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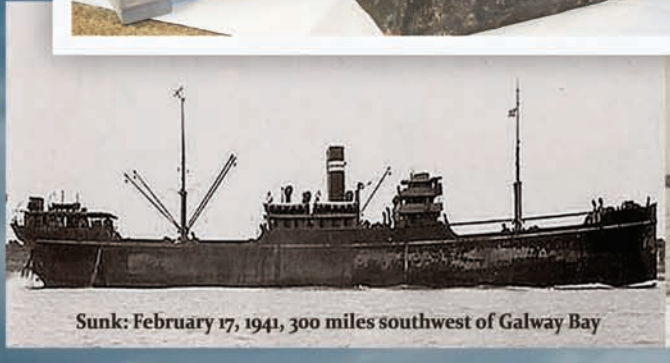
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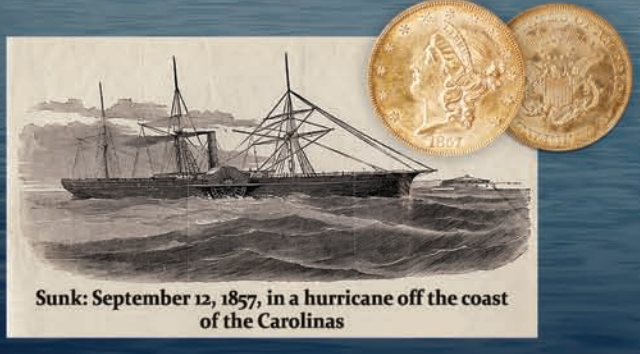
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COVER: A U.S. Army sergeant from the 320th Infantry Regiment near Bastogne, Belgium during the Battle of the Bulge. See story page 74. Photo: Alamy

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"Unknown" no more.

IN the last issue, I wrote about the pain of families of military persons listed as "missing in action." Shortly after that issue was published, government sources announced that about 30 of the sailors who died when the USS *Oklahoma* (BB-37) was attacked and sunk at Pearl Harbor on December 7, 1941, and were buried as "unknown" have been identified.

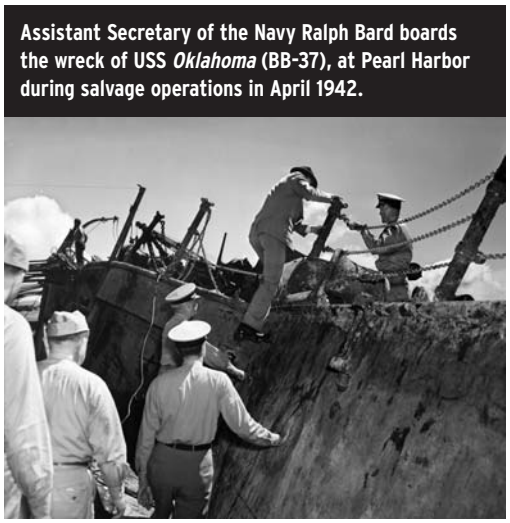
The *Oklahoma,* you may recall, was hit by eight aerial torpedoes in the first few minutes of the Japanese attack and she began to capsize. A ninth torpedo then slammed into her. All told, 14 Marines and 415 sailors died aboard her. The *Oklahoma*'s December 7 casualties were second only to to those of the USS *Arizona,* which lost 1,177 men.

For three days after the *Oklahoma* sank, Navy divers could hear banging of frantic survivors trapped within her hull. Then silence.

From December 1941 to June 1944, Navy personnel recovered the remains of the deceased *Oklahoma* crew. Only 35 men could be identified at the time, just after the disaster. The rest were subsequently buried as "unknowns" in the Halawa and Nuuanu Cemeteries, and later moved to the National Cemetery of the Pacific at Punchbowl Crater in Honolulu.

Because they could not be identified then, the remains of the sailors and Marines were mixed together in the burial plots.

In 2015, with advances in forensic science and technology (especially DNA), the Pentagon's Defense POW/MIA Accounting Agency decided to disinter 388 "unknown" remains at the Punchbowl. Thus far, through dental records and DNA matches with relatives, the agency has been able to identify about 30 of the crewmembers and notify their families.



Assistant Secretary of the Navy Ralph Bard boards the wreck of USS *Oklahoma* (BB-37), at Pearl Harbor during salvage operations in April 1942.

According to the *Marine Corps Times,* "The agency has said it expects to identify about 80 percent of the battleship's missing crew members by 2020.... Many of those identified have been buried in their hometowns. Others were reinterred at the National Memorial Cemetery in the Pacific." Some of the others were laid to rest in Arlington National Cemetery outside of Washington, D.C.

Perhaps now, and during the next two years, more families of the "unknown" sailors and Marines who made the supreme sacrifice can also rest, knowing that their loved ones are unknown no more—and can at last "come home."

—Flint Whitlock, Editor

(The *Arizona* is still resting at the bottom of the harbor with most of its crew entombed on board. The *Oklahoma* was not salvaged until March 1943. Declared unrepairable, the shipwreck was being towed back to California in 1947 to be cut up and sold for scrap when the tow line broke and her battered hulk sank in the Pacific.)

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The rugged Soviet T-34 played a crucial role in defense and later spearheaded the drive toward Berlin.

DECEMBER 1941 was a dark month and the end of a dark year for the Soviets as the Germans pressed ever onward toward Moscow, the lair where Stalin and his minions plotted what to do next against the Nazi juggernaut that had, in a few short months, rolled over everything before them.

Poland had been taken, and then Denmark and Norway, and then Belgium and France had fallen to the Germans, who now had advance units reportedly within eyeshot of the Kremlin.

The German commanders were confident. They had never tasted defeat at that point, and a December 4 intelligence report stated flatly that the Soviets were simply not capable of "conducting a counter-offensive without significant reserves."

The ax fell the very next day as the Soviets launched a massive surprise assault that "caught the Germans almost literally frozen in their positions," as historian Max Hastings aptly describes it. Winter played a hand, with the —30 degrees C temperature freezing the German lubricants while the Russian equipment performed fine, especially the T-34 tanks with their specially designed compressed air starters.

Initially, infantryman Albrecht Linsen could not believe his eyes with the rapid onrush of Soviet tanks and men. "Out of the snowstorm [German] soldiers were running back, scattering in all directions like a panic-stricken herd of animals. A lone officer stood against this desperate mass; he gesticulated, tried to pull out his pistol and then simply let it pass."

Landser Linsen was momentarily befuddled as well. There was an explosion near him and he "felt a searing pain in my right thigh. I thought: 'I am going to die here, 21 years old, in the snow before Moscow.'"

The unrelenting Russians—fortified with additional tanks and equipment and bolstered by freshly arrived Siberian troops—charged into the German salients north and south of Moscow and kept pressing forward.

For days the Germans staggered backward from the determined and unrelenting Soviet attacks. The invaders were pushed back between 60 and 150 miles before General Walther Model managed to rally his forces and stop the back peddling in the face of the T-34s.

The Germans had encountered the sturdy T-34s a few months earlier in their invasion of the Soviet Union. They had learned their Panzer III and IV medium tanks, which had successfully spearheaded the French and Polish campaigns, were simply no match for the powerful and new turret-forward, sloped-armored tanks sent against them.

"Each shot seems to be a direct hit," one German antitank gunner said early in the June 1941 invasion. But "the shells bounce off. The fire doesn't seem to bother the

A panoramic painting of the battle of Berlin in the Museum of the Great Patriotic War in Moscow depicts T-34s rolling through the German capital's shattered streets toward the Reichstag building.

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tanks in the least," added the astonished gunner in describing the T-34 and Russia's heavier, less nimble KV's ability to ward off German firepower.

The T-34 was equipped with characteristics that the German tankers would come to envy: thicker armor that was sloped to further help deflect enemy fire, a robust V-12 diesel engine, a low profile, and wide tracks that made movement across snow and mud comparatively easy.

The wide tracks proved particularly crucial in traversing the vast stretches of the Motherland with its few, comparatively primitive roads that often became little more than "canals of mud" in the *rasputitsa*, or the weeks-long wet periods in the fall and spring.

The Germans in 1941 were initially taken aback by the power and effectiveness of the T-34, and they promptly realized the need to gear up and meet the challenges poised by the Soviet tank. In November 1941 a special German armor investigation committee visited Generaloberst Heinz Guderian's 2nd Panzer Army and examined several captured T-34s.

The outspoken Guderian demanded a complete rethinking of German tanks and called for greatly improved mobility, greater armor protection, and a heavier main gun. This led to two different and competing design approaches by the Nazis. One, led by Daimler-Benz (designer of the Panzer III), envisioned a tank similar in appearance to the T-34 and powered by a 650-horsepower diesel engine and rear-wheel drive.

A second design by the MAN group, designer of the Panzer I and II tanks, called for a vehicle built around the new Maybach HL 210 gasoline engine that had just entered production. It featured a centered-turret design and front-wheel drive, both features not found on the T-34.

The MAN design won out and it became the Panther. That was largely because it could be put into production earlier than the Daimler-Benz model. Subsequent design changes resulted in a 45-ton tank that had grown in weight by a full 50 percent in less than three months of planning. The inherent advantages of a diesel engine and rear-wheel drive were passed over in the push toward prompt production.

Ironically, MAN lacked the ability to construct large numbers of Panthers itself and came to rely on a large number of subpar subcontractors, including several French firms. As it turned out, the increased weight put too much strain on the untested engine as well as on its transmission and drive train.

Unlike the T-34, the Panther never underwent serious mobility or field trials but was rushed into service against the advice of Guderian and others. While the vehicle sported a superb L/70 70mm main gun and thick, sloped armor, it fell short in other important categories. Reliability and a fuel-efficient diesel engine had been given short-shift in favor of expediency.

Ironically, battlefield realities in 1941 had forced a rethinking and reworking of German tanks, "but German developers erred grievously by building a tank that essentially ignored" those very realities.

The Tridtsatchetverka, or T-34, came equipped in the early stage of the war with a 76.2mm high-velocity gun that could take out opposing German medium Panzer

tanks with their lighter armor and shorter 75mm main guns.

The Soviet tank was based in good portion on a design from innovative American engineer J. Walter Christie who used a then-novel suspension system that enabled the tank to move quickly over uneven ground. The ability and ease of movement across the Russian steppes was critical throughout much of the war. That was very much the case, especially when skilled Soviet gunners learned to fire on the move.

The initial design of the T-34 certainly proved effective when deployed and used properly. It was based on lessons learned by the Soviets in the 1939 Mongolian-Manchurian border clashes with the Japanese and earlier in the Spanish Civil War. The thin-armored, gas-fueled light tanks were not up to the task, and Soviet officials quietly called for the development of a completely new tank.

A number of prototypes were secretly produced by the Soviets, some using the standard 45mm main gun and others equipped with a larger 76.2mm gun. Initial Soviet ventures into Finland in late 1939 proved disastrous, with the loss of 80 tanks in the first week alone to Finnish anti-tank guns.

A Red Army tank crew studies maps on the hull of their tank as a line of T-34s passes to their rear. Some historians credit the T-34 as being responsible for the Allied victory over the Germans.

This prodded Stalin's bureaucracy to select a prototype built at a locomotive factory in Kharkov that became the T-34. That initial go-ahead came after a grueling road test and demonstrations that the tank's maximum of 44mm of sloped armor could withstand fire from 45mm AT guns.

Secret mobility tests had been run at the Kubinka test area against a Panzer III purchased from then-ally Germany. The prototypes were then driven back to the factory in a 1,802-mile round trip and later successfully used in a demonstration blow-

ing up captured Finnish bunkers.

The tests proved the ruggedness of the vehicle's diesel engine and the strength of its main 76mm gun. The powerful diesel engine and the suspension system enabled the designers to emphasize mobility. It offered better range and a full 30 percent more power than any other contemporary tank engine. But the transmission, similar to that of the Soviets' earlier light tanks, needed further improvement and refinement as did its steering system.

By March 1940 the Defense Ministry approved the full-scale production of the new tank at the Kharkov plant with the use of the main gun from the Kirovski Works facility and the diesel engines from Factory #75 in Kharkov. The initial T-34/76 1940 model weighed in at slightly more than 26 tons and featured the L-11 76.2mm gun. An improved 76.2 gun was planned for the following year along with a cast iron turret with thicker armor

By the time of the 1941 invasion of the Soviet Union, the Kharkov factory and the Stalingrad Tank Factory combined had produced some 1,226 T-34s, in a fairly even mix of the Models 1940 and 1941. Older, outdated light tanks comprised the vast majority of the tanks the Soviets had at the outbreak of war, with only five percent being T-34s.

Some 985 T-34s were stationed in western Russian when the fight began, according to U.S. military strategist Robert Forczyk. Those technically advanced machines were at the ready, but inadequate Soviet training and poor logistics led to debacles, despite their ability to ward off the German 37mm AT fire. The ill-prepared Soviets fought bravely but often had no armor-piercing rounds and only one topping of fuel per tank.

"The best-designed tank in the world is merely scrap iron if it doesn't have ammunition, fuel, or a trained crew," observed Forczyk, and that was the condition of the T-34s all that summer as the Germans pushed ever eastward into the interior of the nation that Hitler had predicted would fall like a house of cards.

The onslaught was unrelenting, and by early July fully half of the available T-34s had been lost as the poorly prepared and poorly led Soviet border armies were ground under. Many of the remaining T-34s were lost shortly thereafter when the Kiev pocket collapsed.

A T-34 prototype being tested against "Molotov cocktails" (improvised firebombs) in March 1940. Over 64,000 T-34s were built during the war.

The Soviet pushback at Moscow gave the Russians breathing room and, in a Herculean effort, they managed to relocate the crucial Kharkov tank factory and other crucial production facilities eastward to the Urals, well away from the fighting. The resulting Model 1942 had an improved frontal armor of 65mm (from 45mm) and a simplified design to speed production.

The Soviets managed to produce 12,553 T-34s in 1942 but fully 51 percent of those were lost in the fierce fighting that followed as the Germans learned to use the 88mm gun to their advantage against the still poorly trained and undersupplied Soviet tankers.

By the middle of that year plans were underway for a Model 1943 that would feature an improved hexagonal turret with two hatches for increased crew safety and slightly thicker turret armor of 70mm. Visibility remained a problem for the tank commander and that was not resolved until mid-1943 when a small cupola was designed for the turret top.

More important, the Model 1943 replaced the 76mm gun with what had been the M1939 85mm antiaircraft gun to form the T-34/85. The 85 had a heavier projectile than the 75mm gun on the new German Panther, but the German tank was able to penetrate thicker armor at a longer range, thanks to the use of more propellant and a longer barrel.

By that stage of the war, the Soviets had learned some hard-won lessons from their opponents on how to stage and fight a quick-moving, armor-thrusting war. Both their training and their tanks had improved, and the Soviets did not religiously subscribe to the theory that the best antitank weapon was solely another tank. They used easier to produce—but highly effective—artillery and self-propelled antitank guns to a full measure.

They also came to have faith in the distinctive long-barreled Degtyarev antitank high-velocity rifle that could hurl a deadly 14.5mm projectile at more than 1,000 meters per second to knock out Panzer IIs, or perhaps even disable the tracks of the heavier German tanks.

The Soviets also used their 85mm gun, a close relative of the German 88, in an antiaircraft role, a move that helped protect its advancing tank and infantry units from what in the past had been truly punishing and deadly air attacks

Soviet depth and sophistication had grown by that point so that tank repair and service battalions traveled right behind the advancing units, ready to retrieve and repair damaged Russian tanks. The Soviets even had one special unit for the evacuation of captured German tanks that were then repaired, reequipped and repainted, and sent into action against their makers.

The T-34/85 became the mainstay going forward, but the Soviets continued to

employ their light tanks and Lend-Lease tanks in independent brigades, most often as infantry support. The T-34s also saw some modified use in clearing minefields, a task most often handled by "tramplers"—men in penal battalions who cleared areas on foot.

The struggle on the Eastern Front had taken on gigantic proportions by the time the German 6th Army surrendered on February 2, 1943, at Stalingrad. A brilliant and bold counteract in the Ukraine by General Erich von Manstein shortly thereafter destroyed the overextended Soviet 3rd Tank Army and led to the Nazis retaking Kharkov. The Germans quickly set about planning Operation Citadel, using components of two large army groups, in an effort to encircle and destroy Soviet forces in the Kursk salient.

The Germans felt the newly designed Panthers along with heavier Tigers and the Ferdinand tanks with their larger guns could deal a decisive blow to their foes. Serious technical problems with the MAN-designed Panthers delayed the operation several times, providing additional time for the Soviets to reinforce, dig in their guns, lay additional mines, and construct more tank traps.

The Panthers, dogged by design and production problems, did not arrive by rail until early July, providing little if any time for those tanker crews to be properly briefed. The Soviets had some 3,350 tanks, including about 2,300 T-34s, and thousands of AT guns laying in wait. For one of the few times at that point, they would be able to face their opponent properly prepared and fully armed with the best in Soviet armor and about 50 percent of their available tanks.

The Soviets, in short, still had another half of their T-34 tanks available for use elsewhere on the Eastern Front while the Germans had virtually stripped other sections of the front to mount Citadel.

The Soviet supply system had improved to the point that the T-34 gunners now often consumed their full allotment of ammo in a single outing, while their German counterparts were forced to be more conservative because of an uncertain, intermittent supply system that had been dis-

rupted by Soviet partisan activity and Allied bombing at home.

The Soviet gunners had learned that their tank could not only move faster, but its turret could turn five times faster than the turret on the heavier, underpowered Panther D and some 50 percent faster than the Panther A. This gave the Soviets even more reason to close fast, helping to cancel their opponent's advantage of a larger, more powerful main gun, while taking advantage of the T-34's speed and maneuvering abilities.

"To stop is to die," is a paraphrase of Tanker Georgi Nikolaevich Krivov's comment. That was especially true later in the war with the arrival of the Panther with its 75mm gun, larger German tank killers armed with the deadly 88, and the improved use of existing field guns. The panzerfaust, the shoulder-fired antitank weapon developed late in the war, was yet another reason not to stop or slow in the advance toward the enemy.

Mobility is a key to tank warfare and, as noted earlier, the more nimble T-34 with its wide treads and exceptionally dependable diesel engine proved its worth in the Eastern Front's exceptionally poor field conditions. The German engineers had also discounted the T-34's Christie suspension system and developed a complex running gear that tended to clog up.

More Panthers were often lost due to mechanical breakdowns than enemy fire in 1943. The Germans discovered that some 90 percent of the tanks suffered transmission failures after less than 1,500-kilometers of combat, and the Panther D endured continued fuel pump problems.

Fuel for German vehicles became an issue from that point on, and the Panther's rapacious thirst for gasoline did not help matters. The Panther, in fact, required almost twice as much fuel to go the same distance as a T-34, yet the Soviet tank consumed easier to produce diesel fuel.

The T-34/76 was further "up-gunned" toward the end of the war with the Soviet's proven 85mm gun. The T-34/85 began rolling off the assembly lines in January 1944. Those enabled the Soviets to take on the lumbering tank killers that the Germans had fielded. "Prior to that, we had to run

Soviet infantry accompany T-34s during the battle of Kursk—history's largest-ever tank battle.

like rabbits and look for an opportunity to turn and get at the flanks" of those huge, slow-moving tanks, admitted tanker Nikolai Yakovlevich Zheleznov.

The Soviets were able to produce nearly 87,500 tanks of all kinds during the war, including some 64,550 T-34s, along with another 22,300 self-propelled guns and countless thousands of artillery pieces.

From 1943 onward the Soviets proved they had truly come into their own, having learned hard-fought lessons from the very best then in the world. By studying the enemy's tactics they had gauged how to put their growing array of tanks, self-propelled guns, improved artillery, and even antiaircraft weapons to good use.

They had learned how to use their smaller tank to its fullest advantage in tangling with the Panthers and other larger tanks. By that time, they even had the depth in trained and experience manpower to create an additional 27 tank destroyer brigades and 36 antiaircraft divisions to provide further protection for their field armies.

The degree of increased Soviet sophistication can be gauged by its 1944 Field Regulations of the Red Army or Ustav. It stressed a systematic approach, using artillery and air offensives to provide continuous support for attacking Soviet infantry and tank-thrusting units. Ustav emphasized maneuver, surprise, and initiative (MSI) that was a far cry from the largely ham-handed Soviet actions early in the war.

It was the combination of hard-earned experience, knowledge and improved weapons—spearheaded by the T-34—that made the difference as the Soviets pushed ever westward toward Berlin and victory over the invaders of the Motherland. □

ARMORED CLASH IN ALSACE-LORRAINE

BY ALLYN VANNOY

In January 1945, U.S. and German armored forces squared off for a costly battle near the village of Herrlisheim.

THE AMERICAN LIGHT TANKS, bringing up much needed supplies, were in column as they began to take fire. When the second in line was hit, the crew bailed out except for the driver, whose head had been blown off. But the damaged vehicle was blocking the road, so a quick-acting Pfc. Marvin Wiseman jumped inside, started it, and backed it off the road. To stop the tank, Wiseman had to cut off the fuel because the dead driver's foot was jammed against the gas pedal. The rest of the column was able to continue on.

It was January 9, 1945, and another turn in the bloody fight for the village of Herrlisheim, France—between Colmar and Strasbourg and close to the Rhine River on the German border. German forces, trying to stop Lt. Gen. Alexander Patch's U.S. Seventh Army's advance toward Germany, were attempting to break through the Americans' right flank near Herrlisheim.

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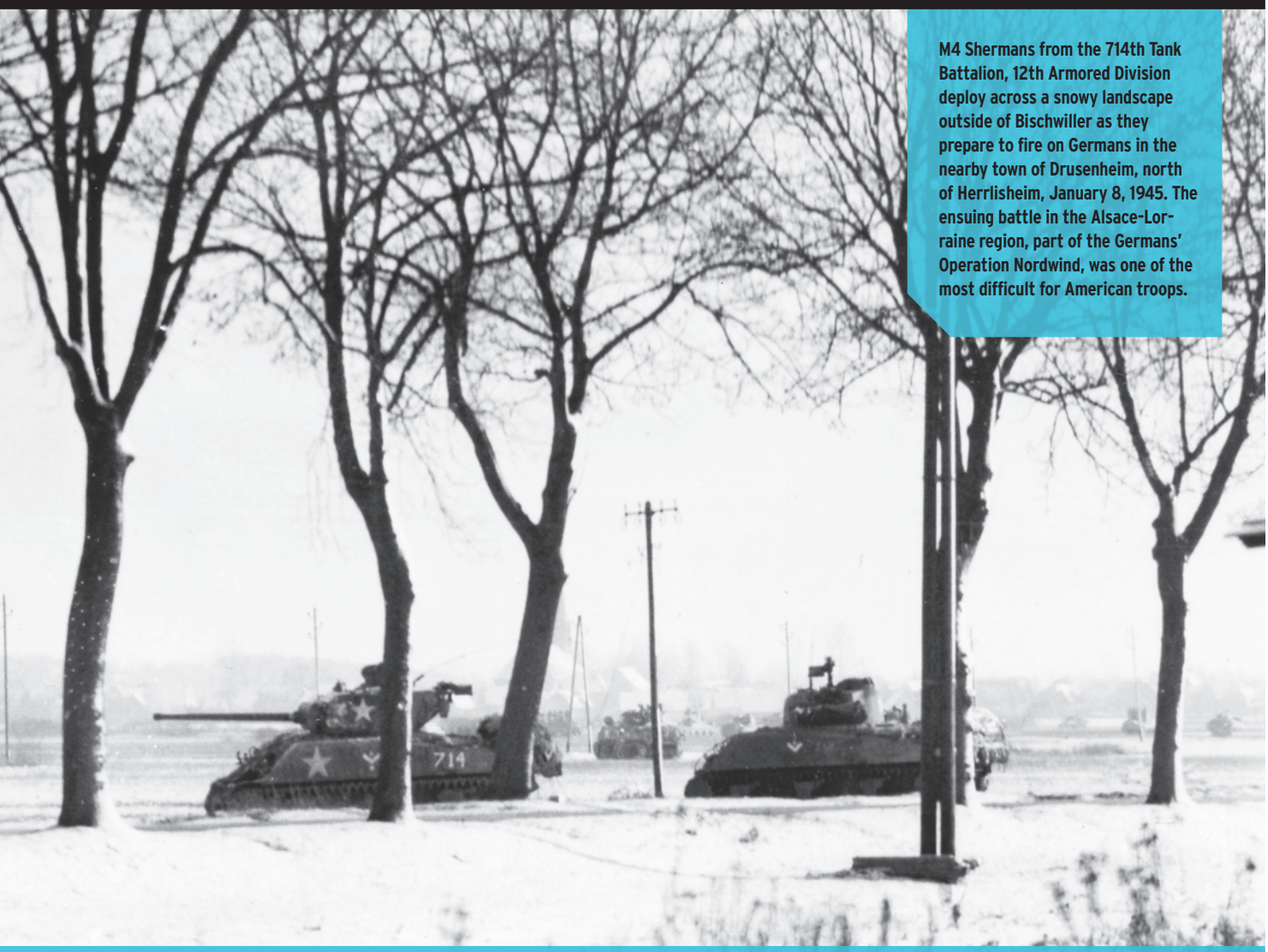

M4 Shermans from the 714th Tank Battalion, 12th Armored Division deploy across a snowy landscape outside of Bischwiller as they prepare to fire on Germans in the nearby town of Drusenheim, north of Herrlisheim, January 8, 1945. The ensuing battle in the Alsace-Lorraine region, part of the Germans' Operation Nordwind, was one of the most difficult for American troops.

The Germans had launched their winter offensive in the Alsace region with the hope of breaking through the American lines, weakened as a result of shifting forces to the Ardennes, to recapture the political and strategic prize of Strasbourg, destroy several Allied divisions, and drive the Allies from Alsace-Lorraine—ambitious goals, to say the least.

The Germans' intention was to either strike south from their Rhine bridgehead—which centered on the towns of Gambsheim and Herrlisheim, the latter an attractive, half-timbered hamlet of approximately 500-700 persons—toward Strasbourg and link up with the 19th Army in the Colmar Pocket, or advance north to the town of Haguenau and pinch off American forces there.

Terrain and weather dominated the area. Snow and heavy ground fog blanketed the region, neutralizing Allied air superiority. The west bank of the Rhine was poor tank country—although flat and open it was punctuated by small clusters of woods and criss-crossed by many small waterways, with many of the bridges having been destroyed.

To the north of the bridgehead, the Moder River runs along the southern edge of the town of Rohrwiller and then north through Drusenheim. The Zorn River runs northeast along the western edge of Herrlisheim, joining the Moder about 200 yards northeast of la Breymuehl, a small cluster of buildings east of Rohrwiller and north of Herrlisheim.

Kleinbach Creek roughly parallels the Zorn and flows through the center of Herrlisheim. The Landgraben River runs somewhat perpendicular to the Zorn along the northern edge of the nearby Steinwald Forest and through the village of Offendorf. The Steinwald, north of Gambsheim, dominates the ground south of Herrlisheim.

In 1945, a two-lane road, the D-468, connected Gambsheim, Herrlisheim, and Drusenheim. Another road ran southwest from Bischwiller through Rohrwiller and la Breymuehl, joining the D-468 just north of Herrlisheim. A small secondary road connected Herrlisheim and Offendorf and then snaked south along the Rhine to Gambsheim.

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A railroad line also ran along the eastern edge of Herrlisheim, roughly paralleling both the D-468 and the Zorn, the railroad embankment providing defilade for antitank guns.

American intelligence believed the German bridgehead was defended by only a small force of poor quality. In reality, this turned out to be elements of two well-organized and well-supported German divisions—the 10th SS Panzer Division "Frundsberg" (which had fought in Holland during Operation Market Garden) and the 553rd Volksgrenadier Division.

The 12th U.S. Armored Division, commanded by World War I veteran Maj. Gen. Roderick R. Allen, had arrived in France in mid-November, fought near Luneville and then Bitche in December. It had then gone into reserve before the Germans launched their Nordwind offensive.

Elements of the division were ordered to the town of Hochfelden on January 6 to support operations to wipe out the German Rhine bridgehead. It was to be a joint operation with French forces driving up from the south and the U.S. 79th Infantry Division "demonstrating" against Drusenheim in the north.

Herrlisheim, about four kilometers west of the Rhine and at the center of the bridgehead, was to be taken in a pincer movement. No one knew how difficult this operation would be.

The 12th was to use only one of its combat commands for the operation: Combat Command B (CCB), which included the 56th Armored Infantry Battalion and the 714th Tank Battalion, along with Company B, 119th Armored Engineer Battalion, and the 18 105mm howitzers of the 494th Armored Field Artillery Battalion in direct support. In preparation for the attack, the armored infantry of CCB moved in the early morning of January 8 to the town of Kurtzenhouse and the tanks to Weyersheim, west of Herrlisheim.

CCB, under Colonel Charles Bromley, was organized into two task forces. The 56th Armored Infantry Battalion (minus its Company C) with Company B, 714th Tank Battalion attached was designated Task Force Rammer, under Lt. Col. Louis L. Ingram. The 714th Tank Battalion, under Lt. Col. WiIliam J. Phelan, with Company C, 56th, in place of its own Company B, was designated Task Force Power.

Both units were ordered to attack Herrlisheim from the north on January 8, jumping off from just west of Rohrwiller, at 10 AM. Company L, 314th Infantry Regiment, 79th Infantry Division had secured a bridgehead across the Zorn at a small group of buildings, la Breymuhl, which contained machinery for regulating the flow of the river, referred to as "the waterworks."

Between Rohrwiller and la Breymuhl were two footbridges over branches of the Moder, then a bridge over the Zorn just before la Breymuhl (where CCB was to pass through Company L/314's lines), and a second bridge over Kleinbach Creek as it flowed through Herrlisheim. These features would all play important roles in the upcoming battle.

The planning was meticulous. At 8 AM, TF Rammer moved out from Kurtzenhouse, followed by TF Power, which took the lead at Bischwiller with 17 M4 Shermans of Company C, 714th under Captain Charles C. Clayton.

Between Bischwiller and Oberhoffen the tanks swung east and then south to the main road, traveling 800 yards before deploying in attack formation in the snowy fields. Captain Clayton went forward on foot to check the line of departure—the first bridge, which his tanks would have to cross—and found the last planks being put in by the 40th Engineer Combat Regiment.

Captain Robert W. Harrington's Company A, 714th followed Clayton's tanks, less the detached 3rd Platoon, the 1st and 2nd Platoons continuing to Rohrwiller, where they secured the northern part of the town. Company D, 714th, with five M5A1 Stuart light tanks, reached Bischwiller about 9:30, and was assigned to evacuate the wounded and haul supplies.

Captain David S. Fairbairn's Company C, 56th, TF Power, overstrength with 251 officers and men, was to move east between Rohrwiller and Herrlisheim to protect the assault's left flank. Once Herrlisheim was taken, Fairbairn was to pass east of the town, continue on to Offendorf, and meet the French advancing from Gambsheim.

The foot troops climbed onto Harrington's and Clayton's tanks at Weyersheim, with the antitank platoon's half-tracks following. Upon reaching their assembly area, the infantry dismounted and organized for the attack.

Captain Burnett B. Beach's Company B, 56th, understrength at 155 men, and with the Headquarters Company's 28-man heavy machine-gun platoon attached, led TF Rammer in its half-tracks. Captain Clyde K. Maddox's Headquarters Company, 56th, was bringing up the rear of TF Rammer but then moved in front at Bischwiller; its 11-

man reconnaissance platoon reached Rohrwiller at 9 AM.

The heavy mortar platoon led by 2nd Lt. Leo Mulligan—25 men with three 81mm mortars on M21 half-tracks—followed. Behind them was a 26-man assault gun platoon with three 75mm howitzers on M8 light tank chasses. The units were to reinforce the attack and provide "on-call" fire.

Maddox's 56th Battalion's HQ Company set up its command post in Rohrwiller. Captain Francis B. Drass's Company A, 56th, followed Beach's Company B with its 190 men, reaching Rohrwiller about 11 AM. At approximately 2:30 the two companies jumped off. Rolling after Drass's company, was Company B, 714th, with 17 Shermans, under Captain James W. Leehman.

In order for Clayton's Company C, 714th to move east of Rohrwiller-Herrlisheim and clear that sector for the 56th's drive, 2nd Lt. Wallace A. Russell's 2nd Platoon of Company C, 56th moved forward to check the bridges, which the tanks would need. They reached the Bailey bridge across the Moder at 10:20 AM just as the engineers completed work.

Russell radioed for the tanks and the remainder of Fairbairn's Company C to move up, but as the 2nd Platoon approached la Breymuhl, it came under fire. When Russell reached the waterworks and found Company L, 314th Infantry defending, he discovered that the just-built Moder bridge had been destroyed.

At about 11:45, Fairbairn's armored infantrymen came forward and located the waterworks keeper, asking if the water level could be lowered enough for tanks to cross. When told that it could be reduced by a meter where the Zorn River met the Moder, Fairbairn called for two tanks from Clayton's Company C, 714th to attempt the crossing; only one managed to wade the river.

Fairbairn then directed Russell to lead a patrol to obtain prisoners. With five men, Russell captured six Germans. While returning, they drew fire; two men were killed and one was wounded. When they reached the outer wall of the waterworks courtyard, enemy fire increased. The prisoners made it into the courtyard with Russell, but two men with him were killed.

When two enlisted men were wounded, Captain Fairbairn rushed out to aid them but was hit in the shoulder. Lieutenant Russell, a medic, and another man, then made five trips with a stretcher to bring in the wounded as the Germans held their fire. Before being evacuated, Fairbairn directed 1st Lt. John E. Trusley, Anti-Tank Platoon leader, Company C, 56th to take command of the company.

Since the bridge at the waterworks was out, preventing the tanks from moving with the infantry, Lt. Col. Phelan called Captains Harrington and Clayton and Lieutenant Trusley at 2:30 PM to give them the word that the 56th would attack without close armor support. The tanks of Companies A and C, 714th were to support by fire, assisted by the 714th's four 105mm assault guns.

It was late in the afternoon when Clayton's tanks began to move from la Brey-

BELOW: Two soldiers from the 2nd Battalion, 314th Regiment, 79th Infantry Division take cover from German counterbattery fire under a tank in Rohrwiller. OPPOSITE: Infantrymen of the 56th Armored Infantry Battalion advance by a ruined church in Rohrwiller, north of Herrlisheim.

National Archives

muhl to positions west of Herrlisheim, facing the town, later joined by Harrington's Company A. When darkness came, they pulled back.

Lieutenant Colonel Ingram, in command of TF Rammer, contacted Captain Leehman, Company B, 714th, and told him to bring his tanks from Bischwiller to Rohrwiller and then move as close as possible behind the dismounted Companies A and B, 56th. But when Leehman received word that the infantry was drawing fire, he deployed his tanks around la Breymuhl.

That afternoon, when Lieutenant Trusley, commanding Company C, 56th, found that the 2nd Platoon was holding la Breymuhl, he ordered the 3rd Platoon to advance from Rohrwiller to the waterworks to relieve Russell's troops. They arrived there shortly after dusk.

Companies A and B, 56th were then to enter the waterworks, cross the Zorn, and continue to Herrlisheim abreast as darkness set in.

When Captain Beach, commanding Company B, 56th, was told that the two footbridges to be used were under mortar and artillery fire, he decided to rush a squad at a time across them, after which they would move off to the west side of the road to Herrlisheim, where a slight embankment offered some protection.

After 1st Platoon dashed across the second footbridge, mortar fire became intense, inflicting heavy casualties in the 2nd and 3rd Platoons.

At 3 PM, Beach's hard-hit Company B moved over the bridge at the waterworks and swung east into a nearby alleyway. Many of the personnel became confused as they found that 2nd Platoon of Company C, 56th, and Company L, 314th Infantry, occupied buildings there. The 1st Platoon was sent to the west side of the works to make room for the other platoons.

As this was taking place, the Germans unleashed a mortar barrage on la Breymuhl, wounding Captain Beach in the legs; 2nd Lt. John R. Casner, Jr., 2nd Platoon leader, briefly took charge of the company. After reorganizing, Company B moved out. When the 1st Platoon had almost reached Kleinbach Creek, it turned to the south going directly at Herrlisheim.

The 2nd Platoon moved abreast to the east with 3rd Platoon following. They paused briefly to let Company A catch up, then moved another 50 yards and dug in as darkness fell.

Drass's Company A, 56th, left its dismount area at 3 PM and crossed the two footbridges. About 10 PM, the 2nd Platoon reached its assigned sector and deployed, while half of the 1st Platoon took positions behind it. The rest of Company A remained at la Breymuhl.

