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USMC Ret. Master Gunnery Sergeant Bob Verell takes a moment to honor those commemorated on the replica Vietnam Memorial Wall.
Photo by Thomas Wells

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TABLE OF CONTENTS

WWII QUARTERLY

Features

Departments

Cover: German Junkers Ju 87 Stuka dive bomber aircraft hunt for targets over the Soviet Union. See story page 88. Photo: Bundesarchiv Bild 1011-631-3749-35A; Photo: W. Wanderer.

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In Case You Missed It—More WWII in the News

JFK's "other" PT boat found–in New York!

With the contentious 2020 election finally behind us, it's time to remember a war hero and previous president—John Fitzgerald Kennedy.

Everyone recalls his PT-109, which was rammed and sunk by a Japanese destroyer in the Solomon Islands on the night of August 1, 1943. After he and his crew were rescued, he was given command of another torpedo boat, PT-59.

A New York Times article said that, with PT-59, "[JFK] attacked Japanese barges and shore batteries, and rescued 10 stranded Marines in the northern Solomon Islands, one of whom died in Kennedy's bunk."

Recently, that second boat was pulled by a crane from the mud and muck of North Cove, along the Manhattan side of the Harlem River. Sold as surplus after the war, the craft was operated as a charter fishing boat during the 1950s.

PT-59 was purchased for $1,000 in 1970 by Redmond Burke, a retired English professor, and became the houseboat on which he lived for five years. In the mid-1970s, Burke let the leaky craft sink rather than spending the money to repair it.

Before he abandoned it, though, Burke wrote down the hull number—274398—that was carved into the boat's main beam and took it to a U.S. Coast Guard office in New York. There he learned that it was the PT-59; he learned later that JFK had been its skipper.

Plans for the badly deteriorated, now-recovered craft are still uncertain, but two possible locations are the Kennedy Presidential Library and Museum in Boston and the Battleship Cove Maritime Museum in Fall River, Massachusetts.

UXB in Poland explodes while being defused

In October 2020, a 12,000-lb. "Tallboy" bomb exploded while being defused in a Baltic Sea shipping canal near the Polish port city of Swinoujscie, possessed by Germany before and during the war and formerly named *Swinemünde*.

About 750 residents were evacuated while the defusing operation took place. Luckily, no Polish Navy divers who had been working to neutralize the bomb were injured, and no damage was reported.

The British RAF used the expensive Tallboys exclusively against high-value strategic targets that could not be destroyed by other means.

UXB damages Regensburg

The previous year, another unexploded bomb was discovered during construction in the southern German city of Regensburg. The 550-lb. bomb could not safely be transported or defused, so experts decided to detonate it in situ using a bomb-disposal robot. Some 4,500 people within a one-mile radius were evacuated, and the explosion damaged several buildings.

British and American air forces bombed Regensburg repeatedly during the war, and many of the bombs failed to detonate upon imact, posing a continuing challenge to life in the city.

Chuck Yeager dies

Chuck Yeager, World War II fighter ace and the first person to break the sound barrier (in 1947), died at age 97 on the 79th anniversary of Pearl Harbor. Brig. Gen. Yeager shot down 13 German aircraft; he also flew combat missions in Vietnam. Yeager was one of the featured personalities in the book and movie *The Right Stuff*.

Even 75 years after the end of the war, the after-effects of World War II are still in the news.

— Flint Whitlock, Editor
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Weird Herb Shocks Doctors With Relief of Leg and Feet Pain, Burning, Tingling, Numbness

6 clinical studies show it is effective. Lost but now re-discovered. Thousands of new users report amazing relief from leg and feet problems in just 30 to 90 days – with no side effects. Available in all 50 states without a prescription.

A re-discovery from the 1600s is causing a frenzy within the medical system. A weird herb has been shown in six clinical studies (and by thousands of users) to be very effective for leg and feet pain, burning and numbness – with no side effects – at low cost – and with no doctor visit or prescription needed.

This weird herb comes from a 12-foot tall tree that grows in Greece and other countries in Europe. In the old days, people noticed that when their horses who had leg and feet problems ate this herb – it was almost like magic how quickly their problems got much better. They called it the "horse herb". Then somehow with Europe's ongoing wars, this herbal secret got lost in time.

"It works for people who've tried many other treatments before with little or no success. Other doctors and I are shocked at how effective it is. It has created a lot of excitement" says Dr. Ryan Shelton, M.D.

Its active ingredient has been put into pill form and improved. It is being offered in the United States under the brand name Neuroflo.

WHY ALL THIS EXCITEMENT?

Researchers have found an herb originally from Greece that has been shown in six placebo-controlled medical studies (543 participants) to be effective and safe. This natural compound strengthens blood vessel walls and reduces swelling to stop the pain and suffering.

Poor blood flow in the legs and feet is one of the common problems that develops as we age. Millions of Americans suffer from neuropathy and chronic venous insufficiency (CVI), edema, and other leg/feet problems – millions have these but are undiagnosed.

Today's treatments don't work for a high percentage of people – and they have side effects that make them hard to tolerate or that people do not want to risk. This includes prescription drugs, over the counter pain pills, surgery and compression.

Already popular in Europe, this natural herb is taking America by storm since it was announced last week.

HOW IT WORKS

Here's why you have pain now: Your arteries have weakened. Your arteries can't carry enough blood, nutrients and oxygen down to your legs and feet. This damages your nerves and causes your burning, tingling and numbness.

The herbs in the pill Neuroflo strengthen your arteries that carry blood, nutrients and oxygen to your feet and legs. It improves your circulation so oxygenated blood goes to the nerves and repairs them. This makes your nerves grow stronger so your pain fades away and your legs and feet feel much younger again.

Until now, scientists could not combine these herbs into one pill without losing their full potency, but finally, they have succeeded.

Katerina King from Murrieta, California says, "I had hands and feet tingling and snapping and burning feeling. It made my life very uncomfortable. I had a hard time walking, my legs felt like they each weighed 50 pounds. Once I got in my car and my feet felt so heavy I couldn't even drive the car. With Neuroflo I have no more tingling, cold or burning painful legs and feet. It went away."

WHAT DOCTORS ARE SAYING

"Now I finally have a natural solution I can recommend to my patients who suffer from leg and feet problems and pain. I'm delighted because previous treatments were not effective, but Neuroflo has worked for every one of my patients with no side effects" says Dr. Eric Wood, N.D.

Dr. Ryan Shelton, M.D. says "This is new and different. It works for people who've tried many other things before. It is natural with no side effects. Don't give up hope for your leg and feet pain, burning, tingling and numbing. This pill is working for countless people after other treatments have failed them. I highly recommend it."

"Neuroflo is a terrific choice for people with leg and feet issues. The clinical trials in support of this herb show it is very effective for safe and fast relief," said Dr. Wood, a Harvard trained doctor who has appeared on award winning TV shows.

RE-DISCOVERED LEG AND FEET PROBLEM SOLUTION: *In Greece in the 1600s, this herb was originally called "horse herb" because it was fed to horses with ailing legs. It has now been re-discovered and is giving soothing comfort to Americans who have leg and feet pain, burning, tingling and numbness.*

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The German Type 166 Schwimmwagen was one of the most versatile military vehicles ever built.

In the spring of 1940, as the German armed forces were sweeping across Western Europe, famed automobile designer Dr. Ferdinand Porsche, creator of the Volkswagen or "People's Car," was asked by the high command to build an all-purpose vehicle for the coming campaign against the Soviet Union.

In April 1941, as the Balkan campaigns got under way, the Waffen SS asked Porsche's son, heir, and namesake, Dr. Ferry Porsche, to design a similar car. The result was the Kubelwagen, or bucket car, and a derivative of that design was an amphibious version called the Schwimmwagen, or swimming car. A total of 150 four-wheel-drive amphibians were manufactured for tests and trial runs.

The VW Kubelwagen and Schwimmwagen had very few parts in common but shared the same rear-mounted engine, an air-cooled flat four. The four-wheel-drive assembly, however, was special, as was its truly unique feature, a retractable water propeller at the rear of the small vehicle's frame.

The bodywork of the waterborne Kubelwagen was a true single-welded, sheet-steel hull, more like a boat than an automobile, and reinforced with cross-members. As the car floated very low in the water, there were no doors to open or close, and one simply climbed in and out to enter or exit the vehicle.

Between 1942 and 1944, a total of 14,276 Schwimmwagens were built, serving on both the Eastern and Western Fronts. After the war, the car got a new lease on life in Europe as a recreational vehicle favored by duck hunters in swamps and marshes.

The Schwimmwagen had a top speed of 50 miles per hour on land and six miles per hour in the water. It had an air-cooled overhead valve, flat-four cylinder engine with a displacement of 1,131cc, and a rating of

An advance patrol of the Panzer Grenadier Division "Grossdeutschland" takes to the road in a versatile Schwimmwagen (swimming car). The vehicle was ideal for on-road, off-road, and amphibious use.

Bundesarchiv Bild 183-J28132; Photo: Ernst Schwahn

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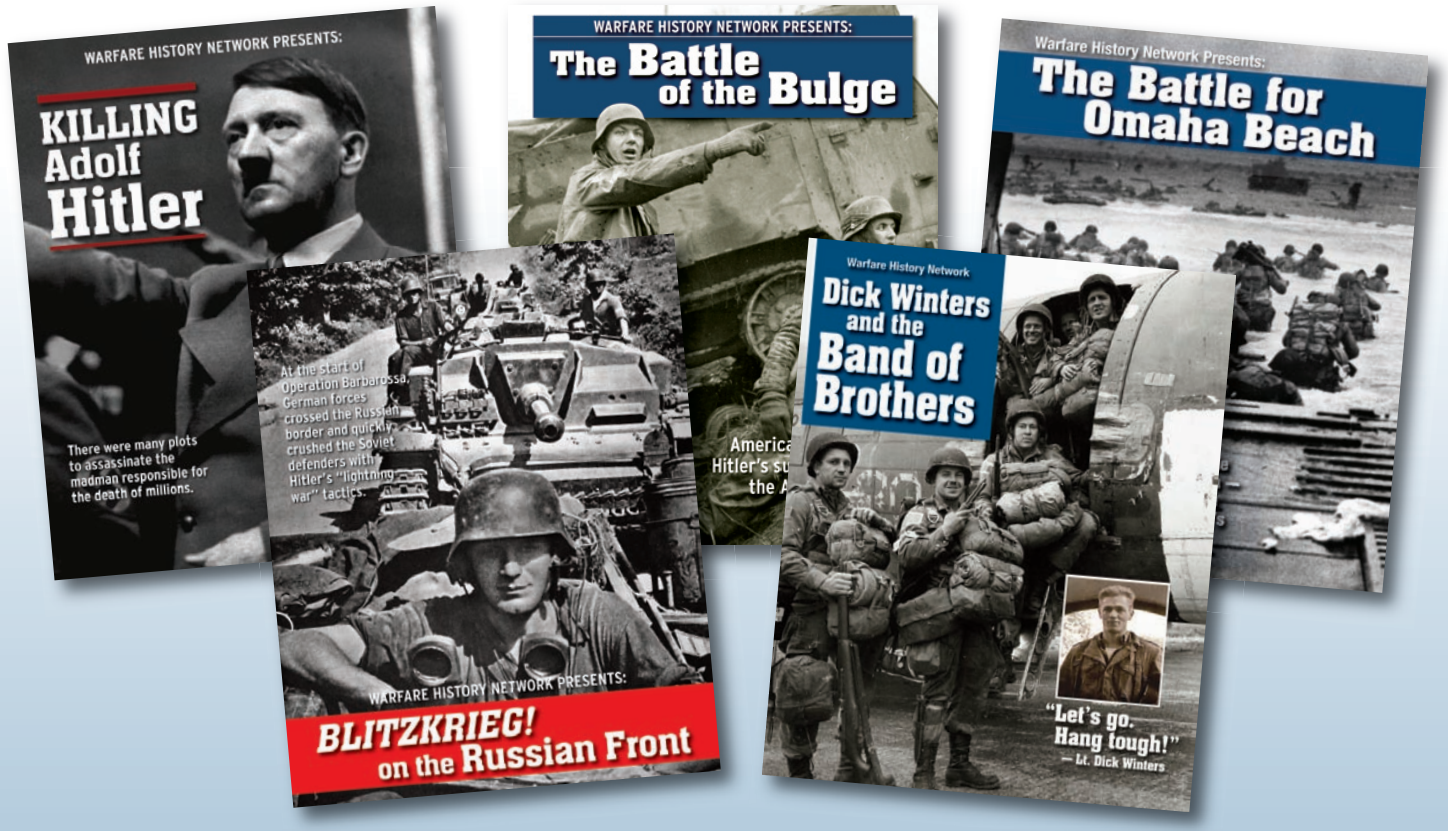

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ABOVE: Adolf Hilter (right) and Heinrich Himmler (next to him) inspect a Schwimmwagen at the Führer's Wolf's Lair headquarters in East Prussia duing the summer of 1942. The man in civilian clothes is Dr. Ferry Porsche, the vehicle's inventor and the son of Ferdinand Porsche, creator of the VW "Beetle" and several panzer models. BELOW: A Type 166 Schwimmwagen, shown outfitted with paddles in the event of engine failure in the water. The vehicle replaced the motorcycles in many units.

