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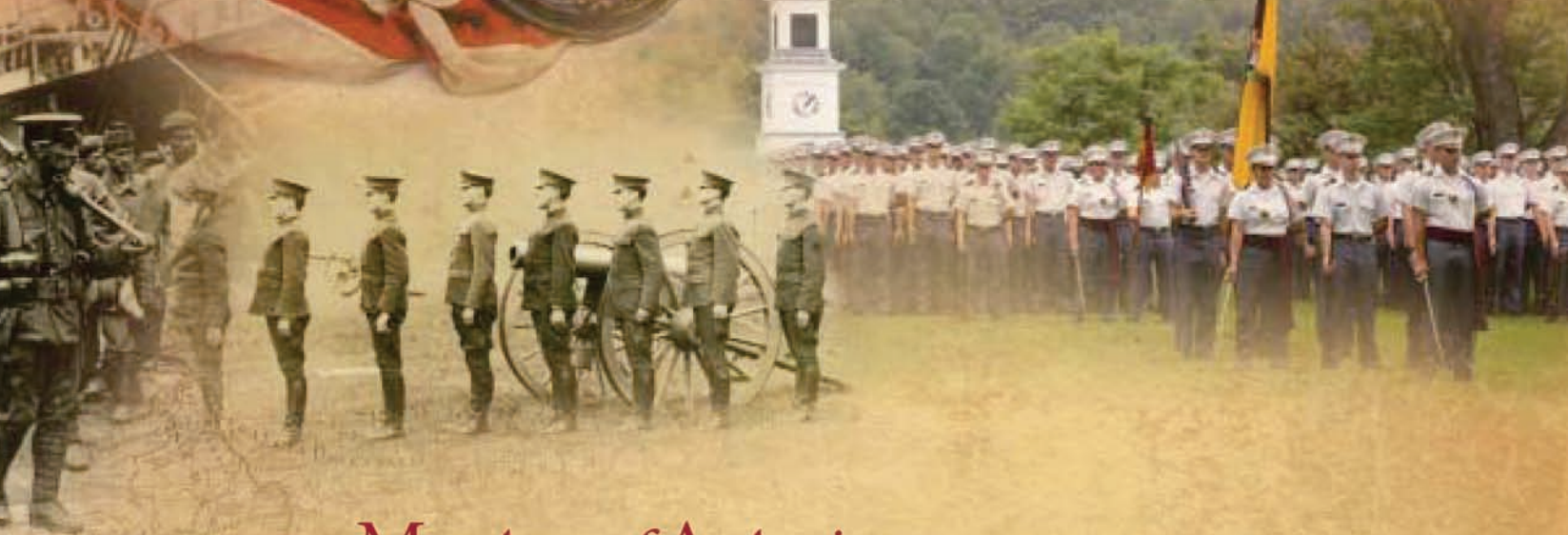

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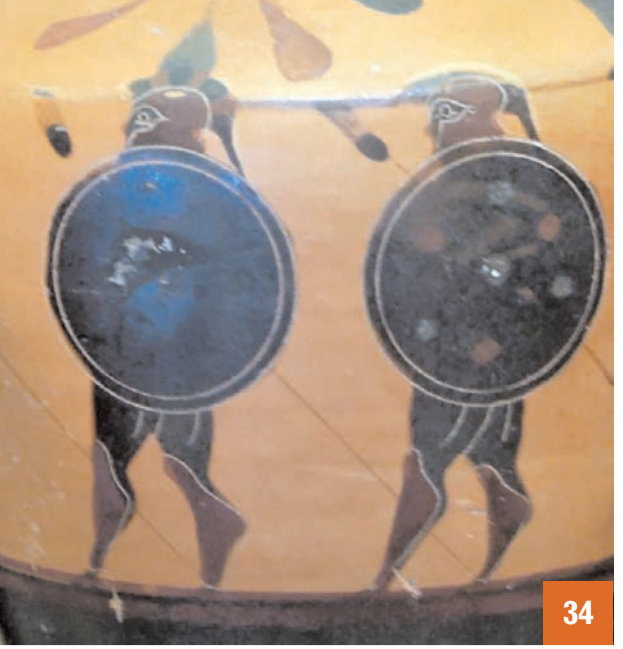

MILITARY HERITAGE

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features

columns

COVER: An American infantryman in training at Fort Belvoir prepares to hurl a "pineapple" grenade. Photo courtesy of the Library of Congress.

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editorial

Leaders would do well to remember Dwight Eisenhower's warning: "Every war will astonish you."

WITH THE 2003 UNITED STATES INVASION OF IRAQ still overshadowing all aspects of American life, it is too early to predict what historians will say definitively about the enterprise. But as this issue of *Military Heritage* demonstrates, all leaders—from George W. Bush on—would do well to heed the warning of another president, one with far more military experience than the current resident of the White House. "Every war," said Dwight D. Eisenhower, "will astonish you."

The wisdom of that hard-earned remark is underscored by the varying fates of three invasions highlighted in this month's issue. For the Athenian general Nicias, the 415 BC invasion of Syracuse confirmed his own worst fears about undertaking a voluntary invasion of a city-state that had not directly attacked him. Two years of brutal siege warfare followed, giving the lie to hotheads such as the traitorous Alcibiades, who had predicted that the invasion would be both easy and glorious. Nicias and his army eventually paid dearly for Alcibiades's foolhardy bravado.

Prussian monarch Frederick II anticipated a similarly easy task when he sent his forces marching into neighboring Silesia, Austria, in December 1740. Only after he had been driven from the battlefield at Mollwitz in fear for his life, and a more cool-headed commander, Field Marshal Count Kurt von Schwerin, had managed to rally the Prussian forces, did Frederick realize the true gravity of his undertaking. Unlike Nicias, Frederick ultimately would succeed in his invasion, but at the cost of provoking a much wider war in central Europe. Never again would he underestimate his opponents. "Mollwitz," he said, "was my school."

In 1980, Iraqi dictator Saddam Hussein observed the unsettled conditions inside revolution-torn Iran and determined that the time was ripe to launch a massive and unprovoked invasion of Iraq's traditional enemy. Eight years and three million casualties later, Hussein was still in power in Baghdad, but his invasion had failed to gain an inch of Iranian territory. Proving that he was incapable of learning from his own history, Hussein would invade another of his neighbors, Kuwait, 10 years later—a move that would lead indirectly to his own eventual death by hanging after American forces invaded his own country for reasons that are still being debated as we write.

Dwight Eisenhower, who led the largest and arguably the most successful invasion in military history—the D-Day landings and the subsequent Allied drive across western Europe to Nazi Germany—could speak with vast personal experience about the subject of war. A graduate of the United States Military Academy at West Point, Eisenhower knew his history. He was under no illusions about the hidden difficulties facing any invasion. Famously, he wrote out two messages on the eve of D-Day, one announcing its success, the other taking personal responsibility for its failure. To his own relief and the world's great benefit, he and his forces did not fail.

Even in victory, however, Eisenhower had little use for war as an instrument of clever policy-making. "When people speak to you about a preventive war," he said, "you tell them to go and fight it. After my experience, I have come to hate war. War settles nothing." The key word there is "experience." □

Roy Morris Jr.

MILITARY HERITAGE

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By William McPeak

Grenades evolved from the Middle Ages into the modern era, giving soldiers an easily delivered and effective close-range weapon.

WHEN DID HUMANITY BEGIN THROWING EXPLOSIVE DEVICES? By the early 13th century, the Chinese and the heirs to their technology, the Mongols, were using effective incendiaries such as fire arrows and small rockets in battle, and further advanced to using metal casings for larger incendiary grenades. Meanwhile, in Muslim Spain, the military use of explosive gunpowder was typical by the middle of the century. Spanish Moors were hurling rocks with explosive gunpowder from primitive bucket cannons in siege warfare about the time the Mongols were using them.

By the early 14th century, European cannons, although not yet completely replacing the age-old slinging siege machines such as the catapult and trebuchet, were evolving quickly into cheaper, more rapid-fire weapons. By the time the idea of using gunpowder as an explosive weapon rather than as an explosive propellant for cannons and early firearms, it was near the end of the 15th century. The innovation was a simple discovery—gunpowder was transported in barrels, and flammable powder dust near camp flames or cannon matches caused occasional massive explosions. But it was not until 1495, when Francesco di Giorgio Martini, a Sienna architect, loaded barrels of powder into a shaft beneath Castel Nuovo in Naples, lit a long match, and proceeded to blow up a whole section of wall and scores of French defenders, that the true destructive potential of gunpowder was realized.

In this World War I lithograph poster for war bonds, an American doughboy tosses a grenade at a pair of cowering Huns.

Library of Congress

The mine—in the form of a powder keg—quickly became an accepted weapon and continued to evolve into more manageable sizes such as the compact petard mine attached to gates and walls. The earliest innovators may have been the Knights Hospitalers of St. John, the crusading order in the Middle East. Vastly outnumbered, the Hospitalers needed up-to-date military technology for their survival, and for that reason they began adapting and modifying the use of gunpowder in the later 15th century. The Knights used terra-cotta to fashion hand-sized ovoid or heart-shaped containers four inches in length and filled with Greek fire. They etched criss-cross lines for better gripping, thus anticipating the modern grenade with its pineapple design for grip and fragmentation.

In the early 16th century, the Knights made a variation of these

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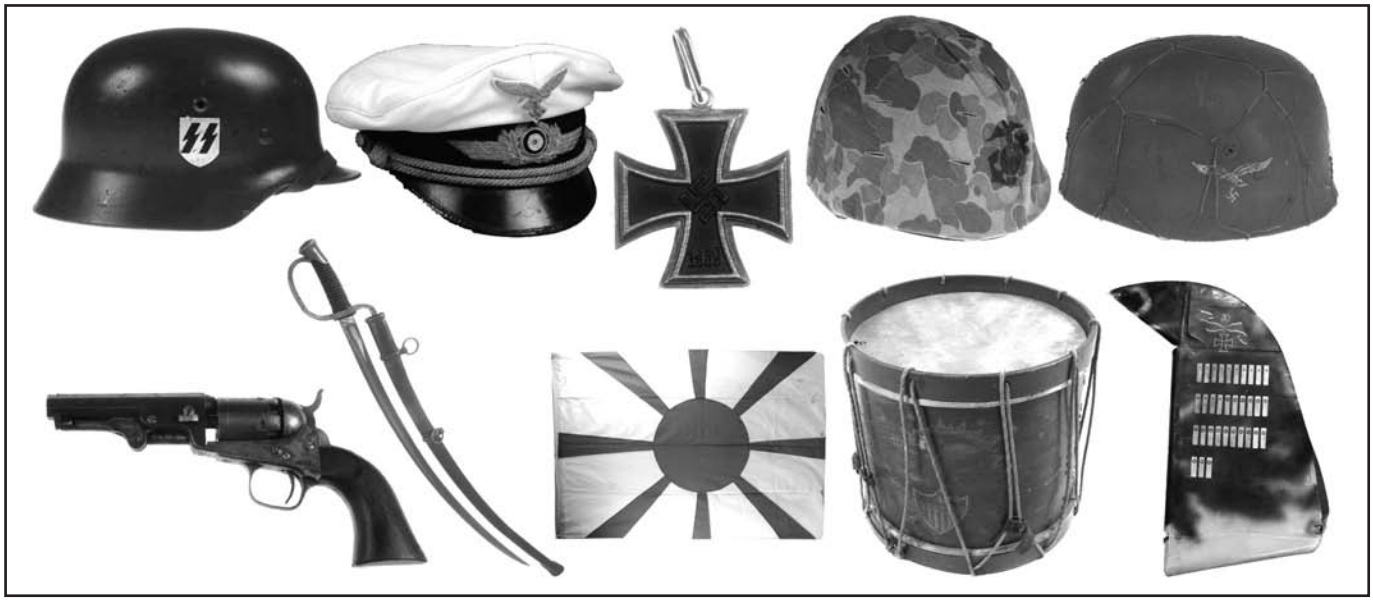

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"fire pots" using gunpowder. The neck of the new weapon was covered in canvas or parchment and wound with a match cord looped into the container, with both ends wound around the neck and lit to ensure detonation. These hand bombs proved to be very effective as antipersonnel weapons. Dropping firearm shot into the mixture was a natural progression, since grapeshot had been used for cannons for over a century. This was the first instance of the explosive hand grenade.

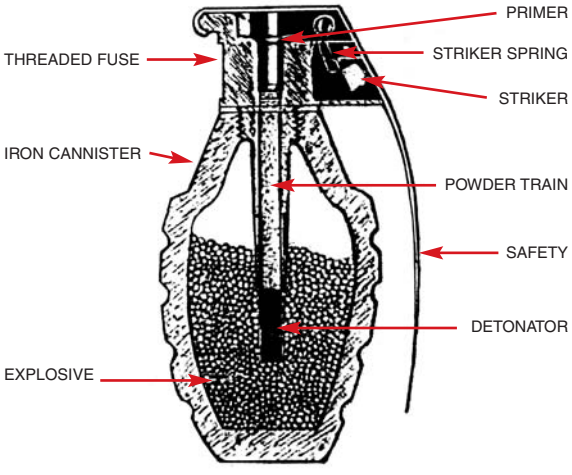
Explosive cannonballs with a fuse appeared in the later 16th century, adapted from the development of similar-sized bombs that could be fuse-lit and launched by small catapults, slings, and heavy-duty crossbows. Explosive and incendiary devices continued to be adapted for siege use in the 17th century. Hand-held sizes also continued to develop with the use of various metal casings, some entwined in rope with a leader to sling the grenade. Another variation was the spiked grenade, which alleviated the danger to volunteers planting petards on wooden ramparts. The spiked grenade, embedded with as many as 80 or 90 iron spikes, was launched by crossbow and could stick to anything wooden—a precisely aimed weapon that saved the lives of many besiegers, if not those besieged.

Toward the end of the 16th century, soldiers realized that hand bombs or grenades could be effective in battlefield conditions. For more than a hundred years, large center and flank formations had been divided into specialized infantry and cavalry block formations. Thrown with sufficient skill, a grenade could wreak havoc on these formations and cause enough damage to inspire panic and retreat. Such weapons needed strong fellows with good arms. By the mid-17th century, soldiers with these specific physical abilities, "grenadiers," were formed as companies within infantry regiments. As special soldiers more vulnerable to enemy fire, they were given more pay and various privileges, including distinctive uniforms and hats. In the 18th century, with the formation of the midsize battalion unit, England, France, and Prussia began taking grenadier companies from individual regiments to form special battalions. Napoleon Bonaparte thought enough of their service to form brigade- and division-level units of grenadiers. By the mid-19th century, the use of grenadiers went out of military fashion, although units kept the name as a traditional title for special skills and esprit de corps.

Troops in the field continued to improvise their own grenades. During the Crimean War, grenades made from powder and nail-packed soda bottles were devised by the British and thrown into Russian trenches. Grenades were a factor during the Russo-Japanese War. German observers noted the use of grenades and began turning out various types—disk-, ball-, and egg-shaped—for stockpiling, using a high explosive developed in Germany in 1863—TNT. During World War I, there were some 50 new designs—good and bad—developed for grenades with two basic ignition types: the time fuse and the more dangerous impact or percussion design. The latter was potentially unsafe because it exploded on impact—but impact could come from being jarred in many different ways before ever getting close to the enemy. For obvious reasons, timed grenades were preferred over the percussion variety.

The first modern grenade was the British Mills bomb, developed in 1915. With a cast-iron casing ribbed horizontally and vertically to form surface notches, it was the first of the so-called "pineapple" or fragmentation grenades. The Mills bomb employed a central spring-loaded firing pin and spring-loaded lever. The lever released the striker, which in turn ignited a four-second fuse. Although it was filled with low-explosive gunpowder, the Mills bomb nevertheless was a leap forward in grenade technology. Other designs would prove more enduring. The German variation of the stick grenade appeared in 1915 and was perfected by 1917. This was the famous "potato masher," Model 24, with a time fuse lit by a friction igniter that was used throughout World Wars I and II. It had the advantage of achieving about twice the throw distance of conventional ovoid-type grenades because of the torque achieved with the hollow wooden

Famous German M-24 "potato masher" stick grenade, circa 1914.



Cross-section of a U.S. MK-1 "pineapple" grenade, post-World War II.

A British World War II-vintage Mills bomb.

Very early earthenware hand grenade, probably Syrian, from the 16th century.

handle, which also contained a pull fuse.

The United States entered World War I with a complicated impact fuse grenade that proved such a failure in combat that it had to be scrapped. For a short period, the French pineapple grenade, the F-1, was used by American forces, but in 1917 an improved variation of the Mills bomb, the Billant grenade fuse system, was integrated into a new American grenade, the famous pineapple MK. The MK-1 was abandoned after May 1918 for the MK-2, which was improved after the war and used in World War II and Korea. New design and safety features went into the improved M-61 used in Viet Nam and today's M-67.

Grenade design was not confined to the ignition mechanism; it also entailed the combat use of the weapon. The most common defensive grenade was the fragmentation grenade, which was meant to throw shrapnel out to about 50 yards. The Mills bomb and other pineapple designs were of this type. An offensive grenade was meant for demolition, and thus was packed with more explosive. The highly explosive potato masher was an example of the offensive grenade. Another type was the concussion grenade, designed to have the effect of a shockwave in an enclosed area. The concussion grenade used a thinner, low-fragmentation casing, and its explosive power was concentrated within a 10-yard radius.

The idea of using gas in grenades originated with the French, who first used tear gas (an eye- and throat-burning, chlorine-based compound) against the Germans in 1914. The proliferation in the use of poison gases during the war inevitably found an application in grenades as well. The Germans developed gas grenades loaded with various poison gases in liquid form. The small egg grenade was often used for this because its aerodynamics allowed a longer throw. The Allies were quick to follow up with their own gas grenades. Because shifting winds could easily blow the gas back on the attacker, gas masks became essential equipment.

Tactically, the grenade came into its own in World War I, where stalemated trench warfare was a fact of life and lobbing a grenade into the enemy's trenches might cause more casualties than random pot shots from trench to trench. Throwing grenades became fundamental field tactics, and skirmishes between grenade-throwing patrols became commonplace. The grenadier was reconstituted into bombing parties used by both sides to raid the enemy trenches and cause disorganization and panic before an infantry assault. The longest grenade combat encounter during World War I occurred at Pozieres Heights on the night of

Anne S.K. Brown Military Collection

ABOVE: A British grenadier about to light the fuse on his grenade, 1746. BELOW: An American infantryman training at Fort Belvoir prepares to hurl a pineapple grenade during World War II.

Library of Congress

July 26-27, 1916, when Australian and British troops fought the Germans for 12½ hours. The Germans used every kind of grenade they possessed, while the Allies used some 15,000 Mills bombs.

By World War II, it was common for most infantrymen to be proficient in the use of grenades, but specialists still were trained for tactical duty in preparing and delivering grenade packs against tanks and machine-gun pillboxes. Lobbing a grenade ever farther was an important incentive for improvements. The idea of using a rifle to do so was first advanced during World War I. A variant Mills bomb was developed with a base plug and rod to fit over the rifle barrel as a launch adapter. Other adapters included a simple tin can-looking affair, a discharger cup, whose base was integrated over the rifle barrel. Launch was via a blank cartridge. By World War II, TNT had been improved with the more powerful RDX (explosive nitroamine) and Composition B, a mixture of the two.

The American military developed a tube-launched small rocket and shaped-charge aerodynamic grenade to disable tanks. The latter would become the powerful M-10 grenade, while smaller versions of rifle grenades were adapted for the M-1 Garand rifle and M-1 carbine. With a new stabilized rocket launcher added in late 1942, the weapon became the bazooka rocket grenade, the world's earliest RPG. The Germans copied the bazooka as the Panzerschreck; the Russians would use it as the basis for what would become the RPG-7, the weapon of choice for modern-day terrorists. There were also launcher adapters for the conventional pineapple grenades, but the user had to pull the grenade pin before seating it for launch. American forces continued to use bazooka rocket grenades through the Korean War.

By World War II, the gas grenade had expanded in other directions. Smoke bombs or smoke grenades were used as nonlethal tactical weapons, usually in canister form, for screening military movements, signaling (using different colored dyes with potassium-based smokes), targeting, and marking landing zones. There were also exploding smoke grenades, using highly flammable and poisonous white phosphorus with a bursting charge to spread more than smoke. These were employed both as antipersonnel agents and for illuminating enemy positions. Along with these were incendiary grenades containing thermite reactants, aluminum metal, and iron oxide; they were used to destroy weapon caches, artillery, and vehicles. Not requiring oxygen, some were also used for underwater demolition. Like other grenades, the incendiary grenades had rifle-mount applications with extra charge-assists to boost effective ranges.

Grenade technology, following functional demand and progression, has continued to inspire improvements. Many military applications have been translated to law-enforcement work. Tear gas grenades are a common example, along with so-called stun or flash grenades used as diversionary weapons to disorient and confuse criminals with intense light and noise. Yet another crossover is the sting grenade, designed to explode with a nonlethal payload of small, hard rubber balls that can incapacitate suspects without killing them. □

By Tom Wolforth

Ruthless and determined, King Kamehameha eventually extended his rule from Hawaii to the other islands in the Pacific chain.

Dixson Library, Sydney

When Kamehameha came into possession of a cannon and some small arms, he was ready to settle old scores with Maui and conquer the other rival islands. The result was the Battle of the Red-Mouthed Gun.

IN JULY 1782, THE ISLAND KINGDOM OF HAWAII WAS FRACTURED INTO three groups, beginning a power struggle that would last for the next 10 years. Similar in kind to the territorial disputes between England and France in the Hundred Years' War, the sovereignty of the islands separated by the deep-blue waters of the Pacific Ocean had been disputed for generations between the rulers of Maui and Hawaii.

The death of the old Hawaiian monarch Kalanipou'u that year left a power vacuum on the large island. The rival claimants were warrior-princes Kamehameha and his cousins, Kiwala'o and Keoua. After a sharp clash at Mokuohai, Kiwala'o was killed and Kamehameha laid claim to the Hawaiian throne. A subsequent attempt by Kamehameha to conquer Maui was beaten back, and an uneasy peace settled over the islands for the next eight years.

Increased trade with foreigners was partly responsible for the lack of warfare in the islands during this period, as rulers and commoners alike focused their attentions on understanding and exploiting the rapidly evolving economic situation. Foreign ships began to appear off Hawaiian shores more and more frequently, starting in 1786. By 1789, numerous whaling and trading ships were wintering in the islands. Many sailors jumped ship to become landlubbers in paradise, and some even served Hawaiian leaders as interpreters of foreign language and culture, and in managing the new and advanced alien weapons.

Although many peaceful interactions took place with sailors, traders, and visitors throughout the island chain, an unusual series of events culminated in placing a cannon and several guns in the hands of Kamehameha, and this in turn set in motion a new series of battles on the

islands. In February 1790, Captain Simon Metcalf and his 18-year-old son Thomas were commanding two trading vessels, *Eleanor* and *Fair American,* off the shores of Honua'ula, Maui. After trading for small firearms and ammunition, a local chief returned at night with his followers to cut loose *Eleanor*'s little shore-going boat. The transgressors killed the sleeping watchman inside the boat and quickly took it apart for its iron.

Upon learning of the offense, Captain Metcalf managed to capture two prisoners and discover the details of the night's killing. The captain was patient; several days later he invited the natives to trade aboard his ship. Many of those who took him up on his offer did not live to tell about it. Metcalf ordered cannons and small arms to open fire on the assemblage of canoes gathered around his ship. More than 100 native Hawaiians were killed, and another 200 were wounded. Metcalf weighed anchor and headed southeast to the island of Hawaii to rendezvous with *Fair American,* captained by his son.

Metcalf's cruel ways of dealing with natives had already sown the seeds of his own destruction. Previously, the captain had whipped Kame'eiamoku, a notable headsman from Kona in west Hawaii. Kame'eiamoku had vowed to exact revenge on the next ship that strayed into his territory. True to his word, and unfortunately for the Metcalfs, that ship was *Fair American*. The ship's complement consisted of the younger Metcalf and five sailors. They were no match for the angry Kame'eiamoku and his warriors, who stormed the ship, threw the crewmen overboard, and beat them to death with their paddle-oars. Only the ship's mate, Isaac Davis, escaped death and was taken prisoner. The vessel was driven ashore, and her bounty of swords, guns, ammunition, and one cannon were be bestowed on the island's ruler, Kamehameha.

Several miles to the south, *Eleanor* anchored at Kealakekua Bay, scene of the fatal stabbing of Captain James Cook 11 years earlier. John Young, one of the several sailors who went ashore, lost his way and subsequently was captured by Kamehameha. Finding himself suddenly equipped with a cannon, plenty of ammunition and small arms, and two foreign sailors capable of effectively handling the artillery piece, Kamehameha was emboldened to return to Maui to settle old scores. This time the campaign was designed to take more than just the easternmost portion of the island—Kamehameha was ready to conquer all the

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ABOVE: A prophet told King Kamehameha that if he built a temple at Pu'ukohola he would rule supreme over Hawaii. Kamehameha then sacrificed a rival cousin to consecrate the temple. RIGHT: Kamehameha I, painted in European clothing, was king of Hawaii from 1795 to 1819. OPPOSITE: Hawaiian warriors with spears plan their next attack.

Hawaiian islands. Looking to enhance his chances, he asked for assistance in the form of canoes, feathered capes, and warriors from an old rival in Hilo, Keawema'uhili. To the surprise of the third island chief, Keoua, Keawema'uhili decided to assist Kamehameha in his invasion of Maui.

Following an initial victory in east Maui, Kamehameha's forces moved westward across the island by land and sea. The opposing forces met at the mouth of the Wailuku River in north central Maui, where one of the bloodiest battles of the campaign took place. Local noncombatants fled up the sides of the mountains on both sides of the river valley for safety, then watched in horror as the Hawaiian forces slowly pushed the Maui warriors back up the valley. At this point, Kamehameha unleashed his secret weapon—the cannon from *Fair American*. Under a ground-shaking bombardment, a majority of the Maui warriors were slain, their bodies clogging the Wailuku River and giving the battle the name Kepaniwai, or the damming of the waters.

Kamehameha pressed his advantage. In contrast to victors in the past, he did not bother to set up new headsmen on the conquered lands. Instead, he focused his attention on the next island to the west, heading to Kaunakakai on the island of Molokai. Victory there was achieved without violence after consultation with the ruling chieftains. Maui and Molokai were now under Kamehameha's control. Taking Oahu would be a more difficult matter.

Kamehameha dispatched two messengers to Oahu. One exchanged messages with the shrewd but dying ruler Kahekili, who encouraged Kamehameha to wait until he had passed away before continuing his campaign of conquest. The other messenger sought out Kapoukahi, a respected prophet who instructed Kamehameha to build a large temple at Pu'ukohola, adjoining the old temple near Kawaihae. Once he had done that, Kamehameha would rule supreme over all Hawaii.

On the verge of moving farther westward, Kamehameha was forcibly reminded of unfinished business on his home island. Keoua had turned his anger on Keawema'uhili for helping Kamehameha and attacked the Hilo ruler at Alae, north of Hilo Bay. Keawema'uhili was killed, and Keoua extended his rule over two-thirds of the island. That was not enough, and he pressed his advantage while Kamehameha was away. Keoua's forces marched westward into Kamehameha's defenseless territory in Kohala, ravaging the countryside, destroying fields, fish ponds, temples, and the homes of the villagers.

By the time Kamehameha returned to Hawaii, Keoua had advanced as far west as Waimea. Kamehameha's troops marched uphill and met Keoua's force at Pa'auhau. Once again, the cannon from *Fair American* figured prominently in battle, serving Kamehameha's forces well until it was captured by one of Keoua's chiefs. The cannon was then used successfully against Kamehameha's crew until its powder ran out. The fighting moved east to Koapapa the next day. On a wide-open plain, Kamehameha's troops enjoyed greater firepower, but Keoua's warriors were better at hand-to-hand combat. When Keoua ultimately retreated to Hilo, Kamehameha could not muster an effective pursuit. Although Kamehameha had succeeded in stopping Keoua from ravaging his lands, neither side had gained an outright victory, and each retired to his respective stronghold in the now-bisected island.

At this point, Kamehameha had gained ground in the islands to the west of Hawaii, but was losing ground on his home island. Keoua now controlled the warriors and resources that used to belong to Keawema'uhili, in addition to maintaining his original base at Ka'u. Kamehameha was unable to defeat the increasingly powerful Keoua, but he found help from an unexpected quarter. As Keoua marched his forces south from Hilo in November 1790 following the intense battle with Kamehameha in Kohala, the volcano Kilauea erupted for several days in a huge display of fire, sand, ash, and hot cinders. Many of Keoua's army and supporters, perhaps 400 men, women, and children, died from the scalding-hot ash.

Kamehameha set out to capitalize on Keoua's misfortune with a new offensive in 1791. Ke'eaumoku led an army against the Keoua

forces stationed in Hilo. John Young and Isaac Davis were attached to the force. Ka'iana led another army into Keoua's homelands on the southeastern part of the island. Ka'iana pressed his attack with a flotilla of canoes. Keoua maneuvered northward to Puna, where he dealt Ka'iana a severe blow, forcing him to retreat to Kona.


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Kamehameha had a tentative hold over Maui and Molokai, but Keoua was proving to be a formidable opponent. Kamehameha could not secure any of the westward islands while Keoua remained his enemy on Hilo, and the recent series of battles had made it clear that Kamehameha could not overcome his old enemy by force. He tried a different approach. Kamehameha focused all his resources on the building of a new temple at Pu'ukohola to abide by the directive of Kapoukahi. To expedite the building, Kamehameha personally joined in the construction work.

While Kamehameha's attention was focused on building the temple and devising new ways to overcome Keoua, armies from the western islands were mounting an attack on his homeland only a few miles away on the other side of the Kohala Mountains. By this time, Oahu ruler Kahekili had joined forces with the Kauai ruler Ka'eokulanai, creating an alliance that held authority over all Hawaiian islands except the island of Hawaii. They decided to attack Kamehameha.

The combined forces left Oahu and stopped on Maui on their way. While on Maui, Kahekili agreed to transfer sovereignty of Maui to Ka'eo, the Kauai ruler. This unusual move upset the district chiefs of the Maui to the point of near mutiny. Somehow internal dissension was abated, and forces from Oahu and Kauai set out separately to rendezvous at different points along the Kohala coast of Hawaii.

The combined force from the western-island alliance was formidable. Famed warriors were supported by another foreigner, Mare Amara, who was able to work the cannons in their arsenal. One particularly large cannon was mounted on a canoe. Large fighting dogs obtained from Russians on Kauai were also brought along to inspire terror and inflict mortal wounds in the land battle they were preparing. Ka'eo's forces were the first to arrive, and they devastated the valley of Waipio, the ancient capital of the island and home to rulers from past generations. Ka'eo went beyond the usual destruction of homesteads and agricultural fields, setting out to destroy the sacred temples of Paka'alana and Moa'ulahei. The invaders positioned their cannons at the mouth of the valley facing the ocean, preparing for Kamehameha's inevitable advance.

Kamehameha launched a fleet of double-hulled canoes from Kona as soon as he could. Many canoes were mounted with small cannons. He also sent a force by land. This group met and engaged the Kahekili forces north of Waipio valley. Ka'eo's forces unwisely left their stronghold to join the battle. As the western alliance forces arrived in their canoes, they encountered Kamehameha's fleet.

The two armies met in a battle at sea off of the cliffs of Waimanu. Sea battles had taken place in Hawaiian waters before, but this was the first one in which mounted cannons played a conspicuous part in the engagement, and the battle was dubbed Kepuwaha'ula'ula, or the Battle of the Red-Mouthed Gun. The cannons were successful in smashing the war canoes. Many lives, canoes, and cannons were lost on both sides, but the Hawaii islanders managed to best their opponents, sending the Maui and Kauai fleet retreating to Maui.

Although Keoua was not involved in the Battle of Kepuwaha'ula'ula, the results had a profound effect on his thoughts. Kamehameha invited Keoua to meet with him at the newly completed temple at Pu'ukohola. Surprisingly, Keoua agreed, traveling by canoe with a few of his advisers. As soon as Keoua set foot on land, he was fatally speared by some of Kamehameha's followers. His body was then used as a sacrifice to consecrate the new temple and ensure Kamehameha's rule over the entire island chain.

In early 1792, Kamehameha finally succeeded in taking complete control of the island of Hawaii. Three years later, after a long period of preparation, he defeated Kalanikupule in battle on the island of Oahu, literally driving his enemies over the rim of the inactive Puoaina volcano to their deaths 700 feet below. Following lengthy negotiations, Kamehameha was ceded control of both Oahu and Kauai, fulfilling Kapoukahi's long-standing prophecy and unifying his hold on all of Hawaii. □

By Allan T. Duffin

A Japanese balloon bomb drifted 6,000 miles to deliver a deadly blow to a party of Sunday school picnickers in Bly, Oregon.

ON SATURDAY, MAY 5, 1945, THREE DAYS BEFORE THE END OF World War II in Europe and just three months before the Japanese surrendered, spinning shards of metal ripped into the tall pine trees, burrowing holes into bark and tearing needles from branches outside the tiny logging community of Bly, Oregon. The nerve-shattering echo of an exploding bomb rolled across the mountain landscape. When it was over, a lone figure—Archie Mitchell, a young, bespectacled clergyman—stood over six dead bodies strewn across the scorched earth. One of the victims was Elsie Mitchell, the minister's pregnant wife. The rest were children barely into their teens.

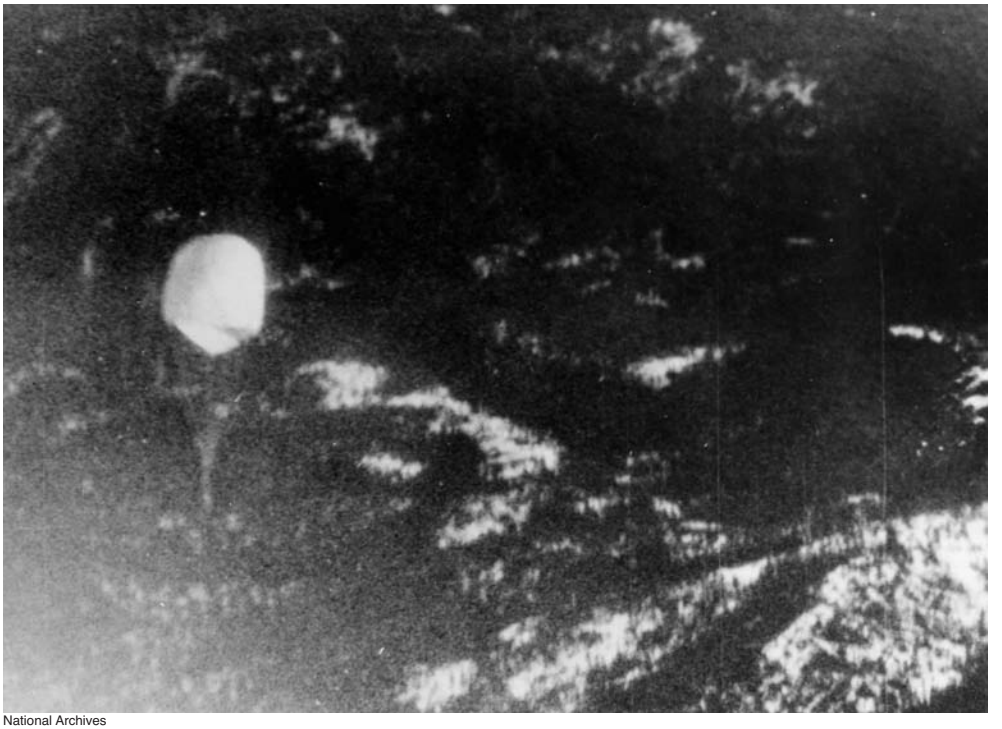
Mitchell, pastor of the Christian Missionary Alliance Church, had invited students from his Sunday school classes to a picnic on Gearhart Mountain in the Fremont National Forest. Everyone piled into the Mitchells' automobile and rode to the secluded area, where Mitchell dropped off his wife and the other picnickers as he parked the car. Suddenly Elsie called out to him. She and the children had found something on the ground. "Don't touch that!" shouted Mitchell. He was too late. A sudden explosion rent the air.