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ABOVE: Camouflaged with bedsheets, two GIs man their .30-caliber machine gun in the woods north of Herrlisheim. OPPOSITE: Small villages, numerous rivers, and thick forests—not to mention the brutal winter conditions—made this portion of the Alsace-Lorraine region a particularly difficult place in which to fight.

Company B, 56th, was finding the digging difficult in the frozen, snow-covered ground. Prior to the arrival of Company A, some of the men noticed a group of about 30 Germans moving toward them in the darkness across the flat ground, silhouetted against two burning buildings in Herrlisheim.

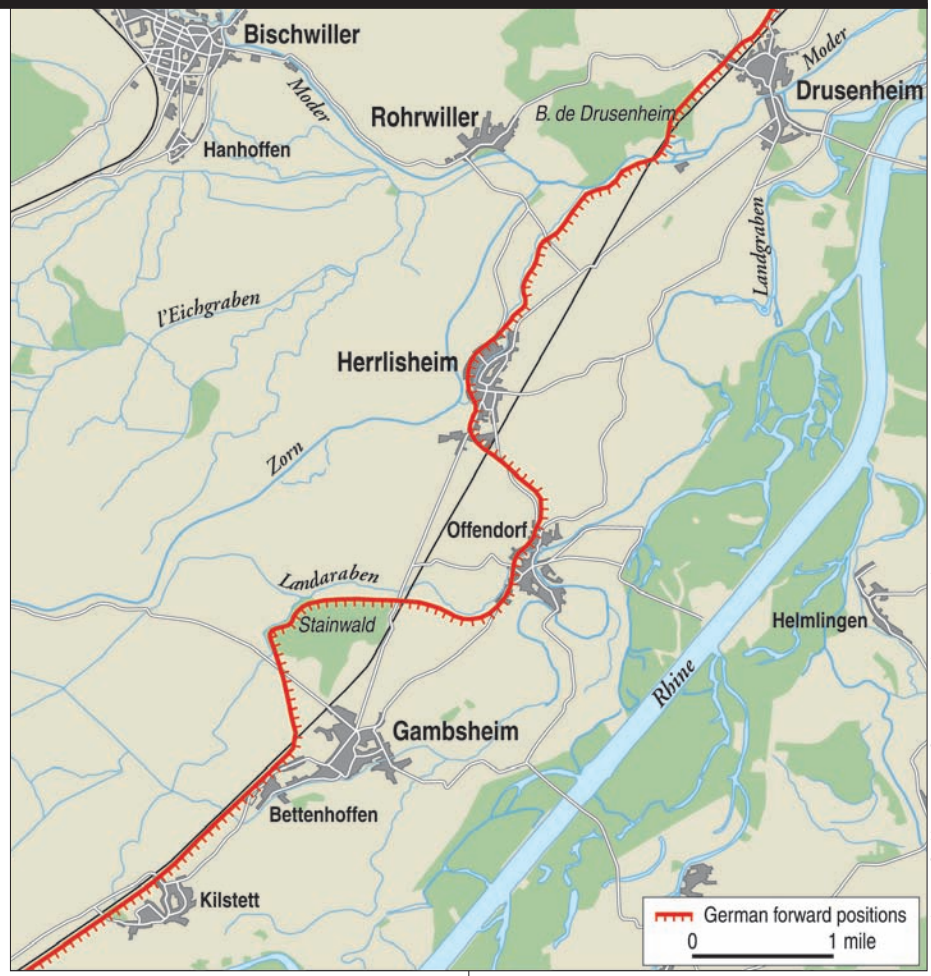
Staff Sergeant Charles F. Peischl, 1st Platoon, said, "They had no formation, were talking loudly, and suspected nothing because I could see the two leading men of the

party—one with a burp gun on his shoulder and another with two boxes of ammunition—nonchalantly walking straight toward me."

The Germans were so close that word could not be passed of their approach; however, all the GIs seemed to have sighted them about the same time, as they quickly stopped digging and silently took up firing positions. When Peischl noticed that the German with the ammunition boxes was slowly putting them down, possibly suspecting that something was amiss, Peischl opened fire.

The entire company then let loose. Two light machine guns caught the Germans in a crossfire, while others heaved hand grenades and emptied their rifles. The Germans were so surprised that they were not able to get off a shot; some escaped but at least 12 were killed.

Around 1:30 AM on January 9, word came for Companies A and B to return to the waterworks. There they set up security around the buildings and courtyard, overcrowded now with all three infantry companies of the 56th, plus Company L, 314th Infantry. A half-hour later, Lt. Col. Ingram sent 1st Lt. Floyd C. Vanderhoef, XO of Company A, 56th, to take charge of Company B, 56th, replacing Lieutenant Casner.



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

By the end of the first day, CCB's attack had come up short, with its infantry and tanks holed up at la Breymuhl, then having to fight through the night. The commanders of both Companies B (Beach) and C (Fairbairn), 56th, had been wounded and replaced, and Company B had suffered heavy casualties. By nightfall there was still no bridge at la Breymuhl for the tanks to cross.

First Lieutenant Andrew J. Cavanaugh III, 56th Headquarters Company, Machine-Gun Platoon, recalled, "About 0330 all hell began to break loose at the waterworks." The sound of approaching track-laying vehicles gave way to mortar shells landing in the courtyard. A group of Germans approached through an orchard to the east and began tossing concussion grenades over the wall, causing little damage. The GIs retaliated by lobbing grenades back and picked off Germans who ventured beyond the wall.

Two German panzers now came toward the waterworks and began to fire at the upper floor. Fortunately, the panzers were unable to lower their fire due to a seven-foot stone wall between them and the waterworks. One of the panzers moved to the west side of the courtyard and knocked down part of the building's outer wall.

As their position was becoming untenable, Private Robert L. Scott volunteered to take a bazooka and knock out the panzer, but the weapon misfired. Undaunted, Scott ran back, picked up another, and returned. This time he hit the panzer and disabled it. The second tank then lumbered up, its crew attached cables, and pulled the disabled vehicle back toward Herrlisheim.

Fighting at the waterworks continued until daybreak.

During the night the American commanders prepared plans for a dawn attack on Herrlisheim. Company B, 56th, now under Lieutenant Vanderhoef, was to lead off at 6:05 AM, to be followed 10 minutes later by Drass's Company A coming abreast on B's west flank. Both companies were to be at the edge of Herrlisheim by dawn, then clear the town with Company A on the left bank of the Kleinbach and Company B on the right. Company C would mop up.

Lieutenant Colonel Ingram called Captain Leehman to Bischwiller at midnight to give him the plan for his tanks. At daylight they were to cross the Bailey bridge, which was to be ready at the waterworks, follow the infantry, and give close support. The other two medium tank companies were to be in fields west of Herrlisheim, providing fire support. In case the Bailey bridge was not finished, Company C was to cover the right flank from the west bank of the Zorn.

At 4 AM, Leehman found that the bridge was still not in; no work had been done on

it during the night due to the shelling and fighting at the waterworks. Four hours later, Leehman ordered all firing ceased as a large number of Germans came forward to surrender; 125 prisoners were taken.

The infantry jump-off time was moved from 6:05 to 7:30 AM due to the situation at la Bremuhl. But when the troops failed to move out, Lt. Col. Ingram arrived and got the attack going at 10:30 as the tanks of Company B, 714th, advanced down the opposite side of the Zorn. Company B, 56th, moved out of the waterworks but had to wait for Drass's Company A to come up on its flank.

As Company B was moving, a heavy mortar barrage rained down on its 2nd and 3rd Platoons, causing extremely heavy casualties. One of those was Lieutenant Vanderhoef.

The thinned ranks of Company B pushed forward and had reached the edge of Herrlisheim, where they were halted by machine-gun and small-arms fire coming from a clump of trees at the edge of town. To escape this hail of lead, the company veered to the southwest and then held up for a short time at the outskirts of the town.

Throughout the night the situation of the beleaguered GIs in Herrlisheim became increasingly desperate. Cut off and without communications, they were subjected to German raids, some of which set fire to the houses.

As Company A moved out of the waterworks a few minutes after Company B, it was met by mortar, small-arms, and machine-gun fire but luckily suffered little. After they pulled alongside Company B's west flank, the assault moved ahead. A little over halfway to Herrlisheim, Drass's company pivoted to the southeast and entered the village.

They advanced against small-arms fire, intending to secure the northwest part of the town and continue south through the streets. After Companies A and B cleared out their sectors, they were to meet where Kleinbach Creek exited the town and await orders.

During the morning, the 3rd Platoon of Harrington's Company A, 714th, rejoined the company on the left of the 2nd Platoon, relieved from its earlier attachment. Lt. Col. Phelan ordered it to move as close to the Zorn as possible to protect to the east and northeast. The platoon then spotted German machine guns and panzers that were firing on the infantry as they emerged from la Breymuhl.

The 1st and 2nd Platoons had moved down to the Zorn, west of the town, to provide direct fire into its southern half, which would be lifted as the infantry entered the town. "But the 3rd Platoon could not return the fire because Company B, 56th, was passing directly in front of us," explained Captain Harrington, Company A, 714th.

Just prior to Harrington's tankers moving down to fire into the town, Clayton's Shermans had gone forward. Along with assault guns, the tanks blasted the town, gradually moving their fire down as Company B, 714th, neared.

At about 8:30 AM, Drass's men entered Herrlisheim. The first four intersections along the north-south road into Herrlisheim had been designated as phase lines. Upon reaching each line, Company A was to radio the battalion CP in Bischwiller but was unable to do so because its radios were not operating. Companies B and C were also having radio problems.

Company A began to move through Herrlisheim's streets, clearing the houses. The 40-man 2nd Platoon led off, working from the westernmost north-south road toward the east. Company B was to fill the gap from there to Kleinbach Creek and along its opposite bank. The 1st Platoon, Company A, with 35 men, entered just below the 2nd, moved down the same road, but cleared in the opposite direction, to the west.

Drass's troops hadn't gone far when they encountered a Mark IV panzer; after a half hour the panzer withdrew. As the company began to move again, it was confronted by six German paratroopers and killed three.

The troops advanced by squads, one leapfrogging past the next as they cleared the houses. While a few men stood guard outside and others went to the rear to check the outhouses, the rest made a search of the rooms.

They kicked doors open and poked into basements and upper stories, capturing a few prisoners and discovering abandoned machine gun and antitank gun positions. The 3rd Platoon, with 19 men, followed the other two and mopped up, capturing 16 Germans in one cellar.

As Company A approached the bridge within the village, unknown to them a panzer sat on the opposite side of the stream with its main gun trained on the bridge. When the 1st Platoon reached the bridge, three men started across.

The first soldier reached the center of the bridge just as the panzer fired an high-explosive round and then finished him off with its machine gun; the other two men managed to crawl back to safety. The 2nd Platoon ran into heavy fire to its front and left flank as one man was killed and three were wounded.

At about 10:30, Leehman's Company B, 714th, moved out from la Breymuhl to the west of Herrlisheim, keeping pace with the infantry on the other side of the Zorn, with the tank platoons firing to cover each other as they leapfrogged southward. When west of the town, they let loose with their machine guns at foxholes along the west bank of the Zorn and at a pillbox. About 25 Germans quickly surrendered, and the pillbox proved to be empty.

Company C, 56th, in reserve, moved from the waterworks about noon. The 1st Pla-

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An M32 Tank Recovery Vehicle comes to the aid of an M4 Sherman from the 43rd Tank Battalion bogged down in deep mud during the fighting near Herrlisheim.

toon, under Tech. Sgt. Lowell D. Huddleston, was to have its west flank guiding along the road from la Breymuhl; Lieutenant Russell's 2nd Platoon was to follow the 3rd, under 2nd Lt. Gino A. Forchielli, as it advanced between the Zorn and the road.

Huddleston's 1st Platoon moved quickly to get under cover just west of the road while 3rd Platoon came up "on the double" and moved abreast of the 1st, on its west flank. The company entered Herrlisheim at about 2:30 PM, having suffered only two casualties in spite of being subjected to intense fire, including nebelwerfer rockets.

At about 4 PM, Captain Leehman found that the Bailey bridge at la Breymuhl was finally in place, so Lt. Col. Ingram ordered Leehman to move his Company B tanks over it and into Herrlisheim at once. The 1st Platoon was to hold its position and cover the 2nd and 3rd as they moved through the waterworks.

Leehman's company encountered heavy fire as it started toward la Breymuhl. First Lieutenant Arthur D. Slote's tank was hit and went up in flames, killing one crewman. A 3rd Platoon tank belonging to 2nd Lt. Charles M. Hisinger was knocked out and two of the crew killed. A third tank was hit and set on fire, but the crew escaped. A fourth was also hit. The fight was over in minutes.

When Leehman saw the condition of his platoons, he asked for and received permission to take them back to Rohrwiller to "straighten out."

As darkness came, Company A's and C's tanks pulled back. During the night plans were formulated for Companies B and C, 714th, to attack Herrlisheim the following day.

Second Lieutenant John Patterson, Jr., 1st Platoon leader, dispatched a messenger to Captain Drass, Company A, 56th, reporting their situation, requesting ammunition, and calling for artillery fire on enemy strongpoints. Drass gave orders for Company A to withdraw to the vicinity of phase line No. 4, reorganize, and set up defenses. He intended to consolidate the battalion in the morning and then push through the town.

That morning, Company B, 56th, entered Herrlisheim about a half hour behind Company A after having been subjected to merciless mortar shelling that thinned its ranks to approximately 35 men. Lieutenant Casner, once again in charge of the company, gathered the survivors at the edge of town then proceeded to enter the northwest corner of Herrlisheim to begin clearing houses.

Sergeant Peischl reported, "As we advanced, the enemy ran down the creek southward like scared ducks, leaving their foxholes at the rear of the houses without their weapons."

By about 3 PM, Company B had only its light machine-gun squad and a few riflemen left. Then German machine guns opened up, accompanied by mortars. One man was literally blown apart by a shell.

As the men were ready to push along the main road under 1st Lt. Henry Hilgert, 3rd Platoon, Lieutenant Casner came up. Seeing that he had just 20 men left, he ordered them to fall back, to be replaced by Company C.

As Company B moved into a house along the westernmost road that was thought to have been cleared, 36 German soldiers surrendered.

Near dusk, with communications to battalion having been lost, Lieutenants Casner and Trusley and Captain Drass—the latter now in charge of all the infantry in Herrlisheim—decided that Company B would hold in place and wait for morning.

Company B's antitank platoon, which had been guarding the bridge near Rohrwiller, received word at 2 PM to move to Herrl-

isheim and reinforce Company B. The platoon was able to reach Company B's CP without loss, nearly doubling the company's strength as darkness was setting in.

In the meantime, German antitank guns fired on the 714th's tanks in the open fields to the west, sending several up in flames. When Lieutenant Casner was badly wounded by mortar shrapnel, a lieutenant named Hilgert took command of Company B. The shelling let up after 7 PM as more Germans began infiltrating into the area.

Late that same afternoon, Company B, 119th Engineers, was told by Colonel Bromley to install a treadway bridge across the Zorn northwest of Herrlisheim. But when they arrived at the site they found the 714th's tanks ablaze in the fields, lighting up the proposed bridge site in the growing darkness. Upon seeing the fires raging, the engineers turned back.

Throughout the night the situation of the beleaguered GIs in Herrlisheim became increasingly desperate. Cut off and without communications, they were subjected to German raids, some of which set fire to the houses. Orders were issued to shoot at anything that moved outside, and no one was to leave their position. Unopposed, German panzers roamed the streets and shot up houses at will.

"The Krauts seemed to have a system of first firing at a building with tracers to mark it," Sergeant Peischl noted, "and then blowing it with a bazooka or AT gun. Some of them might have been doped up, for they would come right up to our doors, open them, and yell, '*Komm heraus!*' We wasted no time in knocking them off."

Luckily, Lieutenant Trusley's Company C, 56th, had suffered little while moving from la Breymuhl into Herrlisheim, but his radio was knocked out.

Captain Drass met Trusley and told him that Company A had taken the first three streets—from phase lines No. 1 to 4. Since Company B was so badly shot up, Drass directed Trusley to take the left flank and advance along Kleinbach Creek until it was abreast of his own Company A, whereupon both companies would continue the advance to the south.

Four houses had to be cleared across the creek before Company C could work down—the 1st Platoon was chosen for the job. Several men were wounded by snipers, but the houses were cleared. At the same time, the 3rd Platoon cleared houses along the west edge of the creek.

Trusley contacted Drass, who directed that the company hold for the night at the positions it had taken on the battalion's east flank and remain in contact with Company A to its south and Company B to its north.

At approximately 10:30 PM, Lt. Col. Ingram called 2nd Lt. John L. Jacobs, leader of 56th's Headquarters reconnaissance platoon, and told him to take his 11 men into Herrlisheim and deliver two radios and the unit's artillery overlay plans to Company A. He was to return with company strength reports.

Jacobs' small force moved along the west side of the Zorn until they found a bridge they could use. As they stepped off the bridge, they encountered a dozen Germans,

12th Armored Division Memorial Museum / Portal to Texas History

ABOVE: After losing its tracks, this German tank was used as a pillbox in a hull-down position near Herrlisheim. OPPOSITE: While a Sherman tank (left) smolders and another rolls through Oberhoffen, north of Herrlisheim, two medics attend to wounded 12th Armored Division men.

killing 10 and taking two prisoner. Under interrogation, the prisoners incorrectly reported that all the Americans who were in the town had been wiped out.

By this time, approximately 33 infantrymen who had escaped from Herrlisheim through the fields along the eastern bank of the Zorn joined Jacobs' men. They reported that the town was cut off and surrounded and that it was impossible to advance further because the enemy troops had orders to shoot at anything that moved. This information, along with a blazing building that illuminated the ground they would have to traverse, persuaded Jacobs to abandon efforts to enter Herrlisheim.

Jacobs then noticed colored lights moving in the fields to the north and east. The Germans appeared to be moving in.

Shortly after midnight, a Mark IV panzer approached Company A's sector. The panzer shot up one house, but fortunately it was empty, then turned its attention on a 1st Platoon house next to the company CP. It pumped five rounds into it, but the occupants had gone to the cellar.

The panzer withdrew after an hour, but a group of 25 Germans who had accompanied it remained for a while before moving off. When one GI shouted out an inquiry as to

what company was passing, the Germans scattered, but Browning machine guns opened up and cut them down.

By the end of the second day CCB had launched another assault on Herrlisheim. The Bailey bridge had been repaired, allowing the tanks to cross the Moder and advance to Herrlisheim. The start of the infantry attack had been delayed until 10:30, but then a mortar barrage had inflicted heavy casualties on Hilgert's Company B, 56th, during its advance.

All three infantry companies had reached the town and begun clearing houses, then dug in after encountering German armor. But several Sherman tanks had been disabled and radio communications with the infantry were again out.

After Company B, 714th, had reorganized near Rohrwiller, Lt. Col. Ingram ordered Captain Leehman to move his company to Herrlisheim immediately. Leehman's mission was to contact the infantry and have them withdraw. He started out at 4 AM. So that his tanks did not lose contact in the darkness, they moved slowly in a tight formation. After crossing the Bailey bridge at the waterworks, they hugged the east bank of the Zorn.

As dawn broke, they entered the west end of Herrlisheim, and as Leehman reconnoitered, he spotted an enemy tank, which he knocked out with a point-blank shot. Leehman then encountered an American soldier who led him to Company A's position, where he spoke to Captain Drass. Told that the infantry companies occupied only the northwest part of the town, he pulled his tanks up to that vicinity and radioed CCB that he had found the cut-off units. Headquarters told him to remain in place, but Leehman indicated that he thought that they could not hold the town.

At 6 AM, Lieutenant Cook, in Oberhoffen, received word from Lt. Col. Ingram to take his light tanks to Rohrwiller, where he was to pick up the 56th Battalion's Headquarters Company commander, Captain Maddox, and 19 infantrymen and take them to Herrlisheim, along with critical supplies.

Meanwhile, the engineers of Company B, 119th Engineers, were ordered to move down into Herrlisheim as infantry; CCB was running low on troops. With all three of its platoons at full strength—45 men each—the engineers started out from Oberhoffen in a column of trucks and half-tracks, then dismounted and traveled along the west side of the dry Augraben Creek. After a reconnaissance party found the damaged footbridge, they managed to cross despite the damage. Haze and mist allowed them to reach Herrlisheim safely.

The engineer platoons were placed at the southernmost point of the defensive perimeter. Foxholes were dug, minefields laid, and six medium tanks positioned to provide cover with bazooka teams protecting each.

When Cook reached the footbridge, he found that the Germans had attempted to destroy it; all that remained was a 15-foot-long stringer and railing, but enough to allow the men to cross one at a time. The infantry moved into the town at about 7:30 AM under the cover of a thick fog. Cook returned to Rohrwiller.

At 8 AM, Cook and his light tanks went forward again to the footbridge, this time transporting Lt. Col. Ingram and five of his men. A short distance beyond la Breymuhl, the column was slowed by enemy fire. Cook's tank, the second in line, was hit. The crew jumped out unharmed except for the unfortunate driver, whose head had been blown off.

That was when Pfc. Wiseman jumped inside, started it, and backed it off the road to allow the rest of Cook's tank column to continue on to Herrlisheim.

The light tanks brought in supplies to the beleaguered troops and evacuated the

National Archives

wounded under a thick fog. Captain Maddox contacted the three company commanders and found that there were approximately 50 wounded who required evacuation; the tanks made three trips to remove the wounded, but during their fourth trip, about 2 PM, they drew heavy antitank fire, which brought a halt to the operation.

Lieutenant Colonel Ingram arrived at 9:30 AM to size up the situation and formulate plans to continue the attack. Trusley's Company C was to cross Kleinbach Creek again, recapture the houses it had taken the day before, and come up on line with Drass's Company A so that both could start a push to the south. Company B, badly weakened, was to stay in reserve. Company C was to jump off after noon.

Lieutenant Colonel Phelan had instructed Captain Harrington to take his tanks closer to the Zorn. They were to protect the movement of vehicles, supplies, and personnel into Herrlisheim and be prepared to resume the attack. Harrington's Company A was also to cover the north and northeast part of the town, the roads leading into it from la Breymuhl and Drusenheim, and the railroad embankment. Harrington placed his tanks just south and west of the waterworks.

Meanwhile, Lt. Col. Ingram told Captain Maddox to move his mortars and assault guns nearer to the town to support the attack. When he learned of the heavy fire that the light tanks had drawn while traversing the road to la Breymuhl, he realized that he could not bring his M8 assault guns and mortar-carrying half-tracks over the same route. Instead, he had the mortars remain in place and sent his two assault guns to the field west of the Zorn to set up in defilade behind Augraben Creek.

The three ammunition and CP tracked vehicles with the assault guns crossed the frozen creek at approximately 2 PM, but the two M5 Stuarts broke through the ice and nosed down. Just then the Germans opened up with heavy antitank fire, presumably aimed at the tanks of Harrington's Company A, 714th, which were in the field beyond the Zorn. Shells whizzed about as the half-tracks tried unsuccessfully to pull the M5s out of the stream.

When firing ceased, Maddox radioed to have a wrecker brought to Rohrwiller, where he would be waiting to guide it. It wasn't until after dark that the wrecker was able to locate the M5s and pull them out.

After Clayton's Company C, 714th, rolled into Herrlisheim early on January 9, and as the fog lifted, Phelan wanted Harrington's tanks to pull back from their exposed position. About 3 PM, the tanks drew fire; luckily, there was only light damage to two. The tankers were then ordered to move farther west, the crews using smoke bombs to screen their withdrawal.

Under the cover of darkness, the 2nd and 3rd Platoons were brought northwest of Rohrwiller to replenish their ammunition and fuel. The 1st Platoon remained behind.

At 10:10 AM, Lt. Col. Phelan visited Company C, 714th, with orders for Captain Clayton to take his tanks over the Bailey bridge and along the road leading into Herrlisheim from the north, to join the infantry in continuing the attack.

It was about 11 AM when Clayton's company crossed the bridge and moved forward just off the west side of the road, where the embankment offered some defilade. As they pulled onto the road in front of the town, all three 12th Armored Division Artillery battalions laid down a heavy smoke screen to the east.

As the tail of the column was entering the town, a Sergeant Phelps, commanding the next to last tank, spotted Germans manning an antitank gun at the northeast corner of the town. The Germans fired from several guns; the trailing American assault gun was knocked out, but the crew escaped.

The few American tanks still outside town moved quickly to get under cover, which they were able to do due to the fast thinking of the 1st Platoon leader, Lieutenant Dominic A. Dolce, as he advanced the head of the column to allow sufficient room for the rear of the column to get into the protection of the buildings.

After Lt. Col. Ingram reached Herrlisheim and plans had been made to continue the attack, Captain Leehman received word from Major Edward L Livaudais, S-3, 56th, to "sit tight," as CCB was sending Lt. Col. Phelan down to take charge of operations; Phelan reached Herrlisheim at about 1 PM. Company C, 56th, was ready to jump off as Phelan decided the attack should begin at 2 PM and include the engineers and his

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tanks as support.

Battery C, 494th Armored Field Artillery Battalion, was to fire an artillery preparation prior to the assault on the north edge of the Steinwald Woods. At 1:45 they were to lay down a 15-minute concentration on the southern end of the town to "soften" it for the infantry advance.

Drass's Company A, 56th, was to move down the westernmost street of Herrlisheim with Hilgert's Company B following. Upon reaching the bridge over Kleinbach Creek, Hilgert was to cross over, join Trusley's Company C, and work along the main road. Each company was to be supplied with two tanks from Leehman's Company B, 714th, as support.

Once the drive got underway, Leehman planned to take the remainder of his tanks across the creek and place them at the eastern edge of town to protect Trusley's Company C. As the attack pushed south, these tanks would keep pace, except for one platoon which was to remain behind as a covering force.

ABOVE: A German Sd.Kfz. 251 half-track has been reduced to scrap metal during the fierce fighting around Herrlisheim. RIGHT: A group of 12th Armored Division soldiers appear pleased at the number of Germans they have captured during the fight for Herrlisheim. OPPOSITE: Two Shermans negotiate a snowy road while heading into battle near Herrlisheim.

At the same time, Captain Clayton expected to send his 1st Platoon with Drass's men along the west edge of town, the 2nd Platoon to remain at the northwest corner of town to cover the open field, and the 3rd Platoon to remain in place as a reserve.

The tempo of artillery and mortar fire now picked up until it reached a crescendo at about 1:40 PM, the same time that the 494th Armored Field Artillery Battalion's concentration began to pound the Steinwald Woods.

By now the 56th AIB had been reduced to about 150 men as heavy concentrations of German fire steadily plastered the town.

At the CP, Phelan and the other officers organizing for the attack had to move several times to escape German shelling, fleeing from their CP building and ducking into the nearest house. A few minutes before the units were to jump off, at 2 PM, direct hits were scored on the house, blowing down the ceiling and injuring all the occupants. The wounded included Phelan, with a compound fracture of the leg and shrapnel in his back, and Lieutenant Dolce, whose intestines lay exposed.

The attack was not able to get underway due to the heavy infantry casualties and the steady stream of mortar and artillery shells, which lasted until dusk. The few men that Trusley had on hand attempted to get across Kleinbach Creek but were stopped cold along with the supporting tanks—hit by tank and antitank gunfire.

At 2:40 PM, Captain James M. Boone, S-3 of the 714th, who had arrived at Herrlisheim with Phelan, took command of the troops in the town by order of Major William B. Avery, S-3 of CCB, for the purpose of consolidating forces.

After determining the number of troops and conditions, Boone reported the situation to Major Avery. In addition, they determined that infantry reinforcements should be sent in immediately, feeling that that they could not hold their present positions if the Germans attacked in force that night. It was considered impossible to withdraw during daylight.

At around 4 PM, General Roderick Allen, division commander, ordered CCB to renew its attack but Colonel Bromley, the CCB commander, told Allen that his unit had suffered heavy casualties and was in no shape to attack. He proposed that the division simply contain the bridgehead and let the Germans wear themselves out trying to sustain it. Unaccustomed to having his orders challenged, Allen relieved Bromley of command.

Captains Boone and Drass and the other officers saw to the establishment of defensive positions for the night. The tanks were dispersed among the houses to cover the streets.

That night, while defenses were being established, General Allen decided Bromley was right and ordered CCB to pull all units out of Herrlisheim as soon as possible.

On Captain Boone's order, the infantry companies were to move out in five-minute intervals. Each was to contribute a squad of six men with a machine gun to guard the area around the tank companies, Companies A and B, at the northwest cor-

ner of the town and Company C to the south. The tanks, in turn, were to cover the infantry as they withdrew and follow about an hour later when Boone gave them the green light.

Company B, 714th, would wait 10 minutes after the signal before pulling out, with Company C tying in behind. Three of Company B's tanks were to be the last to leave. To keep noise to a minimum, tank engines were not to be started until the last moment. At that time the infantrymen, who had remained behind on outpost, were to depart.

A friendly artillery barrage came down on schedule; under its protection the troops began to withdraw. The three rifle companies moved off at approximately 1:30 AM on January 11, but the night air was so thick with fog that the infantrymen had to hold on to one another's belts as they moved in a column. The 3rd Platoon of engineers was the last to leave. The mist and bitter cold intensified the men's suffering.

The infantry and engineer units reached the Zorn in less than an hour. Company A was the first to cross, followed by Company C and then B. The Germans were apparently unaware as the operation was completed without loss.

A half hour after the troops left the town, Boone gave the signal for the tanks to start their engines. They drew no fire on the way out.

Captain Leehman led his company along the east side of the Zorn with Boone behind, then Company C, and finally the rearguard tanks carrying the infantrymen who had remained behind to defend the tankers.

On the way out, Captain Clayton's tank "quit" and had to be abandoned. The crew transferred to another tank, and both companies crossed over the Bailey bridge at la Breymuhl, continued on to Rohrwiller, and went into an assembly area northeast of Bischwiller.

The successful withdrawal was due in no small part to the artillery support. Shells were dropped at several points in and around the town. All three of the division's artillery battalions fired concentrations, supplemented by units of the 33rd Field Artillery Brigade.

A lone American soldier walks down a muddy street in the heart of shattered Herrlisheim.

The initial assault on Herrlisheim had faltered due to failure to scout the terrain. While additional infantry might have helped, it's doubtful that they could have gained much. There were also claims that the officers in charge were not sufficiently aggressive. The weather had also hindered operations, especially the ground fog that had reduced visibility and prevented aerial reconnaissance. Most serious of all, the Americans had underestimated their opponents.

By January 11, the Germans had increased the number of their troops at the bridgehead. At the same time, the battle for Hatten-Rittershoffen, two villages about 12 1/2 miles to the north, was underway; the Allies feared the Germans would try to enlarge the bridgehead by forming a junction with these forces.

While CCB, 12th Armored Division, had begun operations three days earlier at near full strength, the 56th Armored Infantry Battalion had taken heavy losses, including four wounded company commanders. Along with the 714th Tank Battalion, the two units were now mere shadows of their former selves, with little to show for their efforts.

But General Allen would not give up. On January 16, he committed CCA to remove the bridgehead. The renewed battle for Herrlisheim continued until January 19, with CCA now taking the brunt of the slugfest. It, too, fared no better than CCB; the result was a tactical draw, which led to a VI Corps grade for the 12th Armored Division of "unsatisfactory."

In fact, the performance of the division at Herrlisheim was so criticized that an Iinspector General investigation of Allen was conducted. In the end, it concluded that he had done everything possible within the restrictions placed on him by higher headquarters—having been required to commit his units piecemeal while also keeping one combat command in corps reserve.

On January 19, the 36th Infantry Division relieved the battered 12th Armored at Herrlisheim. The 10th SS Panzer Division was pulled out, too, and used to face the 42nd Infantry Division at the Gambsheim bridgehead. Then it was withdrawn to Germany to try to stop the Soviets during the battle for Berlin.

Although the 12th Armored Division's performance had been judged "unsatisfactory," it had fought bravely and stopped the Germans from breaking out of the bridgehead and reaching either Strasbourg or the Colmar Pocket. □

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As war clouds gathered over the vast Pacific Ocean in the late 1930s, the United States belatedly began to think of protecting the nation's possessions of far-flung islands and atolls. Civilian contractors were hired to build runways, port facilities, barracks, fuel dumps, water towers, and fortifications in the Philippines, Guam, Midway, Wake, and especially Hawaii, the new home of the Pacific Fleet. The civilian workers relished the high-paying jobs especially after the lean early years of the Depression.

Military planners knew that they would be vulnerable if war broke out. By the "rules of war," armed civilians could be considered guerrilla fighters and "legally" executed by the enemy. In the small circles of the military establishment in Washington, consideration was given to creating a construction corps within the Navy similar to the Army Corps of Engineers. Before December 1941, however, little was done.

Meanwhile, in the Atlantic in July 1941, the United States assumed responsibility for protecting Iceland to relieve the hard-pressed British. The call went out for civilian construction workers to beef up the island's defenses and port facilities. Many experienced construction workers declined for fear of the deadly U-boats, the inhospitably cold climate, and the less than cordial population.

The Navy called on Admiral Ben Moreell, commander of the Bureau of Yards and Docks (BuDocks), to find service personnel to fill the void; five companies of 99 men each were authorized. By December 7, 1941, about 200 experienced construction engineers and workers, many of them veterans of World War I, had signed up for the construction brigades. But they never got to Iceland.

When war came suddenly, the civilian construction workers fared badly. After Wake Island fell, more than 1,000 surrendering civilian workers were herded below decks in cramped Japanese prisoner ships to spend the rest of the war toiling in feverish labor camps under deteriorating conditions; 100 more were kept behind on Wake to perform construction work for their new masters. Sadly, in 1943, with Wake cut off from Japan and little food left on the island, they were all summarily executed.

Civilian workers also suffered on Guam and in the Philippines. It was clear that construction workers needed to be able to defend themselves and their construction projects.

As early as February 1942, the Navy acquired property at Quonset Point near Davisville, Rhode Island, which would be turned into a base to train the new Naval Construction Battalions and support the war in the Atlantic. Another base was constructed at Port Hueneme, California, to serve the same function in the Pacific; Caribbean operations were supported by a third new base at Gulfport, Mississippi.

The initial plan was for a single regiment-sized unit with three battalions. It wasn't long before these Naval Construction Battalions (or CBs) acquired the official name of "Seabees." After some debate, the Seabee program was placed under the command of the Civil Engineering Corps.

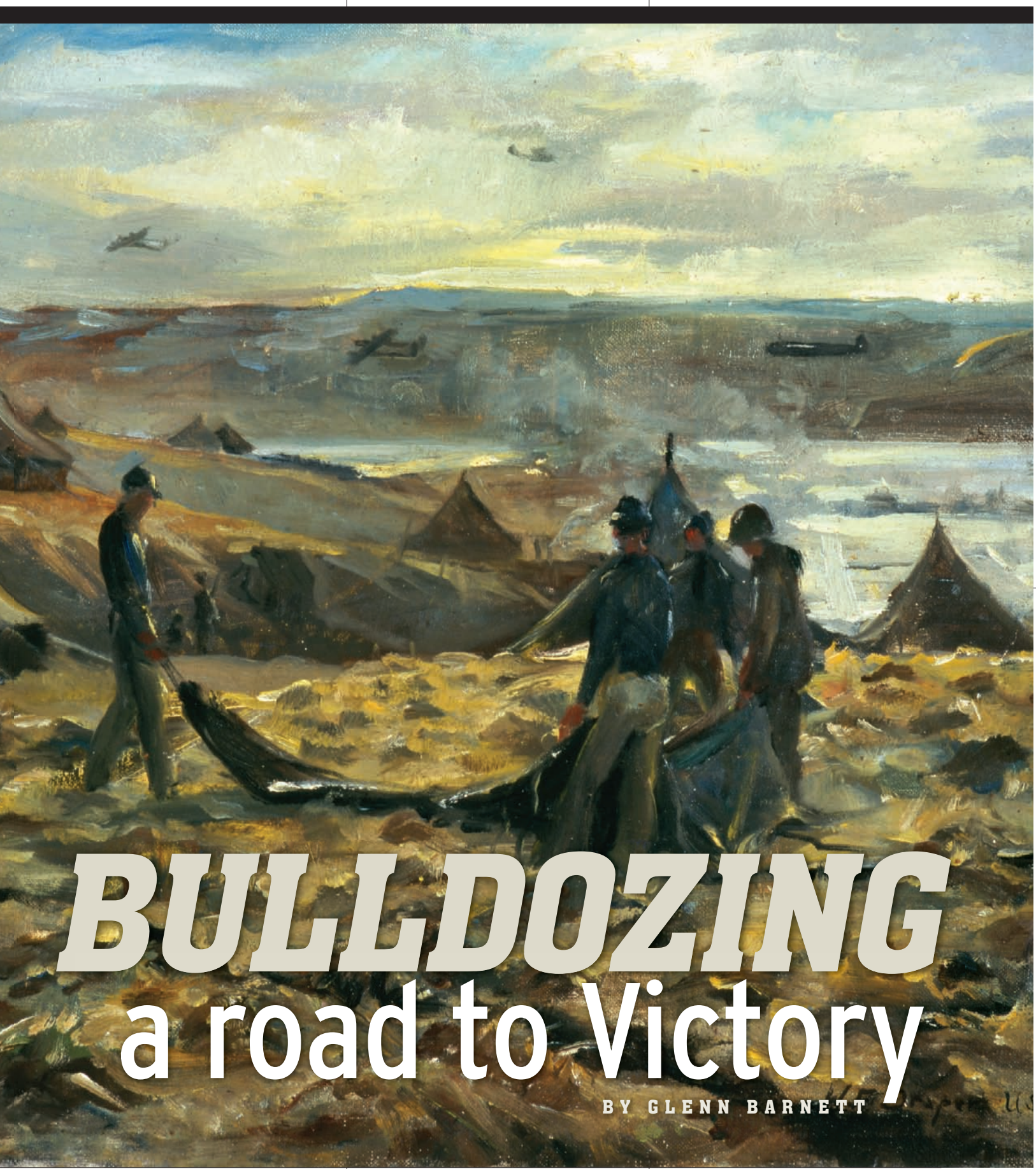
Overall command was entrusted to a professional civil engineer, the same Admiral Moreell, who had already begun recruiting construction workers for Iceland. He was an early advocate of the NCBs, and his men would soon be calling him the "King Bee."

