniter that was used in both world wars. This model had the advantage of a much longer throw distance because of the torque achieved with the hollow wooden handle. The United States would enter World War I with a complicated impact-fuse grenade that was a complete failure and was soon scrapped. For a while the Americans would use the French F-1 until an improved version of the Mills Bomb was integrated into a new American grenade, the pineapple-shaped Mk 1.

The Mk 1 was replaced in May 1918 with the Mk 2. The Mk 2 is a fragmentation, antipersonnel weapon that was standard issue during World War II and the Korean War. The Mk 2 was manufactured with grooves in the cast iron to improve fragmentation and provide a better grip for handling and throwing. This design gave it the look of the earlier pineapple model which soon became its nickname. It was commonly referred to as a "frag grenade," in contrast to the Mk 3 grenade, which was a concussion weapon. The low-explosive Mk 2 used smokeless EC powder that produced an adequate amount of fragmentation and did away with the need for a detonator. At first it was replaced by a small length of safety fuse that ended with a black powder igniter charge. High-explosive Mk 2s used flaked or granular TNT. Prewar Mk 2s had TNT filler and were identified with an all yellow body as a warning to users. Wartime grenades were repainted olive drab for camouflage purposes.

The Type 97 hand grenade saw widespread use by the Japanese during the Second Sino-Japanese War and World War II. It had same principles as most fragmentation grenades of the period. It featured a grooved, segmented body that dispersed sharp pieces of shrapnel when it exploded.

Using the Type 97 was a complicated and time-consuming process. The operation began by first screwing down the firing pin, allowing it to protrude from the striker. The safety pin was then removed by pulling the cord to which it was attached and the protective cap that covered the striker was removed. A sharp blow against a hard surface, such as a combat helmet or rock, would overcome a creep spring and crush the thin brass cap, which allowed the pin to hit the primer and begin the delay sequence before throwing the grenade at the target. When compared with Allied grenades of the same period, the Japanese model was weaker,

National Archives

ABOVE: German soldiers throw grenades during a mass infantry assault at Verdun in March 1916. RIGHT: Modern grenades generally are constructed of cast iron or one or two layers of steel or tinplate. Pictured from left to right are a World War II British Mills Bomb and a Japanese Type 97 grenade.

Both: Wikimedia

and the lack of an automatic ignition mechanism made the grenade less reliable and could be dangerous to the user.

In the wake of World War II efforts got underway to improve upon the fragmentation grenade design. The problem with a grenade that produces limited heavy fragments is consistency of the coverage area. Many times even close to the point of detonation, grenades would not be effective. Experience showed that hand grenades needed to be more effective close in, and long-range hazards needed to be reduced.

For these reasons, a new class of grenade was developed: a high-yield, limited-range fragmentation grenade. In the evolution of American hand grenades, the M61 became the standard used by both the American and Canadian forces during the Cold War. The M61 was a variant of the M26A1 grenade being used by other countries around the world, with the exception of an additional safety clip added to the design. The clip was connected to the lever to prevent accidental detonations if the base pin was inadvertently pulled. It became known as the Jungle Clip since it was designed based on the experience of American forces in the jungles of Vietnam where grenades often became snagged on undergrowth.

The M67 is currently used by the United States and other countries. The M67 has a 2.5-inch spherical steel case that contains 6.5 ounces of explosive substance. An internal fuse ignites the charge within and the ensuing explosive disintegrates the grenade casing, which becomes the fragmentation component. There is a four- to five-second window to get the grenade away. The actual detonation cycle begins when the spring-loaded safety lever separates from the grenade in flight. An internal firing pin hits against a percussion cap and ignites the fuse. This is preceded by the operator having pulled the pin. The pin can be put back into a live grenade as long as the safety portion is still in place.

Modern grenades generally are constructed of cast iron or one or two layers of steel or tinplate. The indentations on the exterior of the body are intended to allow a firm grip. The basic components are the body, filler, and fuse assembly. The body contains filler and, in certain models, fragmentation material. The casualty radius for most grenades ranges from five to 22 yards; however, stray fragments can travel as far as 220 yards. The filler is made up of a chemical or explosive substance that determines the type of hand grenade for employment factors. The fuse assembly causes the grenade to ignite or explode by detonating the filler.

Over the course of its long history, the fragmentation model has been the most enduring type of hand grenade but there are other types in use as well. The controlled fragmentation grenade was developed in the 1970s. This type consists of thousands of steel ball bearings embedded in plastic bodies. The offensive grenade, which is less lethal than the fragmentation grenade, is designed to be used against enemies in open space but also can be used in a confined space. Soldiers also use special model grenades, such as smoke grenades and special-purpose grenades that furnish a signal, screen movement, or destroy equipment.

Hand grenades can be thrown from a standing, kneeling, or prone position. Since all soldiers do not throw in the same manner, it is not wise to have hard and fast rules about how to throw a hand grenade. Accuracy in throwing a grenade is far more important than how the grenade is thrown. If a soldier can achieve more accuracy and distance using his own style, he would normally be allowed to do so; however, there are a few basic rules that should be observed. They include turning the body sideways toward the enemy's position and throwing overhead.

Not all grenades are hand thrown. A significant development in this field was the rifle-launched grenade. A need would develop for a high-angle weapon to fill the gap between the hand grenade and the small infantry mortar. In World War I, the British and the French developed rifle grenades. The British had a weapon mounted on a rod thrust down a rifle barrel that was propelled by a blank cartridge. American Expeditionary Forces used the French model known as the VB. The grenade consisted of a steel container that was about the size of an ordinary can of condensed milk, with a doughnut-like hole through the can. The grenade was fired from a launcher called a "tromblon," which was fastened to the muzzle with a bayonet clip. The bullet of a ball cartridge passed through the hole in the grenade. This would arm the grenade, and the gases behind the bullet launched it, sending it tumbling end over end for a distance of 200 yards. The blast from the pound-and-a-half grenade could be devastating.

The Germans developed two types of rifle grenade launchers. One was a spigot-type launcher, similar to the American model, and the

other, a cup type of an entirely different sort. The cup type is made of steel and consists of a rifled barrel that screws into a holder fitted with a clamp for attachment to the rifle barrel. There are no gas ports, and varying ranges can be obtained by altering the elevation of the rifle with the aid of a sighting device. The cup type can fire three projectiles: an antipersonnel grenade, a light antipersonnel, or a heavy antipersonnel. Under favorable conditions, the heavy model can penetrate about two inches of armor, making it an effective antitank weapon at close quarters.

During the Vietnam War, the Americans introduced the M-79 grenade launcher that resembled a large sawed-off shotgun with an effective range of 440 yards. The breach-loaded M-79 fires various types of 40mm rounds, including high-explosive, flare, and CS gas. The M79 can throw an explosive charge much farther and with greater accuracy than one thrown by hand, but not without limitations. Since the round does not arm until after approximately 30 feet, it was not effective for close-quarters fighting. In addition, it often detonated prematurely after hitting foliage in flight. For these reasons, it was not a replacement for the hand-thrown M26 or M67 fragmentation grenades.

The modern grenade has attained a point of peak efficiency and, therefore, it has not changed much in the past 30 years. Explosive fillers of modern grenades are more powerful, more reliable, and less prone to accidental detonation than grenades of past centuries. This level of performance and reliability makes the grenade indispensible to riflemen of all nations. □

An American soldier hurls a grenade at a tank destroyer during commando training in 1943. Turning the body sideways and throwing overhead are essential to achieving accuracy.

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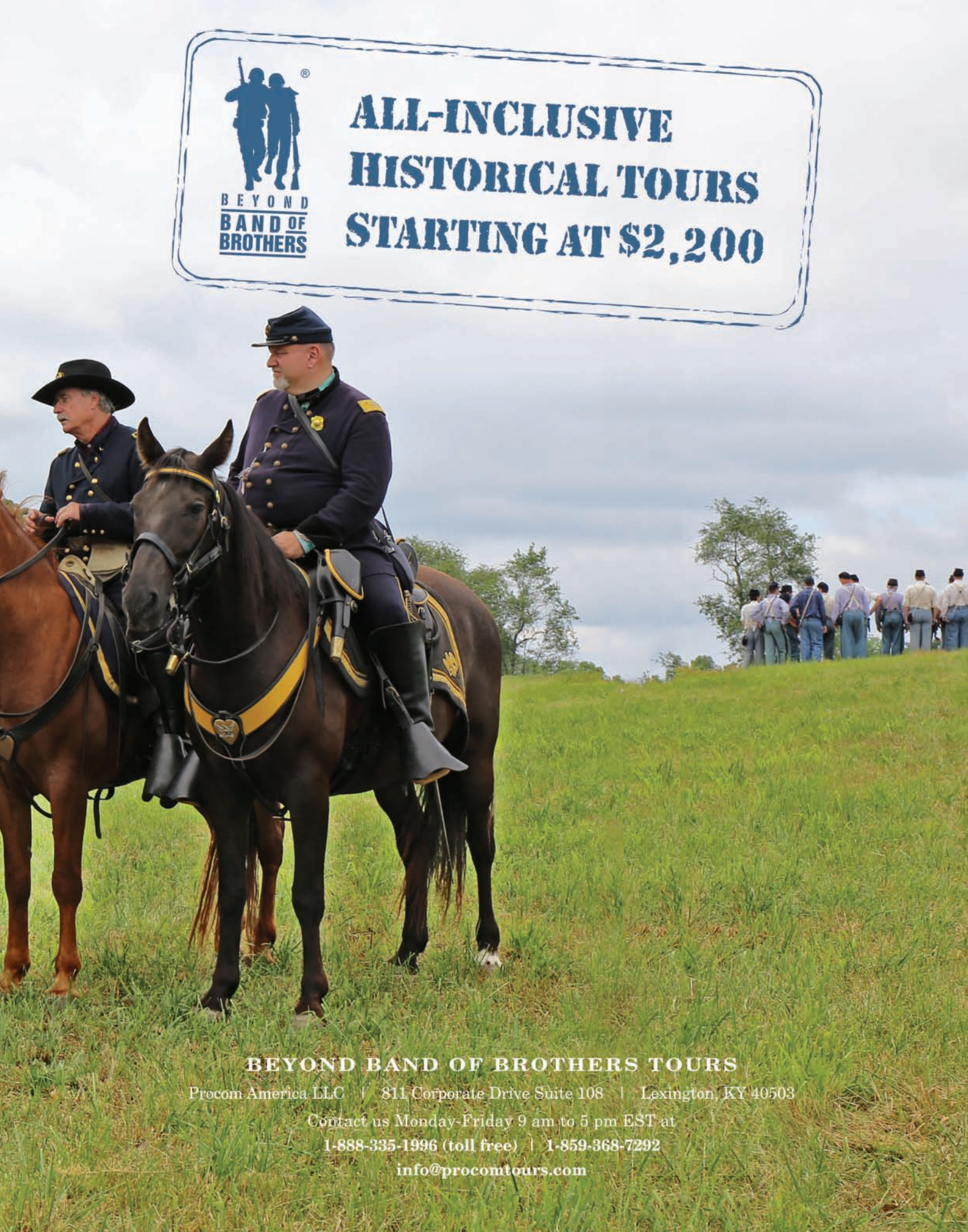
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By William E. Welsh

Colonel David Lownds faced agonizing decisions as commander of the Marines at Khe Sanh.

THE MARINES PATROLLING OUTSIDE KHE SANH COMBAT BASE WATCHED three enemy soldiers dart across an access road and dive into the protective edge of a tract of woods. After receiving permission from his company commander to follow them in the hope of capturing a prisoner to interrogate, the young Marine second lieutenant waved his platoon forward across an open field in pursuit of the enemy soldiers. They crossed two empty trench lines and walked unwittingly into an enemy ambush.

As the North Vietnamese began to probe the Khe Sanh Combat Base, Colonel David Lownds curtailed Marine patrols so that fighter-bombers could strike enemy positions at will without friendly fire incidents. INSET: U.S. Marine Colonel David Lownds.

The Marines had not seen the enemy soldiers because they were concealed in trenches, bunkers, and spider holes. Automatic rifles, machine guns, and shoulder-held, rocket-propelled grenade launchers blasted the Marines from the front. Simultaneously, enemy fire raked their line from the side. "We were right in front of the NVA [North Vietnamese Army] trenches and bunkers," said Corporal Gilbert Wall. "The air was filled with screaming, shouting, gunfire, and blood."

Second Lieutenant Don Jacques, commander of the 3rd Platoon, Bravo Company, 1st Battalion, 26th Marine Regiment, had led his platoon into the contested territory south of the combat base at 8 AM on February 26, 1968. He and his men were scouting for enemy tunnels and trenches. The Marines knew that the NVA's 304th Division was digging zigzag trenches from which it planned to assault the base from the south and east.

The three soldiers who darted in front of the platoon had done so to lure it into the ambush. The two sides became so intertwined that the Marines inside the base initially refrained from furnishing supporting artillery fire for fear of causing friendly casualties. Although Bravo's 1st Platoon was sent to reinforce the hard-pressed 3rd Platoon, it was taken under concentrated mortar fire and pinned down.

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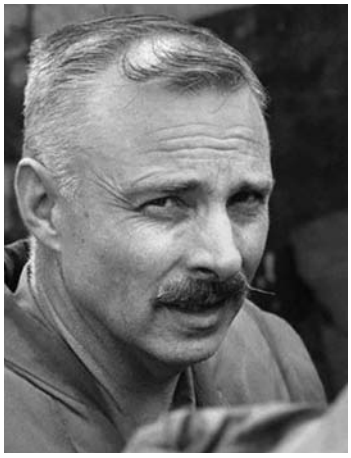

In the ensuing firefight, the 3rd Platoon suffered five dead, one of whom was Jacques, 17 wounded, and 26 missing in action. Although the MIAs presumably were slain, the Marines dared not to try to recover their bodies until a later date. Although patrols had been allowed within sight of the base, after that point the only authorized movement outside the perimeter was to repair defensive barriers.

While there were other troops guarding the perimeter of the base

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Lownds ordered heavy mortars, recoilless rifles, and howitzers sent to the Marine outposts on the hills north of Khe Sanh to give them the firepower required to break up enemy infantry attacks.

that might have been sent out to assist the beleaguered 3rd Platoon, it was a conscious decision of Colonel David E. Lownds, the commanding officer of the reinforced 26th Regimental Command and the base commander, not to send more men outside the wire. His primary mission was to defend the combat base, and he could not afford to strip units defending the perimeter from their positions to send them on rescue missions in which they might also be ambushed. Such a move would jeopardize the security of the combat base and leave it vulnerable to a major attack.

Even so, some of the Marines at Khe Sanh could not find it in their hearts to forgive Lownds. It was one of the brutally tough decisions he had to make while serving as commanding officer of the combat base from August 14, 1967, to April 12, 1968.

Lownds arrived at the combat base in the summer of 1967 to take command of the 26th Marine Regiment. The 46-year-old colonel had an impressive résumé that included both combat and staff work. As a junior officer, he had led a platoon in the 4th Marine Division during the fierce Pacific battles at Roi-Namur, Saipan, and Iwo Jima in World War II. Afterward, he served in a variety of staff assignments for the 2nd Marine Division during the Korean War.

Khe Sanh Combat Base was situated in the Quang Tri Province of South Vietnam 14 miles south of the Demilitarized Zone (DMZ) and four miles east of Laos. The Marines arrived at Khe Sanh in 1966. Shortly after their arrival, the Navy Seabees arrived to improve a primitive airfield that the Army of the Republic of Vietnam (ARVN) had established on the Khe Sanh plateau four years earlier. Although initially sited next to the airstrip, the U.S. Special Forces Civilian Irregular Defense Camp was later relocated four miles southwest of the combat base.

The combat base and the airstrip helped U.S. forces monitor enemy movement on the nearby Ho Chi Minh Trail in Laos. The airstrip was situated on the 1,500-foot-high triangular-shaped plateau south of the Rao Quan River. Some of the tall hills on the south side of the Rao Quan were covered with double-canopy rain forest. The undulating ground between the hills was covered with 10-foot-high elephant grass and tracts of 40-foot-tall trees and bamboo stands.

The limestone hills northwest of Khe Sanh were known by their height in meters on military maps. The Marines were determined to hold the high ground to prevent the NVA from posting artillery on them that could bombard the combat base and airstrip.

The Marines had fought a series of sharp company-sized engagements with the NVA in the spring of 1967 for control of key hills around the combat base before Lownds' arrival. The Marines captured Hills 881 North, 881 South, and Hill 861; however, they withdrew in the summer of 1967 from 881 North as part of a scaling down of forces at the combat base. Events would show that abandoning 881 North following the Hill Fights was a mistake since the enemy reoccupied it.

The only road into the combat base from the east was National Route 9, a one-lane dirt road that crossed dozens of streams between Khe Sanh and the Rockpile, the closest Marine combat base situated 12 miles east. As the siege of Khe Sanh progressed, the North Vietnamese cut the road. This forced the Marines to rely on cargo aircraft, such as the C-123 and C-130, for supplies and ammunition.

The company-sized garrisons on the hills required daily resupply by helicopter. Lownds ordered small numbers of heavy mortars, recoilless rifles, and howitzers sent to the outposts to improve their ability to defend themselves against enemy attacks.

Army General William Westmoreland, the head of the joint command known as Military Assistance Command Vietnam (MACV), had authority over all Marine forces in Vietnam. Lownds reported to Maj. Gen. Rathvon Tompkins, the commander of the 3rd Marine Division, who in turn reported to Lt. Gen. Robert Cushman, the head of the III Marine Amphibious Force.

Cushman had to follow Westmoreland's orders, even when he felt that it was in the Marine Corps' interest to take a different approach. Cushman's predecessor, Lt. Gen. Lew Walt had frequently clashed with Westmoreland.

The Marines had been reluctant to garrison Khe Sanh, which they deemed too isolated to bear any real strategic significance. But Westmoreland insisted on it. He saw it as a way to bait the Communists into a large-scale set piece battle in which American firepower could inflict catastrophic casualties on the enemy. The Marines had already shown in the Hill Fights that they could break up enemy troop concentrations and supply depots with a combination of the artillery at the combat base, long-range 175mm howitzers positioned 10 miles to the east at Marine combat bases at Camp Carroll and the Rockpile, and ground attack aircraft and B-52 bomber strikes.

For the North Vietnamese, the capture of Khe Sanh Combat Base would be a major propaganda victory and put them in a position to outflank the string of Marine combat bases south of the DMZ. The NVA had its own formidable firepower consisting of Soviet-made long-range guns deployed in protected positions on Co Roc Mountain just across the border in Laos. They also brought forward 122mm rockets and deployed them on Hill 881 North.

In addition to frequent patrols that swept out from their fortified positions on the hills to the west that overlooked Khe Sanh, the Americans also had eight-man teams that conducted long-

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Unable to capture high ground where they could place their artillery to support human wave attacks against the combat base, the North Vietnamese withdrew from Khe Sanh in mid-March 1968.

range reconnaissance patrols in enemy-held territory to the west and north of Khe Sanh. Added to this were sophisticated aerial reconnaissance and seismic and acoustic sensors that were dropped in the no-man's land around Khe Sanh from U.S. Air Force aircraft. The Air Force processed data from the sensors at facilities in Thailand and forwarded it to Lownds and his staff at Khe Sanh. The information was used to determine targets for air strikes.

In December 1967, it became evident to MACV that the NVA was marshalling troops and equipment for a major assault on Khe Sanh Combat Base. The NVA 325C Division was advancing from the northwest against the outlying hills northwest of Khe Sanh, while the 320th and 324B Divisions were approaching from the northeast. In addition, the 304th Division was advancing from the Ho Chi Minh Trail to attack Khe Sanh from the west and south. The North Vietnamese established a corps-sized headquarters they named the Route 9 Front to oversee the 40,000 troops operating in the region.

By mid-January Lownds had about 6,000 Marines and support troops to defend the combat base and the key outposts to the northwest. He had all three of the battalions of the 26th Marine Regiment, the 1st Battalion of the 9th Marine Regiment, the 37th ARVN Rangers, and the 1st Battalion of the 13th Marine Artillery. Marines already held Hill 881 South and Hill 861, which were occupied by India Company 3/26 and Kilo Company 3/26 and three platoons from 1/26, respectively, but Lownds wanted other key outlying positions manned as well.

Lownds sent Lt. Col. Francis Heath's 2nd Battalion of the 26th Marine Regiment to occupy Hill 558, which overlooked the Rao Quan Valley, and he dispatched Lt. Col. John Mitchell's 1st Battalion of the 9th Marine Regiment to hold the rock quarry adjacent to the combat base to the west. Defending the combat base's perimeter were elements of the 1st and 3rd Battalions of the 26th Marine Regiment. The ARVN Rangers had their own perimeter attached to the Marine-held combat base to the east.

Lownds' direct-fire assets inside the combat base consisted of 18 105mm guns, six 155mm guns, six 4.2-inch mortars, six M48A3 Patton tanks, and 10 Ontos, a tracked vehicle mounting six 106mm recoilless rifles.

Beginning in November 1967, members of the 3rd Engineer Battalion oversaw the improvement of the perimeter defenses at the combat base by the Marines defending it. They added a fourth layer to the existing layer of triple concertina wire and constructed a 33-foot-wide expanse of tangle-foot wire. Outside of these wire obstacles they placed double apron wire strung from eight-foot-tall posts. Inside the original layer of triple concertina wire they put a ring of Claymore mines. The Marines also used jellied gasoline known as fougasse on the perimeter. The mixture was stored in 55-gallon drums that were detonated by a Claymore firing device.

Lownds and his Marines were leaving nothing to chance as they hardened their defenses. "They're going to attack and we're going to inflict a heavy loss on them," Lownds told his staff on January 13. He ordered all Marines to wear their flak jackets and carry their rifles around the clock.

The Marines tried but failed to retake Hill 881 North on January 20. While the Marines were bogged down, Lownds unexpectedly ordered them to break contact and return to their outpost. The reason for the change of plans was that Lownds had learned from an NVA prisoner that an enemy attack on multiple targets was imminent.

Lieutenant La Than Tonc had defected to the Americans at the combat base while the attack on Hill 881 North was in progress. Tonc was a NVA junior officer from the 14th Anti-Aircraft Company attached to the 325C Division. He told his interrogators that an attack would occur that night. He said that the NVA planned to make assaults against Hill 881 South, Hill 861, and the combat base itself. The enemy intended to capture the two hills in order to use them as positions for mortars and recoilless rifles that would be used to support a full-scale attack on the combat base. Although the attack that unfolded on January 21 was in some respects different from the one described by Tonc, it nevertheless bore much in common with what he had described. Based on the information gleaned from the defector, Lowndes wanted all Marines safely inside their perimeters on the night of January 20-21.

Shortly after midnight on January 21, 300 soldiers of the North Vietnamese 325C Division attacked the northwest side of Hill 861 held by Kilo Company 3/26. Mortar fire crashed down on the Marine bunkers and trenches as Communist troops streamed through breaches in the wire made by skilled NVA sappers. The North Vietnamese regulars charged into the perimeter yelling and firing their AK-47s as they ran. Marines rushed to man their heavy weapons, which included 4.2-inch heavy mortars, 106mm recoilless rifles, and .50 caliber machine guns. The close-quarters fighting lasted for six hours, but the well-led Marines prevailed and repulsed the determined attack. The casualties were suprising light, but Lownds sent a platoon to replace Kilo's losses.

The attack on Hill 861 was eclipsed by a major NVA artillery, rocket, and mortar barrage on the combat base fired from the slopes of enemy-held Hill 881 North. A well-placed shot by a 122mm NVA rocket struck the largest ammunition dump at the combat base that was

located next to the airstrip, sending a huge fireball into the sky and triggering subsequent secondary explosions as the 1,500 tons of bombs, shells, plastic explosives, and bullets cooked off over the next 48 hours.

The attacks of January 21 marked the official beginning of the 77-day siege that would end on April 8 when the First Air Cavalry Division arrived at the combat base after reopening Route 9 to traffic. Following the NVA attacks on January 21, Westmoreland ordered Operation Niagara, the Seventh Air Force's support for Khe Sanh, to begin. A three-aircraft cell of B-52s arrived on average every 90 minutes, flying from either Guam, Thailand, or Okinawa to strike the target box. The target was selected based on intelligence data gleaned from detectors and sensors or the request of an air or ground controller. Added to this were the hundreds of strikes by Navy, Marine, and Air Force fighter bombers made each day.

As the siege began, Westmoreland criticized the quality of the Marine bunkers at Khe Sanh, stating that they were flimsy and overly reliant on sandbags that could not withstand direct hits from enemy rockets and heavy artillery. Cushman inferred that Westmoreland was unhappy with Lownds' defensive preparations, and so he suggested they consider replacing Lownds. When Tompkins learned that Lownds was in danger of being sacked, he immediately came to his defense. Tompkins said Lownds knew the terrain better than anyone else. Cushman dropped the idea, and Lownds remained in his position.

Lownds met frequently with reporters who flew to the combat base during the siege. They grilled him about vulnerable bunkers and other matters, trying to find fault in his performance. Lownds shrugged off the criticism in a good-natured way. He told the reporters they were exaggerating.

Operation Niagara threatened the lives of the locals known as Montagnards. When they sought protection on the combat base, Lownds would not allow them through the gates. He did not have the supplies or room to accommodate them. Sadly, they had to fend for themselves. It seemed heartless, but Lownds' top priority as the safety of the Marines.

Following the attack on Hill 864 and the ammunition dump explosion, the North Vietnamese launched five more significant attacks against the combat base and the surrounding outposts. A lull occurred during the peak of the countrywide attacks carried out by Viet Cong and North Vietnamese that began on January 30 during the Tet holiday, which was the Vietnamese New Year. The attacks at Khe Sanh resumed with a vengeance on February 6 when the enemy attacked Echo Company of 2/26 on Hill 861A in the early morning hours. The Marines fought, often hand to hand, with the 200 enemy soldiers who attacked through breaches made by sappers. The defenders called in supporting fire from multiple locations to help them repulse the enemy attack.

On the morning of February 7, the NVA launched a full-scale attack against the Lang Vei Civilian Irregular Defense Camp where U.S. Army Green Berets were deployed with several hundred Montagnard irregulars. Elements of two NVA divisions, supported by a dozen Soviet-made PT-76 light amphibious tanks, attacked the base from two directions. Although the stalwart Green Beret troops managed to knock out a few of the tanks with recoilless rifles, the NVA succeeded in overrunning the camp. The Green Berets had requested Marine reinforcements during the battle, but Lownds declined to send them. He justified his decision on the grounds that the North Vietnamese undoubtedly would have ambushed the relief column.

Over the course of the next two weeks in mid-February the Communists focused heavily on advancing their siege trenches toward the eastern end of the combat base where the ARVN rangers were deployed. The NVA attacked the ARVN Rangers on several occasions, but they were repulsed each time.

In mid-March Westmoreland informed President Lyndon Johnson that the NVA offensive against the combat base was over. Westmoreland launched Operation Pegasus, conducted by the 1st Air Cavalry Division, in early April. The airmobile troops battled the North Vietnamese in the Route 9 corridor over a two-week period. Their mission was to open Route 9 so that Khe Sanh could once again be supplied by road.

Colonel Bruce Meyers relieved Lownds on April 12. The Lion of Khe Sanh, as some called Lownds, was hailed by many as a great hero for his direction of the Marine forces at the combat base during the siege. Lownds had readily reinforced positions when he felt it was wise, but he showed great restraint in withholding reinforcements when he felt that a relief column might be ambushed and annihilated. That required sound military judgment.

Before the siege began, Lownds knew that the Marines would forever be remembered for their stand at Khe Sanh. "We at Khe Sanh are going to be remembered in American history books," he said. It is important that history also remember the name of the man who stood up to the North Vietnamese at Khe Sanh. □

By Eric Niderost

The U.S. Navy's Africa Squadron took concrete action to halt the slave trade with regular patrols in the Atlantic Ocean.

THE U.S. SLOOP OF WAR *CONSTELLATION* WAS SAILING OFF THE coast of Africa, not far from the Congo River, and both officers and crew were enjoying a night so beautiful it seemed almost like a dream. The sea was flat calm, as smooth and placid as a mill pond, and the moon cast its beams brightly on the shimmering, mirror-like waters.

It was just after dusk on September 25, 1860, and the crew was headed back to St. Paul de Loando, their supply base in Portuguese Angola. Some of the crewmen began to laugh and sing, and even the officers pacing the quarterdeck seemed to be in a more relaxed mood. The Africa Squadron was far from being considered choice duty. Its official mission was to intercept slave ships before they could deliver their human cargo to the Americas, particularly Cuba. But most of the time the bluejackets saw little action, and they had no choice but to endure a daily grind of torrid heat and mind-numbing boredom.

Suddenly a lookout perched on the fore topsail yard broke the spell by yelling, "Sail ho!" For a breathless moment it seemed as if time had stopped; the singing ended, laughter was stilled, and everyone seemed frozen in place. "Where away?" asked the officer of the deck through his speaking trumpet, and the lookout answered, "About one point forward of the weather beam, Sir!" Every officer and man looked in the direction indicated and, sure enough, a ship could be seen in the distance, the moonlight making it seem like a phantom.

The USS *Constellation*, built in 1854, had the speed necessary to overtake slavers off the coast of West Africa in the mid-19th century. INSET: The *Constellation*'s Officer of the Deck, Lieutenant Donald McNeil Fairfax.

Both: Naval History and Heritage Command

Every ship in these waters had to be inspected, but as soon as the "phantom" saw it had been spotted it tried to run. *Constellation* gave chase. For the next three hours or so the slaver bark *Cora* matched wits and seamanship with the *Constellation*'s officer of the deck, Lieutenant Donald McNeil Fairfax. The lieutenant was a skilled seaman, at one point even ordering the sails to be wetted down so they would catch more wind.

To show that the *Constellation* meant business, the number one gun crew was told to load its 32-pounder cannon with solid shot. Fairfax then ordered a shot across *Cora*'s bow, the traditional means of ordering a ship to heave to. When *Cora* ignored the warning and continued on, *Constellation*'s crew rejoiced, because this was confirmation, if confirmation was needed, that the ship they were pursuing was indeed a slaver.

Excitement aboard *Constellation*

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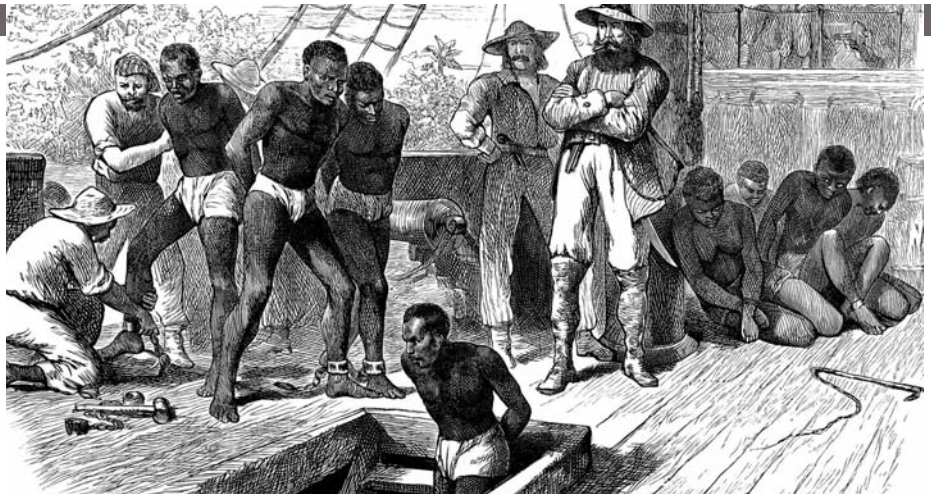

African slaves were transported in shocking conditions. Captives freed from slave ships were returned by the Americans to Liberia, the fledgling nation established by the American Colonization Society for American blacks.

reached a fever pitch. Every man and boy scrambled on deck, even those who should have been sleeping, preparing for their next turn on watch. It was not just the excitement of the chase that was causing the adrenaline to course through their veins: there was also money to be had. A captured slave ship and all its fittings would be sold, with half the proceeds set aside for the care of sick and aged sailors. The other half would be divided among officers and men. In addition, Congress offered a $25 bounty for each slave set free.