Hurrying over, a horrified Mitchell stood over the mangled body of his dead wife. Hot shrapnel was still burning on her body. Four of the children—Jay Gifford, Eddie Engen, Dick Patzke, and Sherman Shoemaker—lay dead alongside her. Joan Patzke, 13 years old, initially survived the explosion but succumbed to her injuries shortly afterward.

Forestry workers were running a grader nearby when the force of the explosion blew one of them off the equipment. Another dashed to the nearby telephone office, where Cora Conner was running the town's two-line exchange that day. "He had me place a call to the naval base in nearby Lakeview, the closest military installation to our town," recalls Conner. "He told them that there had been an explosion and people had been killed."

Within 45 minutes, a government vehicle roared to a stop in front of the telephone shack. A military intelligence officer scrambled out of the car and joined Conner inside. "He warned me not to say anything," Conner says. "I was not to accept any calls except military ones, nor was I allowed to send out any information." The rest of the day proved difficult, as Conner struggled with lumber companies and angry locals who had been stripped of their phone privileges without explanation. Angry citizens congregated outside the telephone office, banging on the windows and doors. A frightened Conner handled it as best she could. Ironically, the 16-year-old Conner had narrowly missed becoming another victim of the mishap. "Dick and Joan Patzke were in our kitchen

A Japanese balloon bomb in flight during World War II. The Japanese launched some 9,000 such weapons, one-tenth of which reached the continental United States.



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that morning and invited my sister and me to join them on the picnic," Conner recalls. "But Saturday was a workday in our house, so we didn't go."

Back on the mountain, Army intelligence officers joined the local sheriff at the accident site. The bodies of the victims were grouped within a 10-foot radius of the explosion, which had churned up the forest floor. At the center of the impact zone, lying on a snow pile six inches deep, were the rusting remains of a bomb. A huge paper balloon, deflated and pockmarked with mildew, lay nearby.

The U.S. government immediately shrouded the event in secrecy, labeling the six deaths as occurring from an "unannounced cause." But in the close-knit atmosphere of Bly, 25 miles north of the California state line, many of the locals had already learned the truth: Elsie Mitchell and the five children were victims of an enemy balloon bomb, held aloft by a gigantic hydrogen-filled sphere and whisked from Japan to the western seaboard of the United States. The contraption had alighted on Gearhart Mountain, where it lay in wait until the fateful day when it found its victims—the only deaths from enemy attack within the continental United States during World War II.

The Japanese high command launched balloon bombs against the United States for a period of six months, from November 1944 through the spring of 1945. In an ironic twist, the Japanese had canceled the program just several weeks prior to the incident in Bly, citing the program's apparent ineffectiveness. A five-month media blackout ordered by the U.S. government helped disguise the fact that several hundred Japanese balloon bombs had reached the West Coast. Woodsmen in Spokane, Washington, stumbled across two fallen bombs on the ground and, according to reports, "fiddled" with the devices, which failed to detonate. Elsewhere, a farmer noticed one of the balloons drifting in the sky above, then watched as it plummeted to the ground and wedged itself against a barbed wire fence. He was able to secure the device for investigation by the FBI and military authorities. Week after week, the public reported more and more sightings of the mysterious airborne devices. Balloons fell into rivers, tumbled onto forest roads, and interrupted electric service when they dropped onto power lines. Military pilots engaged balloons in midair and shot them down.

For Americans living near the coastline, the threat of a Japanese invasion by air or sea was nothing new. In September 1942, a Japanese submarine surfaced off the Oregon coast and launched a small airplane that dropped a 165-pound incendiary bomb over the Siskiyou National Forest. Authorities quickly contained the resulting fire, which was minor and had little effect. Further exploring their long-range options, the Japanese also planned to riddle the American coastline with submarine-fired rocket volleys. But as the war continued and the Allies marched ever closer to Tokyo, the Japanese high command altered its plans. The balloon bomb, though seemingly a passive weapon, provided the Japanese with an effective method of bringing the war to American shores without expending enormous amounts of manpower and materiel. When detonated, the bombs might trigger massive forest fires in the northwestern United States that would divert manpower from the war effort and knock the lumber industry back on its heels. Moreover, the potential devastation would hammer away at American morale.

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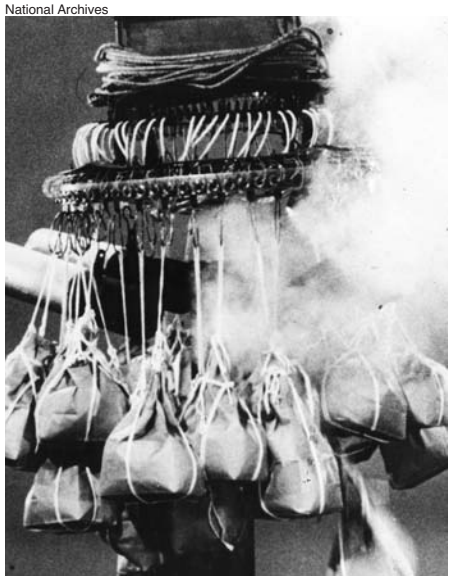

ABOVE: A load of balloon bombs attached to a "chandelier" with an automatic release mechanism and exploding fuse. BELOW: This aerial photo of a Japanese balloon was taken by a pursuing Bell P-63.

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The Japanese balloon project was revenge for an altogether different morale-smashing mission. In April 1942, four months after the Pearl Harbor attack, Lt. Col. Jimmy Doolittle and 16 B-25 medium bombers roared off the deck of the aircraft carrier USS *Hornet* to pummel targets in and around Tokyo. The Doolittle Raid, although limited in destruction, was an effective psychological ploy, proving that American forces had the capability to strike the Japanese homeland. In retaliation, the Japanese high command injected new life into its previously dormant balloon project, which had begun in the early 1930s but had been relegated to the back burner as other wartime priorities took hold.

Two years passed before the Japanese launched the first operational balloon bomb across the Pacific. The designers planned to have the balloons drop their ordnance via timed fuses, but an important question had to be answered: how would the device maintain altitude for 70 hours as it traversed 6,000 miles of ocean? Some sort of altimeter was needed to respond to changes in air pressure as the balloon sailed along its path. A gas-discharge valve and ballast-dropping system were added to the design, allowing the balloon to self-correct any drops in altitude. The jet stream, an atmospheric phenomenon just beginning to be understood, would do the rest, carrying the balloon from the Japanese mainland all the way to North America.

The Japanese set a production goal of 10,000 balloons. Due to wartime shortages, only 300 balloons of rubberized silk were crafted; the rest were made of paper. School children were drafted to paste together balloons in seven factories around Tokyo. When pumped full of hydrogen, the spheres grew to 33 feet in diameter. Each balloon was wrapped in a cloth band from which hung a set of 50-foot shroud lines to carry its ordnance and instruments. A typical balloon was equipped with five bombs, including a 33-pound antipersonnel device and several types of incendiaries. To launch the weapons en masse, the Japanese selected three sites on the island of Honshu. Each launch procedure required 30 personnel and took half an hour to complete. With good weather, several hundred balloons could be launched each day.

After several hundred tests, the Japanese released the first balloon bomb, named *fugo,* or "wind-ship weapon," on November 3, 1944. Additional launches followed in quick succession. A large number of the balloons that successfully reached North America failed to release their bomb loads when they arrived. By the summer of 1945, nearly 300 fallen balloons would be found, strewn across 27 different

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Wedding photo of Reverend Archie Mitchell and his wife, Elsie. Mrs. Mitchell was pregnant when she fell victim to the Bly balloon.

states. Balloons were reported over an area stretching from the Alaskan island of Attu to Michigan—all the way to northern Mexico. The American media reported on many of the earliest recoveries, but in January 1945 the government's Office of Censorship, hoping to convince the Japanese that their program was failing, ordered a publicity blackout. That same day, a balloon bomb exploded in Medford, Oregon, digging a shallow crater and shooting flames 20 feet into the air.

At first, American authorities surmised that the balloons were originating in German POW camps or Japanese internment camps within the United States. Other experts thought the devices were weather or barrage balloons that had drifted off course. As more of the balloons were recovered across North America, however, the military realized that they were dealing with a new type of enemy weapon. With a little scientific detective work, the government pinpointed the geographical origin of the sand used in the weapons' ballast bags. American B-29 bombers were dispatched to Honshu, Japan, where they destroyed several plants involved in the production of hydrogen for the balloons, effectively crippling the *fugo* project. Back in the United States, military officials quickly coordinated search efforts with forest rangers and law enforcement officials. Airborne coastal defense, less of a priority as the war neared its end, underwent a brief resurgence as the U.S. Army's Project Sunset coordinated radar and aircraft surveillance around the clock. Over 2,000 military personnel participated in the overall effort to track, recover, and study the balloon bombs.

On May 10, 1945, five days after the bombing of Bly, more than 450 people attended a mass funeral for the victims. Due to the size of

the crowd, the service was held at the Klamath Temple in Klamath Falls, 50 miles southwest of Bly. Boy Scouts served as pallbearers, as the male victims had all been members of the local troop. To help avoid similar tragedies, the government lifted the media blackout. In late May 1945, the headquarters of Western Defense Command, based at the Presidio in San Francisco, issued a cautious message entitled "Japanese Balloon Information Bulletin No. 1." In an effort to avoid a media frenzy and quell public paranoia, the document was to be read aloud to small gatherings "such as school children assembled in groups, preferably not more than 50 in a group and Boy Scout troops." The bulletin warned that many hundreds of Japanese balloons were reaching American and Canadian airspace. If anyone came upon such a balloon bomb on the ground, the document instructed him to keep at least 100 yards away from the device and inform the local police or sheriff. "Let us all shoulder this very minor war load," read the bulletin, "in such a way that our fighting soldiers at the front will be proud of us."

In Japan, radio broadcasts trumpeted the success of the balloon bomb program, claiming that the devices had triggered major fires and caused 500 American casualties. The propaganda broadcasts promised that Japanese soldiers would invade the United States by the millions, all carried to the enemy coast by massive balloons. In reality, the Japanese high command had heard little about the balloon bombs' effects on the United States before abruptly canceling the program in April 1945. Of the 9,000 balloons launched by the Japanese, experts estimated that perhaps 900 reached North America.

The accident site in Bly became a tragic landmark for the local community. In 1950, the Weyerhaeuser lumber company asked Robert Anderson, a local stonemason and Navy veteran, to create a monument to the victims of the balloon bomb. A newspaper account noted that "the wooded spot where tall pines show scars left by bomb fragments has been set aside by Weyerhaeuser Timber Company as Mitchell Recreation area, named in honor of the Rev. Archie Mitchell, sole survivor of the war tragedy. The location is on a Weyerhaeuser tree farm." Today the land is supervised by the Forest Service.

Although the town of Bly soldiered on, the shock of the balloon bomb incident reverberated for decades afterward. Some 40 years after the deaths on Gearhart Mountain, John Takeshita, a former resident of the wartime relocation camp at Tule Lake, California, met a Japanese woman who as a young student during World War II had pieced together paper bal-

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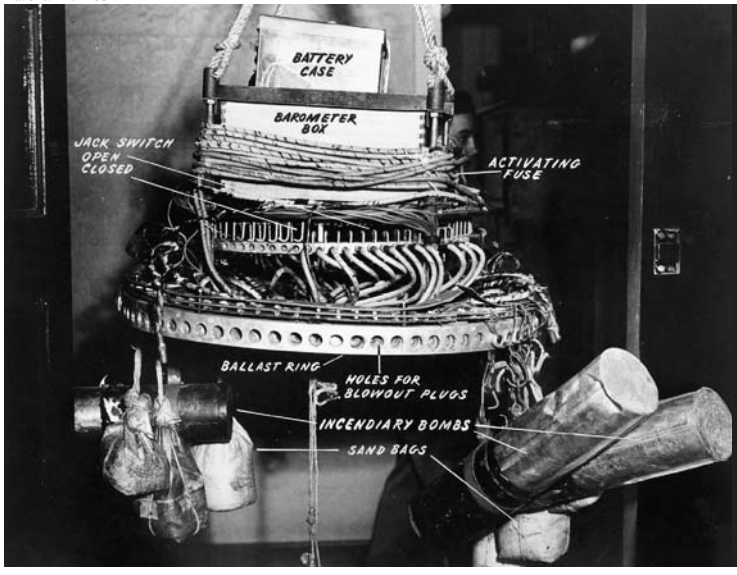


"Brain center" of a Japanese balloon bomb. The automatic altitude control device allowed the balloon to travel at 30,000 feet during the 3-to-4-day trip to the United States.

loons in Tokyo. Takeshita, intrigued, talked to the woman and many of her former classmates, all unwitting participants in the balloon project during the war, and shared the story of the tragedy that had occurred in Bly. In 1985, the Japanese women crafted 1,000 paper cranes, symbols of peace, and sent them to the family members of those who were killed by the balloon bomb. Later, handmade dolls and handwritten letters arrived from Japan, each one a heartfelt apology to the people of Bly.

In May 1995, 50 years after the incident, nearly 500 people convened in the Mitchell Recreation Area for a rededication of the accident site. "It was really something," remembered Ed Patzke, brother to two of the victims. "Hard to believe it could be put on by a little place like this. They had 10 big school buses to transport people to the site. There were several different speakers. They were playing taps and the bagpipes played 'Amazing Grace.' Near the end they had a flyover by the fighter jets from the Air National Guard unit at Kingsley Field. Most of the town was there. It was very effective." John Takeshita purchased cherry trees to plant at the accident site, at Reverend Mitchell's old church in Bly, and at a school in Japan that had supplied students for the balloon project.

On the day of the rededication, Cora Conner was finally able to come to terms with what had happened on Gearhart Mountain half a century earlier. Locked away in the telephone office on the day of the bombing, unable to inform anyone about what had happened, she had been haunted by the incident long after the bodies were cleared away. "I had really, really bad nightmares for years," she says. "I didn't realize what was causing them until I met John Takeshita and the Japanese women who visited Bly for the ceremony. One of the girls who had been involved in making the paper for the balloons was the same age I was. I was fortunate to meet her and talk about what had happened. It began to ease the pain, and eventually the nightmares stopped."

For Archie Mitchell, who lost his wife, unborn child, and five members of his church on that fateful day in 1945, life eventually resumed its course. He remarried and in 1947 moved to Southeast Asia to continue the missionary work that inspired him. Unfortunately, fate would deal him yet another blow. On June 1, 1962, a wire report brought his name back into the news: "Today word came from South Vietnam that three Americans had been kidnapped by Communist guerrillas. One of them is Reverend Archie E. Mitchell, a former pastor at Bly in southeast Oregon." Mitchell was never heard from again.

Even today, unrecovered balloon bombs are thought to dot the North American landscape. The bombs are slowly disintegrating with time, but are still potentially lethal. To date, approximately 300 of the aged weapons have been found. As late as 1992, a balloon bomb was recovered in Jackson County, Oregon, about 100 miles west of Bly. Nearby, the Klamath County Museum keeps the history of the incident alive for current and future generations. Todd Kepple, manager of the museum, notes, "It's safe to say that we'll always feature an exhibit on Japan's balloon bomb campaign, including its general failure to inflict the widespread damage that was intended, and the heartache it caused in one tiny Northwest community. Many current residents of southern Oregon are scarcely aware of the history of Japanese balloon bombs, but a handful of local residents are determined to make sure the story is never forgotten." □

By Peter Suciu

The Ohio Valley Military Society's 15th Annual Show of Shows attracted collectors from all over the world.

ONE OF THE FINEST COLLECTIONS OF MILITARIA EVER HOUSED IN one room was on hand in Louisville, Kentucky, at the 15th annual Show of Shows. With enough equipment present to mount a major military campaign and enough uniforms to hold an impressive victory parade, it was an event that more than lived up to its name.

The Ohio Valley Military Society sponsors the annual collectibles show each February. As one of the oldest and largest militaria collector's clubs in the world, the OVMS boasts more than 2,000 current members. The Show of Shows is just one of three shows the group sponsors, but it has also become the largest in the world, attracting flocks of international dealers and collectors to the Kentucky Fair & Expo Center. While rival events such as the Military Antiques Xtravaganza, or MAX, focus almost exclusively on Third Reich collectibles, the SOS offers a much more eclectic mixture of fine items.

Today, the Show of Shows is the largest collectibles show in the world. Prior to its beginning in 1992, there were few events even close to mega-show status. In the early 1980s, only a few regional events anywhere in the country were devoted entirely to militaria, and most of these were 200- or 300-table shows. The largest was the annual Cincinnati, Ohio, show sponsored by the Ohio Valley Military Society, with about 400 tables. Over time the MAX was launched, and while that show grew in size and scope, it also suffered from repeated changes in venue. For many collectors, last year's show in Indianapolis fell short of expectations.

By contrast, the Show of Shows has repeatedly sold out in recent years. The annual show, which is held in Louisville in February, features more than 1,600 tables, with a wide variety of collectibles. "There is something there for everyone, whether you collect $100,000 Nazi baubles or $3 patches," noted Jeff Shrader of Advance Guard Militaria, who regularly travels to a variety of shows, large and small. "The result is something of a giant 'ecosystem,' for lack of a better word. There is simply too much merchandise to be absorbed. As word of this atmosphere has spread, more and dealers are buying or trying to buy tables, and more and more collectors are making a major commitment of time and travel to attend."

The 2007 Show of Shows saw more than 1,650 tables devoted to collectibles from the English Civil War to complete Iraqi Republican Guard uniforms. There was a heavy mix of Imperial German, British, American, and Japanese items. If that were not enough, the show coincided with the National Gun Day & Civil War Show, which was held just down the hall

All photos by Peter Suciu

One of many of the attractions at the 2007 Show of Shows was this Canadian Black Watch uniform from World War I and poster from the same era. BELOW: A complete World War I German uniform was available for viewing, if not purchase.

with another 3,000-plus tables.

"I thought this year's SOS was the best of the past three that I've attended," said longtime collector and dealer Tom Buck, who traveled from Virginia Beach for the three-day event. "The Kentucky Expo Center has the ability to put on more than one show of such magnitude at the same time. Plus, this venue is close to all the major hotels, restaurants, and most importantly to some, the airport."

The premier collectors are still regarded by many of the old timers to be those of the Third Reich, and there was no shortage of daggers, swords, flags, uniforms, and helmets. The stahlhelm, or steel helmet, remains one of the most recognizable collectibles, and the SOS had some of the finest examples ever seen, mixed in with plenty of high-end (and not so high-end) fakes.

One notable advanced collector was on hand to sell nearly his entire collection of early Model 1935 German helmets. These included more than 25 helmets from the various branches of the German Wehrmacht, along with unique camouflaged examples. It was no fire sale, however. The prices were fair but firm, and the examples were worth every penny. Other collectors seemed to agree, and by the end of the show the table was bare, with the helmets selling in record time.

Among the prized German helmets at the show was an early pre-World War II double-decal Waffen SS helmet that sold for more than $8,000. And it wasn't just German Third Reich items that were at a premium this year. For the past several years, no doubt thanks to movies such as *Saving Private Ryan* and HBO's *Band of Brothers*, the popularity of American World WWII militaria has been on the rise.

"For general U.S. helmets, the SOS has just about anything the collector could ask for," said advanced helmet collector Larry Munnikhuysen. He noted that he saw fewer rare examples than in years past, but that prices continue to rise across the board. "The prices at this year's SOS were high, as they are every year," Munnikhuysen said. "As the good material decreases in quantity, the remainder goes up in price—rules of the marketplace. Almost without exception, though, the marked price is negotiable; therefore, dealers tend to mark high in the anticipation of negotiating down to a fair price. I did find some pieces were terribly underpriced, which generally indicated dealer uncertainty over authenticity or dealer ignorance of what the item really was."

Vintage American uniforms were also on

hand, including numerous examples of Indian War swords and uniforms. One of the show's biggest surprises was that a nearly complete Pattern 1882 corporal's uniform went unsold. With jacket, pants, and helmet, the seller actually had the collection priced to sell, offering it for only a few hundred dollars more than some of the helmets alone. It was another example of how some eras are still underappreciated.

Much more popular this year were items from Imperial Germany, and the SOS boasted more than 100 excellent examples of the infamous German Pickelhaube, or spiked helmet. Pickelhaubes.com founder Brian Loree made the trek down from Toronto to gather with other fellow "Pickel-heads," or spiked-helmet collectors. The event has become a regular gathering place for the enthusiasts. One member in good standing was away, serving in Iraq, and the group had a mannequin crafted in his likeness. "The Show is worth the trip because of the amount and variety of militaria for sale plus the fellowship that comes with meeting up with other collectors," said Loree. "I think that militaria collectors are a rather isolated group. There are few members of the general population who are interested in old military antiques."

ABOVE: The author found a true "Holy Grail" at SOS. This Model 1902 Imperial German tropical helmet is among the rarest of any pre-WWI German helmets. TOP: This original Dutch pattern "zischargge" helmet is of the style used during the English Civil War.

Loree added that the shows, especially the big ones such as SOS, are a good place to learn about other areas of militaria and history. "It really does not matter if you collect Canadian, British, American, German, WWI, or WWI," he said, "we can all appreciate how it feels to buy that special piece at a show. Most collectors are really anxious to share their knowledge and if you have an open mind, you can learn a great deal."

Even with the National Gun Day Show down the hall, SOS was not to be confused with a gun show. While there were plenty of vintage firearms, those seeking modern handguns, sporting rifles, and hunting equipment were completely out of luck. Swords, daggers, bayonets, and other bladed and edged weapons were plentiful, however, with everything from medieval Japanese samurai swords to Third Reich daggers on hand.

This year's show saw a decline in one area of firearms, however—nonfiring guns. Because of a recent ban on the importation of parts for "nonguns," the actual number available at the show was significantly smaller than in past years. And while there were still a few non-functional machine guns available, there weren't the massive, cluttered tables that resembled a cache of small arms from a Third World civil war.

For decades, Japanese militaria has been the "other" Axis collectible, existing in the shadow of German Third Reich items. But in recent years, new understanding of Imperial Japan, coupled with a wave of new movies, has spurred interest. At this year's SOS, the exhibit of Japanese items was the largest yet, and prices were already on the rise.

With the recent Clint Eastwood-directed movie *Letters from Iwo Jima* nominated for an Academy Award for best picture, it was not surprising to collectors that Japanese militaria was finally in vogue. While still rare, Japanese militaria is often much more affordable—and accessible—than German items, even when the rising prices are factored in. The days of finding a near-mint German helmet for under $1,000 are all but a thing of the past, but a nice Japanese helmet still can be found for $500 to $700, and items such as tunics and web gear can be had for only a few hundred dollars.

This year, Japanese collectibles certainly seemed to attract far greater interest than in years past. "It may have to do with the fact the ranks of the World War II vets are getting pretty thin and their descendants, particularly male, want to learn about their experiences first hand before it's too late," observed Stan Zielinksi, an editor for *BANZAI*, the monthly newsletter devoted to Japanese militaria.

The Show of Shows has benefited in recent years from a better grouping of similar dealers, forming what is akin to the "Old Quarters" of an ancient or medieval city. This was most

ABOVE: An excellent selection of Japanese bayonets was available from Eric Doody, notable dealer of Japanese militaria. RIGHT: An original Pattern 1882 American Army uniform was up for sale.

notable at this year's show, where many of the most significant dealers of Japanese items were grouped together, giving collectors with an interest in the area a better chance to take it all in and determine what they liked best.

While large comic book or science fiction conventions are known for their guest speakers and celebrities, military collectibles shows are typically concerned with the items themselves. But the Show of Shows had attendees lining up for a chance to meet and greet several notable veteran guests, including decorated heroes and authors. Among the honored guests were Medal of Honor recipient Jack H. Lucas, a World War II Marine Corps veteran from Iwo Jima and the author of the book *Indestructible;* and Robert L. Williams, 101st Airborne Division and D-Day veteran and the author of *Return to Normandy*.

Other notable guests included World War II P-51 pilots and Tuskegee Airmen Eugene J. Richardson, Jr., and John L. Harrison, as well as Ted "Dutch" Van Kirk, navigator of the *Enola Gay,* and David "Tex" Hill, a pilot with the Flying Tigers. These American flyers traded stories with Luftwaffe pilot and former POW Gottfried P. Dulias, who was on hand to share tales of his exploits over the Russian Front. Also on hand was actor and former USMC drill sergeant R. Lee Ermey, host of *Mail Call* on the History Channel.

Proving that there was something for just about every budget, the Show of Shows attracted several notable book dealers, as well as authors selling signed copies of their books on topics ranging from American sleeve patches to the history of the "Blue Max."

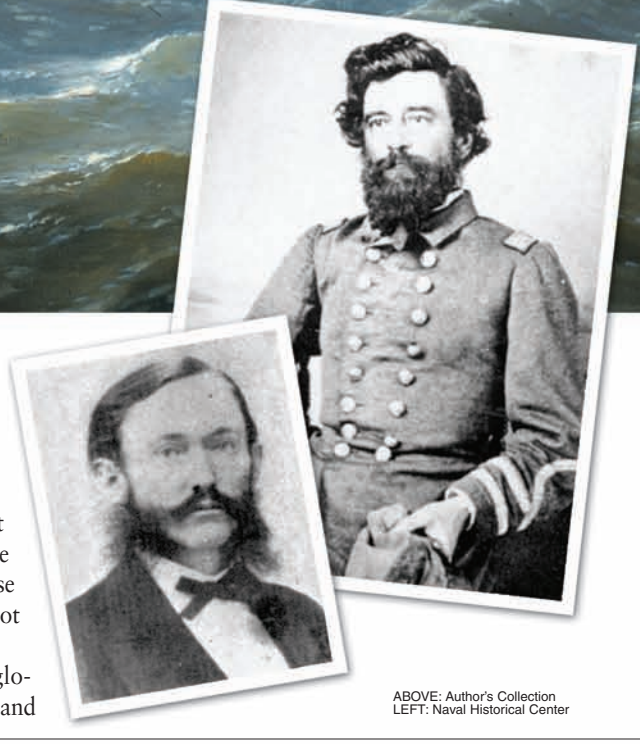
The rear of the hall served as the staging area for attendees to chat with the notable guests, and also offered a sight of a restored Kubelwagon, which was on hand courtesy of a World War II reenactment group. About the only thing missing was some period armor, but Louisville is just a short drive from Fort Knox, which is home to the General George Patton Armor Museum.

For those looking to head to SOS next year, the dates have already been announced—February 21-24, 2008. Plan to show up early, and expect the sellers to be willing to wheel and deal. The best tip for those considering heading to the show next year is to sign up for OVMS membership, as the show is open to dealers and members on Thursday, while the general public can't get in until Friday and Saturday. Likewise, members can attend the Sunday breakdown, which is a good time—and last chance—to find that special bargain. The Show of Shows will continue to offer a mix of historic items, notable personalities, and the chance to mingle with fellow collectors from around the world. □

Last of the GRAY PHANTOMS

WITH THE CONFEDERACY CRUMBLING, SWIFT AND DARING BLOCKADE-RUNNERS SUCH AS *BANSHEE II* AND *OWL* MADE DESPERATE RUNS ACROSS THE HIGH SEAS INTO THE LAST REMAINING SOUTHERN PORTS.

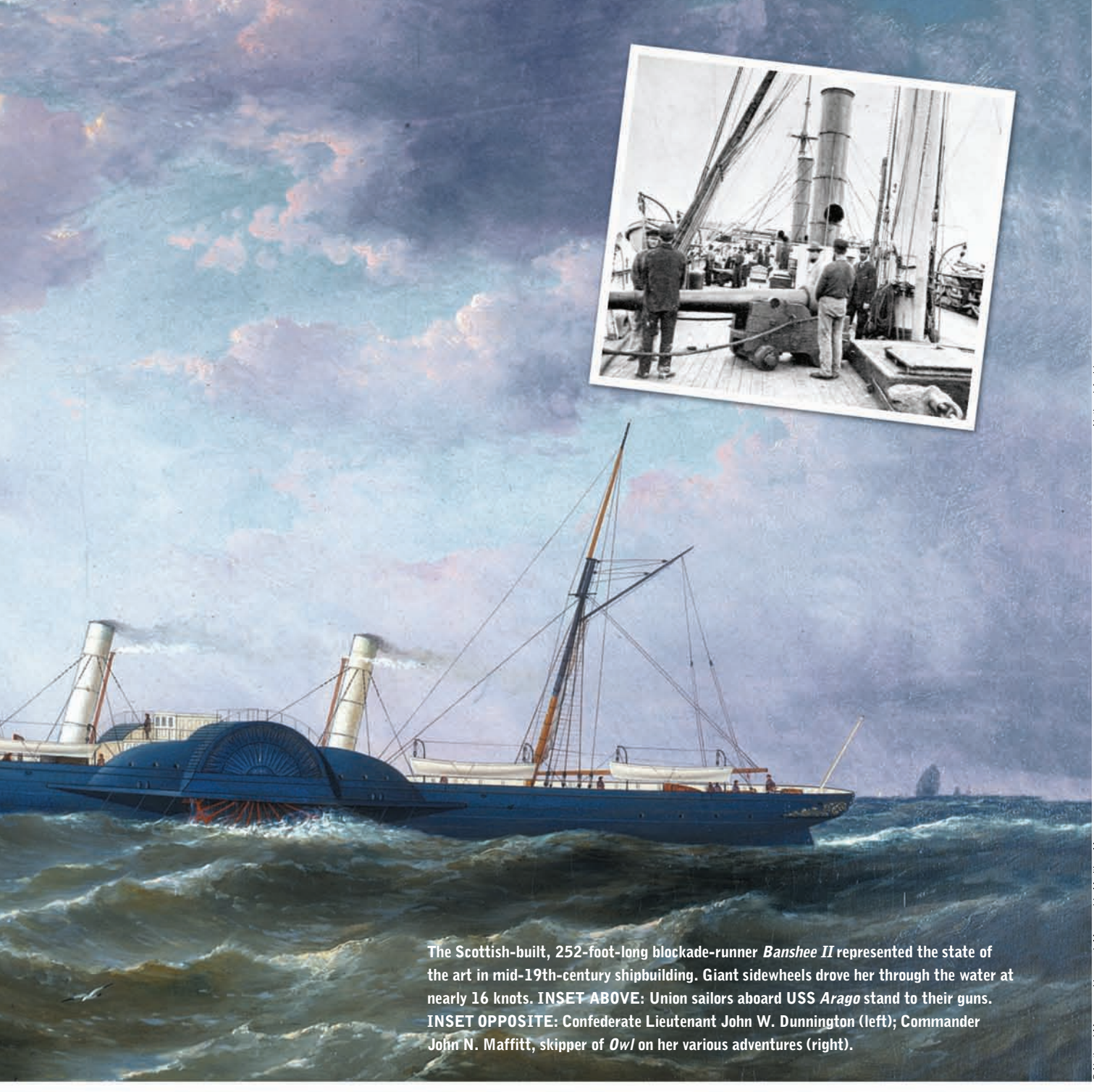
BY R. THOMAS CAMPBELL



DESPITE THE INCREASING EFFECTIVENESS OF THE UNION NAVAL BLOCKADE, MORE and more steamers plied the waters between the few remaining Confederate ports and Nassau, St. George, and Havana during the last two years of the Civil War, bringing supplies and munitions to the hard-pressed southern armies in the field. In 1863, a total of 199 blockade-runners made safe arrivals in Confederate ports. The next year that number increased to 244, with another 30 steaming into port in 1865. To achieve this daredevil record required a special design of steamer, one with high speed, large cargo capacity, and a low silhouette on the horizon. Add to those specifications a brave and imaginative commander, and success was usually, but not always, assured.

One such commander was English-born Tom Taylor, a supercargo for the Anglo-Confederate Trading Company of Liverpool, England. Taylor managed the loading and

ABOVE: Author's Collection
LEFT: Naval Historical Center



National Archives

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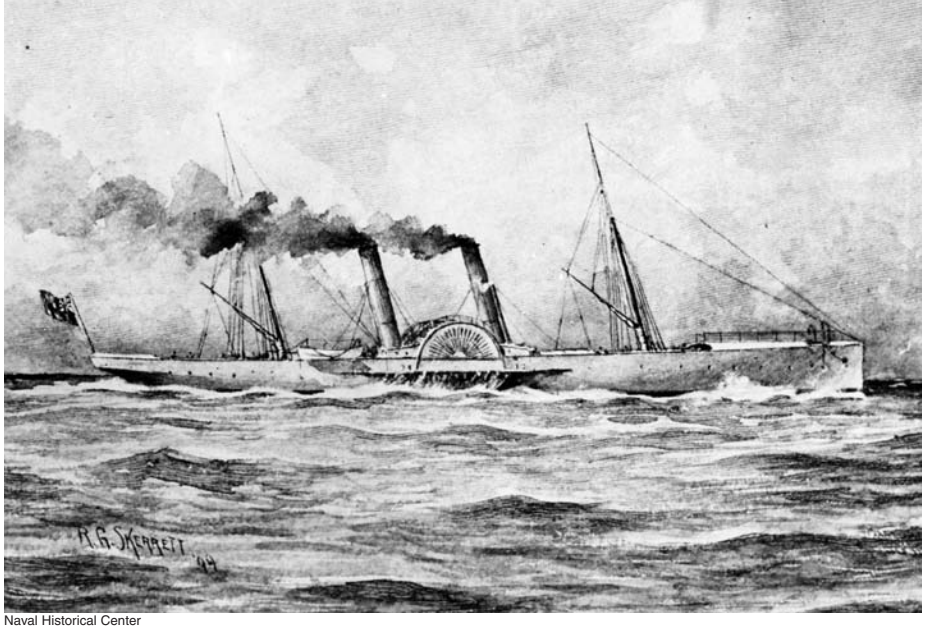
The Scottish-built, 252-foot-long blockade-runner *Banshee II* represented the state of the art in mid-19th-century shipbuilding. Giant sidewheels drove her through the water at nearly 16 knots. INSET ABOVE: Union sailors aboard USS *Arago* stand to their guns. INSET OPPOSITE: Confederate Lieutenant John W. Dunnington (left); Commander John N. Maffitt, skipper of *Owl* on her various adventures (right).

delivery of all payloads consigned to the Confederacy by his company. During the war, his steamers compiled an astounding record, successfully completing 49 runs out of 58 attempts. Supervising the operations of nine blockade-runners, Taylor personally made 28 trips to assure the safe delivery of his company's merchandise. Although sympathetic to the South's cause and her struggle for independence, Taylor put his vessel and his life in harm's way not for patriotism, but for the enormous profits that could be accrued by successfully running the Federal blockade. Little did he realize, however, that when the 252-foot *Banshee II* steamed majestically up the Cape Fear River at Wilmington, North Carolina, on the crisp fall morning of October 15, 1864, it would be the start of his last voyage of the war.