Moreell expanded his efforts to recruit men from the building trades. Construction engineers would become commissioned officers while foremen and supervisors were enlisted as petty officers.

Fortuitously, many of the early Seabees had learned their trade skills in the New Deal work programs established during the Depression. One of these programs, the

The Allied victory in the Pacific would not have been possible without the hard work and ingenuity of the Seabees, the U.S. Navy's Construction Battalions.

A U.S. Navy artist's depiction of Seabees erecting tents on cold, windswept Adak Island in the Aleutian Chain as P-38s and B-25s fly in the distance. Here the 12th Construction Battalion created roads, airfields, sewers, floating drydocks, base housing, and other facilities. ABOVE: A Seabees recruiting poster. Eventually, more than 325,000 men served in the Navy Construction Battalions (NCB) in every theater of war.



BULLDOZING a road to Victory

BY GLENN BARNETT

National Youth Administration (NYA), continued to help.

The NYA had built youth camps across the country that were no longer in use. These were made available to the Seabees to assemble, orient, outfit, inoculate, and provide some physical conditioning for the new recruits before hurriedly shipping them out to the South Pacific. Some of these camps were put to use until the Seabees' own camps were built.

To appease the labor unions that feared the Seabees would be in competition with them, Moreell promised that the Seabees would only work overseas except in the case of national emergencies. As it was, nearly 80 percent of the early Seabees were union members.

Construction was only part of the job for the Seabees. The other part of their duty was as combat soldiers, so they were trained in the use of small arms and military tactics. When trouble came, they were expected to drop their tools and pick up their guns.

This led to the creation of the Seabees' motto: *Construimus Batuimus*—Latin for "We build. We fight." Their slogan became "Can do!" Around the same time the iconic insignia of the Seabees was created. It featured a bee wearing a Navy hat while carrying a tommy gun, a hammer, and a wrench.

Even before the bases could be completed or the chain of command established, the 200 men who had been recruited to work in Iceland were joined by another 100 raw recruits. They were given three quick weeks of basic training, and in January 1942 they boarded ship along with 4,000 regular U.S. Army troops of the 13th Coast Artillery.

Their convoy made two stops to load equipment and supplies in five transport ships before steaming with its escorts to the French island of Bora Bora, where it arrived on February 17, 1942. The newly arrived Seabees became known as the 1st Construction Battalion Detachment and for the rest of the war called themselves the "Bobcats," after the naval code name for Bora Bora. Their assignment was to construct a major air and sea refueling base for warships keeping the vital sea lanes open to Australia.

The Bobcats started with nothing. Their construction and moving equipment rested at the bottom of the supply ship holds. Ship's cranes could lower cargo onto barges, but when the barges reached shore unloading them had to be done by hand.

The land-based cranes, bulldozers, and earthmovers were buried beneath everything else aboard the ships. So eight 7-inch, 13-ton naval guns meant for the island's defense had to be laboriously hoisted into position by hand. (Some of these guns still remain on Bora Bora today). It would take 52 days to completely unload the five transports and the three additional ships that arrived soon after.

The men were subject to tropical diseases that sapped their strength. A few came down with the grotesque elephantiasis. Most of their food came from tins of questionable age. They endured incessant rain and mud with primitive facilities they had to build themselves.

Despite all obstacles, the Bobcats managed to set up 300 Quonset huts within three weeks. They built an airfield, docks, a power plant, and the all-important fuel tanks. To meet the Navy's deadline for the fuel tanks, the 4,000 Army troops pitched in to help. Tankers brought in fuel as the men ashore worked long hours to position and assemble the holding tanks. The refueling station was up and running just in time to replenish the ships and planes that took part in the critical Battle of the Coral Sea in May 1942.

The Navy could not have fought in the Coral Sea without refueling at Bora Bora. For the first—but not the last—time, the enemy was surprised and confounded by the work of the Seabees. They and their Army partners were the unsung heroes of that battle. It had been hard work, and sometimes tempers flared. Their commander later wrote that his men "smelled like goats, lived like dogs, and worked like horses."

Valuable logistics lessons were learned at Bora Bora. The Bobcats had been sent wheelbarrows without wheels. There were not enough spare parts for their trucks, and welding equipment arrived without protective masks.

Learning that civilians had done the loading of the transports that had caused so much trouble, the Seabees began to rely on themselves for loading and unloading the supply ships. Attention was given to what was being sent and the order in which equipment

Naval History and Heritage Command

and supplies were needed ashore. They did such a good job that the Navy tasked them with the loading and unloading of all supply ships.

Back in the United States, Seabee recruiters continued to go after men with construction skills, but standards for physical fitness were relaxed. As a result the average age of the early enlistees was 37, and in some cases men in their 60s signed up.

In March, the 1st NCB shipped out to the islands of Tongatabu in the Tonga group and Efate in the New Hebrides. In May, the 2nd NCB arrived in Samoa. The 3rd NCB was sent to Fiji and Noumea in New Caledonia, the 4th to Alaska, and the 5th sent detachments to Midway, Palmyra, Johnston Island, and French Frigate Shoals. The Seabees began to build a ring of bases around the Japanese Pacific Ocean empire.

A detachment of the 1st NCB landed on Efate on May 4 to find a small group of Marines and Army engineers struggling to build an airfield. Delighted to see the newcomers, the soldiers and Marines gave pride of place to the Seabees for leadership. All three groups pooled their equipment and resources to complete the airstrip for the arrival of 20 planes on May 28.

High on the priority list at Efate was the construction of a 600-bed hospital. Lt. Cmdr. Samuel Mathis of the 1st Battalion explained, "We couldn't start a land offensive until we had the hospital ready." At the height of the battle for Guadalcanal, the hospital would care for 900 wounded men.

Along with their other jobs, the Seabees built a seaplane ramp so that on June 1 Consolidated PBY Catalina flying boats from Efate dropped the first bombs on the Japanese airfield under construction on Guadalcanal. But it was a 1,400-mile round trip to Guadalcanal; effective bombing could not take place from that range. The Seabees were ordered to move northward 200 miles to Espiritu Santo.

Lieutenant Commander Mathis remembered, "We arrived at Espiritu Santo on July 8 [1942]. There wasn't a damn thing there but jungle." They went to work immediately setting up generators and floodlights so they could work all night. Working around the clock, they built airfields, fuel tanks, barracks, and hospitals. In doing so, they decreased the range for bombing of Guadalcanal. The first fighter planes arrived on July 28 and Boeing B-17 Flying Fortess bombers the next day.

The 6th NCB was the first to come under fire. On August 7, 1942, the Marines landed on Guadalcanal to find an unfinished muddy, undrained, and unpaved airstrip that the Japanese had hastily evacuated. The airstrip had deep ruts from bombs and shells; more planes were lost to accidents in the chaotic sludge than in combat. Few Marines could be spared to work on the airstrip yet. To sustain themselves on the contested island, they needed working airfields. Call in the Seabees.

On August 20, Lt. Cmdr. Paul Blundon, CEC, USNR, commander of the 6th NCB, flew to Guadalcanal in a PBY to examine the unfinished field. He immediately called upon Maj. Gen. Alexander A. Vandegrift, the commander of the 1st Marine Division.

Blundon claimed that the Seabees could create an all-weather, paved airfield; Vandegrift was eager for the result but not so much in having more mouths to feed. His food supplies were limited and dwindling, and the available shipping to bring in men and construction equipment was problematic.

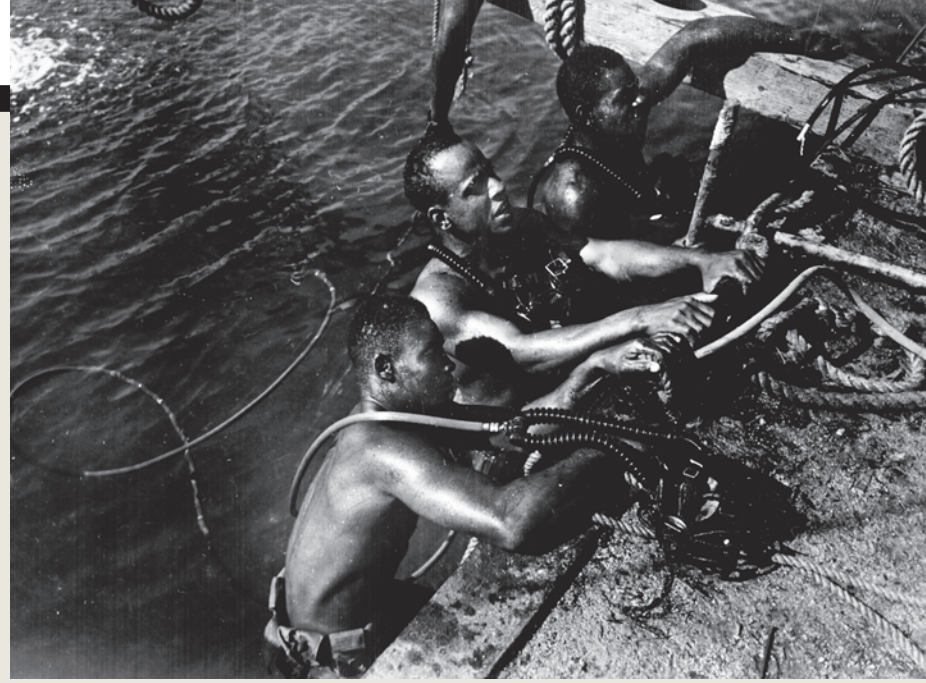
A compromise was reached in which only half the battalion would work on Guadalcanal until supply limitations were resolved. On September 1, five officers and 357 men of Companies A and B of the 6th Battalion landed on the island.

The Marines looked askance at the Seabees; some of them were old enough to be their fathers, and they wore a hybrid uniform with Navy, Marine, and Army influences. But the newcomers soon proved their worth.

After a rough first night on open ground, the Seabees went to work. First they would solve the drainage problem, then level, lengthen, and widen the airfield that was named Henderson Field by the Marines, after Major Lofton Henderson, who was killed during the Battle of Midway. They would also build two supporting fields for fighter planes. It would be mid-October before all 1,000 men of the 6th NCB were ashore.

Blundon recalled what was expected of the Seabees: "It was our job to keep the holes filled up while we finished the grading, laid Marston mat, built hardstands and revetments, and helped solve the fuel and ammunition problems."

ABOVE: Seabees' founding father Admiral Ben Moreell (left), called the "King Bee," and Captain John Laycock inspect a model of a barge built from multiple metal pontoons and used to offload vehicles and other matériel from LSTs. OPPOSITE: A trainee operates a Caterpillar D-7 bulldozer at the Quonset Point training facility near Davisville, Rhode Island.



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ABOVE: African American divers of the 34th Seabee Battalion—a nonsegregated unit—work on the marine railway at Gavuta in the Solomon Islands, 1944. At the height of the war, there were more than 12,000 black Seabees. OPPOSITE: Seabees lay Marston mats during runway construction on Bougainville. Developed before World War II, the Marston Mat consisted of perforated steel planking strips primarily used for the rapid construction of temporary runways and landing strips.

On their first day, the Seabees were greeted by a single Japanese bomber that dropped its payload near the airstrip. It interrupted but did not stop the work. Within three weeks the Seabees had drained and leveled the field. Next they began to pave the runway with newly arrived "Marston mat"—a 1/8-inch thick, perforated, and interlocking steel webbing that provided a level and firm foundation for landings, takeoffs, and taxiways.

As soon as the matting was in place, planes began to arrive to add their punch to the battle. It did not stop the Japanese, however. From the hills, the enemy could rain down artillery shells at will and at night nuisance bombers, nicknamed "Washing-Machine Willie" and "Louie and Louse," dropped a small number of bombs on the airfields.

The enemy fire did not do much damage to the airfields, but it would compound the work of the Seabees. One day, in frustration, Seaman 2/C Lawrence Meyers grabbed a nearby .50-caliber machine gun and fought back—there were loud cheers when he shot down a Zero fighter. For his quick-thinking action, he would be awarded the Silver Star. Unfortunately, the honor would be posthumous; Meyers was killed in action two weeks later.

For three days in mid-October, the Japanese made a maximum effort to put the Americans out of business. Just before noon on the 13th, more than 25 Japanese bombers pockmarked the field, tearing up the Marston mat and leaving deep craters.

As the bombers departed, the Seabees rushed onto the field to repair the damage. Pre-loaded and positioned trucks brought loads of rock and gravel to fill in the craters. The damaged segments of the Marston mat were removed and replaced with new sections, which had also been prepositioned at the edge of the runway. Other Seabees gathered up and removed fragments of shrapnel and jagged steel pieces that could puncture airplane tires. The field was soon back in operation.

The bombing and repairing was repeated twice that afternoon after further attacks. Then at midnight, a Japanese battleship got close enough to pound the airfield with huge 14-inch shells. The seaborne bombardment was followed by another flight of bombers. Repair work went on throughout the night. Even the cooks pitched in to keep the airstrip open.

With unrelenting labor the Seabees had restored the entire field by 9:30 the next morning. The cycle of bombing and shelling, followed by repairs, lasted for 48 hours over three days. In all, 53 craters had pockmarked the field, but the Seabees, although exhausted and taking casualties, were equal to the task. On the other side, increasing aircraft losses forced the Japanese to cease their all-out effort.

During the intense bombing, the American fighters were always able to get into the air. The trick was to have runway damage repaired before the aloft fighters ran out of gas. They sometimes had to circle Henderson Field while the Seabees labored as fast as they could.

Blundon later noted, "We found that 100 Seabees could repair the damage of a 500-pound bomb hit on an airstrip in 40 minutes." After the worst was over, the Americans were still in the fight.

In addition to the desperate work of repairing the main airfield, the 6th NCB built 24 miles of road between the port, Henderson Field, and the two new outlying fighter fields. This included building several bridges to span intervening creeks and gullies. They restored a captured Japanese power plant to provide electricity. They also repaired a Japanese ice-making facility and dubbed it the "Tojo Ice Company."

Detachments of the 6th NCB would also support the Marines on nearby Tulagi Island. The 6th was the first of four Seabee battalions to be awarded the Presidential Unit Citation.

In November, more Marines came ashore east of Henderson Field. With them were 500 men of the 14th NCB, who began building two dedicated bomber fields. In December, the 18th NCB arrived, followed by the 26th, which relieved the exhausted 6th which had borne the brunt of the Seabees' battle for the island.

The late arrival of the Seabees at Guadalcanal convinced the Pentagon that, whenever

possible, Seabees should land alongside the invasion force to begin their all-important work immediately. This gave rise to good-natured teasing between the Marines and Seabees. Each insisted that they arrived first and, in some cases, such as obstacle clearance, the Seabees did precede a Marine invasion. The Marines would be met with taunts like, "What kept you?"

In December 1942, the recruitment activity exercised by the Seabees was transferred to the Selective Service System. Thereafter recruitment came from the draft pool, but while candidates were younger and more physically fit their trade skills were limited. Theirs would be the ultimate "on-the-job training."

Back in 1940, the legislation that enacted the Selective Service stated, "Any person, regardless of race or color ... shall be afforded an opportunity to volunteer for ... the land and naval forces of the United States." Before the war, the limited number of African American naval personnel could only serve in the kitchen and dining rooms of officers as mess attendants. When the war began, thousands of black men signed up.

The military establishment in 1942 was still unprepared to place African Americans in fighting units. The Navy asked the Seabees to form battalions of these newly enlisted sailors to perform construction duties. By war's end, some 12,500 black sailors had served in the Seabees. But there were compromises to be made.

Most of the black recruits hailed from the South, so it was thought prudent to place Southern white officers over them, the thinking being that they would know best how to deal with the Negros. But experience taught the Navy that this approach did not work and by 1944, these officers were replaced by more enlightened leaders. Promotions and commendations followed.

The first African American Seabee unit to be deployed was the 34th NCB. In January 1942, they shipped out for the South Pacific. For a year and a half they toiled in the sweltering tropics of the Solomon Islands. It would not be long before the war found them.

Aside from the casualties of accidents and diseases, five men were killed and 35 wounded from Japanese bombing. Around the time that the 34th shipped out, the second black battalion, the 80th, was being formed and would serve on the island of Trinidad. Others would follow.

As the war unfolded, the Japanese concocted a complicated plan to capture Midway Atoll in June 1942. It included a secondary invasion of the Aleutian Islands of Attu and Kiska. Suddenly, Alaska was on the front lines. Within a month, the 4th NCB arrived in Alaska to beef up the territory's defenses. In August they were reinforced by the 21st NCB.

The work in Alaska included airport and facilities construction, fuel storage, barracks building, supply duties, and support for the Army in recapturing Attu and Kiska.

In August 1942, the 65th NCB landed near Freetown in what is now Sierra Leone, West Africa. The 65th shocked the complacent British colonials by reviving abandoned and rusted machinery and motivating native workers. Roads, airfields, and housing sprang up, the harbor was repaired, and the town was turned into a major supply base.

The invasion of North Africa opened a new front for the Seabees. Under the relentless desert heat and blowing sand, they unloaded and delivered supplies, expanded airfields and ports, improved roads and railroads, constructed barracks, built gun emplacements, and a thousand other things.

As wartime recruitment became stan-

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dardized, so did basic training. The new Seabees would receive six weeks of instruction in unit training and the use of light arms. In all, 325,000 men and nearly 8,000 officers would train, build, and fight with the Seabee insignia on their uniforms.

In recognition of their courage, Seabees would earn 33 Silver Stars and five Navy Crosses, but the awards would come at a cost. Some 272 men and 18 officers would be killed in action, and 500 more would die in construction-related accidents or of diseases. Many more would be injured or wounded.

In the early days of the war, Seabees would arrive at their assigned location before their equipment could be shipped to them, so they had to improvise to get work done. One huge problem was that there were few functioning harbors or docks on undeveloped islands for unloading the supply ships. At one time there were more than 80 freighters swaying at anchor in the South Pacific, waiting to be offloaded.

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ABOVE: Men of the 6th NCB finish construction of a railroad on Guadalcanal, completed in three days. The Seabees also constructed roads, runways, piers, buildings, bridges, fuel-tank farms, pipelines, electric powerhouses, tunnels, and other facilities. OPPOSITE: Mobile Construction Battalion 40 works through the night to construct a runway during the campaign on Los Negros Island, July 1944.

On Funafuti in the Ellice Islands, an air raid alert sent a supply ship sailing away for safety, taking with it most of the food for Seabees. "We lived on Vienna sausage and hardtack for five weeks," remembered one veteran.

Supply ships at Guadalcanal abruptly left when the enemy first approached. After the debacle of supply shortages there, "special" battalions of Seabee stevedores were created that worked exclusively unloading ships and distributing their contents.

Unloading would not cease just because ships came under attack. Instead of pulling up anchor and fleeing at the first sign of trouble, Seabees helped the understaffed crews man the guns, the infirmaries, and the engine rooms while continuing offloading operations.

In the South Pacific, the Allies began to move up the Solomon Island chain. On the list was Vangunu Island in the New Georgia group. The Marines landed at 10:30 on the morning of June 30, 1943, followed closely by the men and equipment of the 47th NCB.

By 3 PM the beachhead was secure enough that the Seabees were able to begin construction of a fighter airstrip. Hills were blasted and bulldozed, ravines were filled in, leveled, and paved with crushed coral; nine days later the first plane landed. By July 18, a 3,300-foot-runway accommodated an entire fighter squadron.

During August the Vangunu runway was widened. Two large aviation fuel tanks were installed nearby, and support buildings and revetments were constructed, allowing bombers flying northward from Guadalcanal to have a fighter escort on their bombing runs.

The Seabees were needed not only in the Pacific, but also throughout the world wherever U.S. forces operated. In a two-ocean war, the Panama Canal was an extremely strategic location, so a ring of bases was built up to protect it. This included the expansion of existing facilities in the Canal Zone, Cuba, and Puerto Rico.

Agreements were made with Central American countries and arrangements made with the British on Lend-Lease territories in the Caribbean. Much of the early work was conducted by civilian labor, but by 1943 the rapidly expanding Seabee program enabled them to take over these jobs.

Back in the Solomons in late 1943, the 87th NCB was assigned the invasion of the Treasury Islands and would support combat troops from New Zealand. While driving his bulldozer ashore to commence work, Machinist's Mate 2/C Aurelio Tassone was told that a Japanese pillbox was holding up the advance of the Kiwis and was asked if he could use his dozer to attack the pillbox.

He swung behind the enemy position and raised the dozer's blade as a shield against rifle fire. When he reached the enemy position, he lowered the blade and stove in the palm log and sand barrier, entombing a dozen Japanese soldiers in the process. For his actions, Tassone was awarded the Silver Star. He also inspired a scene in the 1944 movie *The Fighting Seabees* in which 37-year-old John Wayne reenacted Tassone's heroics.

Back home, the Seabees came up with an invention that would drastically alter the war. They improved an ancient tool, the pontoon bridge, with standardized watertight boxes. Each pontoon was 5'x7'x5' of welded plate steel. This effort was led by Captain John Laycock of the Civil Engineering Corps (CEC), who had a working model of his pontoon capable of supporting 20 tons ready for testing even before Pearl Harbor.

This system would be used not only for bridges, but also piers, wharfs, causeways, small drydocks, and barges. In Alaska one of these sturdy pontoon barges was even used as an icebreaker. Dragged ashore, the pontoons would be repurposed for, among other things, bake ovens and griddles. The differing configurations were facilitated by standardizing the parts and fasteners (called jewels) that joined

"Throughout the Pacific Theater, the Seabees built 111 major airstrips, 441 piers, 2,558 ammunition magazines, 700 square blocks of warehouses, hospitals to serve 70,000 patients, tanks for the storage of 100,000,000 gallons of gasoline, and housing for 1,500,000 men."

the floating boxes together.

The first test of the new system would be Operation Husky—the invasion of Sicily—in July 1943. The waters around the southern Sicilian beaches were shallow, and LSTs (Landing Ship, Tank) would touch ground as far out as 500 feet and still be in six feet of water—not ideal for landing tanks or bulldozers.

The solution was a 300-foot pontoon causeway that would get the heavy equipment within 200 feet, wading distance of the shore. Top secret rehearsals helped make for a smooth landing. In all, 96 of these causeways, carried in sections by LSTs, were deployed. They would offload more than 10,000 heavy vehicles, trucks, guns, and tanks.

The enemy, believing amphibious landings in southern Sicily to be impossible, was caught totally by surprise. British Commander Lord Louis Mountbatten called the causeways nothing less than "miraculous."

The Seabees tried to replicate their success on Sicily at Salerno and Anzio on the Italian coast but had lost the element of surprise—the Germans were not fooled twice. They targeted the causeways and the defenseless Seabees who rode them to shore.

When determined counterattacks threatened the beachhead at Anzio, the Seabees continued to deliver supplies and ammunition along the causeways while under fire, in the process suffering more casualties unloading the supply ships that stabilized the Allied positions and led to a breakout that eventually succeeded in capturing Rome.

With the lessons learned in North Africa, Sicily, and Italy, the Seabees turned their focus to the biggest engineering challenge of the war if not all of history: Operation Overlord—the June 1944 landings at Normandy, France. The Navy builders had already mastered the piers and causeways that would be needed. But there would be new challenges.

The coast of Normandy is often stormy in the spring, and 1944 was no exception. There were no harbors or breakwaters along the coast, so the Seabees determined to make them. The solution was a British invention called the Mulberry harbor.

The idea (Churchill's) was to construct hollow blocks of cement caissons, called "Phoenixes," that could be towed across theChannel and sunk side by side, with available "block ships," to create a breakwater that would calm the sea enough to allow for the unloading of supplies over the now familiar pontoon causeways. The British-built caissons would serve both the British landing site at Gold Beach and the Americans at Omaha Beach. The task of constructing the American Mulberry harbor was given to the Seabees.

About 50 of the Phoenixes were used to create a two-mile-long Mulberry harbor at Omaha Beach. Each Phoenix was eased into place by British tug boats. Beginning on D-Day, the Omaha Mulberry took about a week to complete.

Another problem at Normandy was the unpredictable shoreline, which undulated in underwater ripples of sand bars parallel to the beach that could trap the large landing craft (LSTs) far offshore. The solution, based on the pon-

toon system, was barges consisting of joined pontoons 30 boxes long and six wide. It was called the Rhino Ferry.

The Rhinos would dock with an LST in deep water. The ship would then transfer half its cargo at a time onto the "ferry," and two huge outboard motors would then power the barge to the shore. After unloading, the barges would return for the second half of the LST's load.

The 81st and 111th NCBs—which had worked on the Italian landings—were given the task of constructing, testing, and operating the Rhinos. On D-Day, 11 Rhinos would be employed in the first waves at Omaha Beach, growing to 20 as soon as possible; 11 more would be used at Utah Beach.

On June 5, LSTs began to pull the Rhinos out of British ports toward France. The going was slow in the choppy seas and took all night; it would be 5:30 AM before they were in position. The Rhinos were designed to operate in waters with a three-foot swell, but the swells off Normandy that day were six feet and over.

It was dangerous work getting the rhinos lashed and secured to the front of their LSTs. Accidents slowed progress as Seabees and machine operators began loading 75 to 80 trucks, tanks, and bulldozers onto the barges in the heaving swells.

Even with the help of tug boats and small landing craft pushing from astern, it was noon before the first of the ferries reached shore at Utah Beach, much to the relief of all on board. At Omaha, meanwhile, the Rhinos were stopped before they could reach shore. German obstacles of steel, concrete, and mines–– not to mention sunken and disabled landing craft—stood in their way.

Only one Rhino, commanded by Lieutenant Robert Stilgenbauer, reached shore on D-Day, and that was because he failed to see the signal to stop. Somehow he made it through the obstacles to the beach and unloaded his cargo, but by the time he was through offloading the heavy vehicles, the tide had gone out, leaving him stranded on the beach until the tide returned. No other Rhino would land at Omaha until D-Day plus 1.

Before Stilgenbauer landed, the first Allied troops ashore were Seabees of Naval Combat Demolition units and soldiers of the Army Corps of Engineers. These men were trained demolition experts who worked as fast as they could in the growing light before dawn to remove the obstacles. When they were spotted by alert German sentries, they came under severe fire and suffered casualties. Still, they blew up enough of the obstacles to open up the beaches for the landing craft.

As Seabees were destroying obstacles ashore and wrestling with Rhinos at sea, about 10,000 more men of Naval Construction Regiment 25 (25th NCR), a temporary amalgamation of several battalions, were installing causeways and piers at Utah and Omaha Beaches.

While the Rhinos brought in the first wave of heavy vehicles, these causeways would, over time, deliver millions of tons of equipment and supplies of all types to the insatiable Allied armies until November 1944, when French and Dutch ports were retaken from the Germans. The Seabees were then tasked with obstacle removal and repair of those port facilities.

The Seabees' dominion was the ocean shore, where they excelled at supporting and supplying the Army and Marines. There was one major exception.

When General George S. Patton's Third Army reached the Rhine River, detachments of the 627th, 628th, and 629th Construction Battalion Maintenance Units (CBMU), wearing Army uniforms at Patton's request so they would not be mistaken for the enemy, were on hand with small boats (300 in all), construction equipment, and the ubiquitous pontoons to ferry the soldiers, tanks, and supplies across the mighty river.

During the course of the war, the Seabees performed above and beyond the call of duty. At Guadalcanal, Seabee cooks fed every Marine that came to them as long as the food lasted. It became a sense of honor with the Seabees throughout the war to feed every sailor, Marine, soldier, or airman who asked.

In the Russell Islands north of Guadalcanal, one cook, a chef before the war, convinced the Navy to buy an entire herd of local cattle. Processing the meat and baking his own buns, he operated a hamburger stand, serving his Seabees and the island's more numerous Air Corps personnel—all at no cost to his customers.

While the Army was still struggling on the beaches of Normandy, the 2nd and 4th Marine Divisions landed on Saipan on June 15. Landing with them were the 18th and 121st NCBs. On June 19, the Marines captured Aslito airfield and turned it over to the

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ABOVE: The Seabees weren't just in the Pacific. Here a section of the artificial Mulberry harbor, built in England, is towed across the Channel to Normandy. Seabee crews rode the Mulberry across the Channel and opened the sea valves to sink the concrete structures at Omaha Beach. OPPOSITE: Seabees have "married" a pontoon causeway to an LST to offload cargo from ship to shore on an unnamed island.

Seabees, who hurriedly filled in bomb craters, removed shrapnel and debris, and smoothed over the mile-long runway so that the first American plane could land there just two days later.

At Saipan, as everywhere else, the Seabees did more. There was a small wrecked Japanese railroad that ran from the shore to the airport. The construction men restored the bombed-out rail bed and track while repairing the locomotive and cars.

The task took four days, and then the train carried everything from bombs to fuel from the landing site to the airfield, much to the relief of the men who would have had to haul it by hand otherwise.

The next American target was Guam. On July 21, the 3rd Marine Division and the 1st Marine Brigade waded ashore, followed closely by the 25th NCB. The Seabees immediately began unloading cargo, sorting it out, and moving it across the beach to the intended units.

The 25th had the support of the 2nd Special Battalion. The Seabees had created several of these "specials" for specific tasks, such as stevedores, demolition, and ordnance clearance, road building, lumberjacking and milling, machine repair, maintenance, and more. The 2nd was recruited from among stevedores and dockworkers as experts at loading and rapid unloading of cargo.

At a second landing site on Guam, Seabees, driving a waterproof tractor, assisted with unloading LSTs stuck on a reef. They then guided tanks through the shallowest water to reach the shore while under fire.

By the end of the first week of the invasion, Seabees were at work improving Apra Harbor, the only natural harbor on the island. Despite all their work being destroyed by a typhoon in October, they redoubled their efforts to make Apra a first-class harbor.

Next came the invasion of the nearby island of Tinian, three miles south of Saipan. There was only one beach on Tinian, and it was heavily defended; the rest of the island contained natural obstacles like cliffs and swamps.

On the north shore of Tinian were 15-foot cliffs that the enemy considered unassailable; they didn't think about the Seabees. Captain Paul Halloran, a civil engineer who commanded the 6th Construction Brigade, designed a special device for an LVT (Landing Vehicle, Tracked) that carried a ramp with cross ties.

Upon reaching the shore, the LVTs (affectionately called Doodlebugs) dropped their ramps against the cliffs and rolled over them to reach the top. While the Japanese waited in the south, the 4th Marines scrambled over the northern bluffs and outflanked them. The July 24 invasion was all over by August 1.

The Seabees were nothing if not anxious. In the midst of several battles, Seabees could be found surveying and mapping areas still under enemy control. On Guadalcanal, they had to be told to stop using dynamite close to the front lines because it disturbed the target alignment of artillery pieces.

On Tinian, Captain Halloran led a crew to survey a site for a runway. One of the Seabees noticed that several Marine tanks were pointing their guns at them. When the officer went to investigate, a tank officer told him that they had not taken that ground yet and to leave and come back in a few hours. The situation led to more humor about who arrived first.

After the enemy was cleared out, the Seabees went to work on what would become the largest airport in the world. Six separate runways had to be cut and filled, scraped and leveled, surfaced and maintained. Each one was at least a mile and a half long and a city block wide.

Two hundred dump trucks worked 20 hours a day (two 10-hour shifts), followed by four hours of maintenance. The airfields were built to accommodate the huge Boeing B-29 Superfortress bombers that were arriving to bomb Japan into submission.

The Seabees created housing, kitchens, hospitals, water storage, fuel and ammunition dumps, and sanitation facilities for 40,000 men (15,000 of them were Seabees).

Perhaps for their own amusement, they laid out a street grid for Tinian that was patterned after the grid of Manhattan. An ammunition dump in the center of the island was known as "Central Park." Even the streets were named after their counterparts on Manhattan. Tinian today still retains many of these New York street names.

A symbiotic relationship started to grow between the Seabees and some of the crews of the B-29s flying from the island. Some of the crews gave their planes Seabee-inspired names, and these airmen were taken under the wing of the Seabees. They began to receive

preferential housing, more comfortable bedding, ice cream upon returning from a mission, and other signs of favor.

The landings at Leyte Gulf in the Philippines were an Army show, but as in Europe the Seabees were crucial to their success. The Sixth Army roared ashore on October 20. The Seabees were prepared to support them with pontoon causeways and landing boats, but they were not needed. The sheltered gulf and sandy shore provided perfect conditions for the large LSTs to land at the shoreline.

Only an hour after the initial landings, the Seabees went to work unloading the LSTs and distributing the vehicles, equipment, and supplies carried in their hulls. The construction battalions soon would be needed for other work.

On the night of the 24th, Admiral William Halsey steamed with his entire Third Fleet northward to intercept approaching Japanese aircraft carriers, leaving the Army without fighter cover. The 61st NCB and Army engineers rushed to complete fighter and bomber fields to protect the vulnerable troops.

About 32,000 Seabees served in the Leyte-Samar campaign. Their building projects and shore facilities came under Japanese air attack a total of 100 times. On one occasion Japanese troops parachuted onto an airfield construction site on Samar. The Seabees held them off until Army troops could arrive.

Near Manila the 119th NCB built a camp and hospital for 4,000 liberated American POWs. Many were malnourished and had suffered mistreatment. At the camp they were housed and fed, their wounds and sicknesses cared for until they could be shipped home.

Halfway between Tinian and Japan is the rocky outcrop of Iwo Jima. The assault on the little island was to be spearheaded by the 4th Marine Division supported by the 133rd NCB consisting of 23 officers and 767 men. Battle plans called for a campaign of three days. It would take 29 days.

On February 19, 1945, the Seabees landed on the beach just 20 minutes after the initial Marine assault wave. The construction battalion was initially used as a shore party, hauling supplies and ordnance to the front.

The soft sands of the beaches would not support wheeled vehicles, so tanks and bulldozers were enlisted to haul trucks to the solid ground behind the beach sand, all the while coming under fire from enemy artillery and snipers. When Marston mats were brought ashore, they were laid down so that trucks could negotiate the treacherous sands.

The main job of the 133rd NCB was to repair and upgrade Motoyama airfield located

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Men of the 2nd Marine Raider Regiment, 3rd Marine Division pose on Bougainville with a sign paying tribute to the Seabees. OPPOSITE: Navy Seabees crew LCVP landing craft to ferry GIs across the Rhine in Germany. At General Patton's request, the Seabees were issued Army uniforms.

in the center of the island. The task had to be reassigned to the 31st and 62nd NCBs because, by the time the airfield was secured, the 133rd had suffered 328 casualties, including 42 killed and two missing. It would be the highest casualty count that any CB unit suffered.