By about 10 PM *Constellation* was gaining ground on its quarry, and another shot was fired, but still the slaver captain paid no heed. The *Cora* started dumping things overboard to lighten its load, and even let loose one of its ship's boats in a vain attempt to distract the fast approaching U.S. vessel. More cannons were fired, and one of the blasts damaged some of the slaver's rigging. *Constellation* dared not send cannonballs though the hull for fear of hitting the tightly packed slaves in the bowels of the ship

When the slaver was within hailing distance it was ordered that the cannon be loaded with shell and fuse. A shell explosion would be far more devastating than solid shot and would cause more extensive casualties. The order was shouted loud enough for the slaver crew to hear it across the water. The threat of shellfire finally persuaded them to furl their sails and surrender.

A boarding party was sent over to take formal possession of the newly captured prize. They were armed with pistols and cutlasses; a sensible precaution, because usually a slaver's crew were murderous thugs of the lowest order.

But there was one question on everyone's mind: how many slaves were aboard? The answer was soon forthcoming. The slaver carried more than 700 slaves. The moment the crew heard these words they spontaneously filled the air with three deafening yet joyous cheers. Both officers and men would gain prize money for all, plus the satisfaction of doing their duty.

The *Constellation* was a relatively new ship, built in 1854, and was the last all-sail vessel made for the U.S. Navy. Most nations, including the United States, were switching over to steam-powered vessels, though steamers still usually had masts, spars, and sails as reassuring traditional backups. But the Africa Squadron's roots go back into the 18th century.

In 1787 the Constitutional Convention passed a compromise provision that would ban the transatlantic slave trade in 1808. At the time slavery was, on the whole, a dying institution. Slaves were costly, and southern planters were afraid of being outnumbered by their human "property." There were also some glimmers of enlightenment. Many Americans grasped that slavery was fundamentally evil. But the invention of the cotton gin in the 1790s changed both attitudes and the economic environment in the South.

The gin deseeded cotton efficiently and made the crop enormously profitable. Cotton plants needed constant tending, including chopping or weeding. Cotton flowers soon gave way to cotton bolls the seed-bearing capsules that contain the cotton fiber. The picking could then commence. Large plantations needed large gangs of laborers, so slavery quickly revived. The process was given added impetus by the Louisiana Purchase of 1803. The cotton boom and slavery moved west into the new territory and helped create new slave states like Mississippi and Alabama.

After the slave trade became illegal in 1808 there were sporadic attempts by the U.S. Navy to halt the traffic. The U.S. government and, by extension, the American people, simply lacked the will at this stage to invest enough resources to stop this infamous trafficking in human beings.

The situation was further complicated by American sensitivity about having Royal Navy vessels inspect American-flag vessels for slaves. The British Royal Navy was the most powerful navy in the world and was in a position to put a dent in, if not altogether abolish, the horrors of mid-Atlantic slave trafficking. Indeed, the British West Indian Squadron chalked up an impressive record in its first 50 years or so of existence.

But part of the process involved the "right of search." Many countries signed treaties allowing the Royal Navy to stop and search their vessels. These nations included France, Spain, Portugal, and Holland. The United States did not agree to this tenet, in part because of bitter memories of the years just before the War of 1812. At that time British warships stopped American merchant vessels with impunity, and also impressed American sailors to serve in the Royal Navy against their will.

Slavers of different nations quickly took note of the situation and hoisted an American flag when a British warship was spotted on the horizon. Protected by the Stars and Stripes, the slavers blithely sailed away while British Royal Navy officers gnashed their teeth in frustration. But the Americans would not budge on this point. Matters remained about the same until the 1840s.

In 1842 the Anglo-American Washington Treaty, also called Webster-Ashburton Treaty, marked a new milestone in suppressing the seaborne slave trade. The treaty stipulated that the United States maintain an Africa Squadron composed of ships that had an aggregate of 80 guns. The American African Squadron would operate independently of the British, but for the first time real cooperation was mandated. The United States was now committed to a permanent patrol, not just sporadic voyages of dubious worth. It must have seemed a very promising start to American and British abolitionists, but unfortunately the progress was more apparent than real.

Abel P. Upshur was Secretary of the Navy when the Africa Squadron was officially established in 1842. He was a visionary administrator who was open to new concepts and innovations. For example, he helped modernize the U.S. Navy through the addition of steam-powered vessels to the fleet. Yet as a Virginian and a slaveholder, he seemed to be indifferent to the fledgling Africa Squadron so recently placed under his jurisdiction.

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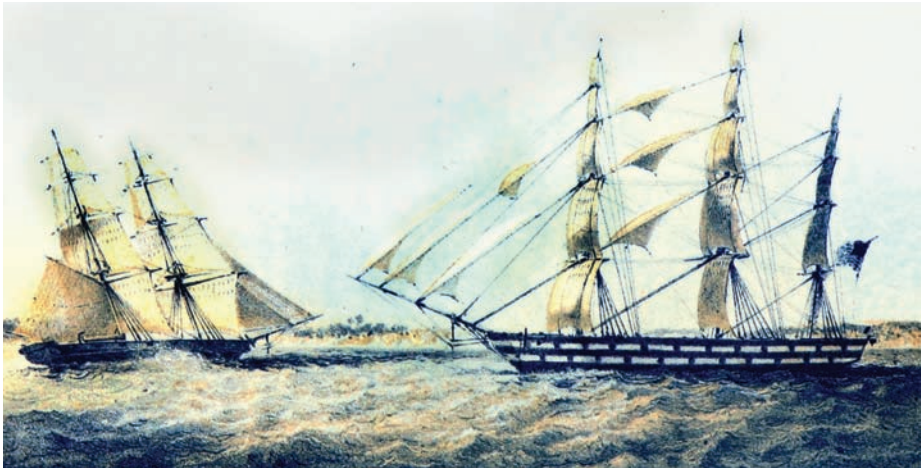

The sail-powered brig USS *Perry* (right) of the Africa Squadron seizes the slave ship *Martha*. By the 1850s, half of the ships in the squadron were modern steam-powered vessels.

In 1843 Captain Matthew Galbraith Perry was appointed flag officer of the Africa Squadron. Perry was truly an old sea dog with vast experience in the naval service. He is remembered in part for having opened up a reclusive feudal Japan in the 1850s.

Perry's new four-ship command was minuscule. It included the frigate *Macedonian,* sloop of war *Saratoga,* sloop *Decatur,* and the brig *Porpoise*. Upshur all but torpedoed the squadron's effectiveness with a letter of instruction. The missive forthrightly declared that its mission and chief purpose was that the "rights of our citizens in lawful commerce" were not to be "improperly abridged." Showing the flag and making sure American trade flowed smoothly from all points of the compass was the squadron's main duty. The suppression of the slave trade, which was the primary reason the squadron was established, came in a distant second.

Slave ships usually began their voyages disguised as routine merchant vessels, with their papers in order and nothing outwardly suspicious. But perceptive observers could easily spot the telltale signs of a would-be slaver, signs that its captain and crew could do little to disguise. Usually there was stored lumber, which would eventually be used to create a slave deck to store the captives. Below the slave deck would be stacks of iron bars used for ship's ballast. But among the ballast would be barrels or pipes of water and sacks of farina, a grain that, when mixed with oil, was the main food for the slaves during the voyage.

Other telltale signs included two sets of ship's papers in the event the second set was discovered. Yet another sign was the presence of a nearly all foreign crew on an American flagged vessel. Sailors in the 19th century were a tough breed, inured to hard work, bad food, and wretched conditions. Congress had only abolished flogging in the Navy and Merchant Marine in 1850. Yet witnessing the horrors of the slave cargo holds was a disturbing and unforgettable experience for most bluejackets.

The physical condition of many slaves was also shocking, with naked bodies "covered in loathsome scabs" and "tongues white from lack of water." Others had burning fevers, or were speckled with human waste or vomit from seasickness. The cargo holds were visions of hell, according to Ensign Wilburn Hall, who was a slaveholder himself.

Captives freed from slave ships were returned to Africa, but not to their home regions. The reason was simple: if returned home, chances were high they would be recaptured and enslaved once again. The British landed their newly freed slaves at Sierra Leone, one of the colonies they had established on the west coast of Africa. In similar fashion, captives freed by the U.S. Navy were sent to Liberia, the fledgling nation established by the American Colonization Society for American blacks.

Gradually, most nations followed the lead of the United States and banned the Atlantic slave trade; however, making the slave trade illegal did not halt the traffic. The profits were just too great. Throughout most of the 19th century the United States was not the primary market for the clandestine sale of African slaves. Virtually all slaves were shipped to Brazil and Cuba, and after Brazil finally banned the trade in 1850, Cuba became the main market.

Slavery was still legal in Cuba, then a Spanish colony, and the island was developing its own stable cash crop. For the American South the cash cop was cotton, while for the Cubans it was sugar. By 1860, Cuba was home to 1,400 sugar mills producing 450,000 tons of the sweet crystal. Nearly 370,000 chattels were working to meet the growing demand but they were not enough. More slaves were needed.

To those without a sense of morality or a drop of compassion for fellow human beings, Cuba's needs afforded a great opportunity for profit. One would think that southern cities would be the centers of the flourishing illegal trade to the island. But New York with its strong trade links to the South was the clandestine center of the slave trade. The risks were small, the rewards great. It made sense to many businessmen to invest clandestinely in slave ventures.

The Cuban demand for slaves eventually leveled off, but it did not disappear entirely. In the mid-to-late 1850s the desire to reopen the slave trade to the United States, long dormant, started to spring to malevolent life. King Cotton dominated the South, but more workers were needed. The concept of natural increase, whereby existing slaves filled the demand by having more children, no longer met the soaring labor demands. As the country began to split along regional lines, the South's feelings toward the North and its "evil" abolitionists came close to paranoia. By that time, the South supplied much of the world's cotton. To maintain that economic position, many individuals started to think that reopening the slave trade was the only viable solution.

The laws of supply and demand exacerbated the South's seeming plight. Simply put, the growing scarcity of slave labor drove up the price of the chattels that were still available on the market. One Southern commentator complained that the price of slaves had already reached a point beyond the means of small planters. Able men (i.e., skilled workers) were sold as high as $1,835, which equates to approximately $20,000 in today's economy.

William Lowndes Yancey, a rabid pro-slavery and secessionist Alabama politician, asked, "If it is right to buy slaves in Virginia and carry them to New Orleans, why is it not right to buy them in Cuba, Brazil, or Africa and carry them there?"

On May 10, 1858, a so-called Commercial Convention met at Montgomery, Alabama. James DeBow, editor of the commercial journal, was one of the organizers, and Yancey lent his support. "Resolved, that slavery is right, and that, being right, there can be no wrong in the natural means to its formation," declared the convention. But this statement was only the warm-up for the convention's real bombshell: "It is expedient and proper that the foreign slave trade should be reopened, and that this convention will lead its influence to any legitimate measure to that end."

The U.S. Navy was full of Southern officers, some of them slave owners, and the record shows that in the main they did their duty. But

public duty and private convictions are two different things. Southerners were sickened by the sights they witnessed on slave ships. But after the initial shock, they seemed to have rationalized the situation and suppressed any feelings of guilt they had.

It was the voyage of the slaver *Wanderer* that caused a sea change in the African Squadron, literally and figuratively. The ship, originally built as a yacht, was so swift it easily evaded the sloop of war *Vincennes* when the latter gave chase in the open ocean. *Wanderer*'s backers included Charles Augustus Lafayette Lamar of Savannah, Georgia. Lamar, yet another secessionist and pro-slavery man, was elated when the ship landed 405 slaves on Jekyll Island under the very noses of the Federal authorities.

But word soon spread of the *Wanderer*'s clandestine and decidedly illegal feat. Northern papers expressed shock. How could this happen? President James Buchanan was usually depicted as a "doughface," meaning he was a pliable politician, kneaded and shaped by the many Southerners in his administration. The easy escape of *Wanderer* seemed to confirm these suspicions. Buchanan was a Democrat, and the newly formed Republican Party was against slavery's growth. The 15th president of the United States was embarrassed by the *Wanderer* and wanted to distance himself from his "fire-eating" secessionist colleagues in Washington.

In the late 1850s Buchannan ordered Secretary of the Navy Isaac Toucey to strengthen the Africa Squadron. Commodore William Inman would have eight ships under his command, and four of them would be steamers. The sloop of war *Constellation* would be his flagship; the other all-sailing vessels were the sloops of war *Vincennes, Portsmouth,* and *Marion*. Yet it was the steamers that were the most welcomed additions, including *San Jacinto, Mystic, Mohican,* and *Sumpter.*

This newly augmented Africa Squadron was spectacularly successful, at least when measured by what had gone on before. The *Constellation* alone captured three slavers, one of which was the notorious *Cora.* The overall situation was helped by the fact that the squadron's base was finally moved to the African continent, namely St. Paul Loando in Angola.

It was the outbreak of the American Civil War that finally put an end to the transatlantic slave trade and the Africa Squadron. The reforms, including the introduction of steamers, allowed the squadron to end in a blaze of glory. In a year's time the squadron caught 14 slave ships and freed 3,032 slaves, which was half the total number that had been liberated from 1839 to 1861. □

RACE TO THE MEUSE

Ullstein Bild

Hasso von Manteuffel's Fifth Panzer Army had a strict timetable to reach the Meuse River during the Battle of the Bulge. The Americans wrecked it. | **BY WILLIAM E. WELSH**

The American airborne troops shivered in their foxholes as temperatures plummeted on Christmas Eve 1944. Behind them to the east lay the beleaguered town of Bastogne. They braced themselves for another German attack. Two and a half hours into Christmas morning the German heavy guns boomed loudly in the distance. Heavy shells screamed overhead and slammed into the snow-covered ground. Once the guns stopped, the American soldiers could see German grenadiers rushing furtively toward their positions.

Earlier that day the 115th Panzer Grenadier Regiment had arrived to reinforce the elements of the German Fifth Panzer Army besieging Bastogne. An attack force, dubbed the 115th Kampfgruppe, consisting of four battalions of infantry, two battalions of armored field artillery, a company of self-propelled guns, and 18 tanks assembled to capture the town. At 5:30 AM, Colonel Wolfgang Maucke ordered his Panzer Mark IVs to advance southeast from their starting point between Flamierge and Givry toward Bastogne.

The German and American infantry fought for control of key hills and villages such as Champs as Christmas Day dawned. In Champs, German grenadiers and American riflemen fought house to house. American reinforcements arrived to bolster the western portion of the perimeter, but they had difficulty seeing where to deploy in the weak light. After 90 minutes of fighting, the men of the U.S. 327th Glider Infantry Regiment heard the telltale sound of German tank suspensions clanking in the distance. From out of the darkness to the west the dreaded machines advanced in two columns with their machine guns chattering as they raked American targets. The left column of Maucke's spearhead peeled off north to seize the village of Hemroulle while the right column proceeded due east for Bastogne.

The German tanks in the right column pushed forward despite resistance from American tank destroyers and bazooka teams that sought desperately to knock them out. Three hours after they began, Maucke received a radio transmission informing him that the tanks of the right column had reached the western outskirts of Bastogne. The German commander was pleased with the news for he expected them to reach the center of the market town by 9 AM.

RIGHT: A confident German SS panzergrenadier advances past a column of burning American vehicles at the outset of Operation Wacht am Rhein. A film with this image was found by the Americans. ABOVE: German infantrymen move cautiously through an Ardennes forest. The key to the offensive was the capture of critical road hubs.

The tanks moved from column to line abreast. They were nearing the 101st Airborne's Command Post. A pair of tank destroyers knocked out three Mark IVs in quick succession. American bazooka teams moved up behind the German tanks and destroyed two more. The strength of the right column was dissipating rapidly in the face of a determined American counterattack.

Meanwhile, the left prong ran headlong into both Sherman tanks of Colonel William Roberts' Combat Command B (CCB) of the 10th Armored Division and four tank destroy-

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ers. To make matters worse, they also were fired on by American 105mm howitzer crews and mortar teams. The Americans had worked their way around both columns and surrounded them. While the Americans continued to feed men into the fight, the Germans received no reinforcements. Maucke heard no other news from his tank troops. By the end of Christmas Day, all 18 of Maucke's tanks were flaming wrecks inside the American perimeter.

The morning attack on Christmas Day occurred nine days after the Germans unleashed a powerful winter offensive named Wacht am Rein on the Western Front during the final months of World War II. Twenty-four German divisions advanced against three U.S. infantry divisions and part of one armored division in the "quiet" Ardennes sector that belonged to Lt. Gen. Courtney Hodges' U.S. First Army of Lt. Gen. Omar Bradley's Twelfth Army Group.

Hodges was using the quiet sector as a place to deploy newly arrived divisions to gain some experience patrolling the frontier and bring battered ones like those that experienced the meat grinder of the Hürtgen Forest back to strength. When the attack unfolded in mid-December, Hodges' First Army had entered Germany at Aachen and was engaged against the Germans in the foreboding Hürtgen Forest northeast of the Ardennes. To the south, Lt. Gen. George Patton's Third Army was battling entrenched Germans in the Saarland.

On September 16, 1944, German leader Adolf Hitler announced to his senior generals his idea for a winter offensive in the West. At the time, 96 Allied divisions were arrayed against 55 German divisions on a 570-mile front. Hitler's overly ambitious plan called for Colonel Group Leader Josef "Sepp" Dietrich's Sixth Panzer Army and General of Panzer Troops Hasso von Manteuffel's Fifth Panzer Army to advance into the Ardennes Mountains, cross the Meuse River, and wheel north to capture the port of Antwerp. While Dietrich drove straight for Antwerp, Manteuffel would follow closely to the west, protecting his left flank from counterattacks by Allied forces. Another German army, General of Panzer Troops Erich Brandenberger's Seventh Army, would guard Manteuffel's left flank.

The offensive would be under the overall direction of Field Marshal Walter Model, the commander of Army Group B, who in turn reported to 60-year-old Field Marshal Gerd von Rundstedt, who was the commander in chief of German forces in the West. Hitler brought the highly decorated commander out of retirement to supervise the preparations for the important offensive.

The intent of Wacht am Rein was to isolate and destroy four Allied armies: the U.S. 1st and 9th Armies, the Canadian 1st Army, and the British 2nd Army and, in so doing, force the Allies to the peace table. The veteran German senior commanders in the West thought it would be a miracle if their troops were able to reach the Meuse, much less get beyond it. "If we reach the Meuse we should go down on our knees and thank God," said von Rundstedt.

The German offensive involved 250 million German troops, 1,278 panzers and assault guns, and 2,600 artillery pieces. Sixth Panzer Army had eight infantry and five panzer divisions, Fifth Panzer Army had four infantry and three panzer divisions, and Seventh Army had four infantry divisions.

The commanders of the two panzer armies were more different than alike, and their respective armies also had key differences. Dietrich, one of Hitler's favorites, was a Nazi Party loyalist who lacked the seniority of many better qualified panzer generals. In comparison to Dietrich, Manteuffel was eminently more qualified for the assignment because of his training and experience. Dietrich would lead the SS panzer forces, whereas Manteuffel would command the Wehrmacht panzer forces. While Dietrich would attack on a narrow front and had access to substantial reinforcements, Manteuffel would attack over a broader front with limited access to reinforcements. Manteuffel's discipline and ability to keep focused on the principal objectives of the offensive produced the greater potential for success as the attack progressed.

The two powerful panzer corps that constituted Manteuffel's Fifth Panzer Army were deployed behind the Our River at the start of the offensive. On the right was General of Panzer Troops Walter Kruger's LVIII Panzer Corps, and on the left was General of Panzer Troops Heinrich Freiherr von Luttwitz's XLVII Panzer Corps.

The LVIII Panzer Corps comprised Siegfried von Waldenburg's 116th Panzer Division and Walter Langhauser's 560th Volksgrenadier Division. To its south was the powerful XLVII Panzer Corps, comprising Colonel Meinrad von Lauchert's 2nd Panzer Division, Generalleutnant Fritz Bayerlein's Panzer Lehr Division, and Generalmajor Heinz Kokott's 26th Volksgrenadier Division. Because of the narrowness of Fifth Panzer's front, Bayerlein's division was deployed in a second line as a follow-on force.

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ABOVE: The extreme conditions of the Ardennes winter tested the mettle of infantrymen on both sides. Men of the U.S. 106th Infantry Division fight from foxholes. RIGHT: Dead American soldiers at a crossroads in Hinsfeld, Belgium. The soldier in the foreground has been stripped of his boots.

Arrayed opposite them on a 25-mile front behind the Our River was Maj. Gen. Norman D. Cota's veteran 28th Infantry Division. Cota's division was part of Maj. Gen. Troy Middleton's VIII Corps. Cota's division had fought in the Hürtgen Forest in November where it had lost 6,000 men. Although its losses had been replaced, the new troops were inexperienced. Middleton's headquarters was situated in Bastogne, and Cota's was based in Wiltz. The 112th held the north of the line and straddled both sides of the Our River, the 110th held the center with its headquarters at Clervaux, and the 109th held the southern end of the line covering the approaches to Wiltz.

At that point in the war, Middleton's 69,000-man VIII Corps also included Maj. Gen. Alan Jones's 106th Division, Maj. Gen. Raymond Barton's 4th Infantry Division, and Maj. Gen. John W. Leonard's 9th Armored Division. The 106th Division, which was untested in combat, arrived at the front on December 11 and deployed directly north of Cota's 28th Division. Like the 28th Division, the 4th Division also was resting following combat operations in the Hürtgen Forest and was temporarily assigned to Middleton's corps. Two of Leonard's three combat commands, CCA and CCR, shored up the corps' front line. CCR was deployed on the 28th Division's left flank, and CCA was situated on the division's right flank. Middleton's also had four battalions of combat engineers he could deploy as infantry in the event of an emergency.

For the Fifth Panzer Army to have any chance to maintain its ambitious schedule of

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reaching the Meuse River in three days, it would have to brush aside the American infantry manning the front line and seize control of several key towns that served as road hubs, such as St. Vith, Clervaux, and Bastogne.

Bastogne, a market town of 3,500 residents where seven roads converged, was critical to the success of Manteuffel's attack. Manteuffel knew Lauchert and Bayerlein could not afford to get bogged down in a protracted battle to capture Bastogne. He had made it clear in briefings before the battle that Kokott's slow-moving 26th Volksgrenadier Division would likely bear the brunt of fighting to secure Bastogne while the panzer units bypassed it. "Bastogne must be taken otherwise it will remain an abcess on our lines of communications," Luttwitz told his division commanders.

The Allied weather forecast for Saturday, December 16, indicated that snow would begin falling in the early afternoon, restricting visibility. None of Middleton's headquarters units warned of a possible enemy attack. The relative quiet that morning was shattered at 5:30 as German railroad guns and gigantic field howitzers heaved their deadly shells into Allied positions along an 85-mile front in the eastern Ardennes. The Germans followed their initial fixed barrage with walking barrages. The barrages were designed to sever Allied telephone lines so units could not share information with their local headquarters. This prevented First Army's units from knowing whether they were facing an isolated attack or a full-blown German offensive. As soon as their artillery stopped, German panzer grenadiers and volksgrenadiers began infiltrating enemy positions to surround and isolate the Americans' forward positions.

The troops of Kruger's LVIII Corps found the Americans of the 112th and 110th Infantry Regiments in strong positions. The 112th Infantry held a six-mile-long bridgehead on the east bank of the Our River. It was situated in the Siegfried Line, the imposing system of defensive forts and bunkers built by Germany before the war. The Americans took advantage of the bunkers where possible. For that reason, it took time to pry them out of their positions.

General-Major Siegfried von Waldenburg's 116th Panzer Division had a complement of 43 Panthers, 26 Mark IVs, and 26 Jagdpanzer IV tank destroyers. His panzergrenadiers captured their first bridge over the Our River at Heinerscheid, but they failed the first day to secure a key crossing farther north at Ouren, where several bridges spanned the Our River.

Colonel Hurley Fuller's understrength 110th Regiment held a half dozen defensive positions between the Our and Clerf Rivers, some of which were manned only by a single platoon or company. Helping them slow the German onslaught were two artillery batteries that guarded the approaches to Clervaux and the crossings of the Clerf River. The scattered units of the 110th also had to contend with Colonel Walter Langhauser's 560th Volksgrenadier Division. The volksgrenadiers took advantage of the seam between the 110th and 112th to make considerable gains at the start of the attack as they closed on the Clerf north of Clervaux.

As the battered troops of the 110th Infantry streamed back toward Clervaux, Cota ordered a fresh battalion to reinforce Clervaux in expectation of a major clash the following day at the key crossing of the Clerf. Bearing down on Clervaux was Colonel Meinrad von Lauchert's 2nd Panzer Division. The powerful division had 58 Panthers, 27 Mark IVs, and 48 self-propelled guns.

Meanwhile, Kokott's 26th Volksgrenadier Division made good progress toward the Clerf by overrunning a forward position of the 110th Infantry Regiment at Walhausen. The American infantry did its best with mortars and antitank guns to try to slow the advance of von Luttwitz's XLVII Panzer Corps, but it proved difficult to stop.

By the end of the first day, Fuller's regiment had lost most of its forward positions. The Germans managed to drive the men of Company B of the 110th Infantry out of Marnach, but they failed to capture Hosingen farther south, where an American infantry company reinforced by an engineer company continued to hold on. As dusk fell over Hosingen, the Americans and Germans were fighting house to house through its narrow streets. To the delight of the beleaguered Americans, four Sherman tanks fought their way into the town that evening. Unfortunately, the infantrymen were running out of rifle ammunition.

South of Hosingen, the Germans of the 26th Volksgrenadier attacking the town of Holzthum got a nasty surprise. When a volksgrenadier company tried to outflank the town to the north, it ran headlong into a company of U.S. M16 antiaircraft half-tracks mounting quadruple .50-caliber Browning machine guns. When used in the antipersonnel role, the fearsome weapon was dubbed the "Krautmower." The gunners raked the 100-man company, sending its survivors into full retreat.

The panzer advance in the south was slowed by the need to build a pair of 60-ton pontoon bridges to funnel Lauchert's and Bayerlein's panzers across the Our. Bayerlein had a wealth of armor, but it quickly became clear that it was going to take considerable time for its weight to be felt as the roads were clogged on the first day by units in front of it. Panzer Lehr had 30 Panthers and 27 Mark IVs. In addition, Bayerlein also commanded the 559th Panzerjaeger Battalion with 19 Jagdpanzers and the 243rd Assault Gun Brigade with 18 StuGs.

At Fouhren on the west bank of the Our River, the 109th Infantry had to contend not only with elements of XLVII Panzer Corps, but also elements of the Seventh Army. The ground was steep in this sector, and the Germans advanced skillfully through defiles to infiltrate and outflank American positions. Fortunately, CCA of the 9th Armored Division was available to lend a hand to the hard-pressed grunts.

Kruger's LVIII Panzer Corps failed on the first day to capture Fifth Panzer Army's northernmost

crossing of the Our River at Ouren, so Manteuffel issued orders for the following morning designed to remedy the situation. The orders instructed Waldenburg to send a portion of his panzer troops to cross at Dasburg, which was the main crossing for Lauchert's 2nd Panzer Division, and attack the rear of the American units at Ouren.

Because Lauchert and Kokott had failed to clear the Americans from Hosingen, the crossings of the Our River remained clogged with vehicles. The bottlenecks on the roads leading west from the Our River crossings at Dasburg and Gemund prevented Bayerlein's Panzer Lehr troops from joining the advance.

General Dwight D. Eisenhower, the Supreme Allied Commander in Europe, and Bradley met in Paris the first night of the German attack to discuss the situation. Bradley had driven four hours from his headquarters in Luxembourg City to meet with Eisenhower at SHAEF headquarters. The Twelfth Army commander, who was responsible for the Ardennes sector, deemed the German advance a diversionary attack designed to take pressure off Third Army's offensive in the Saarland, but Eisenhower disagreed and issued orders for armored troops from the adjacent Allied armies to reinforce Hodges.

Eisenhower instructed Bradley to detach Maj. Gen. William Morris's 10th Armored Division from Lt. Gen. George Patton's Third Army and detach Brig. Gen. Robert Hasbrouck's 7th Armored Division from Lt. Gen. William Simpson's Ninth Army. Both armored divisions received orders to move with all haste to assist Hodges' army. The following morning Bradley departed for Luxembourg City.

The situation on the second day of the German attack was particularly grim for the dispersed companies of Fuller's 110th Infantry Regiment. They held a six-mile-front under heavy pressure at all points. Fuller directed his troops from his regimental headquarters at the Claravallis Hotel in Clervaux. In Hosingen some of the Americans had run out of rifle ammunition and were forced to fight with grenades.

From his headquarters in Wiltz, Cota admonished his infantry companies on the east side of Clervaux to hold their positions at all costs and denied all requests to regroup behind the Clerf River. Middleton was busy to distributing parts of his paltry divisional reserve forces to the battlefront. He dispatched four tank destroyers from the 811th Tank Destroyer Battalion of 9th Armored's CCR to Ouren and a company of self-propelled antitank guns to Clervaux.

As instructed by Manteuffel, Waldenburg sent 13 Panther tanks, nearly one-third of his Panthers, north to dislodge elements of the 112th Infantry Regiment from Ouren. The Americans at Ouren, who were in danger of being ground under the treads of the formidable Panther tanks, called for armor support, and a platoon of tank destroyers answered their call. Waldenburg lost four Panthers but succeeded in dislodging the Americans from Ouren.

On the morning of the second day, Lauchert's panzers fought off a spirited counterattack by American tanks attempting to retake Marnach east of Clervaux. Tank battles occurred between Sherman tanks of Company A of the 707th Tank Battalion and Lauchert's sturdy Panzer Mark IVs. Kokott's volksgrenadiers, who were armed with highly effective panzerfausts, assisted the panzer troops by knocking out a total of 11 American tanks.

A major battle shaped up for Clervaux. The

Panzergrenadiers fanned out into the woods on both sides of the road and probed the position. A short time later Mark IVs and Panthers of the 3rd Panzer Regiment arrived to engage the Shermans. It was a grueling six-hour battle in which the Americans sought to hold their ground but saw their Shermans transformed into burning wrecks.

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Both: National Archives

town was crucial to the Germans because it had a bridge over the Clerf River and was the principal paved road to Bastogne. The volksgrenadiers marching to Clervaux were backed by Panther and Mark IV tanks of Lauchert's 2nd Panzer Division. Fuller dispatched three platoons to form a line on high ground east of Clervaux to contest the German advance.