Banshee II represented the state of the art in shipbuilding when she was launched at the Aitken and Mansel facility at Glasgow, Scotland, in the summer of 1864. Advanced in concept, she constituted a class of vessel that would dominate the design of steam-driven merchant vessels well into the 20th century. Grossing 439 tons, *Banshee II* was 252 feet long with a beam of 31 feet. She drew only 11 feet of water when fully loaded, which permitted her to cross the bar easily at Wilmington. Her steel hull was a light gray, and her giant sidewheels could drive her through the water at over 15½ knots. Her 53-man crew, with their English officers and Southern pilots, made the speedy *Banshee II* almost impossible to catch. She was the pride of the Anglo-Confederate Trading Company, and Taylor was eager to put her through her paces.



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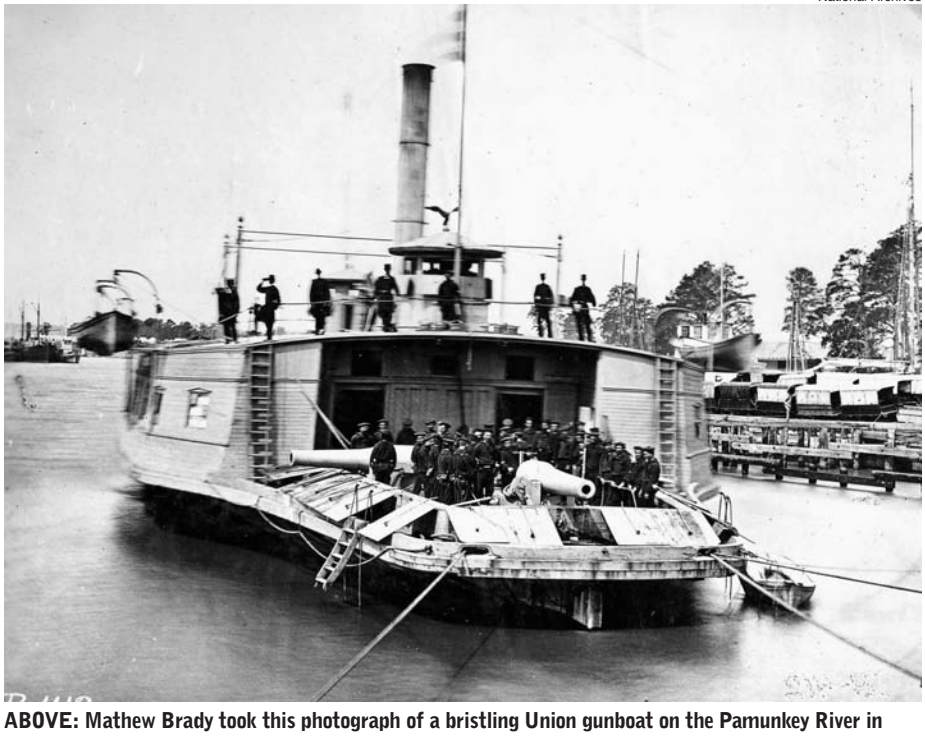


ABOVE: Mathew Brady took this photograph of a bristling Union gunboat on the Pamunkey River in Virginia. TOP: The original *Banshee*, built in 1862 in Liverpool, was captured in 1863 and sold to the U.S. Navy; she became part of the North Atlantic Blockading Squadron.

Banshee II made three round trips into Wilmington before Taylor had an opportunity to sail on her. Laden with a valuable cargo of cotton, she left Wilmington on December 28, just before the Union attack and eventual capture of Fort Fisher. Taylor's favorite captain, the competent Jonathon Steele, was at the helm. Accompanied by Frank Hurst, the agent for the Anglo-Confederate Trading Company at Nassau in the Bahamas, Taylor set sail for Havana before attempting a run across the Caribbean to Galveston, Texas.

"When all was ready we experienced the greatest difficulty in finding a Galveston pilot," Taylor recalled. "Owing to the high rate of pay, numbers of men were to be found ready to offer their services, [but] it was extremely hard to obtain competent men. After considerable delay we had to content ourselves at last with a man who said he knew all about the port, but who turned out to be absolutely worthless. We then made a start, and with the exception of meeting with the most violent thunderstorm, in which the lightning was something awful, nothing extraordinary occurred on our passage across the Gulf of Mexico, and we scarcely saw a sail."

It is 725 nautical miles from Havana to Galveston. The problem was not so much the distance between the two ports as the lack of transportation from Texas to the rest of the Confederacy. With the fall of Vicksburg and Port Hudson on the Mississippi River in 1863, very little in the way of supplies could reach the eastern half of the country. Most of the munitions, provisions, and consumer goods arriving at Galveston, therefore, were shipped by rail to Houston, where they were distributed throughout the Trans-Mississippi Department. In March 1865, *Banshee II* cautiously approached the Texas coast.

"It was a comparatively calm and very dark night," Taylor wrote, "just the one for the purpose, but within an hour all had changed and it commenced to blow a regular 'Norther.' Rain came down in torrents, then out of the inky blackness of clouds and rain came furious gusts, until a hurricane was blowing against which, notwithstanding that we were steaming at full speed, we made little or no way, and although the sea was smooth our decks were swept by white foam and spray. Suddenly we made out some dark objects all around us, and found ourselves drifting helplessly among the ships of the blockading squadron, which were steaming hard to their anchors, and at one moment we were almost jostling two of them. Whether they knew what we were, or mistook us for one of themselves matters not; they were too much occupied about their own safety to attempt to interfere."

Getting into Galveston that night was impossible, so Taylor let *Banshee II* drift free until she was clear of the enemy fleet. He steamed slowly seaward, shaping a course to make land 30 miles to the southwest at daylight. He dropped anchor in perfectly calm water, the storm having subsided almost as quickly as it had risen. Having seen enough of his new pilot to realize that he was no good whatsoever, Taylor decided to lie off shore all day, keeping a sharp lookout, and that night creep slowly up the coast until he made out the Federal blockading fleet.

ANCHORING AGAIN FOR THE NIGHT, Taylor decided to make a bold dash for Galveston at daybreak. "All went well," he recalled. "We were unmolested during the day and we got under weigh towards evening, passing close to a wreck which we recognized as our old friend the *Will-o'-the-Wisp*, which had been driven ashore and lost on the very first trip she made after I had sold her. Immediately afterwards we very nearly lost our own ship too. Seeing a post of Confederate soldiers close by on the beach, we determined to steam close in and communicate with them in

order to learn all about the tactics of the blockaders and our exact distance from Galveston. We backed her close in to the breakers in order to speak, but when the order was given to go ahead she declined to move, and the chief engineer reported that something had gone wrong with the cylinder valve, and that she must heave to for repairs."

It was an anxious moment. *Banshee II* had barely three fathoms beneath her, and her stern was almost buried in the white water. Taylor released the anchor, but in the heavy swell it failed to hold and the ship began to drift slowly but steadily toward shore. When at length the engineers managed to turn her head, Taylor and the others on the bridge were greatly relieved to see her point seaward and clear the breakers. "As soon as we reached deep water the damage was permanently repaired," he reported, "and we steamed cautiously up the coast, until about sundown we made out the topmasts of the blockading squadron right ahead. We promptly stopped, calculating that, as they were about ten to eleven miles from us, Galveston must lie a little further on our port bow. We let go our anchor and prepared for an anxious night; all hands were on deck and the cable was ready to be unshackled at a moment's notice, with steam as nearly ready as possible without blowing off, as at any moment a prowler from the squadron patrolling the coast might have made us out."

Banshee II had not been lying off for very long when the men on the starboard bow suddenly made out an enemy cruiser steaming toward them. It was a critical time; all hands dashed onto the deck and a man stood ready to knock the shackle out of the chain cable and release the anchor. Fortunately for the blockade-runners, the Union ship did not discover them, and soon disappeared over the horizon to the south.

Two hours before daylight, *Banshee II* quietly raised anchor and steamed on, feeling her way cautiously by the lead. When daylight broke, the men found themselves inside the Union fleet opposite Galveston and prepared to make a short dash for the bar. "We had been under weigh some time, when suddenly we discovered a launch close to us on the port bow filled with Northern blue-jackets and marines," Taylor said. "'Full speed ahead,' shouted Steele, and we were within an ace of running her down as we almost grazed her with our port paddle-wheel. Hurst and I looked straight down into the boat, waving them a parting salute. The crew seemed only too thankful at their narrow escape to open fire, but they soon regained their senses and threw up rocket after rocket in our wake as a warning to the blockading fleet to be on the alert."

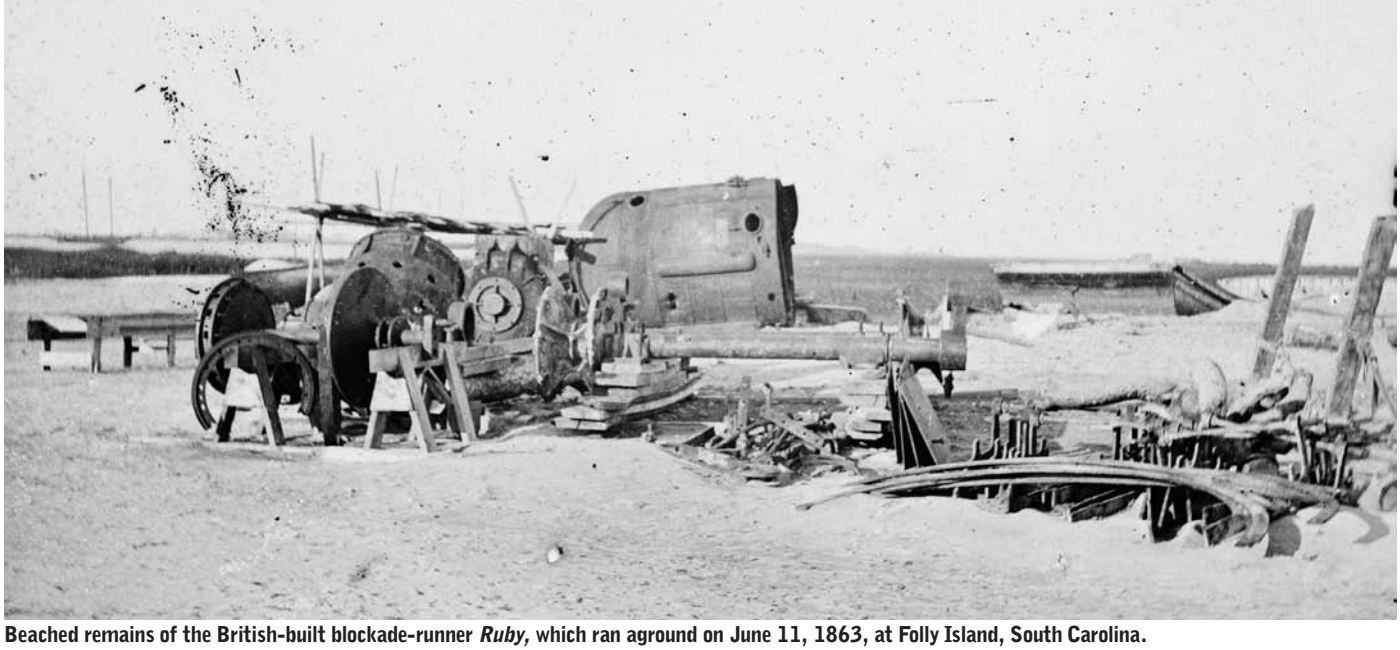
TO THEIR DISMAY, THE CONFEDERATES DISCOVERED THAT THEY HAD NOT TAKEN SUFFICIENT account of the effects of the norther's effect on the current—instead of being opposite the town of Galveston, they found themselves three or four miles downstream. It was a moment for immediate decision: the alternatives were to turn tail and race back to sea with the Federals' fastest cruisers in full pursuit, or else make a short but dangerous dash for Galveston under fire. Taylor decided to go for it, and orders to turn ahead full speed were given. To avoid the enemy fleet, *Banshee II* made a dash for the swash channel along the beach, only to discover that it was nothing more than a cul-de-sac. Shoal waters and heavy breakers still stood between the blockade-runner and Galveston.

By this time the Union fleet had opened fire, and shells were bursting all around the ship. Luckily for the Confederates, the enemy ships were in rough water on the windward side of the shoal and could not employ their guns with any precision. Although *Banshee II*'s funnels were riddled with shell splinters, she received no significant damage and had only one man wounded. But the worst was yet to come—white water lay dead ahead, and the ship's only chance was to bump through it. Everyone on board was well aware that if she became stuck fast they would lose both the ship and their lives, for no lifeboats could have been launched safely in such a surf.

"With two leadsmen in the chains we approached our fate," Taylor recalled, "taking no notice of the bursting shells and round shot to which the blockaders treated us in their desperation. It was not a question of the fathoms but of the feet we were drawing: twelve feet, ten, nine, and when we put her at it, as you do a horse at a jump, and as her nose was entering the white water, 'eight feet' was sung out. A moment afterwards we touched and hung; and I thought all was over, when a big wave came rolling along and lifted our stern and the ship bodily with a crack which could be heard a quarter of a mile off, and which we thought meant that her back was broken."

Banshee II went ahead. The worst was over, and, after two or three minor bumps, she emerged

Library of Congress



Beached remains of the British-built blockade-runner *Ruby,* which ran aground on June 11, 1863, at Folly Island, South Carolina.

into the deep channel, helm hard a-starboard and heading straight for Galveston Bay, leaving the disappointed blockaders in her wake. It was a narrow escape, but *Banshee II* steamed gaily up to the town's wharves , which were crowded with townspeople who had watched the ship's exploits and cheered heartily for her success.

Taylor, to his disappointment, found Galveston a godforsaken place, its streets covered with sand, its wharves rotting, and its defenses in deplorable condition. The Federals, he believed, could have easily captured the city if they had taken the trouble to do so. But the crew's welcome was a warm one, and Maj. Gen. John Magruder, commanding the city, boarded the ship for a night of cheerful camaraderie. "We had a capital French cook," Taylor noted, "and as plenty of game, fish, and oysters were procurable, and our good liquor was plentiful, we had all the necessary ingredients for many most sociable evenings—this was the bright side of the picture."

The dark side of the picture was that Taylor had to travel all the way to Houston to secure an outbound cargo of cotton for his vessel. This he finally achieved, and after shipment over the worn-out rail line to Galveston, *Banshee II* cleared Galveston and returned to Havana without incident. By the time she reached the Cuban port, however, the war was over. Taylor sent the speedy runner home to England, where she was eventually sold for less than one-tenth of her original cost. The career of one of the Confederacy's last blockade-runners ended peacefully, if anticlimatically.

A SISTER SHIP, *OWL*, BELONGED TO A NEW CLASS OF BLOCKADE-RUNNERS THAT APPEARED TOWARD the close of the war. These vessels were constructed in Liverpool, England, under the watchful eye of Commander James D. Bulloch, the Confederate Navy's agent in Europe. Owned by the Southern government, they included the unimaginatively named menagerie *Bat, Stag,* and *Deer. Owl* was a 771-ton sidewheeler with a low, rakishly molded steel hull. She was 230 feet long, 26 feet abeam, and drew 10½ feet of water. Her twin Watt engines could drive her at speeds up to 16 knots. She could carry 800 bales of cotton, and her oversized coal bunkers gave her an extra-long cruising range. Being careful to comply with English neutrality laws, *Owl* was placed under the command of British master Matthew J. Butcher and left Liverpool bound for Halifax, Nova Scotia, on July 29, 1864.

Bulloch had personally selected *Owl*'s cargo. He elaborated on its contents in a letter to Confederate Secretary of the Navy Stephen R. Mallory, stating that the cargo contained goods for the Navy Department as well as the Ordnance Bureau. Bulloch also explained that he was sending a consignment of wire and a magnetic exploder with 100 fuses for electric torpedoes, the result of successful experiments carried out by Commander Matthew Fontaine Maury.

Arriving at Halifax, *Owl* attracted the attention of the U.S. Consul, who telegraphed on August 29 that the new blockade-runner was in port and was expected to leave shortly. Two days later, Consul M.M. Jackson rushed another telegram off to the Federal government. "British Blockade-running iron steamer Owl, 330 tons, has just cleared for Nassau with large valuable cargo, real destination, doubtless, Wilmington," he reported. "Steamer, schooner rigged; has two pipes, one abaft the other. Is long and low and painted light-red color. Takes nearly 100 seamen, probably to supply another vessel at Wilmington."

Owl did indeed head for Wilmington, but stopped first at Bermuda to pick up a pilot, arriving in the North Carolina port on September 19, 1864. Ten days prior to *Owl*'s arrival, Commander

THE GUNS OF THE BLOCKADERS ROARED, SENDING SHELLS SCREAMING INDISCRIMINATELY IN ALL DIRECTIONS.

John Newland Maffitt received a telegram from Mallory. In it the naval secretary instructed Maffitt to relinquish his command of the ironclad CSS *Albemarle* in eastern North Carolina and proceed immediately to Wilmington, where he was to report to Flag Officer William F. Lynch. There, Mallory ordered, Maffitt was to take command of *Owl*. It would be Maffitt's final command of the war, but it would be several exasperating months before he was able to take her to sea.

While docked at Wilmington, Confederate naval officers attempted to transfer the *Owl* to government registry, but for some reason Butcher did not consider the process properly executed, and he refused to relinquish command. On the night of October 3, he crossed the bar at the mouth of the Cape Fear and headed for Bermuda with a full load of Confederate cotton. In spite of the moonless night, Federal blockaders quickly spotted the ship and proceeded to send nine shots screaming over and around the speeding Confederate vessel. Several shells exploded in close proximity, slightly wounding Butcher and several crewmen, but *Owl* reached St. George safely a few days later. Butcher, informed that a Confederate naval officer would soon take his place for the return trip to Wilmington, sailed for Liverpool. First Lt. John W. Dunnington took command of *Owl* and, guided by the experienced pilot Tom Burroughs, arrived uneventfully back at Wilmington on December 2.

While Maffitt waited impatiently in Wilmington for the transfer of *Owl* to naval registry, he received a series of instructions from Mallory. The naval secretary was convinced that the most efficient use of the fast steamers now entering the service was to operate them strictly as Confederate Navy vessels, officered and crewed by regular naval personnel. Mallory emphasized that "the *Owl* is the first of several steamers built for and on account of the Confederate Government, and which are to be run under the direction of the Secretary of the Navy. Naval officers are to be placed in command, and you are selected to take charge of the *Owl*. As the *Owl* will soon be followed by several other vessels under this Department, it is important that uniformity, as far as practicable, be observed in their management."

Five days later, Mallory sent an urgent telegram to Maffitt at Wilmington: "It is of the first importance that our steamers should not fall into the enemy's hands. Apart from the specific loss sustained by the country in the capture of blockaded runners, these vessels, lightly armed, now constitute the fleetest and most efficient part of his blockading force off Wilmington. As commanding officer of the *Owl* you will please devise and adopt thorough and efficient means for saving all hands and destroying the vessel and cargo whenever these measures may become necessary to prevent capture. Upon your firmness and ability the Department relies for the execution of this important trust."

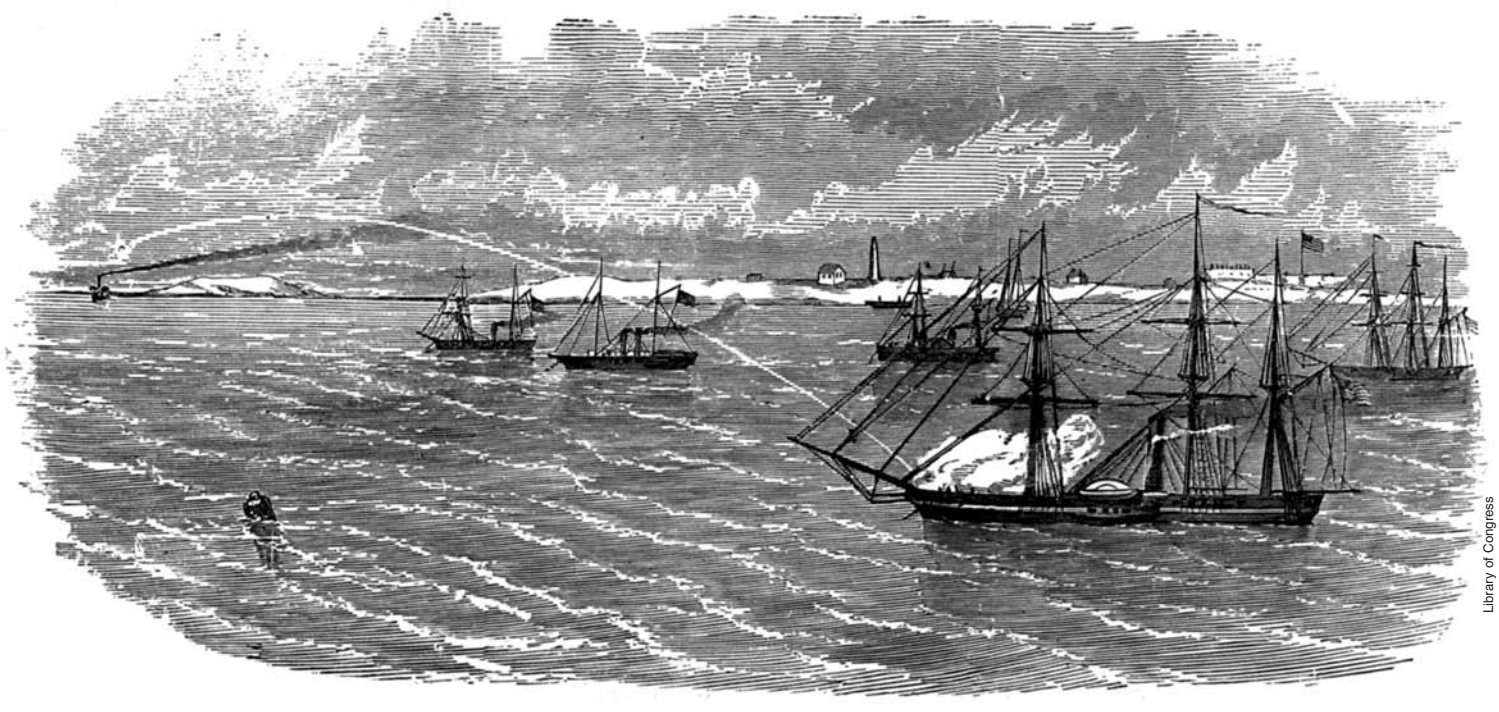
On November 25, Mallory wrote again: "Before leaving port you will station your crew for the different boats of the steamer, having placed in them water and provisions, and also nautical instruments. When capture, in your judgment, becomes inevitable, fire the vessel in several places and embark in the boats, making for the nearest land. The Department leaves to your discretion the time when and the circumstances that must govern you in the destruction of the *Owl* in order to prevent her falling into the hands of the enemy."

Although Mallory's obsession with the possible capture of *Owl* indicated the desperate

straits in which the Confederacy now found itself, the urgent recommendations to a bold and imaginative commander such as Maffitt were unnecessary. Upon the arrival of his new command, Maffitt immediately set out to sea aboard the speedy runner. On the dark night of December 21, he drove *Owl* across the bar at the mouth of the Cape Fear River and set a course for Bermuda. Stacked in the hold and on deck were 780 bales of valuable southern cotton. *Owl,* as Maffitt later wrote, "ran clear of the Federal sentinels without the loss of a rope yarn." Arriving at St. George, Maffitt found several blockade-runners sheltering there, awaiting the results of the expected Union assault against Fort Fisher. By the first part of January, word reached the island that Union Maj. Gen. Benjamin Butler's assault against the Confederate bastion had failed, and Maffitt prepared to return to Wilmington.

On January 12, 1865, with her cargo hold stuffed with assorted hardware for the Army of Northern Virginia, *Owl* stole out of St. George and sped toward the North Carolina coast. On the dark night of the 15th, Maffitt approached Old Inlet at the mouth of the Cape Fear River. Luck was with him. Lookouts spotted only one blockader, and he easily avoided it. Crossing the bar on a high tide at 8 PM, Maffitt eased the big steamer up to the wharf at Fort Caswell. Wisps of smoke spiraled from her twin stacks as crewmen, elated over their easy and successful run through the blockade, rapidly drew the mooring lines taut. Presently, a small boat pulled alongside. The occupants, Confederate soldiers from the fort, had some disturbing news. Fort Fisher had fallen earlier that same day to a combined Federal land and navy force. At that very moment, Southern forces were evacuating Fort Caswell and preparing to retreat to Wilmington. Several Union warships had already crossed the bar at New Inlet and were prowling the river. *Owl* must leave immediately.

KNOWING THAT HE HAD ONLY MINUTES TO MAKE HIS ESCAPE, MAFFITT ACTED WITH COOL dispatch. As he was about to give the order to slip the chain, his pilot begged for a short delay. He pleaded for Maffitt to wait for 10 minutes while he slipped ashore to check on his ailing wife. Maffitt granted his request, on the strict condition that he return quickly. Giving his word, the pilot bounded onto the wharf and disappeared into the darkness. Maffitt nervously paced the steamer's deck. Calling the engine room, he ordered the engineer to maintain the highest possible steam pressure and to be ready to start the engines at a moment's notice. In addition, he ordered the lines cast off and the chain unshackled. Upriver, Maffitt could already see the shadowy forms of several blockaders, and they appeared to be moving in *Owl*'s direction. The minutes seemed like hours. As steam hissed softly from the engine room, Maffitt once more checked his watch—10 minutes, 15 minutes, they must leave now! Suddenly, the pilot came bounding out of the night. The moment his feet hit the deck, *Owl*'s big paddle wheels began to turn. The mooring chain let go, her head turned southeastward, and the powerful steamer ran for the open sea. The nearest Federal ship immediately opened fire, her shells exploding around the fleeing blockade-runner, showering her with shrapnel but doing no damage. Soon the speeding *Owl* was lost in the darkness.



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U.S. war steamer *Mississippi* fires on a Confederate blockade-runner at Ship Island near the mouth of the Mississippi River.

Maffitt had mixed feelings as the throbbing engines drove *Owl* on into the night. He and his vessel had escaped capture, but with Wilmington gone, he was now completely isolated from his family and his homeland. As *Owl* steamed seaward, the muffled explosions caused by the destruction of Fort Caswell were clearly audible. Maffitt wrote that they "rumbled portentously from wave to wave in melancholy echoes." Watching the distant flashes of light, the Confederate commander "in poignant distress turned from the heartrending scene." It was more than he could bear.

With his coal supply dangerously low, Maffitt returned to Bermuda under easy steam, entering St. George's harbor on January 21. He arrived just in time to stop five sister blockade-runners that

were preparing to depart for Wilmington. Being the ranking Confederate officer in the islands, Maffitt called 1st Lts. John Wilkinson and John Low to the home of the Confederate quartermaster, Major Norman S. Walker. There, amid the gloom of the most recent news, the three officers discussed possible strategies for reaching the struggling armies with their supplies. Charleston had not yet fallen, and Maffitt and the others determined to sail for that port. "My cargo being important, and the capture of Fort Fisher and the Cape Fear cutting me off from Wilmington," Maffitt wrote, "I deemed it my duty to make an effort to enter the harbor of Charleston in order to deliver the much needed supplies."

ACCORDINGLY, ON JANUARY 26, 1865, *OWL* CLEARED ST. GEORGE BOUND FOR CHARLESTON. Although several Federal warships were sighted on the departure from Bermuda, the speedy vessel soon left them far behind. Arriving off Charleston in the dead of night, Maffitt placed the government mail and his journal, including his log of his famous cruise aboard CSS *Florida,* in two weighted bags and slung them over the side on a heavy line. He ordered a trusted sailor to stand by the line with a hatchet—if capture appeared imminent, he was to send the pouches to the bottom of the sea. Several Federal blockaders, freed from their service at Wilmington, now crowded the entrances to the channels leading into Charleston, and Maffitt steamed *Owl* slowly back and forth trying to locate an opening.

Writing later, he described the nerve-racking effort. "On the western tail-end of Rattlesnake Shoal," he reported, "we encountered streaks of mist and fog that enveloped stars and everything for a few moments, when it would become quite clear again. Running cautiously in one of these obscurations, a sudden lift in the haze disclosed that we were about to run into an anchored blockader. We had bare room with a hard-a-port helm to avoid him some fifteen or twenty feet, when their officer on deck called out, 'Heave to, or I'll sink you!' The order was unnoticed, and we received his entire broadside, that cut away our turtle-back, perforated the forecastle, and tore up the bulwarks in front of our engine room, wounding twelve men, some severely, some slightly. The quartermaster stationed by the mail-bags was so convinced that we were captured that he instantly used his hatchet, and sent them, well moored, to the bottom; hence my meager account of the cruise of the *Florida.*"

Instantly, the area was illuminated by burning lights and numerous rockets that sputtered into the blackened sky. *Owl* was silhouetted in the flickering light as her paddle wheels drove her forward at full throttle. The guns of the blockaders roared, sending shells screaming indiscriminately in all directions. Enemy vessels swarmed everywhere, but owing to the confusion, Maffitt was able to thread his way through the melee. *Owl,* although badly damaged, finally reached the perimeter of the surrounding blockaders, and with engines still at full power, drove steadily onward into the darkened Atlantic. With no way into Charleston, a disheartened Maffitt reluctantly set course for Nassau.

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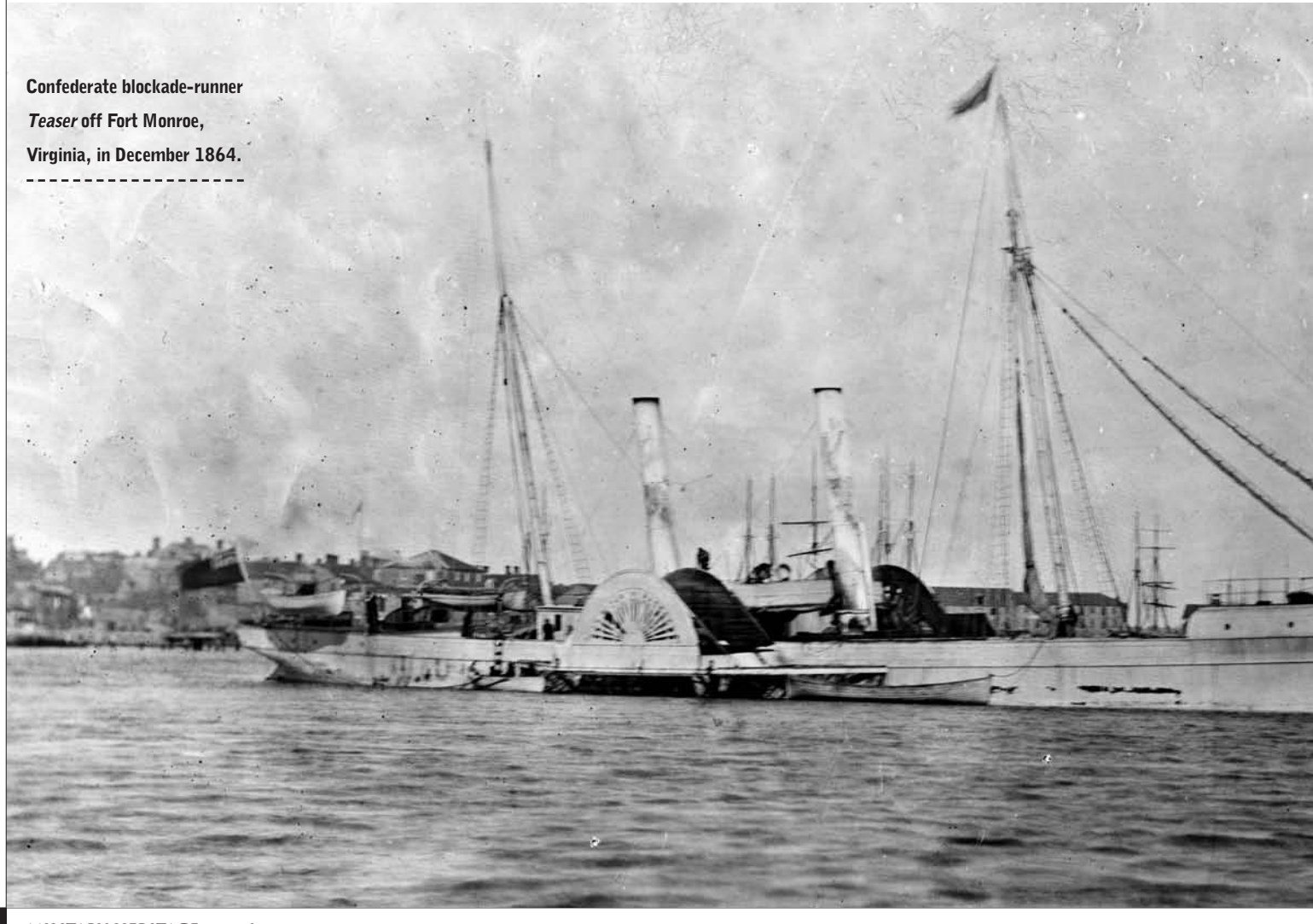


Confederate blockade-runner *Teaser* off Fort Monroe, Virginia, in December 1864.

Owl limped into the Bahamian port, Maffitt recorded, "with a shot through her funnel, several more through her hull, her standing rigging in rags and other indications of a hot time." The Confederate commander wanted to try running into Charleston again, but while *Owl* was undergoing repairs, word reached Nassau that the Confederates had evacuated the South Carolina city. Only one southern port remained accessible now—the distant town of Galveston. With a full cargo of essential supplies still on board *Owl*, Maffitt was determined to land it somewhere in the Confederacy. He decided to sail to Havana and, from there, try to reach Galveston. On the way, however, Maffitt agreed to drop off three passengers on the North Carolina coast. Thomas Conolly, a wealthy member of British Parliament, had approached him in Nassau, asking for his assistance in reaching the Confederacy. He was the bearer, Conolly explained, of important dispatches from Confederate diplomat James Mason to the government officials in Richmond. Maffitt, eager to be on his way, agreed, and although the repairs to *Owl* were incomplete, he steamed out of Nassau on February 23, bound once more for the Carolina coast.

Just before dawn on the morning of February 26, *Owl* approached Shallotte Inlet. With much difficulty, in a cold driving rain, crewmen lowered a small boat, and Conolly and two others set out for the sandy shore that was barely visible in the fog and spray. The heavy surf swamped the boat, but the three men, cold, wet, and miserable, made it safely onto the beach. Eventually, Conolly made his way to Fayetteville, where he visited Maffitt's family before journeying on to Richmond. There he met President Jefferson Davis, dined with General Robert E. Lee, and witnessed the sad evacuation of the Confederate capital.