While the fighting still raged, Seabees were building housing for the Army Air Forces, creating or improving harbor facilities, and bringing ashore the mountains of supplies, food, fuel, ammunition, building materials, and equipment needed for everyone involved—Marines, Seabees, and Army Air Forces.

Often working under fire, the Seabees were able to prepare the airfield for crippled B-29s returning from Japan even before the end of fighting on the island. Soon, two fighter fields were also constructed so that the huge bombers, flying from Tinian, would have fighter protection as they approached their targets.

At a press conference, Admiral Halsey, speaking of the three airfields, said of the Seabees on Iwo Jima, "If necessary, they'll build another island and put four or five airfields there."

In the Pacific, the most difficult task the Seabees faced was Okinawa. The island invasion was entrusted to the Tenth Army and a corps of Marines. In support would be an initial force of 16,000 Seabees and Army engineers.

Seabee battalions were organized into 11 regiments and four brigades, under the command of Commodore Andrew G. Bisset. His command included U.S. Army and even some British engineers. Once the island was secure, he would oversee the activities of 95,000 construction troops. It was the largest gathering of builders for a single battle in the war.

By this point, amphibious landings were well rehearsed. After a brutal naval and air bombardment, LSTs hauled segments of 25 individual pontoon causeways that were laid down between the coral reef and the shore.

Three battalions of Seabees landed to act as shore parties unloading the immense amount of matériel needed to sustain the combat troops. Other Seabees cleared mines and obstacles while the first airfield captured by the Army was turned over to the Seabees and the Corps of Engineers, who had it operational on D-day + 3.

As elsewhere, surveyors often went out in front of the fighting troops and located sites for barracks, fuel storage, and much else before the ground had been taken. When the island was secure, the Seabees built it up as the main base for the planned invasion of Japan. Airfields capable of supporting 4,000 fighter, bomber, cargo, and reconnaissance planes had not yet been completed before the Japanese surrendered. That didn't stop the builders. They finished their tasks on Okinawa—and they weren't done yet.

Seabees were among the first Americans to land in Japan after the cessation of hostilities. There they cleared away damage and created barracks, kitchens, and mess halls for the occupation troops that were to follow. So valuable had the Seabees been to the war effort that the Navy was determined to retain them as a fully equal branch.

The Seabees' record is truly remarkable. As an exhibit at the Seabees Museum in Port Hueneme, California, says, "Throughout the Pacific Theater, the Seabees built 111 major airstrips, 441 piers, 2,558 ammunition magazines, 700 square blocks of warehouses, hospitals to serve 70,000 patients, tanks for the storage of 100,000,000 gallons of gasoline, and housing for 1,500,000 men."

It should also be noted that the Pacific Seabees suffered more than 200 combat deaths and earned more than 2,000 Purple Heart medals.

Many of the facilities the Seabees built more than 70 years ago are still in operation. As just one example, Henderson Field on Guadalcanal is now Honiara International Airport, the Solomon Islands' main airport.

Today, the Seabees are still active, deploying to war-torn trouble spots and the sites of natural disasters. Following the hurricanes of 2017, Seabees were deployed to Puerto Rico and the Virgin Islands to assist with cleanup, water and food distribution and rebuilding. They continue to fulfill their commitment to the Navy and the nation. □

Four Flights In

Elmer Wisherd was born on December 1, 1920, in North Dakota. Shortly thereafter, his family moved to a farm in Bruce, Wisconsin. When World War II broke out, he enlisted in the Army, hoping to become a pilot. That dream was not realized, but he became an aviation mechanic and, eventually, a crew chief on Douglas C-47 Dakota aircraft. This is his story.

I was inducted into the Army on September 12, 1942, and began my basic training at Bowman Field in Louisville, Kentucky. After basic, I was shipped to brand-new Alliance Army Airfield in the northwestern corner of Nebraska.

Because I had been a milk truck driver in Wisconsin, I was initially assigned to the motor pool—driving trucks and working on them. But I wanted to become an airplane mechanic and was assigned to mechanics' school near Gulfport Army Airfield in Mississippi.

Every place we looked—every room in every building—were signs: YOU TOO CAN BE A CREW CHIEF. Most of us thought, 'Yeah, you, too, can be a crew chief, but I can't; that's shooting pretty doggone high.' But I did it.

A C-47 crew chief tells about flying in the war's four biggest aerial operations: Overlord, Market Garden, Varsity, and the relief of Bastogne.

BY ELMER WISHERD WITH NAN WISHERD

to Hell

Photo courtesy of the author

Capturing the dramatic moment that American paratroopers were dropped behind Utah Beach in the early hours of D-Day is *Into the Night* by artist Matt Hall. This operation was the first of four in which the author participated. INSET: The author, photographed in England in 1944, was a crew chief on a C-47.

"Into the Night" by Matt Hall, courtesy Valor Studios.

After completing my mechanics' course in September, I was shipped to Fort Benning, Georgia, where they put me to work on a great big Pratt & Whitney 14-cylinder engine—two rows of seven cylinders each in a circle—and I felt as green as green could be. At school at Gulfport, I had never seen anything like it! They told me to drain a sump on the carburetor. Where was that?! So I had quite a time. I imagine they figured I was pretty dumb, which I was.

Fort Benning was a big training camp. They were training paratroopers and training pilots to fly C-47 transports. The majority of the pilots at that time were staff sergeants who had enlisted.

As time passed, the pilots became warrant officers and then second lieutenants, with corresponding pay increases. I was still a corporal when I became a crew chief and began getting flight pay. Flight pay increased my paycheck by 50 percent.

As crew chief, I was responsible for my C-47 being ready to fly at all times. It was usually my job to turn the propellers before starting the engines but, occasionally, one of my assistants turned them. Before the airplane was started, we had to turn each propeller 14 times. (Because they were in a circle, some cylinders were upside-down.) Turning the propellers, and thus turning the cylinders, drained all the oil from the cylinders. If an engine started with oil in any cylinder, it would jerk the whole engine apart and would require a complete overhaul.

I had a list of items to check and, when I felt the airplane was ready for takeoff, I always started both engines before the pilot and co-pilot arrived. Before I started each engine, though, I hollered "Clear the prop!" so anyone near the engines could get out of the way.

We trained all day long. After takeoff, I stood between the pilot and co-pilot and watched the instruments. Then, as we approached our landing zone (LZ) or drop zone (DZ), I'd climb a ladder into the astrodome and watch for a signal from the lead aircraft. A green light meant "go."

As the aircraft dropped low, the gliders or parabundles were released. Later, when we were practicing with paratroopers, I removed the back door so they could jump. Our C-47s could carry 18 paratroopers.

The paratroopers were constantly training, too. They had jump towers where they trained until they had advanced enough to join us and jump out of the C-47s. They all wore backpacks containing parachutes they'd packed themselves that were attached to static lines running the full length of the C-47. They also had a reserve chute strapped to the chest, which could be hand-operated in case their main chute didn't open.

The jumpmaster's job was getting the paratroopers out of the plane. He was generally at the rear of the plane, shoving out the paratroopers. The jumpmaster hollered "Jump!" or "Geronimo!" before shoving out the first paratrooper in line.

After the paratroopers were out of the plane, the crew chief—me—pulled the static lines back into the plane so they wouldn't damage the side of the airplane.

I saw thousands of paratroopers drop while we were at Fort Benning, and our C-47 probably dropped hundreds nearly every day. As the weeks passed, those paratroopers were getting awfully good training and were landing real well.

After a short furlough home, I returned to my unit and in February 1944 was transferred to Baer Field near Fort Wayne, Indiana. We finally got our overseas orders. In February 1944, we flew from Baer Field to Macon, Georgia, then down to West Palm Beach, Florida; Puerto Rico; British Guiana; and Belem, Brazil, before crossing the Atlantic to Ascension Island and Roberts Field in Liberia, Africa. After Liberia, we flew to Marrakesh, Morocco.

It was a long haul. Twice we flew 11 hours without stopping. We put 8,464 gallons of gas through our plane, #43-15050, and it took us 19 days—81½ hours of flying time—to go from Florida to England. We had a little trouble with one propeller, and sometimes we had a little bit of bad weather, but we made it.

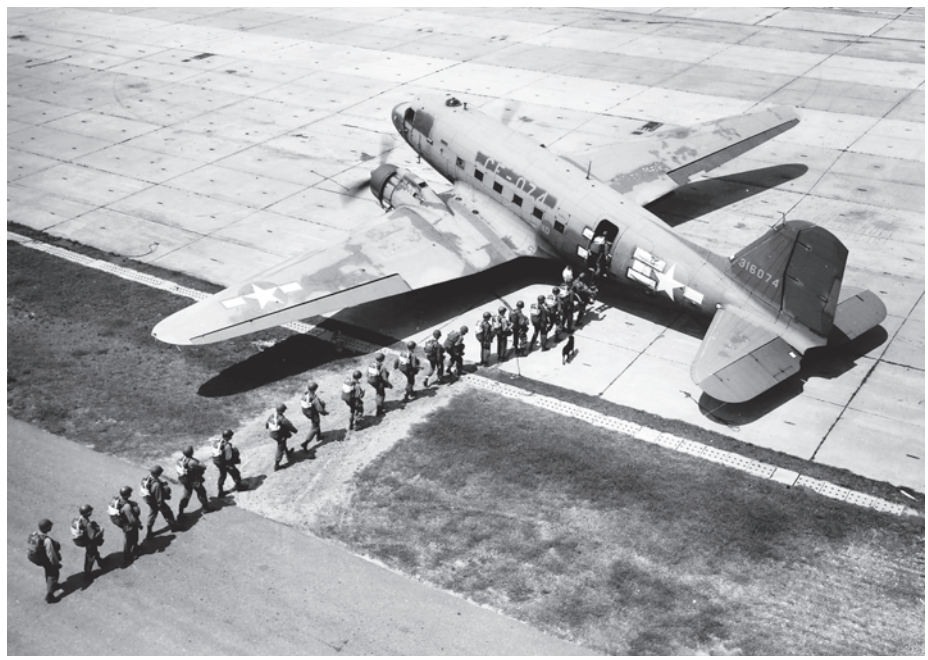
When we arrived, I was 23 years old and a buck sergeant—probably one of the lowest ranks of the sergeants that were crew chiefs of the airplanes. I was in charge of a huge C-47 that I had to work on and then fly in with the rest of the crew.

The airplane we had flown from the States had a large radar unit on the belly of the fuselage, and a commander took our airplane. I was transferred to another C-47—#42-100823. I looked it over, pre-flighted it, and got everything ready to go.

About that time, I saw two lieutenants walking toward me. I gave them a snappy salute, and they returned my salute. They walked into the airplane and the pilot, Al Johnson, turned to me and said, "Sergeant, when we're out in public, you may salute. When we are in this airplane, I'm Al, he's Joe, and you're Elmer." That was the way it was from then on.

Sam, my old radio operator from #43-15050, moved with me to the new aircraft that Al Johnson had named *Ruca,* after his wife, Ruth Callaway Johnson. Our destination: RAF Balderton, located two miles south of Newark-on-Trent and 15 miles

BELOW: A "stick" of paratroopers enters a C-47 transport during training at Fort Benning, Georgia, in 1943. Note the "paradog" near the front of the line. OPPOSITE: After arriving in England, the paratroopers continued to train for their D-Day jump. Note the static lines streaming from the C-47's door. One of Wisherd's jobs as crew chief was to pull them back in so they wouldn't damage the plane's fuselage.



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northeast of Nottingham.

Most of the 439th Troop Carrier Group had arrived at Balderton on March 6, and we all lived in Quonset (Nissen) huts. Ours had no windows, but it did have a door on each end. It was unheated during the day, but we had a little potbelly coke-burning stove in the center of the hut for the cold nights. Cots closest to the stoves were prized, but we were never very warm. We dug trenches outside our hut so we had a place to go in case the Germans bombed us.

On March 18, the 439th was out doing a night flight and working on flight assembly when we got a signal that there were "bandits" in the area. Flight assembly was something we worked on practically every week, whenever we could get up and fly.

It began with the first plane taking off and circling the field while the other airplanes caught up and got into the flight assembly. When the signal came about the bandits, all planes immediately turned off their lights and landed back at Balderton as quickly as possible.

In 25 minutes, everyone from the 439th had landed. There were searchlights cutting through the night, bursts of flak and, to the east and northeast, there was quite a little firefight. Several bombs were dropped. I later heard that a couple English bombers were shot down that night.

We did a lot from the time we landed in England until Operation Overlord. We worked and flew both day and night. We had many flights where we delivered someone to another airfield. Al Johnson, Joe Fry, Sam Anbender, and I very seldom flew with a navigator. We flew by dead reckoning most of the time.

We also did a lot of paratrooper dropping. We would take a bunch of paratroopers up, flying around to simulate the time they'd be in the air before being dropped in France. These practice flights to the drop zone usually took 60 to 90 minutes. After we reached the DZ and the paratroopers had jumped, we'd fly back by ourselves.

Once in a while, though, the winds were too strong for them to jump safely without getting blown all over the place. When that happened, we brought them back with us. Did those guys gripe and holler then! They were not going to land in that damn airplane! They trusted their parachutes a heck of a lot more than they trusted our C-47.

I had to convince the jumpmaster that he needed to calm down the paratroopers. I also had to stand by the door, which we removed prior to the jumps, and make sure they didn't take the door off and jump.

In April we moved to RAF Upottery, which was closer to the coast. The British were operating their fighter planes there, and we were at an airfield where we were operating only the C-47s of the 91st, 92nd, 93rd, and 94th Squadrons—about 70 planes. We were put in groups of three to six airplanes, and we were scattered over the 500-acre area. We were told that, if we were scattered, the Germans couldn't come in and take out our complete group.

We went to London every once in a while. It had been bombed very badly, but the British didn't act like anything was wrong. They seemed to think, 'Well, so what? This has happened, we'll live through it.' And they did.

The Germans also had V-1 "buzz bombs" that came in and, as long as we

could hear the buzz bomb above us, we had no worries. When the buzzing stopped, though, it was time to start worrying.

Operation Overlord

We did some heavy training at Upottery. We were getting ready for the big push—Operation Overlord, the invasion of France. The paratroopers were at our airbase by the middle of May, so we knew that sometime, somewhere soon something was going to happen.

On June 2, barrels of black and white paint arrived. The paint was to go on the airplane wings and fuselage in alternating stripes of black and white that went completely around the wing and completely around the empennage (the tail part of the airplane).

The reason for the striped painting was that, during Operation Husky (the invasion of Sicily), the troop carrier group was coming in with paratroopers in C-47s and some trigger-happy U.S. Navy gunners thought the C-47s were enemy bombers. They started shooting and many C-47s were shot down.

Painting our planes right before the invasion made them easy to distinguish from the German planes. I remember we used paintbrushes and brooms to paint the stripes. All of us painted the planes—all of the crewmembers, all of the mechanics. Everyone worked on painting the ships.

Our paint jobs must have been acceptable because the flight crews and paratroopers were all put into a heavily guarded restricted area on June 4. During that time, we could have anything—as many cigarettes as we wanted, unlimited candy bars, all the steak we wanted to eat.

This reminded me, the country boy, of beef cattle being put in a holding pen where they were given all the best quality food they could eat because they were being fattened up for the kill. We were definitely in the fattening pen. I guess when it came right down to it, they believed that most of us were eating our last meals.

We were finished with our pre-training. On June 3, we did a pass-in-review of all the big wheels who had come to watch

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the 439th. I remember being in the parade and staying in step, but I had no idea why we did this.

General Dwight D. Eisenhower was in charge of the invasion. We didn't know this at the time, but the former prominent Wing Commander of the RAF told Eisenhower that he thought 50 to 70 percent of the troop carrier aircraft would be shot down in the upcoming Allied airborne assault.

Aircraft, including the C-47s being used as jumping platforms, had to fly low and slow, making them easy targets, as the tow ships and the gliders would be. They were unarmed, had little or no armor plating, and were without self-sealing fuel tanks.

Furthermore, because of the stiff German opposition on the ground, those who succeeded at landing, according to the RAF Wing Commander, would be quickly overwhelmed by the German ground forces.

After hearing this, Eisenhower still believed that plans for the invasion needed to proceed. Later, as the invasion began and Eisenhower watched the planes taking off for the French coast, he prayed, "May the Lord have mercy on their souls." He believed the troop carriers, flying 600 feet above the ground and at only 110 miles an hour, would lose 70 to 85 percent of their C-47s and crews.

The weather was really bad, so we stayed all of June 5 in our restricted area with nothing much to do but eat and sleep. We were waiting for Eisenhower's chief meteorologist, Captain J.M. Stagg, to figure out when the invasion could begin. Finally, Stagg told Eisenhower that we had an opening of a few hours for the invasion. Otherwise, it would probably be two or three weeks before weather would improve enough to launch the invasion.

Scattered across England on 13 airfields were 801 C-47s and more than 13,000 para-

troopers waiting to take off. Scheduled to depart 30 minutes before the main force were 20 C-47s. They would carry an advance group called "pathfinders" and would fly low—too low for radar detection. They would drop the pathfinders with lights, radio beacons, and brightly colored tarps that were used to create Ts or arrows to mark drop zones for the airborne force behind them.

During the hour before midnight on June 5, the sea was choppy, the wind was rising, and the clouds were beginning to form over the French coast.

At approximately 11:15 PM, our C-47 crews at Upottery began the final checklists and warm-ups. After that, the cockpit lights were turned off, and the pilots put on their wrap-around red glasses to help their eyes fully adjust to the darkness. After 15 minutes, the glasses were removed, the takeoffs began, and 81 heavily laden C-47s roared into the black night sky from Upottery.

We had practiced for months, taking off and circling above the field while another bunch of airplanes took off and caught up with the ones already in the air. The need for quick assembles and tight formation had always been stressed. We had practiced and practiced, and now we hoped our intense training would pay off.

We were scheduled to tow gliders and release them over Normandy; we would not be carrying paratroopers.

It is hard for me to describe how I felt and what I saw during the invasion of Normandy. It still seems amazing that this large mass of airplanes took off and ended up at their objectives at the right time. With what little navigation equipment and radios we had at that time, Operation Overlord is something that should have never succeeded.

One member of our squadron, John R. Phillips, described the invasion better than I ever could. He wrote, "My recollection of that night is really quite vivid. I remember, after briefing, being driven to the airplane where our sticks [the line of 18 paratroopers—maximum—within the plane] were already assembled and prepared for takeoff.

"Lieutenant John North was platoon commander, and we discussed jump speed and altitude. Since a group [the pathfinder planes] led by Charles Young had gone ahead, we had to have an altitude of greater than 1,000 feet above ground level. North requested that, if possible, we would descend to 500 feet above ground level (normal altitude for our jump was 600 feet) so his stick would have only one swing before landing.

"I agreed, with the provision that I would not break formation. The rest were informed by both me and North. North, of course, was the jumpmaster of the stick that was in his airplane.

"Just as we made landfall, turning into the DZ, we encountered low clouds and rain. My flight maintained good formation, but we lost visual contact with Morton's right wingman. My navigator, Larry Wiles, saw that we were on instrument conditions and rapidly calculated our arrival time at the DZ. We broke out of the clouds but were unable to see Morton's formation. Morton was leading another set of three....

"I asked Wiles where the pathfinder team

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ABOVE: A pair of C-47s each tow a single CG-4A glider over Normandy. Note the "invasion stripes" painted on the fuselage—a recognition sign to show Allied shipboard gunners that the planes were "friendly" and should not be shot at, as had happened in Sicily. BELOW: Flying an unarmed transport plane had its hazards. Here a C-47 lies crashed and burned in a Normandy field. OPPOSITE: For the Normandy invasion, the author's plane was one of many that towed combat gliders as part of the second wave. Several gliders are visible in the fields separated by hedgerows.

was ... and I put a lighted 'T' to show us which direction to go and where our drop zone was.... Wiles gave me an estimated time based on our airspeed to an approximation to the 'T.' When he told me we were two minutes out, I throttled back to 1,500 RPM, dropped down with my two wingmen to 500 feet, turned on the amber light in the cabin, and Wiles said, 'This is close.' I turned on the jump light and the sticks went out.

"My crew chief, Milton Wolf, was in the astrodome and confirmed that all the sticks in our Flight A were out. Just prior to the green light, I added power to the right engine, leaving the left engine at 1,500 [RPM]. The left engine was the side that the jump door was on, so we wanted to leave the left engine with no prop blast coming back on the paratroopers.

"We came under intense ground fire, and I saw Marvin Mirror being hit, and the right engine caught fire. He turned out to the left as we were told to do and descended for a night crash landing. When he turned out and I could see how badly the plane was burning, I broke radio silence and said, 'Jump, Marvin! For God's sake, jump!' He didn't, and I was horrified to see the plane hit the ground and explode.

"Within 30 seconds, we sustained a hit from the ground fire, and I felt my left foot feeling rather warm and squishy inside my shoe. I told [Bill] Ogletree, my co-pilot, to take the airplane, which he did.

"After we were out of enemy fire, I went back to the navigator's table, took off my shoe and found my sock was quite bloody, and there was a hole in my foot. I put the sock and shoe back on since the bleeding was minimal at that point, but was beginning to hurt.

"Ogletree had turned back toward Upottery and flew the airplane until we had the field in sight at which point he said, 'Sam, I can't land it.' So I tried a little pressure on the left rudder bar and found I could do it. We entered the pattern and I landed the plane, taxied to the wounded abort area, and was assisted by my navigator Wiles and Wolf to be taken to the 67th Hospital.

"The next morning I was operated upon

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ABOVE: Fully equipped paratroopers on a training run in Europe. Flight crew members are visible at the bulkhead in background. OPPOSITE: An impressive armada of C-47s lined up and ready for Market Garden. Paratroopers and their gear can be seen around the planes.

and numerous bits of bullets and parts of the left rudder pedal were removed. Some of the material was so deeply imbedded that the surgeon was unable to remove some of the smaller pieces. Today, I still have a foot full of shrapnel and left rudder pedal.

"To deny fear would be a lie. Yes, I was afraid that we all would die, but to succumb to that fear and lose control of my airplane and my flight is bullshit."

We made it back safely to Upottery. On June 7, we hooked up with a CG-4A glider; I don't know what was in the glider. If the glider had a jeep, there would have been at least six men in it. If the glider had a trailer for the jeep, that trailer would probably have been loaded with ammunition or supplies along with six or eight men. Or, the glider could have been completely loaded with ammunition. We didn't like to know what was in the gliders because, if it was a load of ammunition and got hit by a shell, it would make quite an explosion behind us.

We were one of 821 airplanes, lined up in five different groups, with the 439th being one of them. We were coming in three abreast with the lead plane in the middle, the left-hand wing, and our C-47 flying right-hand wing. We were all towing gliders. As we flew closer to the French coast, we began following another group of C-47s and gliders.

When our gliders landed, they were going to have some problems. The Germans had been expecting a glider and paratroop invasion, and they had flooded much of the land. Most of the open land not flooded was covered with "Rommel's asparagus," which were booby-trapped poles and stakes tied together horizontally and diagonally. Our gliders would have trouble finding safe places to land.

We joined a line of airplanes as far as I could see. Then I looked left and saw another big group of airplanes, probably the same size group that we were in. Another group of airplanes was moving in from the right and pulling into the same line we were in. Farther back behind this group was another group of airplanes, joining us in an ever-growing show of force. It was a sight that I've never forgotten.

The timing was so good, and the preparations were so good, that all of these airplanes

could come in and line up and drop their gliders into these fields—some that were safe for landing and others that weren't.

We released the gliders (the glider we were pulling could be released by the glider pilot or from inside the tow plane), and we had not been shot at. We then dropped low, and Al turned our C-47 back toward Upottery.

The tow rope, of course, was still trailing behind us, and we didn't want to bring it back to Upottery, so Al said, "Elmer, this is your chance. Be a bombardier, release the tow rope, and see what you can hit." As Al was buzzing over the treetops and houses, I found a target, reached up, and pulled the handle that released the tow rope. I don't know if I hit the target or not.

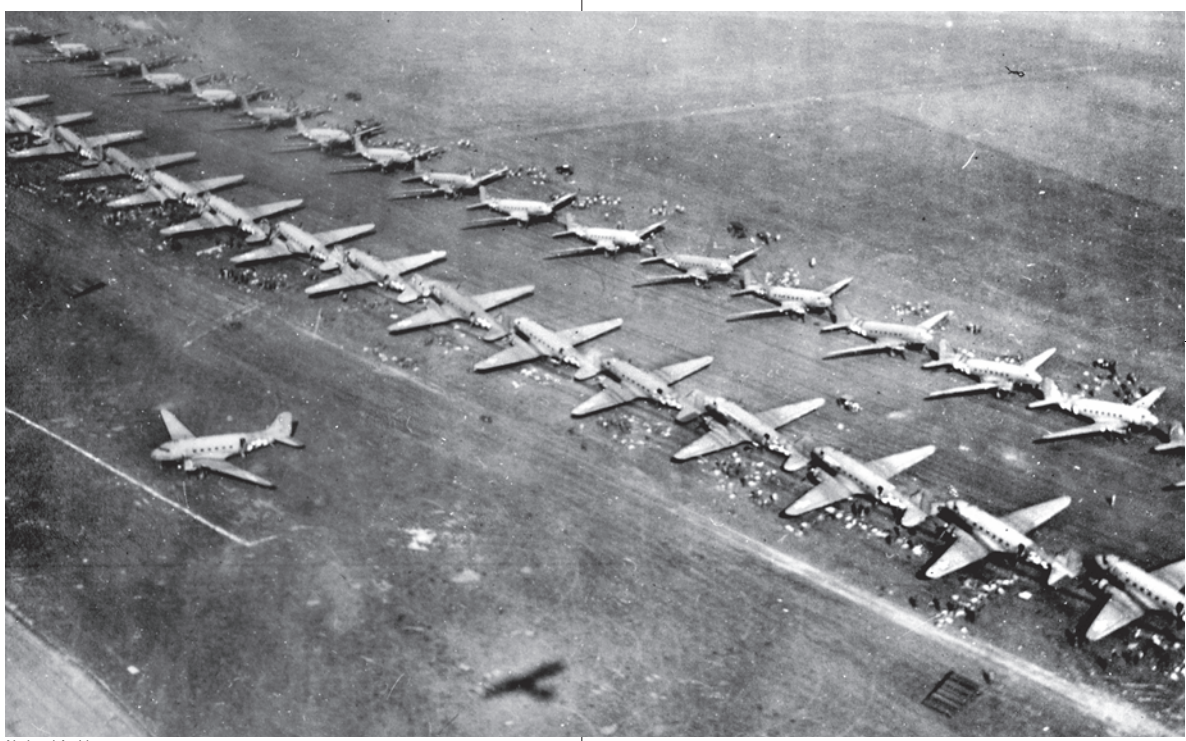
We returned to Upottery and loaded our plane with food, ammunition, and first-aid equipment wrapped in parabundles. Then we strapped six parabundles to the belly of the airplane and flew back to France.

We flew two more missions on June 7 to resupply the troops. I remember flying toward the French beachhead and seeing many barrage balloons along the coast. There were ships near the coast, and many ships were unloading.

I remember movement on the beach, too, but most of the time I was busy with my job and had no time to think about anything else that was happening during Operation Overlord.

We spent the next few days resupplying our troops in France. There were days when we couldn't fly, but we stayed busy whenever the weather was decent enough to fly.

On Saturday, June 24, we loaded up with resupplies and some nurses. Our mission was to land in France and take off again. They had bulldozed and leveled an area in a good-sized field. The field was wet and mushy, so they had laid metal planks—Marston mats—and hooked them all together for the length that was needed to land the C-47s.



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We unloaded our supplies, and there were some wounded soldiers who came back to Upottery with us. We carried them into the plane on litters; sometimes we had two or three tiers of litters strapped to the inside of the plane. Some nurses stayed in France, and a few stayed with us and tended to the wounded.

Sunday was a repeat of Saturday. When I had time, I helped take care of the wounded as we evacuated them back to England. This went on into July.

On September 8, 1944, our 50th Wing was ordered to move to France, near Reims, to supply General Patton's Third Army. We weren't in France for many days, though, before we were ordered back to England.

We knew another big operation was coming, but we weren't put in the restricted area this time. The Allied commanders probably believed that the Germans knew what was happening anyway. What was happening was Operation Market Garden, the invasion of Holland.

Operation Market Garden

On Monday, September 18, we took off at 10:30 AM with paratroopers for the Holland invasion and drew fire as we hit the coast. Plenty of flak, all of it too high. *Ruca* was hit once but not bad. Just before we reached the DZ, we drew more fire. Some ships were hit hard but all returned.

The antiaircraft gunners determine at what altitude the airplane is flying and, at that altitude, the shell will explode. Because we were flying so low, the Germans didn't have time to get an accurate aim, and the flak was all exploding too high. We were moving quite fast over the ground and canals—at about 160 miles an hour—and at perhaps 800 to 1,000 feet.

We picked up one bullet going over Holland. It was a 30.06, and it had come up through the tail of the airplane, ricocheted around for a while, and finally ended up on the pant leg of a paratrooper sitting in the airplane. He picked the bullet up, and it was hot as blazes. He was sitting there, blowing on it, and all the paratroopers hollered, "Get that damn door open!" As soon as we got hit with that bullet, I pulled the jump door out real quick. I often wondered if that paratrooper took that bullet

back to the United States.

Some of the ships were hit once or twice, but nothing was too bad. Before we reached the drop zone, we drew more fire—flak and 20mm this time—and that was pretty heavy stuff. Flak makes one heck of a big puff of black smoke and, out of the black smoke, there might be nuts and bolts and razors and sharp metal flying in every direction.

We were so low (and this was scary) that we could actually see the Germans who were shooting at us. They were running around on the ground, picking up their clips of shells, and loading them into their guns. Then the bullets came flying past us, but we only saw the fifth or sixth ones. They were the markers, or tracers, so they could see where they were shooting.

We were pretty darn lucky that we got through there. Some ships were hit pretty hard, but the C-47 was a good old bird, and we all returned. One pilot was hit through the lungs, and one plane was hit through the hydraulic system, but they all got back to Balderton. We had no problems with the paradrop.

We were scheduled to have Wednesday off, so Al and Joe decided to go out and celebrate on Tuesday night. In the wee hours of Wednesday morning, however, we were told that we had a mission early that day. We had the parabundles filled, and we had our gear inside the airplane, but when we were ready to go, Joe Fry was so hung over that we had to help him into the airplane.

Joe was supposed to be the co-pilot, but he wasn't going to be a co-pilot for a while—I knew that for a fact. So I got in the co-pilot's seat with Joe in back on a stretcher, and we took off. As we were flying in formation across the English Channel, the pilot Al looked over at me and said, "Elmer, have you ever flown formation?"

"No, Al, I never have."

"Well, you're gonna have to—I'm too damn sleepy. I can't make it."

While Al was napping in the left seat, I controlled the throttles and the whole works and stayed in our three-plane formation. After a while, we all dropped below the fog to get our bearings and

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ABOVE: A C-47 that made a belly landing in the snow near Bastogne, Belgium, during one of the resupply missions. OPPOSITE: GIs in Bastogne watch as a formation of C-47s drops supplies to the surrounded town. The resupply missions were essential to the Americans' successful defense during the Battle of the Bulge.

immediately drew some antiaircraft fire. Al woke up and took us up above the clouds so the Germans couldn't see us.

About that time, Joe came staggering up from the back and asked, "Where are we?"

Al, fully awake now, answered, "I don't know." He handed Joe a map. "Find out where we are."

Joe studied the map for quite some time, finally figured out that we were lost over Germany and sobered up pretty darn fast. He began studying the features on the map more closely while looking at the land below us. Finally, he found a river and told Al to follow it north. We landed safely in Brussels, Belgium.

Another C-47 had been hit, and one of its engines caught fire. The co-pilot of that ship immediately bailed out, and the fire stopped shortly after he jumped. (I think he landed safely but was taken prisoner.) The pilot landed back in England along with one other C-47 in our group of seven from the 91st Troop Carrier Squadron that had taken off that morning. The rest of us were reported as being shot down. Five out of seven airplanes missing on one mission actually wasn't a very good record.

We left Brussels on Thursday and, on our way back to England, we got lost in the fog again. Fog is pretty normal around England; we sure didn't see very much good weather while we were there. All five ships that had been reported as being shot down did get back, though.

On Saturday the 24th, we picked up a load of blankets and were supposed to deliver them to the Étain-Rouvres Air Base, an airfield known as A-82, near Verdun. Because of the weather conditions, we had to fly in formation at about 600 feet in altitude. The lead ship, #43-15050, had the only navigator. Our ship was flying right wing; Lieutenant Berry was flying left wing. The navigator in our lead ship missed the field at A-82 and took our three-plane formation over German lines.

All at once all hell broke loose and tracers were all over the sky. I was never so scared in my life. We didn't even have flak suits on. I threw flak suits to everyone in our plane. I found out later that Lieutenant Berry, flying left wing, banked sharply to get away from the tracers, and our lead ship was hit.

The right engine of# 43-15050 was on fire and I found out later that, tied down on the floor of #43-15050, were dozens of highly explosive oxygen bottles. When the plane got hit, Berry hollered to the crew chief, "Get rid of those bottles!"

The crew chief cut the rope holding the bottles in place, and the bottles rolled to the back of the plane. Their weight put the airplane completely out of balance, put the nose high, and there was no way to keep the airplane flying on one engine with the nose that high. The only thing the pilot could do was try to maintain altitude until he could find a place to land.

Al radioed back that we would follow our lead plane until it landed, which we did. The pilot made a belly landing somewhere in France, and everyone on board was fine. I later heard that the airplane landed near an emergency field for the wounded—a Red Cross station—and they were in very dire need of oxygen bottles.

We took off again, somehow found A-82, and landed. We had blankets piled to the ceiling and had quite a job unloading them. We had just finished unloading when we saw a truck roaring toward us down the runway with its lights flashing. Inside the truck was the crew of #43-15050 that had just crash landed! We all piled into our plane and thought, 'Oh boy, we have a navigator! We can get back to England now!'

We took off for England and were soon lost again. Really lost. We were calling "darky" [a request for directions] and we only had a half-hour of fuel left. Al told everyone to put on our 'chutes. He said we were going to make one more pass over England and, if we didn't get directions, we were going to all bail out as Al pointed the plane toward the English Channel.

Just then, an English voice came over the radio and said, "Charlie-47, if you'll take up a heading of…."

Well, by hit and by miss, we did finally get back to our airbase. It had been quite a day. No one will ever know how we came out alive.

On October 1, we moved to a base in France, three miles from Alençon and 20 miles north of Le Mans. We were living in tents again, but we had rain. Lots of rain. Our airstrip near Alençon was dirt that had been packed down by heavy equipment. It was covered with tarpaper and worked sufficiently unless it was raining.

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During this time, we generally flew resupply missions. Our day usually began with a flight to Cherbourg, the port city we liberated in Operation Overlord. After loading our planes, we flew to various parts of France—wherever those supplies were needed near the front lines. We often had to unload the supplies, and we occasionally evacuated wounded soldiers.

On October 26, we moved again—Alençon to Châteaudun, about 70 miles southwest of Paris. It had been built as a French air base but was taken over by the Germans after the 1940 invasion. The Germans later based their Messerschmitt Me-262 jet fighters there.

Châteaudun was pretty well bombed out. There were many, many hangars, but no hangar was intact. There had been huge craters in the runway where our bombers had dropped 500-pound bombs, but they had been patched and repaired. Still, it was a well-equipped field.

We were living in tents out in the flat land east of the airfield, and we had a water supply. We had no electricity, but we did have mess halls, and the food was good. We could use the materials we found from the abandoned buildings and planes, and we tried to make our living quarters as comfortable as possible.

During this time, we continued flying supplies to the Allied front and evacuating the wounded to hospitals in England. As Christmas approached, I thought about being in Fort Benning, Georgia, for Christmas just one year ago. So much had happened during the past year.

The Relief of Bastogne

Soon it became time for another big operation—the relief of Bastogne. In December 1944, American forces were in Bastogne, but the Germans launched their Ardennes counteroffensive and trapped the 101st Airborne Division in and around the town. We got orders to deliver supplies to them.

Shortly before we took off on December

27, headquarters had received word that the Germans had moved a flak gun into the area. Headquarters, though, did not fully communicate the extreme urgency of the situation to our mission commander before we left. The Germans had positioned their flak gun on a railroad crossing and had it zeroed in on the corridor they knew we would be flying. They also had 20mm, 30.30, and 30.06 guns, so they were ready for us.