Lauchert launched a well-executed, two-pronged strike against Clervaux. He sent one armored column to the northeast to roll up the flank of the Americans defending the eastern approaches to the town and another armored column to hook around the American defenses and secure the bridge. When a dozen German tanks, among them the imposing Panthers, prepared to advance line abreast against Clervaux, some of the American self-propelled antitank guns beat a hasty retreat. One driver apparently was gripped by a terror so great that he overturned his vehicle in his haste to get away from the Panther tanks. Despite having artillery and armor to support them, the American infantry could simply not hold Clervaux in the face of such formidable odds.

As for the Americans ordered to stand firm in Hosingen, they held out until noon on the third day when 320 riflemen and engineers surrendered. The loss of Clervaux and Hosingen opened a 12-mile breach in the middle of the 28th Infantry Division's line that the Germans would exploit on the third day.

Eisenhower's only reserve consisted of Maj. Gen. Matthew Ridgway's XVIII Airborne Corps, comprising the crack 82nd and 101st Airborne Divisions, which were resting and refitting in Reims following Operation Market Garden. On the morning of December 17, Eisenhower transferred Ridgway's corps from his reserve to First Army's reserve. Bradley issued orders for the XVIII Airborne Corps to embark by truck immediately for the Ardennes.

Brigadier General James Gavin led the 82nd, while Brig. Gen. Maxwell Taylor led the 101st. Since both Ridgway and Taylor were in England at the time, command of the corps devolved to Gavin and command of the 101st went to the short, plucky Brig. Gen. Anthony McAuliffe. He received his orders at 8:30 PM, December 17, and the convoy of 380 trucks carrying the 11,840 men of the 101st got under way shortly after midnight on the 100-mile trip to Bastogne. Although initially both divisions were earmarked for Bastogne, the 82nd would be put into a blocking position 30 miles north of Bastogne at Werbomont.

At the beginning of the third day, Manteuffel's panzer troops had secured crossings of the Clerf River and were traversing the Wiltz Val-

ABOVE: After delaying the Fifth Panzer Army's attack along the Our River, men of the 28th Infantry Division withdrew to Bastogne. LEFT: Americans surrender to the Germans. Isolated American infantry units received orders to hold their ground to allow time for reinforcements to reach the battlefront. OPPOSITE: An American with a submachine gun engages enemy soldiers while a German half-track burns on a clogged roadway. Bottlenecks on key roadways bedeviled the German panzer columns.

ley. General Middleton sent small task forces of engineers, artillery, and tanks or tank destroyers to slow the German advance. These task forces were not expected to defeat the stronger German columns, but simply to buy time for reinforcements to arrive at Bastogne.

The following morning, Colonel Joseph Gilbreth's CCR of the 9th Armored Division did its best to slow the German panzer juggernaut on the main Clervaux-Bastogne road. Captain L.K. Rose's Task Force and Lt. Col. Ralph Harper's Task Force would man roadblocks across the northern and southern routes to Bastogne. For the XLVII Panzer Corps, the race to Bastogne was on for Luttwitz had learned through intercepted American radio transmissions late on the second day that the Americans were sending their elite airborne troops to Bastogne to reinforce the key town. Bastogne was crucial to the Germans because it would afford them the most direct routes to the Meuse crossings.

Task Force Rose had set up five miles west of Clervaux and 14 miles east of Bastogne during the early morning hours of Monday, December 18, on the Clervaux-Bastogne road. Rose had a company of Sherman tanks, an armored infantry company, and a platoon of armored engineers. The Germans advanced on the ridge where Rose's force was deployed at 10 AM. Panzergrenadiers fanned out into the woods on both sides of the road and probed the position. A short time later Mark IVs and Panthers of the 3rd Panzer Regiment arrived to engage the Shermans. It was a grueling six-hour battle in which the Americans sought to hold their ground but saw their Shermans transformed into burning wrecks.

The troops of Task Force Harper awaited farther west. Harper had elements of the 2nd Tank Battalion and two companies of the 52nd Armored Infantry Battalion. Harper guarded the intersection near Allerborn nine miles from Bastogne where the road from Wiltz joined the Clervaux-Bastogne road. Lauchert's panzers approached the American defenders in the gloaming and quickly overran two American tank platoons. The Shermans could not stand their ground in the face of

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ABOVE: Americans at the 28th Infantry command post in Wiltz. The Germans shelled the key town in an effort to force the Americans to give up. OPPOSITE: The crack 101st Airborne Division shored up the defense of Bastogne and played a major role in preventing the Germans from achieving their objectives on the south side of the bulge.

the more powerful Panthers. The fire from the panzers' machine gunners swept the ground, killing and maiming the American infantrymen. When Harper was slain, they pulled back to Longvilly, and Lauchert's 2nd Panzer Division peeled off north on its drive to the Meuse.

While Lauchert's 2nd Panzer Division had been fighting the task forces on the northern routes to Bastogne on the third day, Panzer Lehr crossed the Clerf River near Drauffelt. Colonel Ludwig Heilmann's 5th Parachute Division advanced on a parallel route to the south. Wiltz lay in the direct path of Panzer Lehr, the 26th Volksgrenadier Division, and the 5th Parachute Division. The Americans had strengthened the forces defending Wiltz by sending tanks and assault guns and the 600 men of the 44th Engineer Combat Battalion, but it was only a matter of time before it fell to Kokott's volksgrenadiers and Heilmann's paratroopers.

Bayerlein had a dubious combat record. Indeed, Manteuffel had serious reservations about his ability to command such a panzer division under pressure. Bayerlein made the rookie mistake of asking Belgian citizens for information on the location of the American forces. They gave him misleading information. Specifically, they told him that a force of Americans held Margaret, a short distance east of Bastogne, with 50 tanks. If he had been bold and daring, he conceivably could have reached the outskirts of Bastogne on the third day. His delay not only allowed various forces to reinforce Bastogne, but also allowed Middleton to deploy a fresh set of task forces to screen the approaches to Bastogne via the towns of Noville, Longvilly, and Wardin.

While the two task forces were trying to slow Luttwitz's panzer juggernaut, Middleton was briefing the commanders of the reinforcements that began arriving in Bastogne that afternoon. The first to arrive was Colonel Roberts, the leader of CCB of the 10th Armored Division. McAuliffe, whose 101st Airborne Division was placed temporarily under Middleton's command, arrived at 4 PM. Middleton ordered Roberts to divide his combat group, which was composed of Sherman tanks, half-tracks, and armored scout cars, into three sections that would each block a road into Bastogne. The task forces moved into position under cover of darkness on the night of December 18-19.

The sacrifice of Cota's division in the first three days of the German offensive had put Kokott's and Bayerlein's divisions 36 hours behind schedule. Beginning on December 19, the defense of Bastogne was largely in the hands of the elite paratroopers and glider troops of the 101st Airborne and the armor and artillery that arrived to support them.

The vanguard of the 101st, which consisted of Colonel Julian Ewell's 501st Parachute Infantry Regiment, arrived in Bastogne at midnight on December 18-19, and the other three regiments arrived the following morning. In addition, the 705th Tank Destroyer Battalion of the Ninth Army rolled into town as did various artillery regiments with instructions to support the paratroopers. Of the seven artillery battalions that eventually would deploy at Bastogne, three were armed with the formidable 155mm "Long Tom" howitzers.

Heading five miles north to defend Noville was a team led by 26-year-old Major William Desobry. He had 400 men, 15 Sherman tanks, and a platoon of M-10 tank destroyers with which to grapple with Lauchert's panzer regiments. They arrived at 2:30 PM and waited for the Germans to arrive. Thick morning fog on Monday morning prevented the Americans from seeing anything at a distance. In an old cemetery at Noville, crews manned 57mm antitank guns, and bazooka teams hunkered down ready to spring into action. Out of the mist loomed German Panthers, and the Americans knocked out two in quick succession.

The Germans began a series of probing attacks. American morale soared when the 1st Battalion of the 506th Parachute Infantry arrived from Bastogne. The tough airborne troops advanced against the Germans with the Shermans providing fire support. The Germans had more men and more tanks, though, and they drove the paratroopers back to the village. When it finally fell back south toward Bastogne, Task Force Desobry had delayed elements of Lauchert's panzer division an entire day.

Lieutenant Colonel Henry Cherry was ordered to take his task force east to Longvilly, and Lt. Col. James O'Hara was to deploy his task for three miles to the southeast of Bastogne at Wardin. Cherry's task force could not reach Longvilly because the route was packed with retreating U.S. vehicles and troops from the earlier attempts to slow the Germans advancing on the Clervaux-Bastogne road. When Cherry learned that the vanguard of the Panzer Lehr Division was in Margaret in his rear, he withdrew to Neffe. Task Force Cherry's rearguard under Lieutenant Edward Hyduke, the leader of a tank battalion, used their Shermans effectively against a pack of Mark IVs that blunted the German advance on the main road.

Luttwitz arrived at Oberwampach, which lay southeast of Longvilly, to personally supervise Bayerlein's advance. He had arranged for Lauchert, who was directing his division's advance to the northwest at Chilfontaine on the Clervaux-Bastogne road, to send a battery of 88mm flak guns south to knock out American howitzers that had shelled Bayerlein's panzer column. The flak gun crews opened up on Hyduke's Shermans and together with Bayerlein's panzers destroyed the American rear guard.

Meanwhile, the gridlocked Americans

tracked and wheeled vehicles attempting to withdraw west toward Margaret from Longvilly found themselves cut off and surrounded by German forces. At 1 PM Germans tanks and flak guns began firing into the trapped line of vehicles. In 90 minutes they had destroyed the trapped column. After rounding up American prisoners who survived the carnage, the Germans marched on Neffe.

Cherry's troops set up a defensive position in a chateaux on the south side of the road, taking automatic weapons from their vehicles and propping them up in windows of the old building. As the two sides clashed, mortar crews on both sides dropped rounds into their tubes. When the German fire became too severe, Cherry disengaged and led the survivors toward Bastogne.

Eisenhower met the senior generals at Verdun on Tuesday, December 19, to discuss how best to quickly and efficiently contain the German thrust. When asked by Eisenhower how quickly he could reinforce Hodges' army, Patton said he could have three divisions deployed against the Germans on the left shoulder of the bulge by Friday, December 22.

Patton issued orders for Maj. Gen. Hugh Gaffey's 4th Armored Division to concentrate at Longwy and head north 40 miles to the left shoulder of the bulge. He also instructed his chief of staff to find transportation for the 80th Infantry Division that would start out that day for the battlefront and be followed on December 20 by the 26th Infantry Division.

Luttwitz's three division commanders favored an attack by the entire XLVII Corps against Bastogne to open up the roads leading west from the town to the Meuse River. Manteuffel flatly refused on the grounds that it was contrary to their mission; however, he passed the request up the chain of command. The staff of Army Group B told him that Bastogne was not the main objective and did not merit such a concentration of force.

The final blow to the beleaguered 28th Infantry Division defenders of Wiltz began at 2:30 PM on December 19. That morning Cota had relocated his headquarters to Sibret southwest of Bastogne. The 3rd Battalion of the 110th Infantry retreating from the village of Nocher had recently arrived in the town. Paratroopers of the 5th Parachute Division backed by 40 tanks and assault guns assailed the town from three sides. German assault teams whose members were armed with submachine guns trotted alongside the tanks spearheading the attacks. The Germans smashed through the weak perimeter in several places. With few choices left to them, the Americans received permission that evening to break into small groups and try to escape west under cover of night.

On December 20, the fifth day of the German offensive, Kokott's volksgrenadier division spread out around the Bastogne perimeter with the intent of encircling the Americans. It would take them two more days to complete their encirclement, though. By that time the German advance had slowed considerably. German regiments advanced cautiously for fear of running into an American ambush.

The Americans were contained within a perimeter that was only five miles wide. For the next several days, the Germans were content to keep the units inside Bastogne contained. During that period, McAuliffe ordered his artillery units to conserve their ammunition.

On the Fifth Panzer Army's right flank, Kruger's LVIII Panzer Corps did not capture St. Vith until December 21. The Germans had hoped to capture St. Vith on the second day of the offensive, but it took them four more days than they originally planned to secure the vital road hub. Elements of Hasbrouck's 7th Armored Division and CCB of the 9th Armored Division had buttressed the two American infantry regiments that held on at St. Vith, thwarting the Germans' attempts to break out beyond the town. By the time the surviving Americans pulled out, Gavin's 82nd Airborne had taken up a blocking position at Werbomont east of the Ourthe River. It took the LVIII Panzer Corps two more days to outflank the hardy paratroopers and their supporting armor and field guns.

McAuliffe was growing increasingly anxious about the situation inside the perimeter. The Americans had an acute shortage of medical supplies, food, and ammunition. On December 22, Maj. Gen. Gaffey informed McAuliffe by radio that the vanguard of the 4th Armored Division was just 20 miles south of Bastogne. However, Gaffey's combat commands had encountered stiff opposition from Heilmann's 5th Parachute Division of the Seventh Army and it would likely take at least several more days before one of them reached Bastogne. With the American forces at Bastogne contained inside the perimeter, the reconnaissance battalion of Panzer Lehr was able to race around Bastogne to the south and reach St. Hubert. This put Bayerlein's reconnaissance troops only 30 miles from the Meuse River.

The Germans completed the encirclement of Bastogne on December 22. This prompted Luttwitz to demand the Americans' surrender. A pair of German officers carried Luttwitz's ultimatum to McAuliffe. It stated that if the Americans did not surrender immediately they could expect total annihilation.

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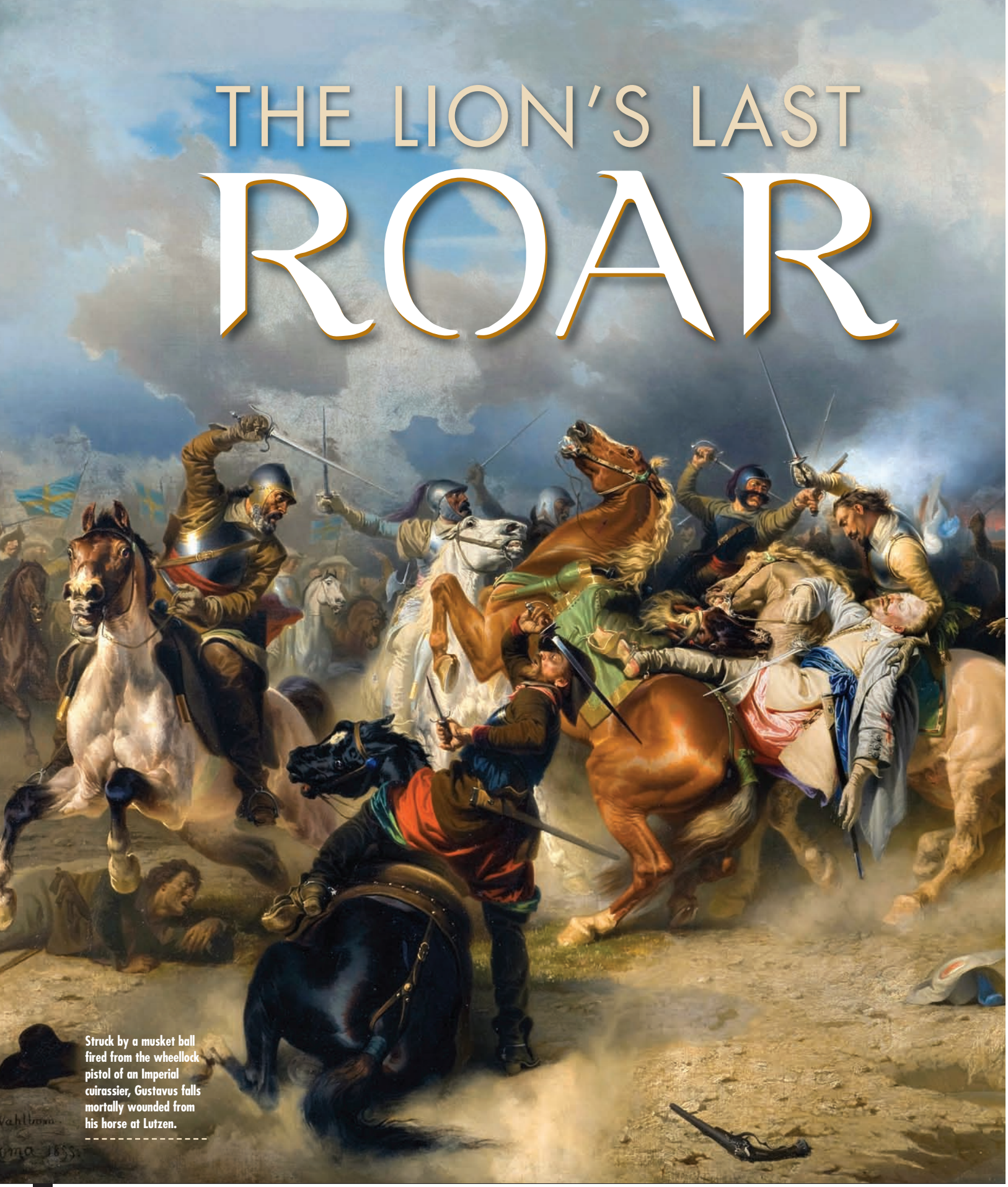
"Aw, nuts!" McAuliffe said when he read the ultimatum. He and his staff decided on that spontaneous reaction as their reply to Luttwitz, but they shortened it to "Nuts." As he was ushering the German officers out of the American lines, Colonel Joseph Harper told them that the expression in the current context meant "Go to Hell!"

When word of the response spread throughout the senior leadership of the Fifth Panzer Army, Manteuffel and his generals were furious. They vowed to crush the Americans in Bastogne for their insolence.

After a week of low cloud cover, a high-pressure system that brought clear skies and subfreezing temperatures enabled Allied high-altitude bombers, fighter-bombers, and transport

Continued on page 74

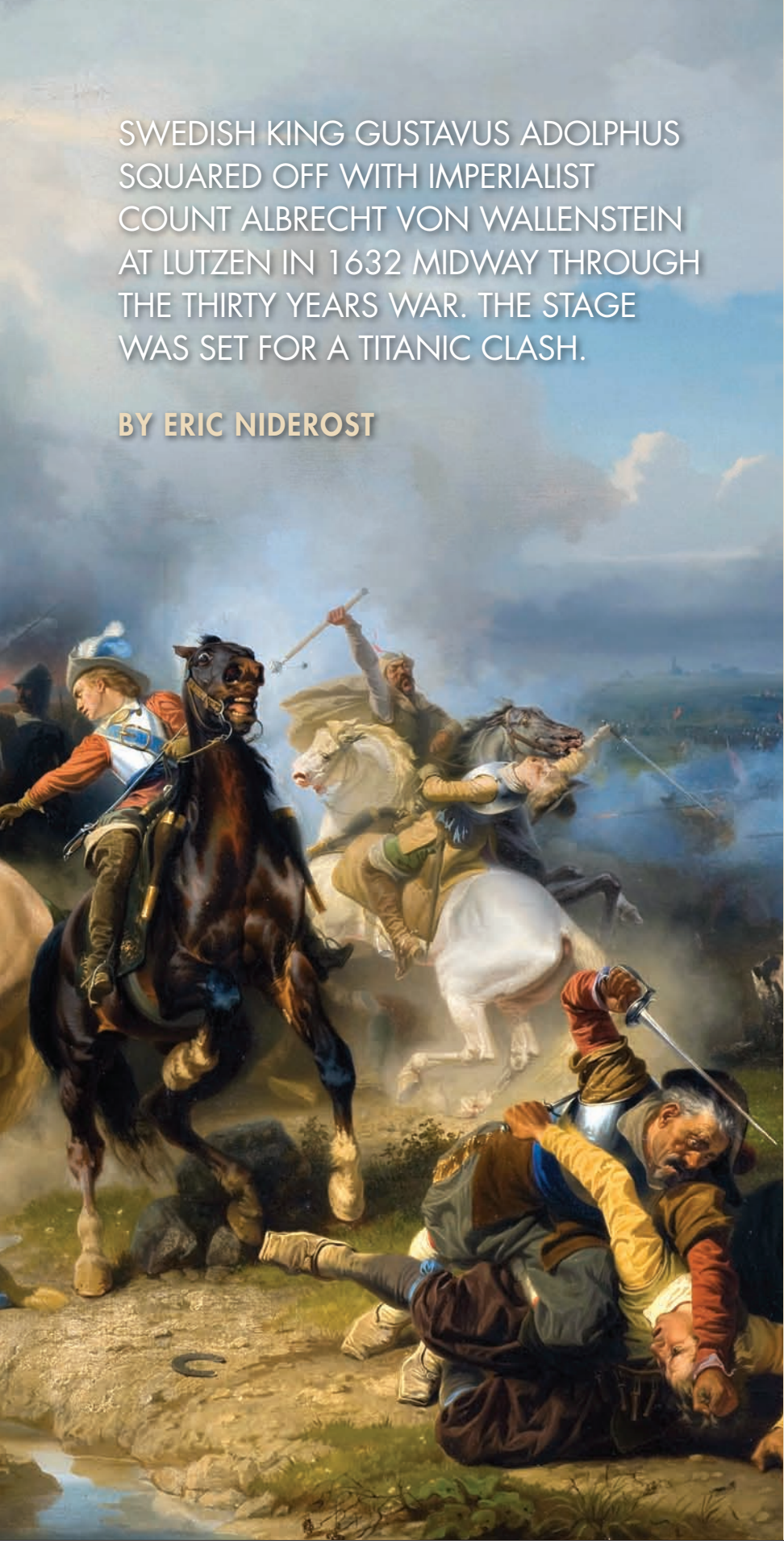
THE LION'S LAST ROAR



Struck by a musket ball fired from the wheellock pistol of an Imperial cuirassier, Gustavus falls mortally wounded from his horse at Lutzen.

SWEDISH KING GUSTAVUS ADOLPHUS SQUARED OFF WITH IMPERIALIST COUNT ALBRECHT VON WALLENSTEIN AT LUTZEN IN 1632 MIDWAY THROUGH THE THIRTY YEARS WAR. THE STAGE WAS SET FOR A TITANIC CLASH.

BY ERIC NIDEROST



Swedish National Art Museum

King Gustavus II Adolphus of Sweden rode forward confidently, digging his heels into Streiff, his war horse, signaling the animal to quicken his pace and jump the ditch that was just ahead. With his muscles rippling and his nostrils flaring, the magnificent beast cleared the ditch and was soon several paces beyond the king's small entourage. It was November 16, 1632, and the Swedish army and their German allies were fighting a desperate battle against the forces of the Holy Roman Emperor Ferdinand II. The king was initially leading a cavalry charge, but became separated from his troopers. Only a handful of men continued to follow him.

A lingering fog clung to parts of the battlefield. The gray blanket worsened when it mixed with acrid smoke arising from the burning town of Lutzen. Completely disoriented, the Swedish king was behind enemy lines and in grave peril. An enemy shot struck the king in his left arm, just above the elbow. At the same time, the cottony fog began to dissipate, revealing Imperial cuirassiers not far away.

A moment later the king's entourage caught up with the wounded monarch. "The king bleeds!" they cried. "The king is shot!" Gustavus tried to calm them, but the pain was too great, and the wound so severe that he began to succumb to shock. "Cousin, I am sore wounded, help me make my retreat," he said to Duke Franz Albrecht of Sachen-Laurenburg.

Gustavus always led from the front. His body was mute testimony of his bravery, bearing scars from no fewer than 13 old wounds. But an earlier neck injury from a Polish soldier was particularly severe. The injury had left him with two paralyzed fingers, and an inability to wear heavy armor. Instead of a steel breast and back plate, he wore an elk skin buff coat. That made him particularly vulnerable to firearms.

An 18-year-old Swedish page, Augustus Leubelfing, tried to give the king his horse but was mortally wounded before the transfer could be performed. Gustavus' bodyguard also was quickly cut down. The fast-riding Imperialist troopers were rapidly closing the gap. As they grew near, it was clear the king's fate was sealed.

An Imperialist officer recognized the king, who was reeling in his saddle. Unable to maintain his balance, Gustavus slumped to the ground. There was no mistaking the oval face, close-cropped blonde hair, piercing blue eyes, and neatly trimmed Van Dyck beard. The Swedish king's features were well known throughout central Europe. "Here's the right bird!" the Imperialist officer shouted as he fired a round from his large pistol into the king's back. Other Imperialist troopers leaned forward and stabbed him with their swords.

Bleeding from several wounds, dazed and in agony, somehow Gustavus managed to retain consciousness. It was said that one of the enemy troopers asked, "Who are you?" Summoning his last reserve of strength, Gustavus replied, "I was the King of Sweden" His use of the past tense was inaccurate, but perhaps by only two minutes. When a troop of Swedish cavalry arrived, one of the Imperialist troopers delivered the fatal coup de grace by firing a pistol shot into the king's temple.

Gustavus' meteoric career had been significant enough to earn him the sobriquet "Lion of the North." At the time, Gustavus was waging war south of the Baltic Sea ostensibly to rescue fellow Protestants from religious oppression at the hands of zealous Catholic Holy Roman Emperor Ferdinand II and his Papist followers.

Sweden was far from a democracy, but its king was enlightened enough to desire popular support. That is the reason that the Swedish crown made sure that Lutheran clergy denounced Ferdinand II with thundering jeremiads each Sunday. It was a kind of pulpit propaganda that worked well in a country that was staunchly protestant. Yet Sweden's entry into the Thirty Years War was not a foregone conclusion, and not necessarily motivated by religion.

Surviving records from the king's council meetings make it clear that religious zeal was a distinct second to the hard-headed realities of European power politics. The chance of an Imperial invasion of Sweden, and a subsequent forced conversion to Catholicism, was virtually nonexistent. Gustavus and his ministers grasped this, but by the same token they were not eager to have a powerful Catholic enemy at Sweden's doorstep.

But with the German principalities of the Holy Roman Empire in turmoil, there was an opportunity to take control of the Duchy of Pomerania. This would not only allow Sweden to dominate the Baltic Sea, but also provide a barrier against possible Imperial ambitions. By so doing, he would gain a staging area from which to launch future operations against Emperor Ferdinand. The Swedish invasion of Pomerania marked Sweden's debut as a great power, a status it maintained for nearly a century.

Gustavus landed on the coast of Northern Germany with 13,000 men on July 6, 1630. Four days later, the Swedish king occupied Stettin, the capital of Pomerania. Gustavus hoped the Protestant princes of Germany would join him and increase his numbers. Although they eventually would see him as their best hope to counter the Imperialist juggernaut, he was not initially greeted with open arms. The German Protestants knew little about him, and their rulers were wary. When he arrived in Germany no one was sure if he was a savior or an opportunist.

Gustavus received badly needed financial support. He initially believed that the Baltic provinces could support his army, but his troops quickly picked it clean of crops and livestock. Unable to fund the cost of his expeditionary army alone, he soon received support from an unlikely ally: Catholic France. Cardinal Richelieu, King Louis XIII's chief minister, did not let his status as a Catholic clergyman get in the way of his diplomatic efforts on behalf of France. Emperor Ferdinand II was as much France's enemy as he was Sweden's enemy for the Hapsburg dynasty thwarted France's attempts at expansion. After securing Pomerania, the Swedes methodically set about controlling Mecklenburg, the Baltic province that adjoined Pomerania to the east.


Skokloster Castle

Clockwise from top are Swedish King Gustavus Adolphus, Field Marshal Albrecht von Wallenstein, and Imperial general Johann Tserclaes, Count of Tilly.

Gustavus offered assistance where he was able to the Protestant peoples of northern Germany. As early as October 1630, Gustavus had pledged through his representatives to help the predominantly Lutheran population of Magdeburg in Saxony improve their defenses in anticipation of an Imperialist assault. Gustavus sent Dietrich von Falkenberg, a Hessian adviser on his staff, to oversee the city's defenses.

The emperor had ordered that the city restore lands allegedly confiscated from the Catholic Church, but the Lutherans openly defied the order. Because of that decision, Ferdinand ordered Imperial general Johann Tserclaes, Count of Tilly, to force the city to comply with the order. Tilly, who had been operating in Mecklenburg in March 1631, found it impossible to sustain his forces in the region and already had set his sights on Magdeburg, which he believed was well stocked with provisions. Gustavus attacked Frankfurt-on-Oder in Brandenburg on April 13 in an effort to get Tilly to break off his siege of Magdeburg, but the tactic failed. Gustavus remained fixated on securing Brandenburg at the expense of the people of Magdeburg. He told von Falkenberg that he would not be able to march to his assistance until June.

As the days dragged by, Tilly became increasingly convinced that Gustavus would arrive at any moment to relieve the city. On May 17, the Imperialists stormed the city in a 48-hour assault but were repulsed. The two sides parlayed, but on May 20 Tilly's second-in-command, Count Gottfried Heinrich Graf zu Pappenheim, ordered another assault without seeking Tilly's permission. The defenders were caught by surprise, and starving Imperialist soldiers swarmed into the city. Fire consumed the buildings as soldiers from all corners of Ferdinand's far-flung empire sacked the city and massacred its people. The Imperialist soldiers, the majority of whom were mercenaries, raped women and tortured men. At least 20,000 died in the conflagration.

The Sack of Magdeburg shocked German princes into allying themselves with Gustavus. Both John George of Saxony and Frederick William of Brandenburg, both of whom were prince-electors who had the privilege of casting votes for the Holy Roman Emperor, allied themselves with the Swedes. Up to that point, though,

Gustavus had yet to prove himself in a major battle against the seemingly invincible Catholic forces. The two prince-electors were allies in name only for they were prepared to switch sides if the Swedes suffered a major defeat.

The first major test of Gustavus' capabilities in a pitched battle against the Catholic forces came at Breitenfeld in September 1631. Tilly's Imperialist army also included troops from the Catholic League, an alliance of Catholic German princes led by Duke Maximilian of Bavaria. The Swedish-Saxon army had 40,000 men. In contrast, Tilly had 32,000 men. He was sure he could easily beat the Swedish upstart, but he badly underestimated his opponent.

The Battle of Breitenfeld fought on September 7, 1631, was the German debut of the so-called Swedish system. The system was a modified version of tactical reforms introduced by Count Maurice of Nassau who had served as Captain General of the Dutch army. Gustavus, an avid disciple of Maurice, took Maurice's augmented and expanded Maurice's reforms in regard to how troops were deployed in battle.

Tilly's Imperial army had been the favorite at Breitenfeld. Gustavus decisive victory over Tilly astonished both Catholic and Protestant leaders. The battle began badly for the Swedes when their untested Saxon allies quit the field. This left 23,000 Swedes facing 35,000 Imperialists. But the unflappable Swedish King extended his line to compensate for the loss of his left wing. Late in the day Gustavus launched a counterattack that smashed the Imperial center. Tilly and his troops shamefully fled the field; in so doing, they handed the Swedes a decisive victory.

Renaissance armies consisted of both musketeers and pikemen. The pikemen wielded 16-feet wooden poles with an iron tip. Their main duties included protecting the musketeers, especially from enemy cavalry, and engaging enemy pikemen in what was known as "push of the pike."

But the Swedish king put his faith in firepower, not in ancient tactics. Pikemen were still necessary. The purpose of the pike troops was to protect the musketeers, also known as shot troops. Gustavus reduced the number of pikemen and increased the number of musketeers.