After dropping off Conolly and the two other passengers, Maffitt steamed for Havana, where he arrived around the first of March. There he found other blockade-runners, including Tom Taylor's *Banshee II*, preparing for the long run to Galveston. It took four to five days to steam the 725 miles from Havana to Galveston, and with the prospect of finding no coal at the Texas port, the steamers had to carry enough fuel for the round trip. Only the largest steamers had the bunker capacity to carry that much fuel. Even then, their draft might be too great to allow passage over the bar at Galveston. *Owl* still had her full load of supplies, and while her fuel supply might be marginal, Maffitt resolved nevertheless to make the attempt.

Before he could start for Galveston, however, Maffitt received orders from the Navy Department to execute one more courier mission. On March 24, he landed Assistant Surgeon D.S. Watson and First Assistant Engineer E.R. Archer on the Florida coast, nine miles from St. Marks. Maffitt left Havana for good in the middle of March. Hot on his heels, USS *Cherokee* steamed out of the harbor as well. Passing Morro Castle, *Owl* hugged the western coast, followed by *Cherokee*. The chase continued for more than an hour. *Owl* had the advantage of speed and Maffitt's superior seamanship. Throwing "dust into the eyes" of his pursuer by changing from hard to soft coal and clouding the air with dense, black smoke, *Owl* steamed past the Federal cruiser and disappeared into the darkness.

Arriving off the Texas port, Maffitt found 16 Federal blockaders guarding the entrance to Galveston Bay. Pressing on in the face of heavy fire, *Owl* managed to cross the bar, but ran aground on Bird Island Shoals. The enemy commanders were determined to destroy the helpless steamer, and they increased their fire, their shells dropping all around. Maffitt stood on the bridge as exploding shrapnel whizzed about him and coolly directed efforts to free the runner. Her powerful paddle wheels labored in reverse, but *Owl* would not budge. Union fire became more accurate, and it looked as if all was lost, when someone pointed to a steamer coming out of Galveston Bay. It was the little CSS *Diana*, captained by James H. McGarvey. Seeing *Owl*'s plight, McGarvey steamed into the storm of shot and shell and threw her a towline. With *Diana*'s help, *Owl* slid off the sandbar and steamed safely into the bay. It was a narrow escape.

On May 9, long after the hardened veterans of Robert E. Lee and Joseph Johnston had stacked their arms for the last time, Maffitt ran the blockade out of Galveston and arrived back in Havana. There he received word that all Confederate forces west of the Mississippi had surrendered. Maffitt and his fellow officers had to face the reality that their cause was lost. Deciding that the best course of action was to return to Liverpool and deliver *Owl* to Fraser, Trenholm and Company, Maffitt left Havana for the long ocean crossing. During the voyage, he maintained a wary eye for Federal cruisers, which were under urgent orders to apprehend him. Stopping at Nassau for coal, *Owl* reached Liverpool without incident and steamed up the Mersey River on July 14.

The following day, Maffitt gathered the entire crew on the quarter deck and addressed them for the final time as their commander. "This is the last time we meet as sailors of the Confederate States Navy," he told them. "The Confederacy is dead. Our country is in the hands of the enemy, and we must accept the verdict. I am grateful to you for your loyalty to me, and to the South." Maffitt then paid off the men, spliced the mainbrace one last time, and to the accompaniment of three resounding cheers from the crew, slowly lowered the Confederate flag. *Owl*'s gallant little war was over. □

FURTHER READING

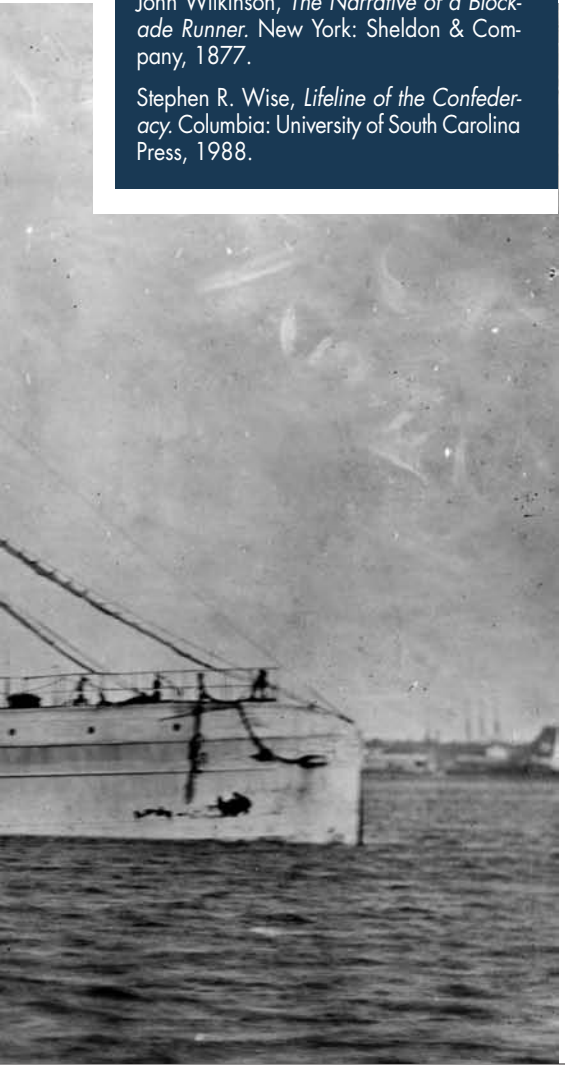
J. Thomas Scharf, *History of the Confederate States Navy*. New York: Crown Publishers, 1977.

Royce Singleton, *High Seas Confederate*. Columbia: University of South Carolina Press, 1994.

Thomas E. Taylor, *Running the Blockade*. London: John Murray Publishing, 1896.

John Wilkinson, *The Narrative of a Blockade Runner*. New York: Sheldon & Company, 1877.

Stephen R. Wise, *Lifeline of the Confederacy*. Columbia: University of South Carolina Press, 1988.



BY BARRY PORTER

Misplaced AGGRESSION

BY THE SPRING OF 415 BC, A PEACE TREATY BETWEEN THE warring city-states of Athens and Sparta had held firm for six years. The savage and unrelenting Peloponnesian War had come to the point where both sides realized that neither was in a position to vanquish the other. Peace seemed the logical choice—at least until the rivals could replenish their armed forces and come up with a new battle plan. That spring, Athens took a decisive step in that direction.

The year before, two cities on the island of Sicily had sent ambassadors to Athens to ask for help with their troublesome neighbor, Syracuse. Athens had intervened in the past to block Syracuse's various expansions, but these attempts had been weak at best, more diplomatic than warlike, and easily rebuffed by a talented Syracusan general, Hermocrates. Now Athenians considered the advantages of taking over the entire island. Not only would it provide them with additional allies in the simmering war with Sparta, but it would also cut off a vital trading partner of Sparta and its supporters.

One of the Sicilian cities, Segesta, offered Athens 60 talents of silver, enough to equip 60 warships for a full month. Three Athenian commanders—Nicias, Alcibiades, and Lamachus—were chosen to lead the expedition. The outspoken advocate for the invasion of Sicily was the youthful and excitable Alcibiades, a charismatic adventurer who had caught the imagination of many Athenians. He argued that the fight against Syracuse would be comparable to Athens' struggle against Persia 70 years earlier. His chief nemesis in the debate was Nicias, the architect of the fragile peace with Sparta. Nicias felt that Athens should not become involved in a war in Sicily—that they should not waste resources, money, or men in a distant fight when nearby Sparta was close to rebuilding her own forces. Lamachus, the third leader of the expedition, was chosen mainly to help break the inevitable deadlock between the other two men. He supported the invasion, but he also respected Nicias's position.

Seven Athenian ships were sunk and several others damaged by a Syracusan counterattack, stranding the Athenian invaders on the island of Sicily. From a 19th-century wood engraving.

The Granger Collection, New York

Seeking an advantage over its longtime Spartan rivals, Athens launched an ill-conceived invasion of Sicily, only to have it falter outside the walls of Syracuse.

After much debate, the Athenian Assembly decided to send 60 ships to Sicily, but no more. They hoped that Segesta and other allies on Sicily would provide the armies to fight the Syracusans while Athens confronted them on the high seas and in their harbors. If they were successful, Athens and its allies would control Syracuse; if they were defeated, the loss would be relatively small. It was a reasoned, cautious response.

A few days later, a second debate commenced, and Nicias made the first of many serious mistakes. After Alcibiades bragged that Syracuse was not as powerful as everyone thought, Nicias realized that Athenian enthusiasm for the invasion had risen. He wanted to scare the Assembly into accepting his more diplomatic approach, and in the heat of the debate he exaggerated Syracuse's power and the amount of Athenian resources it would take to defeat the Syracusans. Nicias insisted that Syracuse was fully prepared to mount a major battle against any invaders. They had the numerical advantage, plenty of food, and better communication with their leaders. If Athens were to have any hope of conquering Syracuse, Nicias argued, the expedition would have to be larger, stronger, and more expensive.

THE ASSEMBLY AGREED WITH HIM. RATHER THAN ABANDON THE INVASION, however, the lawmakers felt the expedition should be enlarged, despite the costs. Their eagerness had bloomed under Nicias's gloomy predictions, and he had inadvertently set into motion a potential disaster. Upon his advice, the Assembly dispatched 134 triremes, 5,100 hoplites, and thousands of light infantry to Syracuse.

Before the three generals embarked with the armada, a strange religious heresy struck Athens. On the morning of June 7, Athenians awoke to find that numerous statues of Hermes distributed throughout the city had been desecrated. Hermes was the god of travelers, and the affront was widely interpreted as an attempt to stop the expedition. The Assembly offered rewards and immunity to any eyewitnesses to the crime. Eventually, several came forward and accused Alcibiades. He denied the charges, which he said came from his political enemies, and insisted that he be put on trial under penalty of death to prove his innocence. He wanted above all to avoid being tried in absentia, when his supporters—mostly the soldiers and sailors who would be joining him on the expedition—would be gone and his enemies would have free rein. Instead, Alcibiades was encouraged to leave on schedule and return to stand trial after a successful military campaign, when his popularity would be even greater. He agreed, much to his later regret. In June the Athenian forces, fully supplied thanks to private donations and money from the Athenian treasury, headed for Corcyra, an island off Greece's western shores, to rendezvous with their allies. According to the historian Thucydides, it was the most expensive invasion force yet dispatched from a single Greek city.

The clash was hard and loud. The skies seemed to echo the assault, booming with thunder and slashing with rain.

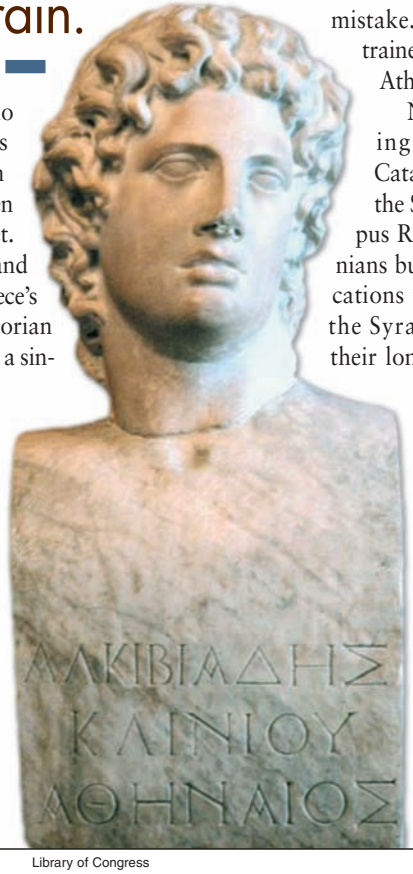
The leaders of Syracuse were not totally ignorant of the forces being arrayed against them. Hermocrates, who had been instrumental in kicking Athens out of Sicily nine years earlier, goaded the people of Syracuse to do so again. He argued that they should seek help from Sparta and Corinth, Athens' traditional enemies, as well as cities in Italy and Carthage in North Africa. The Syracusans were not entirely convinced of the threat until word came that a massive Greek force had landed at Rhegium, in southern Italy. Suddenly the certainty of war was driven home. Syracusans began to prepare for battle.

While the Syracusans readied themselves, the Athenians found a place from which to launch their attack—Catana, a Sicilian city 40 miles north of Syracuse. Earlier, Alcibiades had sent 10 ships into the harbor at Syracuse to provide reconnaissance and call out surrender terms to the enemy. The Greek ships found no waiting fleet, no soldiers on the beach, no sign that Syracuse was prepared to fight. They returned to Alcibiades with the good tidings, not realizing that Syracuse was busy preparing for a land battle, not one at sea.

Alcibiades's confidence was soon dampened by his own countrymen. The Athenian Assembly had continued its attack on him once he was gone, reviving the charge of sacrilege. Alcibiades's enemies pressed for his arrest. Although they finally settled on a lesser charge of mocking a religious rite, the state trireme *Salaminia* was sent to catch up with the armada and bring Alcibiades back to Athens for trial. *Salaminia* arrived at Catana and Alcibiades was arrested. He promised to follow the ship back to Athens, but at the first opportunity he turned his trireme toward Sparta, escaping both his guards and his trial. In Athens, he was convicted in absentia and sentenced to death. His property was confiscated by the state.

The sudden turn of events left Nicias and Lamachus in charge of the expedition. Nicias, the stronger leader, did not feel that he could return to Athens without achieving some sort of victory in Sicily. He attempted unsuccessfully to attract allies from around the island. Valuable time passed as he debated what course to take. The element of surprise was lost. Even worse, Nicias had neglected to include a large group of cavalry on the expedition, perhaps because of the difficulty of transporting horses across the sea. It would prove to be a grievous mistake. Syracuse had a large, well-trained cavalry ready to charge the Athenians at the first opportunity.

Nicias decided to attack. Luring the Syracusan forces to Catana, he led his own navy into the Syracuse harbor near the Anapus River. Once on land, the Athenians built trenches and other fortifications to defend themselves. When the Syracusan army returned from their long, pointless trip, they found the Athenians ready and eager to fight. The Athenians were ranged in a line eight soldiers deep. Their left flank was exposed to attack by the enemy's 1,200 cavalry, so they crossed the river and used its natural bend for protection. Their right flank bordered the open waters of the harbor and marshland. On both sides, Nicias placed archers to counter any cavalry attacks.



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The Art Archive/Dagli Orti (A)

ABOVE: Ruins of the Greek fortifications at the Castle of Eurialo, dating back to 400 BC, at Syracuse, Sicily. OPPOSITE: Athenian general Alcibiades pushed for the invasion of Syracuse, then turned traitor and fled to the arch-enemy, Sparta.

The swiftness of the Athenian advance surprised the Syracusans. The clash was hard and loud. The skies seemed to echo the assault, booming with thunder and slashing with rain. The tumult frightened the Syracusans, who lacked the long experience in warfare that the Athenians possessed, and the discipline of the Athenian army carried the day. The Athenian right wing forced the Syracusans back, and the center pushed forward and broke the enemy line. Syracusan soldiers ran for their lives. If Nicias had possessed adequate cavalry, he could have killed or captured the fleeing soldiers immediately. Instead, the Syracusans used their own cavalry to cut off the pursuing Athenians and save the lives of their compatriots. In the first clash between the two sides, Syracuse lost around 260 soldiers, Athens only 50. But outright victory had escaped Athens. It would not be the last time.

Realizing that the enemy was regrouping, Nicias ordered his forces to retreat to their ships and sail back to Catana. He sent an after-the-fact request for cavalry and more money, and again tried to garner allies on the island of Sicily. While he waited, the Syracusans regrouped. Hermocrates convinced Syracusan leaders to increase the size of the army by drafting poor men into the ranks. He made the war effort more manageable by reducing the number of generals from 15 to three (including himself), with full powers unrestrained by the assembly. Meanwhile, he placed forces in areas where he thought the Athenians might try to land and sent word to the Spartans asking them to mount their own attacks on Athens back in Greece. Finally, Hermocrates extended the city walls to make it more difficult for the Athenians to conduct a siege.

Neither side attacked during the winter. Nicias drifted ineffectually, seeking allies, demanding supplies, and achieving little. As the spring of 414 BC bloomed, however, so did Athenian morale. They seized a strategically important position, a plateau called Epipolae that overlooked the city, and built a fort along its northern cliffs where they could store their supplies. Soon afterward, a force of 650 Athenian cavalry arrived, and Nicias ordered siege walls to be built around Syracuse to isolate it from outside help. Syracusans started to construct a counterwall, one that would cut across the intended line of the Athenian wall, but their plans were thwarted by 300 hoplites and a corps of light infantry that drove off the Syracusans and destroyed the counterwall.

THE ATHENIAN SIEGE WALL CONTINUED TO GROW, EXTENDING ACROSS THE Epipolae to the Great Harbor in the south and surrounding a large part of Syracuse. The Athenians moved their fleet into the harbor while their soldiers held the plateau above. Then they attacked. Lamachus led the soldiers by himself—Nicias remained in his fort on the Epipolae plateau, ill from a kidney infection. Leading his men across the Lysimeleia marsh by using planks and doors to cross the soft ground, Lamachus seized the initiative. The Syracusans again were taken by surprise; half their army fled back into the city, the other half raced toward the Anapus River. Three hundred Athenian hoplites moved to cut them off, but they found themselves cut off in turn by the Syracusan cavalry already waiting at the river. The cavalry pushed back the hoplites and then struck the Athenian right wing.

The Athenians scattered. Lamachus, stationed on the left wing, rushed to their aid, but found himself suddenly trapped on one side of a ditch. He was quickly surrounded and killed and his body carried off by the Syracusans to their fort at Olympieum, south of the city. It was a major blow to the Athenian campaign. The boldness of their previous attacks on the Syracusan walls

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Greek hoplites, shields in hand, march colorfully around this terra cotta vase. The real invasion was not as simple.

had probably been devised by Lamachus, considering the hesitancy of Nicias, and now his leadership had been eliminated.

The Syracusans continued their counterattack, capturing the siege walls from the plateau down to the harbor. They nearly captured the fort where Nicias lay. Nicias had enough presence of mind, however, to order his men to build a great fire, which had the dual purpose of driving back the enemy while also warning the Athenians on the plateau and the beach that their fort—and general—were in great danger. The hoplites rallied, despite the loss of Lamachus, and pushed the Syracusans back behind their city walls. Then they raced to their remaining leader's rescue.

After catching their breaths, the Athenians rebuilt the wall to the south and continued building one to the north. Syracuse was now in dire straits. Help from Sparta and the rest of the Peloponnese did not seem imminent. The Syracusans replaced their generals, including Hermocrates, with new ones, but the fresh leadership did little more than discuss possible surrender terms. The end of Syracuse looked mere weeks away.

But the Athenians had an Achilles' heel the Syracusans did not know about—Nicias himself. When word came to him that Sparta was sending four ships to aid Syracuse, led by the obscure general Gylippus, he did little to stop them. Gylippus was considered a man of inferior status within Sparta, and therefore was expendable. Whatever the reason for his delay, Nicias sent only four of his own ships to stop them. By the time the Athenian ships reached Locri, the Spartans already were at Himera, in northern Sicily, drawing allies and weapons from the locals. The cities of Selinus and Gela, in the south, also joined Gylippus, and by the time he was ready to approach Syracuse by land, he commanded around 3,000 infantry and 200 cavalry.

GYLIPPUS ARRIVED JUST IN TIME. THE ATHENIANS WERE ABOUT TO COMPLETE the southern siege wall, a double barrier that ran down to the harbor. But in their haste, they had left a vital part of the Epipolae plateau unguarded. It was through this western breach, called the Euryalus Pass, that Gylippus led his forces.

At the southern siege wall, the two armies met. Gylippus had hoped to shock the Athenians into a retreat with the sudden appearance of his army, but for once, Nicias did not flinch. Neither did he press his advantage and pursue the enemy when Gylippus withdrew his forces. It was yet another mistake on Nicias's part, allowing Gylippus more time to better array his men and effect a new strategy. The Sicilian troops distracted the Athenians on the southern siege wall while a larger force overran the Athenians' unfinished northern wall and took the vital fort at Labdalum on the northwest corner of the Epipolae plain. In a single stroke, Gylippus captured Athens' supplies and treasury. Nicias's failure to safeguard the vital position was yet another mark against his reputation.

Nicias had no choice but to create a new supply depot. He chose a most inhospitable place for one, at Plemmyrium, two miles south of Syracuse and far from any available water. The Syracusans immediately set up base at Olympieum, between Plemmyrium and Syracuse, and used their cavalry to prevent Athenian scouts from gathering water or other essentials.

With Nicias's forces now divided, one part on the Epipolae plain, the other far off at Plemmyrium, he had few options open to him. Surrounding Syracuse with walls in order to isolate it now seemed impossible. Even a strategic retreat across land was closed off since the Sicilians held the western pass and their forces at Labdalum cut off the north. However, there was still the sea. To keep their escape route clear, Nicias managed a bit of foresight and sent out 20 ships to intercept the Corinthian fleet then approaching.

Meanwhile, Gylippus began to build a counterwall on the plateau and regularly harassed the Athenians camped there. He sensed that Nicias was not up for a fight. The Athenian troops were ready and willing, but their orders were to hold their ground and not engage the enemy unless defending themselves. This damaged the morale of the soldiers, who had come all this way to fight the Sicilians and take Syracuse, not sit around on their haunches until their leader could figure out what to do.

Unfortunately for the invaders, Gylippus knew very well what to do. When Nicias sent soldiers to stop Gylippus from cutting off their northern wall, the enemy's javelin throwers and heavy cavalry crushed the Athenian hoplites on their left flank and forced the troops back into the safety of their fort. Once the hoplites were safely tucked away, the Sicilians finished their counterwall and kept Syracuse open to their aid. The Athenian ships sent to intercept the Corinthian fleet also failed and the Corinthians sailed into the Great Harbor with 2,000 more trained fighting men. Gylippus used the new troops to secure the Euryalus Pass on the plateau, thus cutting off the Athenians from both the plain and the escape route to the north.

Nicias could not ignore the obvious—his entire expedition was in danger of defeat. Yet he could not muster the moral courage to admit failure and return home to face the political fallout from such a disaster. Instead, he wrote to the Assembly at Athens, arguing that the Athenian leadership must either recall their forces or send massive reinforcements and more money. If he had hoped the assembly would choose the former, thus removing some of his responsibil-

ity for a retreat, he was wrong again. The Assembly decided that since he had nearly conquered Syracuse with what forces he had, surely he could lead them to victory if he got the reinforcements he asked for. They sent two additional commanders along with these reinforcements. Eurymedon would come immediately with 10 ships and 120 silver talents, and Demosthenes would follow with an even larger force.

The Assembly seemed to follow Nicias's lead in making bad decisions. The solons directed their ships to attack the Laconia coast, blatantly violating the peace treaty between the two cities. Sparta was well aware of Athens' drained resources in Sicily, and King Agis ordered his armies to begin ravaging the farmlands outside Athens in the spring of 413 BC. Cavalry that might have been sent to help Nicias in Sicily were kept home to hold the Spartan forces at bay.

As the attacks against Athens proceeded, Sparta also sent reinforcements to Sicily. Gylippus badly needed them. Despite his victories, keeping allied soldiers around Syracuse was quite expensive. Syracuse did not have a healthy treasury, and providing for foreign soldiers while building and manning warships was increasingly difficult. If Athenian reinforcements arrived and managed to retake the harbor, he might have to consider surrendering.

Gylippus had to act fast. He contacted Hermocrates, inside Syracuse, and they conceived a strategy whereby Hermocrates would send 80 triremes toward Plemmyrium as a distraction while, under cover of night, Gylippus led an army to take the Athenians by surprise. The Athenians, however, saw the ships coming and put out 60 of their own vessels to push them back. They fought the Syracusans to a standstill and sank 11 enemy ships while losing only three of their own. It would have been a resounding victory if the Athenians had not made a serious mistake back on shore. Nicias and his men watched the sea battle from the beach when they should have been keeping their attention on their backs. When Gylippus attacked on land, he caught them completely by surprise and captured the three forts the invaders had built there. Nicias's soldiers scattered, losing their food and supplies yet again.

GYLIPPUS'S VICTORY WAS DEVASTATING TO THE ATHENIAN CAUSE. NEWS OF THE battle traveled swiftly throughout Sicily. Those cities that had remained neutral before now flocked to Syracuse's side. Gylippus made sure that word reached Sparta as well, and he urged the Spartans to send out a fleet to cut off any supplies from Athens. He had Nicias on the run. The Athenians had lost their last base on the island; they were without food or supplies. Yet Gylippus knew that as long as the Athenian fleet controlled the harbor, reinforcements could still arrive in time to save them. For both sides, the clock was ticking.

Nicias, to his credit, did not panic. He gathered his men and kept them organized. When Gylippus sent a corps of Sicilian Greeks to run down the Athenians, Nicias sprang an ambush on them and bought himself more time. Gylippus attempted another two-pronged attack, sending soldiers overland as a diversion while Syracusan warships surprised the enemy in the harbor. But the Athenians expertly defended their southern walls and sent out their fleet to fight the Syracusans to a standstill.

On the third day of the battle, the Athenians made another serious mistake. After failing to make any headway, the Syracusan fleet withdrew and headed for shore, where food merchants had gathered to feed them. The Athenians did the same, but before they could begin to eat, the Syracusans suddenly attacked again, catching the Athenians by surprise. Syracusan javelin throwers rained down death on Athenian rowers. The tactic was a shattering success. The Syracusan fleet destroyed seven Athenian ships and damaged several others. The Athenians retreated, badly beaten, and the Syracusans put up a victory trophy proclaiming to all that they now controlled the Great Harbor.

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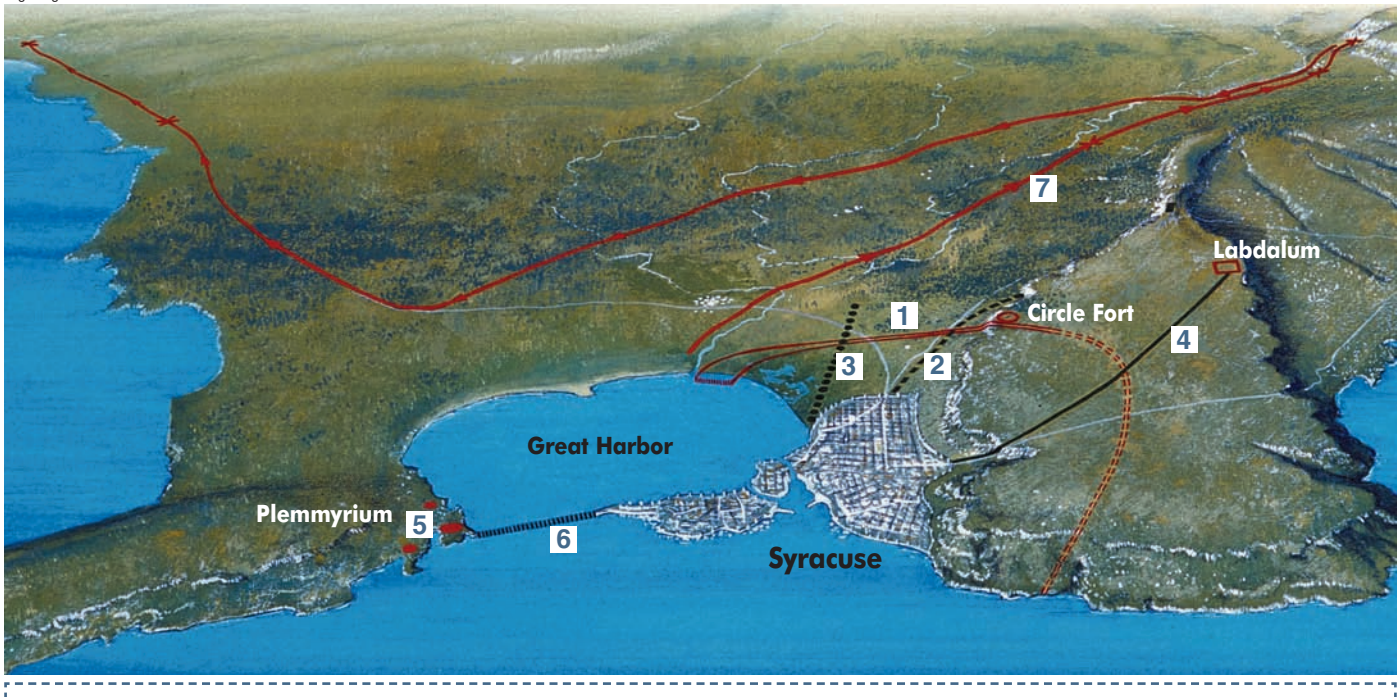

1. The Athenians build the Circle Fort and the fort at Labdalum, then begin building twin walls to encircle the city. 2, 3. The Syracusans build counterwalls which are captured by the Athenians. 4. Gylippus captures Labdalum and builds a third wall from which to attack the Athenians. 5. The Athenians build three new forts at Plemmyrium, overlooking the harbor. 6. The Syracusans block the harbor entrance. 7. The Athenian forces attempt to escape overland.

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Desperate Athenian hoplites retreat in panic, only to be destroyed by Syracusan missile throwers and cavalrymen.

Nicias was on the brink of utter defeat when reinforcements arrived. Demosthenes and Eurymedon landed with 73 ships and nearly 5,000 hoplites, along with much-needed supplies and food. Nicias linked his army to that of Desmosthenes and waited for the new general to plan their salvation. Demosthenes did not hesitate. While the Athenian armada cut off Syracuse from the sea, they needed only take the walls at Epipolae to surround Syracuse and force its surrender. Demosthenes's plan was bold and direct, a fast solution to the seemingly endless battle. Unfortunately for the Athenians, it did not work as planned.

THE FIRST ASSAULT FAILED. DEMOSTHENES PLANNED THE NEXT ATTEMPT AT night. Some 10,000 soldiers, a mixture of hoplites and light infantry, poured through the Euryalus Pass and took the fort there, then hurried forward and captured the counterwall. But just as the darkness had helped them secure their initial victories, it now betrayed their efforts, causing confusion and spreading chaos. Gylippus sent reinforcements against the advancing hoplites and managed to turn back the Athenians. As more Athenians hurried across the plain, they saw figures running toward them. In the darkness they could not tell if they were friends or foes. Some Athenians attacked, others retreated. Friends began to fight friends. To the badly rattled Athenians, the enemy seemed to be everywhere.

The Syracusans, still organized, continued to push. Panic erupted in the Athenian ranks. Many tried to escape by jumping from the cliffs, only to find the drop much longer than they had thought. Others were herded forcibly over the edge. By daybreak the Athenian reinforcements were scattered on the plain, wandering about blindly as they were hunted down by Syracusan cavalry.

The bold and direct stroke by Demosthenes had turned into the worst Athenian disaster yet. Nearly 2,500 men were dead. The plateau still belonged to Gylippus. Struck by low morale and malaria, the Athenians listened with relief as Demosthenes recommended that they cut their losses and head for home. Surprisingly, Nicias did not agree. His spies within the city walls assured him that the Syracusans were in dire financial trouble and would probably surrender any day. Demosthenes and Eurymedon voted to return home, but Nicias's other generals, Menander and Euthydemus, voted to stay. A suggestion to find a stronger position farther north, along the coastal cities, was also voted down. The Athenians stayed where they were and continued to die of disease in the swamps.

Eventually, the situation grew so bad that Nicias turned his mind to escape. Morale was at its lowest ebb; the Athenians had been trained to fight to the death at the hands of their enemy, but they found no honor or dignity in dying a slow, feverish death from disease. Finally, Nicias acceded to the wishes of his men—they would attempt to escape under cover of darkness.

In their weakened state, superstition played havoc on their plans. On the night of August 27, 413 BC, the moon was wholly eclipsed by the shadow of the earth. A soothsayer among the soldiers advised Nicias to wait "thrice nine days" before setting sail. With the moonlight shut off for an hour, the entirety of his forces could have snuck away, but Nicias took the soothsayer at his word and ordered his men to remain in the swamp outside Syracuse for the next 27 days.

The Syracusans used the time to gather more allies and strengthen their navy. Then Gylippus attacked the Athenian southern walls while the Syracusans sent their fleet, totaling 76 triremes,

to confront the madly scrambling Athenians. Eurymedon and Menander commanded the Athenian fleet. The Syracusans broke through Menander's center, then attacked Eurymedon on the right wing, destroying seven Athenian ships and killing Eurymedon. By the end of the day, Nicias had lost 18 triremes and all of their crews. It was a particularly embarrassing failure for the preeminent Greek naval power. The Syracusans built on their victory by imprisoning the Athenian fleet inside the harbor, anchoring triremes across the entrance and linking them with great iron chains to form an impenetrable sea wall.

The Athenian invasion had turned into a desperate fight for survival. Nicias spoke to his men on the beach and aboard the triremes, encouraging them to uphold their honor. While he was exhorting his troops, Syracusan soldiers began to line the shore, watching. When Nicias gave the command, the Athenian captains aimed their ships at the mouth of the harbor and rushed the small opening the Syracusans had left for their own ships to come into the harbor. They immediately overwhelmed the enemy. The Athenians cut the chains linking the Syracusan ships, only to see more Syracusan ships attacking from their rear. Nearly 200 ships fought, in such close quarters that neither side could effectively ram the other. Hand-to-hand combat was the order of the day. The Syracusans finally chased the Athenians back into the harbor. Nicias's men deserted the ships and ran for their camp, seeking the protection of their comrades.

Demosthenes suggested that they attempt another breakout at daybreak. But the morale of the Athenian soldiers had been crushed—they refused to take to sea again, insisting upon a land escape. The Syracusans, meanwhile, also suffered a collapse in discipline. In the giddiness of their victory, many of the men became incapacitated with drink. Gylippus, realizing his mistake in allowing the premature celebration, knew he had to find a way to delay the Athenians until his men were sober again. After some discussion, he sent decoys to the Athenian camp who convinced the Athenians that they were allies, working within Syracuse to hand the city over to Nicias. They warned the Athenians not to try to escape that night, since the Syracusans were guarding all the roads.

The ruse worked. Nicias kept his men in camp, instructing them to supply themselves for a long walk away from Syracuse. By then, the Syracusans were sober and alert once more. The subsequent retreat of 20,000 Athenian soldiers from their camp was an ignoble one. The sick and wounded called out for help, but their cries went unanswered. The dead lay unburied all around them. Nicias tried to encourage his men as best he could, but he was tired and ill himself. Nevertheless, his planned route was a good one. They would march west, past the plain of Epipolae, then head north toward Catana, where they could rest and gather additional supplies.

Four miles outside Syracuse, they were attacked. The Athenians rallied and broke through, but the enemy cavalry continued to rain missiles down on them as they passed. Soon water and food became an issue for the Athenians, and they had to stop to search for supplies. The Syracusans walled them in against the foot of a large cliff, and the Athenians were forced to seek another route to Catana. They were immediately set upon by Syracusan cavalry and javelin throwers. Nicias's men fought bravely, falling back on their training, and managed to hold off their attackers for another day.

THE SITUATION WAS DESPERATE. THE ATHENIANS TURNED SOUTHEAST, following a river they hoped would take them to Catana by a more indirect route. At night they lit campfires, hoping to trick the Syracusans while they snuck away under cover of darkness. Nicias led the way with a select few men, while Demosthenes followed with the rest of the army. They made their way toward the seashore, then turned toward the Cacyparis River, intending to meet up with friends from Sicel who would escort them to Catana. The Syracusans were not fooled. They attacked again.