25 horsepower. It also had a four-speed transmission and a hinged, triple-bladed propeller and four-wheel brakes, plus a seamless pressed-steel monococque hull, built to keep out water.

It initially had competitors, but in the end the Schwimmer beat them to become the sole amphibious vehicle of both the German Army and the Waffen SS. Its closest competitor had been designer Hannes Trippel's Type 2SG, of which a thousand were built before all amphibian production was halted in 1944.

The Porsche Design Bureau's Type 128 Kubelwagen, the prototype Schwimmer, appeared in 1940, and 30 units were built and delivered to the Army the following year for testing. Its boat-shaped body rested on the standard VW chassis frame. After receiving the go-ahead from Maj. Gen. Hans Juttner's SS Leadership Office, the Type 128 was improved as the Type 166, and it was this model that entered mass production in 1942.

The Schwimmwagen was designed not only as a waterborne vehicle, but also as a replacement for the motorcycle scout vehicles that had proven their worth in Western campaigns. The motorcycles had been introduced to replace horse cavalry. Ironically, despite the motorcycle, the horse would make a belated comeback in the

Signal

A Schwimmwagen tows a line of rubber rafts across a rain-swollen river. The amphibious vehicle allowed advance parties greater range of operation.

East for the simple fact that it was better suited for off-road terrain.

The Type 166 production model Schwimmwagen had a wheelbase 40 cm shorter and a width 10 cm smaller than that of the earlier Type 128. The 1,130 cm engine was the same as that of the 1943 Kubel, with a water draft of 77 cm. Besides the Waffen SS, other users of the handy vehicles were the regular German Army pioneer (engineer) battalions, Reich Marshal Hermann Göring's Luftwaffe field divisions, and the elite parachute forces of Luftwaffe General Kurt Student.

Alamy

On September 21, 1940, the first box-like Schwimmwagen model appeared, looking very much like the Kubel Type 87, with doors welded shut. Decades after the war (from 1973 to 1976), a variant of this car reappeared in both the United States and Mexico as the Volkswagen "Thing."

The Type 128 Schwimmer also had the Kubel Type 87 power plant, but with front-axle and front-wheel drive, a locking differential, super watertight front wheel bearings, and front axle carrier screws encased in rubber rings. The speedometer cable was passed through a watertight body with rubber sleeves and metal protective caps. It also had twin three-leaf spring bars.

The Type 128 Schwimmer transmission was also different, with easier assembly rear axle drive shafts, half-shaft crown wheel double sealing, rear axle bonding to the main body by sleeves, spring bars, and different rear shock absorber attachment and sealing. The brake cables were packed with grease and also made watertight, but

National Archives

Bundesarchiv Bild 101I-256-1228-10; Photo: Micheljack

TOP: The Schwimmwagen's propeller is clearly visible in this photo of the vehicle belonging to the 101st SS Panzer Division driving through a French village in the summer of 1944. ABOVE: A motorized column of the 1st SS Panzer Division "Leibstandarte SS Adolf Hitler," led by two Schwimmwagens, parades down the Champs Elysees in Paris, July 29, 1942.

there were no lubricating nipples.

On November 1, 1940, the prototype Schwimmwagen was ready to be tested by the Army Weapons Office. The rigorous trials, on the Autobahn, secondary roads, cross-country, and in the water transport role for which it was primarily designed, lasted until December 6.

The Type 128 VW Schwimmer used six liters of fuel per hour while in the water. In December 1940, the Wehrmacht authorized the building of 100 more vehicles, and the Drauz Company, later joined by Ambi-Budd, was commissioned to build the bodywork. More tests were conducted during the spring of 1941, before and during Operation Barbarossa on the Eastern Front. Waterborne runs were also made by the Instructional Department of the Wehrmacht at Wunzdorf Lake in Germany. Again, the new Schwimmers passed their tests.

A final Alpine trial of a trio of Type 128s occurred during August 1941, as the Germans were winning resounding victories in the East against the reeling Red Army. The mountain tests encompassed a total of 2,580 kilometers. The official report stated, "Driving mountain paths in the high mountains under difficult conditions, as at the Kitzbuhler Horn, or under the very worst conditions at the Rudnicker Alm near Watsching, sometimes muddy, rocky, very narrow and steep, demonstrated to us as never before the Type 128's extraordinary off-road capability when driven sensibly. We drove on paths that had never before seen a motor vehicle, and the total weight always amounted to almost half a ton.

"The vehicle's water capability did not fall short after its great off-road test runs, as it performed faultlessly in rivers at a higher speed than that of the other [competitor] vehicle." On February 18, 1942, both the 128 and 129 were discontinued in favor of the improved Type 166, which was promulgated the following April.

The first Type 166 was tested at the Max Eyth Reservoir outside Stuttgart in March 1942, with acceptance by the High Command of the Army (OKW) Weapons Office given on May 29. On June 6, 1942, exactly two years before D-day in Normandy, the initial batch of completed Type 166 models rolled off the assembly lines. During July 1942, snow testing was conducted on Grossglockner Mountain. By the end of 1942, Wehrmacht and SS units in the field began receiving their trusty little Schwimmers.

So seaworthy was the vehicle that a committee of the Weapons Bureau seriously tried to get Dr. Porsche to equip it with a green light to starboard and a red one to port to conform to international navigation rules.

For protective armament, the Schwimmwagen had an MG-34 machine gun mounted on a swivel. On the right-hand side of the hull's interior, four magazines were placed for easy access by the gunner.

According to Dr. Ferry Porsche, writing in his 1976 memoir, *We at Porsche*, "This machine [the Type 166] could carry four people and differed from its predecessor, the Type 128, not only in size but in detail. It carried much less equipment … an anchor and similar equipment usually found in Navy craft were considered unnecessary … Its prime purpose was for officers of advance units to move across

country, ford rivers and carry out reconnaissance by water. In fact, officers used some of them as platforms for duck shooting!

"Our experience with the Type 166 amphibian during the Russian campaign was incredibly good. This compact machine had no trouble using the same terrain as tanks! I can speak with some satisfaction, as I was responsible for all Kubelwagen production—both land and amphibian types—from 1939 until disaster overtook us in 1945 ....

"By August [of 1941], the first prototype was ready for testing. I was asked to bring this car to Hitler's headquarters for a demonstration, and he appeared to be pleased.... He took a long time inspecting the vehicle and asked the most detailed questions ... 'I would like you, by the way, to think over one serious problem. It concerns our soldiers in the East. They constantly have to fight off swarms of mosquitoes as well as the Russians. Couldn't you devise some kind of mosquito net for this car that would give them protection while in transit?' Hitler asked.

"At precisely that moment, one of the generals present, who was standing right beside Hitler, was bitten by a mosquito on the cheek. With amazing speed, Hitler struck out and slapped the mosquito dead. Immediately the blood it had been sucking began to run down the general's face. Hitler thought this very funny. 'Look!' he said. 'The first German general to shed blood during this war!'"

The officially designated Light Personnel Car (Kfz 1/20) Type 166 had a wheelbase of 2,000 mm, was 3,825 mm long, had an overall height of 1,615 mm, a width of 1,480 mm, tread centers of 2,000 mm, a net weight of 890 kg, a ground clearance of 265 mm, a 24-horsepower engine, a piston displacement of 985/1, (131 cc in later models), and a fuel tank capacity of 50 liters.

In addition, the vehicle had a five-speed gearbox with two self-locking differentials and mechanical brakes plus independent suspension with torsion bars. The tire size was 5.25-16 or 200-12.

The question arises as to how the propeller system actually worked. The vehicle could take a flying leap into the water.

National Archives

Muddy, rocky paths, as shown here on the Eastern Front, were no problem for the rugged Schwimmwagen, which handled difficult terrain with ease.

Once there, the propeller was engaged to the drive shaft after having been lowered beneath the surface, and the boat-like vehicle glided serenely to the far shore. Upon arrival, the propeller was disengaged from the drive shaft and hauled manually from the water. The four-wheel drive was then reengaged, and the vehicle drove itself out of the water once its front wheels touched solid ground. The vehicle's rudder action was directed by turning the wheels to the right or left.

In a very real sense, the Schwimmwagen was a boat on wheels that also rolled on land, with a high-mounted exhaust system to the rear and a crude air intake grille behind the cockpit. According to author Keith Seume in *VW Beetle*, "The large engine access panel was designed to help prevent water from getting into the engine bay. The simple top folded down out of the way, but offered little protection when raised. Rudimentary mudguards offered similarly minimal protection.... This is regarded as one of the most versatile military vehicles ever built."

The final word on this remarkable wartime vehicle is provided by American author Walter Henry Nelson in his superb 1965 work *Small Wonder: The Amazing Story of the Volkswagen*. The British Army captured the VW works at Wolfsburg in 1945, and especially liked the Schwimmer. "They would hold games in which they would run it off wharves into the Mittelland Canal at 40 mph, hitting the water with a great splash and then driving the cars up and down the canal," wrote Nelson.

The French wanted to seize some of the factory's essential butt-welding machinery, but the British decided to deter them from this goal in a rather unique way. They put their near-drunk guests in Schwimmers and drove them along the canal, then swerved suddenly off the embankment and into the water, flying out over the surface at top speed and then landing smack down into the water.

One officer later recalled, "We gave the French quite a wild ride in the water, too, and then the bilge tank plug just happened to come out; our vehicle just happened to sink!" □

Blaine Taylor is the author of several books on World War II, including Volkswagen Civil and Military Vehicles of the Third Reich. *He resides in Towson, Maryland.*

A leading Jewish-American is speaking out. **He sees a war against Christians in court and the media.**

"Dark Agenda: The War to Destroy Christian America," is David Horowitz's extraordinary look into the left's calculated efforts to create a godless, heathen American society.

Horowitz argues that even Jews – and anyone who believes in God – will be in danger if Christians are not protected.

Now Horowitz is warning that the new Biden-Harris administration poses dangers for Christians.

Horowitz is a *New York Times* bestselling author and leading conservative thinker.

Horowitz argues that Judeo-Christian values are at the very root of America's democracy and success. Kill off such values and all of our freedoms could perish. Everybody could be in danger.

He warns that Obama's anti-Christian and anti-religious agenda will be resurrected by a Biden-Harris administration.