Under the Swedish system musketeers were trained to fire rapidly; that is, at least as rapidly as a matchlock could be fired. Ranks were relatively shallow at only six ranks deep, but on command musketeers could double the files and add firepower. In this technique the rear ranks moved between the front ranks, making a three-rank extended formation. The front rank would kneel, the middle rank crouch, and the third rank stand. On command all three ranks could fire simultaneously. This became known as the Swedish salvo, and it was capable of shattering an enemy assault.

Berlin State Museums

The Catholic sack of the predominantly Lutheran city of Magdeburg in May 1631 drove the north German princes into the arms of King Gustavus.

The Swedish shot troops delivered their salvo at point-blank range, which was between five to 10 paces. At such a short distance even early smoothbore weapons could be deadly accurate. After they had shattered the enemy line, the musketeers would advance and finish off the job with their swords and musket butts. The Swedish matchlock often had a fishtail-shaped stock, which made it effective as a club in hand-to-hand fighting.

Artillery also would protect the flanks of the pike-musketeer formations. Sweden was blessed with an abundance of iron ore, so the country could produce some exemplary cannon tubes. Artillery of the period was large, heavy, and nearly impossible to transport across soft ground or mud. Gustavus encouraged his gunsmiths to develop lighter barrels made of new alloys. He established three calibers for regimental cannon: 3, 12, and 24 pounder.

As for the Swedish cavalry, its quality varied widely. The Swedish and Finnish horsemen, both of which were drawn from the lands of the Swedish empire, were the best in army in comparison to the German cavalry. Their Scandinavian horses were so small that they resembled ponies, which was something the Germans found highly amusing.

Although trained in the Swedish style, the majority of the infantry in Gustavus' army were Germans, although there were some elite Swedish infantry units. In addition, the Swedish army also had Scottish mercenaries. Gustavus was deeply fond of the Scots who he treasured for their steadfast bravery. At Lutzen, only one-tenth of the infantry and one-quarter of the cavalry were ethnic Swedes or Finns.

Following his victory at Breitenfeld, Gustavus moved into southwestern Germany, hoping to bring the war to a successful conclusion for the Protestant cause. Tilly established a strong defensive position on the east side of the River Lech near the Swabian town of Rain. Gustavus faced the difficult task of forcing a river crossing in the face of an entrenched enemy. In the Battle of Lech, which was fought on April 15, 1632, Gustavus bombarded Tilly's army with as many as 72 guns, which distracted the Catholics long enough for his troops to build a bridge and establish a strong foothold on Tilly's side of the river.

Swedish artillerists devastated the Imperialist-Catholic League army. A cannonball inflicted a mortal wound on Tilly early in the engagement. Command devolved to Johann von Aldringen, but he also was struck by shrapnel from a Swedish cannonball that fractured his skull. At that point, Maximillian ordered a general retreat. Tilly died two weeks later.

The triumphant Swedes moved south. Gustavus plundered the Bavarian capital of Munich on May 17, 1632. He stayed for 10 days removing whatever items could be used by his army before moving on. It seemed at that point that nothing could stop the Swedish juggernaut. Ferdinand worried that Gustavus might even besiege Vienna.

Ferdinand decided that his best course of action was to reinstate Field Marshal Albrecht von Wallenstein. The emperor had dismissed Wallenstein in September 1630 because he feared that the powerful Imperial general might be planning a coup to overthrow him. But with Vienna threatened by Gustavus' seemingly unstoppable Swedish army, Ferdinand had little choice but to reinstate him, which he did on April 16, 1632. Wallenstein quickly retook Prague from the opportunistic Saxons.

Wallenstein was in some respects a modern general. His troops were usually well provisioned. That was a major achievement itself given that Catholic and Protestant armies had heavily pillaged Central Germany by that point in the war. During his service to the empire, he had transformed his estates in Bohemia into a vast military depot. Scores of workshops and factories worked unceasingly to produce arms and clothing for his troops, and the effort was on a massive scale.

Wallenstein was a meticulous planner who obsessed over the smallest of details. By the time he was recalled, he was well past his prime. He suffered from gout, and it had taken a heavy toll on his body over the years. Still, he was the most competent commander the Imperialists had at the time, and Gustavus would find him to be a formidable opponent.

The Swedish king continued campaigning in southern Germany throughout spring 1632, but eventually shifted north to Upper Palitinate. He arrived at Nuremberg on June 16 and constructed a fortified encampment in Nuremberg. Always the master recruiter, Wallenstein had assembled a formidable army of 55,000 men with which to confront the Gustavus' 18,000 troops. Wallenstein

Wikimedia

The Swedes won a decisive victory with their innovative tactics at Breitenfeld in Saxony.

arrived in Nuremberg in July and established his own fortified encampment nine miles west at Alte Veste. Wallenstein set his troops to work fortifying a hill upon which a dilapidated castle was located. He set his troops to work entrenching and constructing abatis in the event of a Swedish attack.

Meanwhile, Gustavus sent word to Sweden that he needed immediate reinforcements. Swedish Lord High Chancellor Axel Oxenstierna raised 24,000 men and marched to the king's assistance arriving on August 27. When Gustavus received the reinforcements, he attacked with his infantry on September 3. Heavy rain made it difficult to bring regimental guns into action on the rugged ground. For their effort, the Swedes only captured a few outer works at the cost of 2,500 casualties. Gustavus departed for Swabia where he intended to camp for the winter, but events would force him to change his plans.

Wallenstein marched north with the intention of knocking Saxony out of the war. Duke John George, the Saxon Elector, was not much use in the field given that he was a serious alcoholic. But his support was crucial to Gustavus' Protestant coalition. No one knew this better than Wallenstein. "If the Elector is lost, the King [of Sweden] must be lost too," said Wallenstein.

Wallenstein dispatched a small Imperialist force under Feldmarschalleutnant Heinrich Holt to pillage Saxony. Holt, a Danish Protestant who had switched sides, carried out his orders magnificently. Holk's cavalrymen systematically pillaged Saxony in late summer 1632 stopping only at the gates of Dresden. But the conquest of Saxony required a concerted effort by all of the Imperialist forces. For that reason, Wallenstein's army of 18,000 men rendezvoused with Holt in mid-October. Meanwhile, Pappenheim marched east from his area of operations in northwest Germany to join them. Instead of attacking Dresden, Wallenstein decided to besiege Leipzig, which fell to him on November 1, 1632.

When Gustavus learned that Pappenheim was approaching Erfurt, he became deeply alarmed. Erfurt was the center of the German road network; if it fell to the Imperialists, then Gustavus' line of communications to Sweden via the Baltic ports was in danger of being severed. The Swedish army embarked on a forced march to Saxony covering 370 miles in 17 days. To prevent the Imperialists from securing Erfurt, 3,000 Protestant troops led by Duke William of Saxe-Weimar occupied it. By November 7, Gustavus' had concentrated his forces on Saxony in anticipation of a battle despite the lateness of the campaigning season.

November 1632 was unseasonably cold, and there were not enough villages in the region to shelter the troops of the two large armies occupying western Saxony. Wallenstein received disturbing reports that Protestant forces were threatening Cologne, which was the seat of one of the Holy Roman Empire's three archbishop electors. Pappenheim requested that Wallenstein allow him to lead his force west to North Rhine-Westphalia in order to deal with the threat. Wallenstein reluctantly agreed to the request, and a large group of Imperialists departed on the mission.

When Gustavus received information on this breakup of Imperialist forces, he sensed an opportunity. He believed that since Wallenstein was nearby the Swedes might be able to surprise his weakened forces. He believed a victory would redeem his army following the reverse it suffered at Alte Veste.

Gustavus' plan miscarried due to war's unpredictable nature. The Swedish army was taking the main road from Leipzig to Lutzen, but there was a small force of Imperialists in the vicinity commanded by Imperialist Generalwachtmeister Rudolf von Colloredo. Although Colloredo had only 500 dragoons, it was unlikely that he could stop the Swedish army. But luck was with Colloredo. By a twist of fate 500 Croat horsemen were in the area. Legend has it that their commander had lingered at a local inn to engage in amorous adventures.

This gave Colloredo just enough men to fight a delaying action while he sent a warning back to Wallenstein. Colloredo had excellent defensive terrain at his disposal. He took up a position behind the Rippach, a tributary of the Salle River. The Rippach was a narrow stream. Marshes lined its approaches, thereby adding a second layer of defense.

A skirmish developed on November 15 that bought the Imperialists precious time. The Croats gave a good account of themselves, even though they were decimated by the action. When a local guide led the Swedes to a ford on the stream, the skirmish ended. The Croats withdrew, and the Swedish army crossed the Rippach. By then it was 4 PM, and nightfall was fast approaching. "Oh, for a few hours of daylight," said Gustavus. There was nothing to do but camp for the night and take on Wallenstein in the morning. From their location, the Swedes come see the glow of Imperialist campfires.

The Swedes had travelled without tents, so the tired soldiers bedded down in the open, more or less in the order that they had marched that day. The Swedish King retired to his carriage for the night. Even senior officers, many of them with noble blood, had to follow their soldiers and sleep outdoors, their only roof a canopy of twinkling stars.

When Wallenstein received word from Colloredo that the Swedes were coming he sent an urgent dispatch to Pappenheim at Midnight on November 15-16 ordering him to return as soon as possible. Pappenheim's troops were widely scattered after a long day spent pillaging local villages. It took time to sort things out; nevertheless, Pappenheim's cavalry was on the road to Lutzen by 2 AM.

Since there was a note of urgency in Wallenstein's missive Papenheim went ahead with just his cavalry. The infantry would resume the march at first light, and the slow-moving artillery would follow as best it could. Pappenheim drove his troops as hard as possible.

In the meantime, Wallenstein had to prepare to meet the Swedish army as best he could. The Imperialist commander preferred to fight behind field fortifications because they negated an enemy's advantages, which in this case was the devastating firepower of the Swedish infantry. If Wallenstein he could establish a strong defensive line, the Swedes might be kept at bay until Pappenheim's reinforcements arrived.

Wallenstein's right was anchored on the town of Lutzen, a cluster of 300 houses surrounded by a wall and dominated by a small moated castle. The surrounding region was pancake flat and boggy in spots, even though some of the firmer ground was good enough to support some farms. There were two made-made canals that helped drain the viscous muck, the Muhlgraben and the Flossgraben. The former was fairly easily crossed, but the latter was wide enough to thwart a crossing.

GUSTAVUS AND HIS TROOPS HELD A RELIGIOUS SERVICE, AFTER WHICH THE KING GAVE TWO ROUSING SPEECHES. ONE WAS ADDRESSED TO HIS SCANDINAVIAN TROOPS. HE PROMISED THEM REWARD AND HONOR IF THEY DID WELL, AND DISGRACE AND VIRTUAL BANISHMENT IF THEY DID NOT. THE OTHER SPEECH WAS DIRECTED AT HIS GERMAN ALLIES. HE REMINDED THEM THAT THEY WERE FIGHTING FOR RELIGIOUS LIBERTY.

Not far from Lutzen there were a few windmills, creaking and groaning as the northern breezes caressed them, which stood on a knoll. The hill was really just a gentle, almost imperceptible rise only a couple of feet high, but in this flat region it stood out like a beacon. Wallenstein decided to place the 14 guns of his main artillery battery atop the hill. The windmills provided the necessary wood to fortify the battery.

Wallenstein also made use of the Leipzig post road, one of the better roads in Germany. It came out from Lutzen in a northeasterly direction, running for about a mile and a half before crossing the Flossgrabben and exiting the future battlefield. There were two dry drainage ditches on either side of the road, and Wallenstein lost no time in having his men dig them out and convert them to full-fledged trenches. For Wallenstein excavation tools, such as the pick or spade, were as important as pike or musket.

Once the trenches were finished they were filled with musketeers. Wallenstein's army was even more of a polyglot force than the Swedish army. The only thing that bound this heterogeneous force together was its religion, which of course was Catholic. Like Tilly's Catholic League army, Wallenstein's army had Austrians, Czechs, Italians, Hungarians, Poles, Croatians, and Germans.

Imperialist cavalry had several types, but the most formidable were the cuirassiers, whose breastplate and back plate of armor were blackened to prevent rust. Their weapons were swords and pistols, and they knew how to use them. The Croats were light cavalry, colorful men in Eastern garb that included fur hats and long coats. Though they were labeled Croats many were Magyars from Hungary, not Croats from Croatia.

Imperial infantry usually wore more armor than the Swedes, and in battle they formed battalions of 1,000 men. On campaign there was bound to be attrition, but regiments weaker in numbers were combined to make sure battalion strength rarely wavered. Wallenstein's army was a formidable force, and would not be easily overcome even by Gustavus' brilliance.

The Swedish army had formed up by 7:30 AM, only to discover a thick fog had blanketed the area overnight. Gustavus and his troops held a religious service, after which the king gave two rousing speeches. One was addressed to his Scandinavian troops. He promised them reward and honor if they did well, and disgrace and virtual banishment if they did not. The other speech was directed at his German allies. He reminded them that they were fighting for religious liberty.

It is unknown how many soldiers actually heard the king's pre-battle harangues; after all, the Swedish army had around 18,000 men. But probably a good many heard the King's supplication to the Almighty, which he delivered in a loud voice. He started the fervent prayer with "Jesus! Jesus! Jesus!" Whatever his political machinations, few could doubt his sincere piety.

A few patches of fog remained at mid-morning, but enough had dissipated to begin the battle. With the fog largely gone, Gustavus' next problem was where to actually engage the enemy's

main body. The meadows to the east of Lutzen were waterlogged and impractical for supporting masses of troops. The only alternative would be to go west, where there was a fairly flat and open plain. But before they could reach the plain the Swedes had to cross the Flossgraben and Muhlgraben canals.

The Flossgraben was wider than today and icy cold, so that the idea of wading through it on foot was far from attractive. There was a bridge at the village of Meuchen, but no one could expect an army of 18,000 to use a single narrow span. Luckily the Flossgraben's main purpose was to float firewood down to two salt refineries so that there was plenty of debris around to construct crude bridges. The Swedes started harvesting the waterlogged planks and before long troops were crossing over several rickety but still effective spans.

The Swedish King chafed at the delays, but eventually the Swedish battle array began to form. The right, which was the traditional position of honor, was under the king, while the left was led by his second in command, Duke Bernhard of Saxe-Weimar. Between the two wings the king placed infantry brigades under Generalmajor Nils Brahe. Brahe did not have independent control, though. Gustavus could control the right infantry brigades if needed, and Bernhard the left units.

Baron Knyphausen commanded the rear infantry brigades, as well as the cavalry reserves. When either wing needed fresh squadrons, Knyphausen would furnish them. Knyphausen was the third in command. He would take over if both Gustavus and Bernhard were killed or badly wounded.

The battle began at 10 AM when the King of Sweden ordered a small battery to open fire. Wallenstein waited, willing to endure these Swedish pinpricks for the moment. But after a short time the Imperialist cannons roared to life, flaming in counterbattery. Initially, though, all was sound and fury signifying little or nothing, because there were few casualties on either side.

At that point, Wallenstein decided to put Lutzen to the torch. The town walls were in poor condition, and it was estimated that the town would need 1,000 men to properly garrison it. Wallenstein could only spare 400 men. He feared being outflanked. The only viable option was to burn Lutzen to deny it to the Swedes. Four hundred Imperialist troops still remained in Lutzen Castle, and for that reason Wallenstein had not entirely abandoned the position. The Imperial commander had issued explicit orders for his troops to lock the townspeople of Lutzen in the castle's cellars to prevent them from extinguishing the flames.

The main action began on the Swedish right, where King Gustavus had six regiments of Swedish and Finnish cavalry, the best horsemen in his army. The Swedish King also had groups of 200 musketeers, and Nils Brahe's two right-hand infantry battalions.

The Swedish king noticed that there was a screen of Croats just in front of him. Lightly armed, they were not a great threat, but just beyond them were some groups of Imperial cuirassiers. With their dark horses and black armor, they seemed like rampaging symbols of death itself. "As for [the Croats], I care not for them, but charge me those black fellows soundly, for they are the men that will undo us," Gustavus said to Torsten Stalhandske, his Finnish cavalry commander.

The Finns spurred their horses into a furious gallop, veering northeast to cross the Leipzig road where Imperialist trenches had not yet been dug. Seeing this seemingly irresistible tidal wave of steel and horseflesh, the Croats rode off without trading blows. It is not clear where the black-armored Imperial cuirassiers were located at that point, but as they advanced the Finns encountered little opposition.

But Wallenstein had employed a clever ruse. To bulk up his anemic left flank, the Imperialist general had created mock formations. Camp followers and baggage handlers became the fake troops. Carrying poles with sheets to simulate battle flags, they were quite impressive from a distance, but apt to become demoralized and disrupted by the slightest of threats.

When Gustavus' Finns charged into their midst, the subterfuge fell apart. The fake troops in the mock formations scattered. Worse yet, the Croats and fake troops through that Wallenstein had ordered the evacuation of the baggage train to Leipzig. Sensing an opportunity for easy pickings, both groups lost no time in looting their own baggage train. Grabbing what they could, both Croats and the fake troops started to flee with their arms full of plunder.

The Imperialist left was on the verge of collapse when Pappenheim and his cavalry arrived at Noon. The arrival of fresh troops gave Wal-

Pieter Snayers

lenstein's left wing fresh heart, and order was restored. It was Pappenheim's fleeting moment of glory for he would not live long enough to fully savor it. He was mortally wounded while leading a cavalry charge. Wallenstein's letter summoning him to Lutzen was in his pocket when he was slain.

It was around this same time that Imperialist cavalry killed Gustavus who was fighting on the Swedish right flank. Legend says that when the Swedish army heard of their terrible loss, they were filled with fury and a desire to avenge the king, a rage that spurred them on to victory. But in reality very few soldiers in the Swedish army knew of the king's demise, even though the news spread as the battle progressed.

In any event Brahe was determined to fulfill the King's earlier orders to the letter. The king's instructions stated for him, "to go boldly at the enemy and not take heed of their numbers, nor to fire any salvos until the Imperial musketeers had fired themselves." The idea was to mow the enemy down before he could reload, then advance before he could recover, but this time it did not work. The elite Swedish Yellow Brigade was shredded by an Imperialist volley delivered at point-blank range that felled most of the brigade's officers. Without proper direction, the Yellow Brigade could not adequately return a volley.

The Swedish Blue Brigade, another elite unit, suffered its own ordeal. The Blue Brigade advanced with parade ground efficiency against an Imperialist infantry, but in so doing its soldiers veered off. This loss of direction inadvertently created a large gap between their brigade and supporting Yellow Brigade. The Imperialist cavalry raced to exploit the error.

Archaeologists recently confirmed the Blue Brigade's destruction. A mass burial site unearthed in 2011 contained the skeletons of 47 Blue Brigade individuals, ranging in age from 20 to 30. An analysis of the teeth shows that all except one of the soldiers in the mass grave was German. Their findings allow for a greater understanding not only the battle, but also of life in 17th century Europe.

A soldier's life was certainly hard. Some skeletons show signs of healed wounds, while others have the marks of syphilis. But even more telling perhaps are the signs of malnutrition when they were children. Common soldiers, no matter their skill level, were of peasant stock, and peasants often endured crop failures and famine. But virtually all the buried soldiers were killed by firearms, and some of them still had bullets lodged in their skulls. Others were dispatched by swords that left deep gashes in the skull.

Carl Fredrik Klörboe

ABOVE: Gustavus's white horse flees the field at Lutzen. The Swedes had a number of gifted generals who continued to lead Swedish forces in Germany after the king's untimely death. OPPOSITE: A cavalry clash with wheellock pistols and sabers. The Croats functioned as superb light cavalry for the Imperialist armies.

Swedish fortunes were at their nadir around 2 PM. Two of Sweden's best infantry brigades had been destroyed, and the others decimated. The right wing also was in trouble, in part because it was essentially leaderless. The right flank soldiers, bloodied, and exhausted, were growing anxious due to Gustavus' mysterious disappearance. Some cavalry from the rear squadrons abandoned the field, thinking discretion was the better part of valor and others followed suit.

Reserve commander Knyphausen kept his head, moving in reserves to plug up the gaps in the weakening Swedish line. Swedish preacher Jacob Fabricus gathered a few officers around him and they all started singing a Lutheran hymn. Religion was a strong force in the 17th century and hearing the hymns actually calmed the many of the soldiers and stemmed the panic.

By that time, Duke Bernhard had taken overall command of the Swedish army. "[I cannot] think of retreat, only of dying or winning the battle, and of making his revenge as memorable as their loss," he said upon receiving confirmation of the king's death.

After a brief lull the battle flared up with renewed fury. This phase was a soldier's battle, with little thought for elaborate maneuvers or clever stratagems. Rank had no privilege in this melee; many senior officers were killed and wounded. "The fighting comes to push of pike and crunch of musket butt," said a participant. "The din and smoke were terrific. No quarter was asked for, or given."

As darkness fell, Swedish troops managed to take Wallenstein's battery located at the windmill. After so much blood and effort, it seemed like a meaningless achievement. After all, some of the best regiments in the army had been shattered, reduced to bloodied remnants, and above all their beloved and charismatic king was dead.

Though they did not realize it yet, the Swedes had won the day. Wallenstein had been appalled by the losses his army had sustained, and doubted if his troops could perform well the next day. He had been hit by a spent musket bullet that bruised his thigh, but did not break the skin. But what really pained the Imperialist commander were the reports he received of heavy casualties. Although some Imperialist officers expected their commander to renew the battle the next morning, Wallenstein instead ordered his units to withdraw under cover of darkness.

Following the Battle of Lutzen, Wallenstein quartered his mercenary army in Imperial territory but refused to support the Imperial war effort. He also entered into peace negotiations with France, Sweden, and various German powers. The emperor ordered his removal, and he was assassinated on February 25, 1634.

Gustavus' intervention in the Thirty Years War had kept the Protestant cause alive. The Swedes remember Lutzen as Gustavus' most glorious victory. After the death of the charismatic Swedish king, it was apparent that Sweden could not win the war alone. Although they had long financed Protestant operations, the French intervened militarily in 1635 and recruited Bernard of Saxe-Weimar to help them wage war in southwestern Germany. The combined power of France and Sweden eventually proved too much for the Catholics. The protracted conflict ended with the Peace of Westphalia in 1648. □

STEPPING OFF OF TWO CAPTURED RIVER STEAMBOATS, the 2nd Kentucky Cavalry and the 9th Tennessee Cavalry set foot in Indiana on July 8, 1863. On the south bank of the Ohio River awaiting transport were seven more regiments of Confederate cavalry led by Brig. Gen. John Hunt Morgan. They aimed to keep well ahead of the Union cavalry sent to pursue them and bring the war into Indiana and Ohio, a so far untouched section of the Union. But first they had to get the rest of the army across the river. The slow process of using the captured steamers as ferryboats was about to turn dangerous. One mile above the crossing, dark smoke poured from the stacks of an approaching sidewheel steamer. Then, a plume of whitish smoke gushed from the steamboat's bow, and cannon shot hurtled toward the Confederates waiting on the Kentucky shore. A gunboat of the U.S. Navy's Ohio River Division had joined the pursuit of Morgan's raiders.

In June 1863 Lt. Gen. Braxton Bragg's Confederate Army of Tennessee was at Tullahoma in south-central Tennessee. Facing it was the larger Army of the Cumberland under Maj. Gen. William S. Rosecrans. A smaller and separate Confederate force under Maj. Gen. Simon Bolivar Buckner held eastern Tennessee. Maj. Gen. Ambrose Burnside, commander of the Department of the Ohio, pressed against Buckner's army. Under this dual threat, neither Confederate army could afford to reinforce the other; however, one of Bragg's generals devised a solution that he thought would swing the initiative back to the Confederates.

Confederate horsemen of John Hunt Morgan's command examine items taken during the course of their pillaging in a 20th-century painting by Daniel Boza. Their trademark weapons, pistols and carbines, lay within easy reach.

Born in Huntsville, Alabama, Morgan's family relocated to Lexington, Kentucky, when he was a boy. He served as a private in the U.S. Cavalry during the Mexican War and afterward returned to Lexington where he became a businessman. In September 1861 he led a militia unit known as the Lexington Rifles into Tennesee to join the Confederacy. The following April he raised the 2nd Kentucky Cavalry, of which he became the colonel.

Morgan was a legend among the South's cavalry commanders. Three times during 1862 he had led long mounted raids from Tennessee into Union-held areas of the border state of Kentucky. At the cost of only light casualties, Morgan's raiders destroyed millions of dollars' worth of military supplies, cut railroads, and captured and paroled more than 2,000 prisoners. His successes won him promotion from colonel to brigadier general and a vote of thanks of the Confederate Congress. Beyond their strategic value, his bold raids boosted morale and buoyed hopes for a turnaround in Confederate fortunes west of the Appalachian Mountains.

Morgan's accomplishments inspired him to suggest to Bragg a raid against Louisville, Kentucky. In Morgan's thinking, a strike against the great Ohio River port city, with its warehouses and transportation facilities, would distract Rosecrans and ease the pressure on Confederate forces in Tennessee. Morgan estimated that Louisville was defended by only about 300 troops. Such an attack might compel Burnside to detach his cavalry from Buckner and send it to Kentucky for several weeks.

Bragg consented to the new raid. On June 14 Maj. Gen. Joseph Wheeler confirmed his own meeting with Bragg and informed Morgan that he could have 1,500 men for his expedition. As the commander of Bragg's cavalry corps, Wheeler was Morgan's superior.

"I can accomplish everything with 2,000 men and four guns," said Morgan. "To make the attempt with less might prove disastrous, as large details will be required at Louisville to destroy the transportation, shipping, and government property. Can I go? The results are certain."

Bragg increased the authorized force to 2,000 men, with the proviso that the raiders hit the Louisville and Nashville Railroad to interrupt Rosecrans's flow of supplies. Wheeler stressed to Morgan that it was vital that he strike Louisville and return quickly; after all, he was taking a fifth of Bragg's cavalry.

Although Bragg forbade crossing the Ohio River into the Union states, doing just that was Morgan's true objective. Three weeks before, Morgan had already sent some "intelligent men to examine the fords of the upper Ohio," including a crossing from Ohio to West Virginia at Buffington Island.

Library of Congress

Confederate raider John Hunt Morgan promised his superiors he would return promptly if allowed to strike Union depots along the Ohio River in the summer of 1863. It was a promise he did not keep.

BY DAVID A. NORRIS

MORGAN'S NORTHERN STRIKE

A separate 25-man detail under Captain Thomas Henry Hines was also on its way north. Disguised as a Union cavalry patrol on the hunt for deserters, Hines's men crossed the Ohio River on June 18 into Indiana. They searched out Dr. William A. Bowles, a leader of the region's "Copperheads" (secret secessionist sympathizers in the North), to enlist his help. Bowles informed them that while his adherents had some sympathy for the Confederate cause, that did not extend to their taking the risk of extending any tangible help to an invading force.

For his grand raid, Morgan left Alexandria, Tennessee, on June 11 with 2,460 men. The force was composed of eight regiments of cavalry from Kentucky and one from Tennessee. Morgan had two 3-inch Parrott rifles and two 12-pounder howitzers.

Leading his two brigades were two colonels. Basil Wilson Duke had distinguished himself as commander of the 2nd Kentucky Cavalry, a regiment that Morgan relied upon as his dependable regulars. Duke was Morgan's brother-in-law.

Morgan's other brigade commander, Colonel Adam Rankin Johnson, had already crossed the Ohio the previous year. On July 18, 1862, with about 40 men, he captured the town of Newburgh, Indiana. Lacking any artillery, Johnson built a single fake cannon from a pair of wheels and an axle from a wrecked wagon topped with a length of stovepipe. Allowing the garrison to see the gun only at a distance, Johnson convinced them to surrender the town. Thereafter, he was known as "Stovepipe Johnson."

At Glasgow, Kentucky, on June 22, Union Brig. Gen. Henry Judah of the Union XXIII Corps received word that Morgan's cavalry threatened Carthage, Tennessee. Judah shifted his division to cover the Tennessee border so he could either relieve Carthage or block a potential Confederate advance into Kentucky. Judah's brigades had been organized as combinations of horse and foot regiments in preparation for Burnside's intended campaign against Buckner in eastern Tennessee. Another combined brigade consisting of both horse and foot soldiers under Brig. Gen. James M. Shackelford was temporarily placed under Judah's command. Judah's move from Glasgow would be the beginning of a month-long odyssey in pursuit of Morgan.

Heavy rains slowed Morgan's advance to Kentucky. The Obey and Wolf Rivers were so flooded that the Rebels' wagons had to be taken apart and ferried across in canoes. On June 30, Morgan and his riders reached the Kentucky border south of Burkesville, a town on the Cumberland River. Duke described the Cumberland as "out of its banks, and running like a mill-race." His brigade had only "two crazy little flats that seemed to be ready to sink under the weight of a single man, and two or three canoes," according to Duke. On the other hand, because the river was at flood stage, Union commanders thought it unnecessary to pay much attention to the Cumberland River, and Morgan's men were all on the north bank on July 2. Many accounts reckon that day as the beginning of what became known as Morgan's Ohio Raid.

News of Morgan's moves changed Burnside's plans regarding Buckner. Burnside, whose department included most of Kentucky, sent the XXIII Corps divisions of Brig. Gens. Henry Judah and Jeremiah Boyle toward Louisville. Burnside reshuffled some of the mounted units into a provisional division under Brig. Gen. Edward H. Hobson, his senior brigadier. Judah gave Hobson permission to move as he saw fit in regard to the unfolding situation.

One day later, the raiders approached Tebbs Bend in Taylor County, a likely spot to cross the Green River. Morgan had already been to that location. During his "Christmas Raid" of December 1862, Morgan's men had burned the old bridge and a small stockade. Union forces replaced the stockade, but rising waters swept away the new temporary bridge on June 28. Captain Thomas Franks of the 2nd Kentucky Cavalry, sent ahead to Tebbs Bend, reported that "during the entire night, he heard the ringing of axes and the crash of falling timber."

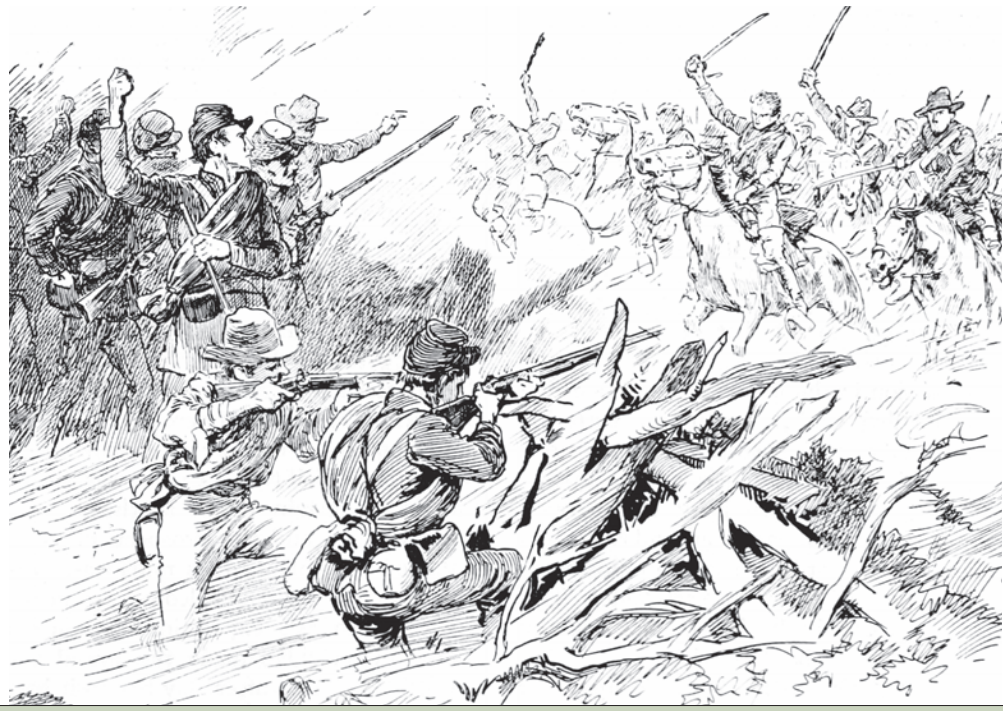
For about two weeks Colonel Orlando Hurley Moore and 250 men of his 25th Michigan Infantry had been stationed at Tebbs Bend. By June 27, it was clear that Morgan was moving north into Kentucky and would likely confront Moore soon. Moore abandoned the old stockade, which could not hold out against a major attack.