On the sixth day of the retreat, Syracusan cavalry attacked Demosthenes's army with full force. They managed to cut off the Athenians in an olive grove and continued to kill them throughout the afternoon. Demosthenes, surrounded, could not break through and join up with Nicias. The situation was hopeless. At the end of the day, Demosthenes surrendered his 6,000 and tried unsuccessfully to kill himself with his own sword.

Nicias heard about the capture the next day from the Syracusans themselves, who ordered him to surrender as well. Nicias made a counteroffer: Athens would pay for the damage done by the war if the Syracusans would let his army go. He promised to leave behind one soldier for every talent of damages. Seeing full victory in sight, the Syracusans naturally refused his offer. They surrounded Nicias and his men and rained missiles down upon them. Night came again and the Athenians attempted another escape, but only 300 broke through. The rest remained trapped along with Nicias.

The next day, Nicias attempted to break through and lead his men to the nearest river, the Assinarus, three miles to the south. Enemy missiles fell and cavalry attacked, but the surviving Athenians made it to the river, falling on the rushing water like madmen. Thucydides recounts that many of the men were trampled to death, while others fell accidentally on their own swords or were swept away by the river. While the parched Athenians gulped hungrily at the water, the Syracusans stood on the steep opposite bank and threw javelins at them at their leisure. The Spartans then came down from the plain, having traveled far to kill Athenians, and joined merrily in the slaughter.

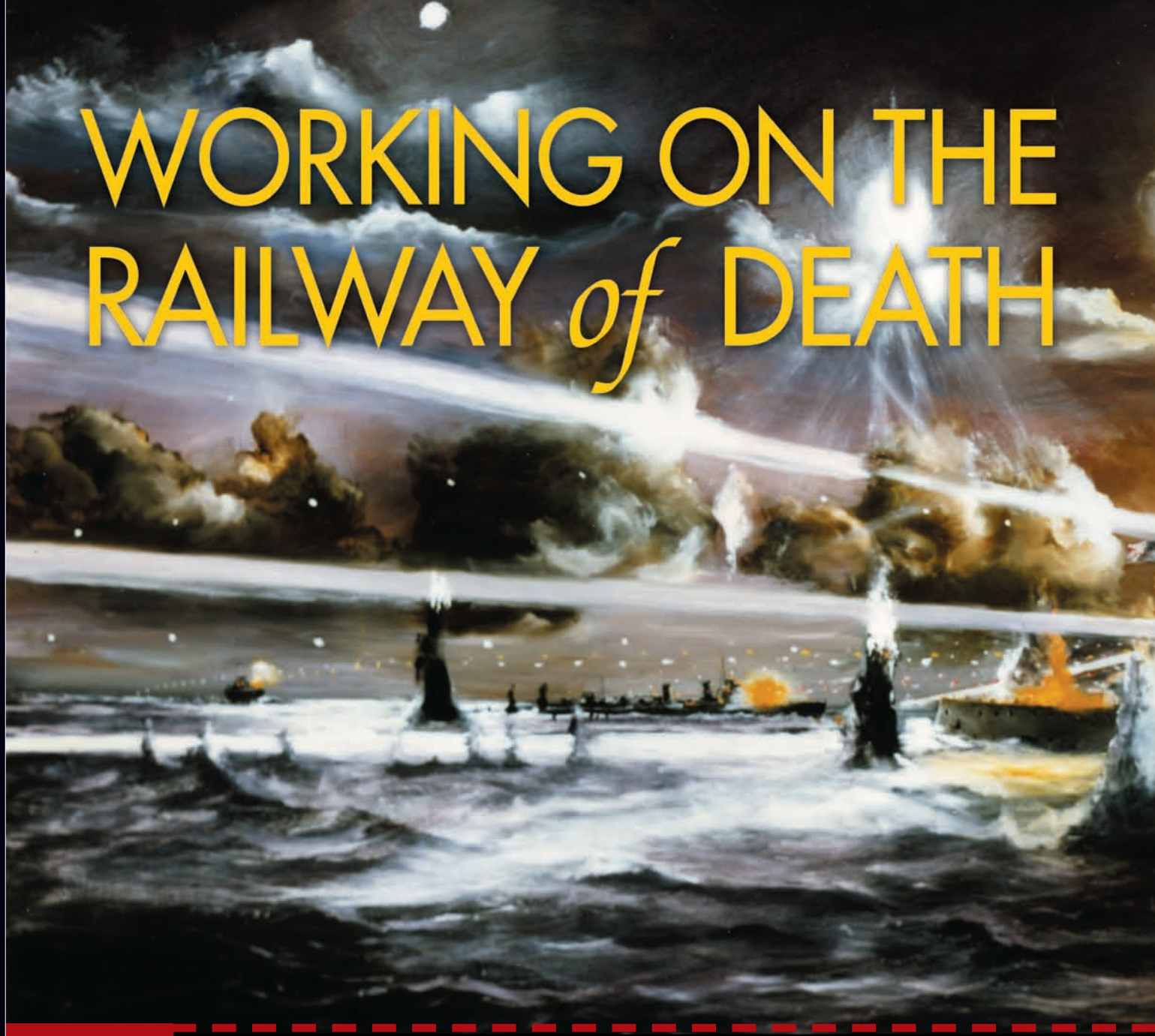
The killing did not end until Nicias gave himself up to Gylippus. Of the 20,000 soldiers who had set out from the Athenian camp at the Great Harbor eight days before, only 6,000 remained.

Enemy missiles fell and cavalry attacked, but the surviving Athenians made it to the river, falling on the rushing water like madmen.

The great Athenian army was completely destroyed. Although Hermocrates and Gylippus argued that the lives of Nicias and Demosthenes should be spared—Hermocrates out of decency, Gylippus so that he could revel in the glory of bringing them back to Sparta with him—the Syracusans shouted them down. The bedraggled Athenian generals were executed. The survivors were made slaves for life.

The expedition had been a badly planned one from the start. The removal of Alcibiades, the absence of cavalry, and Nicias's fatal hesistancy all contributed to a disaster of major proportions. Its navy and army both lost on a distant island they never should have invaded in the first place, proud Athens was knocked to its knees. Although it would be several more years before Athens finally surrendered to Sparta and ended the Peloponnesian War, the debacle at Syracuse had laid the groundwork for that defeat. Never again would Athens flourish—its days of glory were at an end. □

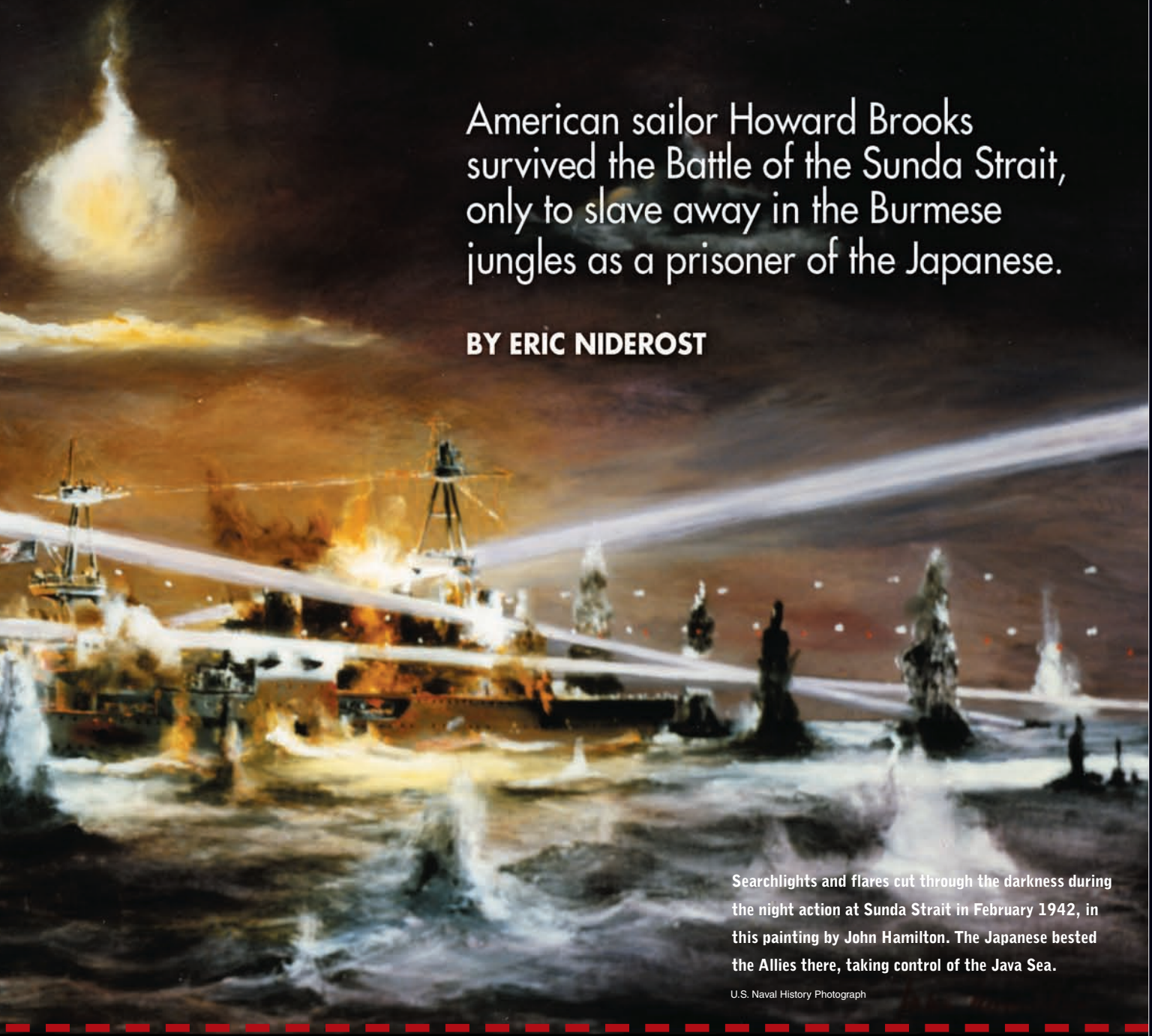
WORKING ON THE RAILWAY *of* DEATH



WHEN HOWARD BROOKS JOINED THE UNITED STATES NAVY IN 1939, the 20-year-old farm boy from Tennessee had no idea that he was going to experience one of the most harrowing adventures of World War II. In the early months of the war, Brooks and his fellow crewmen aboard USS *Houston* fought heroically against overwhelming odds, only to have their ship blown out from under them at the Battle of the Sunda Strait in February 1942. But the battle, horrific as it was, marked the beginning, not the end, of their ordeal. *Houston* survivors were captured by the Japanese and shipped to Burma, where they became slave laborers on the notorious "Railway of Death," made famous by the Academy Award-winning (if rather inaccurate) 1957 movie, *The Bridge on the River Kwai.*

Houston (*CA 30*) was a heavy cruiser that became celebrated in the 1930s as President Franklin Roosevelt's favorite warship. She was a thing of beauty, sleek and powerful as her graceful prow sliced though the water at speeds upward of 33 knots. *Houston* hosted Roosevelt four times, carrying him and his staff on long holiday cruises in 1934, 1935, 1938, and 1939. As the president later remarked, "I knew that ship and loved her. Her officers and men were my friends."

Houston was in many ways a microcosm of the Depression-era Navy. Her crew was highly trained, her officers competent and professional, but the ship's overall fighting ability was weakened by "penny-wise, pound-foolish" budget cuts imposed by Congress. As the flagship of the Asiatic Fleet in the early 1930s, *Houston* was a familiar sight in Shanghai and other Far Eastern ports of call. She returned to Asia in March 1941, just as Japan and the United States were teetering on the brink of war.



American sailor Howard Brooks survived the Battle of the Sunda Strait, only to slave away in the Burmese jungles as a prisoner of the Japanese.

BY ERIC NIDEROST

Searchlights and flares cut through the darkness during the night action at Sunda Strait in February 1942, in this painting by John Hamilton. The Japanese bested the Allies there, taking control of the Java Sea.

U.S. Naval History Photograph

Houston was in the Philippines when war finally broke out. In January 1942, she became part of a hastily assembled and poorly coordinated combined Allied fleet. She escaped destruction several times, mostly from enemy air attacks, but her luck ran out at the end of February, when the Allies engaged an overwhelmingly powerful Japanese task force in the Battle of the Java Sea.

The battle was an Allied disaster, but *Houston* and the Australian light cruiser HMAS *Perth* managed to escape the debacle. Ordered to the Indian Ocean, the pair was caught by the Japanese in Sunda Strait. *Perth* was sunk by torpedoes, leaving *Houston* to fight alone in an epic, one-sided battle against an entire Japanese task force. After fighting desperately and valiantly, *Houston* was sunk. Of her roughly 1,100 men, only 360 survived the battle.

Howard Brooks was one such survivor, and eventually he found himself assigned to the infamous Thailand-Burma Railroad, the "Railway of Death." The 257-mile-long rail line passed though some of the roughest terrain in the world, a nightmare of thick jungles, mountainous ridges, and treacherous streams. The tropical climate was unforgiving, and the half-starved, exhausted prisoners were all too susceptible to cholera, typhoid, malaria, and beriberi. Some 61,000 Allied POWs were slave laborers on the railway, including 30,000 British, 18,000 Dutch, 13,000 Australians, and 700 Americans. Of that number, perhaps 16,000 Allied prisoners died of disease, overwork, and maltreatment by vicious Japanese guards. Another 200,000 native Asian workers also were forced to labor on the line, and 80,000 of them lost their lives as well. Understandably, Brooks has vivid memories of the Railway of Death.

ERIC NIDEROST: Perhaps you could start by giving us some of your background.
HOWARD BROOKS: I was born October 30, 1919, in Greeneville, Tennessee. I grew up on a farm, where we raised mainly tobacco and cows. I was one of eight children, but originally there were three more, two boys and a girl. They died in the great flu epidemic.
EN: Why did you join the U.S. Navy?
HB: One older brother had joined the Navy in 1927, and I was influenced by him. After graduating from high school in June 1938, I stayed on the farm for a time. On September 3, 1939, I went to town and signed up for the Navy. A few days later I got on a bus for the naval training center in Norfolk, Virginia. After boot camp I was sent to San Diego, where I arrived on New Year's Day, 1940.
EN: Eventually you were sent to Hawaii, where you were given the heavy cruiser USS *Houston* as your permanent assignment. In time you became a ship's electrician. What was life like aboard the *Houston?*
HB: A heavy cruiser was like a hotel, and I enjoyed it. After work or duty hours, a group of friends would chip in and go down to the gedunk [shipboard store] for some pogey bait [snacks], usually Coke and some kind of chips. We'd go to some breezy place topside and all sit down on a wool blanket, and then my best friend, Arnie Arnesen, would play the accordion. Our favorite place was the searchlight station, which was on our mainmast.
EN: How was the daily work routine aboard *Houston?*
HB: It was all spit and polish. All painted surfaces were kept squeaky clean, and all brass polished almost daily if you were at sea. We had lots of wood decking on the fo'castle quarter deck and fantail, and these would be holystoned first thing daily. Of course, there were a lot of gunnery drills.
EN: In the last months of peace, *Houston*'s skipper was Captain Albert Brooks, an Annapolis graduate who was known to do things by the book. What were your impressions of him?
HB: A fine man. I never really saw much of him until our first action on February 4, 1942. If we were not at battle stations, he'd come around and say a friendly word.
EN: Admiral Thomas C. Hart ordered most of the Asiatic Fleet to withdraw from China. The Philippines, then a quasi-colonial possession of the United States, would be the fleet's main base. *Houston* was a magnificent ship, but her beauty and power hid some flaws. She needed modernization, and her fire control equipment was obsolete.
HB: Yes, and we had faulty antiaircraft ammunition, and we didn't have the latest radar equipment. Yet, in my 22-year-old mind I felt very confident that we were going to have a short and successful war. We may not have been ready in a material way, but we were ready in a way that counted
EN: After the war broke out, *Houston* was mainly employed in convoy escort duties. But things changed on February 4, 1942, when *Houston* joined other Allied ships to try and intercept a Japanese force at Makassar Strait, north of Java. But then, formations of Japanese twin-engine bombers appeared. What was your battle station?
HB: I was with the after-damage control party. Our station was on the second deck in the area very close to the barbette of Number Three Turret [one of the eight-inch battery turrets].
EN: It was said that Captain Brooks maneuvered the 600-foot cruiser "like a motorboat," dodging bomb after bomb. But finally, the Japanese scored a hit.
HB: The [500-pound] bomb came though the deck at an angle, then entered the turret barbette and exploded immediately. Most of the blast was inside the turret, but there was still enough outside to kill all of the damage-control party but two. I was one of them.
EN: How did you survive?
HB: Just a short time before the bomb hit, Boatswain Joseph Bienert, warrant officer and head of our damage party, had been asked to send two electricians to check on a problem on one of the five-inch ammo hoists. He sent me and Larry Wargowsky, and we found that the electrical problem was an overheated ammo hoist motor. But when we were there we heard

USS *Houston*, President Franklin Roosevelt's favorite ship, went down fighting valiantly at Sunda Strait.

Author's Collection

over the PA system that a bomb had hit Turret Three, so we rushed back to our station. Most of the guys had been killed by concussion, but there was Bienert, sitting with most of his insides lying on his lap. He was conscious, aware, and talking, and when we were trying to put him on a stretcher, he asked us to leave him alone and help someone else.

EN: *Houston* had 48 dead and 20 wounded from that bomb blast. The light cruiser *Marblehead* also had been badly damaged in the

Courtesy of Howard Brooks

same air attack.

HB: About the same time that we were hit, *Marblehead* was hit by one bomb on her fantail. There was damage to her steering gear and rudder, with about 13 killed and two dozen wounded. *Houston* and *Marblehead* headed to Tjilajap [Java] by way of Bali Straits. On our way to Tjilajap, a big work party was busy making plain wooden caskets. Twelve were from the damage-control party; the rest were from the turret crew.

EN: Once at Tjilajap, then part of Netherlands East Indies, there was an attempt to effect repairs. There was also a moving funeral ceremony for the casualties.

HB: A big dock crane repositioned Number Three Turret onto its base and spot-welded it in places so that it would be stable. It was at the shipside ceremony for our dead that I saw Admiral Hart, the only time I ever saw him. After the ceremony, the caskets were loaded onto what looked like Dutch Army trucks. The severely wounded from *Houston* and *Marblehead* were taken by Dutch medical vehicles to Dr. Wassell's hospital [Dr. Corydon Wassell, portrayed by Gary Cooper in the Cecil B. DeMille movie *The Story of Dr Wassell*]. I didn't actually go ashore at Tjilajap.

Courtesy of Howard Brooks

EN: Admiral Hart commanded the Asiatic Fleet before the war. He was the one who had to decide if *Houston* would stay in a deteriorating Southeast Asian Theater or head home for repairs. With some reluctance, but with Captain Rook's wholehearted approval, he agreed *Houston* would stay.

HB: I have always wondered who made the final decision for the *Houston* to remain out there. Rooks and Hart knew beyond a shadow of a doubt that the situation with the Japanese was a totally hopeless one. The Japs owned everything from Shanghai to Singapore, and if they tried, they could have landed anywhere in northern Australia

EN: *Houston* and *Perth* managed to survive the Battle of the Java Sea, an Allied debacle that

National Archives

ABOVE: In a photo taken from the USS *Marblehead, Houston* sails the waters at Tjilajap, Java, on February 6, 1942—less than month before she went down at Sunda Strait. TOP: Brooks, left, and machinist's mate John W. Ranger, a shipmate aboard the ill-fated *Houston* and a fellow Japanese POW, at a 1993 reunion. LEFT: Sailor Howard Brooks, photographed by his brother at Schofield Army Base, Hawaii, in December 1939.

saw the loss of two cruisers and three destroyers. Worse was to follow. Before going down on his flagship *DeRuyter,* Dutch Admiral Karl Doorman had ordered *Houston* and *Perth* to retire to Batavia [now Jakarta].

HB: We arrived at Tanjung Priok [Batavia's port district] before sunset, tied up to a pier, and were soon taking on oil. I remember sitting on the searchlight platform looking down at the ship's band as it was playing on the fantail. As I sat there, I heard a plane that sounded like it was near. As I looked up, it came directly over us, and I could see the big red sun under each wing. We didn't see the plane anymore, but at about 11 o'clock that night we headed for the Sunda Strait.

EN: *Houston* and *Perth* were ordered by Dutch Admiral Conrad Helfrich to report to Tjilajap, on the other side of Java. This meant leaving the Java Sea and breaking out into the wide Indian Ocean via the Sunda Strait, the passage between the islands of Java and Sumatra.

HB: I remember, in our small talk, we all were looking forward to entering the Indian Ocean. My feeling was, we're going to out of range of those planes that have been harassing us for so long.

We'll be safe. On the evening of February 28, I was fast asleep on the fantail-starboard, on my blanket near the water.

EN: The two cruisers had the bad luck to run into a major Japanese invasion effort, a landing force consisting of 56 transports and auxiliaries carrying the Japanese Sixteenth Army and its supply train. But the transports were guarded and screened by a formidable array of Japanese vessels, including two cruisers, one light cruiser, and three divisions of destroyers. How did the battle start from your perspective?

HB: The first thing I heard was the battle station gong. It was a little after 11 PM, and *Perth* had opened fire on something—at least we thought it was *Perth*. *Houston* picked up speed, and you could tell the captain [Rooks] was zigging and zagging to avoid torpedoes. We were doing this for a while—it seemed like minutes—when all hell broke loose. Strong lights began to shine on us, and we were keeping up a good speed and doing a lot of turning.

EN: After the gallant *Perth* was torpedoed and sunk, *Houston* was alone in the midst of enemies,

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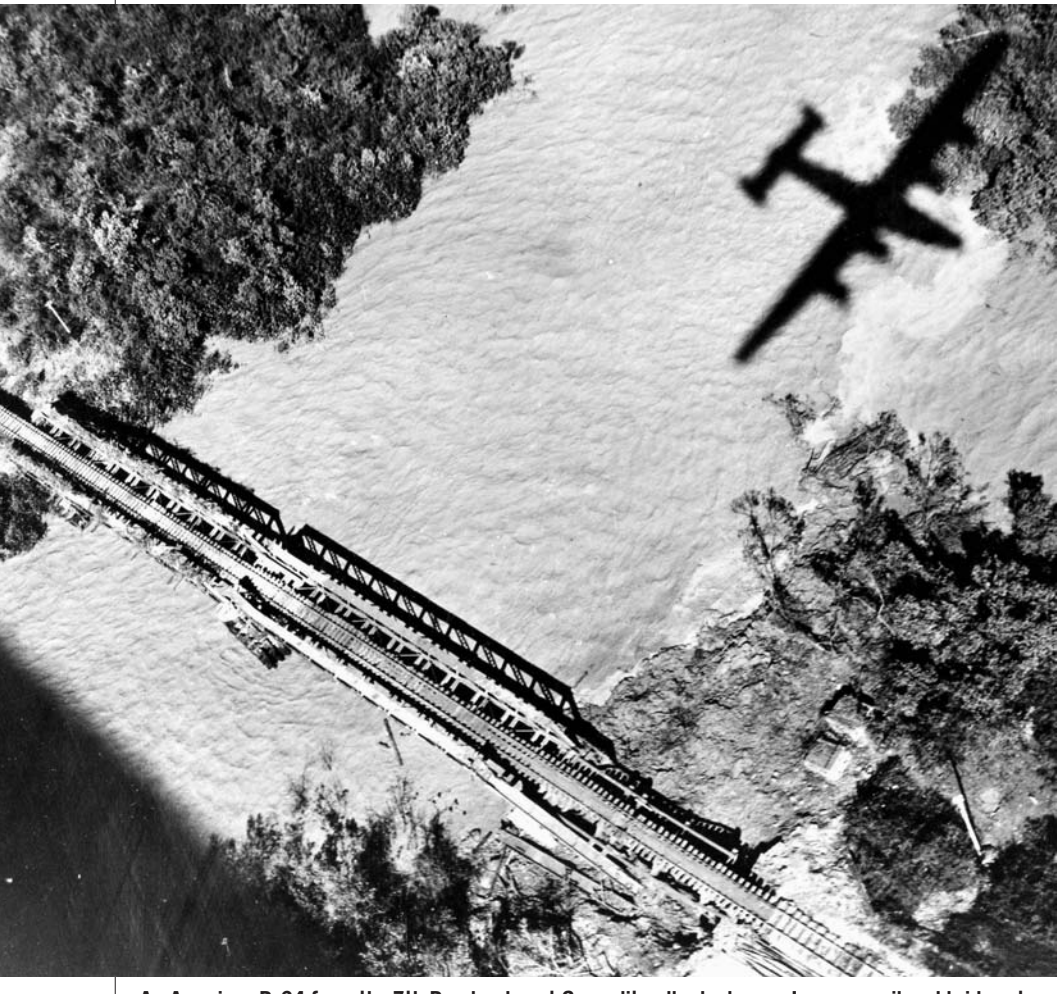

An American B-24 from the 7th Bombardment Group literally shadows a Japanese railroad bridge at Moulmein-Ye in January 1945. The bridge was one of three transporting enemy supplies to Burma.

firing in all directions at her attackers. The Japanese fired shells, launched torpedoes, and even raked *Houston* with machine-gun fire. What were the ship's last moments like?

HB: I could feel the ship shudder, and at the same time I could hear what sounded like machine-gun bullets hitting the sides of the ship, so I disappeared real quick down the ladder that was nearby. A short time later, the PA system announced a torpedo hit forward-starboard, and a moment after that, there was another shudder. This time it was starboard-midship—the forward engine room.

EN: *Houston* went down fighting, and by some accounts managed to hit three Japanese destroyers and sink a minesweeper

HB: The last thing I saw before going below was that searchlight on us, and I remember hearing an airplane overhead, and of course there was what sounded like machine-gun fire and heavier gun fire, too. The PA sounded "Abandon ship," and then, "Cancel abandon ship." I was confused, but continued to look for a life jacket, when over the PA came the final and definite call for "Abandon ship." By this time I had reached the portside-aft and, sure enough, I found a life jacket. I could see that most of the ship from the quarterdeck forward was burning, the biggest fire coming from the bridge forward.

EN: The second order to abandon ship was at 12:33 AM on March 1, 1942. The ship was in her death throes, listing hard to starboard and settling by the bow. How did you get into the water?

HB: Well, I did a stupid thing—I removed my shirt, pants, and shoes before putting on my life jacket. I had to get off the ship, and I figured the clothes I just removed would have become waterlogged and pulled me down. I jumped into the water, and I don't know how many degrees the list was, but it did help me. As soon as I was in the water, I saw there was a life raft nearby, so I grabbed onto one of the rope side loops. When I grabbed on, I breathed a sigh of relief, since I was a nonswimmer.

EN: Did you look back toward the ship?

HB: *Houston* was all lit up by Japanese searchlights and, as we floated away from our sinking ship, she was engulfed in flames from the boat deck to the stern. The stern was fast approaching sea level by that time, and any guys that did not get out of the forward powder or ammo magazines were being drowned or suffocated. Those still on deck were being sprayed with machine-gun fire from Japanese tin cans and smaller torpedo boats. As we floated and watched *Houston* burn, those Japanese vessels were also firing into the water all around the sinking ship where we were.

EN: *Houston*'s final moments were at hand.

HB: As the fantail slowly disappeared into the brightly lit sea, our "Old Glory" still flapped defiantly to the last. To this day I have never seen a more beautiful display of a flag.

EN: What happened immediately after *Houston* went down?

HB: Well, I remember there were several severely injured men in the center of the raft, and three other guys hanging onto the sides as I was. Later, we began to float near some Japanese transports, so close that we could hear them talking. Not long after that we saw what looked like a whaleboat being paddled by four Japanese sailors. They came near and took a good look at us, but then they kept going. We surmised they saw all the badly wounded guys

National Archives

Emaciated Allied prisoners after their liberation at Rangoon, Burma, in August 1945. Hundreds more were abandoned by their captors on the road to Pegu.

and didn't want to be bothered with us.

EN: You floated around for three days.

HB: Now, during all that time we were floating along we could see the shore line—at times we would be so near we could see the trees very plainly, but the current would always take us out of reach. On the second day we lost one of our injured sailors. He was gently slid into the deep on the morning of the third day. The other two wounded men followed the first. A lively breeze was blowing, and we were five hungry, thirsty, and awfully sunburned guys. The breeze was pushing us toward shore, and one of the guys weakly said he thought his foot had touched a rock. Sure enough, in just a very short time all of us were lying down on the sand, stretching our weak, hungry bodies.

EN: After capture on Java, you and other *Houston* survivors were taken to Batavia and placed in the so-called "Bicycle Camp." There were occasional beatings, but on the whole—especially when compared with what was to come—conditions were fair.

HB: The food was nothing to write home about, but acceptable. They took us out on work details. Most of the work I had to do was at the Dutch Shell warehouses, where we handled truckloads of grease and oil. But after a few months [October 1942] the Japanese told us that we'd be taken to a beautiful vacation place where we would spend the duration of the war in pleasant surroundings. They put us in an old English freighter, and in a few days we were tied up in Singapore.

EN: Eventually you were shipped to Burma [January 1943] to begin work as slave laborers on the "Railway of Death."

HB: We learned that we were to build a railway from Moulmein down to near Bangkok. We were put in a camp that had a boundary marked with a string attached to small sticks. There were strict orders not to go beyond that boundary. One evening some of us were standing near the boundary, and a guard accused us of trying to escape. Our punishment was to kneel with a three-inch-diameter piece of bamboo behind the knees. Soon your legs became numb and you could tolerate it better. I don't remember how long they had us stay there, but when they let us go, we could not walk. We were also slapped many times—the officers did that to their own soldiers, too.

EN: The Death Railway was done almost completely by hand under primitive and horrific conditions.

HB: It was very brutal work. Our first work was digging dirt and piling it on the railroad bed. A bamboo pole would be put through the loops of a burlap bag, a POW on each end of the pole. We'd walk to the digging area and lower the bag, where a digging guy would shovel soil into it. We'd then walk over to the railroad area and dump it. There was always a long line of POWs constantly filling the bags and dumping the dirt. Ants had nothing over us.

EN: What was the next step?

HB: After a section of railroad was filled to its proper level, the next step would be to add a surface of crushed stone. They would find outcroppings of stone as near as possible to the railroad, then use dynamite to loosen it. We would sit with a small hammer and break up the stone into smaller pieces, about the size of an egg, then carry it over to the leveled fill.

EN: What were the next steps in construction?

HB: A POW crew would lay ties down on the stone. These ties would have to be carried one by one, and they were not light. Many times we saw that the ties were made of beautiful teak or mahogany. The steel rails were next. The first ones were carried in a railroad flatcar. Later on, as we continued building, there was what looked like a truck, but had railroad wheels instead of tires, and it would push the rail flatcar along the newly completed sections of railroad.

EN: The terrain and climate must have been horrible, especially for abused, ill-fed men not used to the tropics.

HB: The construction process sounds simple, maybe easy, but there were many hills and valleys, and many of the hills contained solid stone that had to be dynamited and dug. This meant long, dreary, hard work days. To make holes for a Japanese engineer to put dynamite in, one POW would hold a long chisel and another would pound it with a 10-pound sledgehammer. During this process, little flakes of stone would fly around and, if it hit you, the wound would be the beginning of a tropical ulcer. Such ulcers were the cause of many lives lost.

EN: The famous 1957 film *The Bridge on the River Kwai* makes railroad construction a paradise by comparison. What do you think of the David Lean movie?

WHEN ONE OF US GOT SICK, OR WAS SO MALNOURISHED THEY COULDN'T WALK, WE KNEW IT WAS THE END.

HB: It was shameful to all POWs, and glamorized by Hollywood to make money. I've talked with Aussie and Brit POWs, and they of course agree wholeheartedly. The Japanese government has had an ironclad position on their treatment of POWs, downplaying the barbarity, and I don't think they will ever change. PBS has aired, and continues to air, a documentary on the Death Railroad that features an elderly Japanese who was an army engineer who worked on the building of the road. In the film he denies any harsh treatment of POWs. [Brooks was also featured in the documentary.]

EN: How long did you work on the railroad?

HB: Two and a half years. The food was absolutely terrible. That's one of the reasons why so many of us died. The only time you'd see the food was at the midday meal. The other times it was too dark. We would eat in the morning, before it was daylight, midday, and then after sunset. At midday we'd get rice and "stew," but the stew was mostly water and a few vegetables. Sometimes there were maggots in the stew, but if you couldn't see them, you ate them.

EN: You had little or no medicine, and "hospitals" were really dumping places where the Japanese placed men too sick to work. It was a place to die.

Continued on page 69

ROYAL MAULING AT MOLLWITZ

ON OCTOBER 20, 1740, CHARLES VI, HOLY ROMAN Emperor and ruler of Austria, died, leaving his vast holdings and titles to his 23-year-old daughter, Maria Theresa. The young, inexperienced archduchess inherited a troubled nation. Her father's bequest left her holding sway over 11 million subjects and extensive European territory, including parts of the Netherlands, Germany, Austria, Hungary, and Italy. But Charles's lack of a male heir made Maria Theresa's assumption of power suspect in the eyes of many foreign courts. The unsettled situation invited the unfriendly attention of any neighbors who had the means and ambition to take advantage of Austria's dire condition. Unfortunately for the Hapsburgs, such a troublemaker resided immediately to their north.

Frederick II had come to the throne of Prussia a mere three months before Maria Theresa inherited the Austrian crown. At 28, Frederick was intelligent, ambitious, self-confident, and cynical. He wanted to expand the territorial limits of his country; he felt he had no choice. Prussia sat squarely in the middle of Germany, one of a number of loosely organized independent states. With a population of less than two million, Prussia was surrounded by often hostile countries—France to the west, Austria to the south, and Russia (which controlled Poland) to the east. To survive, Prussia had to expand, and the path of expansion pointed directly toward Austria.

By the fourth decade of the 18th century, the Hapsburg government in Vienna had been gravely weakened by the ongoing strain of international conflict: first the five-year Polish War of Succession (1733-1738), then the military drubbing it had received fighting the Ottoman Turks between 1737 and 1739. The result of almost a decade of strife was a bankrupt administration that now could muster a demoralized army of less than 100,000 men. There was unrest in many parts of the empire, and no foreign allies offered to help with the strain. Even worse, claims by the Elector of Bavaria, Charles Albert, to the Austrian lands and the title of Holy Roman Emperor had created a succession crisis that pitted members of Maria Theresa's realm against each other. Austria's predicament made her look like easy prey for anyone strong enough to move against her.

Displaying the disciplined valor that would become a national characteristic, Prussian troops advance into withering fire at the climax of the Battle of Mollwitz on April 10, 1741. INSET: Frederick II was young and untested when he launched the invasion of Silesia in late December 1740.