In "**Dark Agenda**," Horowitz reveals:

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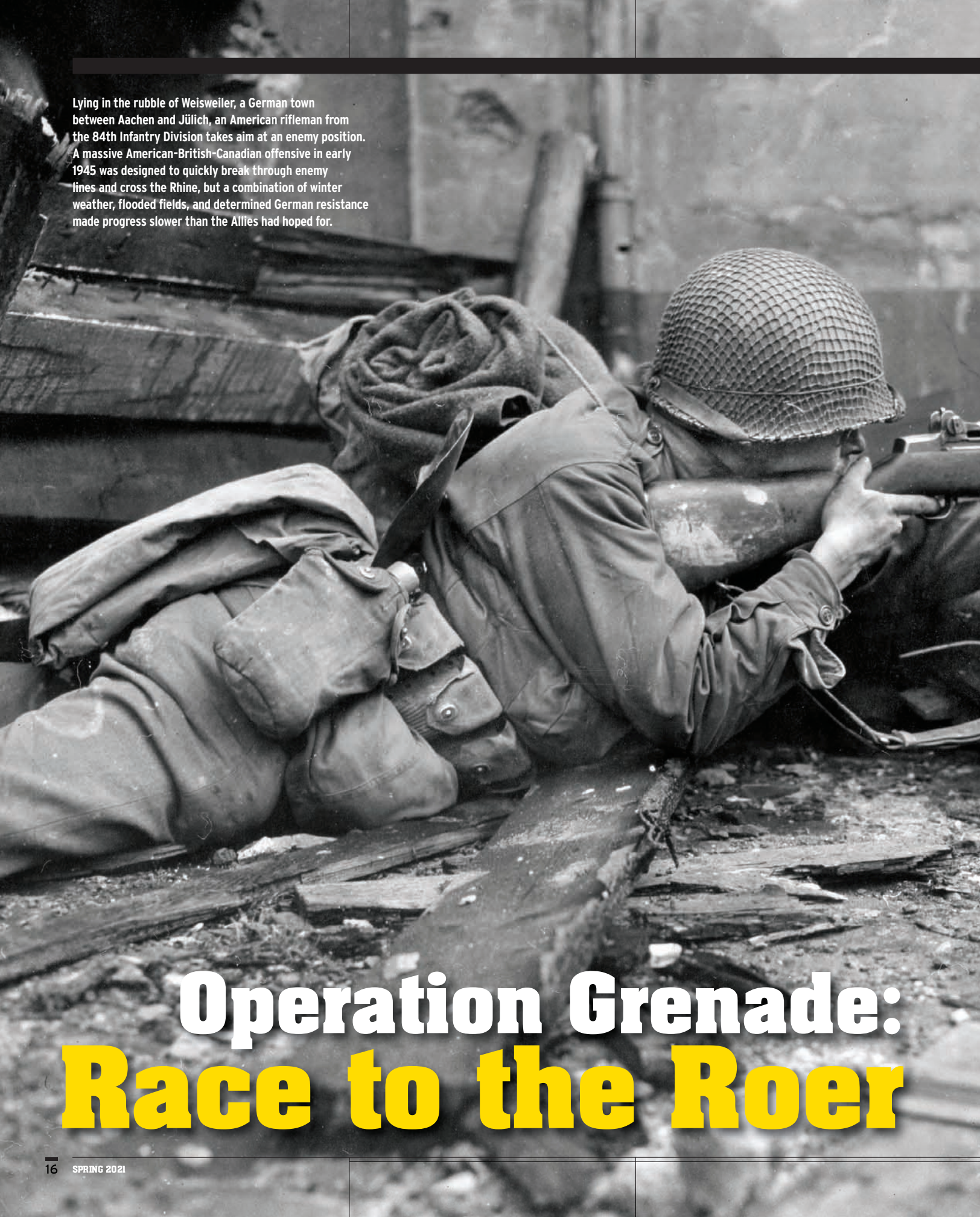


Lying in the rubble of Weisweiler, a German town between Aachen and Jülich, an American rifleman from the 84th Infantry Division takes aim at an enemy position. A massive American-British-Canadian offensive in early 1945 was designed to quickly break through enemy lines and cross the Rhine, but a combination of winter weather, flooded fields, and determined German resistance made progress slower than the Allies had hoped for.

Operation Grenade: Race to the Roer

In two weeks of furious fighting in February and March 1945, the Ninth U.S. Army bulldozed its way over the Roer River on its drive to the Rhine.

BY ALLYN VANNOY

In early 1945, while the American First Army was focusing on the dams of the Roer River near the German-Belgium border and Patton's Third Army was probing the Eifel and clearing the Saar-Moselle triangle, the First Canadian Army was about to open their offensive as part of Operation Veritable in a drive southeast up the left bank of the Rhine from the vicinity of Nijmegen. A few days later, the Ninth U.S. Army, from positions along the Roer River northeast of Aachen, was to launch Operation Grenade, an assault across the Roer followed by a drive to the Rhine.

The Ninth Army became operational on September 5, 1944, under Lt. Gen. William H. Simpson, West Point class of 1909. The Ninth had seen considerable fighting in the Brittany Peninsula in September and in the drive from the German border to the Roer River in November and early December. It was positioned on the right flank of Field Marshal Bernard Montgomery's 21st Army Group, just to the north of Lt. Gen. Courtney Hodges's First Army.

During the December fighting in the Ardennes, the Ninth responded by doubling its frontage to 40 miles and switching to a defensive posture. By mid-January 1945, as the Battle of the Bulge was nearing an end, the Ninth Army returned to its former frontage near Aachen and prepared for offensive operations.

Supreme Allied Commander General Dwight Eisenhower concluded in February 1945: "One more great campaign, aggressively conducted on a broad front, would give the death-blow to Hitler's Germany." In order to deliver that death blow, Ike declared, "Before attempting any operations east of the Rhine, it was essential to destroy the main enemy armies west of the river."

For his part, Hitler was also thinking about the Rhine and had decided on a tenacious defense west of Germany's

All photos: National Archives

greatest river, with no withdrawal allowed behind it.

The broad-front advance was to be conducted by a succession of blows, from Strasbourg on the upper Rhine to Nijmegen on the lower. The first blow would be Montgomery's Operation Veritable, intended to break through the heavily fortified Reichswald—Imperial Forest—along the German border. After that, the First Canadian Army would drive to the Rhine and then turn south, clearing the west bank and then linking up with Ninth Army as it drove northeast from Aachen.

Simpson's offensive, Operation Grenade, was intended to be launched simultaneously with Operation Veritable. Ninth Army was to assault over the north-flowing Roer River—though threatened by the enemy's control of a series of dams upriver—drive across the Cologne Plain to the Rhine and link up with British and Canadian forces. It was hoped that substantial German forces would be pocketed by this envelopment before they could escape across the Rhine.

The U.S. 29th and 102nd Infantry Divisions had occupied positions along the Roer since December. As a result, American commanders realized that the river presented more than the usual problems for crossing operations because the Germans controlled the seven dams at the headwaters of the Roer and its tributaries.

German destruction of the dams could cause disastrous flooding throughout the Roer River Valley with catastrophic results for any operations in progress—bridges washed away, positions inundated, troop concentrations isolated. The Allied command concluded that an attack over the Roer would only be possible after they had seized control of the dams or had blown them up and let the floodwaters subside.

Under normal conditions, the Roer averaged about 90 to 125 feet in width and was fordable at a number of points. While its current was fairly rapid at its upper reaches, it slowed near Aachen and even more along Ninth Army's front near its confluence with the Meuse River at the Dutch town of Roermond.

ABOVE: U.S. Ninth Army Commanding General William Simpson, right, photographed with Field Marshals Alan Brook and Bernard Montgomery, along with British Prime Minister Winston Churchill among the anti-tank obstacles known as "dragon's teeth" along Germany's "Siegfried Line." OPPOSITE: Three Sherman tanks of the African American 784th Tank Battalion line up on a road outside a village before going into action, December 1943. The 784th supported the 35th Infantry Division during Operation Grenade and helped to capture several towns in late February 1945.

The Ninth Army's engineers estimated that a combination of spring thaws and destruction of the Roer dams would convert the river into a lake as much as a mile-and-a-half wide. Even after the waters had subsided, the Roer valley would be soft and marshy, impassable to vehicles operating off the roads. The planners selected crossing sites at the narrowest points of the river, mostly at the locations of destroyed bridges.

Captured documents indicated that the Germans recognized the destructive potential that the Roer River dams represented. It was clear that the Germans would fight stubbornly to retain control of the dams in an effort to deter Allied operations throughout the river valley.

The Germans had two options for flooding the Roer. First, they could destroy the Schwammenauel and Urfttalsperre dams, creating a flash flood throughout the valley. An engineering study by the Americans indicated that the short but high-level flood would last about eight hours, inundating the valley to 15 feet above the usual level. The engineers determined that operations should not commence until at least five days after the flood was unleashed.

The second option the Germans might employ was to destroy the outlet valves while keeping the dams intact. This would cause the velocity of the river to rise while also raising the river's level by four or five feet. Also, some parts of the river would widen by as much as 1,200 feet. The engineers estimated that it would take at least 12 days for the river to return to normal in this case.

In an effort to remove the dams from the equation, Allied bombers were ordered to hit them during the first two weeks of December. The raids, however, proved unsuccessful. It became clear that the Germans would either be left with their options, or the Ninth Army would have to make a direct ground assault to secure the dams.

During October 1944, Lt. Gen. Omar Bradley had ordered First Army to fight its way to the area of the dams. In early November, V Corps' 28th Infantry Division had fought itself out in the Hürtgen Forest, incurring more than 6,000 casualties in six days of fight-

ing. Though fighting continued in the Hürtgen through November, another effort to take the dams was not made until December 13. This effort, by the 2nd Infantry Division, was barely underway when the Germans launched their Ardennes offensive.

The final attack to take the Schwammenauel and Urfttalsperre dams was ordered as Operation Grenade was about to get underway. The 78th Infantry Division, supported by the 7th Armored Division, was able to capture the Urfttalsperre dam on February 8, but they found the dam's outlet valves had already been blown. On February 9, the Schwammenauel dam was attacked and captured, but again the valves had been destroyed.

Meanwhile, the water level along the lower Roer rose steadily, washing out some smaller dams. The river's velocity and width increased markedly. As a result, Operation Grenade was postponed.

General Simpson believed that once the Roer dams situation was resolved, his army would be in the best position of any of the Allied armies along the West Front to penetrate the German defenses and reach the Rhine.

In attacking across the Roer River and advancing northeastward to the Rhine, the Ninth Army was to drive across the Cologne Plain—flat, open country traversed by an extensive network of hard-surfaced roads, the plain stretching from the highlands of the Eifel to the lowlands of northern Germany and the Netherlands. The only natural obstacles were two forests and two rivers—the Roer and the Erft.

The larger of the forests was in the north. Beginning on the east bank of the Roer opposite Heinsberg, it extended northward some 20 miles to the Dutch border near Venlo. This obstacle prompted Ninth Army's planners to forego Roer crossings in that sector.

The other wooded area was the Hambach Forest, east and southeast of the river town of Jülich. When it became apparent that Simpson's Ninth Army needed a broader base for attack, the northwestern third of the Hambach was assigned to it.

As the Roer was the line of departure, so the Erft guided the northeasterly direction of the main attack. Cutting diagonally across the Cologne Plain, the Erft splits the 25-mile distance between the Roer and the Rhine almost in half. It enters the Rhine at Neuss, opposite Düsseldorf. Neither the Erft nor the Erft Canal, which parallels the river for much of its course, were major military obstacles, but a boggy valley floor up to a thousand yards wide turned the waterway into a good natural defense line.

The Ninth Army contained 15 divisions in four corps, including the VII Corps, attached from First Army—giving the Ninth a strength of some 375,000 men. Of the divisions, only the 8th Armored Division was new to combat; the 29th Division had been in action since the D-Day landings in Normandy.

Simpson's divisions were deployed along a 40-mile front. The northern quarter was considered unsuitable for offensive crossing operations. In the south, 10 miles east of Aachen, the VII Corps (Maj. Gen. J. Lawton Collins) manned positions along the Roer near the towns of Birkesdorf and Düren. Two of the corps' four divisions were to make the initial crossing with the 3rd Armored Division held in reserve.

Opposite the VII Corps was the German

Three Massachusetts soldiers of the 417th Regiment, 75th Infantry Division, clean their weapons as they prepare to move up to the front line near Echternach, Luxembourg, February 8, 1945.

LVIII Panzer Corps. To the left of VII Corps, opposite Jülich, was the XIX Corps (Maj. Gen. Raymond McLain), with the 29th and 30th Infantry Divisions and the 2nd Armored Division facing the German LXXXI Corps.

To the north of XIX Corps was XIII Corps (Maj. Gen. Alvan Gillem) near the town of Linnich, with the 84th Infantry, 102nd Infantry, and 5th Armored Divisions. On the north end of the line was the XVI Corps (Maj. Gen. John B. Anderson), consisting of the 8th Armored, 35th Infantry, and 79th Infantry Divisions, facing the German XII SS Corps. Simpson retained the 95th Infantry Division as a reserve.

In direct support of Ninth Army was the XXIX Tactical Air Command (TAC) under Brig. Gen. Richard E. Nugent, employing five groups of fighter-bombers—375 planes.

In mid-February an intensive bombing campaign targeted bridges, railways, and communications centers using aircraft of the XXIX TAC, along with the heavy bombers of the US Eighth Air Force and RAF Bomber Command.

For ground fire support, Operation Grenade had 130 battalions of field artillery and tank destroyers with more than 2,000 guns.

Facing Ninth Army was German General Gustav Adolf von Zangen's Fifteenth Army with only 30,000 troops and virtually no armor and little artillery.

With overwhelming superiority in numbers and firepower, the Americans looked for a quick crossing of the Roer and a breakthrough of the German lines followed by a rapid exploitation into the enemy rear.

The Fifteenth Army's three corps possessed six battered volksgrenadier divisions. Occupying the area near Düren was LVIII Panzer Corps (General der Panzertruppen Walter Krueger), with a volksgrenadier division and an infantry division bolstered by a volksartillery corps.