Heavily outnumbered, and with no artillery, Moore chose a spot admirably suited for defense. He occupied the open end of the loop in the Green River. Protected on his flanks by the river, he had only to protect a narrow front. He set his men to work on new breastworks to block the road, as well as abatis and a large rifle pit in front. Woods and ravines partially shielded his front and right. This defensive position not only would funnel the Confederate attack into a narrow front, but also give Moore's men an unobstructed field of fire.

Under a flag of truce, Morgan demanded Moore's surrender. Moore replied that "if it was another day he might consider the demand, but the Fourth of July was a bad day to talk about surrender, and he must therefore decline," recalled Lt. Col. Robert Alston, Moore's chief of staff.

Morgan could have bypassed the stubborn Michigan troops, but he was determined to

BELOW: Although heavily outnumbered, five companies of Michigan infantry defended their outpost at Tebbs Bend, a key crossing of the Green River in central Kentucky, in July 1863 against repeated charges by Morgan's raiders. OPPOSITE: The mayhem that ensued when Morgan's raiders pillaged a town is shown in a period engraving. Morgan was less inclined than equally famous cavalry leaders such as Nathan Bedford Forrest and Joseph Wheeler to support operations of the Confederate army.



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carry their position. Moore's well-hidden sharpshooters decimated the Confederate gunners until the general ordered the artillery pulled back. Against the advice of his officers, Morgan ordered a frontal attack on foot. Three times the Confederates charged, but the sturdy Union defenses protected the defenders. Moore's men poured a deadly fire into the attackers.

It was clear that overrunning Moore's post would cost too much time and blood. Morgan called off the attacks late in the morning and moved to a less defended crossing. He had lost six officers and 29 men dead, including Colonel David W. Chenault of the 11th Kentucky Cavalry. Chenault had been shot while leading the first charge dismounted. He was in the process of scaling the barricade when he was slain. Another 45 men were wounded. That night Morgan lost another valuable officer. Captain William M. Magennes, Morgan's adjutant general, was shot to death by a soldier under arrest for stealing a watch from a prisoner.

Crossing into Kentucky was a homecoming for most of Morgan's men, who were natives of that divided state. But this also meant that they would confront some of the fellow Kentuckians who defended their state for the Union. This very situation occurred on July 5 when Morgan faced another stubborn Union garrison at Lebanon, Kentucky. Lt. Col. Charles S. Hanson commanded about 400 men, mainly from his regiment, the 20th Kentucky Infantry (Union). Hanson and his family were acquaintances of the Morgans, as both families had lived in Lexington. Roger Hanson, Charles Hanson's brother, was a Confederate brigadier general who died on January 4, 1863, of wounds suffered at the Battle of Murfreesboro.

Like Moore, Hanson put up sharp resistance. Pushed back into the town, the pro-Union Kentuckians held on to each house as best they could. Eventually they concentrated in Lebanon's sturdy brick railroad depot. The Rebel artillery was ineffective. Three guns were posted on higher ground, but the gunners could depress the muzzles only enough to hit the roof of the building. The defenders swept the fourth gun's crew with their musket fire. A last-ditch dismounted charge overran the depot. In the final minutes of the battle, the Confederate commander's younger brother, 19-year-old Lieutenant Thomas Morgan, was shot dead.

Hanson surrendered the garrison. Duke remembered their losses as "about eight or nine killed and 25 or 30 wounded." The raiders left Lebanon immediately, herding their prisoners at the double-quick. Scarcely one hour after

Alamy

When Duke reached Brandenburg, he found Captain Hines "leaning against the side of the wharf-boat, with a sleepy, melancholy look—apparently the most listless, inoffensive youth that was ever imposed upon," recalled Duke.

Hanson surrendered, a battery and two regiments of Michigan cavalry under Colonel James I. David neared the town. David did not press after Morgan, and the Rebels rode toward Louisville after paroling their prisoners at the town of Springfield.

Morgan detached two companies under Captain William J. Davis with orders to ride east of Louisville. They were to create as much commotion as possible, confuse the Union Army as to Morgan's intentions, and then rejoin the main force in Indiana.

Besides sending out small detachments to move in different directions and sow confusion, Morgan also took advantage of the enemy's telegraph system. Before the war, Morgan met a Canadian-born telegrapher named George Ellsworth in Lexington. Remembering how impressed he was with Ellsworth's intelligence and skill, after the war began Morgan had him transferred to Duke's 2nd Kentucky Cavalry. With a portable telegraph unit, Ellsworth could tap into the enemy wires. He could listen to messages and send new ones. His comrades had called him "Lightning Ellsworth" because during an 1862 raid, the young operator sat on horseback in a flooded creek and tapped out a message during a thunderstorm.

Each telegrapher had a distinct style that an expert could identify nearly as well as a voice. Ellsworth had a remarkable ability to imitate particular Yankee telegraph operators, giving a veneer of authenticity to the false messages dictated to him by Morgan.

While Davis headed around Louisville, the rest of the Rebels turned to the northwest, away from the big city. As they neared the Ohio River port of Brandenburg, Kentucky, on July 7, Morgan sent two officers ahead to secure boats for crossing the river.

For three weeks, Hines had been trying to find Morgan. On June 19 Hines's men came under fire as they tried to cross the Ohio near Leavenworth, Indiana. They scattered and Hines was sep-

Map © 2018 Philip Schwartzberg, Meridian Mapping, Minneapolis, MN

ABOVE: Morgan's daring 1863 expedition involved traversing enemy-occupied territory in three states and sparked the mobilization of 50,000 militia in Ohio. OPPOSITE: Morgan's brother-in-law Basil Duke, mounted on his horse, samples pies cooling outside a house. Morgan's raids produced colorful tales of escapades that enthralled Southerners and distracted them from the defeats at Gettysburg and Vicksburg.

arated from his troops. When Duke reached Brandenburg, he found Captain Hines "leaning against the side of the wharf-boat, with a sleepy, melancholy look—apparently the most listless, inoffensive youth that was ever imposed upon," recalled Duke.

At Brandenburg, the civilian steamer *John B. McCombs* pulled up to the wharf boat about 2 PM on July 7. Wharf boats were common along the Ohio, because the fluctuating water levels of the river made traditional wharfs impractical for many towns. Once the steamboat was tied up, a party of Confederate soldiers took possession of it. Another steamboat, the *Alice Dean,* came into sight downstream from the town. It seemed like a double stroke of luck until the course of the approaching steamer showed she did not intend to land. At that point, the Confederates steered the *John B. McCombs* into the channel. They hailed the *Alice Dean,* and her unsuspecting captain halted. In moments, the raiders swarmed on board the second steamer. With two boats available as ferries, Morgan's men seemed to be ready for a quick crossing of the Ohio.

Morgan's division rode into Brandenburg, Kentucky, around 9 AM on July 8. Fog cloaked the river, so no one knew that some Union home guardsmen waited on the opposite bank. Arrayed in buildings and boats, and sheltered behind haystacks on the Indiana shore, the enemy opened fire. Rifled-muskets had no effect across a half mile or more of river, but shots from a Yankee 6-pounder dropped among the Rebels and scattered them. When the mist thinned out, Duke could see the enemy across the river. Some wore uniforms and others wore civilian clothes. Their attire indicated that they were a scratch force of the enemy.

Duke began to worry about, in his words, "how large a swarm Hines had stirred up in the hornet's nest." Two Confederate regiments landed across the river before the firing began and for the time being were left stranded without their horses. A pair of Parrott rifles was brought forward and drove away the gunners from the Union cannon, allowing the Confederates to resume transferring their men across the river.

Half a dozen tinclad gunboats of the Mississippi Squadron's Ohio River Division, under the command of Lt. Cmdr. Le Roy Fitch, were available to watch for the Rebel cavalry. But Fitch had 100 miles of river to patrol with only six vessels. In places, some of the gunboats were barely able to make headway upstream against the strong currents, and enemy cavalry could take short cuts across land while the steamers chugged around great bends in the river.

One of Fitch's boats, the *Springfield* under Acting Master Joseph Watson, was just northwest of Louisville at Portland, Kentucky. Watson learned Morgan's men were trying to cross the river and headed down the Ohio after them. Aboard the *Springfield* were six 24-pounder howitzers. When the *Springfield* nosed around the bend east of Brandenburg, "A bluish-white funnel-shaped cloud spouted from her left-hand bow, and a shot flew at the town," wrote Duke.

Watson's guns fired at the Confederates on both sides of the river for 1½ hours. Morgan's two Parrott rifles returned fire from "a high hill near the courthouse." Down the slope from the Parrotts the Rebel howitzers also bombarded the *Springfield*. Outgunned by the enemy rifles' range and superior elevation, the *Springfield* fired with little effect. At last the tinclad temporarily drew upriver out of range. Two steam transports with 500 troops arrived from Louisville, and Watson again unsuccessfully engaged the Rebel artillery.

Morgan ordered the *Alice Dean* set afire; however, the *John B. McCombs* was commanded by a friend of Duke, so the Confederates spared that steamer. Soon the entire Confederate force was in Indiana, riding north on a course that threatened the state capital, Indianapolis.

Alerted to the invasion, Indiana's Governor Oliver P. Morton called up emergency troops. On July 9 he summoned to arms every able-bodied male citizen who lived south of the National Road in the southern half of the state. As the Rebels eluded pursuit, Morton called up the men of the northern portion of the state as well. Eventually as many as 65,000 men from Indiana reported for temporary military duty during the raid.

On July 9 near Corydon, Indiana, Colonel Lewis Jordan waited in Morgan's path with about 450 men of the 6th Regiment, Indiana Legion, which was the state's militia force. Jordan's men had little or no training and were armed with a grab bag of weapons. They built

a log barricade to block the road to Corydon. There was little hope of repelling the much larger invading force, but Jordan hoped to delay Morgan until more Union troops could arrive.

Another of Morgan's brothers, Colonel Richard Morgan, led the Rebel attack. The raiders soon outflanked the Indiana militia on both sides, killing or wounding several men and capturing practically the entire force. Eleven Confederates were killed and about 40 were wounded. By this time, the Rebel force numbered fewer than 1,800.

On the same day as Corydon, Hobson's tired cavalrymen reached Brandenburg. The *Alice Dean* was still burning, but because the Rebels spared the *John T. McCombs,* he sent that steamboat to Louisville to order transportation for his brigade. By 2 the following morning, the boats from Louisville had landed Hobson in Indiana. At daybreak he followed Morgan's trail, passing by a burned farmhouse and a smoldering flour mill.

After Corydon, Morgan sent detachments out in different directions to screen his movements and round up fresh horses. They reassembled on July 10 at Salem, Indiana, after sweeping aside the militia and armed citizens who waited for them. Duke's old 2nd Kentucky Cavalry captured a small swivel gun. Once used for town celebrations, the old piece was "loaded to the muzzle," wrote Duke. Luckily for the Rebels, the militiaman in charge of the cannon fled before touching off the gun.

At Salem, Morgan's provost guards were hard-pressed to prevent looting. Duke thought the plundering "seemed to be a mania—senseless and purposeless." He saw troopers grab absurdly useless items; one took a chafing dish, and another took a birdcage with three canaries. One rider stole seven pairs of ice skates and draped them over his neck in the sweltering summer heat. "They would [with a few exceptions] ... throw away their plunder after a while, like children tired of their toys," wrote Duke.

Discipline was restored when the Confederates learned that Hobson's cavalry had crossed the river and was only 25 miles behind them. Leaving Salem, Morgan quickly went through several towns. The raiders burned a depot and railroad bridge at Vienna. They camped that night at Lexington, about 40 miles from Corydon.

Most of the troops in Morgan's path were untrained volunteers or militia, and nearly all of them were foot soldiers. With the raiders moving in an unpredictable path, and cutting railroads and telegraph lines, militia in any one place often had little time to assemble a credible defense. Yet even brief and futile actions served the purpose of delaying Morgan until regular cavalry could arrive.

The troopers and horses of Generals Judah and Hobson were as tired as those of Morgan. Although the citizens of Indiana and Ohio provided all the help they could to the Federal troops, there was one gift they could not give: fresh horses. All along their route, the Confederates sent out small parties that fanned out to seize all available horses for several miles beside and ahead of the main column. For remounts in the countryside the bluecoat horsemen found only exhausted horses worn down and abandoned by the fast-moving Rebels.

On July 11, Captain Davis's detachment hoped to rejoin Morgan in Indiana. Davis started crossing the Ohio at Twelve Mile Island, 12 miles above Louisville. They used two small boats as ferries until two Union gunboats, the *Springfield* and the *Victory,* opened fire on them. A few of the Rebels and their captain reached the northern bank of the river, but they were intercepted and captured later that day at New Pekin, Indiana.

The rest of Davis's force was left stranded. Lieutenant Joseph B. Gathright eventually assembled 44 men; however, all but eight had to abandon their horses and arms on Twelve Mile Island. During a series of stealthy night marches, they captured enough horses to mount all the men and eventually returned to the Confederate lines near Knoxville.

Morgan approached the railroad hub of Vernon on July 11. About 1,000 men of the Indiana Legion under Brig. Gen. John Love waited outside town. Morgan sent a demand for surrender, but Love refused. Rather than lose any more time with Hobson growing nearer, Morgan slipped south-

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east toward Dupont and halted for the night. Hobson by this time was 17 miles away at Lexington.

Another hard day of riding brought the Rebels to Ferris's Schoolhouse, two miles south of Sunman, on July 12. Hobson was less than 20 miles away, at Versailles. Near Sunman was another force of 2,500 cavalry under Brig. Gen. Lew Wallace. Not realizing the enemy was so near, the Union cavalry troopers did not interfere with the raid.

In answer to Governor Morton's call, Indianapolis was filling up with soldiers. Five regiments camped on the grounds of the state capitol. Saloons were ordered closed and most regular business came to a standstill. On July 13 the 12th Michigan Battery passed through the streets.

After breaking camp on July 13, Morgan's advance crossed the border into Ohio near Harrison, about 20 miles from Cincinnati. With a population of 160,000, according to the 1860 Census, Cincinnati was the seventh largest city in the country. Morgan had no realistic chance of attacking such a well-defended metropolis with fewer than 2,000 exhausted cavalrymen. Yet he also rejected the idea of crossing the Ohio River and heading back to the Confederate lines; instead, he was determined to ride across the state of Ohio to make his raid even more destructive and disruptive to the Union.

Riding all night on July 13-14, the Confederate raiders passed within a half dozen miles of the northern outskirts of Cincinnati. Finding the right roads in the pitch-dark night was challenging. The Rebels were "compelled to set on fire large bundles of paper, or splinters of wood to afford

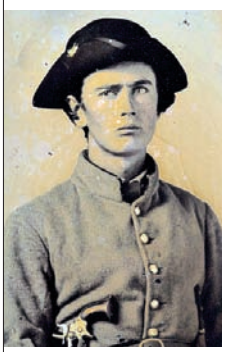
a light," wrote Duke. On heavily traveled roads, it was impossible to tell which horse tracks belonged to Morgan's leading regiments, but Duke found that "the dust kicked up by the passage of a large number of horses will remain suspended in the air ... and it will also move slowly in the same direction that the horses which have disturbed it have traveled." Duke added, "We could also trace the column by the slaver dropped from the horses' mouths."

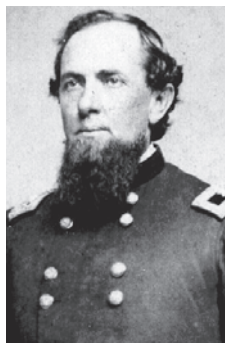
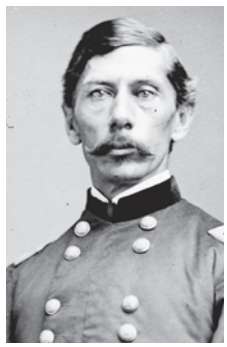
Long days of incessant riding and skirmishing pressed upon the cavalry. "At every halt officers were compelled to ... pull and haul the men who would drop asleep in the road," wrote Duke. "Quite a number crept off into the fields and slept until they were awakened by the enemy."

At Williamsburg, 28 miles from Cincinnati, Morgan allowed the men to halt in the late afternoon and rest all night on July 14-15. The column had ridden 90 miles in the previous 35 hours, according to Duke.

In pursuit of Morgan, Union cavalry units straggled into Cincinnati with worn-out horses.

All: Library of Congress



ABOVE: Left to right are Confederate Lieutenant Hiram L. Hendley of the 9th Tennesee Cavalry, which served with Morgan during the raid; Morgan; Union Brig. Gen. Edward Hobson; and Union Brig. Gen. Henry Judah. OPPOSITE: On November 27, 1863, John Hunt Morgan and six of his officers escaped from the Ohio Penitentiary using a ventilation shaft and then ascending a wall with a rope made from bunk coverlets.

Burnside assembled a new force, under Majors W.B. Way and George W. Rue, and provided them with fresh mounts. Burnside rushed them east by rail, hoping to get them ahead of the raiders while sparing the horses.

Morgan pushed east through Ohio for four more days. Although they outran the regular cavalry, the Confederates confronted militiamen and armed locals everywhere they went. The toll of countless skirmishes, ambushes, and sniping whittled away at Morgan's ranks and delayed their progress. Besides picking off Rebel horsemen, the militia also busied themselves chopping down trees to block the roads, further slowing Morgan down.

Roughly 150 miles east of Cincinnati, the Rebel horsemen reached Chester at 1 PM on July 18. They were only about 10 miles from the Ohio River and a crossing that offered escape into West Virginia. For some hours, the Rebels lingered at Chester to allow their scattered and stretched column to unite. They also searched in vain for guides who were familiar with the fords along the river.

Morgan planned to cross the Ohio just above Buffington Island. Roughly one mile in length and a quarter of a mile across, the island spilt the river into two channels. The western channel, known as Buffington Chute, was a narrow passage between the island and the Ohio shore.

The long halt at Chester delayed their arrival at Buffington Island until dark. A regular officer, Captain D.L. Wood of the 18th U.S. Infantry, held the ford with about 200 men rounded up at Marietta. Wood's men were one of numerous detachments scraped together to hold every possible crossing point open to Morgan. With two old guns formerly used only for firing salutes, Wood reached the ford near Buffington Island only one day before Morgan and put his men to work building some defenses.

Morgan's advance took Wood's detachment for a force of 300 regulars with two guns. Duke urged an immediate attack to secure the ford and cross the river as soon as possible, but Morgan pondered several reasons to avoid quick action. He knew the risks of a night attack on a fortified position and of crossing in the darkness a river swollen by heavy rains. And, Morgan's men were down to about five cartridges each, and there were only three rounds apiece for the artillery.

When the 5th and 6th Kentucky Cavalry came to within 400 yards of the enemy works, they decided to wait for dawn before rushing the enemy entrenchments. As soon as it was light enough to press forward, they found the works had been quietly abandoned during the night. Both Union guns were rolled off the bluff into the river.

Finding the works empty, the two Kentucky regiments were sent after Woods' retreating Union troops. Meanwhile, General Judah with his staff advanced down a road that was bordered on both sides by fences that led to the river. They were investigating disturbing reports that Wood's men had fled. A Union gunboat had withdrawn, and Morgan was already escaping across the river.

Fog cut visibility to about 50 yards. In the mist, the general's party stumbled into Duke's cavalry. Duke told Judah later that "he could not have been more surprised at the presence of my force had it dropped from the clouds." Firing broke out in an instant. Taken by surprise, Judah's party was pushed back and scattered. Their gun was taken before it could fire a shot.

About 50 of Judah's men were shot or captured, including some of his staff officers. Most famous among them was 65-year-old Major Daniel McCook. The major's family was known as "the Fighting McCooks." Nine of his sons and six nephews all served in the Union Army. Although too old for field service, McCook joined the army in 1862 and became a paymaster. He left his routine duties to volunteer as an aide for General Judah and was shot in the early minutes of the clash near Buffington Island. McCook died of his wounds two days later. He was the highest ranking Union officer killed on Ohio soil during the war.

Judah and the other survivors fell back to join the rest of their force. "Obstructing fences prevented a charge by my cavalry," wrote Judah, but his muskets and artillery hammered the enemy troopers. Hobson's men were not far behind those of Judah, and at 6:30 AM they attacked Morgan from the west.

The report that the gunboat on the river had withdrawn was not true. Most of Fitch's gunboats were deployed farther downstream. The army had not conveyed much solid intelligence about Morgan to the Navy, and Fitch in part relied on newspaper reports to decide where to station his vessels, but he was on hand with his gunboat, the *Moose*.

Pressed by more than twice their number in cavalry, the Confederates retreated north along the riverbank. One and a half miles above Buffington Island, they tried to ford the river under cover of a Parrott rifle and a 12-pounder. Armed with four 24-pounder Dahlgren guns, the *Moose* opened fire on them from the river. After the Rebel gunners were killed or driven away by the Dahlgrens, Lt. Cmdr. Fitch sent a landing party to capture the two cannons.

Some of Morgan's men were partway across

the river when the *Moose* opened fire on them. Most of the men turned back to the Ohio bank. But several of Morgan's men had been shot from theirs saddles. Some of their horses remained standing still in the water, while bodies and pieces of Confederate clothing and equipment floated downstream past the steamer.

On the shore, the Rebel riders were exposed along a narrow ledge of beach. Men scrambled up ravines and disappeared into the woods. Captured wagons and carriages were abandoned by the edge of the river. "The road along the bank was literally strewed with his plunder, such as cloth, boots, shoes, small arms, and the like," wrote Fitch.

The Battle of Buffington Island all but ended Morgan's raid. Of the force involved, 750 men, including Colonels Duke and William Morgan, were captured. The remnants of the expedition rode northwest back into Ohio as far as Nelsonville, then turned northeast on a course converging with the Ohio River.

Twenty miles upriver, Morgan tried to cross the river and reach Belleville, West Virginia. The *Moose* again opened fire on the soldiers fording the river, this time cutting the Confederate force in two. Several men were killed in the water. Stovepipe Johnson made it to West Virginia with 300 men, but the rest of the force followed Morgan to make another try at getting home.

Fighting their way northward and eastward for another week, the dwindling force of raiders tried to maneuver around Union troops and find their way across the Ohio. Brig. Gen. James M. Shackelford, leading 2,600 Union horsemen, caught up with Morgan at Salineville on July 26. Shackelford's force killed 23 Confederates and captured nearly 300 men. Salineville would be the northernmost battle of the Civil War.

Morgan escaped from Salineville with only a handful of men. A few hours after the clash with Shackelford, the remaining raiders reached West Point in Columbiana County, Ohio. They were just past the northern tip of West Virginia and about 10 miles from the Pennsylvania border. But the appearance of more Union cavalry dashed any hope of getting out of Ohio. Burnside's use of the railroads had enabled Major Rue and elements of the 9th Kentucky Cavalry to catch up with Morgan. Before Rue could close in, Morgan surrendered to one of his prisoners, a militia captain named James Burbick. The captain agreed to parole Morgan and his remaining men.

Sparing a notorious raider such as Morgan from prison was unacceptable to Rue and his superiors. Burbick's decision was overruled on the spot; an official inquiry later found that because he was not a regular officer, he had no authority to grant paroles. Rather than being treated as prisoners of war, Morgan and several of his officers were jailed in the Ohio State Penitentiary as common criminals.

On November 27, 1863, Morgan and six of his companions broke into a ventilation shaft that ran under their cells. Soon they were outside the prison and scattered into the rainy night.

Hines and Morgan had some money they had kept hidden from the guards. The pair bought tickets to Cincinnati aboard a train leaving early on the morning of November 28. Morgan struck up a conversation with a Union officer in a passenger car and shared a flask of brandy with him.

At daybreak, when their train reached the edges of Cincinnati, Morgan and Hines moved to the platforms at either end of their car. Both men yanked on the bell ropes to activate the emergency brakes. When the train slowed down, they jumped off. Eluding arrest, they paid the owner of a skiff two dollars to row them across the Ohio. Once in Kentucky, they found Confederate sympathizers to help them reach the Confederate lines.

Again, Morgan went back into the field as a cavalry raider. He met General Hobson once more when he captured the Union officer during an attack on Cynthiana, Kentucky, on July 11, 1864. Less than two months later, Morgan's career ended when he was shot dead during an attack at Greenville, Tennessee, on September 4.

Although a spectacular achievement in so far as traversing two Union states, Morgan's Raid accomplished little of strategic value. The cavalry force slashing across the Ohio Valley was too small to accomplish any permanent objectives, and it could ill afford the losses incurred in sharp clashes such as those at Tebbs Bend and Lebanon. The raid deprived Bragg of many of his most effective cavalry officers and men. Tying up more than 100,000 enemy troops meant little when the massive Union Army could easily spare them for a few weeks.

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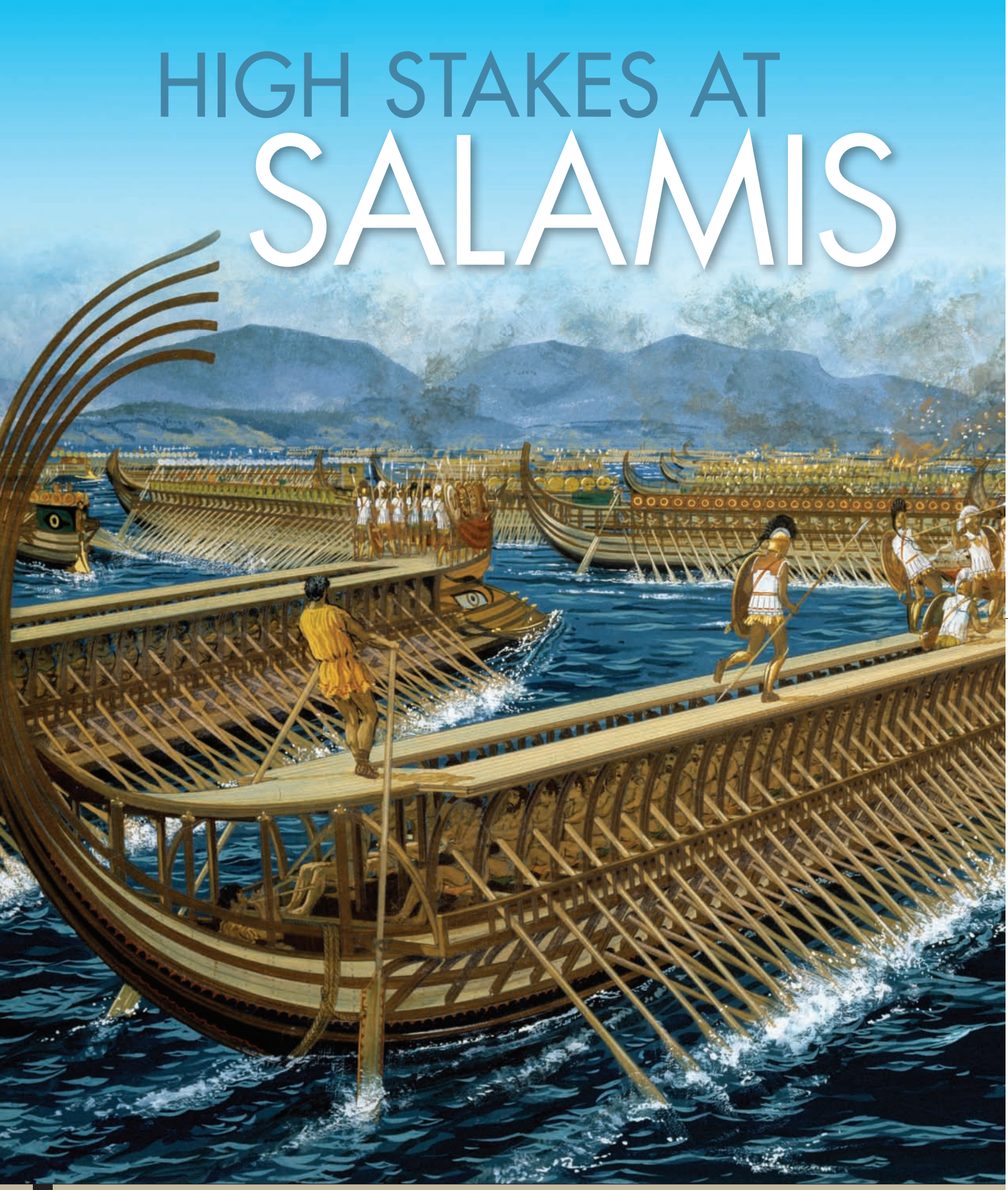
More important than any tangible results, though, Morgan's Raid at least for a short time provided hope for a Confederacy reeling from the twin disasters of Vicksburg and Gettysburg. Morgan's men could point to an impressive toll of damages. They took and paroled 6,000 soldiers, which was almost three times their own number. During the raid, they burned 34 bridges and cut railroads in more than 60 places. In Ohio alone, the raiders captured about 2,500 horses. As many as 4,375 people across 29 Ohio counties filed damage claims. The state government mobilized approximately 50,000 militia to deal with the Rebel foray. After the war, the expedition remained a proud achievement to the ex-Confederates of the trans-Appalachian theater of the war, and a vivid memory to the inhabitants of a broad and otherwise peaceful swath of Indiana and Ohio. □

HIGH STAKES AT SALAMIS



The Athenians maneuvered their nimble fleet to victory against the unwieldy Persian armada in the Straits of Salamis in 480 BC.

BY ERICH B. ANDERSON

AKG Images

AS THE SUN ROSE SHORTLY AFTER dawn on a morning in late September 480 BC, 170 rowers densely packed on three tiers within an Athenian warship strenuously pushed their oars to propel their vessel forward as fast as possible. The captain, Aminias of Pallene, had given the order for the crew to advance while nearly all of the other Greek ships in the fleet either stayed in place or moved slightly in reverse as they faced the huge armada of the formidable Persian Empire within the narrow Straits of Salamis. Aminias was one of, if not the first, Greek captain to decide to attack; thus, his command was carried out by the rowing master responsible for making sure the oarsmen rowed fast in unison, and the helmsman, who maneuvered the trireme to strike the closest vessel in the approaching Persian fleet.

Right before impact the pilot ordered the rowing master to have the crew quickly switch to backing water with their oars so the heavy, wooden ram covered with solid bronze at the prow of the ship did not penetrate too deep into the enemy vessel and get lodged. But the attempt was made in vain, for the ram of the Athenian trireme crashed into the Phoenician ship with such force that it became stuck, and the oarsmen could not reverse out of the penetrated vessel. With the two warships locked together, the Greek archers and hoplites on board began to combat the Persian marines of the Phoenician warship. A bloody fight ensued on the decks over control of the vessels. It was one of many ship-to-ship struggles that played out during the historic naval clash at Salamis.