We were flying a 50-ship mission towing gliders. The orders had been, "Get there as soon as possible." Our primary mission was to deliver 76 tons of heavy ammunition, along with four surgeons. We had some fighters protecting us, but I saw two hit before we reached our LZ.

As we came in, the Germans opened fire. The black smoke made visibility almost impossible, but we had to stay in formation until we released our gliders. After releasing the gliders, we made a left turn. That was when all hell broke loose.

Flak was everywhere. The sky was just nothing but a big cloud of black smoke with our airplanes flying right smack dab into it. We were ducking, diving, and climbing all over the sky in that black cloud with flak exploding above us and ground fire below us. Flak was exploding so close that it bounced the airplane around, and we could hear the flak hitting it. One burst in half right in front of the windshield, scratching it as each half flew by but, luckily, the windshield didn't break.

I got up on the navigator's stool and, because we were in the front of the formation and were heading back, I was able to see the planes still trying to drop their gliders. I saw a plane get hit, and the left engine immediately caught fire. One crewmember jumped, and his parachute opened right in the flak. Two more jumped out, and their parachutes opened halfway down. One crewmember never came out, and the plane exploded the second it hit the ground.

Then I saw another plane blow up in the air. (I found out later that this plane was piloted by my buddy, Joe Fry, who had been my co-pilot since the past March when I arrived at Balderton Field, but on this mission they needed more planes and pilots. Joe was made first pilot and was placed in slot 13. Joe came back later, burned, but he and his crew all bailed out safely.)

Both: National Archives

ABOVE: Hundreds of C-47s and CG-4A gliders, ready to take part in Varsity, are lined up for as far as the eye can see. BELOW: Over Germany: Paratroopers drop from C-47s during Operation Varsity, the war's biggest airborne operation, March 24, 1945.

John Hill, piloting the glider being towed by Joe Fry, later wrote, "About eight miles from the LZ, we started getting small-arms fire and, as we got nearer to Bastogne, the ground fire became heavier. I could hear the bullets hitting the heavy ammunition I was carrying, and I was praying that they would not hit the detonators that I had hanging next to my seat!

"Then something turned loose on us from underneath. It sounded like large antiaircraft fire. The towship then caught fire under the belly, and it blazed up suddenly over the whole back end. We flew for about three or four miles farther with the blaze getting larger all the time. It looked as though the towship would blow up any minute, it was burning so furiously.

"I realized Joe was trying desperately to get me over the LZ. Flames were leaping back halfway down the towrope. Two 'chutes came out through the flames. After another mile, I thought I could make it to the LZ. Around the time a third 'chute appeared, I cut loose and cut across to the LZ." Hill's glider made it safely down.

Our mission on December 27 successfully delivered 70 percent of the cargo destined for Bastogne, but it came with the highest percentage of losses for any mission flown during the war. Of the 50 C-47s that took off from Châteaudun that morning, 13 were shot down, one crashed, and two were damaged beyond repair. Another 15 ships were damaged but eventually flew again.

Eighteen C-47 crewmembers lost their lives, and 21 became POWs. Three glider pilots died, and 14 glider pilots became POWs. Fourteen C-47 crewmembers were injured but returned to Châteaudun on December 27.

Colonel Charles H. Young later wrote about the mission to Bastogne, "Troops on the ground [at Bastogne], their eyes fixed on the drama taking place a few hundred feet above them, held their breath as pilots followed each other doggedly into the murderous German flak concentration, now locked in on the narrow column."

Later, a captain who had witnessed the carnage, stated, "No 'show' I have ever seen, or will ever see, compares to this spectacle, and this includes the armada of Normandy on D-Day. Nothing compares to seeing those fellows marching headlong through that intense flak."

After this adventure, I was transferred to B-24 school back in England. I didn't much care for B-24s; most of them had leaky gas tanks, and that gas dripped down into the bomb bays. Before landing, the bomb bay doors had to be opened hydraulically to remove the gas fumes before lowering the landing gear. If the landing gear was lowered first, it created electrical sparks that could ignite the gas fumes in the bomb bays. I had seen a B-24 pilot lower his landing gear with the bomb bay doors closed, and his plane blew sky high.

Once my training was done, it was back to Châteaudun, but I was returned to my C-47 group and not assigned to B-24s. Soon we were preparing for Operation Varsity, which occurred on March 24, 1945, and was the last major airborne assault in Europe during World War II.

Operation Varsity

Varsity was also the largest airborne operation in history to be conducted in one location on a single day—with more than 17,000 paratroopers ,836 aircraft, and 1,348 gliders involved. Varsity's goal was to establish a stronghold on the east side of the Rhine River and support the Allied troops as they crossed the river.

We had been put in the restricted area again, so we knew something big was going to happen. I was on guard duty at the compound on March 22 and 23. We took off at 9:30 AM on March 24.

As we were flying along, the new engines, because we hadn't had time to break them in properly, were heating up. The air-cooled engine of the C-47 has cowl flaps that could be completely opened, completely closed, or left halfway open. These engines were "in trail," meaning that our air speed dictated the position of the cowl flaps.

I told the pilots that they had to get the cowl flaps open or the engines were going to blow up. They said, "Well, if we do that, we're going to burn too much gas."

I shot back, "If you don't open those cowl flaps, our engines are going to blow up, and you're not going to need gas. Open those cowl flaps and get those engines cooled down." They complied and we made it to the landing zone.

As we flew toward our LZ, there was plenty of sweating going on, and plenty of shooting, but no hits on my airplane. We were very lucky, because we were pulling two loaded gliders at only 90 miles an hour.

Talk about ships going down and burning on the ground! I had never seen as many airplanes burning on the ground as I did during that flight. That was because many of our pilots were flying C-46s, and the C-46s are controlled by hydraulics. (The C-47s are controlled with cables.) When the hydraulic lines of the C-46s were hit, the pilots lost control of their planes. When they lost control, there was nothing they could do but crash.

Later I heard that, once the tow planes starting coming in with their gliders, it was three hours of nonstop formations before everyone had passed by. Like we did at Normandy, everyone stayed in close formation, and it was an overwhelming sight.

After we dropped our gliders, no one had enough gas to get back to our base, so we all landed at alternative airfields. A number of planes landed with no rudder, some didn't have elevators, and others had holes in the wings that you could stick your head through. Many had holes in their fuselages.

Many C-46s would have crashed—and did—with these hits, but our dependable C-47s kept on flying. Many called the C-47 the "workhorse of the air." A number of planes that landed at the airports didn't leave for quite a few days or even months, depending on the repairs they needed to be flyable again.

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Crew members inspect a glider tow cable attached to a C-47. Once the gliders were released, the tow ropes were detached and fell to the ground.

Varsity was my last combat mission, but we still ran resupply and evacuation missions. As the war came to a close, we usually flew two flights a day into Germany, and we saw some terrible things while we were picking up prisoners of war. In some camps, the prisoners were nothing but skin and bones, and their clothes were hanging on them. We had to carry some of them

Continued on page 98

Soviet soldiers, riding on T-34-85 tanks, approach a Manchurian city, August 1945. The Red Army invasion force had more than 3,700 tanks, 1,800 self-propelled guns, 3,700 aircraft, and 1,500,000 men.

National Archives

BY NATHAN N. PREFER

Japan's GREATEST DEFEAT

Operation August Storm, the massive 1945 Soviet invasion of Manchuria, was Japan's death blow.

TO the Soviet military, it is known as the Manchurian Strategic Offensive Operation. Although it had no official name to the Japanese, it has become known in the West as Operation August Storm.

It was the greatest defeat in Japanese military history, yet few outside the circles of Japanese and Soviet history are even aware that it occurred. It ensured the end of World War II as much as the dropping of the atomic bombs on

Hiroshima and Nagasaki did, yet it is often ignored in Western studies of the war.

More than one million Japanese soldiers and hundreds of thousands of Japanese civilians were killed or captured in a month's bitter fighting in a far-off land that even today remains somewhat mysterious.

The seeds of the annihilation of four Japanese armies, each equal to an American field army, were planted in 1931. Japanese militarists saw the civil war in China between Chiang Kai-shek's Nationalists and Mao Tse-tung's Communists as an opportunity for a place at the imperialist table and a slice of the Chinese pie, and thus decided to invade China, Manchuria, and Korea.

The Imperial Japanese Army was particularly interested in showcasing its skills. They began by courting the Chinese warlord then in control of Manchuria. As the situation in China deteriorated, the Japanese Army used a series of staged provocations to eventually invade and seize Manchuria. This move, in the spring of 1931, set the stage for the Sino-Japanese War, which would last until Japan's defeat and surrender in August 1945.

Although a giant in terms of land mass and population, China was viewed by most Japanese leaders in the 1930s and 1940s as a weak and largely defenseless area ripe for colonization and exploitation. Increasingly the Japanese militarists—primarily the Army but to a lesser extent along the coast, the Imperial Japanese Navy as well—increased their appetite for additional Chinese territory.

But these increasing violations of Chinese sovereignty brought a new player into the scenario: the Soviet Union. Premier Joseph Stalin became increasingly concerned that the Japanese were getting much too close to his own far eastern borders, and the already suspicious Russian leader began to fear their ultimate goals. This brought on the first armed clash between Russian and Japanese forces in late July 1938.

Known as the Changkufeng Incident by the Japanese and the Battle of Lake Khasan by the Russians, it would set the stage for all future conflicts between the two nations.

Essentially, a strong Russian force of about 20 infantry divisions massed on the border of Japan's puppet state, Manchukuo—formerly Manchuria—to prevent any Japanese incursions. The Japanese, by now fully involved in the so-called "China Incident," ignored the threat.

The Japanese had a low opinion of Russian military prowess, anyway. The Russian defeat in the Russo-Japanese War in 1905, and the more recent Stalinist purges of his own military hierarchy, simply reinforced an already established prejudice.

When in 1938 there arose a dispute over the exact border between Manchuria, Korea, and the Soviet Union, a high-ranking Soviet defector brought much intelligence to the Japanese Kwantung Army. This defection prompted a local Soviet commander to occupy part of the disputed border line.

Even as diplomatic messages were being exchanged, the ever aggressive Kwantung Army began preparations to eject the Russian "trespassers," and a Japanese infantry

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In an attempt to halt the Soviet invasion of Manchuria, Japanese infantrymen board a train bound for the front. Most would not return home alive.

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Riding in U.S. Lend-Lease amphibious DUWKs, Red Army troops advance to the U.S.S.R.- Manchuria border during Operation August Storm.

division was rushed to the area. The Russians countered, sending more troops as well. The Japanese were ready to attack and needed only the usually pro forma approval of their Emperor. But that approval did not come, infuriating the Kwantung Army leaders.

Repeated requests to begin the battle were denied, only to be followed by more urgent demands. Finally, the local Japanese division commander launched an attack on his own, claiming that the Russians were digging defensive positions within Japanese territory.

It was not the first, nor would it be the last time that the Kwantung Army started a war all on its own. Indeed, during this crisis the leaders of the Kwantung Army seriously discussed prospects of bringing down the current Japanese government should it interfere with their operations.

The Changkufeng battle was comparatively small. Fewer than 2,000 Japanese soldiers attacked in darkness and with surprise, overwhelming the Soviet defenders. The Japanese believed the issue settled. Not so the Russians.

General Grigori Shtern brought up his 49th Corps of the Red Banner Far Eastern Army, and repeated Soviet counterattacks drove the Japanese back, with heavy casualties on both sides. Diplomacy eventually settled the dispute, but the Japanese were unpleasantly surprised by the force and volume of the Russian military response. The result was a change of plans by the Kwantung Army regarding a possible invasion of eastern Russia. To prevent further Russian action, the Japanese ordered a more aggressive border security policy for all their units.

This policy resulted in the next incident, commonly known as the Nomonhan Incident. Repeated clashes between border-guard units finally erupted into open warfare on May 11, 1939. The Nomonhan Incident was much more like a full-scale war than Changkufeng.

Stalin decided that he had had enough of Japanese provocations. He ordered a heavy response and sent a new up-and-coming military leader, Georgy Konstantinovich Zhukov (who would later distinguish himself at the Battles of Moscow, Stalingrad, and Berlin), to take command.

The resulting battles, which lasted into August 1939, cost the Japanese between 18,000 and 23,000 casualties and achieved nothing in terms of additional territory. Once again diplomacy resolved the issue but left the pot simmering. In April 1941, to cool the pot, a nonaggression pact was signed between the Soviet Union and Japan.

Within a year of the Nomonhan Incident, Japan's leaders were trying to decide how to finally knock out China and end a war that seemed interminable. One choice was to attack the Soviet Union, thereby eliminating the northern threat and freeing up forces for the war in China.

Others argued for a strike to cut off all avenues of resources to China, starving her into submission. This, other voices said, might touch off a war with the United States, Great Britain, and Holland.

Already in the spring of 1940, German forces had overrun much of Western Europe and had pushed the British Expeditionary Force out of Dunkirk and back to Britain. In September 1940, Japan allied herself with Fascist Italy and Nazi Germany by signing the Tripartite Pact.

These seemingly easy successes in Europe whetted the Japanese leaders' appetite for an aggressive strike against their perceived Western foes. The results, of course, were the 1941 attacks on Pearl Harbor, the Philippines, Wake Island, and other American, British, French, and Dutch territories in the Pacific.

Between 1940 and 1945, the Japanese Kwantung Army in Manchuria, which

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ABOVE: Japanese soldiers man a machine-gun outpost along the shores of the Amur River in Manchuria, August 9, 1945, the day the Soviet invasion began. OPPOSITE: A huge motorized Soviet convoy advances across the Grand Khingan Mountain Range in south central Manchuria.

also had responsibility for Korea, remained relatively static. There were no significant incidents and no struggles with the Russians. But the Army itself was being bled by the needs of the Imperial Japanese Army rampaging across the Pacific. Several of the best combat divisions within the Army were called up to do battle in New Guinea, the Philippines, and the Central Pacific. This left the Kwantung Army with inadequately trained and equipped forces should any enemy suddenly appear.

That enemy indeed appeared as a result of the several Allied political leaders' meetings during the course of the war. As the war rolled on, both the Americans and British were fully engaged in battle in North Africa, Italy, northwestern Europe, and the Pacific. (The British, after their early losses, had, relatively speaking, only token forces left in the Pacific.) The Western Allies, therefore, were anxious for some assistance in defeating Japan once Germany surrendered. Plans had to be made.

The joint U.S.-British effort to develop an atomic bomb was a well-kept secret, and there was no proof that it would work. Even if it did, it might not force Japan's surrender without a full-scale invasion of the Home Islands. Many requests—at Tehran, Yalta, and most recently at Potsdam—had been made for Russia to enter the war against Japan.

Stalin had agreed in principle but had put off releasing any details. But, as the war continued and his spies in the British and American intelligence communities reported progress on the atomic bombs, Stalin became more interested in acquiring territory in the Far East before the war ended.

As a result, he agreed to declare war on Japan within three months after Germany surrendered. Originally planned for August 15, 1945, the Russian declaration was moved up when the first atomic bomb was dropped on Hiroshima.

In mid-1945, the Kwantung Army contained 24 infantry divisions, two tank divisions, five air squadrons, and totaled 780,000 officers and men. In addition, seven more infantry divisions with 260,000 personnel were in Korea and subject to joint operations.

The Kwantung Army commander was General Otozo (Ichikawa) Yamada, with headquarters located at Hsingking. Under his command were the First, Third, and Fifth Area Armies, with numerous independent units.

In addition, General Yamada had under his command armies of the puppet states of Manchukuo and Mengjiang, with 220,000 and 10,000 troops, respectively. Some sources have said that available Japanese defense forces totaled 1,100,000 officers and men.

There were also tens of thousands of Japanese civilians, men, women, and children, who had settled in Manchuria as colonists or worked for the Imperial Japanese Army.

Even as the Russians were about to battle for Berlin in April 1945, arrangements were made to release some major Red Army combat units for the coming war with Japan in the Far East. Beginning in March 1945, Stalin began transferring forces to the East, including the Karelian Front and the 2nd Ukrainian Front. (A Front was the Soviet equivalent of a U.S. Army Group and generally consisted of three to five armies—more than 100,000 men.)

These brought with them four army headquarters: the 5th, 39th, and 53rd Infantry and 6th Guards Tank Armies. These had not been chosen at random. Rather, each had some combat experience that would be needed in Manchuria. Some had fought in marshes and swampy terrain, while others had fought in the Carpathian Mountains—another feature they would face in Manchuria's Grand Khingan Mountains.

In addition, a host of artillery, engineer, and tank regiments were also shipped east to reinforce the larger armies. Beginning in March and continuing through August 1945, some 20 to 30 trains per day were rolling east on the Trans-Siberian Railroad, carrying these and other reinforcements for the Far Eastern Army.

By August, Soviet strength in the Far East had doubled, from the former 40 divisions to 80 divisions with strong supporting forces. These troops were assembled in rear areas well out of view of the Japanese border guards, and as the time for the attack neared they were quietly moved forward under cover of darkness to their assault positions (much as Nazi Germany did prior to its 1941 sneak attack against the Soviet Union).

Manchuria itself covered 1.5 million square kilometers and encompassed mountain ranges, swamps, fertile valleys, and barren stretches. Its strategic importance stemmed from its geographic location, bordered on the south by Korea, on the east and north by the Soviet Far Eastern provinces, including Siberia, and on the west by Outer Mongolia.

Japan, China, and the Soviet Union had all viewed this area as a critical location for either defense or aggression against their neighbors, should that become necessary. But the area had a poor road network, and those roads were subject to deterioration under adverse weather conditions.

The key area to controlling Manchuria was its Central Valley region, where most of the population lived and where much of its agricultural production originated. Other key areas included the Barga Plateau and the Grand Khingan Mountains, which controlled, militarily speaking, the rest of the country.

The Japanese defenders consisted of two area armies, the rough equivalent of an American army group. The 1st Area Army, under the command of General Kita Seiichi, included the 3rd Army and the 5th Army, each with three infantry divisions.

Under Seiichi's direct command at 1st Area Army were four more infantry divisions and one independent mixed brigade. Responsible for eastern Manchuria, the 1st Area Army counted 222,157 soldiers within its ranks by August 1945.

General Ushiroku Jun's 3rd Area Army was the other major defending force in Manchuria. It included the 30th Army with four infantry divisions, one independent mixed brigade, and one tank brigade, as well as the 44th Army with three infantry divisions, one independent mixed brigade, and one tank brigade.

Under Jun's control at 3rd Area Army were an additional infantry division and two independent mixed brigades. Responsible for central and western Manchuria, Jun had 180,971 men under his command.

A third force, Lt. Gen. Uemura Mikio's 4th Separate Army, covered north-central and northwest Manchuria with three infantry divisions and four independent mixed brigades amounting to 95,464 soldiers. In reserve under direct Kwantung Army control was the 125th Infantry Division.

After hostilities with the Soviets began, Imperial Japanese Headquarters in Tokyo assigned to General Yamada the 34th Army, headquartered at Hamhung in northern Korea, with the 59th Infantry Division at Hamhung and the 137th Infantry Division at Chongpyong—a total of 50,104 additional troops.

The 17th Army in southern Korea, with another seven infantry divisions and two independent mixed brigades, was also assigned at this time. The Sungarian Naval Flotilla—a collection of small coastal supporting naval craft—was also a part of the defense.

In Manchuria alone, the Imperial Japanese Army mustered 713,724 soldiers, 1,155 tanks, 5,360 artillery pieces, and about 1,800 aircraft. The average Japanese infantry divisions had more men (about 12-16,000 troops) than the average Soviet division (with perhaps 10-12,000 troops).

Overall, the Kwantung Army seemed to be a formidable force with 31 infantry divisions, nine independent mixed brigades, two tank brigades, and one special-purpose brigade. But these figures were deceiving. Japanese armor was inferior to anything the Soviets possessed, even

Alamy

though the Russians were using, in some units, tanks that had been obsolete on the Western Front by 1941.

The Soviets also were masters in the use of artillery and outnumbered the Japanese in Manchuria nearly five-to-one in both tanks and artillery. In the air, the Japanese were outnumbered two to one. In manpower, the approaching Soviet juggernaut would be closer to equal, but even here the Japanese were about to be outnumbered more than two to one in numbers of troops.

The Japanese had adjusted their planning as time went by and the world's circumstances changed with the developing war situation. Before 1944, the Japanese continued to plan for an aggressive attack against the Chinese and Soviets to advance their territorial goals in the Far East. By September 1944, those plans had changed to a strong defense of Manchuria at the borders.

Those plans were again changed to a defense-in-depth, with the borders lightly defended and the main Japanese resistance to be set at selected fortified locales within Manchuria and a final stand to be made in the Tunghua stronghold just above the Korea/China border.

Imperial General Headquarters ordered that the many border garrisons be combined and formed into eight new infantry divisions, numbered 121 through 128, plus four mixed brigades. These were to replace four regular divisions transferred to the Home Islands, the Philippines, and Central Pacific.

Headquarters in Tokyo also decreed that some 250,000 Japanese Army reservists be called up for the Kwantung Army. These would be organized into eight more divisions, numbered 134 through 139 and 148 and 149. Seven more brigades and supporting units were also to come out of the reservist callup.

But these measures actually weakened the Kwantung Army, replacing veteran troops with new troops in units that were badly in need of combat training.

The latest plans called for platoons and battalions to be left at the borders to delay the enemy while the main forces withdrew 40 to 70 kilometers to the fortified localities, which were each to be defended by one or more divisions.

The withdrawal was to be as slow and deliberate as possible and directed finally on the prepared defenses at Tunghua and Antu in a decisive defensive battle along the northern Korean border. About one-third of the Japanese forces were to defend the border while the remaining two-thirds were to withdraw into the fortified redoubts.

Japanese intelligence and Japanese diplomatic couriers using the Trans-Siberian Railway had reported seeing massive troop and equipment movements from west to east and noted the unusual recall of Soviet diplomats and their dependents from Japan.

An attack by the Soviet Union had been long expected, but it had been hoped that the

Sovfoto

Red Army troops follow in the wake of an armored vehicle towing an artillery piece up a steep incline.

Russians would, as one historian put it, "adopt a policy of 'waiting for the ripe persimmon to fall,' rather than shaking the tree and were expecting nothing before the end of August."

This was even though, in April 1945, the Soviets had told the Japanese that they would not be extending their nonaggression pact, which still had a year to run.

The Russians were indeed preparing a strong attacking force to overcome the Japanese plans and forces. The senior command was the Far East Theater Headquarters, headed by Marshal of the Soviet Union Alexsandr Mikailovich Vasilevsky.

After joining the Red Army and becoming a company commander in 1918, Vasilevsky became a battalion commander. By 1936, he was attending the General Staff Academy, after which he was posted to the Soviet General Staff. He was in the operations division of the Soviet General Staff in 1940 and, within two years, was the chief of staff.

As Stalin's personal representative, he participated in the Stalingrad, Kursk, and Belorussian operations before taking command of the 3rd Belorussian Front in East Prussia in 1945. That same year he was designated to command the Soviet Forces, Far East.

The first of Marshal Valislevsky's operational armies was known as the Trans-Baikal Front. This army had under its command the 6th Guards Tank Army, the 17th, 36th, 39th, and 53rd Armies, and a Mongolian Cavalry-Mechanized Group, along with the 12th Air Army.

Its 640,040 men were divided into 30 rifle divisions, five cavalry divisions, two tank divisions, 10 tank brigades, and eight mechanized brigades; some 41 percent of the Soviet forces were within this group. Commanding the Trans-Baikal Front was Marshal of the Soviet Union Radion Yakovlevich Malinovsky, who had previously commanded a front in the Battles of Odessa, Budapest, and Vienna.

Malinovsky's compatriot was 48-year-old Marshal of the Soviet Union Kirill Meretskov and his 1st Far Eastern Army, with the 5th Guards Army, 1st Red Banner Army, 25th and 35th Armies, 10th Mechanized Corps, and Chuguevsk Operational Group, supported by the 9th Air Army.

In total, Marshal Meretskov had 586,589 troops in 31 rifle divisions, one cavalry division, 12 tank brigades, and two mechanized brigades. Meretskov's forces represented 37 percent of the total Soviet force.

The smallest of these combined Soviet armies was the 2nd Far Eastern Front with the 15th, 16th, and 2nd Red Banner Armies, 5th Separate Rifle Corps, and the Kuriles Operational Group, supported by the 10th Air Army. With 337,096 men, it represented only 21 percent of the total Soviet force in the East of 1.5 million men.

These combined armies were the result of the constant Soviet effort at updating and modernizing their forces as they learned from experience. A combined arms Soviet army at this stage of the war consisted of between 80-100,000 soldiers divided into 7 to 12 rifle divisions, one or two artillery brigades, a tank destroyer brigade, an antiaircraft brigade, a mortar regiment, signal regiment, engineer regiment, two or three tank brigades, and a tank or mechanized corps. These troops were armed with 320 to 460 tanks, 1,900-2,500 guns and mortars, and 100 to 200 self-propelled guns.

Soviet tactics against enemy defenses had also been articulated into military regulations. Superiority over the enemy forces on one particular axis needed to be achieved, then close tank-infantry cooperation, strongly supported by artillery and air power, would attack.

Mobile groups of tanks and mechanized troops would break through, creating an initial penetration at which time the entire attacking force would follow through and exploit that penetration, breaking up the remaining enemy defenders into smaller groups that were then defeated in detail. Meanwhile, airborne, reconnaissance, and partisan groups would disrupt the enemy's rear areas, cutting lines of communication and supply.

For the Manchurian campaign, 50-year-old Marshal Vasilevsky planned a double envelopment of the Kwantung Army, attacking along three separate axes of advance. His objective was to destroy the Kwantung Army and secure the entire Manchurian territory for the Soviet Union as quickly as possible, before the end of the war halted all military operations.

To do this he had planned to launch Marshal Malinovsky's army first, followed in a day or two by Marshal Meretskov's, but on August 7—the day after the Americans dropped an atomic bomb on Hiroshima—Vasilevsky changed his mind and decided on a two-pronged simultaneous attack using all three armies.

On August 9, a second A-bomb wiped out Nagasaki. Still, the Japanese did not surrender.

On that same day, Vasilevsky directed the Trans-Baikal Front to strike east into western Manchuria while the 1st Far Eastern Front attacked west into eastern Manchuria. These attacks were to clear the Japanese out of Manchuria and to join with each other in the Mukden, Harbin, and Kirin areas of south central Manchuria.

Meanwhile, the 2nd Far Eastern Front would launch a supporting attack into northern Manchuria and also join with the others in the Harbin and Tsitsihan areas of Manchuria. Attacks planned against southern Sakhalin Island and the Kurile Islands would be delayed, depending upon the speed of the other operations.

The primary thrust was to be made by the Trans-Baikal Front, striking 350 kilometers into the Japanese-held interior by the 10th to 15th day of the attack. Led by Col. Gen. A.G. Kravchenko's 6th Guards Tank Army with Lt. Gen. A.I. Danilov's 17th and Col. Gen. I.I. Lyudnikov's 39th Armies alongside, the object was to bypass the fortified regions around Halungarsheen and advance upon Changchun.

The attack was designed to destroy the Japanese border defenders, cross the Grand Khingan Mountains, and occupy the central Manchurian Plain between Lupei and Solun as soon as possible.

According to the Soviet timetable, the 6th Guards Army would have to cross the

National Archives

deserts of Inner Mongolia, secure the passes through the Grand Khingan Mountains, and occupy Lupei by day five of the offensive. Subsidiary attacks by the Soviet-Mongolian Cavalry-Mechanized Corps would also cross the desert and strike for Kalgan. Lt. Gen. A.A. Luchinsky's 39th Army was to cross the Argun River, secure Hailar, and prevent Japanese troop withdrawals through the Grand Khingan Mountains.

The 1st Far Eastern Army was to penetrate the Japanese border defenses or bypass them, after which they were to operate in the rear of the enemy forces in the fortified zones. Col. Gen. A.P. Beloborodov's 1st Red Banner Army and Col. Gen. N.I. Krylov's 5th Army, with the 10th Mechanized Corps, were to attack from northwest of Vladivostok toward Harbin and link up there with the Trans-Baikal Front, surrounding many Japanese main force units. They were to also secure Port Arthur on the Liaotung Peninsula.

General M.A. Purkayev's 2nd Far Eastern Front was to attack on a broad front across the Amur and Ussuri Rivers to keep maximum pressure on the Japanese and destroy those facing them. They were to also prevent a withdrawal of any enemy forces attempting to reinforce other Japanese forces.

General M.F. Terëkhin's 2nd Red Banner Army was to attack toward Tsitsihar after crossing the Amur River. The 5th Separate Rifle Corps was to attack toward Bikin and secure Paoching, then move to Poli, where it was to link up with the 1st Far Eastern Front.

The Soviet plans called for speed, surprise, and mobility. Tanks would lead all attacks, closely supported by infantry, artillery, and air support. The objective was to prevent the enemy from bringing reinforcements from North China or Korea and then to destroy the Kwantung Army. The attack in all sectors was designed to tie down all the Japanese defenders so that no one area could reinforce another.

At two minutes after midnight on August 9, 1945, after a quick declaration of war against Japan, Soviet forces crossed the border. Advance units crossed both the Inner Mongolia and Manchuria borders, leading main force units behind them.

Initially, only Luchinsky's 36th Army faced any resistance when that army's routes passed through fortified Japanese border areas—most other advances were unopposed, a result of the most recent Japanese plans to withdraw into fortified localities.

On the right flank of the Trans-Baikal Front, Pliyev's Soviet-Manchurian Cavalry-Mechanized Corps advanced with the 25th Mechanized Brigade and 43rd Separate Tank Brigade leading two columns forward. They swiftly advanced across the desert of Inner Mongolia, covering 55 miles on the first day.

To their east, Danilov's 17th Army, led by the 70th and 82nd Tank Battalions, also entered Inner Mongolia unopposed; these columns moved 70 kilometers the first day. The spearhead of the Trans-Baikal Front—Kravchenko's 6th Guards Tank Army—advanced into Inner Mongolia in two columns, each broken down further into multiple columns, stretching over an advancing front line some 20 kilometers wide.

The forward detachments usually consisted of a rifle regiment, a tank regiment, and an artillery battalion. Opposition was limited and progress remained rapid. By dark the forward elements were in the foothills of the critical Grand Khingan Mountains.

On Kravchenko's right flank, Lyudnikov's 39th Army attacked on a southern axis against the Japanese 107th Division. The Wuchakou fortified region was bypassed and, led forward by the 61st Tank Division, the 39th Army continued south, passing the 1939 battlefield of Nomohan (Khalkhin-Gol) to join the 94th Rifle Corps, whose two divisions were attacking the Hailar Fortified Region in support of the 36th Army. Small Japanese counterattacks, supported by Manchurian cavalry, were easily beaten off.

But in some cases, the terrain—more than the Japanese—slowed the Soviet advance.

To keep the forward momentum going, many commanders organized new forward detachments built around self-propelled artillery battalions. With infantry and tanks along, these could move faster and farther than previous organizations.

The attackers continued to either overrun or obliterate Japanese defenses and their occupants. The 5th Army, with 12 divisions and 692 armored vehicles, overran the Japanese 124th Division by advancing quickly and penetrating the border at areas the Japanese had deemed impassible, moving swiftly and attacking unexpectedly.

On the left flank of the Trans-Baikal Front, General Luchinsky's 36th Army sent two rifle regiments of the 2nd Rifle Corps across the swollen Argun River using amphibious vehicles. Lt. Gen. Mikio's Fourth Separate (Japanese) Army defended Hailar with the 80th Independent Mixed Brigade and 119th Division, also supported by Manchurian Cavalry. These Japanese units were installed in the Hailar Fortified Region.

Undeterred, the Soviet 205th Tank Brigade managed to secure the bridges north of Hailar under cover of rain and fog before being ordered to conduct a night attack on the city. Supported by the 94th Rifle Division, the attack managed to surround the city by the next day, August 10.

Although the Soviets secured the outskirts of the town, the 80th Independent Mixed Brigade managed to hold the city center while the 119th Division withdrew to secure the passes through the Grand Khingan Mountains. Heavy fighting would continue in several areas such as these until after the official surrender.

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ABOVE: After the Soviets launched an amphibious invasion of Japanese-occupied Korea on August 14, the Red Army stopped at the 38th Parallel at the proposal of the United States, thus establishing the later border between North and South Korea. OPPOSITE: A Japanese horse-mounted unit on maneuvers along the banks of the Amur River shortly before the Soviets declared war on Japan, August 8, 1945.

The Japanese had expected a Soviet offensive into Manchuria but believed that it could not begin before autumn. The August 9 assault not only surprised them, but also caught them in the process of reorganizing their defenses and units. The result was a massive victory by the Soviets, despite fierce and dedicated resistance by many Japanese units.

Confusion quickly grew within Japanese ranks. General Ushiroku, commanding the 3rd Area Army, decided to withdraw his forces to defend Mukden, where most of his soldiers' families resided. This was contrary to General Yamada's plans and, of course, further disrupted the Japanese defensive scheme.

The Soviet advance continued to suffer from terrain and logistical problems, which caused more concern than Japanese resistance. In the 6th Guards Tank Army, for example, General Kravehenko had to replace one of his leading elements, the 9th Guards Mechanized Corps, because many of its tracked vehicles, including Lend-Lease American Sherman tanks, had broken down or were out of fuel.

Kravehenko moved up the 5th Guards Tank Corps on August 10 to lead his advance; the tracked vehicles handled the rough terrain better than his wheeled vehicles. This enabled him to cross the Grand Khingan Mountains with the 7th Guards Mechanized Corps using two roads and crossing at Mokotan on August 10-11. The 5th Guards Tank Corps, followed by the 9th Guards Mechanized Corps, crossed at Yukoto over one road at the same time.

The 5th Guards Tank Corps reached the high point in the mountains at 11 PM, August 10, and then moved rapidly downhill in the dark and rain, crossing the entire mountain range in just seven hours after covering 40 kilometers. The other corps, encumbered with wheeled vehicles, took longer but nevertheless made the crossing in good time.

By daylight on August 10, the 6th Guards Army had reached the central Manchurian plain; the followup units arrived the next day, August 11. Imme-

diately they moved east to continue the advance.

The 5th Guards Tank Corps reached Lupei on August 11, and the 7th Guards Mechanized Corps seized Tuchuan on the 12th. The operation, planned for five days, had lasted barely four days. There had been no opposition to speak of; Japanese units had already begun to withdraw.

August 12 saw the first serious resistance by the Japanese 107th Division near Wuchakou. The Soviet attack dispersed the defenders, who lost considerably in arms and equipment.

That same day, the 221st Rifle Division accepted the surrender of General Houlin, commanding the Manchurian 10th Military District, along with more than 1,000 of his men. But the fight for Hailar continued unabated.

The Soviet command redeployed its forces, releasing the tanks and replacing them with more infantry. Eventually the Japanese of the 80th Independent Mixed Brigade were driven out of Hailar itself but took up positions overlooking the city and continued to deny it to the Red Army.

Similarly, the 94th and 393rd Rifle Divisions had their hands full with the Japanese 119th Division, still blocking certain access routes to the nearby Grand Khingan Mountains.

General Pliyev's Soviet-Manchurian Cavalry-Mechanized Corps also had problems, crossing the Mongolian deserts opposed by Manchurian and Mongolian cavalry units—a civil war in miniature. Nevertheless, they pushed their way forward and seized Taopanshin in four days of fighting.

Another problem that gave the Soviets as much trouble as the Japanese was a fuel shortage. The 6th Guards Tank Army, leading the advance of the Trans-Baikal Front, had to stand down for two days, August 12-13, due to lack of fuel, which stemmed from logistical difficulties. The leading forces had advanced so far and so fast that the logistical tail could not keep up over the miserable roads in the area.

To address this issue, vehicles—including Sherman tanks, which used more fuel than the standard Russian tanks—were dropped out of the advance; the 453rd Aviation Battalion of the Red Air Force was used to fly gasoline and other fuels to the forward areas. Japanese kamikaze attacks on Russian supply lines contributed to the shortages.

Yet savage fighting continued. At the Wunoerh railroad station, the 275th Rifle Division spent August 13 and 14 eliminating a strong Japanese defensive position, while the 2nd Rifle Corps still fought for Hailar against the 119th Division. While all this continued, the Japanese government was trying to find a way out of the war.

On August 14, the Japanese government contacted the Allied powers for a clarification of surrender terms published earlier. In the interim, the Japanese Emperor ordered his forces to cease fire on August 14 pending further instructions.