In the center of the line was the LXXXI Corps (General der Infanterie Friedrich Koechling), near Jülich, with two infantry divisions supported by a volksartillery corps. The north end of the line was held by XII SS Corps (Generalleutnant Edward Crasemann), with two infantry divisions. To the north of Fifteenth Army, along the Meuse River, were two volksgrenadier divisions—the 180th and 190th of the First Fallschirmjäger Army.

Von Zangen lacked reserves as all available troops were put into the line. Army Group B, the parent formation of Fifteenth Army, directed that mobile formations be placed behind the front. These included five panzer divisions—the 9th, 11th, 116th, 10th SS,

and Panzer Lehr. However, most of them were committed to the Reichswald. As a result, when Ninth Army was ready to jump off, only the weak 9th and 11th Panzer Divisions remained on the Cologne Plain.

Despite the disparity of forces, von Zangen vigorously prepared for the defense of the Rhineland by creating a number of fortified lines throughout the plain.

ABOVE: With their helmets painted white to blend with the patchy February snow, men of the 2nd Infantry Division move past a ruined church in Harperschied, Germany. BELOW: Its hull and turret painted in a dazzle camouflage pattern, a German Panther tank moves through concrete "dragon's teeth" on its way to the Rhineland front along the Westwall.

The Germans had constructed three belts of anti-tank obstacles, minefields, and field fortifications, providing protection for the industrial centers on the Cologne Plain at Rheydt, München-Gladbach, and Neuss. But the Americans recognized that these defensive belts were likely not to be fully manned and assumed that the Germans would try to use the many villages and towns as strongpoints.

For their part, the Germans recognized the defensive potential of the Roer River positions and believed that marshy terrain would channel the enemy's attack. Defenses were organized around terrain features as the construction of a continuous line was not possible.

Allied intelligence estimated that the Luftwaffe could field some 400 fighters and fight-er-bombers along the front, including as many as 75 jets. Realizing the possible vulnerability of bridges across the Roer to German aircraft, Ninth Army's anti-aircraft units were directed to be vigilant.

Simpson's plan was for the VII Corps to attack directly to the east, secure the Ninth Army's right flank while crossing the Erft River, and capture Cologne if possible. The XIX and XIII Corps, after crossing the Roer, were to pivot to the north, striking towards München-Gladbach and Neuss, and link up with Montgomery's troops near Gelden. The XVI Corps was to join the offensive on the third day in an effort to clear elements of the First Fallschirmjäger Army from the Meuse River valley.

Due to the destruction of the outlet valves of the Roer River dams, the American jump-off had to be postponed; American engineers recommended that the attack be delayed a week. Simpson concluded that an attack launched on either February 17 or 18 could still achieve surprise but would face difficult conditions. An attack delayed until February 24 or 25 would not be hindered by flooded terrain but would allow the Germans additional time to prepare their defenses.

Upstream from Düren, where the river's banks are relatively high, the worst effect of the flood was to increase the current sharply, at some points to more than 10

miles an hour. Down-stream, along most of its length, the Roer poured over its banks and inundated the valley. Just north of Linnich, where the river is normally 25 to 30 yards wide, it spread into a lake more than a mile wide.

As a result, General Simpson set D-day for February 23—nearly a two-week delay, one day before the reservoirs presumably would be drained—still hoping to achieve some measure of surprise.

The objective of the first phase of operations was to place the Ninth Army east of Linnich with the army's right flank anchored on the Erft River. Since this involved a wheel to the north, McLain's XIX Corps, on the outer rim would make the longest advance, while the First Army's VII Corps protected Ninth Army's right flank by establishing a bridgehead around Düren, clearing the Hambach Forest, and then gaining the Erft near the town of Elsdorf.

In the second phase, Ninth Army was to extend its bridgehead north and northwest, with the main task falling to Gillem's XIII Corps. By taking the road center of Erkelenz and clearing the east bank of the Roer to a point west of Erkelenz, XIII Corps was to open the way for an unopposed crossing of the river by General Anderson's XVI Corps.

Given slackening resistance and firm footing for tanks, Simpson intended to quickly envelope München-Gladbach from the south and east, then drive on to the Rhine. Should the armor be roadbound or meet stubborn enemy resistance, the two corps on the left were to make the main effort, rolling up the enemy fortifications as far north as Venlo and clearing the forest area lying between Rörmond and München-Gladbach.

At 2:45 AM on February 23, over 1,000 guns and mortars of all calibers of the Ninth Army commenced a 45-minute barrage. Rather than a barrage of lengthy duration, precise concentrations were focused on strongpoints, headquarters, and supply points.

Following the barrage, six infantry divisions sent assault battalions across the

ABOVE: With the Germans opening floodgates and inundating the countryside, troops of the 120th Regiment, 30th Infantry Division ("Old Hickory"), cross a footbridge over the swollen Roer River, February 23, 1945. BELOW: Flooding near the town of Jülich, Germany, slowed the Amercan advance eastward. Here men of the 29th Infantry Division, part of Simpson's Ninth Army, wade through frigid water, February 24, 1945.

Roer. Each battalion carried five days' supply of rations and gasoline against the possibility that bridging might be delayed or knocked out.

The assault troops used a combination of small boats, cable ferries, amphibious tractors (LVTs) and motor-driven double-boat ferries to cross the Roer. A platoon of engineers and 16 boats were assigned to each company of infantry. The boats were able to

carry 10 men at a time as well as three engineers—who manned the boats and made the return trip.

In addition, 500 C–47 transport planes loaded with enough supplies to maintain one division in combat for one day were on call.

In order to shield the attacking infantry and bridging engineers, smoke would be employed using 4.2-inch chemical mortars firing phosphorus shells, smoke generators, or smoke pots.

Two regiments of the 102nd Infantry Division (Maj. Gen. Frank A. Keating), upstream from Linnich, led the assault in the darkness.

The struggle to throw bridges across the river was discouraging. The first footbridge wasn't completed for the 405th Infantry until almost daylight; German artillery promptly knocked it out. Another was put in about the same time for the 407th Infantry, but enemy shelling was too intense for its use.

After midday, engineers were able to open a footbridge and a support bridge. By noon, signs of an impending counterattack had begun to develop. At about 9 PM, Keating ordered every 57mm anti-tank gun in his division to cross the river.

Two miles upstream, the swollen river proved as big an obstacle for McLain's XIX Corps as were the Germans. The 29th Infantry Division (Maj. Gen. Charles H. Gerhardt) was to cross around Jülich. North of Jülich, no bridges were to be built for the 115th Infantry due to floodwater, requiring the use of assault boats and LVTs.

Three miles upstream from Jülich, the 30th Infantry Division (Maj. Gen. Leland Hobbs) faced the most forbidding stretch of water. A patrol of the 119th Infantry crossed the river near the village of Schophoven an hour before the artillery preparation. With the patrol providing a screen, engineers began work on a footbridge as the American shelling began. A battalion of infantry then started crossing in assault boats. When a footbridge was emplaced, the rest of the regiment raced across.

Combat engineers drag flat-bottomed assault boats toward the banks of the Roer River near Linnich, Germany, February 23, 1945, during the opening phase of Operation Grenade. The 84th Infantry Division made the crossing despite days of rain, boggy ground, and stiff enemy resistance.

The 120th Infantry, upstream, had no such success, as the current was too swift for assault boats. Plans were made for cable ferries, but the current proved too swift even for that; only 30 men reached the east bank. An anchor cable had been secured for a footbridge just before the artillery preparation began, but German artillery fire cut the cable. A second cable snapped, and a mortar shell cut a third. A fourth held long enough for engineers to construct 50 feet of bridge before the current snapped the cable and the bridge buckled.

The engineers tried once more, and the cable stayed; but the coming of daylight brought increased German shelling. It was nightfall before a footbridge was in place. The regiment resorted to LVTs to get the bulk of two companies across, with the rest of the regiment crossing on a footbridge of the 119th Infantry.

Opposite Linnich, the 84th Infantry Division (Maj. Gen. Alexander R. Bolling) had the good fortune to strike astride a German corps boundary. The 334th Infantry's 1st Battalion hit the extreme north flank of the 59th Infantry Division of Koechling's LXXXI Corps, taking the Germans by surprise and occupying the village of Körrenzig before daylight.

The battalion turned north, clearing enough of the east bank for the XVI Corps to cross unopposed. The battalion then began to roll up the flank the 183rd Infantry Division of Crasemann's XII SS Corps. By nightfall the battalion was approaching the crossroads at the village of Baal, three miles from their crossing site, while the 335th Infantry moved to seal the 334th's flank to the east.

As night was approaching, the Germans were able to muster counterattacks at Baal. A battalion of the German 183rd Division, supported by panzers and assault guns, drove south out of Baal at the same time the 334th Infantry was trying to break into the village. Artillery and P-47 Thunderbolts of the XXIX TAC broke up the enemy thrust. Another attack, conducted by three understrength German battalions, struck just before midnight. Fighting was intense, but by morning small-arms and artillery fire had driven the Germans off.

The day's strongest German counteraction developed to the south against the 102nd Division. Despite that, the 407th

With most of the bridges destroyed by the retreating enemy, Ninth Army troops in assault boats paddle their way across the fast-flowing Roer River near Goch, in the Reichswald.

Infantry was able to take the village of Gevenich, seizing 160 prisoners. The 405th Infantry entered Tetz, southernmost of the day's objectives, against little opposition; but it was midafternoon before the regimental commander, Colonel Laurin L. Williams, could send a force northeast to seize the villages of Boslar, two miles from the Roer, and Hompesch. The 405th Infantry had gotten no farther than Boslar when darkness came.

The tactic for dealing with an enemy bridgehead was to launch a vigorous counterattack, but most of the German mobile reserves had been directed north to deal with Operation Veritable.

As Ninth Army's attack had emerged during the morning of February 23, Army Group B commander, Field Marshal Walter Model, placed his reserves, the 9th and 11th Panzer Divisions, at the disposal of Fifteenth Army. General von Zangen also attached elements of the 59th and 363rd Infantry Divisions to Koechling's LXXXI Corps.

Koechling directed an infantry battalion from each division to counterattack, with the support of remnants of two panzer battalions and an understrength assault-gun brigade. The 59th Division was to strike toward Gevenich, the 363rd Infantry Division toward Boslar and Tetz.

General Keating, 102nd Division, reacted to the counterattack on his front by ordering his reserve, the 406th Infantry, into position south and east of Tetz. The 405th and 406th Infantry Regiments formed a defensive arc from the high ground between Gevenich and Boslar, through Boslar, to the river south of Tetz. The 407th Infantry continued to hold Gevenich.

The defenders at Gevenich and Boslar had to rely on artillery and bazookas. At Boslar, the Germans attacked seven times. They first hit before 9 PM, employing a force of about 20 assault guns and panzers accompanied by about 150 infantrymen.

While American artillery fire was dispersing the panzers and infantry before they reached Boslar, some of the infantry bypassed the village and penetrated the lines of a battalion of the 406th Infantry; a reserve rifle company was able to seal off the penetration.

The commander of the defending battalion called the fight "indescribable confusion." The infantrymen used bazookas to dispatch four Mark V panzers, but during the night panzers and infantry swarmed into the village. While the Americans huddled in cellars, forward observers called down artillery. By daylight the Germans had fallen back.

In the area of the 29th Division, the 115th Infantry had no trouble taking the village of Broich, overcoming automatic weapons and entrenched positions, to anchor the division's bridgehead. The division's 175th Infantry encountered little resistance in Jülich, but clearing Germans from the town was a slow process.