Over a decade before Aminias and his crew initiated not only one of the greatest naval battles in antiquity, but also one of the most significant military encounters of Western civilization, the small city-state of Athens aroused the fury of the Persian kings who ruled over the most powerful empire the world had seen up to that time.

By supporting the formerly independent Ionian Greek cities during their revolt against the Persian Empire in 499 BC, the Athenians had earned the ire of King Darius. Swearing revenge against the Athenians, Darius in 490 BC led a great army into Greece. The Persians met the Athenian army in battle at Marathon that year. Although heavily outnumbered, the Athenians prevailed against the Persians.

Although Darius contemplated another invasion of mainland Greece, he died in 486 BC with-

A Greek trireme rams a Persian trireme in Salamis Bay while hoplites and archers engage each other with spears and arrows.

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Xerxes' Persian army achieved an engineering marvel by crossing the Hellespont on two long pontoon bridges.

out achieving his vengeance. At the time of his death he was engaged in putting down a rebellion in Egypt. The unfinished business with Athens fell to Darius's son Xerxes; however, Xerxes had other scores to settle first. After Xerxes crushed uprisings in Egypt and Babylonia, he was free to pursue his father's goal of conquering mainland Greece.

As the Persians were occupied with the Egyptians and Babylonians, a new man named Themistocles was rising to power in Athens. The increasingly popular politician firmly believed that the best way to protect Athens from the threat of the Persian Empire was to greatly expand the fleet. The discovery of rich deposits of silver at Laurium enabled the Athenians to fill their coffers, and Themistocles successfully managed to convince his fellow citizens that the surplus wealth should be spent on overhauling and expanding the Athenian navy. The Athenians embarked on a shipbuilding program in 483 BC that produced 200 new triremes.

Xerxes raised an army of approximately 150,000 soldiers in the spring of 480 BC. His army crossed the Hellespont in May on two massive pontoon bridges built atop ship hulls lashed together with heavy cables and anchored at right angles to stabilize them in the swift current.

While the bridges were being built, a severe storm wrecked them. The event so angered Xerxes that he had the men supervising the construction put to death. For disrupting his plans, the Great King also had his men symbolically "punish" the water of the straits by whipping and branding it as if it were one of his unruly subjects. Afterward, the construction resumed and the bridges were completed.

Once on European soil, the Persian army coordinated its movements with the gigantic Persian fleet that numbered approximately 1,200 warships. The grand fleet was composed of squadrons of various subjugated peoples. The Phoenicians furnished 300 warships, the Egyptians furnished 200 warships, the Cyprians furnished 150, and the Ionians furnished 100. The Phoenician squadron was the strongest part of Xerxes' navy. The marines on board the Persian warships were armed and armored like Greek hoplites, even though they might not have been Hellenistic in origin.

The average complement of soldiers on the Greek ships was 10 hoplites and four archers. In contrast, the Persian vessels included 14 of their own hoplites or archers as well as a contingent of 30 additional Medes, Sacae, or Persian warriors.

While Xerxes was the overall commander of both the land and naval forces, Persian military commanders served as admirals of the fleet. Chief among them was Ariabignes, a half-brother of the king and the son of Darius. The other leading admirals were Achaemenes, another son of Darius and full brother of Xerxes, Megabazus, and Prexaspes. Achaemenes led the Egyptian fleet, Ariabignes led the Ionians and Carians of southwest Anatolia, and Megabazus and Prexaspes led the rest of the fleet.

The Persian admirals were relatively inexperienced in naval warfare, thus their main purpose was to keep foreign subject commanders and captains in line. The real force behind the Persian fleet was a trio of Phoenician kings who were experts in naval tactics. These royal figures were Tetramnestus, king of Sidon; Matten, king of Tyre; and Merbalus, king of Aradus.

Before Xerxes had initiated the campaign with his troops, many Greek city-states met at the Isthmus of Corinth and decided to band together in the fall of 481 BC. They formed a confederation called the Hellenic League. Under the terms of the agreement, all hostilities between members were to cease immediately. This brought closure to the two decades of strife between Athens and Aegina.

The Spartans commanded both the land and sea forces of the Hellenic League. This was the case even though the Athenians and their supporters believed that the chief admiral of the

fleet ought to be an Athenian since the city-state had contributed more ships than any other Greek member. However, the Spartans had the support of their Peloponnesian allies, so the Athenians were outnumbered in the league and were forced to concede the leadership not only on land, but also at sea. Like the role the Phoenicians and their rulers had in the Persian fleet, Themistocles and the Athenians were the true naval strategists of the allied Greek navy.

United against their common foe, the Greeks began to make preparations for their resistance. They proceeded with their plans despite the Oracle of Delphi's prophecy that not only would disaster befall the Greeks, but also that the Athenians should flee. The prophecies further stressed that the only chance the Athenians had for survival was to put their faith in a wooden wall.

Wikimedia

ABOVE: The *Olympias* is an accurate reproduction of an Athenian trireme owned by the Greek Navy. Triremes were designed for fast attack with ramming speeds up to 30 miles per hour. LEFT: Persian King Xerxes and Athenian General Themistocles.

Many Athenians interpreted this to mean that the construction of a wooden wall and palisade on the Acropolis would save them from the Persian onslaught. Themistocles made a less literal interpretation. He managed to convince a majority of the Athenians that the oracle was actually referencing the wooden bulkheads of the Athenian warships. As a result, the Athenians embraced Themistocles' belief that the only way to stop the invasion of the Persian Empire was to defeat its naval forces at sea.

Many members of the Hellenic League believed that the best place to organize resistance to the Persians was at the Isthmus of Corinth, the narrow stretch of land that connected the Peloponnesian Peninsula with the rest of Greece. The Athenians argued that such a strategy would leave them vulnerable to the ravages of the Persian army. Furthermore, the Athenians observed that troops stationed at the isthmus could be easily outflanked by the Persian fleet. The Peloponnesian members of the league eventually came to appreciate the Athenians' need for protection; as a result, the Greeks assembled an army to confront the Persians in Thessaly.

While the great Persian army was crossing the Hellespont, the Greeks sent an army of 10,000 hoplites to the Vale of Tempe in northern Thessaly. This army consisted of two contingents: one was led by the Spartan Evaenetus and the other was under the command of Themistocles. The journey north was made in vain, however, because the Greek commanders discovered there were too many passes for a force of their size to sufficiently hold against the enemy, so they withdrew to the Corinthian isthmus.

The two sides continued to debate the best way to defend their respective homelands. The Greeks ultimately decided to make a stand in central Greece at the narrow pass of Thermopylae. Where the army would be able to defend the pass while the fleet took up a position at Artemisium near the northern end of the island of Euboea. When the Greek navy took up its position in late August, it had 271 triremes. The commander of the Greek fleet was a Spartan named Eurybiades.

For the Persian fleet, Xerxes instructed his troops to build a canal through the Athos Peninsula. By traversing the landmass, as opposed to going around the southern tip, the vessels could avoid the storms that had devastated the fleet on the campaign led by Mardonius in 492 BC. The Persian land and sea forces rendezvoused in Therma before splitting up again so that the army could penetrate deeper into mainland Greece.

The Persian army reached the Greeks first at Thermopylae near the end of August. Waiting for them were 8,000 hoplites and light infantry led by the Spartan King Leonidas with his royal bodyguard of 300 elite soldiers. Meanwhile, the Persian fleet experienced great hardship on its way from Therma to Artemisium. Storms destroyed 400 warships. Persian woes continued after they reached the Greek fleet, for the Phoenicians sent a squadron of 200 vessels south around Euboea in an attempt to trap the Greeks between the two contingents of the Persian navy. Storms decimated the Phoenician squadron. Regardless of its heavy losses, the Persian fleet had approximately 700 warships by the time it reached the port of Aphetae. Their new position put them in close proximity to the Greek fleet at Artemisium.

The sight of such a huge fleet greatly intimidated the Greeks and caused many to lose heart. But bribery, as well as Themistocles' strong leadership, enabled the Greeks to hold their army together. Shortly afterward, the Greeks received the good news that 15 Persian ships had accidently separated from the main fleet and sailed into the clutches of the Greek navy at Artemisium. The Greeks quickly captured the galleys. Intelligence gleaned from the captured Persians, as well as from a Greek informant in the Persian navy, alerted the Greeks to the southern movements of the Phoenician squadron. Word was then sent to the 53 Athenian warships in reserve to protect

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ABOVE: Xerxes looks on as the Greek navy launches a series of ramming attacks that produced disorder and confusion among the tightly packed Persian fleet. OPPOSITE: Ariabignes, a Persian admiral and Xerxes' half brother, is slain by spear thrusts during a melee that ensued when the Greeks rammed his flagship.

Athens and the rest of Attica from possible attack. If necessary, the reserve force was to intercept the Phoenician squadron so that it could not assault the main Greek fleet from the rear.

While the Persians were preoccupied with making repairs to some of the vessels damaged by the storm, the Greeks went on the offensive. When the two sides met, the Greeks proved that they were not foolishly overconfident, for even though the more numerous Persian ships surrounded their forces, the Greek triremes pulled off a brilliant defensive maneuver. The Greeks formed themselves into a circle to prevent the Persian fleet from using its superior numbers to overwhelm them. Eventually, the Greek captains became too confined within their circle, so they broke through the Persian lines. The Greek ships managed to escape (probably because they were lighter as a result of carrying fewer troops), seizing 30 Persian vessels during the fighting.

After reports of the misfortune that befell the Phoenician squadron reached the Greeks, the 53 ships of the Athenian reserve joined the rest of the allied fleet. The reinforced Greek fleet advanced again to confront the Persian naval forces. On the second day of combat at Artemisium, the Greeks achieved another minor victory when they sank several Cilician galleys. On the third day the fighting grew in intensity. When the larger Persian fleet once again encircled the smaller Greek navy, fierce fighting raged throughout the day. When it was over, both sides had incurred heavy losses.

Meanwhile, a traitor informed Xerxes of a path at Thermopylae that would allow his forces to surround the Greeks stationed there. When the Greek army learned that the Persians had discovered a way to attack them from the rear, a large number departed on the belief that the position was untenable.

Spartan King Leonidas resolved to make a stand defending the narrow space between a steep hillside and the sea. His small force consisted of 1,400 hoplites. Leonidas's troops repulsed repeated Persian assaults for two days, inflicting heavy losses on the enemy while suffering relatively light losses themselves. On the third day, the Persians outflanked and annihilated Leonidas's force. Leonidas and his elite royal bodyguard made a last stand in the defile in which they were all slain.

Following the Battles of Artemisium and Thermopylae, the Greek fleet withdrew to the island of Salamis near the coast of Athens. Putting their faith in the success of their large fleet, many Athenians had already evacuated from the territory of Attica to Salamis, the island of Aegina, or the city of Troezen, which was located in the eastern Peloponnese. With no allied forces north of the Isthmus of Corinth to halt the advancing Persian army the remainder of the inhabitants of Athens were evacuated. The few citizens who remained in Athens fortified themselves on the Acropolis, putting their faith in the words of the oracle of Delphi. Yet the fortifications were of scant use against such overwhelming numbers. By early September, the surrounding countryside of Attica was ravaged and the city of Athens was destroyed by the Persian troops.

After the Greek fleet helped evacuate the Athenian populace, the allied admirals once again debated whether they should withdraw to the isthmus. The location had become even more appealing to the Peloponnesians whose land forces remaining on the peninsula had begun to build a wall across the narrow stretch of land after the defeat at Thermopylae. The next day the Persian fleet arrived at the Bay of Phaleron to the east of Salamis. The Persian navy had been reinforced, therefore maintaining its strength of 700 vessels. In contrast, the Greeks had approximately 300 triremes.

Just when it seemed as if Eurybiades had made his decision to flee to the isthmus, Themistocles was said to have sent one of his most trusted servants, Sicinnus, to the Persians during the night to warn them about the flight of the Greek fleet. The sly Athenian admiral had his messenger tell the Persians that he had switched sides; however, he hoped his message would lure the enemy to the narrow confines of the Straits of Salamis where their advantage of superior numbers would be negated. At the same time, the advance of the Persians would also force the Greeks to engage in combat. It was a fight that Themistocles was confident his side could win.

The ploy worked exactly as Themistocles had planned, for Xerxes and his naval commanders immediately took steps to confront the Greek

fleet. Even though it was nighttime, the crews and marines of the Persian fleet boarded their ships and moved to block all possible escape routes that the fleeing Greeks might use. The majority of the imperial ships shifted east toward Phaleron Bay, although the 200-strong Egyptian squadron sailed for the western side of the island of Salamis to block that path as well. Additionally, a contingent of 400 elite troops was sent to the island of Psyttaleia to assault any Greek individuals or ships that reached the coasts during the fighting.

Themistocles, with the help of his long-time Athenian rival Aristides, alerted Eurybiades and the other allied commanders of the Greek fleet to the actions of the Persians; this was backed up by a report from a Greek ship that had defected from the imperial forces. Since withdrawal to the isthmus was no longer an option, the Greeks agreed to board their ships and confront the Persians at dawn.

At sunrise the Greek fleet was in position with Eurybiades and the 16 Spartan ships in the traditional place of honor on the right wing, the large Athenian navy of 200 triremes on the left, and the 30 Aeginetan vessels and 14 other warships of the Greek allies in the center. The Greek reserve consisted of 40 Corinthian ships.

Xerxes watched the movement of his fleet from the mainland. He was amazed that the greatly outnumbered Greek navy had the audacity to give battle. The Persian fleet was not at all intimidated by the united front presented by the allied Greek fleet. Drums, pipes, and war chants created a terrific din as the opposing sides approached each other. Before the opposing fleets made contact, the Greeks paused briefly to maintain their formation before proceeding.

After the Athenian trireme captained by Aminias slammed into the Phoenician vessel and became stuck in it, the marines of both ships engaged in brutal combat. At first the two sides exchanged missile fire consisting of arrows and javelins before the more heavily armed Greek hoplites and Persian marines confronted each other. The Athenian crew was outnumbered, but it did not take long for their allies on other ships to rush in and help. With their aid, Aminias's crew not only managed to dislodge their ship, but they also tore off the entire sternpost of the Phoenician vessel. Once free Aminias and his crew left the disabled ship so that they could attack their next target in the Persian fleet.

About the same time that Aminias's vessel made contact with the enemy, an Aeginetan trireme successfully rammed into a Phoenician ship. A Greek trireme led by Democritus from the island of Naxos was the next vessel to attack. Lycomedes' ship was the first to successfully capture a Persian vessel.

During the initial clash, a Corinthian contingent sailed to the northwest apparently to meet the threat posed by the Egyptian fleet in the western passage. But it might also have been trying to deceive the Persians into believing that the Greeks would not make a united stand. Numerous collisions occurred in the front ranks, and boarding parties became entangled. The fighting was general from the Cynosura Peninsula to the larger of the two Pharmakoussae Islands.

Near that island, on the western side of the battle, the Phoenicians on the Persian right wing attempted to seize the offensive from the Athenians by breaking through their front line. But the first two lines of the Athenian fleet were so densely packed together, and their flank was protected by the Pharmakoussae island, so the Phoenicians failed in their attempts. The confined space in which the combatants struggled also contributed to the Phoenicians' failure. Moreover, the large crews on board their ships completely negated the superior speed and agility of their vessels. Despite the best attempts of their crews, the Phoenicians were unable to carry out crucial maneuvers.

Desperate to break through the Athenian line, yet exhausted from the overnight to early morning exertions, the Phoenician navy began to lose its cohesion. The Greek fleet stayed in line while also managing to exploit the deteriorating formation of the enemy. As the fighting progressed over the next few hours, the situation worsened for the Phoenicians, especially at 9 AM when a strong, albeit routine, sea breeze began to blow throughout the straits, causing the surface of the water to become rough and choppy. While the lower and broader Greek ships were better able to deal with the sudden swell, the Phoenician triremes, with their high decks, bulwarks, and stern-

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castles, were affected much more by the wind and waves. Under these conditions many of the Phoenician crewmen could not properly control their ships and their sides and sterns became vulnerable to attack. The Greeks exploited these weaknesses with deadly efficiency.

While the Phoenicians initially were able to withstand the Greek assaults, eventually they succumbed to them. Because the Phoenicians were skilled mariners, their morale remained high. They refused to capitulate without a struggle. They were acutely aware that Xerxes was watching them from his perch on the coast of the mainland. What is more, the Phoenicians, as well as the rest of the Persian fleet, still outnumbered the Greeks. The presence of the massive Persian flagship of admiral Ariabignes towered over the lesser vessels like a floating fortress. It inspired the courage of crews in the Persian ships near it.

Aminias and his lieutenant, Socles, realized that the Greeks needed to destroy the Persian flagship. The marines on the Persian flagship showered on the Greek vessels nearest to them "arrows and javelins as from a city wall," wrote Plutarch. "[Ariabignes] was a brave man, the strongest and most just of the king's brothers. Aminias of Deceleia and Socles of Paiania, sailing together, rammed him head-on. The two ships were locked together by their bronze beaks. [Ariabignes] tried to board their trireme but the two Athenians hurled him into the sea with their spear thrusts."

The death of Ariabignes and the loss of their flagship came as a heavy blow to the Persians. At that point, the Persian fleet's command structure collapsed for there was no designated succeed successor to Ariabignes. The surviving captains gave conflicting orders that resulted in great confusion.

Inevitably, the chaos was too much for the Phoenicians, and their ships attempted to flee to safety. The Corinthians returned from the north and fell upon the Phoenician right wing, striking it in the flank. When the Phoenicians began to flee, the Corinthians pursued them and attacked them in the stern.

The Persian fleet was deployed five lines deep in some places. The Phoenician retreat precipitated a disaster as the retreating vessels crashed into the line behind them. The vessels in the rear continued to advance in an effort to impress their Great King with acts of bravery and self-sacrifice.

The dramatist Aeschylus described the effect the heavy winds and the unrelenting attacks of the Greeks had on the Persians, specifically the Phoenicians. "At first the Persian line withstood this shock; but soon our crowding vessels choked the channel, and none could help each other," he wrote. "Soon their armored prows smashed inward on their allies, and broke off short the banks of oars while the Greek ships skillfully encircled and attacked them from all sides."

Many ships were lost and more men perished in the sea, especially among the Persian and Mede marines that were on board. While the Greeks and Phoenicians were sea peoples and could swim, the Persians and their Asiatic allies had no real experience at sea. Many of these sailors and marines were unable to reach the shore and drowned.

A small group of Phoenicians, including captains and aristocratic warriors, managed to escape their damaged or captured ships and reached the coast. When they were brought before Xerxes, the Phoenicians desperately pleaded for the Great King to hear their case. Their failure in battle was not their fault, the Phoenicians claimed, but a result of the treachery of the Ionian Greeks in the Persian fleet.

As the Phoenicians made their accusations, Xerxes witnessed one of his ships, a Greek trireme from Samothrace, striking an Athenian galley from the stern quarter with its bronze prow. The Samothracian trireme successfully disengaged thereby avoiding entanglement. As the Samothracian vessel reversed away from the disabled Athenian ship, an Aeginetan trireme of the Greek navy rammed the Samothracian. The Samothracians hurled their javelins with deadly accuracy, thus killing the majority of the marines on the Aeginetan ship. After decimating the defenders, the Samothracians seized the enemy vessel.

Xerxes, who watched the Samothracian crew distinguish itself before his eyes, ordered the immediate decapitation of the Phoenician accusers. To justify this extreme act, the Great King stated that bad men should not slander those who are better than them.

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By that point, the Phoenician line was entirely broken. Shortly afterward, the Cypriot line collapsed as well. Following the example of the Samothracian ship, the other Persian allies in the center and on the left side of the Persian fleet fared much better than the Phoenicians throughout the early phases of the battle.

The collapse of the Persian right wing meant that the Athenians and Aeginetans were free to attack the remaining resistance in the flank as the Spartans and the rest of the allied Greeks assaulted the enemy front line. The assault on the Persian flank eventually intensified to such an extent that the Cilicians and the rest of the Persian center broke. After witnessing the flight of the Phoenicians and the death of their admiral, Syennesis, the Cilicians could take no more. It was then that the Persian left wing also began to buckle.

As midday approached, Aminias began hunting for his next target. He came across the ship of Queen Artemisia of Halicarnassus. The idea that a woman was one of the enemy commanders so infuriated the Athenians that they put a price of 10,000 drachmas on her head. Unfortunately for Aminias, he and his men were unaware of the great worth of the vessel they pursued because they did not know that the Greek ship belonged to Artemisia. As the Athenian crew prepared to ram the retreating galley, Artemisia ingeniously ordered her men to aim their ship at one of the nearby Carian vessels. When Artemisia's trireme slammed into the unsuspecting vessel, the ship sank and all of the Carians on board perished, including King Damasithymus of Calynda, a Carian city southeast of Halicarnassus.

The ploy worked perfectly, for Aminias suspected that the Greek ship had deserted the Persian cause and switched sides; thus, the Athenian captain and his crew searched for a different enemy galley to assault. Artemisia's deception not only tricked Aminias, but also Xerxes. The Great King was aware of the encounter but did not know that his allied queen had attacked a fellow vessel in his own fleet. Rather than being punished for her treacherous act, Artemisia was praised for her martial performance.

The other Ionians and Carians valiantly held off the relentless assaults from their fellow Greek enemies, but they too were soon compelled to retreat. Aeschylus described the dire situation in which the Persian fleet found itself. "Crushed hulls lay upturned on the sea so thick you could not see the water, choked with wrecks and slaughtered men; while all the shores and reefs were strewn with corpses," he wrote. "Soon in wild disorder all that was left of our fleet turned tail and fled. But the Greeks pursued us, and with oars or broken fragments of wreckage split the survivors' heads as if they were tunneys or a haul of fish and shrieks and wailing rang across the water."

Alamy

ABOVE: Boarding parties tangled in bloody melees when the ships became locked together as a result of ramming. Eventually the Greeks prevailed, and the remaining intact Persian vessels fled to safer waters. OPPOSITE: A missile exchange precedes a boarding attempt as a Greek trireme strikes a Persian warship amidships. As the battle wore on, the bay was littered with crushed hulls that floated upside down on the choppy waters.

In the final phase of the battle, the Athenians and Aeginetans exuberantly took on the remnants of the Persian fleet in increasing jubilation for their continuing triumph against such overwhelming odds. In this atmosphere of growing confidence, some of the Greeks playfully competed with their allies, who shortly before had been longtime rivals. As Themistocles' flagship raced alongside the trireme commanded by Polycritus of Aegina, it was the Aeginetan vessel that managed to strike the enemy first. Once his target was removed, Polycritus yelled to the Athenian admiral and mocked him for saying Aegina was pro-Persian.

The former enemies continued to work in a synchronized fashion as they continued to carry out their devastating assaults on the retreating Persian ships. The Greeks did the most damage to the Persian fleet as it attempted to exit the straits and get back to Phaleron Bay. "The Aeginetans were lying in wait for them in the channel and did famous deeds," wrote Herodotus. "For the Athenians dealing with those ships that put up some resistance or were trying to escape in the confusion and the Aeginetans dealt with those that were trying to get out of the straits. So any that escaped ran straight into the Aeginetans."

The deadly flank attacks employed by the Aeginetans, along with the Corinithian reinforcements, effectively ended the naval Battle of Salamis. Any surviving ships in the Persian fleet fled to the safety of the bay in Attica.

Late in the day, with the straits no longer crammed with Persian ships, the path was open for the Greeks to attack the small Persian garrison stationed on the island of Psyttaleia. Aristides led a contingent of hoplites and support troops that landed on the coast when the Persian force was isolated with no hope of rescue by the battered Persian fleet. At the outset of the assault,

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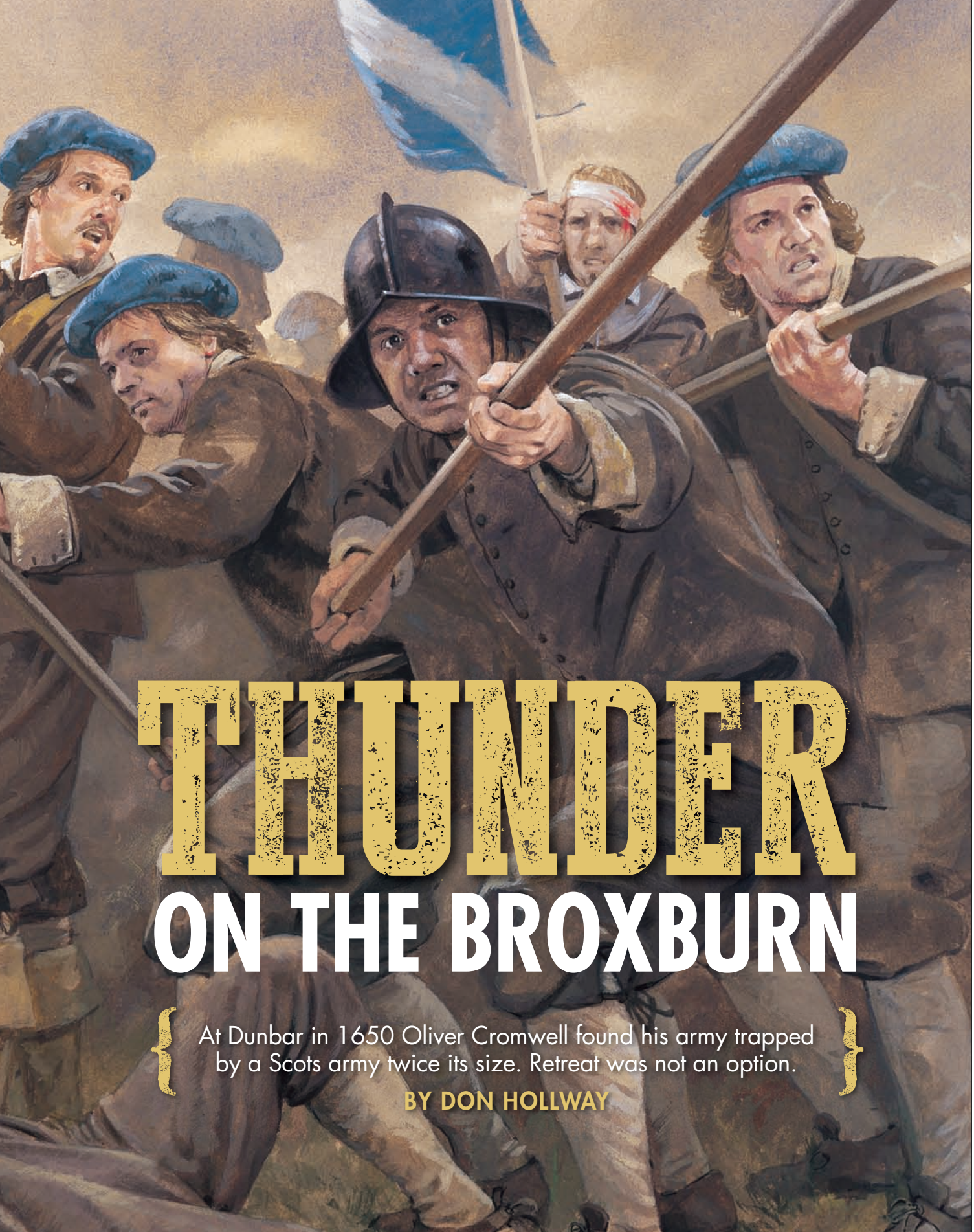
Highlander pikemen of Lawer's Brigade fight a desperate rearguard action against General Oliver Cromwell's cavalry in a modern painting by Graham Turner.



THUNDER ON THE BROXBURN

At Dunbar in 1650 Oliver Cromwell found his army trapped by a Scots army twice its size. Retreat was not an option.

BY DON HOLLWAY

IN July 1637 few Scots or English would have guessed the result when Edinburgh minister James Hannay preached from the Book of Common Prayer, and street merchant Jenny Geddes threw her footstool at his head. "Devil give you colic in your stomach, false thief," said she, "dare you say the Mass in my ear?"

The Book, mandated by King Charles I, was a liturgy of the Anglican Church, which to Presbyterian Scots was tantamount to Catholicism. Geddes' outburst became a riot, then rebellion, then the Wars of Three Kingdoms, also known as the British Civil Wars. For 12 years Royalists and Parliamentarians, Catholics and Protestants battled across Scotland, Ireland, and England. By the time Charles's head finally tumbled from the chopping block in January 1649, Scotland had decided it preferred a king to an English Commonwealth after all.

Politics in Scotland, as in all of 17th-century Europe, was inextricably tangled with religion. In early 1650 the Covenanters, the political wing of the Church of Scotland, the Kirk, defeated a Royalist invasion sent by Charles II, but when he offered to convert all of Great Britain to Presbyterianism, welcomed him. Neither side, however, bargained in good faith.

The Scottish turnabout was no surprise to the new English government, also divided into squabbling religious and political factions. Many Englishmen were horrified that the Parliamentarian cause had led to regicide. Commander-in-chief Lord General Sir Thomas "Black Tom" Fairfax resigned rather than fight his Scottish former allies. Not so his lieutenant-general of cavalry, Oliver Cromwell, who had transformed England's motley militias into the professional New Model Army, made it into the most powerful political force in England, and had no qualms about using it against kings and dissenters alike. In the summer of 1650 he was fresh back from overseeing the subjugation of Ireland, including the massacre of thousands of Irish Catholics and English Royalists at Drogheda.

"I believe we put to the sword the whole number of the defendants," he said. "I do not think thirty of the whole number escaped with their lives. Those that did are in safe custody for the Barbadoes [in servitude]." He accepted Fairfax's command as Lord General of the Commonwealth army, and few in Parliament were sorry to see him off to fight a war with Scotland on Scottish soil.

With a naval support fleet paralleling their advance, 16,000 troops marched to the adulation of crowds along the way. The ranks included red-coated musketeers with shouldered matchlocks, pikemen in buff leather coats with 16-foot two-handed spears, and mounted cuirassiers in steel breastplates with wheellock pistols and carbines. In Northampton Maj. Gen. John Lambert, who together with Cromwell had defeated the numerically superior Scots in 1648 at Preston, remarked he "was glad to see we had the nation on our side."

"Do not trust to that, for these very persons would shout as much if you and I were going to be hanged," replied Cromwell, the regicide.

The political twists that had raised Cromwell and Lambert to command rather than the noose also had them facing a former compatriot: Scottish Lt. Gen. David Leslie. In July 1644 the three had fought together to defeat the Royalists at Marston Moor. But Leslie had something else, something more sinister, in common with Cromwell. At Philiphaugh in September 1645, Leslie had overseen the massacre of 100 Royalist and Irish prisoners and 300 camp followers. It was no fluke. A year later, he pursued 300 Royalists into Dunaverty Castle in western Scotland. The defenders asked for quarter, which Leslie granted, but after they came out of the castle, they were put to the sword, recalled a witness. To this day the ruin of Dunaverty Castle is known as Blood Rock. In 1648, Leslie had refused to support Charles I because the Kirk opposed him; in 1650, with the church backing Charles II, he had accepted command. The Scottish army, though twice the size of Cromwell's, was mostly raw recruits and rife with dissent. Some of the more hardline Covenanters like Colonel Archibald Strachan and Archibald Johnston, Lord Warriston, still opposed the agreement with Charles.