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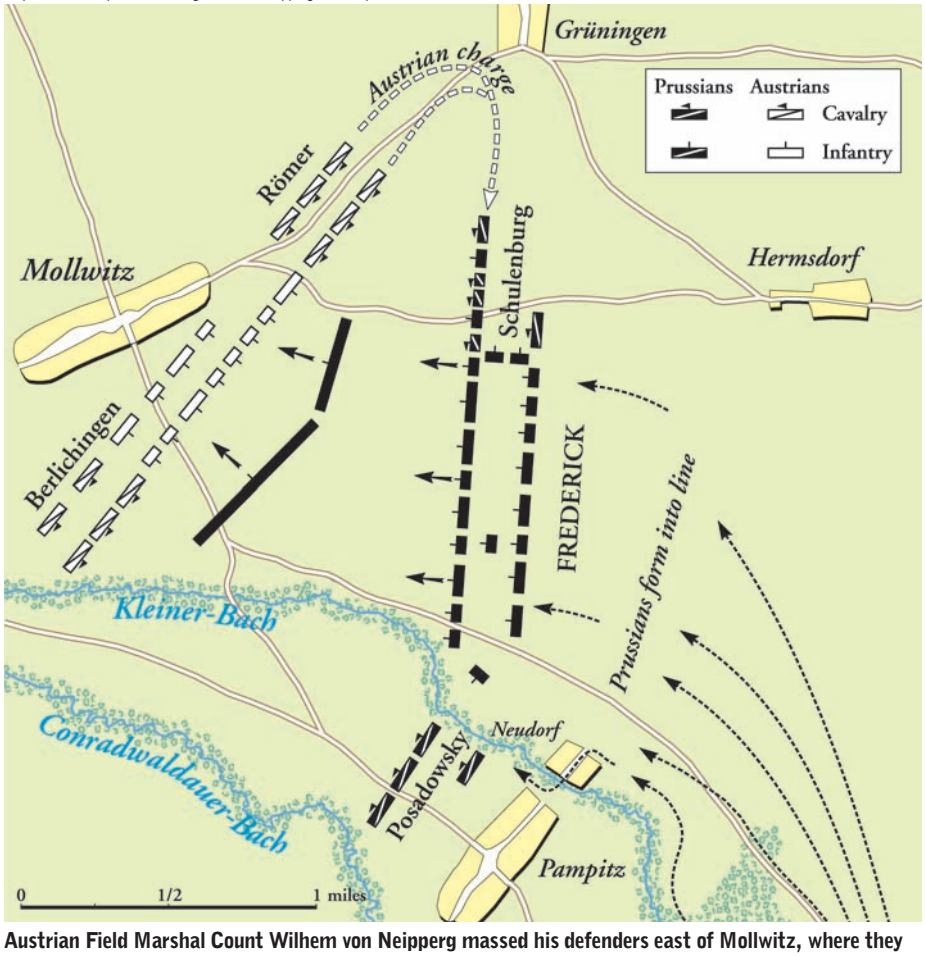
FREDERICK THE GREAT'S INVASION OF AUSTRIAN-HELD SILESIA IN 1740 WAS THE FIRST STEP IN PRUSSIA'S RISE TO BECOMING ONE OF EUROPE'S GREATEST MILITARY POWERS.

BY ARNOLD BLUMBERG

FREDERICK OF PRUSSIA, WITH THE INSTINCTS OF A PREDATOR, DECIDED TO TAKE advantage of the chaos plaguing Vienna. Possessing a large war chest of over 10 million thalers and a standing army of 83,000 well-trained (if untested) soldiers, the king felt confident that a swift land grab from Austria would not be much of a problem. He decided to annex one of the wealthiest provinces owned by the Hapsburgs—Silesia. Encompassing 14,000 square miles of territory contiguous to Prussia's eastern border, Silesia had a population of 1.2 million. It was rich in agriculture, iron, and coal, and such cities as Breslau and Neisse were thriving trade centers. The revenues derived from Silesia alone provided Austria with 21 percent of the funds from her German hereditary lands and 10 percent of the money available from all the Hapsburg dominions. Moreover, the quality of the region's military recruits—an asset Frederick dearly coveted—was quite high.

On December 14, 1740, Frederick left Berlin and traveled the 60 miles to Crossen to join an invasion force being assembled there by Field Marshal Count Kurt Christopher von Schwerin. Upon his arrival, the king joined an army comprising 20,000 infantry and 8,000 cavalry. An



Austrian Field Marshal Count Wilhem von Neipperg massed his defenders east of Mollwitz, where they confronted a double line of Prussian attackers. An Austrian cavalry attack on the Prussian right was driven back by massed artillery.

artillery train of 34 bronze cannons had also been assembled. A reserve element of 12,000 additional men followed Frederick's departure from Berlin. Two days later, the army crossed the Silesian border and that night camped near Schweidnitz. Frederick wrote to his minister for foreign affairs, Heinrich von Podewils: "I have crossed the Rubicon with flags flying and drums beating and I have reason to anticipate all possible good from this enterprise."

For the advance into Silesia, the king divided his army into two parts. One, overseen by the monarch, marched along the Oder River toward the garrison town of Glogau; the second, under Schwerin, moved a few miles to the south toward Liegnitz. The columns traveled in lines 25 miles long, at a rate of 15 to 20 miles a day. At the head of each corps rode a group of dragoons scouting for the enemy and the best routes of march. About 1,000 yards behind, an advance guard of infantry followed the horsemen. Snaking their way along rough paths and through woods, the infantry regiments formed long ranks interspersed with their baggage wagons. The artillery moved between the infantry units, creaking along at a snail's pace and causing bottlenecks at every water crossing or forest path. To either side rode contingents of heavy cavalry. Bringing up the rear were groups of cavalry and infantry whose prime purpose was to gather up stragglers and deserters.

After less than a week on the march, the Prussians had covered more than 60 miles. They prepared to blockade Glogau, while Schwerin closed in on Liegnitz. Frederick sent orders to Prince Leopold II Maximilian to bring the reserve force to Glogau. The invasion was shaping up nicely.

As the Prussian juggernaut swept into Silesia, the Austrian government struggled to meet the crisis. Completely surprised by the invasion, Maria Theresa's counselors were divided as to the proper response. Many wanted simply to cede Silesia to Frederick and make the best peace possible. A small faction at court led by the secretary of the Secret Council, Johann Bartenstein, reinforced the empress's inclination to resist the aggressor at any cost. To that end, instructions were sent to the Austrian commander in Silesia to defend the place as best he could. It was a daunting task.

Lieutenant General Count Maximilian Ulysses von Browne was a 35-year-old Irish Jacobite immigrant and a skilled veteran of the Turkish and Italian campaigns of the 1730s. Assigned the Silesian post in December 1740, Browne's command consisted of 6,000 men, mostly garrison troops tethered to the fortress towns of Glogau, Brieg, Neisse, and Glatz. He was told that only a few hundred more infantry and cavalry troops would be sent to him. Outnumbered 4-to-1, Browne ordered the fortified cities of Glogau and Brieg to delay the enemy as long as possible while he retired with a 2,500-man mobile force behind the Neisse River to await what few reinforcements he could get.

As the Hapsburgs frantically reacted to the Prussian attack, Frederick moved with his main force, commanded by Schwerin, to Breslau, the capital of Silesia. The move was exceedingly slow due to the snow and mud that covered the landscape. At the same time, Glogau was put under siege by Prince Leopold. Meanwhile, Frederick learned that an Austrian army was forming to come to Browne's aid. Surprised at the alacrity of his opponent's response, Frederick ordered Schwerin to take 6,000 men and form a barrier to the west to prevent enemy forces from entering Silesia from Bohemia and

Moravia. Continuing his move on Breslau, the Prussian emperor accepted the surrender of the city's 40,000 people on January 1, 1741.

Frederick next turned his eyes southwestward toward the fortress towns of Neisse and Glatz, whose capture would put all of Silesia under his control. On January 6 he sent word to Schwerin to take the two cities as soon as possible. As his couriers raced to spur on Schwerin, news reached the king that attempts to take the garrisoned towns of Glogau, Brieg, and Glatz were failing; all were standing firm against their Prussian besiegers. With the winter weather growing worse, Frederick's hope of gaining uncontested control over Silesia before the Austrians could put sufficient forces in the field was fading. The longer it took to digest Silesia, the more chance the Hapsburgs might find outside allies to help thwart the Prussian king's aggressive designs.

By mid-January, Frederick was determined to take the fortress town of Neisse. To do so would secure the southern part of Silesia and cause the collapse of resistance at other strongpoints still holding out against Prussian attack. Frederick planned to bombard Neisse into submission. A formal siege was out of the question—the increasingly harsh weather would make it too difficult to keep his army adequately supplied. Taking the place by storm was not an option, either, since it was too well garrisoned and its defense, led by Colonel Baron Wilhelm Morwitz von Roth, was proving to be formidable.

While Frederick ringed the town with heavy artillery, Schwerin was tasked with destroying Browne, who was operating south of Neisse. Outnumbered, Browne slowly pulled back in front of the Prussians, skillfully avoiding pitched battle. He used parties of ruthless mounted irregulars, Croats and Hungarian hussars, to impede the Prussian advance and interrupt their lengthening supply lines. By late January 1741, due to extremely cold weather and heavy snowfall, Browne had stymied Schwerin's efforts and was safely encamped in southern Silesia, on the Moravian border. The campaign was all but over, with the Prussians controlling most of Silesia except for the fortified towns of Glatz , Brieg, Glogau, and Neisse. Schwerin placed his men in a 200-mile cordon from Liegnitz to the Hungarian border while the rest of the army went into winter quarters throughout Silesia.

Back in Berlin, Frederick engaged in intensive diplomacy to create a coalition including Prussia, France, Saxony, and Bavaria that would effectively dismember Austria. At the same time, the British and Russian governments

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A triumphant Frederick II accepts the surrender of the Silesian city of Breslau on January 1, 1741. The real battle was yet to come.

were attempting to form their own alliance with Austria, Saxony, and Holland to conquer and partition Prussia. Frederick was not aware of this threatening development, but he sensed that his position would not be secure until he subdued the stubborn Silesian fortresses. Determined to do so, he returned to the seat of the war in the second half of February 1741.

If Frederick was hoping for peace after he had digested Silesia, the Austrian empress was equally set on destroying her opponent. Her prospects improved noticeably when Great Britain advanced Austria a huge war loan to pay for more troops, both regulars and irregulars. The new troops were central to a plan that had been formulated in December. An Austrian army was to be marshaled at Olmutz, Moravia, behind a covering screen provided by Browne's command. The Austrians intended to eject Frederick from Silesia with this surprise new force .

The leadership of the new Silesian army should have gone to Browne, but the ultraconservatives of the Austrian Supreme War Council, along with Maria Theresa's consort, Grand Duke Francis, opted for a native-born general. Their choice fell on Field Marshal Count Wilhelm Reinhard von Neipperg. The count was the son of an Imperial field marshal and a member of an aristocratic family from Swabia (south Germany). He had entered Austrian service in the first decade of the 18th century, rising to major general by 1717, and participated in the war against the Ottoman Empire. With the conclusion of hostilities, he became a mentor and tutor to Prince Francis. In 1723, Neipperg was promoted to lieutenant general and saw action in a new Turkish-Austrian war that was fought between 1737 and 1739. Conspicuous for his part in safeguarding the Austrian retreat after the defeat at the Battle of Kiotika, Neipperg was authorized to conclude peace terms with the Ottomans. The result was the Treaty of Belgrade, which ceded to Turkey northern Serbia, northern Bosnia, and parts of Wallachia, thus forfeiting all the territorial gains achieved by the Treaty of Passarowitz 21 years earlier. Displeased by the terms, Charles VI had Neipperg placed under house arrest in Vienna.

THE SILESIAN CRISIS, ALONG WITH THE INFLUENCE OF HIS FORMER PUPIL Francis, brought the general back to field command in late 1740. Personally brave, competent but cautious, Neipperg was far from sanguine about the upcoming campaign to retake Silesia. He doubted that the government had enough troops to make the enterprise a success. His infantry force was understrength and poorly trained; his cavalry was seasoned but also understaffed; and supplies for the entire army were inadequate. As a result, Neipperg did not start his campaign until late March 1741. With an advance guard of German cavalry, Hungarian hussars, and other irregular horsemen, followed by the main army of 12 infantry battalions (10,000 foot soldiers), 11 cavalry regiments (about 6,000 troopers), 16 cannons, and a pontoon train, Neipperg moved

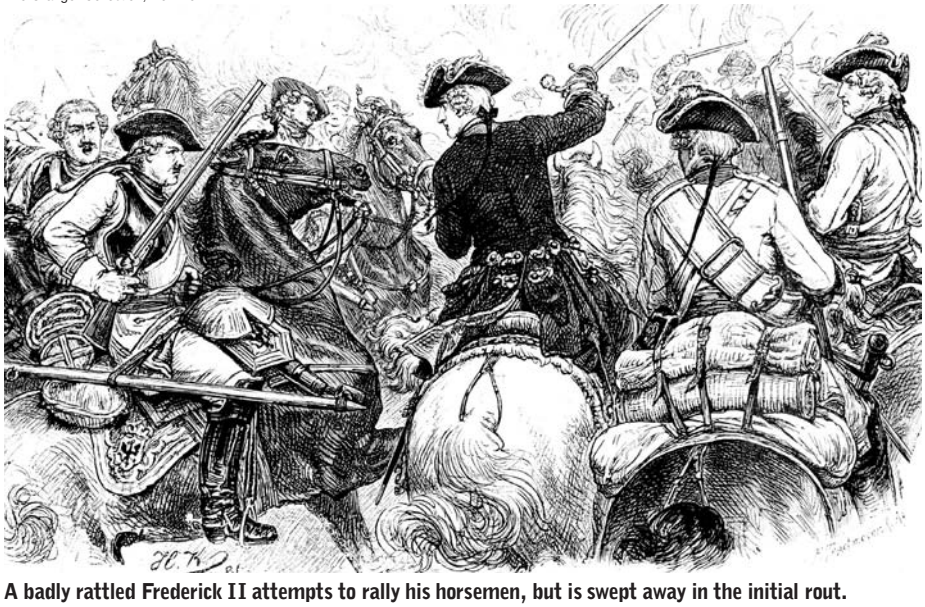
into Silesia. He headed for the area due south of Neisse, hoping to drive a wedge between Frederick's main body and Schwerin's outpost line, destroying both in detail.

If Neipperg was laboring under difficult conditions, he could take comfort in the knowledge that his enemy was suffering as well. All through the winter, Browne had waged an aggressive guerrilla war against Schwerin's forces. Prussian patrols and convoys were ambushed, supply lines interdicted, and a sense of insecurity pervaded the entire Prussian army in Silesia. Audacious attempts to capture both Schwerin and King Frederick barely failed.

As the Austrian liberation army marched into Silesia, Frederick established his headquarters near the small village of Mollwitz, near the town of Brieg. His overall military situation was strained due to the dispersal of his units. The main Prussian army was spread out north and west of Neisse. Schwerin's forces were south and east of the city, while other detachments were still struggling to reduce various Austrian strongpoints. In early April the Prussian king finally learned of the existence of Neipperg's army. He wanted to pull all his forces together, but Schwerin insisted on keeping his men placed around the Bohemian and Moravian border in the mistaken belief that this would prevent enemy forces from entering Silesia. He persuaded the king that the recent snowfall and lack of forage would delay any Austrian efforts to cross the mountains into Silesia for several weeks.

COMPLETELY INEXPERIENCED IN THE ART OF WAR, FREDERICK FELT THAT HE had no choice but to listen to his second-in-command. The 56-year-old Schwerin was one of the most respected officers in the Prussian Army. Born in Pomerania, he had participated in the Battles of Blenheim, Ramillies, and Malplaquet during the War of the Spanish Succession. Schwerin was promoted to lieutenant general in 1739, and the next year he was named count and field marshal by Frederick for his outstanding military and diplomatic achievements. Until the king mastered military command, he would rely on Schwerin's manifest ability and self-assurance.

The Granger Collection, New York



A badly rattled Frederick II attempts to rally his horsemen, but is swept away in the initial rout.

While Schwerin convinced the king that the Prussians had nothing to worry about from the Austrians, Neipperg was proving him wrong by moving his army, albeit slowly, over snow- and mud-covered roads south of Neisse. The Austrian field marshal intended to take Breslau, cutting between Frederick's and Schwerin's commands and severing the Oder River supply line—the main artery of the Prussian forces in Silesia.

When Frederick realized the approaching danger, he immediately ordered a concentration of forces north of the Neisse River. To effect this concentration, the Prussians marched 18 miles a day, while the Austrians managed only five miles a day. The torpid pace of the Hapsburg force enabled Frederick to escape immediate destruction. By April 8, he had gathered his separate commands and headed north to the supply center at Ohlau. There he intended to block any enemy advance to Breslau. That same day, Frederick learned that the Austrians, marching on the west side of the Neisse River, had gotten between him and Ohlau. The king decided to wheel to the right, take position in villages four miles to the south of the hamlet of Mollwitz, and prepare his 21,000 men to fight the Austrians coming down from the north.

As the Prussians girded themselves for the inevitable battle, Neipperg was closing in on his enemy. He did not know it. Unaware of Frederick's exact position and assuming that his opponent had only about 8,000 men, Neipperg kept moving toward Ohlau. He spent April 9, a day of heavy snowfall and frigid temperatures, resting and gathering much-needed supplies. The Austrian cavalry scouted the Mollwitz area but failed to detect the Prussian presence. Neipperg sensed that he was in the midst of his opponents' scattered forces, but he was unsure how to proceed. Still thinking that he vastly outnumbered his adversary, Neipperg was more alarmed about his supply situation. He intended to continue on to Ohlau the next day to secure much-needed foodstuffs.

April 10 found the Prussian army moving north in five columns over ground covered by two feet of frozen snow. Reports of small cavalry clashes between the Prussian advance guard and Austrian pickets reached Neipperg, who although surprised, calmly and quickly ordered his troops to form to meet the oncoming enemy. His task was complicated by the fact that his men were facing in the wrong direction, looking to the northwest of Mollwitz instead of the southeast. To face the enemy, the entire Austrian army had to execute a 180-degree turn. Despite the urgency of the situation, Neipperg told his staff that he expected nothing less than complete victory.

Less than 1,000 yards from his prey, the Prussian king ordered his army into battle formation. Its five columns swung to the right in two parallel lines; the first line fell under the command of Schwerin, the second under Prince Leopold. Cavalry under Count Adolf Friedrich von der Schulenberg took up positions on the right, while more squadrons were placed on the left under Colonel von Posadowsky. The Prussian artillery was placed along the entire front.

Meanwhile, the Austrians, seeing their enemy on their doorstep, had to deploy a force that not only was facing the wrong way, but for the most part still nestled in their camps. Mustering six regiments of cavalry, Lt. Gen. Carl Romer screened the infantry of General von Goldy as they frantically formed a widely spread-out battle line. Romer moved his horsemen to the Austrian left, while General Baron Johann Friedrich Berlichingen's cavalry stood on the Austrian right. Friendly artillery slowly arrived and was filtered into the line at various points.

On the surface, the opposing forces appeared

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Under unflappable Field Marshal Count Kurt von Schwerin, the Prussian infantry rallies "like Caesar's" to win the day at Mollwitz.

to be evenly matched. The Austrians had 19,000 men in 16 infantry battalions, 14 grenadier companies, and 8,000 troopers in two hussar, six heavy cavalry, and five dragoon regiments, along with 19 cannons. The Prussians fielded 21,600 men in 31 infantry battalions, 33 cavalry squadrons, and 53 guns.

As the Prussians neared Mollwitz, they realized to their horror that there was not enough room to deploy the entire first line as envisioned in the plan of attack. The lack of space squeezed out seven infantry battalions and all of the left-wing cavalry, considerably reducing Prussian striking power on that flank. As a result, the orphaned infantry units were reduced to acting as a right-flank guard for Prince Leopold of Anhalt-Dessau's second line. The displaced cavalry had to be moved behind and to the left of the second line. There it was formed in column and poorly placed to take part in the upcoming fight. The repositioning of the units took precious time—90 minutes in all. When it was finally ready, the Prussian formation occupied a level plain 3,000 yards long. Its left flank was protected by a small stream with swampy banks, its right by a tiny wood. The space between the two friendly lines was about 150 yards deep. The Prussian delay materially aided the Austrians in their efforts to form their own defense line.

At 1 PM, Frederick's army started to move toward Mollwitz. Its artillery tried to keep pace and intermittently stopped to lob shells at the Austrian line, which was still in disarray, with few units firmly in place. As the Prussians advanced, clouds of horsemen could be seen coming from the Austrian left near Windmill Hill east of Mollwitz. The unexpected mounted avalanche comprised the 4,500 troopers of Romer's four cuirassier and two dragoon regiments. Romer had been ordered not to attack until the Austrians had established their defensive line, but stung by Prussian artillery fire, he unleashed his command prematurely in a furious charge of revenge.

Romer's onslaught caught Schulenberg's troopers in the open as they belatedly wheeled to face their attackers. Sweeping forward in two lines, the 30 Hapsburg squadrons took their 10 enemy counterparts at almost a standstill, scattering them in all directions. But the Austrians suffered heavily from the Prussian infantry battalions positioned between the two Prussian lines, as well as from grenadier companies that had been interspersed with the Prussian right wing cavalry. Canister from the Prussian artillery on the flank also caused considerable casualties among the attacking horsemen.

Shocked at what he was witnessing, Frederick, who had come over to the army's right, attempted to rally some of the broken Prussian cavalry. But all his attempts proved futile, and the king was carried away by his routed horsemen. Schulenberg was killed during the melee, as was Romer, who was laid low by a pistol shot. Exposed to enemy gunfire and flashing sabers, Frederick was persuaded by Schwerin to quit the field. The badly rattled king spent the remainder of the day wandering the nearby countryside, narrowly escaping capture by Austrian hussars at the village of Oppelin, certain that his first battle had ended in unmitigated disaster.

WHILE THE PRUSSIAN MONARCH FLED FOR HIS LIFE, THE BATTLE OF MOLLWITZ raged on. Schwerin's practiced eye saw that the Austrian cavalry assault was beginning to lose momentum as it turned from the defeated Prussian cavalry to the intact Prussian infantry and artillery. On cue, Prussian infantry battalions with parade-ground precision turned to face the enemy horsemen, blasting them from both front and rear. Piecemeal, Austrian foot battalions joined the fray, but found themselves halted and forced to fall back by disciplined volleys of Prussian musketry.

After five hours of hard fighting, Schwerin, despite being wounded, was able to reorder the second line and calm his men by the example of his personal bravery and confident manner. Slowly, as the afternoon dragged into evening, the Austrian losses inhibited their ability to sustain their forward firing line or engage in determined cavalry attacks.

As the fight raged on the Prussian right, Berlichingen's Austrian cavalry hammered the enemy left.

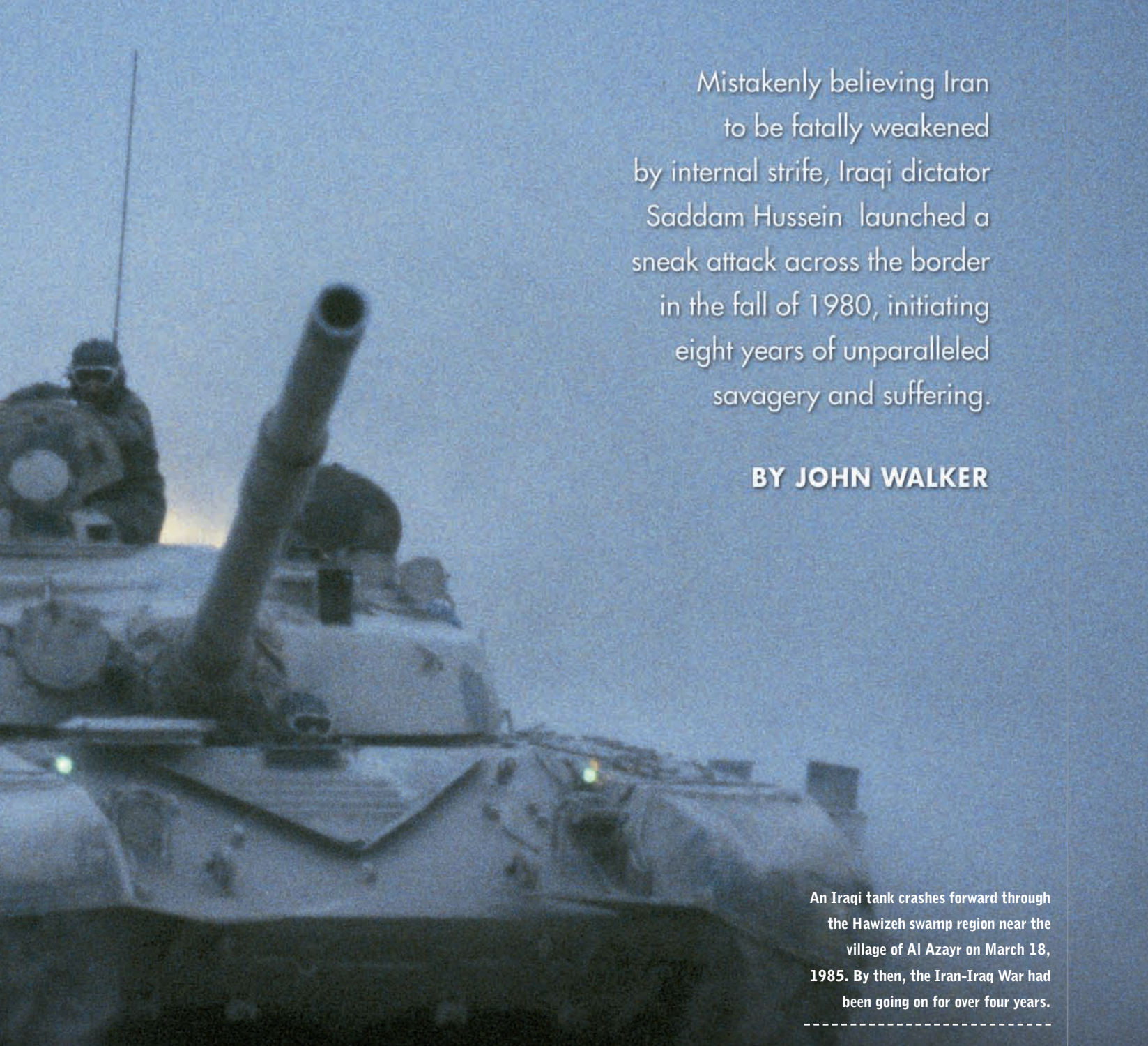
Continues on page 69

NEW BORDERS, THE IRAN-IRAQ WAR OLD ENEMIES

THE WORLD AWOKE TO OMINOUS NEWS ON SEPTEMBER 22, 1980. IRAQI despot Saddam Hussein had launched a massive armored and air attack across the Iraq-Iran border. Believing that his Islamic fundamentalist neighbor to the east had been weakened by the ongoing revolutionary turmoil that in February 1979 had toppled the Shah, Hussein was confident that his forces would win a lightning victory and restore long-disputed territory to Iraqi control. Such a victory, not incidentally, would put Hussein at the forefront of a resurgent Middle Eastern pan-Arabism.

Among the causes of the war—the ruthless ambition of Saddam Hussein; ongoing disputes over control of the strategic Shatt al-Arab waterway, a shipping lane formed by the confluence of the Tigris and Euphrates Rivers that created the southern borders of both countries; the struggle for dominance in the Persian Gulf region—the overriding issue was a centuries-old dispute regarding sovereignty over oil-rich Khuzestan Province in southwestern Iran. Khuzestan was the ancient home of the empire of Elam, an independent, non-Semitic, non-Indo-European-speaking kingdom whose territory spanned almost all of present-day southwestern Iran. Khuzestan had been attacked and occupied many times by various Arab kingdoms of Mesopotamia, the precursors of modern-day Iraq.

The rivalry between Mesopotamia and Persia had lasted for centuries. Before the Ottoman Empire, Iraq was part of Persia. This changed when Murad IV annexed Iraq from the weakening Safavids of Persia in 1638, making it the



Mistakenly believing Iran to be fatally weakened by internal strife, Iraqi dictator Saddam Hussein launched a sneak attack across the border in the fall of 1980, initiating eight years of unparalleled savagery and suffering.

BY JOHN WALKER

An Iraqi tank crashes forward through the Hawizeh swamp region near the village of Al Azayr on March 18, 1985. By then, the Iran-Iraq War had been going on for over four years.

easternmost province of the Ottoman Empire. Border disputes between Persia and the Ottomans persisted. Between 1555 and 1918 Persia and the Ottomans signed 18 different treaties delineating their disputed borders.

The British and other Western powers received a League of Nations mandate after World War I to carve up the remains of the Ottoman Empire and virtually rewrite the map of the Middle East. The Ottomans had backed the losing side, Germany, against their traditional enemies, the Russians. Great Britain took control of Palestine, Iraq, Trans-Jordan, and various Gulf states; France was responsible for Syria and Lebanon. The new map ignored religious, tribal, ethnic, and historical divisions. Borders did not reflect natural frontiers such as rivers and mountains, but rather demarcations on a map drawn in a European conference room. Of all the new nations created with the potential for ethnic-religious strife, Iraq was the worst, a combustible mix of mutually antagonistic peoples—Shiite Muslims, Sunni Muslims, and Kurds—each of which considered itself separate and sovereign.

The modern nation-state of Iraq was granted independence in 1932 and immediately spiraled into ethnic and religious turmoil. Iraq was a rarity in the region, a nation where the Sunni minority ruled over the Shiite majority. In 1969, Iraq's Ba'ath Party mounted a successful coup under the leadership of General Ahmed Hassan al-Bakr and renewed its claim to full control of the Shatt al-Arab waterway. This led Iran to denounce the 1937 treaty dividing control of the waterway

between the two nations. On April 22, 1969, an Iranian ship entered the Shatt with a military escort and refused to pay tolls to Iraq. Relations between Iran and Iraq deteriorated over the next two and half years.

On November 30, 1971, the day before the British withdrew from the Gulf for good, Iran seized three strategic islands in the lower Gulf—Abu Musa and the Greater and Lesser Tunbs—owned by the United Arab Emirates. Their seizure led Iraq to sever diplomatic relations with Iran. Scattered border clashes occurred in 1972, after which Iraq expelled some 72,000 Iranians from Iraq. A new series of border incidents occurred in February 1974. Iraq, its military readiness far inferior to that of Iran, was compelled to ask for a compromise, which took the form of the 1975 Algiers Accord. Under its terms, Iran conceded territory in the Qasr e-Shirin area and agreed to halt arms shipments to the Kurds in return for concessions in the Shatt that again designated the middle of the waterway as the international border.

THE IRAN-IRAQ RIVALRY WAS PROFOUNDLY ALTERED BY THE ISLAMIC REVOLUtion that toppled the Shah in February of 1979, ending 2,500 years of monarchy. Ayatollah Ruhollah Khomeini's sudden rise to power created a regime in Iran that was far more of a threat to Iraq than the Shah had ever been. The revolution cut Iran off from the United States and the West. The 444-day U.S. Embassy hostage crisis began on November 4, 1979, and a brutal power struggle broke out between religious revolutionaries under Khomeini and radical Marxist movements that had initially supported the revolution. The internal disarray made Khomeini seem far more vulnerable than he really was, and led Saddam Hussein to believe that the time was ripe to transform Iraq into the dominant power in the Gulf.

On September 17, 1980, Hussein abrogated the 1975 Algiers Accord and declared the Shatt al-Arab "totally Iraqi and totally Arab." Heavy fighting broke out along the waterway, and Iranian President Abolhassan Bani-Sadr decreed a general mobilization. Convinced that his antagonist had been severely weakened by the purges of its regular forces and was preoccupied with suppressing grave internal threats, Hussein launched an invasion two days later. Six Iraqi army divisions advanced into Iran on three fronts along a 435-mile-broad arc in an initially successful surprise attack. In the north, an Iraqi mechanized division overran the border garrison at Qasr e-Shirin in Bakhtaran Province and pushed on, advancing 25 miles eastward to the base of the Zagros Mountains. Iraq's forces spent several days reaching the villages along the main route to Tehran; many villages were destroyed and their inhabitants expelled. On the central front, Iraqi forces captured Mehran, on the western edge of the Zagros chain in Ilam Province, an important position on the major north-south highway close to the border.

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ABOVE: Much of Iran's infantry was comprised of untrained youths whose political and religious fervor was far greater than their military skills.

The main thrust came in the south, where five armored and mechanized divisions invaded Khuzestan Province on two axes. One easily crossed the lightly defended Shatt al-Arab near Basra, the second headed for Susangerd and the provincial capital of Ahwaz. Supported by heavy artillery barrages, the Iraqis made rapid and significant advances—almost 50 miles in the first few days. The Iraqis made heavy use of artillery and anti-tank guided missiles to break up strongpoints and met with little more than minor resistance from a mix of Revolutionary Guard and gendarmerie infantry forces.

Iraqi units entered Susangerd on September 28; finding it undefended, they pushed on toward Dezful and Ahwaz, crossed the Karun River, and approached the outskirts of Ahwaz and Korramshahr. Iraqi units now threatened all the major cities in southwestern Iran.

Emulating Israeli tactics used in the 1967 Arab-Israeli War, Hussein sent formations of MiG-21s in a preemptive strike against Iran's air bases at Mehrabad, Ahwaz, Dezful, and Abadan, but failed to destroy Iran's air force on the ground. Iranian jets were housed in hardened shelters and survived intact; Iraqi bombs designed to crater runways could not destroy Iran's spread-

out airfields. Within hours, Iranian F-4 Phantoms took off from the airfields, attacking strategic targets near major Iraqi cities. Although Iran's 100 sorties were not especially effective, they shot down two aircraft and surprised the Iraqis; the Iranians also used helicopters to fly transport and attack missions. The Iraqi air force, with at least a 3-to-1 numerical advantage, virtually abandoned the skies to preserve its planes.