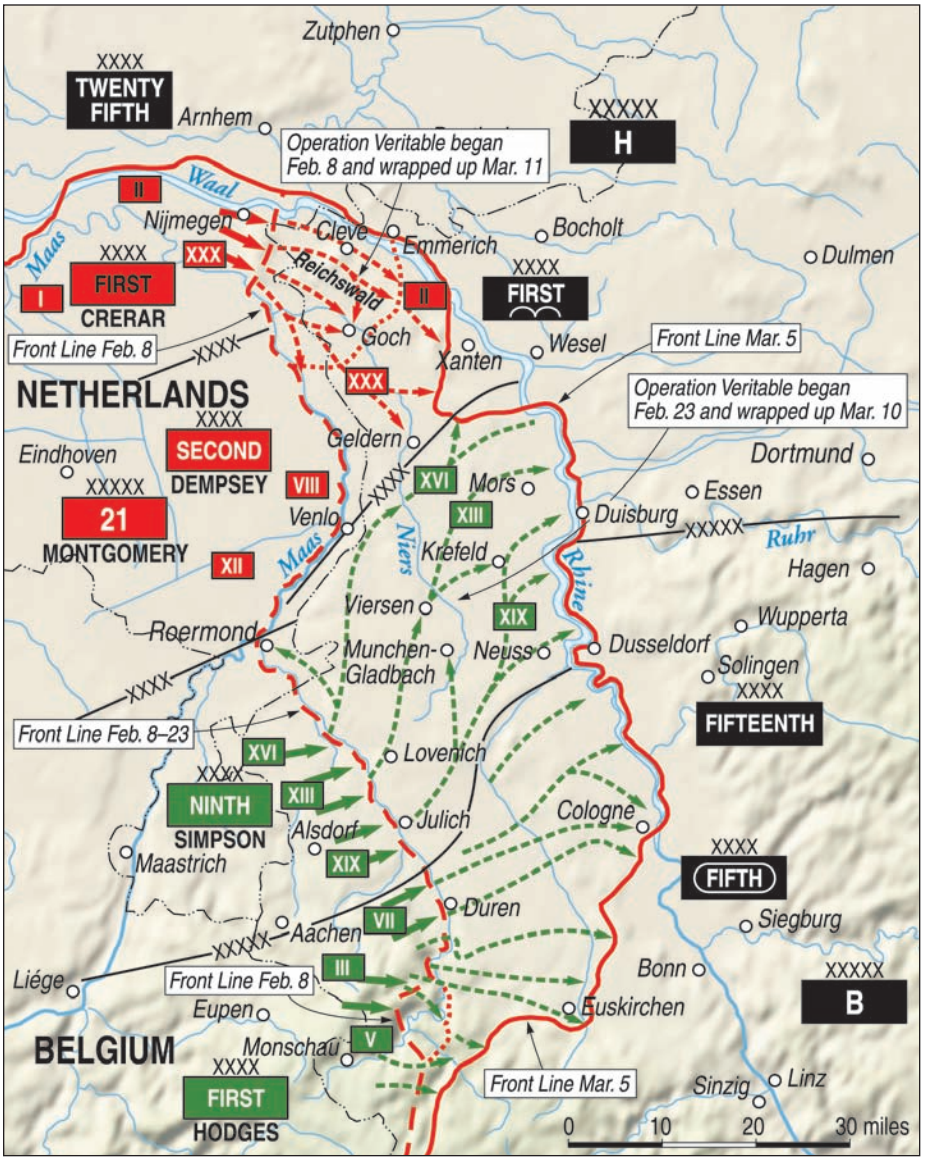
The 30th Division's advance proceeded apace despite problems in crossing the flooded Roer. Leading companies of the 120th Infantry encountered an extensive anti-personnel minefield in the woods near the village of Krauthausen. Both the 119th and 120th

Regiments pushed to high ground to the east. The 119th Infantry also sent a battalion against a village at the edge of the Hambach Forest and took it by mid-afternoon.

Since the 30th Division would be on the outer edge of Ninth Army's wheel to the north, the corps commander, General Hobbs, decided to keep moving through the night. Reserve battalions moved northeast before midnight against the villages of Hambach and Niederzier, more than two miles from the Roer. Night operations were assisted as distant American searchlights bounced light off clouds, producing a twilight effect in the darkness.

At dawn, XIX Corps held all its planned D-day bridgeheads, though an unprotected right flank had developed as VII Corps had a difficult fight to cross the Roer. VII Corps was to cross the river and advance to the Erft, 13 miles from Düren, protecting Simpson's right flank, though it would be exposing its own flank.

VII Corps (Collins) employed the 104th Infantry Division (Maj. Gen. Terry de la Mesa Allen) on the left and the 8th Infantry Division (Maj. Gen. William G. Weaver) on the right to assault the river line.



The combined Allied offenses, Operations Veritable (British-Canadian) and Grenade (U.S.), plunged into the border area between Arnhem and Nijmegen in the north and Cologne and Bonn in the south. The many rivers in the area made progress difficult.

Because Düren was a communications hub, the town was divided between the two divisions. The infantrymen were to establish a bridgehead anchored on high ground about four miles from the Roer—from the village of Oberzier to Stockheim. Collins intended to send the 4th Cavalry Group to clear the Hambach Forest while the 3rd Armored Division (Maj. Gen. Maurice Rose) passed through the infantry to gain the Erft.

The first wave of the 415th Infantry, on the north wing of the 104th Division, crossed with little difficulty. Crossing opposite Düren, the 413th Infantry's 1st Battalion had more trouble. After the first company had crossed without opposition, German artillery and machine guns opened fire on the following troops. The remainder of the battalion shifted to the 415th Infantry's sector to cross.

Northwest of Düren, work began on an infantry support bridge at 4:15 AM, but 15 minutes later artillery and mortar shells destroyed much of the equipment and killed or wounded 19 men.

Upstream, another group of engineers had completed about 160 feet of a support bridge by 1 PM when enemy artillery scored several direct hits. At three other sites, artillery and machine-gun fire prevented engineers from starting construction until after nightfall. The first bridge wasn't opened to traffic until midnight.

The 12th Volksgrenadier Division, LVIII Panzer Corps, failed to halt the crossing. By mid-afternoon, the 415th Infantry had drawn up to the Düren-Jülich railroad—its D-day objective. Once over the river, the 413th Infantry met light resistance at Düren and the village of Birkesdorf, where they captured an entire battalion of the 27th Volksgrenadier Regiment.

Plagued by an open right flank and German observation from the Eifel highlands, the 8th Division had the roughest day. The leading 13th and 28th Infantry Regiments were to cross in assault boats, with cable ferries and footbridges to be put in as soon as possible. The 28th Infantry's 3rd Battalion was to open the assault, cutting enemy

communications to the south and southeast by taking the village of Stockheim.

But the swift river caused trouble—only about three-fifths of the two leading companies got across. Fortunately, the crossing took the Germans by surprise. Behind a rolling barrage, the assault companies continued to the edge of woods overlooking Stockheim.

The 28th Infantry's 1st Battalion encountered problems with failed motors, swamped boats, and enemy fire during its crossing effort. The battalion pulled back to reorganize and wait for a footbridge to be placed. During mid-afternoon, the battalion began a using a shuttle system to get the first two companies across. The rest of the battalion began crossing after dark using a cable ferry.

For the 13th Infantry, almost everything went wrong near Düren. Company K came under intense artillery and machine-gun fire; boats overturned; motors failed. Only 36 men of the 3rd Battalion were able to cross in the initial assault due to the artillery and mortar bombardment.

It was worse for the 2nd Battalion. Short rounds from American artillery knocked out four boats; another 10 were swamped. Company F put only 12 men over the river. As German fire became more intense, the battalion halted efforts to cross. A bridging company of the 12th Engineer Combat Battalion was reduced to eight men. However, by midnight, the 13th Infantry had elements of six companies across, though they had penetrated only 400 yards beyond the river.

The 28th Infantry's 3rd Battalion, which reached the woods overlooking Stockheim, was the only unit of the 8th Division that came near accomplishing its D-day mission. This was due in part to the Germans not counterattacking its bridgehead. The next morning, February 24, the division's engineers were able to complete a Bailey bridge at Düren.

German artillery had been extremely accurate. Several bridges were destroyed by fire despite the effort to employ smoke-screens. Of some 400 VII Corps bridging engineers, 153 were casualties.

Despite swamped assault boats, swept-away bridges, and German artillery fire, all six divisions gained footholds on the east bank of the Roer by the end of the day, suffering 1,447 casualties in the process. Seven treadway and pontoon bridges were in place by dusk, allowing for the passage of vehicles and artillery to the east bank during the night.

On February 24, Ninth Army's divisions expanded their footholds and prepared to make their wheel to the north, while VII Corps strengthened its flank. The only major change in plan was that it was agreed that Anderson's XVI Corps need not wait to cross the Roer; instead, it would begin crossing operations the following day.

The 24th was a day for consolidating bridgeheads and adding strength—increasing from 16 to 38 battalions over the Roer. As Simpson was anxious to start the pivot to the north, both XIII and XIX Corps were to prepare to thrust forward with their right wings.

For the Germans, the 9th Panzer Division was to enter the line after nightfall, but General von Zangen had to deploy the division piecemeal. With only 29 panzers and 16 assault guns, the division was less than a formidable force.

The Germans could muster little opposition as the 30th Division drove through the Hambach Forest. At dark the division's line ran along the north edge of the forest, tying into the 29th Division astride the Jülich-Cologne highway to the west.

Although the Germans feared an Allied pincer west of the Rhine, during the second day of the American offensive, they still did not appreciate Ninth Army's intentions.

ABOVE: An M4A3 Sherman tank from the 771st Tank Battalion, supporting the 84th Infantry Division, moves through the rubble-strewn streets of Linnich, Germany, February 24, 1945. OPPOSITE: A Sherman tank of the 2nd Armored Division rolls through a burning German city. The towns and cities in the path of the advance suffered heavy damage when the enemy chose to stand and fight.

The only difficulty with the Ninth Army's pivot maneuver arose within the XIII Corps sector. The rapid D-day advance of the 84th Division, plus the failure of the left wing of XIX Corps to advance, left the 102nd Division's right flank open.

A crippling blow struck the 701st Tank Battalion as it supported the advance of the 405th Infantry on the village of Hittorf. Anti-tank guns knocked out four tanks from one company, eight from another.

One regiment of the 84th Division remained near Baal, the northernmost point reached by the division on D-day. As the 335th Infantry moved forward, preparing the way for XVI Corps to cross the Roer, they ran into resistance. Not until mid-afternoon, after tanks of the 771st Tank Battalion arrived, did the drive on the village of Doveren pick up momentum, taking the village by evening.

The hardest fighting on February 24 fell to the VII Corps. The 8th Division had much to do before the division could be firmly established on the east bank of the Roer. The 13th Infantry, with all battalions in line, spent the day fighting through Düren. As night came, the 28th Infantry was still short of taking Stockheim, on which General Weaver intended to anchor the division's south flank. Yet, as the second day came to an end, the 121st Infantry crossed into Düren.

To General Collins, the 8th Division's slow progress was of minor concern so long as the bridgehead remained secure. The focus of VII Corps was the continued flank protection for Ninth Army, as well as the continued advance by the 104th Division. Collins was anxious that the 104th gain Oberzier and two other villages before the Hambach Forest, both to take out German guns on the flank of the neighboring 30th Division and to open the way to clear the forest before the Germans could concentrate there.

Because the 413th Infantry was busy mopping up in Düren, General Allen assigned the Hambach Forest villages to the 415th Infantry. Its 1st Battalion reached one of the villages before daylight but had to fight all day and through the next night to clear it.

Making a predawn attack, the 2nd Battalion reeled back from Oberzier in the face of heavy German shelling. When the 2nd Battalion moved again, it was able to take Oberzier. Because the approach to the third village was exposed to fire, the 3rd Battalion delayed attacking until after dark.

As night fell on the 24th, the conditions for committing armored cavalry were met. Anxious to get his mobile forces into action, Collins ordered both the 8th and 104th Divisions to continue attacking through the night.

Although the Germans feared an Allied pincer west of the Rhine, during the second day of the American offensive, they still did not appreciate Ninth Army's intentions. General von Zangen hoped that Simpson was aiming his attack at Cologne and that a northward thrust was simply an effort to secure the road center at Erkelenz. The only hope for stopping the 84th Division's drive north was to send elements of the 338th Infantry Division to Erkelenz. Against the eastward thrust, von Zangen could do nothing but urge speed in commitment of the 9th and 11th Panzer Divisions.

The position of Anderson's XVI Corps was complicated by German bridgeheads

that remaining on the west bank of the Roer—one at the village of Hilfarth, southwest of Doveren. The 79th Division (Maj. Gen. Ira T. Wyche) was to make a feint several miles downstream while the 35th Division (Maj. Gen. Paul Baade) approached Hilfarth.

To assist in the crossing, Baade sent his 137th Infantry into XIII Corps' bridgehead to drive north along the east bank. In the hopes of keeping the Germans from demolishing a highway bridge at Hilfarth, the 692nd Field Artillery Battalion placed harassing fire around the bridge.

On the second day, 10 more infantry battalions had crossed into the bridgeheads, along with seven tank and tank-destroyer battalions and eight field-artillery battalions. Twenty bridges were constructed by the evening of February 24, providing for the increased flow of supplies and equipment to support further operations.

By the end of the day, Simpson had determined that the weakening German resistance and the expanding bridgeheads made the situation ripe for exploitation. Only along VII Corps' front was armored commitment not feasible. In XIX and XIII Corps, the 2nd and 5th Armored Divisions were issued orders to prepare to join the battle.