In mid-July the English crossed the border at Berwick-upon-Tweed and at the end of the month reached Dunbar. A small village sited around the ruins of a Norman castle, Dunbar had been the site of a Scottish defeat by the English in 1296, when Edward I of England had conquered Scotland and taken the Stone of Scone, on which Scottish kings were traditionally crowned, home as a trophy. "The streets were full of Scotch women, pitiful sorry creatures, clothed in white flannel, in a very homely manner," wrote one English officer. "Very many of them much bemoaned their husbands, who, they said, were enforced by the lairds of the towns to gang to the muster [pressed into service]. All the men in this town, as in other

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places of this day's march, were fled; and not any to be seen above seven, or under seventy years old, but only some few decrepit ones."

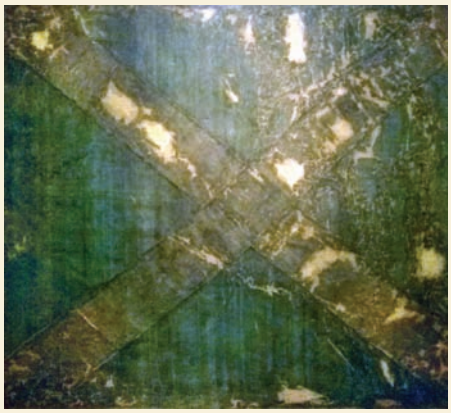
From Dunbar the road turned west along the Firth of Forth, past the town of Musselburgh toward Edinburgh. Cromwell ordered Lambert to ride ahead with 1,400 horsemen to reconnoiter the capital while he brought up the rest of the army. Lambert found the Scots "entrenched by a line [flanked] from Edinburgh to [the port of] Leith, the guns also from Leith scouring most part of the line so that they lay very strong."

"When we came upon the place, we resolved to get our cannons as near them as we could; hoping thereby to annoy them," reported Cromwell. The Scots had manned the ruins of the Iron Age hill forts atop Arthur's Seat, an 800-foot extinct volcano a mile south of Edinburgh Castle. English musketeers under former Royalist Colonel George Monck stormed the hill and rolled two guns up to lay fire on the Scots, while offshore English men-o-war bombarded Leith. Lambert's cavalry, however, was repelled before the Scottish lines, and Highlanders under Colonel Sir James Campbell of Lawers retook Arthur's Seat. In the end Cromwell conceded he could not break in, and as the Scots would not come out, there was nothing to do but withdraw: "Upon the whole, we did find that their Army [was] not easily to be attempted."

As evening fell the Scottish weather descended. Lacking tents, the English bivouacked out in the open, their woolen jackets and leather buff coats sodden, muskets and armor gathering rust. "In the morning, the ground being very wet, and our provisions scarce, we resolved to draw back to our quarters at Musselburgh, there to refresh and revictual," wrote Cromwell.

Troops at the head of the march were a bit too anxious to get out of the wet and outpaced those at the rear. The Scots, unwilling to take on the entire English army, saw a chance to destroy its trailing half. Their cavalry, who preferred the lance over the pistol and sword, surrounded Cromwell's rear guard. English horsemen rode to the rescue and were set upon in turn by Scottish reinforcements, which were then attacked by English infantry. In the snowballing melee Lambert's horse was killed under him and he was captured. "Worthy Lambert got two wounds, one with a lance into the thigh, the other into the arm with a tuck [sword]," recalled Captain John Hodgson of the General's Regiment of Foot. A final English attack rescued Lambert and repulsed the enemy. "The Scots were all skulked into their dens and we marched, with empty stomachs, peaceably to our quarters about Musselburgh," Hodgson wrote.

ABOVE: Covenanter Lt. Gen. David Leslie performed ably commanding at the lower echelons but lacked the skills needed to lead an army. BELOW: This Scottish battle flag bearing a saltire cross is believed to have been carried at Dunbar. OPPOSITE: Oliver Cromwell was a politician by training, not a soldier. He rose through the ranks beginning as a captain of a volunteer cavalry troop in 1642.



But the Scots were not through yet. Strachan knew Musselburgh, his hometown, well. And though Maj. Gen. Sir Robert Montgomery hated Royalists, he was not above sending two of Charles's cavaliers, under pouring rain at 3 AM on July 31, riding up to an English outpost. They claimed to be a returning patrol but actually fronted a brigade of Scottish horsemen. With the sentries deceived and the outpost taken, the Scots charged into Musselburgh. They drove off the English cavalry, but the tumult woke Lambert's infantry. "We were all roused up, having little to do but to shake ourselves," remembered Hodgson. "There were 1,500 horse, that were resolved to sacrifice us that morning."

In a confusion of darkness, rain, muzzle flashes, and clashing steel, the Scots were repulsed. "God appeared wonderfully for us that morning in delivering us, and in destroying our enemies," wrote Hodgson. "There were about forty of them killed about us, it was judged a hundred in all; and about two hundred taken prisoners, with their horses: we had eighteen or twenty wounded."

Cromwell wrote Parliament, "Indeed this is a sweet beginning of your business, or rather the Lord's; and I believe is not very satisfactory to the Enemy, especially to the Kirk party."

The Covenanters, ascribing failure to treachery in the ranks, decided to purge more than 3,000 suspected Royalists from an army fighting for the Royalist cause. These veterans were replaced with, as one observer noted, "ministers' sons, clerks and other such sanctified creatures, who hardly ever saw of heard of any sword but that of the spirit."

"They are not so of a peace as they were, but their disaffection about the King and other divisions increase," reported an English colonel. "They see themselves in a snare, and would gladly many of them get out. We are assured their honest men will not long hold in with them."

"I beseech you, in the bowels of Christ, think it possible you may be mistaken," Cromwell wrote the Covenanters about their bargain with Charles. He sent old comrade Leslie an invitation to parley. The commanders, escorted by about 100 troops each, met on the sandy shore east of Leith. Cromwell inquired of the Scots why they were fighting for a king they mistrusted and encouraged them to defect. "Strachan ... being asked seriously by one what he thought of their King ... replied that he thought him as wicked as ever, and designing both their and our destruction, and that of the two, he thought his [Charless'] hatred towards them [the Scots] was the more implacable," learned an English officer.

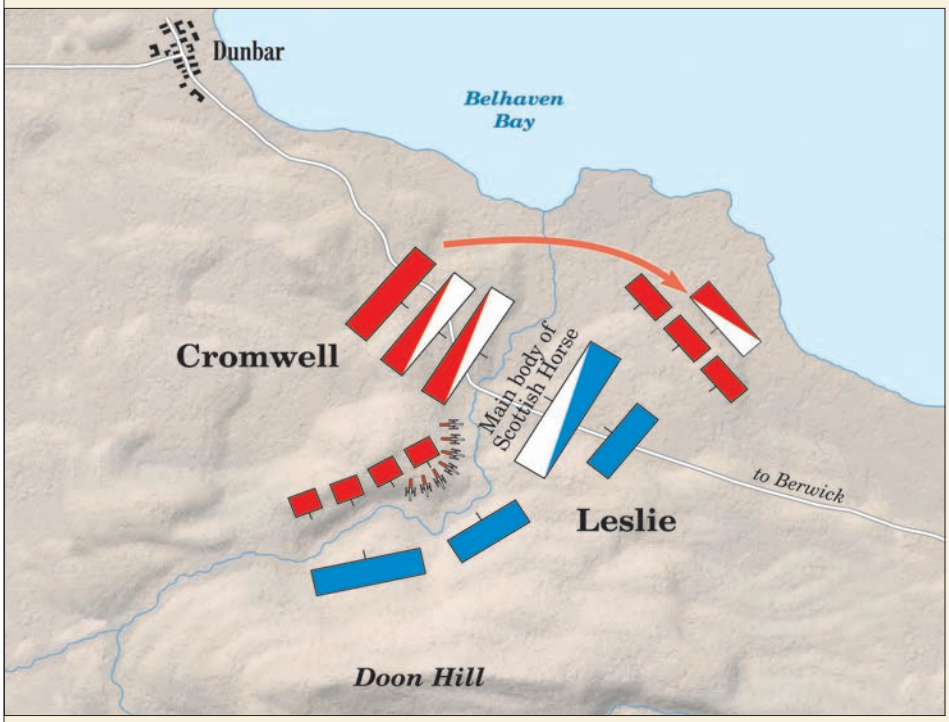
"Much was said to convince each other, but it amounted to nothing," stated an English report. To apply pressure, Cromwell marched to encircle Edinburgh. Leslie, as hoped, brought out the Army of the Covenant to block him. What at first appeared to be an invitation to battle turned out, on closer examination, to be an invitation to become mired in a Scottish bog. Instead the two armies spent the day cannonading each other, to little effect; their brigade formations, wide but shallow, allowed passage of cannonballs with minimal casualties.

"We drew up our cannon, and did that day discharge two or three hundred great shot upon them," reported Cromwell. "A considerable number they likewise returned to us: and this was

all that passed from each to other."

With the weather now taking a toll on the troops, the English decided to withdraw again to Dunbar, the only good harbor between Berwick and Leith. At that location sick men could be put aboard ship, provisions landed, and the Scots, perhaps, enticed to attack. Messenger Richard Cadwell disembarked that day to join the army at Musselburgh. "On Sunday morning the Drums beat, and our army marched to Dunbar, the enemy with their whole army pressing close to the rear of ours within a mile, and sometimes within half a mile of ours," he later reported. "Their army consisted of eighteen regiments of foot, which together with horse made as (themselves say) 27,000, our army being but 12,000."

Whenever the English drew up for battle, the Scots backed off; whenever the English withdrew east, "a poor, shattered, hungry, discouraged army," as Hodgson recalled, the Scots were there to harass them. An English colonel wrote, "Thus from time to time they avoided fighting, neither is it possible, as long as they are thus minded, to engage them; so that to follow them up and down is but to lose time and weaken ourselves."



ABOVE: Cromwell stacked up his regiments in order to punch through the Scottish line at Dunbar. The tactic worked remarkably well. OPPOSITE: A bareheaded Oliver Cromwell prepares to lead his New Model Army against the Scottish Covenanting Army in a 19th-century painting by Andrew Carrick Gow.

Leslie had fought a masterful campaign, letting weather and disease whittle down the English without ever risking his army. He sent a brigade ahead to cut the English off from retreat to Berwick, and on September 1 occupied Doon Hill, a 500-foot ridge south of Dunbar. As a result, Cromwell's army was trapped.

"Cromwell was then in great distress, and looked on himself as undone," wrote Covenanter Lord Warriston's nephew Gilbert Burnet, then seven years old but later a famed bishop and historian. "There was no marching towards Berwick ... nor could he come back into the country without being separated from his ships and starving his army. The least evil seemed to be to kill his horses, and put his army on board, and sail back to Newcastle; which, in the disposition that England was in at that time, would have been all their destruction, for it would have occasioned a universal insurrection for the king."

"We are upon an Engagement very difficult," admitted the Lord General in a September 2 letter to the governor of Newcastle. "The enemy hath blocked up our way ... and our lying here daily [consumed] our men, who fall sick beyond imagination." At that point in the year, no new invasion could have been mounted until the next summer, by which time Charles might well lead a Scottish army south.

However, the crest of Doon Hill was not so ideal a position as it appeared. The miserable weather now worked for the English, down in the town and on the plain, and against the Scots on the windswept hilltop. What is more, there was another ill wind blowing on Leslie, from his overseers in the Kirk.

"Leslie was in the chief command, but he had a committee of the states with him to give him his orders, among whom [Burnet's uncle Lord] Warriston was one," wrote Burnet. "These were weary of lying in the fields, and thought that Leslie made not haste enough to destroy those sectaries."

By all accounts Leslie tried to persuade these armchair generals otherwise. "He told them, by lying there all was sure, but that by engaging into action with gallant and desperate men all might be lost, yet they still called on him to fall on," recalled Burnet.

And so, "Monday morning, before Sun-rising, the Enemy drew down part of their Army toward the Foot of the Hill, toward our Army," stated an English report. Between the two forces ran the Broxburn, a gully "40 or 50 foot wide, and near as deep, with a rill of water in the bottom, which would be a very great disadvantage to that party who should first attempt to pass it," described an English pamphlet.

Swollen with rain, the gully ran northeast onto the flatter ground near the coast, where it was crossed by the Berwick road. There stood Broxmouth House, an estate belonging to Robert Ker, 1st Earl of Roxburgh, a Royalist who had fallen out of Covenanter favor and died the previous January.

On the off chance that the Scots were inept enough to assault across the Broxburn, Cromwell brought the English out from Dunbar and arrayed them along the north bank, ordering two dozen of Colonel Thomas Pride's infantry and a half-dozen of Lt. Gen. Charles Fleetwood's horsemen to hold the nearest crossing. "The Enemy sent down two troops of Lanciers, who caused our six Horse to return," stated an English report. "Those [lancers] killed three of our Foot, took three prisoners, and wounded most part of the Rest."

"Among the three taken by them, there was one stout man who hath but one hand, yet he had thrice discharged his musket before he was taken," stated an English report. "The Prisoners being brought to David Leslie, he asked the soldier with one hand whether our Army did intend to fight. He answered with the confidence of a Soldier by a question, 'What did he think they came for but to fight?' The Scots' General asked again, 'how they could fight when they had shipped away half their men, and all their guns?' The Soldier told him, that if he pleased to draw out his Army, he would

Alamy

The English cuirassiers thundered across the Broxburn, rode up to those Scottish horsemen who managed to mount, and unleashed a barrage of pistol and carbine fire directly into them. The lancers had no defense. Riders and horses alike piled in the wet grass.

find that we had both men and Guns enough to fight him."

Cadwell later told Parliament, "A most dogged handfast man, this with the wooden arm, and iron hook on it! One of the Officers asked, 'How he durst answer the General so saucily?' He said, 'I only answer the question put to me!' Lesley sent him across, free again, by a trumpet: he made his way to Cromwell; reported what had passed, and added doggedly, 'He for one had lost twenty shillings by the business, plundered from him in this action. The Lord General gave him thereupon two pieces, which I think are forty shillings; and sent him away rejoicing.'"

Whether due to his churchmen's goading or the English musketeers' taunts, Leslie resolved to give up the high ground. Down at Broxmouth House, recorded Burnet, Cromwell and his officers "walked in the earl of Roxburgh's gardens, which lie under the hill: and by perspective glasses they discerned a great motion in the Scottish camp: upon which Cromwell said, God is delivering them into our hands, they are coming down to us."

And more than that: descending the gentler eastern end of the ridge, the Scots proceeded to tuck themselves back to the west, under its steepest slope. "Observing this posture, I told him [Lambert], I thought it did give us an opportunity and advantage to attempt upon the enemy, to which he immediately replied that he had thought to have said the same thing to me," wrote Cromwell.

Leslie had effectively stashed half his army between Doon Hill and the Broxburn ravine and put the other half near the crossing, where the English could get at it. "It could be no less than a mile of ground betwixt their right wing, near Roxburgh house, and their left wing: they had a great mountain behind them, which was prejudicial, as God ordered it," wrote Hodgson. The cavalry brigades of Montgomery and Strachan straddled the Berwick road. An attack on that flank would not only open up a line of retreat for the English, but effectively turn the battlefield 90 degrees. The Scottish left would suddenly be a mile to their rear.

"It pleased the Lord to set this apprehension upon both of our hearts, at the same instant," recalled Cromwell. "We called for Col. Monke [sic] and showed him the thing."

Monck is said to have replied, "Sir, the Scots have numbers and the hills; these are their advantages. We have discipline and despair, two things that will make soldiers fight: these are ours. My advice, therefore, is to attack them immediately, which if you follow, I am ready to command the [vanguard]."

Some of the lesser officers were for boarding the Navy ships and sailing home, but Hodgson recalled, "Honest Lambert was against them in all that matter.... One steps up, and desires that [General] Lambert might have the conduct of the army that morning, which was granted by the General freely." Though Fleetwood was nominally second in command and would go on to marry Cromwell's daughter, he had avoided the trial of Charles I and was more politician than general. With Lambert leading, the English agreed to attack at dawn.

In the Scots' camp the politicians agreed to stand down for the night. Maj. Gen. James Holborne, who just two years earlier had escorted Cromwell into Edinburgh, gave permission for the musketeers to extinguish their slow match, except for two cords per company. The infantry used fresh-cut corn shocks to fashion makeshift shelter from the rain. The cavalry unsaddled their horses and

Scottish cavalrymen preferred a short lance, whereas their English counterparts favored sabers, wheellock pistols, and carbines. The lance prevailed when the English ran out of ammunition.

set them to forage. Many of the commanding officers left their units to get out of the vile weather.

On the far side of the ravine there was little rest that night. Under cover of the rain and clouds, leaving a skeleton force along the ravine, Cromwell's army pulled up stakes and moved left.

Never in history had an English army made such a maneuver at night and so close to the enemy. A servant remembered how Cromwell "rid all the night before through the several regiments by torchlight, upon a little Scots nag, biting his lip till the blood ran down his chin without his perceiving it, his thoughts being busily employed to be ready for the action now at hand."

Lambert positioned the English cannon inside a curve of the Broxburn, a salient in the center of the lines from which they could reach all along the Scottish ranks. He ordered his own cavalry regiment and that of Colonel Edward Whalley, Cromwell's cousin and fellow regicide, to join Fleetwood's regiment in the forefront, which numbered 1,500 men. Colonel Robert Lilburne, an ardent Baptist who had fought with Cromwell and Lambert at Preston, commanded the second 1,500-man brigade of horse. Two thousand of Monck's infantry brigade took position on their right. The combined brigades layered up on the Berwick road.

About an hour before sunrise, the weather broke. The clouds parted and the moon shone down on the English regiments stacked before the Broxburn crossing.

Scottish pickets raised the alarm. Lambert's horsemen charged. Some of Montgomery's cavalry were caught still in their tents; their general was nowhere to be found. The English cuirassiers thundered across the Broxburn, rode up to those Scottish horsemen who managed to mount, and unleashed a barrage of pistol and carbine fire directly into them. The lancers had no defense. Riders and horses alike piled in the wet grass.

This time it was the Scots' turn. As Lambert's brigade paused to reload and reform, Strachan ordered his horsemen forward from behind Montgomery's. The fiery colonel might well have favored the Parliamentarian cause over the Royalist but would not let that keep him from his duty. "Before our foot could come up, the enemy made a gallant resistance, and there was a very hot dispute at swords point between our horse and theirs," recalled Cromwell. Strachan's men rode through Montgomery's shattered brigade and took Lambert's English cuirassiers by surprise. If long Scottish lances were of little defense against pistols, empty wheellocks and drawn swords were of little defense against lances. The English cavalry fell back, leaving the Scottish flank unturned.

With the cavalry fight drawn, Cromwell turned to his infantry. Monck led his three regiments splashing across the shallow end of the Broxburn to drive between the enemy horse and foot. About 300 yards up the slope awaited 2,000 Scots, the brigade of Lt. Gen. Sir James Lumsden of Innergellie. Lumsden had served in the Swedish army of King Gustavus Adolphus during the Thirty Years' War, sided with Parliament on his return, and helped save the day at Marston Moor. At Dunbar he had to face many of those same English veterans with a brigade of raw recruits just levied that summer, many of whom had joined the army just three days earlier.

Monck's brigade formed up on the far side of the gully, musketeers to the fore, and started up the slope. At 100 yards they paused, raised their matchlocks, and fired into the enemy ranks. Dun-coated, blue-bonneted men fell all along the Scottish line, but their musketeers returned fire and now it was redcoats tumbling to the ground. The toll, however, was not as great. Perhaps Lumsden's men had already shot most of their ammunition. But since they had taken little part in the fighting, it is equally likely that, given the weather, these three-day soldiers had simply allowed their slow match to get wet. Stepping over their fallen, the English closed to 50 yards and fired another salvo. This time the musketeers parted and ran to either side, revealing the massed pikemen behind them. In the 17th century there can have been few sights more terrifying than a forest of pikes being lowered to horizontal, and the pikemen wielding them advancing steadily with their steel points glittering.

As the two brigades came to grips the light improved, revealing pikemen fencing, probing, and stabbing, musketeers swinging their matchlock butts like six-foot clubs, the cross of St. George and the Saltire (St. Andrew's Cross) flying. Artillerymen found targets and began bombarding them. "The great guns playing on both sides very fast on each other's main body," wrote Cadwell. But the Scottish guns, sited behind their center, were masked by their own lines.

The English cannons in the curve of the ravine fired all across the Scottish front. Lumsden's brigade, almost end-on to the salient, got the worst of it. Cannonballs raked across its length, reaping droves of men with each shot. Lumsden himself was wounded and taken prisoner. For his raw recruits, that was enough. They broke and ran. Monck's English marched over the fallen, driving the survivors uphill.

But there stood another 2,000 Scots. This was Sir James Campbell of Lawers' Regiment of Foot. As Highlanders, the Campbells might be suspected of Royalist sympathies, and indeed Sir James Campbell was one of the Scottish officers absent from the field. His regimental commanders, however, were veterans who knew their business. Sir John Haldane, 11th Laird of Gleneagles, had soldiered for the Dutch

and been knighted by Charles I, but he was a fervent Covenanter and had run his estate into debt to raise his regiment. Men with that much at stake did not fold at the first push of pike.

The Scots moved to block Monck's advance. The English, disordered and depleted by the struggle with Lumsden's regiments, could not withstand the fresh assault of a well-ordered pike brigade. "Our first foot, after they had discharged their duty, (being overpowered with the enemy) received some repulse, which they soon recovered," wrote Cromwell. Monck's brigade fell back to the burn to regroup.

With the cavalry attack on his left and infantry attack in the center stalled, Cromwell was at a crisis point. If the Scots came boiling out from his right and brought all their numbers to bear, it was all over. It was still possible to defeat the entire army by defeating half of it, but not by using only half the English army. Cromwell had to go all in, and had saved the most stalwart of his Parliamentarians to decide the battle.

Lilburne had fought with Cromwell and Lambert at Preston, but his regiment of foot had later mutinied over back pay. Though not implicated, Lilburne was reassigned to the cavalry. When Cromwell ordered forward his brigade to aid Lambert in sweeping away Strachan's horsemen, he had something to prove.

Captain William Packer commanded Cromwell's personal regiment of horse, the original Ironsides. Another devout Baptist, Packer had recently fallen in with Fifth Monarchists, who believed the civil wars and regicide were signs of the Second Coming. He had been arrested for refusing to obey a Presbyterian superior officer and was free only due to Cromwell's personal intervention. He owed the Lord General his freedom and was about to pay him back for it.

Together with Lambert's men, Lilburne's brigade and Packer's regiment outnumbered Strachan's and the remnant of Montgomery's. But just to make sure, Cromwell had Packer take his regiment around his extreme left, almost down to the sea, and then back around into the Scottish right flank. It was the English battle plan in miniature. While Lilburne and Lambert locked horns with the Scots head on, Packer's horsemen piled into them from their right. The brigade formation was designed to face an enemy to its front, not to its flank. Strachan's men had heart, but swords and lances cannot point in two directions at once. "Major Straughan [sic] was in this fight, and charged desperately," states one account. "Some of the horse charged, especially those commanded by Col. Strachan, who was wounded," states another account.

With Strachan out of the fight, the Scottish cavalry lost its best leader. "The [English] horse in the mean time did with a great deal of courage and spirit, beat back all oppositions," wrote Cromwell, "charging through the bodies of the enemy's horse, and their foot, who were after the first repulse given, made by the Lord of Hosts, as stubble to their swords."

"It was resolved we should climb the hill to them [the Scots], which accordingly we did, and through the Lord's strength by a very short dispute put them to an absolute Rout," wrote Lambert.

The English horse drove the Scottish cavalry back until they broke for Berwick. There was no point in pursuing them, and Lambert recalled his men. To their right, the door lay open to the Scottish flank. Cromwell famously led his men in singing Psalm 117. The psalm came not from the King James version of the Bible, but from the older Geneva Bible. It was a verse rather ironically not included in Cromwell's *Souldiers Pocket Bible*.

Next, it was the infantry's turn. Monck, the ex-Royalist, might be expected to show a lack of enthusiasm in fighting against his king. Not so the men of Cromwell's reserve brigade of foot, probably the best in the English army, consisting of his own regiment, Lambert's, and Pride's. In 1648 Pride's troops had forcibly ejected those members of Parliament who still favored rapprochement with Charles; later he had sat as judge at the king's trial. Cromwell's own regiment of foot was under the command of Lt. Col. "Praying William" Goffe, a radical Puritan married to the daughter of Cromwell's cousin Whalley, who like them had signed Charles I's death warrant.

Alamy

A period engraving housed in the Ashmolean Museum in Oxford, England, offers a bird's eye view of horse and foot units maneuvering on the plain below Doon Hill.

Goffe had been a mere captain five years earlier; five years hence he would be a major general and ultimately rise to such power that he would be considered as Cromwell's successor. Men such as Pride and Goffe were not just fighting for their country but for their lives. If Charles II gained the throne they would not only lose everything, but be branded criminals as well. When Lawers' brigade threatened to overrun Monck's, Cromwell called on them to tip the balance.

"The Lord General's regiment of foot charged the enemy with much resolution, and were seconded by Colonel Pride's men, who were even with some of them for their cruel usage to their fellow soldiers the day before," reports an English account.

Campbell of Lawers' Highlanders, stout as they were, could not be expected to stand. Yet they did just that. Pride's brigade rolled into them end-on, English musketeers on the flanks

Continued on page 73

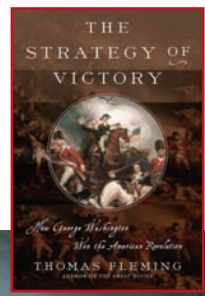
By Christopher Miskimon

George Washington's controversial strategy for winning independence from Great Britain ultimately led to an American victory.

THE FATE OF THE AMERICAN REVOLUTION SEEMED BLEAK INDEED IN December 1776. New Jersey was on the verge of collapse with many of its residents swearing new oaths of loyalty to Great Britain. General George Washington implored Maj. Gen. Charles Lee to join their forces together, but the call went unheeded. When Lee was captured by British cavalry on December 13, Washington quickly took command of Lee's 4,000 troops. Congress, situated in Philadelphia, was unimpressed by this action and abandoned the city, retreating to Baltimore. Congressman William Whipple blamed the citizens of Philadelphia, saying they were in such a panic it infected some of the politicians. Alarm and fear seemed to be the order of the day, as many expected the fledgling rebellion to fail.

George Washington's victory at Princeton in 1777 exemplified his ability to inflict losses on the British in surprise attacks without becoming engaged in a set-piece battle to his disadvantage.

While those around him fretted and dithered, Washington went into action. The British had a series of outposts around the countryside, established to protect Loyalists. The British leadership was overconfident. Washington perceived their outposts were vulnerable, and he moved to strike them. He chose to strike the outpost of Trenton, New Jersey, which was garrisoned by three regiments of German mercenaries. In the early hours of December 26 his army crossed the Delaware River and struck Trenton, killing or capturing 974 men. This victory enabled him to convince his men to reenlist for another six weeks.



He used that time to take further offensive moves, using a night march to get behind the British and defeat three of their regiments at Princeton, New Jersey,

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THE BATTLE OF GETTYSBURG

"I remember... the bullets whistling over us, and the stone wall bristling with muskets, and the line of our men, sweating and grimy, firing and loading, and firing again, and here a man suddenly lying still..."

– Major Abner Smalls, 16th Maine, Gettysburg

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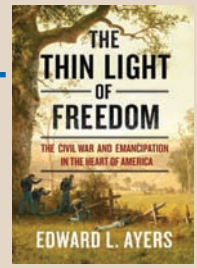
on January 3, 1777. Afterward, Washington feinted at the main British supply depot at New Brunswick, New Jersey, forcing his enemy to rush to its defense. Yet again the American general was shrewd, electing not to engage in a set-piece battle to his disadvantage. He retired with his troops to Morristown, where they went into winter quarters. The British were stung by these defeats. Washington quickly issued a proclamation offering the local citizens a chance to return to the American side by swearing their allegiance at the nearest military post.

This was an example of George Washington's ability to accurately estimate the military situation and take advantage of it. In general he was expert at choosing when to defend, attack, or even withdraw. Despite this genius for engaging in a winning strategy, he was often derided and even plotted against by his contemporaries, who either sought his position for themselves or believed he was unable to achieve the victory they all sought. They could not see that Washington's strategy was aimed at ultimate victory, not simply winning battles his enemies could afford to lose. He knew the American Revolution would continue as long as the rebels had an army in existence, no matter how many battles it lost or how far it had to march. Keeping his army together was always his focus. If it was not necessary to fight, he avoided battle. If retreat was the best option, he took it; however, when he saw the chance to turn and strike his foes from a position of relative advantage and security, he seized that chance as well.

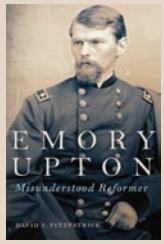
How George Washington created his professional army and kept it in the field until victory was achieved is the subject of Thomas Fleming's new book, ***The Strategy of Victory: How General George Washington Won the American Revolution*** (Da Capo Press, Boston, MA, 2017, 310 pp., photographs, notes, index, $28.00, hardcover). It highlights the creation, successes, and failures of the Continental Army under its famous leader. The Continental Army succeeded despite appalling hardships and seemingly unbeatable odds.

Fleming's work is insightful. It gets right to the heart of Washington's actions in a passionate argument of his virtues as a leader. The author is a leading authority on Washington and this period of American history. His clear language and thoughtful ideas succeed in getting his message across and make this book a pleasure to read. It gives the reader an understanding of the reasons George Washington is considered the father of the United States. Without his vision, drive, and stoic determi-

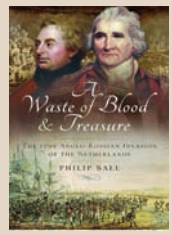
SHORT BURSTS



The Thin Light of Freedom: The Civil War and Emancipation in the Heart of America (Edward L. Ayers, W.W. Norton and Company, 2017, $35.00, hardcover) This book provides a new examination of the relation between the end of slavery and the Civil War. It tells of the end of the Confederacy and the rebirth of the nation.

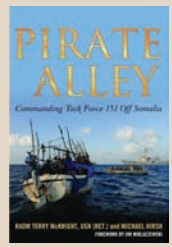


Emory Upton: Misunderstood Reformer (David J. Fitzpatrick, University of Oklahoma, 2017, $39.95, hardcover) A new biography of one of America's most important military reformers. He professionalized the army while upholding the American ideal of the citizen-soldier.

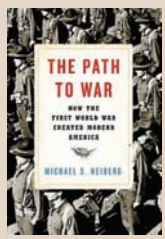


A Waste of Blood and Treasure: The 1799 Anglo-Russian Invasion of the Netherlands (Philip Bell, Pen and Sword, 2017, $34.95, Hardcover) In the early years of the Napoleonic Wars, Great Britain allied with Russia to force Republican France out of the Netherlands. It was a dramatic campaign that ended in failure.

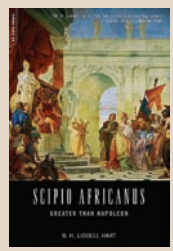
Berlin Blockade: Soviet Chokehold and the Great Allied Airlift 1948-49 (Gerry Van Tonder, Casemate Publishing, 2017, $22.95, softcover) The first clash of the Cold War occurred when the Soviet Union tried to cut off access to West Berlin. Through a supreme American effort, the Communist operation failed.