Iran was in the early stages of transforming its Revolutionary Guard Corps into a serious alternative to the regular army, which meant that much of the initial defense of Iran's central and southern borders fell to a mix of paramilitary forces, a few scattered regular army brigades, and between 12,000 and 30,000 Revolutionary Guards. The military experience of the Guards consisted largely of training as conscripts in the Shah's army or low-level fighting

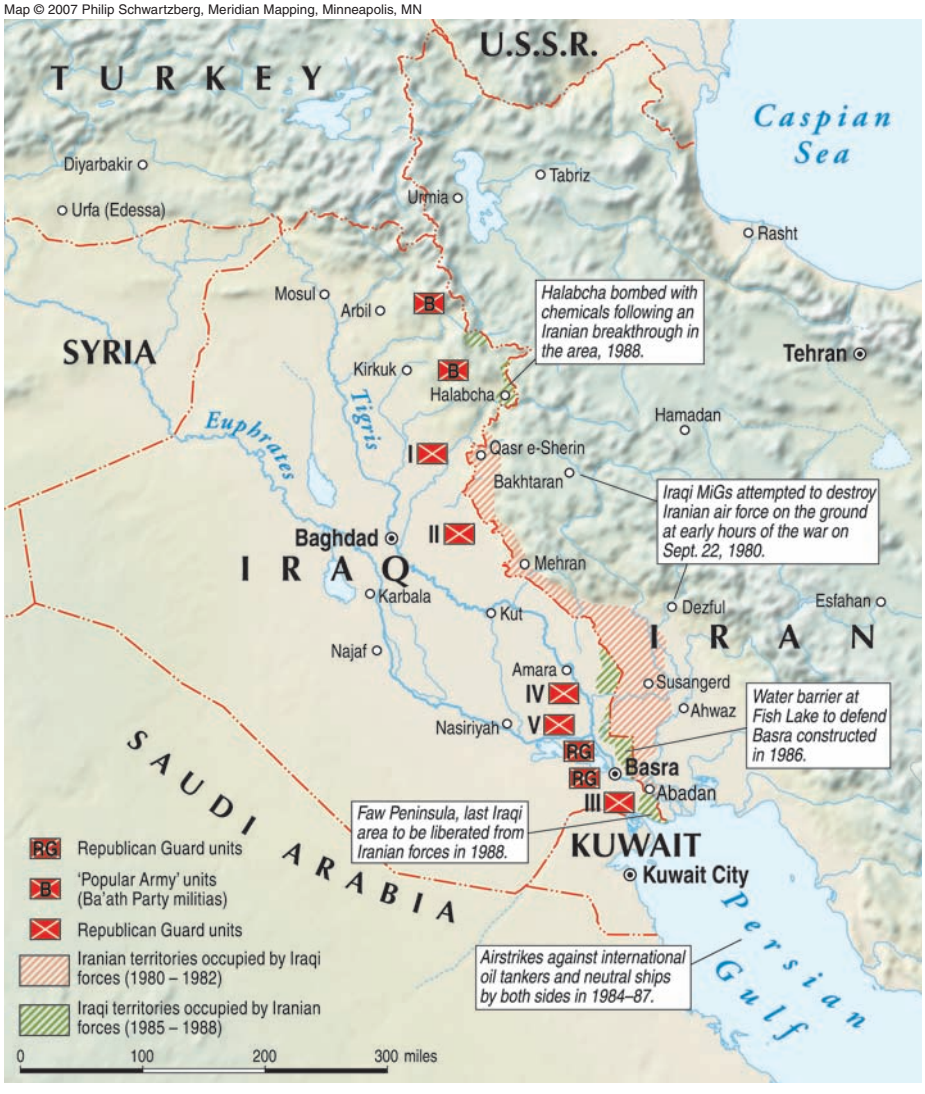
Iranian soldiers on the northwestern front exult in victory during Operation Nasser II, on August 23, 1987. Note the elderly soldiers amid the youths.

against the Kurds or other internal opponents. Meanwhile, the Iranian navy quickly established its mastery of the waters of the Gulf, sinking four enemy vessels and shelling Umm Qasr, the Iraqi oil port on the Faw Peninsula. Within a week, the Shatt waterway was closed for the duration of the war.

Iranian resistance at the outset of the invasion was unexpectedly fierce, if not particularly well organized. Iraqi forces easily advanced in the northern and central sectors and crushed scattered resistance there, but in Khuzestan the attackers encountered unyielding opposition. Iran had rapidly mobilized fiercely loyal Revolutionary Guard units, as well as tens of thousands of untrained and ill-armed popular volunteers called *basij*. By the end of November, a mixed force of 200,000 troops had been dispatched to the front.

Iraqi armored units paused outside Khorramshahr while artillery attempted to soften up the city's defenses. When the Iraqis finally pushed into the city of 70,000 people on September 28, they encountered about 2,000 Iranian regulars and a like number of Revolutionary Guards armed with rocket launchers and Molotov cocktails ready to wage a street-by-street fight. While armored units secured the perimeter of the city, Iraqi special forces and Republican Guards, untrained for urban warfare, were committed piecemeal and suffered heavy losses. Iraq finally managed to gain control over most of the city on November 10; the two sides together suffered at least 8,000 troops killed or wounded. After capturing the city, the Iraqis lost their initiative and began digging in along their line of advance; they were now facing a rapidly reinforcing army which had dug in or withdrawn to the foothills of the Zagros Mountains west of Dezful to set up a defensive barrier.

THE FIGHTING AT KHORRAMSHAHR STALLED THE IRAQI ADVANCE ON THE much larger city of Abadan and the refinery on nearby Abadan Island for two weeks. Although Abadan, separated from Khorramshahr by the Karun River, had been shelled since September 22 from across the Shatt al-Arab, Iraqi troops did not begin surrounding the city until October 10, by which time the Iranians had reinforced it with almost 10,000 regular troops, 5,000 militia, and 50 tanks. An Iraqi mechanized division moved north of Khorramshahr, crossed the Karun River on October 14, and moved to cut off Abadan from Ahwaz. The Iraqis secured the road north to Ahwaz on the 15th, moved south against little resistance, and surrounded most of Abadan Island, but after heavy urban fighting they still could not completely clear



the city of its tenacious defenders.

After one month of fighting, the Iraqis had occupied some 7,000 square miles of Iranian territory, but they could not improve on their early gains. The Iraqi thrust virtually ended after the 24-day bloodbath at Khorramshahr. The Iraqi advance stalled, the front stabilized, and the attackers dug in along a 170-mile-wide line on the southern front from Dehloran to Abadan. Heavy rains, which began in December, gave the Iranians five months to build up and reorganize their forces.

The first six months of 1981 were marked by a stalemate on the front and a state of open warfare within Iran as a brutal political power struggle escalated. President Bani-Sadr, in great part responsible for Iran's initial heroic resistance, came under increasing pressure from clergy members of the Islamic Revolutionary Party. Bani-Sadr, eager to build political support among the armed forces, launched a premature attack by an armored task force that stalled in the mud outside Susangerd and was decimated with heavy losses. When the attack failed, Bani-Sadr was ousted on June 10 and replaced by Khomeini and a three-member Presidential Council. From that point on, the mullahs were in charge of prosecuting the war.

Iran achieved its first successful counterattack, in September 1981, when Khomeini persuaded the regular army and militia forces to work together to lift the Iraqi siege of Abadan. A combined force of regular troops and Revolutionary Guards attacked and defeated the well-entrenched Iraqis, capturing 2,000 prisoners and forcing the Iraqis back across the Karun River. Two months later, the Iranians launched a second successful counteroffensive northwest of Ahwaz.

In late March 1982, Iran routed the Iraqi invaders from territory west of Dezful and Shush. The Iranians attacked during a sandstorm and surprised the Iraqi defenders so completely that they collapsed almost immediately. More than 15,000 Iraqi soldiers and 300 armored vehicles were captured, and 1,500 square miles of Iranian territory were retaken.

FOR THE IRAQIS, WORSE WAS TO COME in the months ahead. While Hussein redoubled his efforts to marshal international support for a cease-fire, Iran launched another massive offensive in an attempt to retake the captured Iranian port of Khorramshahr. The Iraqis had had 20 months to reinforce the garrison and transform the city's gutted ruins into a seemingly impregnable fortress. The defenses were surrounded by arcs of huge earthen barriers, barbed wire, and minefields. Iran massed some 150,000 troops outside Khorramshahr and in southern Khuzestan and attacked along three major fronts, again using human-wave assaults and night attacks to surprise the defenders. After weeks of heavy fighting, the Iranians drew closer and closer to the city. The final push came on

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May 22 when some 70,000 Iranians advanced against 35,000 defenders. Although they suffered horrendous casualties, the Revolutionary Guards and *basij* finally breached the Iraqi line, and after vicious house-to-house fighting and the loss of 12,000 prisoners, the Iraqis began falling back across the Shatt.

The recapture of Khorramshahr ended the second phase of the war, during which Iran recaptured almost all of its lost territory, at a very high price—over 110,000 casualties, including 60,000 dead. From March 22 to May 24, Iraq relinquished 3,400 square miles of captured territory, at a loss of 40,000 dead, 25,000 captured, 200 tanks, and several hundred artillery pieces. Apart from a few isolated pockets, the Iraqi invasion force had been virtually cleared from Iranian soil. In June, Hussein announced his decision to unilaterally withdraw all Iraqi forces to the international border, but Khomeini quickly made it clear that the war would go on until huge reparation payments were made, Iraq was branded the aggressor, and the Hussein regime was overthrown.

The war's third phase—from June 1982 to March 1984—began when Iran deployed five full divisions of troops in an attempt to capture the strategic Iraqi city of Basra. Iraq was now defending its own territory and held an advantage in aircraft of 4-to-1 and in operational artillery and armor of 3-to-1. During the previous two years, while the Iraqis occupied large swaths of Iranian territory, their engineers had been hard at work constructing a series of vast and complicated defensive positions along the border and in support lines behind it. Great man-made lakes appeared after Iraqi engineers flooded low-lying areas to form formidable barriers against tanks and advancing troops, a tremendous feat of engineering skill and back-breaking labor. When the Iraqi retreat took place, it was to a line of prepared positions, a series of mutually supporting defensive works as formidable as anything devised since the set-piece battles of World War I.

The Iranians had roughly the same number of troops around Basra as did Iraq, about 80,000. The first Iranian sortie, dubbed "Ramadan al-Mabarah," began on the night of March 13, 1982. Led by Revolutionary Guard shock troops, four Iranian divisions attacked Iraqi border posts near Salamsheh, with the objective of cutting the main road north from Basra and isolating the city. The Iraqis enjoyed a major edge in firepower, especially artillery, and the attack bogged down after both sides had suffered heavy casualties. The Iranians regrouped and launched another major sortie on July 21, near Zaid, nine miles to the south. At a cost of well over 10,000 men killed, compared to Iraq's 3,000, the attack wound down after scoring only minimal gains.

Iran launched four offensives in 1983, two of them in Kurdistan, but none achieved any decisive results. The battles brought the total number of casualties to roughly 245,000 men killed in action (65,000 Iraqis and 180,000 Iranians) and at least another 300,000 wounded, and marked the first significant use by the Iraqis of mustard gas on the battlefield.

In early 1984, the Iranians made another push, this time in the southern sector along a broad front covering Dehloran, Mehran, and the Hawizeh Marshes. Two limited attacks were meant as a diversion to draw Iraqi forces away from the main objective, a surprise attack through the Hawizeh Marshes to cut the Basra-Baghdad highway. Iran had deployed a strike force of between 50,000 and 100,000 troops, with another 100,000 in reserve, for the thrust. Three major amphibious attacks, using barges and small craft, targeted Beida, Ghuzail, and the Majnoon Islands. Although the initial attack upon Beida was successful, the Iranians were unable to build up a major bridgehead before the Iraqis rapidly counterattacked with artillery and armor. Iranian reinforcements coming up in small craft were ideal targets for Iraq's armed helicopters. By February 25, three successive Iraqi counterattacks had overrun the Iranian forces. The fighting degenerated

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ABOVE: Iraqi pilots undergo a last-minute briefing beneath their Mirage F-1 fighter-bombers. The better-equipped Iraqis controlled the skies. OPPOSITE TOP: Iraqi strongman Saddam Hussein launched a blitzkrieg-like invasion of Iran in September 1980, but it soon stalled into trench warfare more akin to World War I. OPPOSITE BOTTOM: The Iranians had to husband their heavy weapons carefully during the war, due to problems with repair and maintenance.

into brutality; Iraqi tanks ran over Iranian infantry and the Iraqis electrocuted others by diverting power lines into the marshes.

At Ghuzail, wave after wave of advancing Iranian militia were slaughtered when they tried to overcome the entrenched Iraqi defenders by sheer force of numbers. During the battle, Iraq used helicopters and artillery to drop mustard gas onto the oncoming Iranian columns, inflicting several thousand casualties. By March 1 the attack was over. The Iranians suffered at least five times as many casualties as they inflicted, losing between 12,000 and 20,000 men.

IRANIAN TROOPS ADVANCING BY BOAT FOUND THE OIL-DRILLING COMPLEX IN the Majnoon Islands virtually undefended. The "islands," in reality, were two sand mounds in the marshes to the east of Qurnah. The Iranians were able to dig in unopposed and quickly had 20,000 troops in place. The Iraqis counterattacked on March 6. After more bitter fighting, extensive use of mustard gas, and possibly Iraq's first experimental use of the nerve gas Tabun, Iraq could fully recover only one of the two islands, giving the Iranians something of a victory. But its losses in the offensive were so severe that Iran was unable to launch major offensive operations for a full year;

In March 1984, the so-called "tanker war" began in earnest when Iraq, using Super Etendard fighters armed with Exocet missiles, began a series of air strikes against shipping and Iranian oil

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Hunkered down in their trenches, Iraqi soldiers armed with light infantry weapons and antitank missiles man a defensive position on the central front.

installations in the Gulf, hitting two small Indian and Turkish tankers. After repeated attacks on its main terminal at Kharg Island, Iran felt compelled to respond. Given the absence of Iraqi ships in the Gulf, Iran was forced to use its dwindling air assets to retaliate against the neutral ships of Iraq's allies, Kuwait in particular. Iran attacked a Kuwaiti tanker near Bahrain on May 13 and a Saudi tanker in Saudi waters on May 16; attacks on ships of noncombatants increased sharply thereafter. Within five weeks, the two sides had combined to hit 11 ships, 10 of them tankers.

IRAN LAUNCHED NINE LIMITED ATTACKS IN 1985, KEEPING CONSIDERABLE pressure on the Basra-Baghdad highway, and Iraq answered with three counterattacks. New battles took place in the Hawizeh Marshes as well, but did not produce the massive numbers of casualties like those of 1984. After a long series of artillery exchanges in February and March that caused 400 civilian deaths, Iran launched a new offensive, Operation Badr, designed to seize Basra or cut it off from the rest of Iraq. The attackers again chose the Hawizeh Marshes as their stepping-off point, believing Iraq would not expect another attack there.

Iran assembled a strike force of 55,000 troops, of which 60 percent consisted of Revolutionary Guards and *basij*, against an Iraqi force of 10 divisions. On the evening of March 11, the Iranians surged out of the marshes and achieved enough tactical surprise and concentration of force to rapidly break through the first line of Iraqi defenses. As usual, their characteristic human-wave attacks resulted in heavy casualties. The Iranians advanced some 15 miles, and on the night of March 14-15 they laid pontoon bridges across the Tigris River. On the 15th, several militia units actually reached the Baghdad-Basra road, but were unable to sustain or widen their advance.

Iraq felt threatened enough to commit its entire elite Republican Guard division, air force, and massive artillery reinforcements. After flooding large areas in the Iranian rear and deploying armed helicopters, the Iraqis began their counterattack; on March 17, the Iranian lines began to collapse; by the 18th the Iraqis had recaptured all of their lost ground. Iran committed 20,000 troops to another attack against Iraqi positions near Majnoon, but the Iraqis, who had not diverted troops to the fighting farther north, were well prepared. The Iranians attacked on March 19 and 21, but the assault sputtered to an end two days later with the Iranians having achieved nothing except the loss of another 5,000 men, many of them victims of mustard gas attacks.

ONCE AGAIN, REPEATED MASSED FRONTAL ATTACKS ON WELL-PREPARED IRAQI DEFENSES ACHIEVED NOTHING IN THE WAY OF POSITIVE GAINS—AT THE COST OF HORRENDOUS CASUALTIES.

During March, Iraq launched a series of relatively large-scale air and missile attacks against Iranian cities. In one three-day period some 158 air strikes took place, hitting as deep as Tehran. Iran responded with its first use of Scud-B missiles against Iraqi cities. In mid-August, Iraq

began a number of air attacks on Kharg Island, the vital terminal that was responsible for 90 percent of Iran's wartime exports. French-built Mirage fighters, capable of in-air refueling, gave Iraq the ability to threaten targets anywhere in the Gulf, and it began carrying out long-range raids against new Iranian oil installations in the southern end of the Gulf. By mid-September, Iraq had staged nine major attacks on Kharg Island, cutting Iran's exports in half.

After making significant improvements in their amphibious assault capabilities, the Iranians now planned to attack in the south, across or around the marshes, to capture the Faw Peninsula and Umm Qasr. By February 1986, with some 200,000 troops massed in the area, Iran was ready for a new series of attacks. On February 9, the first phase of a two-pronged offensive, designed to split Iraq's defenses, began. Iran's forces on the northern wing launched three diversionary thrusts—near Qurnah, south of Qurnah, and against parts of the northern Majnoon Island that Iraq had retaken. All three attacks were contained after heavy fighting.

The outcome of the southern attack was different, however, thanks to Iran's tactic of attacking at night during poor weather. On February11-12, a major amphibious assault was launched on the Faw Peninsula. Although the Shatt was nearly 900 feet wide and crossings were made at night in driving rain, the landings were successful; almost an entire division made it across the water and advanced along the coast of the peninsula. Iraq's commanders mistakenly believed the main thrust would come to the north and were preoccupied by a massive artillery barrage on Basra. Consequently, they were slow to react when the attack fell on the Faw Peninsula, waiting far too long to commit their reserves.

WITH HEAVY RAIN SEVERELY HAMPERING IRAQ'S AIR FORCE DURING THE crucial initial phase of the battle, the outnumbered Iraqi defenders were overwhelmed. At the height of its success, Iran threatened to break out from the peninsula and attack Umm Qasr, which was only 10 miles from Kuwait. This resulted in near-panic in Kuwait and Saudi Arabia. An Iraqi counterattack to the south was contained with severe Iraqi casualties—5,000 men killed or wounded in one week.

Continuing bad weather prevented Iraq from making optimal use of its air and artillery superiority, giving Iran 10 nights to reinforce and resupply its troops across the Shatt. Iraq attempted to push Iran off the peninsula through the use of brute force, and both sides threw everything they had into the fighting. The fighting raged for weeks; Iraq pressed home its air attacks at unusually low altitudes to improve their effectiveness and delivered large amounts of mustard and nerve gas. By March 20, both sides were exhausted. Some 20,000 Iranians and more than 30,000 Iraqis were locked into positions just a few hundred feet apart.

Iraq mounted one large counterattack in 1986. Saddam Hussein, feeling the need to secure potential attack routes toward Baghdad, sent a large force to recapture the town of Mehran, defended by 5,000 second-line Iranian troops. A force of 25,000 Iraqis attacked on May 14 and captured Mehran and five neighboring villages. Iran responded by threatening to launch a new "final offensive" while secretly planning to retake Mehran. On June 20, five militia brigades attacked Iraqi positions in the heights above Mehran. The attackers were far superior in mountain warfare, and Iran also made use of poison gas as it rapidly overran Iraqi defenses on July 3.

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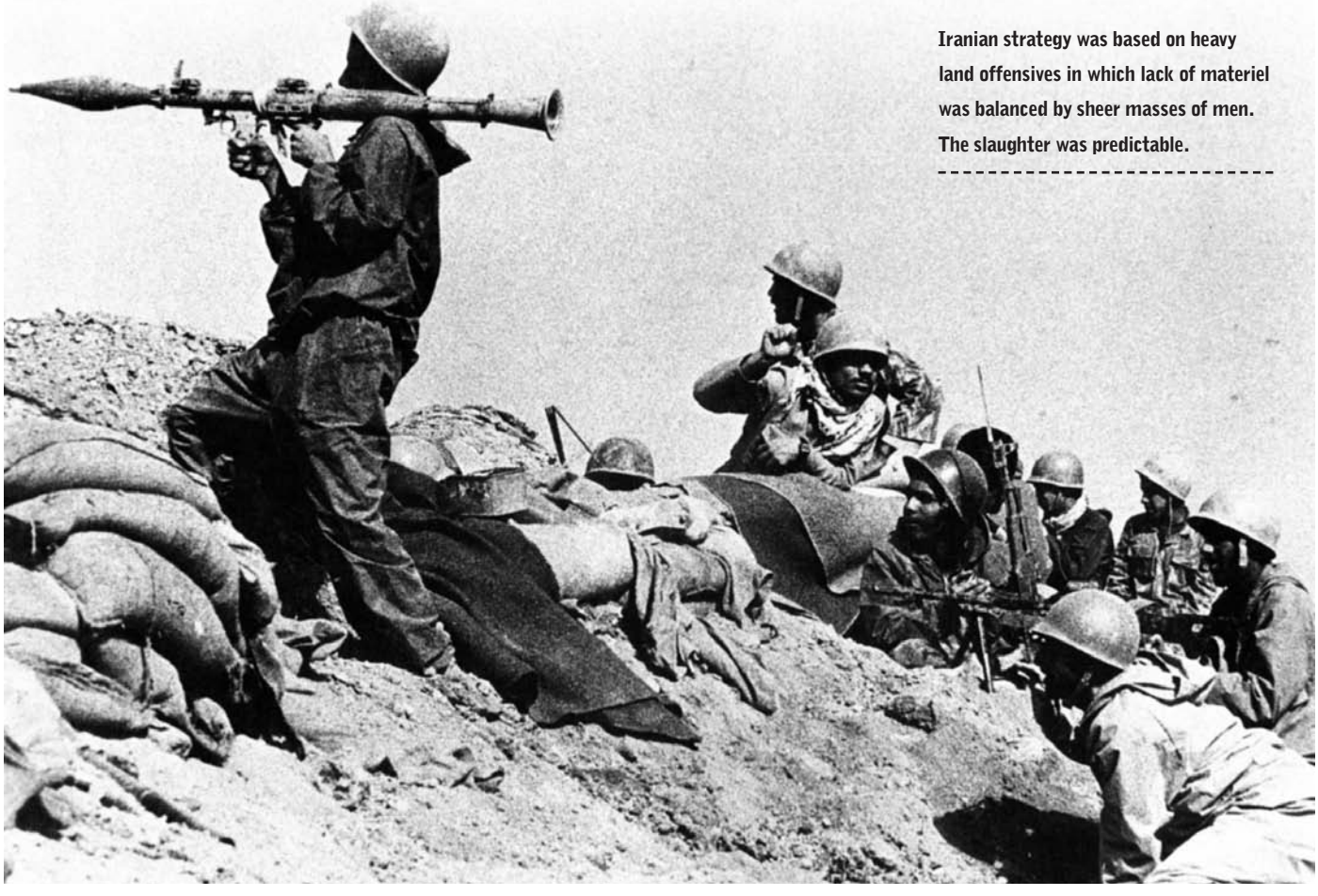


Iranian strategy was based on heavy land offensives in which lack of materiel was balanced by sheer masses of men. The slaughter was predictable.

Iraq retaliated by bombing oil shipping facilities inside Iran and stepped up air strikes in the Gulf and against Kharg Island. The Iraqis attacked Sirri Island, a critical new transshipment site in the southern Gulf, for the first time on August 12 and hit three tankers as well.

Iran began massive new mobilization efforts. On August 31, a new offensive began to retake key heights in the Haj Omran area in the north. Iran's ongoing problems in command and control continued, however, and only limited gains could be accomplished. Iran seized the oil platform at Al Amayah, apparently in an effort to bomb Umm Qasr, but it was quickly retaken by the Iraqis.

ON DECEMBER 23-24, IRAN MOUNTED A NEW OFFENSIVE, A THRUST ACROSS THE Shatt along a 25-mile front. Once again, repeated massed frontal attacks on well-prepared Iraqi defenses achieved nothing in the way of positive gains—at the cost of horrendous casualties. The Iranians were slaughtered by direct gunfire, artillery, armed helicopters, and air strikes, suffering between 9,000 and 12,000 casualties.

By early 1987, Iran and Iraq both had about 200,000 troops deployed along the southern front near Basra, Iraq's second largest city. Again, Iran launched a massive attack. The first wave of 60,000 troops moved rapidly into positions near Salamcheh, a border crossing point 12 miles from Basra. The attackers faced severe difficulties from the outset—the land and water

Department of Defense

barriers around Basra had been vastly improved. The Iraqis had created a huge man-made lake across the Shatt from Basra called Fish Lake, which was filled with sensors, underwater obstacles, and barbed wire entanglements. Basra itself was a virtual fortress with six separate defensive rings, and Iraq maintained strong forces in the area—four army divisions and five Republican Guard brigades.

The Iranians were able to achieve some degree of tactical surprise and managed some significant early successes. On January 9, they struck in a line toward Khusk at two points northeast of Fish Lake and at another point to the southeast in the direction of Salamcheh. Iran committed some 50,000 troops to the initial assault, including several waves of *basij,* many of them 14- or 15-year-old volunteers with little or no military training. On the first day, a breakthrough was made at the city of Duayji, and although Iraq used massive firepower, air strikes, and poison gas in an attempt to seal the breach, the Iranian forces surged forward, capturing other positions near the border.

Iran captured Salamcheh, 19 miles south of Basra, and penetrated the first two defensive lines near Khusk, 40 miles to the north. This gave the attackers a secure bridgehead across the border, and fresh Iranian forces began advancing in strength up the eastern side of the Shatt, arriving at a point about 12 miles south of the outskirts of Basra. On January 10, an Iraqi counterattack failed; some of Iran's initial assault forces penetrated the first two defensive rings around Basra. Fighting intensified.

As the Iranians moved forward onto dry land and attacked Basra's main defenses, they increasingly suffered from a relative lack of firepower, mobility, and ability to move supplies and ammunition. Iraq committed its entire air force, flying some 500 missions on January 14-15 alone. Iran responded by sending in 50,000 reinforcements and launching a minor naval assault on several islands near the Shatt's eastern shore. The main Iranian battle forces were unable to link up as planned, and in spite of the reinforcements it had brought up, Iran began taking so many additional casualties that the attack finally lost momentum. By January 16, the fighting had cost Iran an additional 40,000 casualties.

By early February, Iran had suffered at least 17,000 killed and roughly 40,000 wounded, and possibly more; Iraq had lost 6,000 dead and roughly 14,000 wounded. On February 12, Ayatollah Khomeini declared that the war was a "holy crusade" and vowed that the Iranians would fight until victory was achieved. At least 30,000 Iranian troops still held positions near Fish Lake, and more volunteers were sent to the front. Heavy fighting continued until mid-February with little change in the tactical situation. Iran had secured positions as close as six miles from Basra but could go no farther.

The carnage at Basra led Iraq to intensify the war on Iranian cities. In January 1987 alone, the Iraqis conducted over 200 long-range air and missile strikes. When the month ended, the Iranians claimed that 1,800 of their citizens had been killed and 6,200 wounded. Iran could not retaliate in the air, but it did launch Scud missile attacks on Baghdad and Basra.

On April 6, Iran launched yet another costly series of human wave attacks against the Iraqi defenses around Basra; 35,000 Revolutionary Guards attacked from positions Iran had won in the earlier fighting. This time, however, the Iraqis were not surprised. For three days the Iranians sent repeated waves of troops against well-prepared defenses—the result was a blood-

bath. Iran had another 9,000 casualties, with a high proportion of killed to wounded, while Iraq suffered losses of just 2,000.

The ground fighting in 1987 seemed to indicate that Iran could win limited tactical victories but lacked the capability to make a major strategic breakthrough. Both sides had taken heavy losses, with Iran suffering three to six times as many casualties as Iraq. Iran's total casualties for the war had already surpassed 1 million men killed and wounded; over 2 million Iranian civilians were homeless. On the Iraqi side, the once vibrant city of Basra was virtually deserted, and Iraq had a large refugee population as well.

The course of the war changed radically in the spring of 1988, when Iraq switched from static defense to massive counteroffensives. In early 1988, Iran had decided to switch its emphasis to campaigns in the north, leaving the southern sector undermanned and vulnerable. Iraq had 900,000 troops arrayed along the front compared to 600,000 for the Iranians. Iraq chose April 1, the first day of the Ramadan holiday, to mount one of its largest offensives of the war. Iran was rotating its troops and had left Faw gravely undermanned. The Iraqi assault, during which they enjoyed a 6-to-1 advantage in manpower, achieved almost total tactical surprise, and the defenders never recovered from the initial attack. Just 36 hours after the massive attack began, the Iranians were streaming back across the Shatt in disarray, abandoning their equipment.

On May 25, Iraq launched its second sortie along a 15-mile corridor to the east and southeast of Basra after one of the heaviest artillery bombardments in history. Iraq enjoyed a huge advantage in armor, outnumbered the defenders by at least 3-to-1, and also employed chemical weapons during the initial phase of the attack, which struck the Iranians near the southern edge of Fish Lake, six miles south of Basra. Although the Iranians resisted fiercely and mounted a major counterattack, the combination of Iraq's mass and chemical weapons broke the Iranian resistance. Five demoralized Iranian divisions began to retreat. Many units abandoned their equipment, and Iraq captured 90 tanks. After 10 hours of combat, the Iraqi flag once again flew over the desert border town of Salamcheh. All the hard-won gains that Iran had achieved in 1987 at a cost of 50,000 dead were lost in a single day.

Iraq's next objective was the city of Mehran. On June 18, a massive new offensive, backed by 530 sorties flown by Iraqi jets and helicopters again employing chemical weapons, was launched. Iraqi troops, backed by anti-

National Archives

ABOVE: Iraqi artillerymen dig in during their advance on the Iranian town of Ahwaz in September 1980. OPPOSITE: USS *Wisconsin* and USS *Tripoli* were part of a multinational sea force stationed in the region to safeguard Western shipping during the war.

Khomeini Iranian mujahedin, captured the city of Mehran and several of the surrounding heights. Iraq launched another major offensive one week later against the last remaining Iranian positions in Majnoon and the Hawizeh Marshes. Once again, the attackers enjoyed massive advantages in manpower, artillery, and armor. The Iraqi force, which included regular army units, militia, a paratrooper brigade, and a chemical corps, rapidly enveloped the enemy positions in both Majnoon and the marshes. After just eight hours, the Iranians collapsed and began withdrawing. Four devastating defeats had driven them back across the border, and the Iranian forces no longer had the will to resist the resurgent Iraqis.

An Iranian ground offensive to retake Salamcheh failed, and on July 3 another disaster struck Iran. The United States Navy cruiser *Vincennes,* battling Iranian gunboats in the Strait of Hormuz, mistook an Iranian civilian airliner for an F-14 jet and launched two guided missiles, downing the airliner and killing all 290 passengers and crew. The catastrophe had a profound effect on Iran's leaders, some of whom believed the airliner had been shot down deliberately. Khomeini, his armies defeated, his country bankrupt, and his industries near collapse, agreed to begin cease-fire negotiations. On July 18, Iran notified the United Nations that it would accept Resolution 598; although sporadic fighting continued for a month, the war was effectively over. On August 8, 1988, the agony finally came to an end.

ONCE THE FIGHTING STOPPED, SADDAM HUSSEIN COMMITTED ONE OF THE greatest atrocities of the 20th century by a government against its own people. The day after the cease-fire went into effect, Iraqi warplanes began strafing Kurdish villages in the north, dropping poison gas and rocketing fleeing citizens. Some 5,000 inhabitants perished and another 100,000 refugees headed for the borders of Iran and Turkey. The end of the war for Iraqi citizens meant that they would continue to be strictly monitored, arrested, tortured, imprisoned, or killed by Hussein's brutal regime.

The war had ended, but the rebuilding had yet to begin. Along the Iran-Iraq border, whole villages had disappeared, destroyed either by invading Iraqi troops or by Iranian troops pounding them to rubble in an attempt to liberate them. The true human and economic cost of eight years of unrestrained brutality is impossible to measure. The numbers of people, civilian and military, who were killed, maimed, or sickened by chemical agents can only be estimated. Possibly as many as 1 million people were slain and 1.5 million wounded; another 2 million became refugees.

Neither country came anywhere near achieving even the most modest of its war aims. The borders were unchanged; both armies ended the war in essentially the same position they were in at the outbreak of hostilities. Together, the opponents had squandered some $350 billion on a senseless war of attrition engineered by two venal and intransigent autocrats. A generation of long-suffering Iranians and Iraqis deserved far better. □

By Al Hemingway

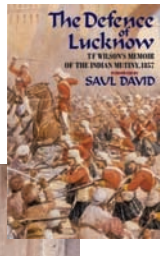
An eyewitness account of the siege at Lucknow demonstrates the brutality of the 1857 Sepoy Rebellion.

ALTHOUGH THE BLOODY SEPOY INSURRECTION OF 1857 WAS SPARKED by the introduction of the new Enfield rifle, the seeds of mistrust between Indian soldiers and their British colonial masters were planted long before that. The growing fear that the British wanted to convert the Sepoys (native soldiers) to Christianiity and do away with their Hindu and Muslim faiths was an ever-present threat in the popular mind. The encroaching territorial gains of the East India Company and its total disregard for native culture and traditions also frightened and angered the Indians.

When the new 1853 Enfield percussion cap rifle was issued, the cartridge had to be bitten open and the gunpowder poured down the muzzle. Then the casing was rammed into the barrel to act as wadding. A rumor spread that the cartridges were lubricated with pig fat and beef tallow—materials that were strictly forbidden to be eaten by Hindus or Muslims. The rumor was false, but when the British high command proved intransigent on the issue, thousands of Sepoys launched a rebellion that would become one of the bloodiest in British military history.

Lucknow was under seige from July 1 through November 19, 1857. The British, their loyal Sepoys, and civilians endured horrible conditions until they were relieved.

In ***The Defence of Lucknow: T.F. Wilson's Memoir of the Indian Mutiny, 1857*** with an introduction by noted historian Saul David (MBI Publishing Company, St. Paul, MN, 2007, 172 pp., photographs, maps, $29.95, hardcover), Captain Thomas F. Wilson, a staff officer serving with Chief Commissioner Sir Henry Lawrence, penned a riveting day-by-day account of the horrors faced by the British and their allies during the siege at Lucknow. With a force of about 1,700 men that included British soldiers, loyal Sepoys, and civilians, Lawrence established defensive positions in an area called the Residency. For the next 87 days, the British held out, their supplies and their hope dwindling steadily.



Wilson gives the reader a dramatic rendering of the horrific conditions the inhabitants had to endure. On July 7, Wilson wrote, "Major Francis, 13th Native Infantry was struck in the legs by a round shot rendering amputation of one immediate, and great fears were entertained for the other. The calm manner in which he bore his misfortune, gained him the sympathies of all." The officer died the following day.

Wilson was also present when Lawrence was mortally wounded. He recounts, "Soon after an eight-inch shell from the eight-inch howitzer of the enemy, entered the room at the window, and exploding, a fragment struck the Brigadier-General on the upper part of the right thigh near the hip, inflicting a fearful wound." Standing by the bed where Lawrence was resting, Wilson nar-

The Art Archive/Private Collection

rowly escaped death when the explosion caused part of the building to collapse. The falling bricks knocked him to ground and a small piece of shrapnel lodged in his back. Sir Lawrence passed away several days later from his wound.

Many civilians, including women and children, were killed during the fighting at Lucknow. Diseases such a smallpox and cholera also claimed numerous lives. The putrid odor of decaying animal carcasses, Wilson notes, filled the humid air, making the "stench from the dead animals in some parts dreadful."

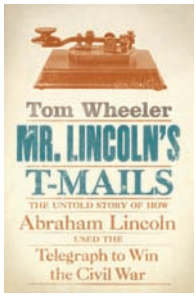
A relief force finally reached Lucknow on September 25, and the occupants of the besieged city celebrated. Wilson noted the great event: "The garrison's long pent-up feelings of anxiety and suspense burst forth in a succession of deafening cheers. From every pit, trench and battery—from behind the sandbags piled on shattered houses—from every post still held by a few gallant spirits, rose cheer on cheer—even from the hospital! It was a moment never to be forgotten."