A battalion of the 35th Division's 134th Infantry attacked Hilfarth before daylight on February 26. The infantrymen forced their way into the town only to encounter mines and booby traps. By mid-morning, engineers had erected two footbridges across the Roer, and the coveted highway bridge there was secured, so that, by noon, vehicles were rolling across.

Giving XVI Corps responsibility for seizing a foothold over the Roer freed the 84th Division to concentrate on a drive to take Erkelenz. Inserting a combat command of the 5th Armored Division (Maj. Gen. Lunsford E. Oliver) on the right flank of XIII Corps also released the 102nd Division to attack Baal, while the 84th cut roads to the west.

Although elements of the German 338th Division had arrived during the night of February 25 at Erkelenz to bolster XII SS Corps, their efforts proved weak. On the 26th, the 102nd Division found Erkelenz deserted.

XIX Corps found resistance increasing as von Zangen committed portions of the 9th and 11th Panzer Divisions. But just before dark on the 25th, the 30th Division's 117th Infantry broke the resistance of panzergrenadiers at the village of Steinstrass, while the 119th Infantry bypassed the village. The 119th ran a gantlet of heavy fire that knocked out eight supporting tanks, but took over 200 prisoners, including a *nebelwerfer* (rocket mortar) company.

During the day, the 29th and 30th Divisions rolled up the flank of the German second line of field fortifications, the 29th advancing four miles to the Erft while the 30th advanced more than three miles.

Exploitation seemed at hand, but General McLain was reluctant to turn the advance over to his armor lest the Germans had manned their third defensive line, which ran through the village of Garzweiler, roughly on an east-west line with Erkelenz. McLain directed the 30th Division to continue as far as Garzweiler, whereupon the 2nd Armored was to take over.

The hardest fighting occurred on the approaches and within the southern reaches of the Hambach Forest. The 9th Panzer Division's 10th Panzergrenadier Regiment could give only slight pause to a relentless American push.

Making a night attack along the Düren-Cologne railroad, a company of the 413th Infantry took 200 prisoners, all that remained of the 1st Battalion, 10th Panzergenadier Regiment. At the same time, the 8th Division's 13th Infantry was wiping out the last resistance in Düren. In an attack on a village two miles to the east, two battalions of the 121st

ABOVE: Soldiers of the 333rd Regiment, 84th Infantry Division ("Railsplitters"), advance behind an M4A3 Sherman tank as it uses its hull-mounted machine gun to blast an enemy position in a residential section of Geilenkirchen, Germany. OPPOSITE: Three M-18 Hellcat tank destroyers of the 2nd Armored Division play the role of artillery as they fire across the Roer River, February 1945.

Infantry fought all day on February 25 without success, until the Germans pulled out.

While his two infantry divisions continued to drive forward through the night, General Collins ordered his cavalry and armor across the Roer.

With the 13th Infantry attached, the 3rd Armored Division was split into six task forces. Two from its Combat Command A (CCA) were to attack astride the Düren-Cologne highway to gain the Erft River. CCB, also with two task forces, was to take the road center at Elsdorf, northeast of the Hambach Forest. One task force was placed in reserve, while the 24th Cavalry Squadron was to protect the division's left flank inside the Hambach Forest.

Striking northeast, the American armor turned away from the area of the LVIII Panzer Corps to that of the LXXXI Corps, where the 9th Panzer Division had arrived. Also present was a *kampfgruppe* (battle group or task force) of the 3rd Panzergrenadier Division, rushed from the Eifel. Yet, little could be done against the Americans.

In moving up the Düren-Cologne highway, CCA lost eight tanks to antitank guns. As night came, contingents of CCB were drawn up before Elsdorf, ready to hit the village the next morning.

During February 25-26, the American infantry divisions had advanced to the northeast at two to three miles a day as the German defenders gave ground grudgingly. By the end of the 25th there were indications that the German front was near collapse. In the south, the 3rd Armored Division had entered the battle and crushed the 12th Volksgrenadier and 9th Panzer Divisions.

On February 27, surviving elements of the 9th Panzer Division made a stand in Elsdorf. But with fire support from a company of tanks, an infantry battalion of CCB broke into the town before noon and began mopping up. By mid-afternoon Elsdorf was sufficiently cleared to enable General Rose to commit his 3rd Armored Division toward the Erft. As night came the armor held a three-mile stretch of the Erft's west bank.

During the day, VII Corps completed its role in Operation Grenade. It had covered ten-and-a-half miles from the Roer bridgeheads to the Erft to seal Ninth Army's south flank.

The operation continued to aim at crushing the southern wing of German Army Group H against Operation Veritable while encircling the First Fallschirmjäger Army and elements of the Fifteenth Army that could be forced to the north.

On the 26th, the German Commander-in-Chief West, Field Marshal Gerd von Rundstedt, pleaded with Berlin to allow him to pull the First Fallschirmjäger Army out of a salient at the juncture of the Roer and Maas Rivers near Roer-

ABOVE: Men of the 320th Infantry Regiment, 35th Infantry Division, Ninth Army, file past the corpse of a German soldier in the German town of Kamp-Lintfort, west of Essen. OPPOSITE: The spires of the Cologne Cathedral rise above the destroyed city as 3rd Armored Division troops perform a mop-up operation. With Germany's major rivers behind them, the Allies were set to push the Germans back toward Berlin.

mond, but Hitler refused.

The next day, Simpson approved commitment of his armored divisions in a shift to an exploitation phase. Simpson did question whether his infantry should continue to lead the way for the XIX Corps until it passed the German trench system, gambling that the enemy was no longer capable of an organized defense. He did direct McLain to send his armor through to the Rhine at Neuss.

On February 27-28, Ninth Army's armored forces—the 2nd, 5th, and 8th Armored Divisions—were unleashed as operations shifted from breakthrough efforts to pursuit. Simpson ordered that there be no letup that would permit the Germans the opportunity to regroup.

The 35th Division, with the attached 784th Tank Battalion, advanced 15 miles on March 1, seizing the fortified town of Venmo on the Meuse. At the same time, XIII Corps neared the towns of Krefeld and Ürdingen on the Rhine, while the 175th Infantry Regiment, 29th Division, captured München-Gladbach. To the south, Rose's 3rd Armored Division attacked toward Cologne, seizing the Vorgebirge—a commanding ridge west of the city.

Simpson shuffled his reserves, placing fresh troops with each corps in order to maintain pressure—the 75th Division (Maj. Gen. Ray E. Porter) to XVI Corps, the 79th Division from XVI Corps to XIII Corps, and the 95th Division (Maj. Gen. Harry L. Twaddle) attached to XIX Corps.

For the Germans, the Panzer Lehr Division was ordered to counterattack southeast from near München-Gladbach to link up with the 11th Panzer Division. But the Panzer Lehr was still assembling. The XII SS Corps continued to fall back to the north while LXXXI Corps and the remains of the 9th and 11th Panzer Divisions withdrew behind the Erft.

McLain's XIX Corps inserted the 83rd Division on the right of the 2nd Armored with the mission of capturing Neuss and securing Rhine bridges at Neuss and at Oberkassel. Attacking in the early afternoon, the 83rd continued through the night, clearing Neuss, but found all three bridges there destroyed.

On the evening of March 1, a task force composed of units from the 330th Infantry, 736th Tank Battalion, and the 643rd Tank Destroyer Battalion (self-propelled) attempted to seize the Oberkassel bridge. The American tanks, painted with German colors and markings, accompanied by German-speaking GIs in German uniforms, were able to work their way through German lines. Although they rushed the bridge with some of the tanks, even occupying its western end, the Germans demolished it.

Four Rhine bridges remained in the Duisberg area, near the confluence of the Rhine and Ruhr Rivers. Another span was located near Uerdingen, four others connected Neuss and Oberkassel with Düsseldorf, and one remained at Cologne.

The 5th Armored Division advanced against little opposition until, shortly past noon, they were able to link up with the 2nd Armored Division just south of Krefeld.

The 84th Division's 334th Infantry launched its attack at 2 PM, with the intention of passing around the north side of Krefeld to reach the Krefeld-Ürdinger Bridge. With attached tanks, the head of the column got into Krefeld less than two hours after jump-off, where they became involved in a firefight with German anti-tank guns.

The task of capturing Ürdingen and the still-standing bridge passed to XIX Corps, assigned to the 2nd Armored Division's CC with attached battalions of the 95th Division's 379th Infantry.

By March 2, units of the Ninth Army had reached the Rhine at several points as German forces disintegrated. Simpson directed his army to continue its advance to the north and north-east in order to eliminate any resistance between the Rhine and Maas Rivers from Neuss to Rheinberg, seize Rhine bridges wherever possible, and provide assistance to the First Canadian Army.

The Germans moved to form a bridgehead west of the Rhine extending north from Ürdingen, west to Geldern, and on to Xanten with bridges to their backs. The 2nd Fallschirmjäger Division was ordered to the bridgehead, but it consisted of only three or four understrength battalions.

The 2nd Armored Division was to attack toward the Ürdingen bridge at 0200 hours on 3 March. In preparation, the 92nd Armored Field Artillery Battalion kept up a continuous harassing fire for more than 15 hours. During the assault, four tanks were knocked out, blocking the passage of those following, while the infantry was halted by heavy mortar fire.

After dark, a patrol gained the bridge and began cutting wires to demolition charges. But at 7 AM the next morning the Germans were able to blow the center and west spans, denying the bridge to the Americans.

Fighting to clear Ürdingen continued throughout March 4th and into the 5th. At the same time, General McLain ordered the 95th Division to drive for the bridges at Rheinhausen, north of Ürdingen. But artillery observation pilots reported that both bridges there were already down.

In the VII Corps sector, the 3rd Armored and 104th Infantry Divisions entered Cologne on March 4 against sporadic resistance. But the Americans found that the Hohenzollern Bridge over the Rhine had been blown up the previous day.

In breaking through at Ürdingen, XIX Corps had compromised the bridgehead line that General Alfred Schlemm, the First Fallschirmjäger Army commander, had been attempting to hold. Army Group H authorized Schlemm to withdraw to a smaller bridgehead at the confluence of the Ruhr River with the Rhine at Duisburg.

On March 5, as XIX Corps finished clearing the Rhine's west bank in its sector, the 5th Armored Division, XIII Corps, dashed towards Orsoy. With tanks and halftracks, CCR covered the last two miles into Orsoy, cutting through German infantry and overrunning artillery. The 84th Division cleared Moers and Homberg but found the Rhine bridges at Duisburg already destroyed.

Although the Americans had failed to secure a bridge over the Rhine, the speed of their advance and vigor in the attack had shattered German defenses. Those German units that had managed to escape across the Rhine were demoralized and spent. Collins' VII Corps alone captured 13,000 Germans during its advance.

Some 50,000 German troops still remained on the west bank near Wesel. The "Wesel Pocket" held out for four days, with most of the troops reaching the east bank of the Rhine before both bridges there were destroyed on March 9.

With the departure of the German troops from the Rhine's west bank, Operations Grenade and Veritable were concluded. Grenade took 30,000 German prisoners and killed an estimated 6,000 more while suffering 7,300 casualties.

In just over two weeks, Simpson's Ninth Army had driven over the Roer to the Rhine and cleared the west bank of the Rhine from Düsseldorf to Wesel. Flexible Allied planning, combined with rigid German defensive actions, had made Ninth Army's victory inevitable. □

A dramatic depiction by Artist Correspondent Arthur Beaumont of a lone Marine F4F Wildcat fighter taking on three Japanese biplanes over Wake Island, done for the War Department's 1942 film, *Wake Island*. Although badly outnumbered, the Americans held their own during the invasion and gave the enemy a bloody nose.

Courtesy of the State Archives of North Carolina / Geoffrey Beaumont

WAKE ISLAND:
JAPAN'S FIRST SETBACK

The battle for a lonely outpost in the Pacific became a supreme test of wills between the island's American defenders and the overconfident Japanese invaders.

BY NATHAN N. PREFER

IT didn't look like much—just a speck in the vast ocean. Most travelers spent only a night in the Pan American Hotel and never ventured far from the small adjoining airfield. It was called Wake Island, and until recently, it had been an uninhabited atoll in the mid-Pacific.

Wake Island was V-shaped and consisted of three atolls: Wake, Wilkes, and Peale. Together they contained barely 2,600 yards of sand and coral fringed by a coral reef on which the Pacific pounded loudly. Woods and underbrush covered large tracts of the island. Even the interior lagoon was unsuitable for ships with its coral heads and foul ground. Only seaplanes could land there in 1941.