Pirate Alley: Commanding Task Force 151 off Somalia (Terry McKnight and Michael Hirsch, Naval Institute Press, 2017, $29.95, softcover) The U.S. Navy continues to carry out operations against Somali pirates. One of the authors was the task force's first commander.

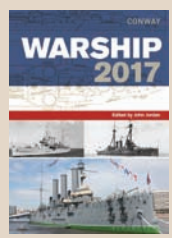


The Path to War: How the First World War Created Modern America (Michael S. Neiberg, Oxford University Press, 2017, $29.95, hardcover) Over the course of World War I, the United States went from an isolationist nation bent on staying out of the conflict to a full participant. This book details that transformation.

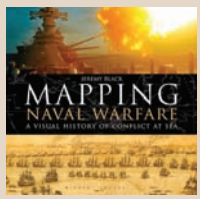


Scipio Africanus: Greater Than Napoleon (B.H. Liddell Hart, Frontline Books, 2017, $17.95, softcover) The author is one of history's great military theorists. He offers keen insight into one of antiquity's greatest generals.

First Founding Father: Richard Henry Lee and the Call to Independence (Harlow Giles Unger, Da Capo Press, 2017, $28.00, hardcover) Richard Henry Lee was the first to call for independence and held the Continental Congress together during the conflict. This biography highlights his achievements.



Warship 2017 (Edited by John Jordan, Conway Books, 2017, $60.00, hardcover) This impressive annual is a hallmark of scholarly naval history. It offers an in-depth look at a wide variety of naval vessels and naval warfare systems.



Mapping Naval Warfare: A Visual History of Conflict at Sea (Jeremy Black, Osprey Publishing, 2017, $45.00, hardcover) Jeremy Black is a renowned scholar of Renaissance history. In his latest work he examines key naval conflicts from the 16th century to the present day and explores how maps helped naval commanders craft their strategies.

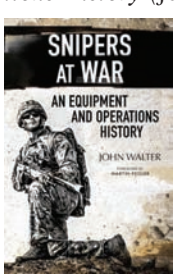
nation, the history of North America would have been decidedly different.

Combat Talons in Vietnam: Recovering a Covert Special Ops Crew (John Gargus, Texas A&M Press, College Station, 2017, 272 pp., maps, photographs, appendices, notes, bibliography, index, $35.00, hardcover)

The first Combat Talons were specially modified C-130 cargo aircraft designed to support Special Forces operations in Vietnam. They were developed in secrecy and used advanced electronics and equipment to make them better able to fly at low level during the night. The author was a mission planner for the unit operating the Combat Talons and oversaw many successful assignments; however, one night an aircraft did not come back. It was lost with all 11 crewmen aboard. Their families were told nothing due to the secrecy around the unit's activities. It stayed that way for the next 30 years.

After a memorial to the lost crew was raised in the late 1990s, the author decided to investigate, hoping the files had been declassified. He discovered the plane had been found in 1992 and the crew's remains were in Hawaii. This led to a deeper investigation around the circumstances of the recovery. This book tells the story of that investigation. It is also partly an autobiography of the author's time in Vietnam. The story is revealed in a gripping narrative that shows the everyday details of life in the unit along with the bigger story of the lost aircraft. Much of what the author found is reproduced in a series of appendices so the reader can read the original documents as well.

Snipers at War: An Equipment and Operations History (John Walter, Naval Institute Press, Annapolis MD, 2017, photographs, bibliography, index, $34.95, hardcover)

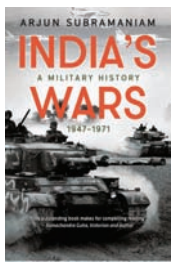


The Battle of Spotsylvania Court House was in full fury on May 9, 1864. Maj. Gen. John Sedgwick, the commander of the Union VI Corps, was directing his troops under fire, oblivious to the occasional bullets flying around him. His infantrymen ducked as the incoming fire zipped past. Sedgwick berated them for trying to dodge the rounds.

A soldier moving past ducked for another bullet. "They couldn't hit an elephant at this distance," said Sedgwick. The soldier good-naturedly told the general he had dodged an incoming shell once and so was a believer in dodging. Seconds later an incoming bullet from a Whitworth Rifle struck home with a slapping sound. Sedgwick turned toward his aide. A hole was visible under his left eye. Without uttering a word, he fell against the aide, knocking them both to the ground. Although at least two Confederate soldiers claimed credit, the exact identity of the sharpshooter remains unknown.

The sniper is a popular character in modern media, but the path to the modern sharpshooter was one of centuries of development. The training, weapons, equipment, and uniforms of specialized marksmen came together through extensive experimentation and battlefield usage. This book is a thorough and scholarly history of the sniper. It is well written with many useful examples. It is also a veritable treasure trove of technical data on the craft of the sniper.

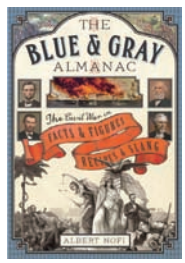
India's Wars: A Military History 1947-1971 (Arjun Subramaniam, Naval Institute Press, Annapolis, MD, 2017, 576 pp., maps, photographs, notes, bibliography, index, $40.00, hardcover)



On December 18, 1961, Martin B-57 Canberra bombers of the Indian Air Force arrived over Dabolim airfield in the Portuguese enclave of Goa. The relatively new nation of India had repeatedly asked Portugal to give back the territory it had held on the Subcontinent for more than 400 years, but that European nation consistently refused. India was taking the region back by force. The Canberras bombed the airfield while an Indian infantry division and armored regiment, supported by paratroopers, crossed into the territory. Some Portuguese fought, but many surrendered to the vastly superior Indian force. The fledgling Indian navy shelled Portuguese defenses before putting ashore a landing force that met stiff resistance, but was ultimately victorious. Within a few days Goa was Indian. The Portuguese were furious at what they considered the theft of their colony while India celebrated its liberation.

The battle for Goa was an early example of a combined operation for the Indian military, combining land, air, and sea elements. It is one small piece of a growing heritage for that nation, a history that is well told in this book. The work is impressive in its readability and clarity, as the author does not presume any foreknowledge of his subject and strives to make clear a subject relatively unknown in the Western world. The work deftly traces India's military origins in the 20th century.

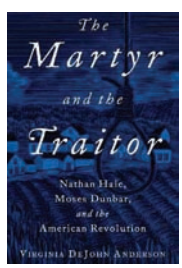
The Blue and Gray Almanac: The Civil War in Facts and Figures, Recipes & Slang (Albert Nofi, Casemate Publishers, Havertown, PA, 2017, 346 pp., photographs, appendix, notes, bibliography, index, $32.95, hardcover)



On the morning of July 21, 1861, the men of the 1st Minnesota Volunteer Infantry were marching into action at the Battle of First Bull Run. When the unit stopped for a brief rest, they saw an old African American gentleman adorned in the tattered remains of a Revolutionary War uniform waving an American flag. They spoke to him and he told them he was once a drummer boy for George Washington. Many of the men were abolitionists and they chatted with him during their rest. When the regiment was called back into ranks to resume the march, one man asked the old soldier to say a blessing for the unit. The elderly veteran asked God to watch over the regiment and make it strong for the coming fight. That day the 1st Minnesota helped repulse three attacks on Henry House Hill and was the only Union regiment to have to be ordered to retreat. The unit also suffered heavy casualties and fought well at Gettysburg two years later. The surviving men of the unit would often attribute their stalwartness in battle to the old man's prayer.

Such interesting anecdotes and stories are frequently retold about the American Civil War, and this new work collects a number of them together. It keeps the reader's interest through a dozen well-written chapters, each covering a different facet of the war.

The Martyr and the Traitor: Nathan Hale, Moses Dunbar, and the American Revolution (Virginia DeJohn Anderson, Oxford University Press, Oxford, UK, 2017, 288 pp., maps, photographs, notes, index, $27.95, hardcover)



The Revolutionary War had only just begun when two men began fateful journeys in September 1776. Nathan Hale was a soldier in the Continental Army who disguised himself as a schoolmaster and secretly went into British-occupied Manhattan. He made sketches and took notes and gave them to George Washington, who was his commander. The other man was Moses Dunbar, who accepted a commission as a captain in a loyalist regiment in New York. Afterward, he returned home to Bristol, Connecticut, to raise recruits for the British cause.

Both men were arrested for their activities. Hale was hanged very quickly on September 22, 1776. Dunbar was given a trial, found guilty, and went to the gallows on March 19, 1777. Hale is recalled to this day as a martyr for the American cause, while Dunbar is regarded as a traitor.

The two men came from fairly similar backgrounds and a comparison of the two is the subject of this book. The author seeks to answer how these men went in such different directions and how easily their legacies might be reversed if the revolution had been quashed. She also examines how their decisions became mixed with politics of the day. The book effectively showcases both sides of what was a bitter conflict with many injustices perpetrated by both sides.

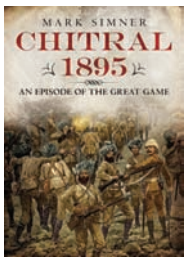
Voices from the Past: The Siege of Sevastopol 1854-1855 (Anthony Dawson, Frontline Books, South Yorkshire, UK, 2017, 288 pp., maps, photographs, notes, bibliography, index $34.95, hardcover)

The Crimean War was an incredibly difficult conflict for the Anglo-French armies and those of their allies. The terrible winter weather combined with outbreaks of both cholera and dysentery and more than 90,000 Allied troops died due to their combined effects. The siege of Sevastopol of 1854-1855 took place in this miserable period. It was a time of huge artillery bombardments, desperate attacks upon defensive positions, and interrelated battles occurring nearby. At one point the Russians blew up defenses they could not keep even though they still had troops manning them. The explosion caused the largest man-made hole in history up to that date.

The author has collected a large amount of previously unpublished material for this new work. Entries from private letters and journal are mixed with French sources previously

unused in the English-speaking world. The result is a work that effectively conveys the thoughts and experiences of the participants to the reader.

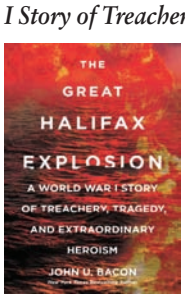
Chitral 1895: An Episode of the Great Game (Mark Simner, Fonthill Media, UK, 2017, 224 pp., maps, photographs, notes, bibliography, index, $34.95, hardcover)



In 1895 a small force of Indian troops was garrisoning the fort of Chitral on the Northwest Frontier. They were commanded by a pair of British officers, a captain and a surgeon-major. The tribes of the region were always hostile toward the occupying British and their Colonial troops and this led to an attack on the fort by a combined army of Pathan and Chitrali tribesmen, which vastly outnumbered the defenders. Unable to breach the defenses outright, the attackers laid siege to the fortress. A relief expedition was quickly organized, but it had to fight its way to Chitral to affect a rescue. Despite difficulty the garrison was nevertheless able to hold out for 48 days. The events at Chitral were a small but significant part of the so-called Great Game played out between Russia and Great Britain for control of the region during the late 19th century. The battle played its part in a later uprising two years later.

Both the siege and relief expedition are covered in detail in this new work by the author, who has several previous books published on the wars of this era. The descriptions of the harsh weather, difficult terrain, and stubborn fighters all blend together to give the reader a clear idea of the hardships faced by the combatants during this time. The result is an interesting look at a little-known battle with far-reaching consequences for the British Empire in this region.

The Great Halifax Explosion: A World War I Story of Treachery, Tragedy and Extraordinary Heroism (John U. Bacon, William Morrow Books, New York, 2017, 418 pp., maps, photographs, notes, bibliography, index, $29.99, hardcover)



World War I was grinding into its fourth year when the French cargo ship *Mont-Blanc* set sail from the Brooklyn docks in New York City. It was loaded with six million pounds of high explosives. The captain so feared an explosion he forbade his men from smoking or even lighting a match. He even had the freight secured with copper nails since they do not spark when struck. The ship underwent a four-day voyage through a snowstorm to reach Halifax, Nova Scotia on December 6, 1917. It arrived at the relief ship Imo was departing. At 8:46 AM the Imo collided with the Mont-Blanc, striking its bow and knocking over barrels of aviation gasoline. A fire broke out and the crew quickly evacuated.

At 9:04 AM the *Mont-Blanc* exploded, killing 2,000 people, wounding 9,000, and rendering 25,000 homeless. A 2.5-square-mile section of the city was leveled. It was the largest explosion in history until the detonation of the first atomic bomb 28 years later on August 6, 1945. This unknown tragedy of the war is brought to light in this new book, which delves into the personal stories of those who experienced it and how the event affected the nations involved.

Offa and the Mercian Wars: The Rise and Fall of the First Great English Kingdom (Chris Peers, Pen and Sword Books, South Yorkshire, UK, 2017, 240 pp., maps, photographs, bibliography, index, $29.95, softcover)

In 8th-century England Offa was the ruler of the Kingdom of Mercia, the most powerful of the Anglo-Saxon realms. For more than 30 years he was the greatest warlord south of the Humber Estuary and successfully strove to increase the power of his nation. He fought numerous campaigns against the neighboring lands of Wessex and Northumbria along with the Welsh tribes. His reign was a long one and Mercia enjoyed a substantial rise before the appearance of the Danes more than a century later.

This new work by an acknowledged expert on ancient warfare and military organizations sheds light on Offa and his kingdom. It sets the man into the greater context of English history and the part Mercia played in what would become the United Kingdom. Much about this period is unrecorded but the author effectively fills in the gaps through his extensive research. Often histories of England begin with the Norman Conquest, but this work effectively argues that England was truly created hundreds of years earlier. □

HELIBORNE BREATHES NEW LIFE INTO HELICOPTER COMBAT GAMES, AND ARC SYSTEM WORKS BRINGS THE TRADING SIM *NEO ATLAS 1469* TO SWITCH.

Heliborne

PUBLISHER KLABATER
GENRE SHOOTER
SYSTEM(S) PC
AVAILABLE NOW

There are countless ways to take to the skies in fighter jets and other similarly designed aircraft in the world of war games, but helicopters are an oft-overlooked focal point. Sure, you may hop in the chopper from time to time depending on what kind of game you're playing, but publisher Klabater and developer JetCat Games have cooked up something more specific with *Heliborne,* a helicopter combat game that recently made its way to PC via Steam. The results, while rough in some areas, are definitely worth checking out for anyone who wants something different out of their aerial action.

Helicopter action games used to be way more prevalent back in the day. From 2D arcade and console classics like *Tiger Heli, Cobra Command, Twin Cobra,* and even somewhat modern shoot 'em ups like *Zero Gunner 2,* to more strategic action offerings like the *Desert Strike series,* there was no shortage of blade-spinning ballistic excitement. While there are still a handful of outliers today, these games certainly aren't as common as they used to be, which makes for a nice niche *Heliborne* is hoping to fill.

It does so pretty well for the most part, too. Players can choose from a wide array of helicopters from the 1950s through 2000—more than 40 in total—with five key maps making up the majority of the real-world-based locales. At the time of this writing the mission maps consist of Kosovo, Afghanistan's Badakhshan Province and Khost Region, and Vietnam's Operation Nguyen Hue and the Gulf of Tonkin. There's also a straight-up polygonal training map that offers up a good opportunity for getting a grip on the controls. While you won't be controlling them yourself, there are a few AI-powered ground units interspersed throughout the missions, as well, including troop carriers, anti-aircraft vehicles, and tanks, with more planned for the future.

As for the specific types of helicopters, there are three classes overall. Reconnaissance-focused scout choppers, for instance, are known for being small and swift and can carry a few troops. Attack helicopters are all about taking on enemies both in the air and on the ground, and Air-assault helicopters handle multiple functions and carry troops of their own. The helicopters that do carry soldiers can deploy them anywhere on the map, whether they're mortar troops or RPG-firing units. This adds an additional layer of strategy to the battles, which can get pretty hectic.

The main multiplayer game modes you can take part in are Domination and Frontline. The former is a capture-the-flag style competitive mode, while the latter allows for convoy-spawning base capturing and fortification across the map. As of now, both modes are just active across certain maps, but hopefully that will change as JetCat Games continues to provide support and expand *Heliborne* over the coming months and years.

Heliborne certainly has some growing to do, but what's there right now is a good time in the making. We'll have to reserve judgment for the full release, though. In the meantime, there's a solid combination of arcade action and flight simulation at play. *Heliborne* walks the line between the two control types just tightly enough, and it's going to be fun to see how they build upon this skeleton in the future. If you've been longing for a new take on the helicopter subgenre of war games, hop on Steam and see if this looks like it fits the bill well enough.

Neo Atlas 1469

PUBLISHER ARC SYSTEM WORKS
GENRE SHOOTER
SYSTEM(S) PC, SWITCH
AVAILABLE NOW

Originally released for PS Vita in Japan, followed by a worldwide PC release on Steam, *Neo Atlas 1469* is a simulation game that puts players in the role of the master of a trading company. Set in 15th-century Europe, you simply hire admirals, listen to their reports, and draw a world map based on what they have to say. Your map is based on your own approvals and disapprovals of said reports, so what you choose

to believe will very literally shape the way you see the world. The next stop for ARTDINK's intriguing game is Nintendo Switch, which could definitely use something along these lines.

It sounds simple enough, but there's more to *Neo Atlas* than mere yays, nays, and the bizarro map that results from listening to the wrong people. You also need to divvy out wages for your admirals so they can continue to discover new aspects of the world and report on them. You can make a tidy profit by setting up new trade routes along the way, and establishing routes that cause certain produce combinations to interact may even end up creating a brand new product. Trade that in for even more profits and, well, you get the picture. There are also treasures hidden across the map, and you can use a dowsing tool to discover them for yourself.

The most interesting part of the experience is seeing what kind of map you end up with, though. It could be very similar to the map we know today, or you could end up with hundreds of continents sitting impossibly close to one another. In a partially discovered world still believed to be flat, there are no real limits to the interpretive possibilities, but hopefully you end up with at least a few trustworthy admirals during your playthrough. At the time of this writing it's unclear whether this will be a budget release on Switch, or even if it's going to be digital-only, but it's a great candidate for the system. At the right price, *Neo Atlas 1469* will be a rare specimen worth investigating on Nintendo's red-hot console/portable hybrid. □

broxburn

Continued from page 65

cross-firing inward, down the length of the formation, while English pikemen jabbed and speared to no avail. Haldane's regiment refused to give ground.

"One of the Scots brigades of foot would not yield, though at push of pike and butt-end of the musket, until a troop of our horse charged from one end to another of them, and so left them to the mercy of the foot," recalled Hodgson.

Packer's cavalry, having ridden completely around the east end of the battle, thundered down the length of Lawer's brigade, firing into them. Haldane and his top officers were all slain. It was the final straw.

"Two regiments stood their ground, and were almost all killed in their ranks," wrote Burnet, "the rest did run in a most shameful manner: so that both their artillery and baggage, and with these a great many prisoners, were taken, some thousands in all."

At that moment the sun rose over the North Sea. Cromwell shouted Psalm 68, "Now let God arise, and his enemies shall be scattered," and as the English formations marched over the former Scots position, laughed, "I profess they run!"

"Then was the Scots' army all in disorder and running, both right wing and left, and main battle," Hodgson recalled. "They had routed one another after we had done their work on their right wing; and we, coming up to the top of the hill with the straggling parties that had been engaged, kept them from bodying: and so the foot threw down their arms and fled."

Victory was complete. Half the Scots army had not even taken part in the battle; the half that had, if not taken prisoner or dead, crowded into them. Trapped between the steep banks of the hill and the gully, the survivors could only flee west, down the bottleneck toward Edinburgh. Cromwell unleashed his horsemen on them.

"The best of the enemy's horse and foot being broken through and through in less than an hour's dispute, their whole army being put into confusion, it became a total rout, our men having the chase and execution of them near eight miles," he wrote. Such a scene of galloping horsemen cutting down terror-stricken, running men would not be seen in Scotland until the aftermath of the Battle of Culloden, almost a century later.

"David Leslie gave out on Monday night amongst their soldiers, that by seven of the clock on Tuesday they would have our army dead or alive, and they had this defeat and rout before eight," Cadwell told Parliament a few days later.

"I know I get some share of the salt for drawing them so near the enemy, and must suffer in this as many times formerly; though I take God to witness we might as easily beaten them as we did [the Royalists] at Philiphaugh, if the officers had stayed by their own troops and regiments," Leslie, who escaped to Stirling, admitted of his men two days after the battle.

The Battle of Dunbar lasted only about two hours. Cromwell wrote Parliament that 3,000 Scots were slain and 10,000 taken prisoner, probably an inflated claim; a contemporary Scottish annalist put the number at no more than 900 killed on the field. All their baggage, 30 cannons, and 15,000 arms were captured. Cromwell reported 30 killed, although the English undoubtedly lost more men than that.

"Thus you have the prospect of one of the most signal mercies God hath done for England, and his people this war and now may it please you to give me the leave of a few words," Cromwell informed Parliament. He went on to make the only slightly veiled point that the Scottish defeat had been the fault of leaders who had no business directing battles. It was meant as an instructive lesson to Parliament.

Cromwell could afford to make threats. Accompanying news of his victory would have been the grim reports of his treatment of enemies. As many as 5,000 Scottish prisoners were sent south on a death march. Food was withheld. Those who fell behind were shot. Only about 1,400 survived, to be shipped as indentured servants to the New World. This conveyed the message that those who opposed Cromwell could not expect mercy.

"Cromwell upon this advanced to Edinburgh, where he was received without any opposition, and the castle, that might have made a long resistance, did capitulate," wrote Burnet.

With the Kirk Party in disrepute, the Scots put their faith in Charles II, who led an invasion of England. A year to the day after Dunbar, Cromwell caught the Scots at Worcester, destroyed the remnant of their army, and almost captured Charles himself. Though the king narrowly escaped, the Royalist threat to Britain, which by that point included Scotland, was ended. As it turned out, the more immediate menace to Parliamentarian rule was Cromwell himself. He dissolved the government in 1653. The Army Council named him Lord Protector of the united Commonwealth of England, Scotland, and Ireland. In effect, he was dictator. The Protectorate, as it was known, was due in no small part to Cromwell's first, and most masterful, victory as Lord General at Dunbar. □

meuse

Continued from page 33

aircraft to take to the skies on December 23. This made it possible for the Americans to begin the first of 241 flights by C-47s that delivered 144 tons of supplies to the troops hunkered down inside the Bastogne perimeter.

That day the Germans launched a concerted attack against Bastogne's perimeter. The most successful of these was launched by the 901st Panzer Grenadier Regiment of the Panzer Lehr Division, which broke through the southwestern sector of the perimeter. Fighting raged well into the evening as panzergrenadiers and the men of the 2nd Battalion, 327th Glider Infantry, fought house to house in the village of Marvie.

Manteuffel had worked tirelessly to obtain reinforcements that could be used to ensure the destruction of the American forces in Bastogne, but the Germans were hampered not only by a severe shortage of fuel, but also by the presence of the P-47 Thunderbolts that relentlessly attacked German panzer formations. Although he had promised Luttwitz that the 15th Panzergrenadier Regiment would arrive with its two panzergrenadier regiments and 72 tanks and assault guns, only one of the panzer regiments made it to the outskirts of Bastogne. When it attacked on Christmas morning, its force of 18 Mark IVs was not sufficient to overwhelm the American reserves inside Bastogne's perimeter. After the repulse, Manteuffel informed Model that he would not approve any more large-scale attacks against Bastogne because they were too costly.

On December 26 the vanguard of Colonel Creighton Abrams' CCR of the 4th Armored Division fought its way north through Assenois and reached Bastogne at 5 PM. This ended the siege. Two days later, with Hitler's permission, the Germans gave up their failed offensive and withdrew their most exposed forces.

The Battle of Bastogne, a small part of the much larger Battle of the Bulge, cost approximately 3,900 American lives and 12,000 German lives. The Americans and British were soon driving east in a quest to retake the ground lost to the Germans. On January 13, British and American troops linked up in the center of the bulge. It took the Allies three more weeks to push the Germans back to their pre-attack positions.

Hitler had taken a great gamble and lost. The Allies continued pumping more men and material into the Western Front to hasten the fall of Nazi Germany. After Wacht am Rein, Hitler did not have another ace up his sleeve. □

salamis

Continued from page 57

Greek archers and slingers rained missiles down on the Persians. Greek hoplites and marines then rushed in to finish the job with their blades. They slaughtered the Persians to the last man.

Once the battle was over, the Greek ships towed as many disabled vessels as they could back to the coasts of Salamis. While the Greeks lost approximately 40 triremes, the Persians fared much worse, having lost more than 200 warships either destroyed or captured. Yet the imperial fleet still had hundreds of ships, so the Greeks were wary of of another major encounter. Such an attack never came. After Xerxes heard the advice of senior commanders Mardonius and Artemisia, the Great King decided to return to Asia. By destroying Athens, defeating the Spartans at Thermopylae, and establishing his rule over northern and central Greece, Xerxes had made a significant number of achievements, despite the outcome at Salamis. The loss at Salamis was certainly a major setback, but it was not the primary reason for his retreat. The approach of winter compelled the Persians to withdraw. The winter months made military operations extremely difficult on land and impossible at sea.

After the order for retreat was given, the fleet was the first to depart under the cover of night. A few days later, Xerxes and the army withdrew back to Thessaly. Once in friendly territory, yet still in Greece, the Persian army split up. Some of the troops accompanied the Great King as he traveled back to Persia. Others remained behind to serve under senior Persian military commander Mardonius. When the Greek fleet became aware of the flight of the Persian fleet, it quickly set off in pursuit. But the Greeks got only as far as Naxos before halting their pursuit.

The final showdown between the Persian Empire and the Greek city-states occurred the following year when Mardonius led his Persian army south to finish the conquest of Greece. The confederation of allied Greek city-states led by Sparta and Athens confronted the Persian troops at Plataea and vanquished them. Mardonius was slain in the battle. The Greeks then drove the Persians from their homeland.

Athens and her allies had successfully repelled an invasion by the mighty Persian Empire. In so doing, they remained free of oppression by a foreign power. From that point forward, Athens was free to achieve its full potential as manifested in the Golden Age of Athens. □

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The Atlanta Campaign, May 17-20

The capture of Chattanooga in November 1863 opened "The Gateway of the South." Following that victory, General U.S. Grant assigned General William T. Sherman the mission of capturing Atlanta. Following 4 months of maneuvering, sieges, and battles, Atlanta fell, setting the stage for "Sherman's March to the Sea." Battlefield historians ***Ed Bearss & Jim Ogden*** will lead us on an in-depth, 3-day tour that traces the armies' movements from Ringgold to Resaca; Kennesaw Mountain and into Atlanta.

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In the span of 18 months, five major battles were waged within a 15-mile radius of this Virginia town-- Two Battles of Fredericksburg and the Battles of Chancellorsville, Wilderness, and Spotsylvania Court House. Join ***Ed Bearss & Frank O'Reilly*** as we examine three of these significant engagements, ***Fredericksburg, Chancellorsville, and the Wilderness***.

Spotsylvania Courthouse, North Anna, & Cold Harbor, October 24-27

In March 1864, President Lincoln placed Ulysses S. Grant in command of all Union armies. On May 4, the Federals crossed the Rapidan River launching the Overland Campaign of 1864, pitting Grant and Lee against one another for the first time. We will trace the armies as they clashed in a series of brutal engagements in a 5-week period following the Battle of Wilderness. Included is a stop at Guinea Station to see where General Stonewall Jackson died on May 10, 1863.

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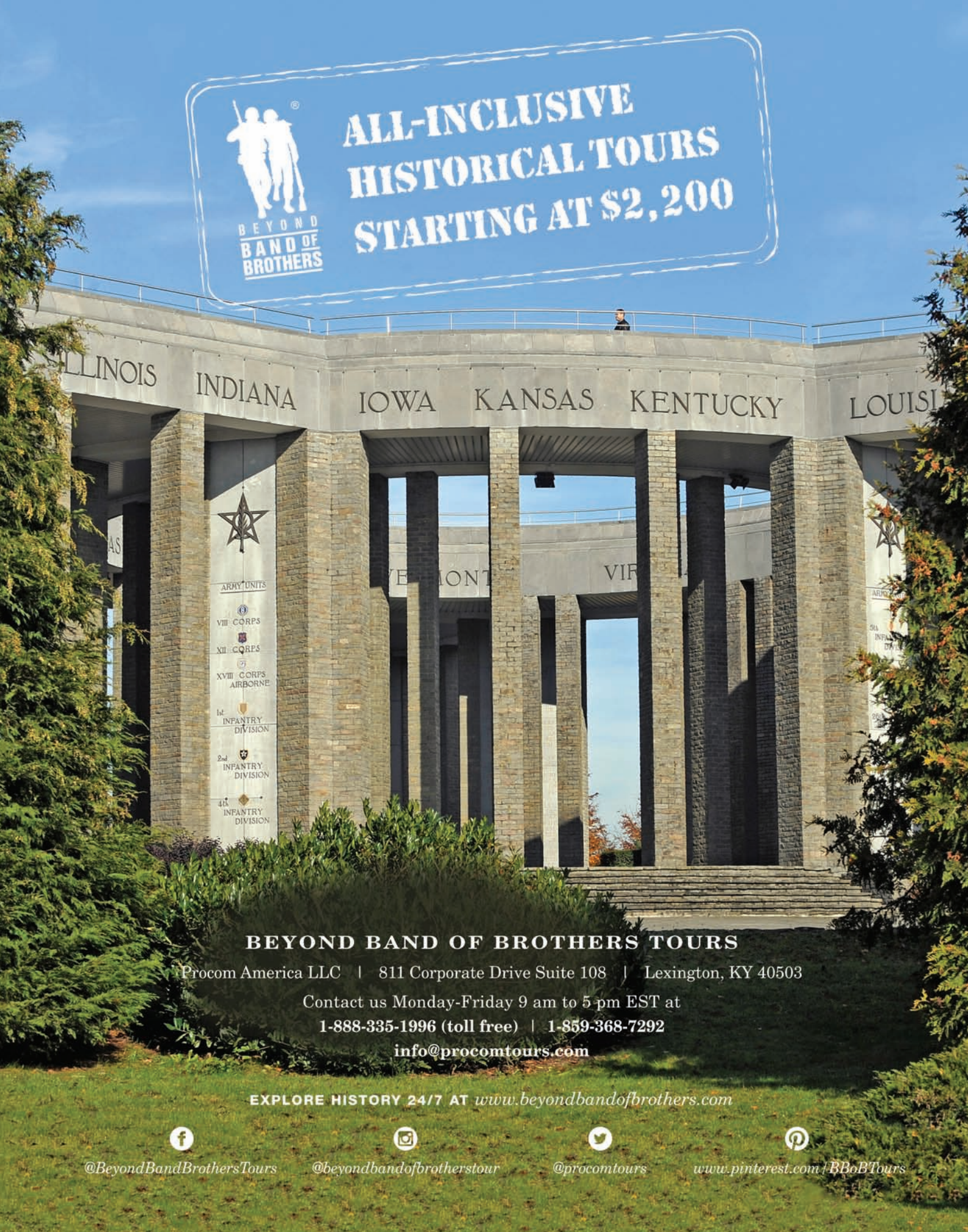
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