Not unexpectedly, General Yamada countermanded the Emperor's order, causing great consternation in his own ranks. The Japanese soldier had sworn an oath to his Emperor, which required unquestioning obedience, but it also required a no-surrender conviction.

Many Japanese were torn between obedience to the Emperor and obedience to the oath requiring no surrender. This confusion not only created factions within the Kwantung Army but further weakened its defensive efforts. Finally, on August 19, General Yamada agreed to a cease-fire.

Now it was Marshal Vasilevsky's turn to ignore the cease-fire. Anxious to overcome Japanese resistance and uncertain if the cease-fire would result in a surrender—plus a desire to seize as much ground as he could before any such surrender—Vasilevsky continued with his offensive. Orders were issued for the capture of Mukden, Tsitsihar, and several other significant Manchurian cities.

On that same day, August 15, the Soviet-Manchurian Cavalry-Mechanized Corps ran into stiff opposition from the Inner Mongolian 3rd, 5th, and 7th Cavalry Divisions at Karibao. But two days of fierce fighting culminated in the surrender of the Mongolians and the capture of 1,635 prisoners of war.

When the Russians seized Harbin in central Manchuria they uncovered one of the most infamous war crimes of the century. There a Japanese doctor, Shiro Ishii, had created the top secret Unit 731. Here Japanese doctors and others tried to create new bio-

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ABOVE: Japanese troops lay down their arms after surrendering to the Red Army in Harbin, Manchuria, August 20, 1945. OPPOSITE: The spoils of war: Soviet troops remove industrial equipment from a Manchurian factory.

logical warfare weapons using human guinea pigs—mostly Chinese civilians and POWs, but also British and American POWs.

Hidden under the guise of a lumber mill, thousands of human beings were experimented upon, including live vivisections and injections of various diseases such as cholera, tuberculosis, typhoid, botulism, and a host of other deadly viruses. Like the Germans, the Japanese disposed of the bodies in a crematorium.

The Russians would later try as war criminals the Japanese staff they captured at Harbin, but those who escaped to Japan and were seized by the Americans, including Doctor Ishii, were never placed on trial.

Meanwhile, Tokyo continued in turmoil. The Emperor's decision to surrender had been contested by many of his advisors, including the Imperial General Headquarters hierarchy and many junior officers who threatened violence against leading government officials if the war was not continued.

Even the second atomic bomb had not dissuaded them from continuing the war. But when reports from the Kwantung Army began to arrive, reporting significant Soviet penetration in Manchuria and the situation as "obscure," objections to surrender were far less convincing.

Finally, on August 18, Japan officially announced the surrender of the Kwantung Army. On that same day, the Soviet-Manchurian Cavalry-Mechanized Corps symbolically crossed the Great Wall of China and marched toward Peking (today Beijing), joining en route the Chinese Communist 8th Route Army.

On this day as well, Hailar finally fell, producing 3,227 prisoners of war. Mukden was occupied on August 24, and on the 30th the last major Japanese force, the 107th Division, surrendered to the 94th Rifle Corps, which was mopping up rear areas. Another 7,858 POWs were sent to the prison camps.

Although such figures are suspect and have been repeatedly altered by the respective governments since their first publication, the Russians claimed the Japanese suffered 84,000 killed and 594,000 captured. Their own losses, since updated, are given as 12,103 killed and 24,550 wounded.

But these figures ignore the casualties of the Manchurian and Mongolian auxiliaries, as well as the undoubted thousands of Japanese reservists and civilians killed during the campaign.

Further, what is left out of these figures are the missing. Of the 2,726,000 Japanese nationals, two-thirds of whom were civilians, captured during the Manchurian Campaign, 254,000 died in Soviet captivity and a further 93,000 were listed as missing, fate unknown.

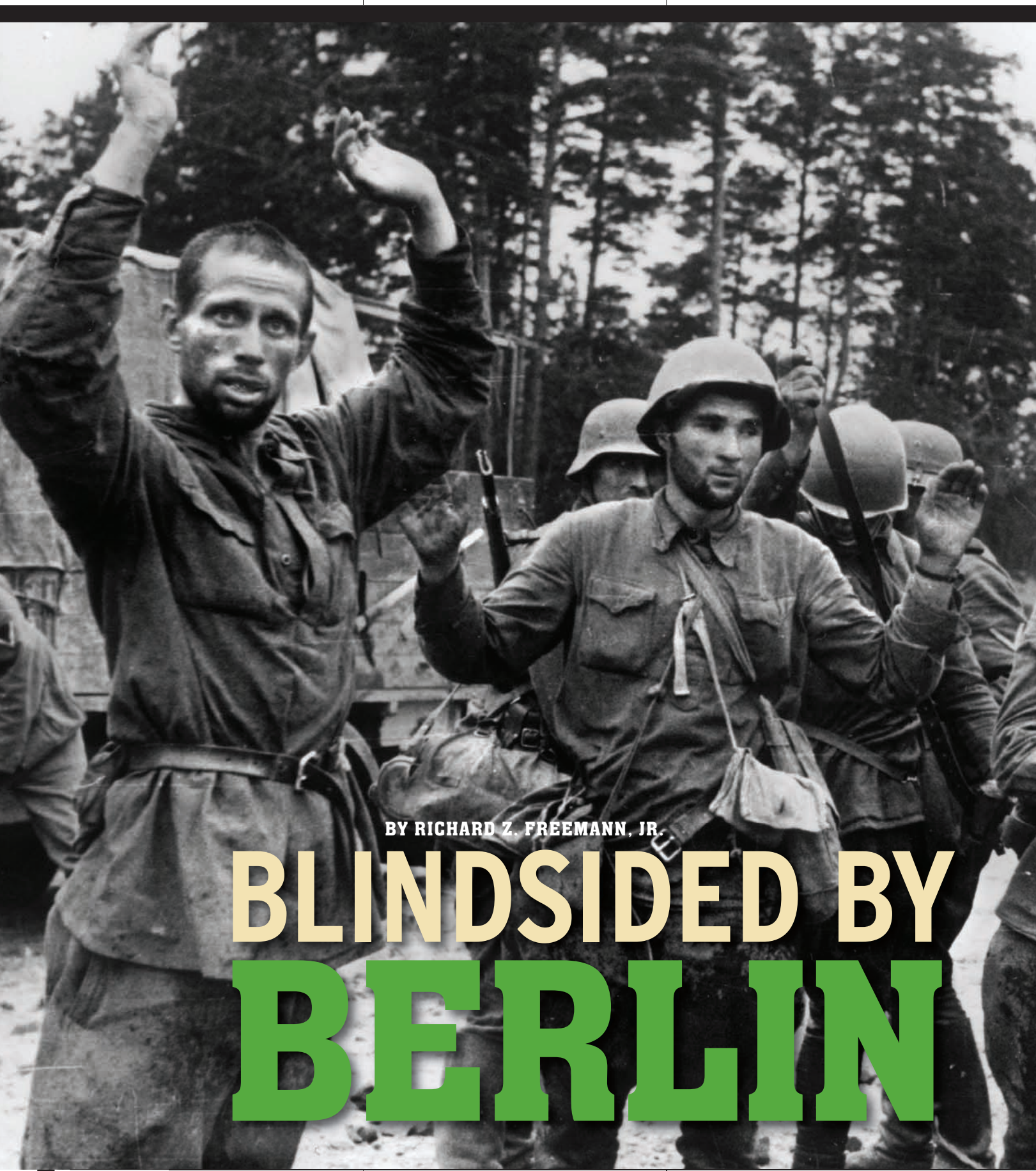
One Japanese estimate indicates that as many as 376,000 died or went missing in the first winter in captivity. Another source states that of 220,000 Japanese civilian settlers, 80,000 died, either having starved to death, committed suicide, or been killed by Chinese partisans. Only 140,000 survivors returned to Japan.

As had happened when the Red Army overran Germany, tens of thousands of Japanese—and Chinese—women were raped, many repeatedly, as the Soviets completed their conquest of Manchuria.

At one airfield where Japanese women had collected for safety, one later recorded, "Every day Russian soldiers would come in and take about 10 girls. The women came back in the morning. Some women committed suicide. The Russian soldiers told us that if no women came out, the whole hangar would be burnt to the ground, with all of us inside."

The Soviets' Manchurian Campaign, August Storm, destroyed the last vestige of Japanese military power outside Japan, and put the final nail in the coffin of those Japanese militarists who, even after suffering two atomic attacks, intended to continue the war to the death.

Only the most fanatical Japanese still wanted to continue what had become a war of annihilation. These few were either killed by the rational Japanese leaders or conveniently committed suicide. The Soviet invasion of Manchuria—which led to Japan's greatest defeat—had helped to end the Pacific War. □



BY RICHARD Z. FREEMANN, JR.

BLINDSIDED BY BERLIN

Soviet leader Joseph Stalin refused to believe that his country was about to be invaded by Nazi Germany—until it happened.

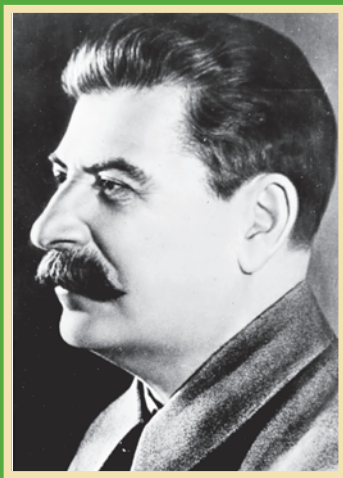
Alamy

"War is mainly a catalogue of blunders."

—Winston Churchill (1950)

On Sunday, June 22, 1941, as the sun slumbered, 3.6 million soldiers, 2,000 warplane pilots, and 3,350 tank commanders under skilled German command crouched at the border of Soviet-occupied Poland ready to invade the Communist nation Joseph Stalin had ruled with steel-fisted brutality for years.

Shortly after 3 AM, in an operation Adolf Hitler called "Barbarossa," a three-million-man Axis force struck Soviet positions along a 900-mile-long front. German aircraft bombed military bases, supply depots and cities, including Sevastopol on the Black Sea, Brest in Belarus, and others up and down the frontier. The night before, German commandos had snuck into Soviet territory and destroyed Red Army communications networks in the West, making it difficult for those under attack to obtain direction from Moscow.



ABOVE: Joseph Stalin, autocratic leader of the Soviet Union, was caught unawares by Germany's invasion and was plunged into depression. LEFT: Looking stunned at their swift defeat, Red Army troops surrender to German soldiers in the opening days of Operation Barbarossa. Within two weeks, more than 400,000 Soviet soldiers were taken prisoner.

By the end of the first day of combat, some 1,200 Soviet aircraft had been destroyed, two-thirds while parked on the ground. The poorly led Soviet troops who were not killed or captured buckled under the German onslaught.

Stalin was staggered by the German ambush. Germany's unannounced act of war violated the nonaggression pact that Hitler and Stalin had signed less than two years earlier and placed at risk the very survival of the Soviet Union.

At first, Stalin insisted that it was just a provocation triggered by some rogue German generals and refused to order a counterattack until he heard officially from Berlin. The German declaration of war finally arrived four hours later.

Hitler justified Barbarossa on the basis that the Soviet Union was "about to attack Germany from the rear." Eventually, after much dithering, Stalin ordered the Red Army to "use all their strength and means to come down on the enemy's forces and destroy them where they have violated the Soviet border," but oddly directed that until further orders "ground troops were not to cross the border."

The Soviet dictator lacked the heart to inform the Russian people that the Germans had invaded. That bitter task fell to Minister of Foreign Affairs Vyacheslav Molotov, who reported the assault in a radio broadcast more than eight hours after the conflict began. Sadly, Axis bombs and bullets had already alerted millions to the disaster.

Despite the urging of his military officers, Stalin, fearing he would be blamed for the losses, declined to take on the title of commander in chief of the Red Army. He did not even meet with the Politburo until 2 PM on that traumatic day.

Lacking sufficient skilled military leadership, the shocked Red Army reacted slowly and fearfully. As the Germans stormed east and mauled the Soviet troops, Stalin's generals asked for permission to retreat to reduce casualties, move to defensive positions, and prepare for a counterattack. Stalin refused. His poorly equipped, trained, and led soldiers were ordered to stand their ground regardless of the consequences.

In the first 10 days of combat, the Germans thrust some 300 miles into Soviet territory

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and captured Minsk and more than 400,000 Red Army troops. At least 40,000 Russian soldiers died each day. Axis forces gained almost total air control and destroyed 90 percent of Stalin's mechanized forces. Twenty million people who had been living under Soviet control were suddenly living in Axis territory. Many of those in areas previously invaded by Stalin (e.g., Estonia, Latvia, Lithuania, and Poland) initially welcomed the Germans as liberators.

Stalin seemed close to a nervous breakdown. The losses were so humiliating that, despite being the head of government, he retreated to his summer home and, during several gloomy June days of heavy drinking, refused to answer his phone or play any role in his nation's affairs, leaving the ship of state to flounder helplessly. On June 28, he muttered, "Lenin left us a great legacy, but

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ABOVE: After both countries invaded Poland in September 1939, German and Soviet officers chat amiably. The smiles, however, would not last. LEFT: German Foreign Minister Joachim von Ribbentrop signs the nonaggression pact as Stalin and Molotov (right) look on. The pact completely fooled Stalin. OPPOSITE: Finland was an ally of Germany during Operation Barbarossa. Here a Russian soldier surrenders to Finnish troops in 1941 during what the Finns called the "Continuation War."

we, his heirs, have ****ed it up."

Senior Soviet leaders mustered the courage to visit Stalin's dacha on June 30. Upon arrival, they found him despondent and disheveled. He nervously asked, "Why have you come?" Stalin apparently thought that his underlings were there to arrest him. But they, long cowed by the dictator's brutal intimidation, simply beseeched him to return to work at the Kremlin. He eventually did so.

Certainly, Operation Barbarossa was spawned by Hitler's hatred of communism and dream of world domination. But Stalin's many missteps in the previous two years enticed Hitler to attack and contributed significantly to Barbarossa's early successes. Stalin's blunders included purging the Soviet military of its leaders, entering into a treaty with Hitler that triggered a world war that subsequently ravaged Russia, launching a bumbling attack on Finland in late 1939, misreading Hitler, adopting a flawed plan of attack on Germany, and ignoring warnings of Hitler's forthcoming Axis invasion of the Soviet Union.

In furtherance of Lenin's goal of provoking a worldwide communist revolution, Stalin sought to undermine capitalist governments across Europe. He sought to destroy anyone abroad or at home who might stand in the way of his brand of communism. According to Stalin, "As long as the capitalist encirclement exists there will continue to be present among us wreckers, spies, saboteurs and murderers."

In a 1937 speech, the "man of steel" (which is what "Stalin" means in Russian) made his brutal stance clear: "Anyone who tries to destroy the unity of the socialist state, who aims to separate any of its parts or nationalities from it, is an enemy, a sworn enemy of the state and of the peoples of the USSR. And we will exterminate each and every one of these enemies, whether they are old Bolsheviks or not. We will exterminate their kin and entire family. We will mercilessly exterminate anyone, who with deeds or thoughts threatens the unity of the socialist state."

This thinking gave rise to the Great Terror in which Stalin had millions of Soviet citizens arrested for "counterrevolutionary crimes" or "anti-Soviet agitation." In 1937 and 1938, at least 1.3 million people were convicted of being "anti-Soviet elements." More than half were executed—on average 1,500 people shot dead each day.

Stalin used the Great Terror to eliminate potential threats within the Soviet military. He removed some 34,000 Red Army officers from service. Of those, 22,705 were shot or went "missing." Out of 101 members of the Red Army's supreme leadership, Stalin had 91 arrested and 80 shot. Eight of nine senior admirals in the Soviet navy were put to death. By 1939, he had essentially decapitated the military forces responsible for pro-

tecting the Soviet Union from invasion.

In Hitler's 1925 autobiography, *Mein Kampf,* he declared both his fierce opposition to Marxism and Germany's need to acquire more territory to provide "living space" for its people. Hitler made clear that one source of such lands would be "Russia and her vassal border states."

Following Hitler's 1933 rise to power in Germany, the fascist policies he implemented were directly targeted against Stalin's communism. Over the next half-dozen years, in contravention of the Versailles Treaty that basically forbade Germany from rearming, Germany's military might and expansionist aspirations grew at a fearsome rate. Hitler added to Germany's territory by absorbing Austria in 1938 and large parts of Czechoslovakia in early 1939. His gaze then fell upon neighboring Poland.

Stalin was right to fret about Hitler's goal of seizing fertile lands to the east of Germany, including Ukraine. Stalin recognized that the Soviet Union and its Red Army in the late 1930s were not ready for war. He could buy time and seek to retard Hitler's appetite either by forming an alliance with Germany's traditional foes, Great Britain and France, or by pursuing a nonaggression treaty with Hitler.

In early 1939, Stalin began negotiations with France and Great Britain aimed at a treaty that would leave Hitler facing opponents to the east and west of Germany. These efforts, however, were impeded by the reluctance of both France and Great Britain to enter into a treaty with a communist nation bent on undermining capitalist democracies and especially one led by an unpredictable and ruthless dictator like Stalin. The negotiations proceeded fitfully.

Several months later, seeking to thwart a treaty among Great Britain, France, and the Soviet Union, Hitler secretly invited Stalin to discuss a nonaggression pact (the so-called Molotov-Ribbentrop Pact, named after the two countries' foreign ministers). Hitler's covert plan for a late summer attack on Poland, which both France and Great Britain had promised to defend, motivated him to strike a deal with Stalin so that Germany would not face a hostile military to the east.

In late August 1939, Hitler and Stalin stunned the world by announcing that their two nations had agreed to a trade and nonaggression pact. This came about only after Stalin obtained Hitler's secret promise that the two nations would invade and carve up Poland between them, and Germany would facilitate Stalin's desire to take over Latvia, Estonia, Bessarabia, and parts of Finland.

On August 19, Stalin justified his unlikely deal with Hitler to the Politburo: "The

SA-Kuva

question of war and peace has entered a critical phase for us. Its solution depends entirely on the position which will be taken by the Soviet Union. We are absolutely convinced that if we conclude a mutual assistance pact with France and Great Britain, Germany will back off from Poland and seek a modus vivendi with the Western Powers. War would be avoided, but further events could prove dangerous for the USSR.

"On the other hand, if we accept Germany's proposal ... and conclude a nonaggression pact with her, she will certainly invade Poland, and the intervention of France and England is then unavoidable. Western Europe would be subjected to serious upheavals and disorder. In this case we will have a great opportunity to stay out of the conflict, and we could plan the opportune time for us to enter the war.

"The experience of the last 20 years has shown that in peacetime the Communist movement is never strong enough for the Bolshevik Party to seize power. The dictatorship of such party will only become possible as the result of a major war."

Stalin continued: "Comrades, I have presented my considerations to you. I repeat that it is in the interest of the USSR, the workers' homeland, that a war breaks out between the Reich and the capitalist Anglo-French bloc. Everything should be done so that it drags out as long as possible with the goal of weakening both sides. For this reason, it is imperative that we agree to conclude the pact proposed by Germany, and then work in such a way that this war, once it is declared, will be prolonged maximally. We must strengthen our propaganda work in the belligerent countries in order to be prepared when the war ends."

So, on August 23, 1939, the cold-blooded, anticapitalist leader who aimed to "Sovietize" the world climbed into bed with the cold-blooded, anti-Bolshevik leader who dreamed of fascist world rule.

On September 1, 1939, more than a million German warriors invaded Poland from the west. Sixteen days later, in accord with the secret August pact between Stalin

and Hitler, half a million Soviet troops invaded Poland from the east. Within weeks the Polish nation simply vanished and, having pocketed its territory, Germany and the Soviet Union now shared a common border and responsibility for starting World War II.

In late November 1939, Stalin ordered about one million Red Army soldiers to invade neighboring Finland, a nation of just 3.6 million residents. (Finland had been ruled by Russia until 1918, when anti-Bolsheviks prevailed in a Finnish civil war.) During four months of harsh winter fighting against brave and defiant resistance, more than 200,000 Red Army soldiers died (Nikita Khrushchev said in his memoirs that the figure was closer to a million)—dwarfing the Finns' military fatalities.

Embarrassed, Stalin entered into an armistice under which Finland surrendered some territory, but the modest Soviet land gain was disproportionate to such vast human losses. Because of its unprovoked attack on Finland, the Soviet Union was expelled from the League of Nations.

Stalin's earlier purge of his military leaders and the Red Army's woeful showing in Finland persuaded Hitler that Soviet forces were weak and encouraged him to consider a surprise attack on the USSR. Stalin was painfully aware by 1940 that the Red Army was lacking in leadership, weapons, manpower, infrastructure, training, and war planning. He ordered a massive upgrade of the military to be carried out at top speed. But this would take time, and in the interim care would have to be taken not to provoke Hitler into attacking Russia.

To Stalin's amazement and discomfort, during the first half of 1940, German military forces stormed through Belgium, Denmark, Norway, Luxembourg, the Netherlands, and France and drove the humbled British forces back to their island from the European mainland. These rapid victories did not comport with the Soviet leader's strategic concept that the Western European countries would, to communism's ultimate advantage, exhaust each other in a protracted war.

Under their trade agreements, the Soviet Union supplied Germany with huge quantities of foodstuffs, raw materials, and oil and acquired from international markets goods Hitler needed but could not otherwise obtain due to Great Britain's naval blockade of German ports. Ironically, by mid-1940, the Soviet Union was Germany's most important trading partner.

Stalin's view at this time was that Hitler's desire to seize land to the east was motivated mainly by Germany's need for additional food and natural resources. Thus, Stalin hoped that if the Soviet Union satisfied much of Hitler's hunger for essential goods the risk of a near-term German attack would be tempered.

Stalin appreciated that a German attack on the Soviet Union was likely to come eventually. He assumed, however, that Hitler would not strike until after Great Britain had surrendered. He believed the British could hold out until at least mid-1942. He also assumed that before attacking the USSR Hitler would demand from Stalin land and resources and that the Führer's ultimatum would afford the Soviets some time to react

Bundesarchiv Bild 101I-265-0040A-22A; Photo: Vorpahl

National Archives

ABOVE: A Russian peasant family watches as retreating Soviet Army troops set nearby farms ablaze, destroying anything the advancing Germans could use. OPPOSITE: A German armored column rolls eastward across a Russian field during the start of Operation Barbarossa. The Red Army was ill prepared and forward units were quickly overrun.

with a concession, a preemptive attack, or at least a move to defensive military positions.

During the summer of 1940, Stalin secretly contemplated having the Red Army launch a surprise attack on Germany in 1942. He hoped that by then the Red Army would be stronger as its officers gained experience and it was modernized, and Germany would be weaker from her ongoing battles against Great Britain.

Consistent with his August 1939 remarks to the Politburo, Stalin reasoned that if Germany fell the Red Army would have a clear path to sweep into capitalist Europe and implant communism there. He directed a few top generals to covertly draft battle plans. In October 1940, after reviewing several proposals, Stalin wavered over when—or whether—to launch a preemptive strike, but planning for such an attack continued.

Coincidentally, in July 1940, Hitler asked his generals to develop secret plans for a German surprise attack on the Soviet Union. The Führer's objectives were to eradicate "Jewish" Bolshevism, gain territory and natural resources to the east, exterminate the Stalinist threat, and eliminate the chance that the USSR would provide aid to Great Britain.

In November 1940, Hitler invited the Soviet Union to join with Germany, Italy, and Japan as a member of the Tripartite Pact, which committed all signatories to align in the event of war with the United States. The German dictator also sought to persuade the Soviet dictator to focus his territorial expansion efforts on the Middle East rather than Eastern Europe.

Because Stalin coveted lands in Europe and wanted Hitler to withdraw Axis troops from Finland, the negotiations failed. These differences convinced Hitler that conflict between his nation and Stalin's was inevitable.

By December 18, 1940, Hitler's mind was made up. He ordered his generals to complete detailed war plans "to crush Soviet Russia in a rapid campaign"—code named Operation Barbarossa—to begin in May 1941.

At about the same time, Stalin ordered the Red Army to construct armed fortifications close to the German/Soviet border. When completed, these would be an asset in a preemptive Soviet attack but a liability in a defensive contest triggered by a German blitzkreig. Military convention called for such fortifications to be set a distance inland from the border to protect troops, artillery, and weapons from prompt destruction or capture in the event of a surprise attack and to give the defending military forces room to maneuver.

As spring arrived in 1941, Stalin still had not decided whether or when to launch a preemptive assault on Germany. His generals, however, continued to prepare for such an attack.

In 1941, Hitler took steps to guard his southern flank against a hostile attack in the coming war on Soviet Russia and convinced Bulgaria and Yugoslavia to join the Tripartite Pact. When in early April civil war broke out in Yugoslavia, he sent troops to quell the uprising. His forces also invaded Greece that month to salvage a failed Italian operation there. These relatively brief military operations, however, forced Hitler to delay the start of Operation Barbarossa. It was reset for June 22.

In April 1941, Stalin proudly announced that the Soviet Union had entered into a nonaggression pact with Japan. This significantly reduced the threat of military action against the USSR from the east and allowed Stalin to focus on Germany.

On May 10, Hitler's Deputy Führer, Rudolph Hess, flew solo to the British Isles and parachuted into Scotland with the objective of negotiating peace between Germany and Great Britain. The British arrested Hess, who had made his flight without Hitler's knowledge or consent. But Stalin's suspicious and conspiratorial mind worried that if Hess were indeed on a secret peace mission and Germany ended its conflict with the British, the threat of a German attack on the USSR would balloon.

On May 15, Stalin's top generals gave him an updated preemptive attack plan declaring that "it is necessary to deprive the German command of all initiative, to preempt the adversary and to attack." The generals proposed sending troops, planes, and other equipment to the western border in the guise of "training exercises."

With the risk of a Japanese invasion apparently neutralized, nervous about what Hess was up to in England, aware that Germany was massing troops at his border, and believing that the first nation to attack would likely prevail, Stalin felt the urge to be proactive. According to

some historians, he decided to move the Soviet preemptive attack up from 1942 to the coming summer.

Just a few days earlier, in a speech to Red Army military school graduates, Stalin had declared, "Our military policy must change from defense to waging offensive actions." He then ramped up production of planes and other military equipment, drafted almost a million more men into the armed forces, and began moving millions of Red Army soldiers and their supplies west to be in place by July 10.

Still wary of giving Hitler an excuse to strike first, Stalin sought to conceal his massive military expansion near the German/Soviet border. Soviet propaganda derided rumors of a Russian buildup as "totally fantastic"—the troops were merely training. Yet, out of fear of inciting Germany to attack, Stalin repeatedly refused his generals' requests to place those western Red Army soldiers on combat alert. He told them, "You must understand that Germany will never on its own move to attack Russia…. If you provoke the Germans on the border, if you move forces without our permission, then bear in mind that heads will roll."

Stalin's vulnerability to a preemptive Axis attack in 1941 was increased by the fact that after moving into Poland in 1939, the Soviets had taken down their defensive fortifications near their old border but had not yet completed new ones at the more westerly frontier.

Another problem was that the military supplies and warplanes Stalin had ordered moved to the new border in advance of the planned preemptive strike were now exposed to capture or destruction in a surprise Axis assault.

Moreover, his military communications systems were rudimentary, and his ability to quickly move troops and equipment by road or rail was limited. Additionally, many of his weapons were outmoded. Finally, Stalin had no backup plan addressing how the USSR would defend if Germany struck first.

During the first half of 1941, the United States, Great Britain, and other foreign nations had gotten wind of Germany's secret plan to attack the USSR. In April, Winston Churchill, no fan of communism, sent an invasion warning to Stalin. President Franklin Roosevelt delivered a similar alert. Stalin also received invasion signals from Soviet spies abroad, the increase of Axis troops on the border, repeated German aircraft incursions into Soviet territory, and the fact that many German diplomats and their families began to leave Moscow.

But Stalin, ever cynical of the motives of others, discredited all of these alarms. The Soviet leader remained convinced that Hitler would not be foolish enough to initiate a two-front war during the first half of 1941, even though by then the only powerful nation Germany was fighting was the beleaguered Great Britain.

Stalin knew that the fall "mud season" and harsh Russian winter dictated that any German blitzkrieg likely to succeed would have to be launched by mid-summer. Thus, he reasoned that if Russia could avoid an immediate attack he would be in position to strike first.

In early June, Stalin's anxiety about internal threats and traitors bubbled up anew. He once again purged the Red Army leadership, this time of 300 officers, including more than 20 who had received the nation's highest military honor. As a result, about three-quarters of his field officers had no more than two years of experience in their posts.

In a peculiar June 14, 1941, radio broadcast reflecting Stalin's paranoia and unwillingness to acknowledge the imminent threat, the Kremlin announced that British rumors of a German attack on the USSR were an "obvious absurdity" and "a clumsy propaganda manoeuvre of the forces arrayed against the Soviet Union and Germany." This statement troubled Stalin's surviving generals, for it was inconsistent with their efforts to gear up for the war brewing at the border.

On June 19, 25 German ships abruptly left a port controlled by the USSR, and Stalin grew more nervous. He ordered that his planes on the western frontier be camouflaged within a month but continued to deny permission to place his troops on combat alert.

Seeking some assurance that his nonaggression pact with Hitler would hold, on June 21 (the day before the scheduled blitzkrieg) Stalin instructed his diplomats to contact Germany's foreign minister to ask why so many German troops had gathered on the Soviet border. Ribbentrop's staff stubbornly maintained throughout the day that the German diplomat was unavailable. Late that evening, when questioned about rumors of an impending Axis attack, Germany's ambassador to the USSR simply said he was unable to supply an answer.

Also that evening, a German defector informed a Red Army officer that the blitzkrieg would come the next morning. Stalin panicked. Hitler might actually strike first! But the Soviet dictator reacted inconsistently. He alerted his field generals that a German attack could come on June 22 or 23 and told them to move their troops closer to the border and be on high alert. At the same time, Stalin warned them to prudently prevent "big complications"—war—and "not to yield to any provocation" from the Germans. Did this mean they were to accept an Axis blow and not counterattack? With no further explanation, Stalin went home for the evening.

Operation Barbarossa was launched several hours later with devastating impact on the Soviets. As both sides were gearing up for a preemptive attack, Hitler struck first and caught the Soviets flatfooted. A massive force of nearly four million Axis troops (from Germany, Italy, Hungary, Romania, Finland, Slovakia, and Croatia), 3,350 tanks, 7,200 pieces of artillery, 2,770 warplanes, and 700,000 wagon-pulling horses crashed across a front that stretched 1,800 miles—from the East Prussia-Lithuania border on the Baltic Sea to the border of Romania and Ukraine on the Black Sea.

The Axis attack was astonishing in its speed, scope, and savagery. Soviet divisions, hopelessly outnumbered and outgeneraled, were torn to shreds by the advancing Axis troops. Some five million Red Army troops would be taken prisoner; most would not

National Archives

Thousands of despondent, defeated Red Army troops march into captivity. Most would never return home. In the end, however, Stalin and the Soviet Union were victorious.

survive the war. Nazi death squads, known as Einsatzgruppen ("Operational Groups"), swept across the conquered lands in the wake of the combat troops to round up Jews in the towns and villages and kill them.

Stalin's many errors invited the devastation. Stalin's target date for his attack on Hitler was tardy by at least two weeks. The Soviet dictator had failed to heed multiple warnings of a German blitzkrieg. Before that, he had rejected a pact with France and Great Britain that, as he acknowledged to the Politburo, would have prevented World War II and probably the June 1941 attack.

Stalin had positioned his combat supplies and undisguised warplanes too near the German border, neglected to develop an adequate military transportation system, and taken down his fortifications at the old Soviet boundary without completing new ones. The Red Army lacked sound defensive plans in the event of a surprise enemy attack.

Stalin failed to order an immediate and comprehensive counterattack early on June 22 and then refused to permit a strategic retreat. His decision to decapitate the Red Army had left him with meek and inexperienced combat leadership. The German attack achieved shocking results during its opening stages, leaving Stalin depressed, disheveled, and drunk.

However, good fortune continued to follow Stalin personally. Despite ruthlessly eliminating all opposition within the Communist Party, killing and starving millions of Soviets in the 1930s and imprisoning millions more, bungling preparations for war with Hitler, and going into depressed hiding for several days after Hitler's stunning attack, Stalin's weak subordinates did not do to him in late June what he surely would have done to them had the roles been reversed; he was not arrested, tortured, imprisoned, or shot dead by firing squad.

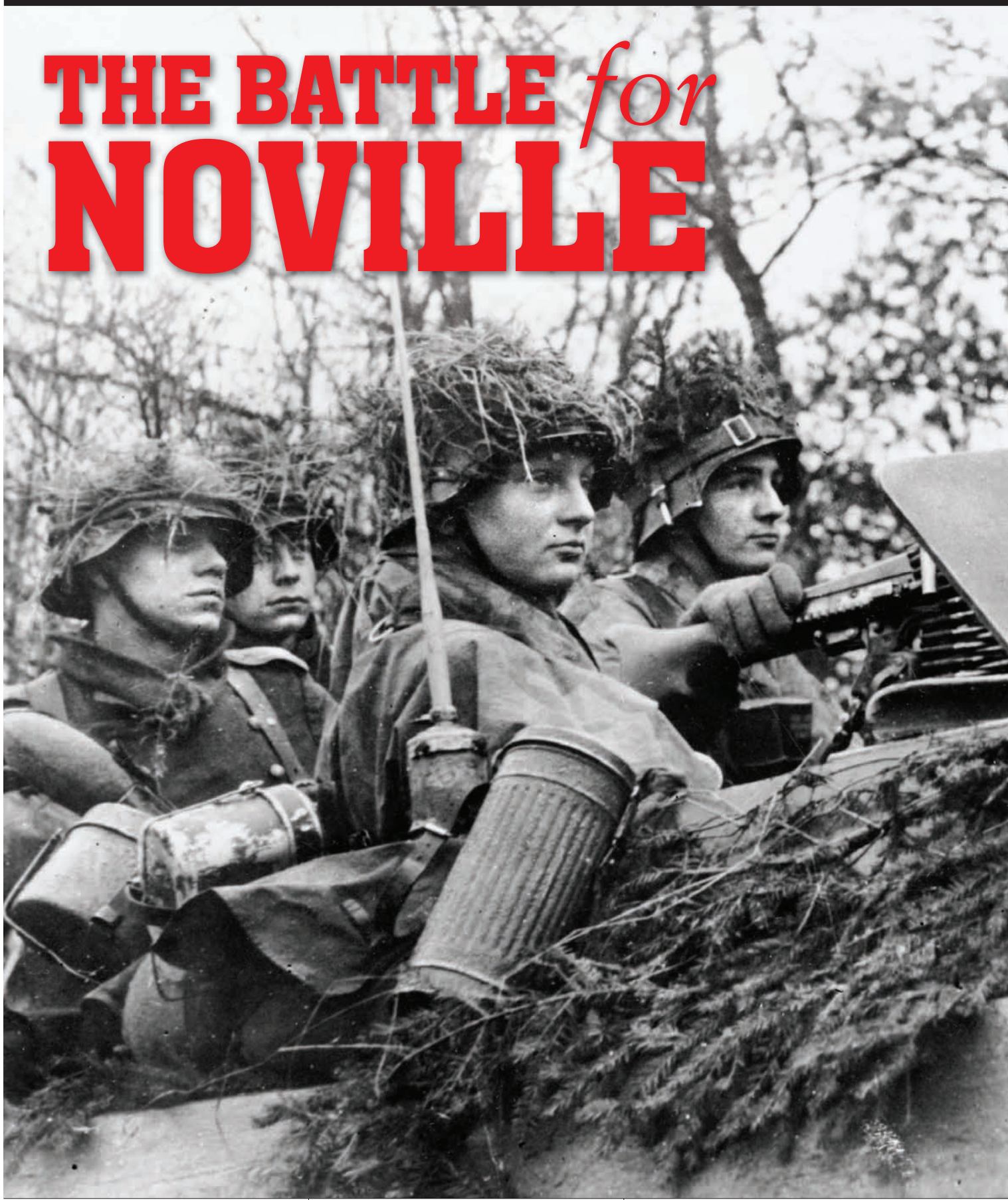
Stalin was also fortunate in late June that bellicose Japan rejected Hitler's urgings and chose not to attack the Soviet Union from the east as Barbarossa advanced from the west.

And, although Stalin's conspiracy with Hitler led to the start of World War II and years of vital communist aid to Axis forces, in the summer of 1941, when Stalin was most vulnerable, two capitalist nations opposed to communism came to his rescue. Great Britain and the United States sent lifesaving military supplies and food to the besieged Soviet leader—something that Stalin was loath to acknowledge.