But Wake's value lay not in its appearance but in its location. By August 1941, Pan American Airlines had built aircraft landing facilities, a refueling base, a powerful radio station, a pier and a concrete ramp, and then a hotel that made Wake Island a stop for the trans-Pacific traffic between Hawaii and the Orient.

This made Wake Island one of only three American outposts in the far Pacific—and the only way the United States could fly reinforcements to its holdings in Guam and the Philippines. Guam was surrounded by Japanese-held islands and believed indefensible from a major attack, while Midway, another stop on the aerial supply route, would be useless without Wake to support its passage of aircraft.

Wake's strategic value was recognized in early 1941, and steps were taken to fortify the island against a possible attack. Civilian contractors were shipped to the island to develop a military base. Admiral Husband E. Kimmel, Commander-in-Chief, U. S. Pacific Fleet, already feared that this had been delayed too long and stressed again and again the importance of developing the Wake Island base as quickly as possible.

One of the steps he took was to request that a U. S. Marine defense battalion be assigned to defend the base during and after its completion. In 1941 a typical Marine Corps defense battalion consisted of 43 officers and 939 enlisted Marines. They were armed with six naval 5-inch coastal defense guns, twelve 3-inch antiaircraft guns, 48 .50-caliber antiaircraft machine guns, 48 .30-caliber antiaircraft machine guns, six searchlights, six sound locators, and infantry weapons. Due to a shortage of personnel and demands on the services of Marine Corps defense battalions, a full battalion was not available for Wake Island. The 1st Marine Defense Battalion was instead divided up between Pearl Harbor, Johnston Island, Palmyra Island and Wake Island.

The first to arrive, on August 19, 1941, was Major Lewis A. Hohn with five officers and 173 enlisted Marines

and Navy Corpsmen. They quickly set up a tent camp (Camp One) separate from the contractors' more comfortable camp (Camp Two). Because the United States was not at war, the construction efforts of the Marines in building defenses and those of the contractors in building base facilities were distinctly separate.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A flight of Grumman F4F Wildcats in tactical formation, mid-1943. The F4F was a tough opponent that could dish out punishment as well as take it.

Although some unofficial cooperation existed between the two groups, each concentrated on its own tasks. In the end, most of the work done by the Marines was done with hand tools—one of the reasons for the soon-to-be-developed Naval Construction ("Seabees") Battalions.

On October 15 Major Hohn was relieved by Major James P. S. Devereux, the executive officer of the 1st Marine Defense Battalion. Devereux was also designated as the Island Commander until later in the year. Described as a "short man of slight build," Devereux was 38 years old, a career Marine officer with experience at Pearl Harbor, Nicaragua, the Philippines, and China.

He recalled, "When I arrived on the island, the contractor's men working on the airfield near the toe of Wake proper had one airstrip in usable condition and were beginning the cross-runway.

"Five large magazines and three smaller detonator magazines, built of concrete and partly underground, were almost completed in the airfield area. A marine barracks, quarters for the Navy fliers who would be stationed on the island, warehouses and shops also were going up on Wake.

"On Peale Island, work was progressing on a naval hospital, the seaplane ramp and parking areas. On Wilkes, there were only fuel storage tanks and the sites of proposed powder magazines, but a new deep-water channel was being cut through the island. In the lagoon, a dredge was removing coral heads from the runways for the seaplanes which were to be based at Wake. Some of these installations were nearly finished; some were partly completed; some were only in the blueprint stage."

One problem that Major Devereux faced immediately was that his Marines were used to refuel U. S. Army Air Corps B-17 heavy bombers, which were transiting to the Philippines and General Douglas MacArthur's Philippine-American forces there. With no automated facilities yet installed, his men had to refuel the bombers by hand, a time- and labor-intensive process that reduced the time they had for their own defense work.

Each plane required 3,000 gallons of gas, which had to manhandled and hand-pumped into it by the Marines. This often had to be done at night, further reducing the amount of sleep available to the Marines. Ironically, most of these aircraft were destroyed on the ground on the first day of the new war.

Devereux's Marines also had to unload the supply ships that kept the garrison and contractors equipped and fed. Again, precious time was taken from building defenses.

Good news arrived on November 2, when another detachment of the battalion arrived, bringing an additional nine officers and 200 enlisted men to augment the Wake Island detachment. The 1st Marine Defense Battalion on Wake Island now numbered 15 officers and 373 enlisted men.

Also encouraging was the arrival of Marine Fighter Squadron 211 (VMF-211) under the command of Major Paul A. Putnam. The ground crews came in by sea and the aircraft by air in mid-November. Also arriving with this shipment was the newly appointed Island Commander, Navy Commander Winfield S. Cunningham, who brought with him the beginnings of a naval air station scheduled to be established on the island. Major Walter L. J. Baylor of Marine Air Group 21 (MAG-21) also arrived to command the service detachment of MAG-21.

By December 6, 1941, Wake Island had the complete armament of a defense battalion, but only about one-third of the Marines to man those guns. This left one complete anti-aircraft battery unmanned, and the remaining two were working shorthanded. Only one had its full allowance of fire-control equipment. One had a director but no height-finder.

Also, there was no radar, which would have been particularly useful on a mid-Pacific island where the pounding surf blocked all other sounds coming from the sea. Even the 5-inch coast defense guns, although fully manned, were missing tools, spare parts, and various ordnance items.

Captain Wesley McC. Platt, commanding the forces on Wilkes Island, reported, "At the outbreak of war, weapons had been set up. All were without camouflage or protection except the .50-caliber machine guns, which had been emplaced. All brush east of the new channel had been cleared. The remaining brush west of the new channel was thick and, as a result of this, the .50-caliber machine guns had been placed fairly close

to the water line. The beach itself dropped abruptly from two-and-a-half to four feet just above the high-water mark."

As darkness fell on this day, there were 1,200 civilian contractors and 38 officers and 485 enlisted men on Wake Island. Ironically, it was on December 6 that Major Devereux was able to finally hold the first "General Quarters" drill since the Marines had arrived on the island.

Pan American's *Philippine Clipper* had spent the night of December 7-8 (December 6-7 in Hawaii) on Wake Island and prepared to resume its journey early on the morning of the 8th.

As the *Clipper* took off, Major Devereux was shaving, and most of the Marines were preparing for another day of work. At the U. S. Army communications radio van, recently arrived on the island, an operator was monitoring Hickam Field on Hawaii

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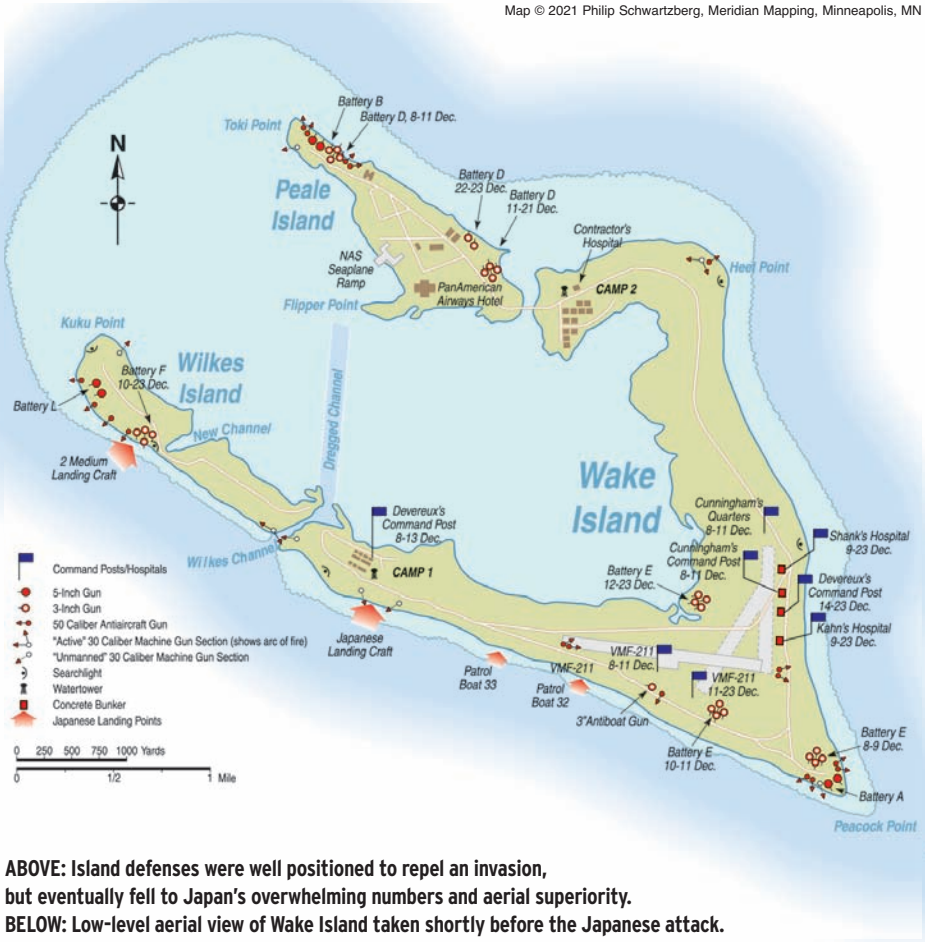
when a message about an attack on Oahu was received.

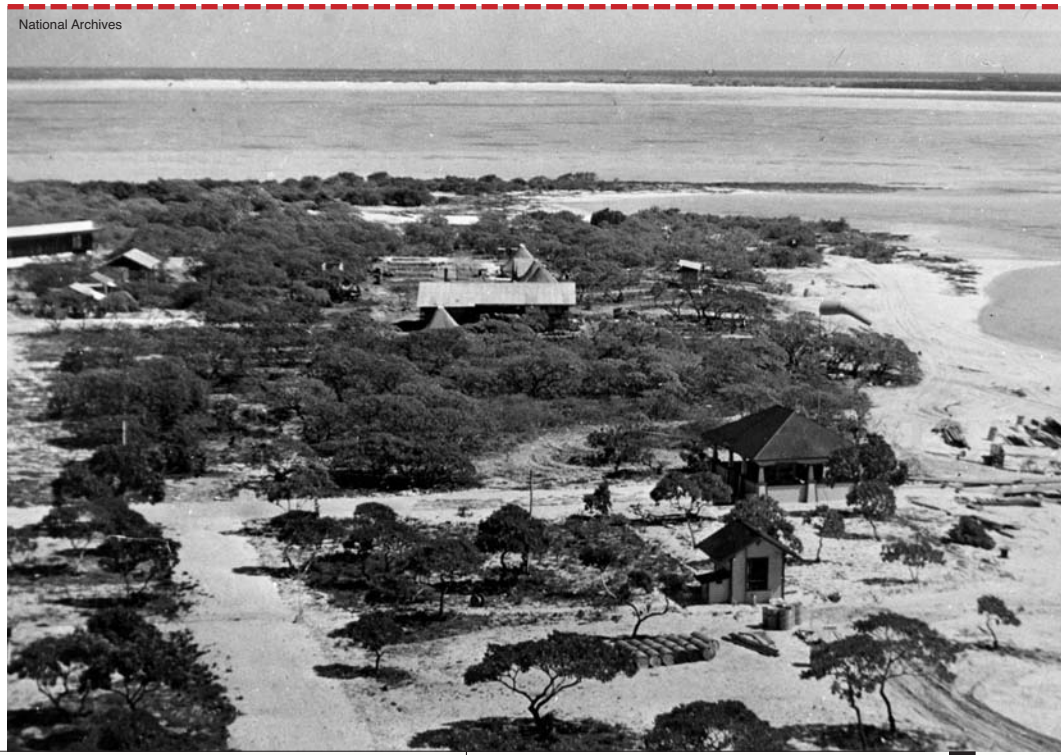
Army Captain Henry S. Wilson rushed the message to Major Devereux, who immediately alerted his Marines. And Major Putnam sent up the dawn patrol while on the ground the remaining aircraft were moved to safe positions. The *Philippine Clipper* was recalled to Wake.

Putnam's VMF-211 had only been on Wake for four days, and aircraft revetments and access roads were still not finished. As he later recalled, "Work was pro-



ABOVE: Island defenses were well positioned to repel an invasion, but eventually fell to Japan's overwhelming numbers and aerial superiority.
BELOW: Low-level aerial view of Wake Island taken shortly before the Japanese attack.
LEFT: Clockwise from top left, Winfield S. Cunningham commanded U.S. forces on Wake; Admiral Sadamichi Kajioka headed Japan's Wake Island invasion force; Marine aviator Henry Elrod; Major James Devereaux.