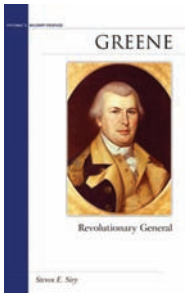
Wilson's journal is rich with detail of the horrible conditions the residents of Lucknow were forced to suffer for nearly three months. As Saul David states in his introduction, Wilson's account is "among the finest war diaries ever written." The book adroitly captures the fighting spirit of the British and native soldiers who endured much in their despairing defense of Lucknow.

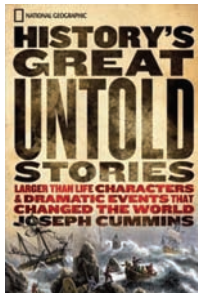
Mr. Lincoln's T-Mails: The Untold Story of How Abraham Lincoln Used the Telegraph to Win the Civil War by Tom Wheeler, HarperCollins Books, New York, New York, 2006, 227 pp., index, $24.95, hardcover.

In 1857, Abraham Lincoln was representing legal clients in Pekin, Illinois, when he acquired a room at the Tazewell House in town. A telegraph office had been established in the hotel, and Lincoln watched with great interest as Charles Tinker, the operator, tapped out messages. Mesmerized by the new technology, the future president quizzed Tinker on the theory behind its operation. With his agile mind, Lincoln quickly grasped how the new invention worked and immediately realized its future importance.

Although the Confederate Army also used the telegraph during the Civil War, it was Lincoln who used it most effectively. By the start of the war, he had already had much favorable exposure to the technology. Telegraphed accounts of his famous debates with Illinois Senator Stephen Douglas in the 1858 Senate race had catapulted Lincoln into the national spotlight. The telegraph had also brought news of his victory in the 1860 presidential election, an event that soon would spark the Civil War. And it would be the telegraph, through Lincoln's unique style of leadership and communication skills, that would eventually help to win the conflict.







At the outset of the war, Lincoln used the telegraph sparingly. It wasn't until the spring of 1862 when Confederate General Thomas "Stonewall" Jackson began his brilliant Shenandoah Valley campaign that Lincoln began to rely on the telegraph to bring him important news from the battlefield. With Washington, D.C., threatened on two fronts, Lincoln kept in constant communication with his generals in the field and "began to assert his authority directly to the field," author Tom Wheeler notes, referring to this as an "electronic breakout." From that point on, Lincoln spent countless hours in the telegraph office reading not only his own telegrams, but messages not addressed to him as well. This enabled him to attain valuable information and learn a great deal more about the men leading the troops.

Wheeler traces Lincoln's use of the telegraph through his years in the White House. In all, the president issued an astonishing 1,000 telegrams during the Civil War. Up to that time, no other president had such technology at his fingertips, and Lincoln had no frame of reference. He only had his own intuition to guide him. As his confidence with the new instrument grew, so did his leadership abilities. As Wheeler writes, "Mr. Lincoln's T-Mails are a chronicle of how one man, even while confronted by a civil war, applied new technology to define a new kind of electronic leadership."

Greene: Revolutionary General by Steven E. Siry, Potomac Books, Washington, DC, 2006, 116 pp., photos, maps, notes, index, $13.95, softcover.

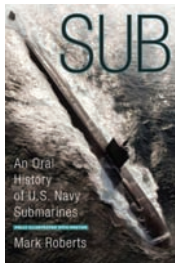
One of the ablest American officers to emerge from the Revolutionary War was Nathaniel Greene. A native of Rhode Island, Greene was raised by strict Quaker parents. His early life showed no indications of a military career. Instead, Greene entered his father's shipping business. When the British government started imposing harsh taxation and laws against personal liberties on the American colonists, Greene became infuriated. He readily embraced the revolutionary movement and enlisted as a private in the Rhode Island militia.

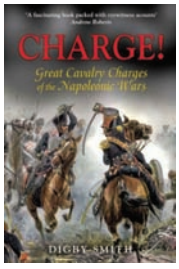
Greene had a swift rise to brigadier general and was soon a part of George Washington's inner circle. He performed admirably during the New York and New Jersey campaigns, but he really shone when he was promoted to major general and went south to keep the British at bay in North and South Carolina. His innovative use of guerrilla warfare and fast-moving tactics kept the enemy off balance and contributed greatly to the eventual American victory at Yorktown. Greene was the only general to serve on Washington's staff faithfully for the entire duration of the war. He died of sunstroke in 1786, five weeks before his 44th birthday. Greene's fierce determination was aptly summed up in his own words: "We fight, get beat, rise, and fight again!"

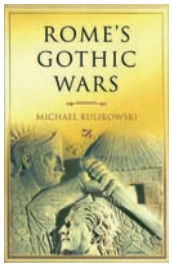
History's Great Untold Stories: The Larger Than Life Characters & Dramatic Events That Changed the World by Joseph Cummins, National Geographic, Washington, DC, 2006, 367 pp., photos, illustrations, maps, index, $30.00, hardcover.

Author Joseph Cummins has done a remarkable job of compiling 28 of the most fascinating historical events and people who left an indelible mark on world history, whether for good or bad. There is just one problem—most of these figures and events have rarely, if ever, been heard of before.

One good example is the tale of the "Leper King." In the latter part of the12th century, the Islamic ruler Saladin threatened to destroy the Crusader States, a territory that included Jerusalem, Tripoli, and Beirut. Inhabited by descendants of the Crusaders, many were Catholics who practiced their religion openly. Faced with a Muslim invasion, people naturally looked to their ruler for help. Baldwin IV was a 16-year-old who "was afflicted with a disease which caused his face to ooze with raw ulcers, turned his hands and feet into little more than suppurating paws, and struck him blind,"







writes Cummins. The king suffered from leprosy. This dreaded affliction would have prompted any other person to be confined to a leper colony. But to the inhabitants of the Crusader States, he was a magnificent ruler.

Baldwin led his men in combat and defeated Saladin's forces at the Battle of Mont Gisard in November 1177. In July 1182, he once again routed the enemy at the Battle of Le Forbelet, even though he was vastly outnumbered. The Leper King died in 1184 at the tender age of 23. Without his leadership, the kingdom of Jerusalem would soon collapse. Cummins's book is full of such captivating stories of little-known individuals who had a tremendous impact on world history.

Sub: An Oral History of U.S. Navy Submarines by Mark Roberts, Berkley Publishing Co., New York, 2007, 298 pp., photos, index, $25.95, hardcover.

From its inception, the submarine has fascinated the American public. Historian Mark Roberts has collected 13 oral histories of men who served on various submarines during war and peace. Their stories about life aboard the cramped vessels will definitely hold your interest.

Lieutenant Commander Chris Kreiss, USN (Ret.) tells about his exploits aboard the USS Batfish during World War II in the Philippines. "Another sub appeared, also headed south," he notes. "This one dove just about the time we closed her and was about ready to fire. Only suddenly, she came back up on the same bearing. We wanted to make an approach on her. We lost some time because we had to swing around and fire torpedoes from our stern tubes. We'd run out of torpedoes up in the bow. We had to make our approach and then do a 180-degree turn in order to fire, which we did, and sunk that one, too. We had a regular feast of Japanese subs."

Roberts's account is a tribute to all those men who served, and are still serving, aboard submarines. Their dedication, bravery, and heroism have earned them the right to proudly wear the coveted dolphin—the emblem of a submariner.

The Yugoslav Wars (2): Bosnia, Kosovo and Macedonia 1992-2001 by Dr. N. Thomas & K. Mikulan, Osprey Publishing, 2006, 64 pp., photos, illustrations, index, $17.95, softcover.

The savage conflict that raged in Bosnia, Kosovo, and Macedonia for nearly a decade in the 1990s can be confusing for the average American to understand. Ethnic hatreds and religious persecutions fostered years of bloodshed in which thousands of innocent people perished. It left an ugly mark on Eastern Europe that caused worldwide condemnation. Eventually, a multinational force intervened to put a stop to the slaughter.

The authors' book is not a history of that conflict. Instead, it provides readers with a detailed look at the various uniforms, patches, and military insignia worn by the many factions involved in the fighting. As with other Osprey publications in this series, it is full of meticulous artwork, rare photographs, charts, and tables explaining the rank structure and garb worn by the military and paramilitary groups.

For those who collect the books in this Elite series, put this one at the top of your list. You will not be disappointed.

Charge! Great Cavalry Charges of the Napoleonic Wars by Digby Smith, Greenhill Books, London, 2007, 304 pp., illustrations, maps, $24.95, softcover.

Meerheim, an officer riding with the Saxon Garde du Corps who participated in the Battle of Borodino, wrote, "We charged at the ravine and ditch, the horses clearing the bristling fences of bayonets. The combat was frightful! Men and horses hit by gunshots collapsed into the ditches and thrashed around among the dead and dying, each trying to kill the enemy with their weapons, their bare hands or even their teeth."

Throughout military history, the sound of bugles accompanying a cavalry charge has had an air of romanticism surrounding it. Gallantly uniformed Lancers and Hussars waving their swords above their heads atop horses in full gallop have captured the imagination of many a history buff. As Meerheim describes during the fight at Borodino, where the Raevski Battery was overrun, there was little actual glory in the brutal hand-to-hand struggle when two armies clashed.

Charge! explains the different types of cavalry, the tactics they employed, and the care of the horses during various battles of the Napoleonic era. Cavalry charges did not begin at a full gallop but rather a walk, then a trot. It wasn't until the cavalry had closed to within 50 paces was the command of charge finally given.

Author Digby Smith has included comprehensive charts at the end of the book listing the many cavalry units employed by both sides in the battles he examines meticulously in his book.

Rome's Gothic Wars: From the Third Century to the Alaric by Michael Kulikowski, Cambridge University Press, 2007, 225 pp., maps, glossary, notes, index, $29.95, hardcover.

In the summer of AD 410, the once great Roman Empire was in a shambles. Many of its citizens were starving while a Gothic army, under the command of Alaric, had positioned itself just outside the city. A sense of unparalleled foreboding hung in the air.

Against this backdrop, the author has written an engrossing account of Alaric and the rise of his Goths within the Roman military structure. Born in 370 on the small island of Peuce at the mouth of the Danube, Alaric (who name means "Everyone's king") was leader of the Visigoths for 15 years. He was the first Germanic ruler to actually seize Rome. His troops ransacked the Eternal City for three days in 410, signaling unmistakably the decline of Rome's power and prestige.

Ironically, it was the Romans themselves who created the Goths from "the pressures of life on the Roman frontier." A gifted leader, Alaric would take them to greater and greater glory just before his untimely death from a fever in 410. But before his passing, Alaric had brought a new spirit of freedom for other barbarian tribes who would follow his example and make their own bloody marks on Roman history.

The Blog of War: Front-Line Dispatches from Soldiers in Iraq and Afghanistan by Matthew Currier Burden, Simon & Schuster, New York, New York, 2006, 291 pp., glossary, index, $15.00, softcover.

With computer access available to our military personnel fighting in the Middle East, many of the soldiers are giving personal and intense accounts of life in a war zone. With the blog, an online diary, these stories present an intimate glimpse into the world of the individual serving in Iraq and Afghanistan. MilBlogs, as they are called, have been used since the invasion of Afghanistan and have filled in details,

both large and small, not included in military and media accounts of events transpiring in the war-torn countries.

The human cost of war comes home throughout the collection. "There was already a pool of blood under the man's head, running down his arm, soaking his clothes," wrote one medic. "I gagged, saliva pooling in my mouth. God I was going to be sick."

Gut-wrenching blogs such as these help bring the war home to the carefully sheltered American public. The author established his own site, Blackfive.net, to support the men and women fighting the war on terror. The American government is now in the process of shutting down all of these blog sites and imposing censorship on the troops. If this happens, we will lose our most accurate and instantaneous methods of accruing accurate and timely information about the ongoing conflict in the Middle East.

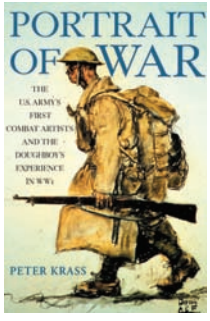
Portrait of War: The U.S. Army's First Combat Artists and the Doughboy's Experience in WWI by Peter Krass, John Wiley & Sons, 2007, 342 pp., illustrations, index, notes, $30.00, hardcover.

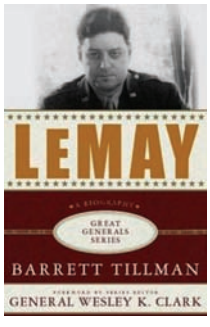
Ever since *Harper's Weekly* sent their illustrators into the field to cover the American Civil War, combat artists have become an essential part of the media coverage of American conflicts. It wasn't until World War I, however, that the U.S. Army actively sought artists to go overseas and record the experiences of the common American soldier. Unlike the photojournalists of today's military, embedded in specific units, the eight men covered in this book were given a free hand to venture anywhere to draw scenes that told the story of the everyday life of the soldier.

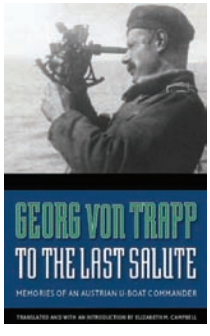
When author Peter Krass was given a present of a book of drawings from that period, it started him on a quest to learn more about these individuals. He was fortunate to meet the family of one such artist, George Harding, who allowed him access to his diary. This valuable find gave him a historical window into another era—a fascinating period of our nation's history—from the close-hand viewpoint of the combat artist.

LeMay by Barrett Tillman, Palgrave MacMillan, 2006, 224 pp., illustrations, maps, index, $21.95, hardcover.

One of the most controversial leaders to emerge from World War II was certainly Curtis Emerson LeMay. LeMay's fascinating career as a pilot and strategist is profiled in this series on influential American generals.







Born in 1906, LeMay was commissioned a second lieutenant in 1930 and entered the Army Air Corps. In World War II, he developed the "combat box formation" during his stint as air commander in Europe. Combative and charismatic, LeMay would personally lead dangerous missions deep into Nazi-controlled territory with no bomber escort. He was quickly promoted to major general and sent to the Pacific, where he oversaw the B-29 bombing raids over Japan that included the punitive firebombing of Tokyo in March 1945.

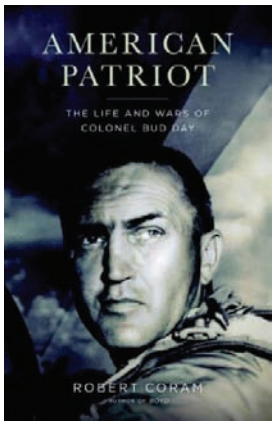
In his post World War II assignments, LeMay constantly clashed with his civilian superiors. His aggressiveness and hard-charging attitude prompted detractors to nickname him "Bombs Away LeMay." Perhaps his most famous line was uttered at the beginning of the Vietnam War, when he said: "My solution to the problem would be to tell them frankly that they've got to draw in their horns and stop their aggression, or we're going to bomb them back into the Stone Age."

Upon his retirement, LeMay dabbled in politics by becoming Alabama Governor George Wallace's running mate in 1968, but that soon fizzled. On October 1, 1990, he died. His remains were interned at the United States Air Force Academy at Colorado Springs, Colorado, where subsequent generations of American pilots and bombers have trained.

Georg Von Trapp To the Last Salute: Memories of an Austrian U-Boat Commander, translated by Elizabeth M. Campbell, University of Nebraska Press, 2007, 192 pp., illustrations, maps, $21.95, hardcover.

Whenever the name Von Trapp is heard, most people conjure up thoughts of the treacly 1960s musical *The Sound of Music,* starring Julie Andrews with Christopher Plummer in the role of Georg Von Trapp, the stern father of a musical brood of Teutonic children. The film traces the family's narrow escape from their

Nazi pursuers without ever answering the question, Why did the German officials want him so badly? Coming from an aristocratic family, Von Trapp was a veteran of World War I, having commanded U-boats in the Mediterranean and Adriatic Seas. As a veteran of that conflict, especially in submarine warfare, Von Trapp was prized by the Nazis, who felt he could provide invaluable service to the Third Reich.

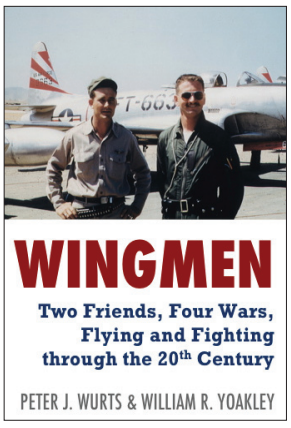


In his personal account, translated by his granddaughter Elizabeth Campbell, Von Trapp captures the feeling of a bygone era where chivalry and love of country were paramount. First published in 1935, this is the first English version of his biography.

His amazing exploits in the Great War and life-and-death experiences as a commander of various U-boats will enthrall readers.

American Patriot: The Life and Wars of Colonel Bud Day by Robert Coram, Little, Brown and Co., 2007, 416 pp., illustrations, index, $27.99, hardcover.

An American hero is one way to describe Colonel George" Bud" Day, a veteran of three wars and POW in the infamous Hanoi Hilton for 67 months. His personal decorations, including the Medal of Honor, are too numerous to mention. It wasn't until after his retirement, however, that Day would experience another type of combat, this time in a court of law.



As a practicing attorney in the State of Florida, Day sued the United States government in 1996 for breach of contract on behalf of World War II and Korean War veterans. The government had reneged on its promise to provide lifetime medical benefits to all those who served in these wars, he charged. In 2000, Day won a signal victory by restoring 95 percent of their benefits. "None of us WWII/Korea/Vietnam War vets want our service people to suffer," wrote Day. "We are not at fault for a shortage of money to the military. It is the Congress who is shortchanging the military for the weapons and equipment they need for combat not the retired military veteran and his spouse."

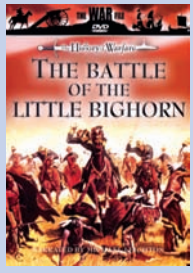
Wingmen: Two Friends, Four Wars, Flying and Fighting Through the 20th Century by Peter J. Wurts & William R. Yoakley, Wurts Publishing, Pacific Grove, CA, 2006, 324 pp., illustrations, $23.99, softcover.

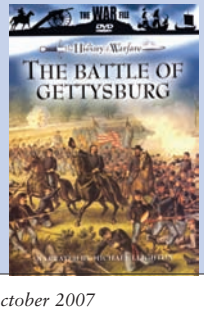
There are few greater friendships than those forged during time of war. The hardships people are forced to endure leave lasting impressions upon them and the comrades with whom they shared them. Peter J. Wurts and William Yoakley are two such friends. They first met in 1943 in California while undergoing training to be pilots in the Army Air Corps. This chance meeting would form a friendship that would last over 60 years through World War II, Korea, the Cold War, and Vietnam.

"Although our book is a labor of love," wrote the authors, "we tackled it the way any pilot approaches a new plane: cautiously at first, then with increasing confidence but always with respect for the facts, for our readers and for the people whose lives we shared." In turn, they have shared their lives and experiences with a new generation of readers. □

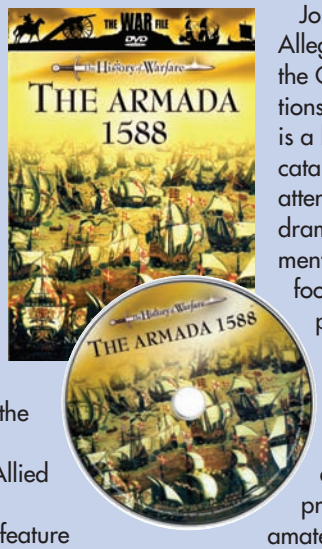
DVD CATALOGUE TAKES YOU TO THE FRONT LINES OF HISTORIC BATTLES.

History enthusiasts young and old will be pleased to know that the Cromwell Productions catalogue of over 100 DVDs is now being distributed exclusively by the Allegro Corporation, one of the leading producers of special-interest documentary videos in North America. Using computer graphics, contemporary reconstructions and reenactments, eyewitness accounts from primary sources, archival film from the 20th century, and expert commentary, each DVD takes you back to an important time in military history. You will be on the front lines of such conflicts as the Battle of Gettysburg, the French & Indian War, the Battle of the Little Bighorn, and the Zulu Wars of 1879. You can venture onto the high seas with the Spanish Armada or charge into battle with the Light Brigade at Balaclava. Your video time travel will take you to the 1066 Battle of Hastings, one of the pivotal events in British history, or to 1815 New Orleans with General Andrew Jackson.





If your interest is in more recent conflicts, Allegro offers an extensive list of World War II DVDs. You can begin your study with a three-DVD series entitled *The History of World War II,* then narrow your focus to aircraft carrier and airborne battles. You can study both Allied and Axis bombers and fighters on two additional DVDs. You'll be able to visit the Russian Front or land on the beaches of Normandy with the Allied troops.



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Joseph Micallef, Allegro CEO, says of the Cromwell Productions catalogue: "This is a legendary DVD catalogue whose attention to detail, dramatic reenactments, stunning footage, and computer-generated graphics will capture the imagination of collectors, military enthusiasts, libraries, professional and amateur historians of all ages and for many generations to come."

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houston

Continued from page 47

HB: The worst thing about the experience was to see shipmates die of starvation. When one of us got sick, or was so malnourished they couldn't walk, we knew it was the end. And if you got a tropical ulcer, it would just eat you away.

EN: How were you liberated?

HB: Near the end of 1944, I was taken with a group of about one hundred men and sent to Saigon, then part of French Indo-China. On August 15, 1945, a Japanese officer came and gave a speech that the war was over and that we'd go home. But we found out from some French residents about the A-bomb and what really ended the war. Then we saw three big four-engine American planes flying over Saigon. We later learned they were C-47s.

EN: It was then you realized liberation was at hand.

HB: A jeep came into camp, and in it were two American Army officers. "Are you ready to go home in the morning?" they said. They gave us candy and cigarettes, and then had us parade by the jeep and give them our name, service rank or rate, and our home address and telephone number. I don't think many of the guys got to sleep at all that night.

EN: The next morning you were driven to an airfield, where C-47s were waiting.

HB: Those pilots looked not a day older than 19 or 20, but what a sight for our poor eyes! Needless to say, many of us were shedding a few tears. It just seemed too good to be true. We stopped in Bangkok and Rangoon for fuel. Late in the PM we landed in India, where we were trucked to the Forty-Second Army Hospital, Calcutta. We were all given new clothes, and in the dining room we all wanted to take pictures of the food. Some guys did.

EN: What happened next?

HB: That night we slept on snow-white sheets, and the next day we were given a quickie medical exam. After about two weeks we were off for home in a C-54. We stayed overnight at Cairo, Egypt, and at Casablanca, and also stayed at a base in Newfoundland before arriving in the United States. We did get to call our homes soon after arrival from Calcutta.

EN: It must have been quite a homecoming.

HB: I shall never forget meeting my parents, brothers, and sisters, and also our neighbors.

EN: Besides the obvious trauma, how did your experiences as a POW affect your life?

HB: You have a greater appreciation for the simpler things in life. You don't have to be rich to be happy and satisfied. □

mollwitz

Continued from page 53

Although some initial penetrations were made, the Austrians were bloodied by enemy musket fire and stalemated. Neipperg ordered the horsemen to reinforce Romer's men. But the fatigued Austrian cavalry was a spent force by this time, and the infantry was hesitant to approach the storm of lead being poured into them by the unbroken Prussian infantry.

Sensing that the enemy was on its last legs, Schwerin ordered his infantry to make a general advance against the now-weakened Austrian right. Marching silently and in perfect order, stopping to shoot and then moving forward, the Prussian foot regiments, with some supporting artillery, steamrolled over the disorganized and demoralized Austrians on the right wing. Within an hour, that part of Neipperg's front dissolved. Seeing the situation develop but being helpless to stop it, Neipperg called for a general retreat. Disordered but by no means routed, the Austrians quit the field. With no organized Prussian cavalry available, Schwerin did not attempt a battlefield pursuit.

By the end of the fighting, more than 4,660 Austrian and 4,550 Prussians were killed, wounded, or missing. Frederick complained long and loudly about his cavalry's poor performance, but he proclaimed that the infantry, "like Caesar's," had saved the day. The battle had two vital results that, in time, would alter European history. First, it opened up for Frederick the prize he most wanted—Silesia—although it would take the Second Silesian War and the Seven Years' War to confirm the conquest of the province into the Prussian state that started at Mollwitz. Second, the battle showed that Prussia was militarily capable. Frederick learned a great deal from the confused struggle—he later claimed, "Mollwitz was my school."

Building on the lessons he learned at the cost of his soldiers' blood, Frederick immediately instituted a program of reform for his cavalry that bore fruit within two years at the Battle of Chotusitz, when they drove the Austrian army from the field. He also intensified infantry training and introduced an instruction program for senior officers. In doing so, the king instilled in his men a sense of tempered aggression that would prove to be the guiding philosophy of war for all future Prussian endeavors. The Battle of Mollwitz, although far from a total tactical victory, nevertheless engendered pride and confidence in the Prussian army and the budding nation still taking shape at the turbulent center of the European continent. □

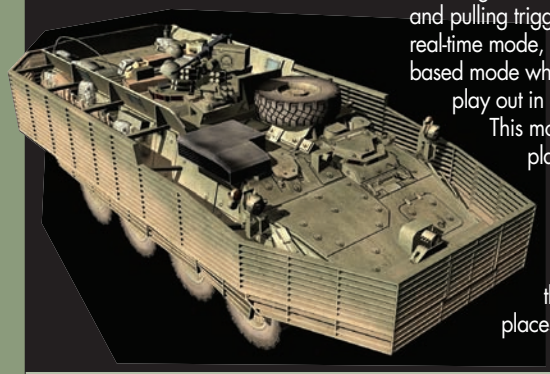
Three new games simulate modern-day helicopter combat.

Enemy Engaged 2, from G2 Games for the PC, is a sequel that was seven years in the coming. *Enemy Engaged: RAH-66 Comanche Versus Ka-52 Hokum* was released in 2000 to universal acclaim as the best simulation of flying an attack helicopter ever created. Various publishing and technical issues delayed the sequel until now, and while the new game is as good as its predecessor, it isn't seven years' worth of better.

As with the first game, the player can fly either the American Comanche RAH66 or the Russian Hokum KA52. The game settings let the player choose how much "real" piloting he wants to do. At its easiest, the game is arcade-like. At the most difficult level, the player can control everything he could on a real helicopter, including auto rotation to the ground. The player also has limited control over his wingmen using voice commands.There are three campaigns: Lebanon, Taiwan, and a new Korean campaign. These campaigns are dynamic in that missions are posed and resolved in real time. Thus the battlefield can be different each time depending on the missions and how they are completed.

Graphics-wise, *EE2* is a big improvement over the original game.The terrain is more detailed and diverse, and the draw distances are extended. Also, the many units in the game, other aircraft (rotary and fixed-wing), and ground forces all have improved models with more detail and shading. No major changes have been made in the campaign/mission system, which is good since it was and is fine. Unfortunately, no major changes have been made in the AI system either. Sometimes this appears in minor glitches (like ground convoys driving in the grass instead of following the new, curvier roads), and sometimes in more major ones, like computer-controlled planes planting themselves in the ground. Overall, players who love fighting helicopters and who don't own the first game should give this one a try

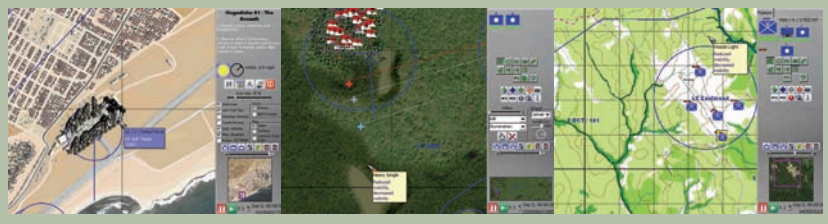
While *EE2* is a straight-up simulation, **Combat Mission: Shock Force** is a step or two back from putting the player "in the battle." *CM:SF* comes more from the lineage of board game simulation than it does from the computer simulators. Which is not to say that the game doesn't show off combat in 3-D real time, because it can, but even in its real-time mode, the game is about issuing orders and watching results rather than aiming and pulling triggers. In addition to the real-time mode, there is also a turn-based mode where the game results play out in one-minute rounds. This mode not only lets the player take his time issuing orders, but also lets him replay the results as often as he likes, free to watch them from different places as he does.



The setting of *CM:SF* is the modern day. Dirty bombs have gone off in Western cities and the bombers have been traced back to Syria. In the main campaign, the player leads a NATO force against the Syrian military. In other scenarios and modes, the player can fight as Syria, and can also play NATO vs. NATO and Syria vs. Syria matches if he likes. The scale of the battles is very tactical. The entire Western force is a Stryker Brigade with supporting armor and infantry. Scenarios can be as small as a Stryker platoon fighting through a town or as large as two M1 platoons on a search and destroy mission.

As befits its focus, the graphics in *CM:SF* are serviceable, but not state-of-the-art. There is enough detail to determine clearly what is going on and to tell unit from unit. The camera controls also take some getting used to. On the other hand, the modeling of the combat is bang on. This is one of the few games that really models the power of modern weapons. The M1s, for example, fight at their true range and accuracy, even when on the move.

Pulling back another couple of steps, but keeping with the theme of modern combat and helicopter operations, comes **Air Assault Task Force** from ProSIM games and still for the PC. This is a pausable real-time game played at an almost board game level of abstraction. The setting is the three great modern theaters of helicopter action: Vietnam, Somalia, and Afghanistan. There are also mini-campaigns set in the Joint Readiness Training Center (JRTC). All the appropriate units of air and infantry are in the game, but the focus is helicopter- borne operations and missions.



Two things are notable about this game. One is the ease of its interface, which allows the player to keep on top of the action without having to feel like he is playing "whack a mole." The second is the backward compatibility of the engine. Players who own previous ProSIM games can run them with *AATF* and thus play them all over again with the improved interface and AI.

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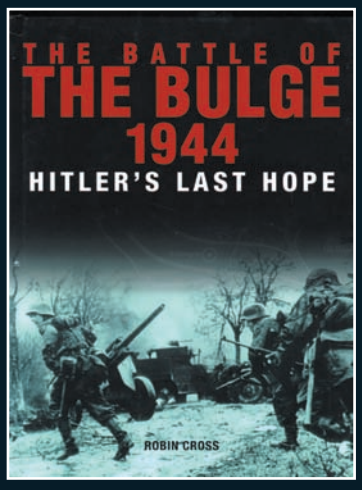

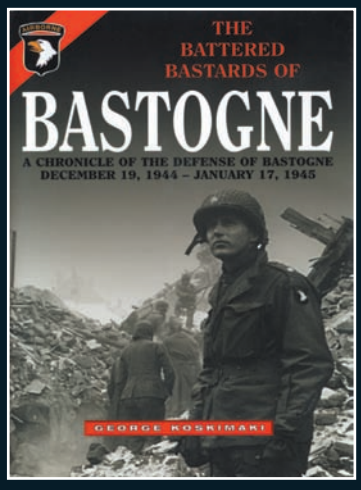

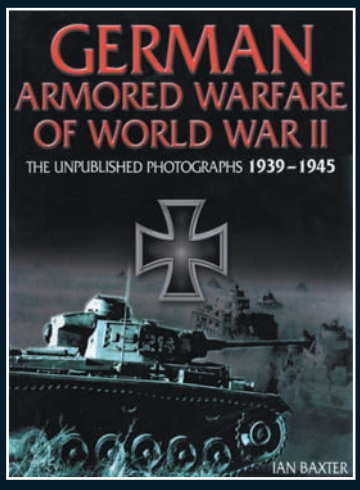

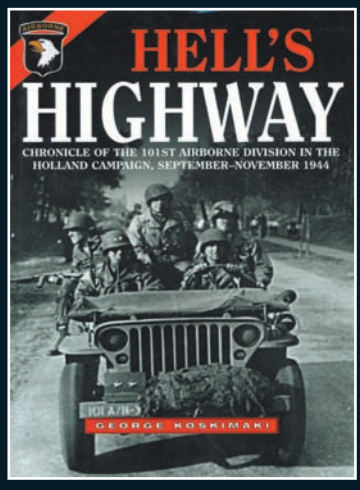

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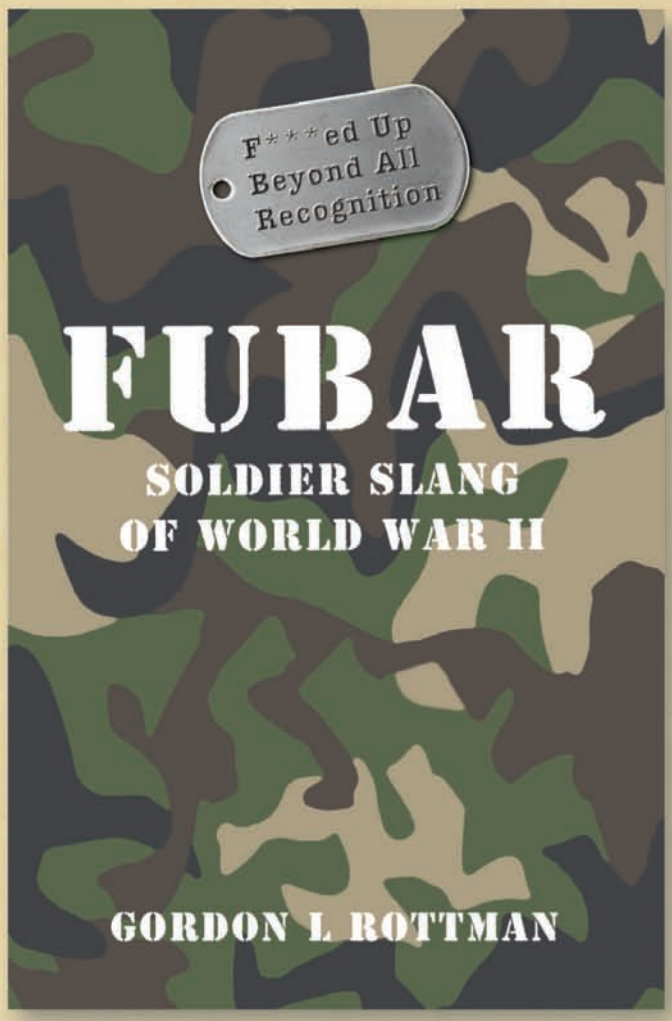

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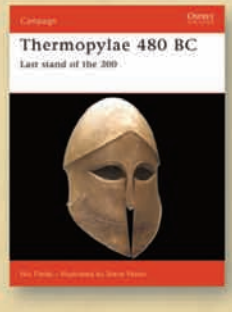

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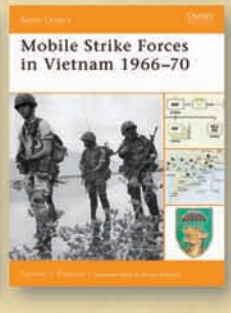

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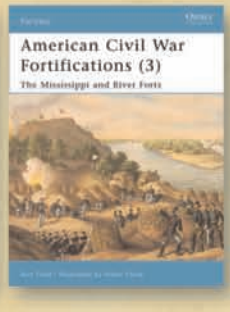

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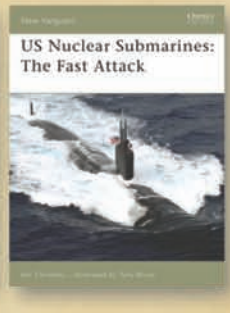

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