Stalin was also lucky that Hitler had decided to postpone his Soviet invasion by five weeks to put down uprisings in Yugoslavia and Greece. The resulting belated Axis march on Moscow was thwarted by the snow and bone-cold December weather just a few miles from the Russian capital. An earlier start could have yielded a far different outcome.

Barbarossa was eventually defeated, but not until four years had passed and tens of millions had died. Lacking Stalin's good luck, the people of the Soviet Union paid a frightful price in death and destruction for his catalogue of blunders. □

THE BATTLE *for* NOVILLE



Bundesarchiv Bild 183-J28519; Photo: Göttert

Well-camouflaged German soldiers advance in a light infantry fighting vehicle through Belgium during the Battle of the Bulge. American tanks, tank destroyers, and armored infantry of Team Desobry held off the German 2nd Panzer Division for a day until paratroopers from the 101st Airborne Division joined the fight.

Shortly after 10:30 AM on December 19, 1944, 26-year-old Major William Desobry picked up his field telephone, called his combat commander, Colonel William Roberts, and asked if he could withdraw from the Belgian village of Noville. Desobry had been holding off the entire German 2nd Panzer Division—some 16,000-men with more than 120 tanks and assault guns—for the last six hours with only 400 men and a handful of tanks and tank destroyers.

With so many Germans bearing down on him, Desobry knew that staying could mean suicide. Roberts, from his Bastogne headquarters in the Hotel LeBrun, gave an answer that probably made Desobry's blood run cold. He told the young officer to hold the phone line.

With the sounds of battle reverberating against his headquarters walls, Desobry held the line. After what must have seemed

A scratch force of an American armored division held a German panzer division at bay north of Bastogne.

BY KEVIN M. HYMEL

like an eternity, Roberts came back on the line. "You can use your own judgment about withdrawing," he said, "but I'm sending a battalion of paratroopers to reinforce you."

With almost 500 airborne soldiers heading his way, Desobry decided not only to stay but to attack. What had started as a day-long holding action became a major two-day battle, pitting a scratch force of Americans against a battle-hardened German division. The Battle of Noville helped decide the defense of Bastogne and the fate of the entire German Ardennes offensive—the Battle of the Bulge.

When the Germans launched their counteroffensive through the Ardennes Forest of Belgium and Luxembourg four days

National Archives

An American tank destroyer rolls past a disabled tank destroyer on a snow-covered road in Belgium. Tank destroyers from two different units helped Noville's defenders deny the Germans entry. No snow fell on Noville during the two-day battle, but the temperatures were cold.

earlier, on December 16, General Dwight D. Eisenhower, the Supreme Allied Commander, immediately sent his 7th, 9th, and 10th Armored Divisions into the fray. Two of the 10th Armored's Combat Commands, CCA and CCR (R for Reserve), each about the size of an infantry regiment, headed to Luxembourg City to hold the southern shoulder of the rapidly developing bulge, while Colonel William Roberts led his CCB to Bastogne, Belgium, to receive orders from Maj. Gen. Troy Middleton, the VIII Corps commander.

By December 18, an entire German panzer corps was barreling straight for Bastogne, and Middleton, outnumbered two to one, needed to buy time while more forces were brought to bear. The Germans had already sacked his 2nd Infantry Division and were grinding down his 9th Armored.

Middleton asked Roberts to break his command into three teams and defend Bastogne's north, east, and southeast approaches. Roberts created three teams to hold the positions, each named after its commander. To the southeast he assigned Team O'Hara, to the east he assigned Team Cherry, and to the north he sent Team Desobry, consisting of soldiers from the 20th Armored Infantry Battalion and 15 Sherman tanks.

When Major Desobry learned of his assignment, he asked Roberts, "If the situation gets to the point where I think it's necessary to withdraw, can I do that on my own or will I need permission from you?" Roberts paused, but then told him, "You know, Des, you will probably get nervous tomorrow morning and want to withdraw, so you had better wait for any withdrawal order from me." With that, Desobry led his team through heavy winter fog toward the town of Noville.

Noville, three miles north of Bastogne, stood like an island amid flat farmland. It consisted of a handful of brown and gray stone homes, farmhouses, and buildings, with a church whose tower dominated the landscape. A mile to the south stood the town of Foy, on the edge of the woods surrounding Bastogne.

North of Noville the ground remained flat until it sloped up to ridges about 500 yards northeast and northwest of the town. The key to Noville was the intersection of the north/south road, N30, and an east/west road, ND77. Team Desobry had to hold that intersection.

Just as determined to capture Noville were the tankers of Maj. Gen. Meinrad von Lauchert's 2nd Panzer Division. Lauchert needed to secure the town's crossroads to continue west to the Meuse River and reach the German counteroffensive's ultimate prize: the Belgian port city of Antwerp.

He did not have orders to take Bastogne, but if he blasted through Noville quickly

while other German units were stalled to the east, he might be able to bag the town and its seven intersecting roads. Lauchert's division counted 27 Panzer IV medium tanks, 58 Panther heavy tanks, and 48 assault guns, for a total of 133 armored heavy-weapons vehicles when it started heading west on December 16.

Once Desobry's men reached Noville, they occupied the buildings around the intersection and smashed out windows with their rifle butts to prevent flying glass once the shooting started. Desobry, meanwhile, set up his headquarters in a schoolhouse catty-corner from the church. He then sent out three patrols to make contact with the enemy and told half his remaining men to get some sleep.

Each patrol consisted of two tanks and an infantry squad. He sent one northwest, the other directly north, and a third directly east to set up a roadblock outside of the village of Bourcy. His engineers were not allowed to lay mines since American stragglers would be coming through the lines. Desobry hoped to incorporate them into his defense.

Sure enough, stragglers intermittently passed through the outposts until around 4:30 AM on December 19. Almost an hour later, a column of half-tracks approached the Bourcy roadblock. In the dark and fog, the sentries could not discern friend from foe until they heard German spoken in the lead vehicle. They immediately tossed hand grenades into the half-track's open beds, which exploded among the packed infantry.

As wounded Germans screamed, others piled out of the half-tracks and opened fire. One of the sentries took a bullet in his cheek. Others tossed the rest of their grenades at the oncoming Germans, but, surprisingly, their support tanks did not fire a shot. The tankers were blind in the darkness and did not want to risk hitting their own armored infantry. After a 20-minute firefight, both sides pulled back and reported to their superiors that they had found the enemy.

In Noville, Desobry had slept for about an hour when he was woken by the sounds of explosions and gunfire to the east. He left his headquarters and stood outside, listening to the fight. He heard the distinct sounds of German armor circling to the north, then distant fire.

He did not know it, but he was listening to the destruction of elements of the 9th Armored Division. Task Force Booth, led by Lt. Col. Robert Booth, had retreated from a position east of Noville and had run into some German vehicles and infantry near where the Germans clashed with Desobry's sentries.

Bundesarchiv Bild 183-J28646; Photo: Schulz

Booth's tanks and infantry quickly dispatched the Germans, then headed north and occupied the town of Hardigny, northeast of Noville. There they knocked out about a dozen enemy half-tracks and infantry, but before they could celebrate, German tanks and infantry surrounded them.

Task Force Booth had stumbled into the 2nd Panzer Division's assembly area. The Germans quickly destroyed the American tanks and rained mortars on the infantry. The surviving Americans broke for a nearby wood, where the Germans hunted them down. They captured Booth, hobbled by a broken leg, but more than 200 men escaped to Bastogne, where they would continue to fight.

National Archives

ABOVE: German Maj. Gen. Meinrad von Lauchert, left, commanded the 2nd Panzer Division. Major William Desobry, right, held off an entire German division at Noville. LEFT: German Panther tanks advance west through a Belgian village. The German goal for the campaign was Antwerp, but the stubborn defense of places like Noville stymied the offensive.

Task Force Booth took some of the pressure off Desobry. Every single German bullet, tank shot, and mortar round fired at Booth's men was one less firing at Noville.

Back near Noville, the enemy column that Desobry heard soon encountered the sentries on the north-south road. One of the two Sherman tanks opened fire first, but its round exploded short. The lead German tank then fired six rapid shots, disabling both Shermans. The two burning tanks now blocked access to the town. Other German tanks spread out and fired their machine guns at the American

National Archives

American paratroopers of Colonel Robert Sink's 506th Parachute Infantry Regiment, 101st Airborne Division pass through Bastogne. Sink's 1st Battalion, under Lt. Col. James LaPrade, headed north to help Team Desobry defend Noville.

infantry. Machine gunners in the town returned fire as the two sides sparred from a distance until Desobry ordered his patrol back into Noville.

Once the fighting died down, Desobry pulled all his outposts back toward the town. In the dense fog, small skirmishes broke out as the Germans probed the lines. The Americans could hear the enemy shouting orders in the dark. At some point, a German sniper wielding an assault rifle found a perch in a house's crawlspace across from Desobry's headquarters and fired at anyone coming in or out of the house.

At 10 AM, the fog suddenly lifted and the men in Noville could finally see what they were facing. German tanks atop the hills to the north started rolling down toward them. The men spotted several German tanks driving down the main road, while some 30 panzers spread out in a skirmish line on a ridge to the west.

As the Germans bore down from the north, from the south raced a platoon of M-18 Tank Destroyers from the 609th Tank Destroyer Battalion. Desobry used the unit as his reserve and kept its platoon commander close. One tank destroyer crew west of the intersection scored a hit on the German lead tank. The crew then traversed the turret to the next panzer and fired. Before finding out if they had disabled the second tank, the crew retreated south. As it did so, American tanks and everyone else with a weapon opened fire on the advancing German tanks and infantry. The fight was on.

The Americans had little difficulty hitting the German tanks as they slowly rolled down the slopes. But then German artillery tore into the town as their armor edged toward the church. Just west of Desobry's headquarters, a single Sherman knocked out three German tanks stuck in the mud on the western ridge. The crew followed up by disabling an enemy half-track. Another tank destroyer knocked out five German tanks.

Just then, two enemy tanks pushed down the north/south road toward Noville, but a self-propelled gun destroyed one panzer and a Sherman knocked out the other, further blocking the road. Inside Noville, a team of Americans located the sniper in the crawlspace and fired into it until blood dripped down.

In all the confusion, a pig raced down the street, tracers snapping around it. Soldiers called to it, trying to coax it to safety, until the pig darted into a house where some American soldiers grabbed it. A cheer went up among the Americans who decided not to eat the frightened animal, but adopted it as a mascot. The fighting quickly resumed.

American artillery smashed into a large group of German infantry approaching from the northeast, forcing them to pull back. American tanks and tank destroyers, well hidden among the town's buildings, had managed to knock out 17 enemy tanks at the cost of one TD and four smaller vehicles.

After a lull in the fighting, a captured Sherman tank operated by the enemy rolled into town from the north and opened fire on several vehicles. "Get that son of a bitch!' shouted an armored infantry captain. "I don't care who he is!" A TD dispatched the Sherman and the German crew bolted from it but were quickly gunned down.

Later, when a second German sniper began firing from the church steeple, tank, bazooka, and small arms fire silenced him, wrecking part of the steeple.

Despite the success, Desobry knew he was blocked on three sides and the Germans held the high ground. He sent out reconnaissance patrols that failed to return. He knew that his small force was out on a limb. With the road south to Bastogne his only escape route, he contemplated a retreat, but then he remembered his conversation with Colonel Roberts the night before and placed the call.

In Bastogne, after Roberts told Desobry to hold the line, he put down the phone and walked outside his headquarters (today up the street, north of McAuliffe Square) to head to Brig. Gen. Anthony McAuliffe's headquarters. McAuliffe, the acting commander of the 101st Airborne Division in Maj. Gen. Maxwell Taylor's absence, had arrived the day before and had taken over General Middleton's headquarters as he awaited his division's arrival.

As Roberts departed his headquarters, he ran into Brig. Gen. Gerald Higgins, the 101st's assistant CG, and explained his dilemma. As they talked, the 1st Battalion of the 506th Parachute Infantry marched past. Higgins waved over Colonel Robert Sink and Lt. Col. James LaPrade, the regimental and battalion commanders, respectively, and ordered LaPrade and his unit to march immediately for Noville. Roberts raced back to his phone and told Desobry the news.

It was no accident that the 506th was marching through Bastogne at that moment. Four days earlier, after Eisenhower decided to commit his armor to the fight, he ordered into battle his only strategic reserves, the 82nd and 101st Airborne Divisions. The 101st paratroopers were resting and recovering in Mourmelon, France, after fighting for three months in the Netherlands, when they were called up only hours into December 18.

With whatever equipment they could find, the paratroopers boarded trucks instead of planes to reach their new battlefield. Most of the trucks did not have canvas covers, making for a cold ride. They rode through the night and into the day. The trucks drove with their headlights on, something almost never permitted at night. Some men succumbed to motion sickness and were forced to vomit into their helmets. Others relieved themselves in theirs. In both cases, the helmets were passed to the back of the truck to be emptied.

The 101st was not headed for Bastogne but farther north to Webermont. By happenstance, McAuliffe stopped at Middleton's VII Bastogne headquarters for instructions and Middleton told him to bring his division to Bastogne. Before McAuliffe could act, another coincidence helped bring the 101st to Bastogne.

When the 101st's 380-truck convoy got stuck in traffic behind the 82nd, Colonel Thomas Sherburne, the 101st's artillery commander, decided to cut through Bastogne about 15 miles to the west, bypassing the backup. After an MP told him that General McAuliffe had used the same road on his way into Bastogne, Sherburne directed the trucks east.

Soon the convoy encountered another blocked road at the town of Mande-St.-Etienne. Once the blocking vehicles were cleared, the column was stopped again by a wave of retreating humanity. Soldiers, mostly from the 28th Infantry Division, limped, slogged, and stumbled east, telling the paratroopers what was in store for them. Some offered up their ammunition and equipment. The paratroopers would have to travel on foot the last three miles to Bastogne.

Elements of Colonel Julien Ewell's 501st Parachute Infantry Regiment reached Bastogne first and headed east to join Team Cherry, which the Germans were attacking. Colonel Sink's 506th came next and was marching north through the town when he encountered General Higgins and Colonel Roberts. Thus, LaPrade's 1st Battalion

received its orders while on the move.

Back in Noville, Desobry's feeling of relief proved short lived. Word of his retreat request had reached his armored infantrymen, who began leaving their positions and preparing to pull back. Fortunately, sergeants and officers talked them back to their positions, assuring them that no such order had been issued.

With that small crisis over, Desobry decided the only way to hold onto Noville was to attack the Germans on the surrounding ridges, and he hoped LaPrade would be game for such a fight. He need not have worried. LaPrade, a 30-year-old West Point graduate, had been with the division since D-Day and had commanded the battalion through the Netherlands campaign.

Desobry knew that it would take a while for LaPrade's battalion to reach him, so he sent a jeep to retrieve the airborne officer so they could devise a battle plan. LaPrade arrived around 11:30 and they devised a two-pronged attack on the ridges. While four tanks and armored infantry provided cover fire on the north-south road, LaPrade's A and B Companies would assault the heights.

Meanwhile, three tanks and armored infantry would do the same on the northeastern road, while LaPrade's C Company would charge. The attack would be supported by a five-minute artillery preparation, followed by smoke rounds.

To make sure everyone understood his objectives, Desobry ordered another jeep to pick up LaPrade's A, B, and C company commanders. Desobry then led them onto the battlefield where their attacks would commence, ducking machine-gun fire as they went.

When LaPrade told Desobry that his men lacked arms, ammunition, and other basic equipment, Desobry dispatched Lieutenant George Rice two miles south to the town of Foy to gather supplies and distribute them to the advancing men. Rice did his job. As LaPrade's men neared Noville, they discovered piles of ammunition. Supply men tossed rifles to the paratroopers who needed them. There were also bandoliers of ammunition, mortar rounds, and precious hand grenades.

The paratroopers then halted on a rise about 500 yards short of Noville and waited for the preparatory artillery barrage. As they waited, they watched a Sherman tank take a hit and the crew bail out—not an inspiring scene. Then the barrage crashed into the German lines and the paratroopers took off, first walking, then running.

The paratroopers entered a town filled with burning buildings, destroyed vehicles, and dead bodies, some of which had been covered with civilian blankets. One replacement turned around and ran, only to be floored by a veteran who threatened him at gunpoint to resume his march.

Enemy artillery exploded in the main street and shook nearby trees. Men went down or leapt into doorways to escape the fire. One paratrooper jumped between two

THE CIVILIANS OF NOVILLE

When the American Army liberated Noville in September 1944, the civilians poured into the streets and cheered their liberators. They took pictures of themselves with the young Americans, never suspecting the Germans might return. But the Germans did, despite the American tankers, armored infantry, and paratroopers holding them at bay for two days.

While the battle raged across the streets of Noville, eight-year-old Andre Meurisse and his parents stayed at a nearby farmer's home. Whenever the shelling paused, the farmer ran out, milked his cows, and returned with a full pail. He eventually lined up five pails of milk, offering some to his guests. Suddenly, two Germans barged into the house. They each picked up a pail and drank as much milk as they could. Once they finished, they urinated into the rest of the pails and left.

It was different with the Americans. When an old man spotted paratroopers on patrol outside his house, he gathered up some bread and wine and brought it to them. The paratroopers, appreciating his gratitude, happily accepted his offering.

After the German 2nd Panzer Division finally entered Noville around noon on December 20, a German reprisal unit soon followed. They discovered the pictures of the locals with the Americans and rounded up 16 villagers they identified in the photos.

The next day, the Germans put them to work clearing American equipment and debris from the road. After they toiled for an hour in the cold, the Germans lined up the civilians and a German officer read eight names from a piece of paper. "These eight may go back home," he told them.

Author's Collection

Local Noville civilians and children gather with their American liberators in front of the village church. After the Germans retook Noville, they found photographs like this and used them to round up civilians, including a Catholic priest, and kill them.

The other eight, including a priest, were led with their hands behind their heads to a field where the Germans had dug three graves. The men were lined up before the graves and shot one by one, their bodies dropping into the graves.

Today, a simple monument stands in a park behind the Noville church. It contains the names of only eight civilians who paid the price for appreciating their liberation by the Americans.

National Archives

Some of Noville's burned-out buildings still stood after the battle. Maj. Robert Desobry set up his headquarters in the center house. It was there he and Lt. Col. LaPrade met their fate.

knocked-out jeeps and had to change direction in mid-air when he saw two of his dead comrades lying in front of him. Paratrooper scouts sprinted ahead of the main body until they reached two Sherman tanks across the main intersection firing on the Germans.

The scouts watched as the two tanks knocked out tank after enemy tank. The fire from both sides was so intense that they could see German tanks exploding but could not discern which Sherman had fired the shots. The scouts had to leave their prone viewing spot when one of the Shermans backed up and almost ran over them as it smashed into a house while maneuvering into a firing position, spinning its treads in the process. The other tank darted about, dodging German fire.

Inside the tanks, the tankers sweated despite the cold as they pushed their machines to the limit. "Those 10th Armored tankers worked so fast," commented one of the scouts, "that even we thought there must have been at least four tanks at the entrance to town and in the tree line."

As other paratroopers reached the northern edge of town, they sprinted for the ridges they could barely see. Despite their speed, they remained organized and under the control of their officers. "I've never seen anything like it," Desobry later admitted. They made it about halfway up the ridges when they ran into the Germans, who were commencing another attack. Caught in the open, the paratroopers made easy targets for the tanks.

Because of the blinding smoke, Desobry's supporting tankers offered scant fire for the exposed paratroopers. Oddly enough, the German tanks advanced alone. Their infantry was reluctant to charge after the blooding they had received at Desobry's hands earlier in the day.

Some A Company paratroopers charged forward and dove into a pigsty, where they paused and lit cigarettes. When an enemy tank edged over the ridge in front of them, they ran for the safety of a haystack, but German tank fire set it ablaze, forcing the men to crawl away.

When they tried running from the area, the panzer chased one paratrooper down a small road. The paratrooper ran all out as bullets kicked up sparks near his feet. He turned around, saw the main gun pointed right at him, and dove into a house where other paratroopers had taken refuge. They all escaped out the back door as the tank fired a round into the house, destroying it.

Some of the paratroopers never got started. Enemy fire pinned down part of A Company in the church cemetery. The men hugged the ground as tank rounds and artillery exploded around them.

East of Noville, the paratroopers of Company C met the same fate. Halted at the base of the ridge, the men retreated, dodging German fire as they went. One C Company paratrooper rounded a corner in the town, holding his own intestines in his arms. Two other paratroopers intercepted him and laid him down next to a

Bundesarchiv Bild 183-J28477; Photo: Göttert

German officers confer over a map during the initial days of the Ardennes campaign. The Americans in Noville managed to kill or wound most of the German armor's support infantry. Without infantry, the tanks continually pulled back.

raincoat. They let his intestines spill onto the raincoat, then cleaned the dirt out of them with canteen water before placing them back inside the man and bandaging his abdomen tightly. They quickly brought him to an aid station.

Desobry watched two Shermans duel with several panzers on the ridge "like a tennis match," he later said about his head pivoting back and forth, following the fire. A sergeant watching the exchange in his armored car called to Desobry, "Major, I can hit that son of a bitch! Your guys stink!" The sergeant then aimed his 37mm antitank gun at one of the panzers and fired. His round hit two fuel-filled Jerry cans on the tank's back deck. The fuel poured down onto the engine and exploded. The sergeant jumped up, clasped his hands together and shook them over his head like a victorious boxer.

German infantry eventually followed the armor into town, where men fought hand to hand in the blinding fog. Americans dodged German tanks from as close as 25 feet. "I could have spit on it," recalled a soldier, "if my mouth had not gone dry."

Desobry had to constantly order the north-south road cleared of damaged vehicles. Finally, he ordered a group of recovery vehicles to tow the damaged vehicles back to Bastogne.

A German tank headed into town and was near the church when a two-man armored infantry bazooka team blasted away from a house behind the church. Their first rocket hit the tank but did no damage. They reloaded, the loader patting the gunner's head when the bazooka was armed, and fired again. This rocket ricocheted off the turret without exploding.

The tank backed up a bit, the turret slowly spinning, searching for the Americans. The men then fired 11 rockets at the tank, but they all just plinked off. Sniper fire and a tank round exploding on the second floor of the house rained wood and brick on the two.

The tank's main gun started to lower. The bazooka team decided to fire one more round before escaping. The gunner fired a rocket into the small slit below where the main gun attached to the turret. The rocket exploded and the gun froze. They decided to fire once more to make sure the tank was dead but, just as the loader picked up another rocket, an explosion rocked the room and drove them both to the floor.

When they came to, they realized a tank destroyer had come up behind them and fired a shot into the enemy tank, turning it into scrap metal. Another TD pulled up and blasted another German tank.

So intense was the fighting that Airborne intelligence officers had to capture prisoners on their own for questioning—no one else was taking prisoners, especially after they had learned that the Germans had killed surrendering Americans. The paratroopers had been briefed before they left France about the Malmedy Massacre, where Germans killed 84 Americans after they surrendered at a Belgian crossroad.

Noville burned and the wounded screamed in the fog. The cries of horses and cows trapped in a burning barn added to the cacophony of sounds. The Germans had repulsed the Americans' single effort to drive them off, but they could not penetrate Noville and pulled back. The small, lightly armed force of almost two battalions had withstood the second German attack.

The Germans tried again, this time with a single tank leading the charge, followed by infantry. The paratroopers of Company A heard the German tank's approach, but since no one had a bazooka, let it pass. Then the infantry followed, firing blindly into the fog as the town's flames lit up their silhouettes.

As the enemy approached, the paratroopers stood up as one and poured fire into their ranks. The Americans fired rapidly, reloading as soon as they heard their ammunition clips pinging out of their M-1 rifles. Soon the German infantry retreated to their ridge.

The enemy tanks, however, remained and fired at anything and everything. Nearby explosions blasted paratroopers out of their foxholes. They rolled back in, only to be blasted out again. Men ran around in confusion. The wounded screamed as more dead littered the streets and sidewalks. But without their supporting infantry, and with the roads blocked by burning tanks, the German tanks pulled back, keeping the town under fire.

Desobry was overseeing the repulse of some flanking German armor when one of his soldiers told him that the paratroopers were pulling out. He raced back to his headquarters where LaPrade explained that Colonel Sink had ordered him back to Foy.

"I can't go back; I'm on orders to stay here," Desobry retorted. "I've lost a hell of a lot of my men. Won't you please stay with me?" LaPrade said, "I'll try," and called Sink, who agreed to let the paratroopers stay.

As the sky darkened, Colonel Joseph Harper from the 327th Glider Regiment arrived to assess the situation. Later, General Higgins joined LaPrade and Desobry. To help protect their headquarters and their high-ranking visitor, LaPrade blocked the north-facing window with an armoire.

Higgins placed LaPrade in charge since he outranked Desobry (the two had fought all day together without worrying about rank) and told them there would be no retreat. His parting words spoke to the dire situation: "Nobody's getting out of here alive."

Higgins departed, then Colonel Sink visited to check on his battalion. When he left, Desobry and LaPrade reviewed their plans for Noville's night defense. As they poured over a map, a recovery vehicle pulled up in front of their headquarters. An officer climbed out and went inside to report to Desobry that all damaged vehicles had been removed and that he and his unit would be returning to Bastogne.

On the ridges northwest of Noville, the Germans noticed this strange vehicle in front of the building and surmised the building must hold something important. A tanker fired two rounds at Desobry's headquarters. The shells tore through the armoire and exploded in the room. Both men were buried under a pile of debris. LaPrade was dead and Desobry had an eye ripped from its socket with deep cuts around his face and head.

Soldiers brought Desobry to the cellar where medics treated his wounds. He was then placed in an ambulance bound for Bastogne, where the dazed and concussed officer hoped to report to Colonel Roberts.

As the ambulance neared Foy, a German patrol halted it but let it go. It proceeded to Mande-St.-Etienne, where the 101st had set up a field hospital. A few hours later, the Germans overran the hospital and Desobry found himself in his ambulance heading east into Germany.

With the two leaders out of the fight, Major Robert Harwick, LaPrade's executive officer, and Major Charles Hustead, Desobry's deputy, took command of the combined force. Harwick had been late joining his battalion and, as he entered Noville, learned of LaPrade's death and his immediate promotion to commander of Noville's defenders. The two officers implemented the defense plan their superiors had agreed to.

Ass Harwick's arrived, the defenders received some reinforcements: a dozen M-18 Hellcats from Lt. Col. Clifford Templeton's 705th Tank Destroyer Battalion, which had reached Bastogne early that evening after pulling back from Germany. The tank destroyer crews were exhausted, but they brought much needed firepower to the beleaguered force.

A few hours into December 20, the German artillery pounded Noville. Structures not already burning shook from the terrible salvos. Soldiers and civilians crowded the cellars, waiting for the volleys to relent. Before dawn, the paratroopers left their

German soldiers advance along a raised road though Belgium's thick fog. The knocked-out American vehicles in the background are barely visible. Thick fog made fighting difficult for the Germans in Noville, while the Americans took advantage of it to hide their small numbers and eventually pull out of the village and head south.

National Archives

cover to prepare for the next attack. Through the fog they could see the burning vehicles and buildings as well as the dead Germans and Americans in the streets.

Major Harwick, the new commander, thought of home and wished he had a cup of coffee. His force was down to six Shermans and 21 TDs. Through the fog, however, he could see the toll the enemy had taken. "Those Krauts sure have a pot full," he wrote. "Tanks all over the place."

Enemy tanks came again, straight down the north/south road. A bazooka team fired at one from behind and it burst into flames. A Sherman tank took out another, firing at it straight down the east/west road. When the German commander climbed out of the hatch and tried to escape, a sergeant killed him with a BAR.

Another German tank rolled over a number of mines, exploding them without damaging the tank while it roared toward an airborne bazooka team in a house basement. The tank's first shot wounded some of the men, and other panzers soon joined. One of the bazooka team members climbed the stairs and shot the lead tank commander standing in the hatch. The tanks then retreated north under a heavy American artillery barrage.

Elsewhere, a German tank turned its turret on one of Team Desobry's company command posts, but before it could fire, the Sherman that had knocked out a tank firing straight down the road rotated to the right and fired three shots. None penetrated the tank, but the German driver reversed the tank and ran over a jeep which got stuck in the tank's treads, sending it out of control and into a half-track. The collision tipped the tank over and its crew escaped into the fog.

Another Sherman crew spotted a group of German soldiers approaching from a slight rise and opened fire. The crew exhausted their ammunition, burning out their .30-caliber machine-gun barrel, but all the Germans were either killed or retreated.

When the Sherman's bow gunner popped out of his hatch to replace the barrel, a German round almost tore off his arm, leaving it hanging by some flesh. He dropped off the tank but, just as he hit the ground, the fog lifted and a German tank fired a round that exploded in front of the vehicle. The wounded gunner took shrapnel but made it to the rear with the help of an Airborne medic.

One Airborne lieutenant pieced together a team of both paratroopers and armored infantry and led them out into the fog. They advanced stealthily until they spotted a German infantry squad. Quietly, the lieutenant had his men count off so they could each claim a German. Next, he ordered everyone to take a knee to steady their shots. Finally, he gave the order to fire. The men pulled their triggers, shots rang out, and the entire German squad went down. "The lieutenant made it look so easy," said one of the armored infantrymen, "it was like shooting fish in a barrel."

The German attack into Noville had been a ruse to cover a flanking attack to the east. When the fog lifted, the tank destroyer crews south of Noville could observe the flanking tanks and blasted them as quickly as possible. One TD crew knocked out five German tanks before their vehicle took a hit. A German tank rolled over a foxhole manned by two paratroopers and stopped. The men worried they would be buried alive but the tank soon moved on, and the paratroopers gunned down the followup infantry.

But ammunition was low, tanks were running out of armor-piercing shells, and the Germans were flanking Noville. Losses in the 1st Battalion opened gaps in the line. Noville's two makeshift hospitals were packed with casualties. Worse, neither Harwick nor Hustead could contact their commanders. Harwick sent a paratrooper in a jeep to tell his leaders that they could not hold out indefinitely but he never heard back. When he learned that one of the tankers received a radio message to fight their way south, he took this as permission to retreat to Foy.

In Bastogne, McAuliffe and Roberts decided to divert the Germans' attention at Noville by advancing on Foy with elements of both the 506th and 502nd Parachute Infantry Regiments; Noville's defenders would use this window to withdraw.

In Noville, Harwick and Hustead planned to load the wounded onto vehicles. An armored car, followed by four half-tracks and five Sherman tanks would lead the way, accompanied by Company C of the 506th. The rest of the vehicles, almost all carrying wounded, would follow. Lt. Col. LaPrade's body would also be taken to Bastogne. The rear guard consisted of a tank destroyer platoon.

When the last vehicle pulled out, engineers would set off explosives in the church steeple, denying it to German artillery spotters and hopefully blocking the road with debris.

At 1:15 PM, as the column organized, fog again descended on the area. It was the perfect cover. Vehicles pulled out of the town while artillery crashed around them. One of the armored infantrymen released their mascot pig into the woods to fend for itself.

Soon the column's lead tank broke down and paratroopers dropped some thermite grenades into it. Adding to the confusion, the lead vehicle took off, racing for Bastogne, while the rest of the column inched forward in the fog.

As the last vehicle left the burned-out husk of what was once a charming village, the engineers detonated the charges in the church, collapsing the steeple into the street.

At the head of the column, the lead vehicles neared Foy but were suddenly stopped. The armor plate above the front slit of a half-track's driver's shield slid down and the driver reached out to push it back up. The officer next to him thought the driver had been wounded so he yanked the hand brake. The vehicle screeched to a halt while the vehicle behind it rammed the half-track. Throughout the slow-moving column, vehicles collided with each other, creating a traffic jam.

Seeing this, the Germans opened fire. While the column prepared to resume, two Sherman tanks broke from the column and headed southeast through an open field to engage German machine gunners in a house outside of Foy. Once they had set it on fire, one tank backed away while the other pressed forward.

Both: National Archives

ABOVE: An American soldier surveys Noville's wrecked church. Twice, members of Team Desobry took the church's spire under fire, once to kill a sniper and again to collapse the tower in hopes the resulting debris would block the German advance. BELOW: The survivors of Team Desobry and the 506th Parachute Infantry Regiment pulled back near the village of Foy after two days of hard fighting. Colonel Sink shook hands with the men as they entered the American perimeter. The Germans soon took Foy and occupied it for more than a month.

From behind a row of trees near Foy, three German tanks opened fire on the advancing Sherman. There was a sharp explosion and the men in the column could see a bright orange glow through the fog. The Germans destroyed the other tank and began firing into the column.

With so many tankers killed or wounded, paratroopers began driving tanks or manning other tank positions. One of the Shermans made it into Foy but was hit. The crew scrambled out as one crewman grabbed the tank's Thompson machine gun and fired at several approaching Germans.

Some Americans dismounted their vehicles and fought their way into Foy, while a procession of tanks and vehicles followed. Some manned the line southwest of Foy, tying in with Lt. Col. Lloyd Patch's 3rd Battalion, 506th, while vehicles carrying the wounded continued streaming into Bastone. Greeting the exhausted, dirty soldiers as they reached safety was a single officer, shaking hands with the men along the road. It was Colonel Robert Sink, the 560th commander. The battle for Foy was over.

The cost of holding Noville had been heavy. Half of Team Desobry's 400 soldiers had been killed, wounded, or captured in two days of combat. It had lost four tank destroyers and 11 of its 15 tanks. LaPrade's 1st Battalion was also cut in half. Of the 473 paratroopers that rushed into Noville, 212 had been killed, wounded, or were missing. The battalion went into reserve for the next month.

But the Americans took a disproportionate toll on their enemy. They destroyed at least 30 German tanks and inflicted some 600 to 800 enemy casualties.

The Americans had scored victories in three directions. First, by putting up such a tough fight, Maj. Gen. Meinrad von Lauchert's superiors refused to let his 2nd Panzer Division attack Bastogne once he captured Noville.

Second, the tankers and paratroopers also gave the rest of the 101st Airborne precious time to deploy around Bastogne's perimeter. Finally, by holding Noville for as long as they did, the Americans delayed the 2nd Panzer from attacking westward to Antwerp by at least 48 hours, giving the rest of the Western Allies time to race reinforcements to block the German attack.

The hard-fought battle was a solid American victory, but it may not have happened if 26-year-old Major William Desobry, who wanted to withdraw from Noville, had not picked up a phone and waited for his commanding officer to give him options. □

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The heart of Dublin after a German air raid on May 30, 1941, that killed 30-40 persons. Why neutral, anti-British Ireland was targeted by the Luftwaffe in 1940 and 1941 remains a mystery.

The Swastika VS. The Shamrock

In 1940 and 1941, Germany sent its bombers to hit Ireland, but Hitler's motives remain unclear. BY JAMES BILDER

The south of Ireland, officially known as Eire and often referred to by many residing there as the "Free State," declared its neutrality when World War II erupted suddenly in September 1939. The Irish would remain neutral throughout the war but were universally viewed as far more sympathetic and helpful to the Allies than the Axis.

Despite their formal neutrality, the Irish experienced a number of aerial attacks from German planes in 1940 and 1941. The Germans insisted that any damage to Irish property or casualties among the Irish populace could not have been the result of German ordnance since there simply were not any German military planes flying in Ireland's airspace. They blamed British skullduggery for these attacks. According to the Nazis, it was Churchill and not Hitler who wanted to drag Ireland into war.

The ordnance and planes involved in these attacks would prove to be unmistakably German and, while it may be true that some of these incidents were in fact accidental, it appears more likely than not that Nazi Germany was both punishing and warning Ireland regarding its relationship with the Allies.

Neutrality was a difficult thing to maintain in World War II, especially for any nation in Europe. When the war began in September 1939, the Netherlands, Belgium, Luxembourg, Denmark, and Norway had all proclaimed their neutrality only to have the Germans quickly gobble them up the following spring. The Baltic States and Finland had done much the same, only to be forcibly occupied or invaded by the Soviet Union that same year or the next.

Sweden and Switzerland had both been neutral states since the Congress of Vienna in 1815, although both nations at least seemed to cooperate more with Germany than the Allies in the subsequent world wars.

Ireland was a different matter altogether. Ireland had Britain and the sea between her and any potential hostile powers like Nazi Germany or Communist Russia. It was no simple matter for a foreign power, save Britain, to invade Ireland, which was thought to be relatively safe from attack.

It was also fairly easy for Ireland to avoid any argument for entering the war. Ireland had no military alliances, strategic interests, colonial holdings, or financial ties that would force it into becoming a belligerent. So the Irish were officially neutral—even if that neutrality happened to favor the Allies. This was not an easy a task because English-Irish relations had, for centuries, been "strained," to say the least.

Ireland had been under British rule since the 1100s, but after the Protestant Reformation in the mid-1500s under Henry VIII the two nations were in a virtual and perpetual state of war. Formal laws denying basic civil rights to Catholics and Protes-

tant dissenters of English rule were passed in the early 1700s. This resulted in much bloodshed, including a failed Irish insurrection in 1798.

Irish-English relations remained strained in the early 20th century, but most Irish were supportive of Great Britain during World War I, with roughly 200,000 Irishmen serving in British ranks. These men were all volunteers, as Britain did not draft Irishmen even though Parliament passed a law in April 1918 authorizing them to do just that. Amongst this uneasy peace, the more militant Irish rose up in arms to defy British rule during the Easter Rebellion of 1916. The fighting was primarily in Dublin and was quelled by the British in less than a week.

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In January 1919, two months after the curtain came down on the Great War, Ireland moved to declare itself an independent state. The British responded with the infamous "Black and Tans"—an ill-clad group of mostly unemployed war veterans not unlike the German Freikorps (Free Corps), who were then busy putting down communist uprisings throughout post-World War I Germany. Both organizations could be absolutely ruthless in their reprisals against innocent civilians, and the horror stories understandably survive to the present day.

A partial solution was reached in December 1921 with the signing of the Anglo-Irish Treaty. It granted the 23 mostly Catholic counties in the south of Ireland independence in a year and let the nine mostly Protestant counties of the north vote to opt out of the treaty (which six did) in order to remain in the United Kingdom.

The German invasion of Poland on September 1, 1939, brought a declaration of war from the United Kingdom within 48 hours. That declaration of war was limited to the UK and did not involve other nations of the British Commonwealth. The UK's authority for war powers over its citizens included the Isle of Britain, England, Scotland, and Wales as well as, the six counties in Northern Ireland known as Ulster.

The south of Ireland (Eire) had been a "self-governing dominion" of the British Empire from 1922-1937. The Irish, acting under British authority, had drafted a new constitution in 1937 and passed it in a plebiscite, making them a fully independent state. The authority enabling the Irish Free State to draft a new constitution came from Britain's Statute of Westminster, passed in 1931.

On September 1, 1939, the Taoiseach (Prime Minister) of Ireland quickly convened an emergency session of the Dail (parliament) to deal with the crisis. The Taoiseach then was none other than Éamon de Valera, an American by birth who was brought by his uncle to Ireland at the tender age of two after his father died.

He had been part of the leadership involved in the 1916 Easter Rebellion and almost certainly was spared execution because he was an American by birth. The Brits in 1916 did not want to risk angering the large Irish-American population while they were courting America as a potential ally in the Great War.

De Valera was both an athlete and a scholar. He was something of an Irish version of Horatio Alger—a man who rose to prominence by picking himself up by his own bootstraps. He would be a powerful force in Irish politics from 1917 until his retirement in 1973 at the age of 90.

De Valera's supporters regarded him as a supreme diplomat. Whether dealing with the Brits or the Germans, they thought him a tough and wise negotiator who could secure an agreement beneficial to his people and avoid conflict in the process. His detractors regarded him as a "typical" politician—that is, noncommittal, evasive, and selfserving. Most of the Irish populace fell into the former category while U.S. President Franklin Roosevelt, David Gray (Roosevelt's envoy to Ireland), and Churchill fell into the latter.

When the war broke out de Valera and his government knew that Ireland was not only free from any obligation to provide military assistance to anyone, but was completely incapable of offering any. The Irish Army had only 7,500 men in its ranks. While undoubtedly courageous, it was far from being combat ready and was regarded by most observers as more ceremonial in nature and best suited for parades. The Irish Navy, moreover, consisted of a mere two motorized torpedo boats (they would have six by the end of 1940) used for coastal patrol.

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ABOVE: Irish Prime Minister Eamon de Valera feared a British invasion as much as a German one. LEFT: View of the navigator/gunner's position in a Heinkel He-111. The Luftwaffe used its high-tech weapons of the time—Heinkels, Donier D-17s, and Junkers Ju-88s—to bomb both Ireland and Northern Ireland. OPPOSITE: With the Republic of Ireland (Eire) remaining neutral during the war, a number of large signs, such as this one atop the Slieve Liag Cliffs, County Donegal, on the Atlantic coast, were created in hopes of alerting German aviators to the fact they were over Ireland and not Britain.

As for the Irish Air Corps, its combat capability consisted of four 1938 British Gloster Gladiators (biplanes), 16 twin-engine British Avro Ansons used for training and maritime reconnaissance (they could drop bombs, assuming the Irish had any), three Supermarine Amphibious Walruses (biplane boats) used for maritime recon, and three British Westland Lysanders, which could be used for land-based observation and reconnaissance or to shuttle a VIP or two.

As the British parliament was approving a declaration of war against Germany on September 3, 1939, the Irish Dail was busy passing the Emergency Powers Act. The Irish armed forces, sparse as they were, were now mobilized.

As prime minister, de Valera now had almost unchecked authority in regard to military matters and preparedness, but the Emergency Powers Act stopped short of granting him the authority to take the nation into war. He could, in effect, do whatever was necessary to protect Ireland from aggression, but the parliament made clear that the nation was neutral in the conflict and intended to remain as such. This was all fine with de Valera, who had long embraced these same sentiments.

De Valera wasn't limiting his worries about aggression against Ireland to just Germany. There was a real fear that the British would seize a neutral Eire and occupy it as a protectorate. The Brits would reason that if the Irish didn't have enough sense to throw in with Britain, then they could be forced to do so for their own good.

Any such anxiety on de Valera's part would soon prove to be justified. The irony cannot be lost that on the very day that Hitler's armies were storming into the neutral Netherlands, Luxembourg, and Belgium (May 10, 1940), the British Royal Marines were landing in neutral Iceland to take control of it.

Whatever Hitler and Churchill were thinking in regard to the Emerald Isle, de Valera's sentiments were clear to both sides: Ireland would fight to the last against any invader—Axis or Allied.

Just two weeks after the fall of France on June 25, 1940, the Brits began to feel the full wrath of Hitler's fury as the Battle of Britain commenced. Hitler's Operation Sea Lion called for an invasion and subsequent conquest of Great Britain in the fall of 1940. Before the Germans could hope to move their troops and vehicles across the English Channel they would need to subdue the mighty British Royal Navy, and the only way to do that would be to have control of the air. German control of the air could only be achieved by first wiping out the British Royal Air Force.

From early July until the end of October 1940, German bombers hit British cities, seaports, industry, air bases, and the all-important radar stations, which provided the only effective early warning of incoming enemy planes. Meanwhile, German fighters engaged their British counterparts in harrowing aerial dogfights over the Channel and Britain itself. The 3½ months of aerial combat did not wipe out the RAF or force Britain into submission, but it seemed to come awfully close.

The Irish people, and perhaps even their own government, may not have appreciated just how much intrigue was now

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A formation of Heinkel He-111 bombers. Those that attacked Eire flew from bases in France and Holland.

swirling around their tiny island. In August 1940, the German high command completed plans for an invasion of Ireland (Operation Green). It called for landing roughly 4,000 troops along an 85-mile stretch of the southern coast between Wexford and Dungarvan.

Even an element of the Irish Republican Army (IRA) was convinced that a German victory could end the British "toehold" of Northern Ireland and bring about a united nation. They had developed "Plan Kathleen" and sent it to German Intelligence with the hope that a joint effort between the two would allow each to obtain their primary objective.

German military leaders of all service branches knew these far-fetched plans could only be pulled off if Sea Lion were successful. Many regarded Operation Green as little more than a ruse designed to throw off Allied intelligence regarding Hitler's planned invasion of Russia.

Still, de Valera knew that while he had reason to be wary of the intentions of both sides, there was every common bond with Britain—especially when compared to Nazi Germany. First, there were between 40,000 and 50,000 Irishmen voluntarily serving in British ranks.

Second, de Valera had advocated as early as 1921 for coordination between Ireland and Britain in regard to their mutual defense. This coordination included Ireland availing its key ports to the British if such an extreme emergency arose. Much to Churchill's chagrin, de Valera refused to do so during World War II.

The ante was upped in May 1940 after Churchill became prime minister and France was under attack. Malcolm MacDonald, who had served as British Secretary of State for the colonies, was dispatched to Dublin to offer de Valera the six counties of Ireland in exchange for Ireland's entry into the war as an ally. The catch was that Ireland would be reunited after an Allied victory over Germany.

De Valera never seriously considered the offer. He doubted the Brits would honor the pledge and, even if they did, it would mean a new civil war for Ireland as the Catholic south would have to incorporate the Protestant north into a new nation. All one had to do was to look at what happened to Russia in 1919 to get an idea of where that prospect led. De Valera liked and respected MacDonald but dispatched him with a cheery goodbye.

The Irish cooperated extensively, although not formally, with the Brits throughout the war. They would avail a corridor of their airspace for British use, move decisively to crack down on German and German-leaning IRA espionage, keep the Brits informed of U-boat activity, allow Irishmen (not already serving in the Irish military) to join the British military, agree to return to the British any German prisoners who escaped from POW camps in the north and to black out coastal cities that were obviously being used as navigational points for German bombers headed toward Belfast. (The blackouts, however were normally limited to businesses and did not begin until April 1941.)

In August 1940, the Battle of Britain was at its height, and it seemed to many that Britain would fall. Perhaps for that reason the Germans felt they could afford to be more cavalier about possibly offending Irish neutrality. That month saw the first of several military incidents by the German Luftwaffe involving the Irish.

The Germans had maritime patrol bombers from Kampsgeschwader (KG) 40 attacking Allied merchant shipping along the northwest coast of Ireland. From bases in Trondheim, Norway, and Cognac, France, as well as Amsterdam, the German Focke-Wulf Fw-200 Condors flew their missions with near impunity.

On August 20, 1940, a condor from KG 40 was in the process of attacking a freighter (probably the SS *Macville*) off Blackround Island in County Mayo when it strafed an Irish lighthouse. When two fragmentation bombs dropped from the Condor failed to sink the ship, the German pilot probably swung around to pepper it with machine-gun fire.

In addition to whatever damage the bursts did to the ship, they also shot up some roof shingles and lantern panes on the lighthouse, but no one on the ground was hurt. This apparently did nothing more than raise some eyebrows. It was a mere six days later that something a lot more serious, and seemingly a lot more deliberate, happened.

Irish Lookout Posts (LOPs) in the southeastern part of the country reported at 1:40 PM that two planes, identified minutes later as German Heinkel He-111 bombers, had entered Irish airspace over County Wexford. They had come from over the Irish Sea and were flying relatively low at about 10,000 feet and heading in a northeasterly direc-

tion.

Twelve minutes after first being spotted by Irish Defense Force (IDF) observers, the planes circled over the town of Campile after having followed rail lines to their destination. It was a bright, sunny summer's day providing a clear view to the German pilots as well as to the civilians on the ground.

One plane came in at lower altitude and dropped four 1,000-pound bombs on Duncormick. A private home was damaged, and a railway viaduct was just missed, but no one was hurt. The second Heinkel would have a more lethal effect.

In clear view of numerous civilian witnesses, the second bomber came in near the ground before releasing a bundle of delayed-action bombs. The Campile Creamery was hit, and three young women employed there were killed.

The censors were able to keep the matter out of the news for the most part, but word still got out among the populace.

Some IRA members and other defenders of Germany said it was the RAF using captured German planes and bombs or the result of exhausted German pilots screwing up their navigation. The Heinkel crews would have had to be trained by Wrong Way Corrigan for anything like the latter to have been true. The Germans offered no explanation (what could they possibly say?) but paid £9,000 in compensation three years later.

Some incendiaries and high explosives fell in County Wicklow on October 25, but there were no casualties or serious damage to property. This could be attributed to a crew's "dumping" ordnance before returning home; bombers of that era did not normally return with anything left from a payload for numerous reasons: pride, fuel conservation, danger to flight crews on landing, and danger to ground personnel having to unload live ordnance. The ocean and open spaces on the ground were often the recipients of unused bombs.

There was also an incident at sea that same year in early December when the *Cambria,* a large Irish steamer that carried mail back and forth across the Irish Sea, was machine gunned by a German plane 20 minutes after leaving port. Like the bombing in Wicklow almost two months earlier, this too could be reasoned to be unintentional on the part of some German pilot.

The Germans seemed far more deliberate on December 20 when, at 7:26 PM, they dropped two small bombs on the Sandycove train station in Dublin County, injuring three people. A few minutes later and they would have hit a train just pulling into the station. Careful timing? Possibly, and if it was it was certainly the type of precision that the Nazis prided themselves on.

National Archives

Northern Ireland was not immune to attack. In the "Belfast Blitz," 55,000 houses were destroyed in four major German air raids, leaving 100,000 people homeless. Some 900 persons died and 1,500 were injured.

There were, however, three factors regarding this incident that make it difficult to attribute it to mere navigational error or ordnance dumping. First, the dropping of "Molotov chandeliers" had preceded the bombs. Molotov chandeliers (sometimes called "fairy lights" by the Irish) were navigational flares dropped to identify and clearly mark a target before releasing ordnance. Pilots as good as those in the Luftwaffe in late 1940 were hardly apt to make that kind of mistake.

Second, while there was a bombing attack against Liverpool that same night the distance from Liverpool to Dublin is 135 miles, which at cruising speed would take an He 111 roughly 25-30 additional minutes to cover. Any German pilots crossing over Britain and overshooting Liverpool would have noticed as they approached Dublin not only the extended flight time but that the city assigned as a target was not blacked out.

Third, and most important, de Valera had the previous day denied a demand from Berlin to increase its diplomatic staff in Dublin with four additional personnel. It was obvious to everyone that the primary purpose of the added German staff was espionage, and de Valera was not about to allow it.

This was an especially gutsy move on de Valera's part since in December 1940 Hitler and Stalin were still military allies. Nazi Germany was at the near zenith of its power and, between its allies and its conquests, had influence or direct control over almost everything from Spain eastward all the way into the Japanese Pacific. Despite this intimidating power, the Nazis eventually acquiesced to de Valera's firmness and relented on their demands for added diplomatic staff in Dublin.

German bombers appeared again over the south of Ireland on New Year's Day, 1941. In County Meath, three bombs fell on Julianstown and five on Duleek. Damage was minimal, and there were no casualties. Considering there were no potential

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Rescue workers dig through the rubble of Belfast's Egligton Street off the Shankill Road, May 7, 1941.

targets of importance anywhere near where the bombs fell, it could have been a case of ordnance dumping.

The action by German planes on the following day, however, appeared more deliberate and punitive in nature. At about 6 AM, in bitterly cold air and over snow-covered ground, German bombers appeared over County Dublin and dropped two bombs in Terenure, which pulverized a couple of homes and produced seven civilian casualties (none fatal). Another person was injured nearby when two bombs fell on a construction site.

Forty-five minutes later in County Carlow another German bomber dropped eight low-caliber bombs in a straight line with one hitting the farm home of the Shannon family in Knockroe. Sisters Mary Ellen and Bridgid, along with their 16-year-old niece Kathleen, were killed instantly as they slept. Two other family members were injured but survived.

Considering the Shannon farmhouse stood out among more than 40 acres of open farm fields and the pattern of attack used by the German pilot was exactly like that used during Blitz attacks on UK targets, it would be hard to chalk this up to navigational error or ordnance dumping.

Counties Wicklow, Kildare, and Wexford were also struck that same day with little or no damage to property and no casualties. It was also reported that the Germans parachuted two sea mines near Enniskerry in County Kildare. They were disarmed the following day without incident.

Witnesses said in all these instances that German insignia on the planes were clearly visible and that both the silhouette and engine sounds of the attackers were unmistakable. The attacking planes even followed the German procedure of briefly cutting their engines in order to glide in silently toward their targets before starting them up again and striking.

Dublin was hit yet again on January 3, 1941. This time it was on Donore along South Circular Road. A stick of 10 bombs was dropped that destroyed two homes and damaged 50 others (typical row housing of the era). Amazingly, this caused only 20 injuries and did not kill anyone. The area where most of the damage occurred was known as "Little Jerusalem" due to the sizable Jewish population that resided there.

Despite the statements of eyewitnesses and the fact that physical examination of spent ordnance all verified the attack as German in origin, the Nazis continued to deny any involvement. Others speculated that these incidents were the result of German pilots flying in the dark and mistaking the east coast of Ireland for the west coast of Britain.

Such explanations overlooked the fact that the Irish Sea provides some 45 to 50 miles of water separating the south of Ireland from the west of Britain (to the north, Belfast is some 30 miles closer to the British coast).

The German He 111 bombers had a ceiling of just of over 21,000 feet. Even if the planes were flying at maximum altitude, navigational charts, wide variance in distance, travel time, and the amount of fuel consumed would have allowed all but an occasional aircrew to avoid overshooting (or undershooting, if dispatched from Norway) their designated target.

The Germans did send their bombers out against Cardiff, Wales, on January 2 and 3, 1941, but Cardiff's distance to Dublin is 182 miles. Unlike Liverpool, which one could attempt to justify as something of a straight westerly run to Dublin (or vice

versa), Cardiff is well to the southeast of Dublin. How does a well-trained military pilot make that kind of error?

These realities coupled with the fact that the attackers were *not* experiencing things like British fighter planes in the sky, blackout conditions on the ground, search lights scanning the skies, roaring air-raid sirens, barrage balloons, and flak. They all should have given any German pilot a clue that he was not, in fact, over the west of Britain.

After the January bombings of 1941, things over Ireland quieted down for a few months, and all concerned welcomed the reprieve. Hitler had much bigger fish to fry. Realizing the Luftwaffe was unable to eradicate the RAF (the Germans lost almost 2,000 aircraft and the British just under 1,800), Hitler had abandoned Sea Lion back in mid-October 1940, and the Battle of Britain concluded a few weeks later having given the Germans their first real defeat of the war.

Hitler's Operation Barbarossa—the invasion of the Soviet Union—now consumed him. He reasoned that a quick victory in the East would allow him to return even stronger to face Britain with a new peace offer or a new plan of conquest.

Since the war began, Britain could look to Belfast's industry to make a real contribution to the war effort. Short & Harland Ltd. had tens of thousands working to produce military aircraft for the RAF, while another Belfast company, Harland and Wolff, had nearly double that number of workers producing warships in their yards for the Royal Navy.

German aerial reconnaissance at the end of November 1940 had confirmed just how poorly prepared Belfast was for attack by air. Despite this, Belfast still had something of a false sense of security. There was the thought that Britain would serve as a buffer between Ulster and Germany. There was also something in Eire's constitution of 1937 that made many think that a German attack on Belfast was unlikely, as it could jeopardize Ireland's neutrality.

Articles 2 and 3 of the 1937 constitution made reference to a single "national territory." It spoke of the "whole Island of Ireland, its Islands, and territorial seas." While this angered many Protestants in the north at the time of the constitution's ratification, now that the UK was at war, it provided some feeling of comfort to those in Ulster who hoped it might force the Nazis to refrain from hitting Belfast lest the "national territory" be attacked and Eire drawn into war. Both the Germans and de Valera's government regarded any such notions as fanciful.

A need to keep the world's attention focused on Western Europe, heavy wartime industry, poor defenses, and a mind-set still stuck in the "phony war" all made Belfast an ideal target to satisfy Hitler's aims. The subsequent air raids in the spring of 1941 would come to be known as the Belfast Blitz.

On the night of April 7, 1941, hundreds of German planes (bombers and fighter escorts) took off from their bases in the Netherlands to attack targets in Scotland. Their Scottish targets included Greenock, Clydeside, and Dumbarton, with secondary targets being Liverpool and Newcastle, located in England.

The pathfinders from Kampfgruppe 26 had taken off from their base near Sosterberg with the assignment of identifying and illuminating targets with their Molotov chandeliers and low-caliber incendiaries. When both the primary and secondary targets of KG-26 were thought inaccessible to them, as many as 15 planes were diverted and veered off to Belfast. This strike would allow the Germans to probe Belfast's defenses (the Germans would find those defenses to be sorely inadequate).

In what became known as the Dockside Raid, some six or seven German bombers attacked from an altitude of 7,000 feet, dropping more than 800 incendiary bombs on the city, primarily along the docks. The Harland and Wolff Shipyards and Pollock Dock were hit, as were several nearby homes and lumberyards, and a peripheral section of the Short aircraft factory.

Of the 13 fatalities that night, 12 were on the docks; two part-time firefighters were also among the dead. The only military death that night was a soldier whose anti-aircraft gun misfired, producing what turned out to be a fatal explosion on the ground. There was no doubt that the aerial defenses of Belfast were every bit as bad as the Germans had hoped—and the Brits and Irish had feared.

The lack of preparedness on Belfast's part apparently made it too inviting a target for the Germans to avoid. The next raid on the city took place on Tuesday, April 15, 1941. This time the Germans decided to make Belfast a primary target and hit a lot harder, sending out some 150-200 bombers.

The bombers took off from Luftwaffe bases in northern France and the Netherlands and included not only the Heinkel He-111s but also Dornier Do-17s and Junkers Ju-88s. The mission was code-named Etappe, which in German means stage or leg (as in a journey). Belfast would soon learn that this second strike was no probe.

The German planes neared Belfast at about 10:30 PM as air raid sirens blared incessantly. Within 10 minutes the bombers began their attack. The city was set ablaze as incendiary bombs rained down on those below. Belfast's firefighting abilities were quickly overwhelmed, and its ability to deliver emergency medical care rendered almost useless as some 900 people perished and another 1,500 were injured, 400 seriously. It was the largest number of deaths outside London of any night raid the Germans carried out during their Blitz on the United Kingdom.

The sole RAF squadron near Belfast was not equipped for night action and never scrambled its fighters, while only a third of the 22 antiaircraft guns defending Belfast briefly returned fire at the attacking enemy. Ironically, The antiaircraft gunners kept their fire limited since they expected British Spitfires to come to their aid at any moment. The Germans pounded the city for roughly five hours.

Belfast was ablaze and sent out an emergency call to Britain for assistance, but the beleaguered city would have to wait as

National Archives

additional firefighters and equipment had to be delivered from across the sea. In desperation, Belfast turned to Dublin for emergency aid. They had to contact them by telegraph as the bombings and subsequent fires had effectively eliminated the city's telephone service.

De Valera was reviewing the request with his advisers just after 5 AM and in less than an hour authorized Dublin's firefighters and their equipment to be sent north to aid their Irish brethren. There was never any doubt as to what de Valera would do. He regarded, at least in principle, all of Ireland as a single nation. How could he possibly deny his fellow countrymen in need?

Also, de Valera was a devout Catholic. Basic Christianity obligates one to help others in need and this alone would have been enough for de Valera, but in such a dire circumstance any Catholic willfully denying help to people in such mortal peril would, in a moral sense, have to consider themselves something of a murderer—certainly closer to murder than the German pilots who carried out a military mission. Most of de Valera's countrymen shared his sentiments and preferred to see their country's neutrality put at risk rather than turn their backs on their Protestant cousins.

De Valera even went to the length of authorizing the Great Northern Railway (GNR) to bring Belfast's newly homeless into Dublin, where they could take refuge. De Valera's public comments on the matter were clear and unequivocal. He even made them on Hitler's birthday (April 20) to effectively spit in the Führer's eye. "They [the Irish in Ulster] are our people, their sorrow is our sorrow," de Valera said. He added, "Any help we can give them will be given whole-heartedly!"

De Valera had no ulterior motive in helping the people of Belfast. His intention was really nothing beyond a desire to help fellow Irish in need, and perhaps for this reason both he and the Dublin firefighters were heaped with praise by the international press for their courage and selfless devotion to those in peril. Even the British press and politicians joined the chorus.

The jovial mood created by Irish cooperation in Belfast was soon tempered by one of the propaganda broadcasts from the infamous British traitor William Joyce, better known as Lord Haw-Haw. From the safety of his radio studio in Hamburg, Joyce broadcast a prediction that Dublin—Amiens Street Station in particular—would be a target of German bombs.

This was cause for concern as even the bombastic Joyce seemingly had his remarks reviewed by his Nazi overseers before making them on the air. Also, the station at Amiens Street was often crowded with women and children who were fleeing Belfast for the safety of Dublin.

The preference of safety over sorrow dominated the day as Dublin City Manager P.J. Hernon announced on April 22 that Dublin's businesses would now be required to go into blackout mode at night.

Dubliners heard German bombers overhead on May 4, but they flew out over the sea and continued on to their primary target—Liverpool. The next day Dubliners held their

breath again as German bombers flew overhead. This time they did not veer eastward to strike some target in Britain or Wales but continued to fly north over Ireland as they moved on Belfast.

This raid killed 150, and once again de Valera sent firefighters and their equipment north as he continued to welcome refugees fleeing south.

The Germans hit Belfast yet again on the night of May 5. Their bombing raids had effectively made half of Belfast's residents homeless. Like their counterparts in London, the citizens of Belfast had shown that they, too, could "take it."

The Irish in the south were looking forward to Whit (Pentecost) Weekend. It traditionally heralded the beginning of spring, new life, outdoor activity, and social activities of all kind. It had been three weeks since the last attack on Belfast, and it looked like the beleaguered city to the north might be spared further suffering.

It also looked to Dublin and its citizens that they had avoided any retribution from the Nazis for the assistance they had provided to Belfast during the air attacks. Little did they know what circumstance, or design, had in store for them.

Whit Weekend in 1941 began as midnight ushered in Saturday, May 31. No doubt countless people were looking forward to a few days of celebration and joy. It was just a couple of minutes after midnight when the sounds of German engines were heard above Dublin, and searchlights went on immediately to scan the skies. What the defense forces observed was baffling, to say the least.

National Archives

ABOVE: Two Dublin officials view damage in the North Strand, Dublin, May 31, 1941, and perhaps search for answers as to "why." OPPOSITE: Extensive wreckage in the North Strand, Dublin, after the May 31, 1941, raid that killed 34 civilians, wounded 90, and destroyed or damaged nearly 70 homes.

German planes were seemingly flying back and forth over the city—first flying north, presumably to strike Belfast, and then turning back south. Even stranger, the highly regimented Germans were breaking their normal tight-knit formations with some planes appearing almost scattered in the sky above. Something like this had occurred three days earlier, but nothing had come of it.

When the planes did not veer off by 12:20 AM, the Irish sent up three red flares ("flaming onions"), which was the established signal to let German planes know they were over neutral Ireland. Irish gunners manning antiaircraft batteries near Dublin (Dalkey, Ballyfremont, Collinstown, Clontarf, Stillorgan, and Ringsend) all stood at the ready. The batteries had minimal live-fire training due to the severe shortage of shells. Any firing would serve merely as a warning and absent any real intent to hit the bombers.

When the German planes had not dispersed by 12:35, the order was given to open fire. For reasons unknown to this day, the Irish gunners fired mostly heavy rather than lighter caliber shells. The German probably took this to be hostile rather than cautionary fire. The episode quickly became a form of public show and went on unabated for almost an hour.

The audience on the ground had grown bored and had started to disperse of their own accord when suddenly the whistle of a falling bomb scattered those remaining in the streets. It exploded on North Circular Road, causing homes to collapse, a fire to start, and power to fail. A second bomb, probably from the same plane, fell less than a minute later on Summerhill Parade with similar results.

A third bomb fell two minutes later into Phoenix Park, creating a hysterical reaction among the animals in the nearby zoo and enabling an elephant to temporarily escape. The bombing initially appeared to be just another bizarre incident of near misses, minor injuries, and limited excitement. Most of the bombers had departed, but some remained seeming to fly aimlessly about.

The bombers then turned north and left Dublin airspace presumably en route to some UK target. As the bombers continued on their way, the antiaircraft battery at Collinstown opened fire on them. One German bomber did an immediate 180 and headed back toward Dublin. He circled and buzzed the city and seemed to focus on the Amiens Station—the very thing that Lord Haw-Haw had announced would be targeted.

The Irish forces on the ground opened up with everything they had, including Hotchkiss machine guns. The pilot continued to circle and taunt those on the ground before swooping down and dropping a 450-pound landmine over North Strand. These bombs were among the most powerful and deadly of the era, being akin to today's bunker busters. The explosion was horrific and the damage incredible. Bodies and homes were simultaneously ripped apart as if made of paper.

Twenty-seven civilians of neutral Ireland were killed in the attack (an additional person died shortly after from wounds), with another 45 injured. The property damage included 25 obliterated homes and some 300 damaged to the point where they were uninhabitable.

The outrage was palpable. Churchill, Roosevelt, and Roosevelt's envoy to Ireland may have expected, if not hoped, that this would finally bring Eire into the war. The Germans were concerned that not only Ireland, but also the United States might now enter the war in response to angry Irish-American voters.

The General Patton Memorial Museum pays tribute to desert warriors.

THIRTY MILES EAST of Indio, California, is a special museum dedicated to General George S. Patton, Jr., who was responsible for determining the location of and establishing the Army's Desert Training Center in southern California and parts of Nevada and Arizona. He chose a vast area of high plateau desert which he felt mirrored the terrain characteristics of North Africa where it was determined that American troops likely would see combat before the European continent itself was invaded.

The General Patton Memorial Museum is built around the two-year desert warfare training experience but encompasses a great deal more which is expressed in literature as "A Military History Museum Honoring America's Veterans." Outside walls consisting of special bricks honoring participants in conflicts to include the world wars, Vietnam, and Korea frame the building's entrance and make a statement about the museum's inclusiveness.

The museum's general appeal for visitors therefore spreads to those interested in military exhibits extending from World War I to the present day. What makes the museum unique, however, is its coverage of the military activities that took part in the desert training area from its establishment in 1942 to its inactivation in 1944.

On February 5, 1942, the War Department approved the creation of a large area for specialized desert training, with the implication that conditions would be harsh to reflect those which might be found in North Africa. As noted, Patton then surveyed parts of southeast California and western Arizona for suitable sites that would offer the terrain and weather conditions necessary in which to conduct appropriate training.

M4 Sherman medium tank on display in tank park.

Statue of General Patton and his bull terrier Willie in front of the museum.

In *Before the Colors Fade,* by Fred Ayer, Jr., a Patton nephew, described those conditions under which Patton wanted to train his men to fight effectively. Ayer described the temperature in summer as reaching 120 degrees Fahrenheit, with a brutal sun bearing down on the troops and no trees present to provide shade.

The dust from blinding storms also made it uncomfortable for the troops, and flash floods roared out of the mountains through deep gullies, posing a serious danger to unwary soldiers. Snakes and scorpions were in abundance. Boots and sleeping bags had to be closely examined for the scorpions before being occupied, while trips to the latrines at night held the danger of rattlesnake encounters.

Patton was only present in the area for four months before he went off to prepare for the November 1942 invasion of Morocco. But during his time at the training center, Patton drove himself relentlessly, sharing the hardships with his men. But, according to Ayer, the men came out "tough, dehydrated and leanly stripped of all excess flesh. They were as nearly ready combat-trained as is possi-

Panel of photos showing activities in training area.

ble for troops who have not yet been fired upon in anger."

Standing outside the air-conditioned museum building is a large statue of General Patton and his dog Willie. In a way, the size of the statue characterizes the vastness of Patton's undertaking in choosing and laying out the training area; for almost as far as one can see from the museum it is endless and monotonous terrain.

To begin one's visit, there is a 45-minute film which is an excellent introduction to the exhibits. The film gives context to what little is generally known about the activities that took place at the site in the early stages of the United States' participation in World War II. The presentation helps the visitor understand the importance of the desert training area, the development of the center, and the conditions under which the troops trained. Soldiers training there, for example, were allocated only one canteen of water a day, which was certainly less than what today's troops fighting in similar conditions are allotted.

A wide range of exhibits beckon. One of the more unique is the piano which was donated for entertainment at the Camp Coxcomb officer's club by Patton's wife, Beatrice. Outside, the tank park has vehicles from World War II to Desert Storm, including an M4 Sherman. Wall tablets and panels display memorabilia and photos that explain different aspects of training and camp life. Two rooms are dedicated to Medal of Honor recipients and the World War II Holocaust. The gift shop offers a plethora of armored vehicle models and books on military subjects.

Although the focus of the museum is on the DTC, the displays are not limited to training in the area, which began in the spring of 1942. In addition to the DTC focus, weapons and equipment from the various wars are displayed inside. A sign at the entrance to the park warns of rattlesnakes and reminds visitors of the desert environment which soldiers training in that environment encountered.

While General Patton's stay at the DTC was short, the museum named for him perpetuates the efforts he made to train soldiers to fight in the desert, and beyond. For anyone with an interest in World War II and Patton, a visit to the museum is an enlightening one.

The museum is readily accessible from the highway and its presence is a welcome stop at Chiriaco Summit for anyone traveling east on Interstate 10 from the town of Indio.

When one sees the statue of General Patton and Willie beckoning from Interstate 10, one is compelled to stop and visit the museum bearing the general's name.

GENERAL PATTON MEMORIAL MUSEUM
Interstate 10, Exit # 173
(Chiriaco Summit Exit) California
(760) 227-3483
www.generalpattonmuseum.com
Hours: Open 7 days a week - 9:30 AM - 4:30 PM
Admission: By donation. Active-duty military enter free.

Ireland

Continued from page 95

dead on June 5; de Valera himself was in attendance. Grieving for the victims took up the entire first week of June, during which time the town of Arklow in County Wicklow was bombed (June 2). There were no injuries or serious property damage, so this incident was largely ignored.

Protests regarding the May 31 attack were sent from Dublin to Berlin; the Germans responded that it was "absurd" to think that Dublin had intentionally been targeted. (In 1958 the West German government used money from their Marshall Plan Aid to pay £327,000 in compensation to Eire.)

Ireland remained neutral throughout the war, although there was one final German attack on Irish soil. On July 4, 1941, the port city of Dundalk in County Louth was bombed. There were no casualties, and Hitler's invasion of Russia the previous month took his attention away from the Emerald Isle seemingly for good.

Churchill expected Eire to enter the war after the attack on Pearl Harbor. "Now," he cabled de Valera, "it's now or never." De Valera chose never. The Whit bombing had drained any iota of bloodlust that may have existed in Ireland. Any Irish wanting to fight that badly could join the British ranks. Many Irish did, including some who deserted from their own ranks to do so.

Both the Germans and Brits suspected each other of obtaining the use of the ports on Ireland's west coast. The Brits feared that the Germans were being allowed to refuel U-boats there while the Germans suspected that the Royal Navy was doing the same with its surface ships. The fears and suspicions were groundless as Ireland denied both Axis and Allied forces use of the ports.

The Irish and British Isles are often covered in fog. That fog gives them an aura of intrigue and mystery. In regard to the truth, whether or not the bombings were deliberate, it too will probably remain intriguing and forever a mystery shrouded in the fog of war. □

Wisherd

Continued from page 53

into the plane and strap them in litters. Others could walk okay but needed some assistance. In other camps—maybe the actual POW camps—the guys were in good shape. All of the prisoners were pretty darn happy to be free.

After the war ended, I returned to the States. Even though I had liked the job I had—I loved being an airplane mechanic and I loved flying with the pilots—I thought that I had had enough. I was discharged on September 16, 1945, as a Tech Sergeant with a base pay of $135 per month, plus flight pay.

When I think back to my time in the European Theater, I sometimes remember the many close friends who died. We all made close friends, we lost some of them, but we had to keep going. We had an important job to do, and with the next day came the next mission. Our ground forces were counting on us to deliver the supplies they needed, and we all worked together to defeat Adolf Hitler and Nazi Germany.

Now, we have the time to remember our friends, who made the ultimate sacrifice for our country. They should never be forgotten.

When we landed the C-46 for the last time on July 20, 1945, I walked away, determined to never fly again. Seeing my buddies shot out of the sky, and praying with every mission that our C-47, our *Ruca,* would safely return to the airfield, was still too vivid in my mind. That day, however, I didn't realize that my fascination with flight was still very much alive.

After the war, Wisherd became a school bus mechanic but, despite his stated desire to never fly again, he found that he missed aviation. He got his civilian pilot's license, maintained and flew private planes, served as a flight instructor, became the operator of the Rusk County Airport in northwest Wisconsin, and started the Lake Flambeau Flying Service. This article was adapted from his memoir, Clear the Prop, *published in 2018 by Cable Publishing.* □

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