National Archives



Laguna Art Museum Collection, Gift of Donald Grant, 1986.005.001

gressing simultaneously on six of the protective bunkers for the airplanes, and, while none was available for immediate occupancy, all would be ready not later than 1400 hours."

In a decision he later regretted, Major Putnam decided to leave all his aircraft on or near the field until the bunkers were ready later that day rather than risk damage by moving them over rough terrain to hide them temporarily.

The attack on Pearl Harbor had been the opening strike of the broader Japanese strategy to seize or neutralize the few advanced American bases west of the Hawaiian Islands as quickly as possible. One part of this strategy was for the Imperial Japanese Navy's Fourth Fleet, under Vice Admiral Nariyoshi Inouye, based in the Marshall and Caroline Islands, to "capture Wake."

Admiral Inouye's fleet was small, consisting of a few old cruisers, destroyers, and submarines, and with some Special Naval Landing Force (SNLF) troops available to it. Inouye, who had known about his mission since November 1941, was confident that his SNLF force of about 450 Japanese "Marines" could do the job without difficulty.

The *Philippine Clipper* was loaded with important Pan American personnel and its own passengers and took off for Midway. VMF-211 maintained a combat air patrol around the island, with pilots returning to Wake for fuel and a rotation of pilots. But as they were patrolling north of the island, the IJN 24th Air Flotilla, based on Roi Island in the Marshalls, some 720 miles away, put in their appearance.

The Japanese airmen headed for the airfield and were only seen once they were already in their bomb runs. They struck the VMF-211 area heavily and, with American planes exploding and burning, flew away, satisfied that they had neutralized Wake's air defenses.

The Japanese were almost right. They had destroyed or damaged seven of the eight Wildcat fighters on the ground. Even the lone remaining Wildcat was damaged, although not severely.

Additionally, Major Baylor's air-ground radio installation was destroyed by a direct hit, and aviation gas flamed as the 25,000-gallon storage tanks burned. Many of VMF-211's tools and replacement parts were also destroyed.

Much worse was the loss of 23 of the 55 Marine aviation personnel who were killed, and 11 others wounded. Three pilots—Lieutenants George A. Graves, Robert J. Conderman, and Frank J. Holden—had also died in the attack; others had been wounded. In one strike, VMF-211 had suffered 60 percent casualties.

VMF-211's Combat Air Patrol had missed the Japanese, and, to make matters worse, one of the four remaining Wildcats was damaged when it hit bomb debris on the runway as it landed. Major Devereux was most concerned that the enemy had arrived unheard and unseen until he was already in his bomb run over the island. With no early-warning device and the surf noise constant, early warning of the enemy's approach remained a major concern.

Damage control parties immediately began dealing with the fires, damaged aircraft, and finding a place for the casualties. The contractor's supervisor, Mr. Dan Teters, offered the use of his hospital, and his doctor, Dr. Lawton M. Shank, aided Lieutenant (jg) Gustave M. Kahn (MC), the defense battalion's doctor, in caring for the wounded.

2nd Lt. John F. Kinney and Tech. Sgt. William J. Hamilton of VMF-211 began a series of minor miracles as they set about repairing what aircraft were left to them. An estimated 10 percent of the contractor's men volunteered to help, and some asked to enlist.

A routine was quickly developed following the hit-and-run attack. General Quarters sounded at 5 AM, before dawn. All weapons, phones, and lookout stations were fully manned. The remaining four Wildcats (F4F-3s) warmed up and took off just before dawn. Once they found no enemy in the area, half the Marines on the island began improving the defenses while the other half remained at their guns.

But as the day wore on, the Marines edged closer to their foxholes, since they knew that if an enemy flight took off from the Marshalls at dawn, it would arrive over Wake sometime around noon.

And that is what happened, day after day without respite. But no longer did the Japanese fly unmolested: VMF-211 began to take a toll of the enemy bombers, though they still came.

Fully aware of how vulnerable Wake Island was, planners at Pearl Harbor continued to make plans to send reinforcements to Wake. Admiral Kimmel decided to send a relief force as part of a three-pronged attack to confuse and delay the Japanese.

Vice Admiral Wilson Brown's Task Force 11, based on the aircraft carrier USS *Lexington* (CV-2), would strike at Japanese bases on Jaluit in the Marshalls while Vice Adm. William F. Halsey's Task Force 8, based on the aircraft carrier USS *Enterprise* (CV-6), was detailed to operate west of Johnston Island, covering Oahu in the event of a returning Japanese strike.

The actual Wake Island relief force was to be Rear Adm. Aubrey W. Fitch's USS *Saratoga* (CV-3), which already had VMF-221 on board. But delays, bad weather, and command confusion rendered the attempt a failure.

Meanwhile, the Japanese were acting faster and with more success. Following his orders, Admiral Inouye assigned Rear Adm. Sadamichi Kajioka and his Sixth Destroyer Squadron the task of seizing Wake Island. Flying his flag on the light

BELOW: U.S. Marines board the seaplane tender USS *Tangier* (AV-8) at Pearl Harbor in preparation for sailing to Wake Island, December 15, 1941. The 14-ship relief force, however, was ordered to return before it reached Wake. OPPOSITE: Arthur Beaumont's depiction of the Japanese first wave attack that destroyed several VMF-211 aircraft and killed 23 Marines. A total of 52 U.S. military personnel died during the 16-day battle and over 400 were taken prisoner.

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Arthur Beaumont: ART OF THE WAR ON THE SEA

Arthur Beaumont (1890-1978) received a commission as a lieutenant in the Navy and became the "Artist of the Fleet" in 1933. Following Pearl Harbor, his work supported the U.S. war effort and portrayed dramatic, life-or-death struggles in the Pacific and, in 1944, he was given the official title of War Correspondent.

His body of work includes numerous portraits of naval warfare vessels, including mighty aircraft carriers and destroyers. Beaumont aimed to portray not only admirals but also common sailors and soldiers.

The Arthur Beaumont Retrospective Art Exhibit is a traveling show that includes 53 paintings and drawings of mostly U.S. Navy subjects, covering the Navy's Official Artist's more than 50-year career. The Tour is sponsored by the Irvine Museum Collection at UC Irvine, James Irvine Swinden, presiding. The Retrospective Tour will travel across the nation over a five-year term, visiting an anticipated 10 museum venues in all.

Arthur Beaumont's son Geoffrey wrote a fully illustrated book about his father's work titled *Arthur Beaumont: Art of the Sea*. **For more information on the traveling art show or to order the book, visit *www.NavyArt.com*.**

cruiser *Yubari* and with six destroyers under his command, Kajioka set sail on December 8 for Wake Island.

Guided to Wake by advance reconnaissance submarines, Kajioka rendezvoused with the 18th Cruiser Division, which was to provide gunfire support for the landing. The cruiser division, under Rear Adm. Marumo Kuninori, consisted of two older ships whose guns would add power to the preliminary bombardment of Wake Island. About 150 sailors of the 2nd Maizuru SLF were carried aboard accompanying transports. If these troops were not enough, then the destroyers would provide landing parties from their crews.

Confident that three days of bombing had reduced the American defenses sufficiently, the task force approached the atoll's southern shore in the pre-dawn darkness on December 11. Although spotted by the two patrolling American submarines, both failed to properly identify the Japanese and made no reports of their presence. The first sighting of the Japanese invasion force came when 2nd Lt. John A. McAlister and Captain Platt reported lights offshore.

Commander Cunningham ordered an alert. and by 3 AM the entire island was on watch. Major Devereux ordered his battery commanders not to open fire until he ordered them to do so. 1st Lt. Woodrow M. Kessler remembered that it was too dark to open fire anyway, as they could not see anything yet.

Major Putnam put his pilots on alert but waited for dawn before launching his remaining aircraft. His and his three senior pilots—Captains Henry T. Elrod, Frank C. Tharin, and Herbert C. Freuler—waited impatiently in their cockpits for the order to take off. On the field, Lieutenant Kinney and his ground crew worked tirelessly to get the troublesome fourth plane ready to fly.

The Japanese opened fire at 5:22 AM, moving back and forth, each time getting closer to the island. The barrage set the oil tanks afire while *Patrol Boat 32* and *33* approached the shore carrying the SNLF. Still, the Marine guns remained silent. The *Yubari* continued to fire, with each pass coming closer to the island.

Meanwhile, the VMF-211 planes took off, masked by some high ground between the field and the Japanese. Shortly thereafter, the fourth aircraft was sent aloft, and the four planes rendezvoused at 12,000 feet over the island's Toki Point. Underwater, the USS *Tambor* (SS-198) saw the gunfire and moved to a position to take the Japanese under attack.

By this time, the Marines were removing the camouflage from their guns and tracking the enemy ships, and ammunition was placed within easy reach. Finally, Commander Cunningham asked Major Devereux what he was waiting for, and with that Devereux gave the command to open fire.

The first shots rang out at 6:10 with the 5-inch guns blasting at the now-visible targets. Within moments 1st Lt. Clarence A. Barninger's gunners believed that they had scored hits on the *Yubari*. Return enemy fire hit near the battery, but aside from a few minor wounds, no casualties resulted.

As Barninger reported, "She [the *Yubari*] straddled [us] continually, but none of the

Wrecked Grumman F4F Wildcat fighters of VMF-211 litter Wake's airfield after the island fell. All 12 of the Marines' planes were destroyed during the defensive stand.

Naval History and Heritage Command

Courtesy of the State Archives of North Carolina / Geoffrey Beaumont

Arthur Beaumont's spectacular impression of a Wildcat sinking a Japanese cruiser, painted within months of the battle. However, no cruisers were lost—only two destroyers and two patrol boats.

salvoes came into the position." Battery A's gun also hit *Patrol Boat Number 33*, killing and wounding several men on board.

Meanwhile, Captain Platt on Wilkes Island was having trouble without a rangefinder. Ordered to estimate the range, he did so successfully enough to endanger the transports and forced three destroyers to intercede between his guns and those transports.

Then he observed two transports heading towards Wilkes at high speed. Correctly interpreting these as transports carrying landing troops, he began searching for landing craft in the dark waters. Meanwhile, Platoon Sergeants William D. Beck and Joe M. Stowe opened fire on the transports, the *Kinryu Maru* and *Kongo Maru*. They also hit the destroyer *Hayate*, which was trying to shield the transports, with three quick rounds. With their third hit, the destroyer exploded, taking 167 Japanese sailors with it.

Lieutenant McAlister's guns then turned on the *Oite*, another destroyer. After suffering a dozen or more casualties, the *Oite* turned away. The destroyer *Mochizuki* was also hit and withdrew out of range.

At the gun positions, Platoon Sergeant Stowe was lightly wounded in the leg and Corporal John R. Dale in the back, but neither wound was serious. Lieutenant Kessler's guns, commanded by Platoon Sergeants Eugene W. Shugart and Forest Huffman, took on three other destroyers, the *Yayoi, Mutsuki*, and *Kisarage*, as well as the cruisers *Tenryu* and *Tatsuta*.

Despite enemy shells hitting all around and within the battery position, Battery B continued to fire without casualties. At least one hit on the stern of the *Yayoi* is credited to the battery.

At this point, VMF-211 joined the battle. The Japanese were now retreating, as explained by Admiral Kajioka's flagship captain: "Since we had already suffered losses and the defense guns were very accurate, the O.T.C. decided at 0700 to retire to Kwajalein and make another attempt when conditions were more favorable."

But the American defenders were not yet done. The four Wildcats jumped the Japanese ships, dropping 100-pound bombs from improvised bomb releases, returning to Wake, refueling and re-arming, and then attacking again. The cruisers *Tenryu* and *Tatsuta* were hit, and a transport was set afire.

Captain Elrod's plane was badly shot up, but before he crash-landed on Wake, he placed a bomb on the destroyer *Kisaragi*, which blew up and sank, leaving no survivors.

The Japanese had been beaten: their first repulse in the Pacific War. They had lost two destroyers sunk and suffered about 500 men killed, against the loss of one American killed. Wake Island was still holding out. It was the only time in the war that coastal defense guns beat off an amphibious assault.

But two of VMF-211's planes had to be written off due to damage. Undeterred, the remaining two shot down two enemy bombers when the regular noon attack

Naval History and Heritage Command

ABOVE: American machine gunners hold off the invading Japanese force. While inaccurate in some details (the artist invented the barbed wire for dramatic effect; no such obstruction existed on Wake Island), it does capture the desperate nature of the Marines' last stand. OPPOSITE: Beaumont's depiction of Japanese soldiers being hit by volleys of defensive fire as they came ashore on December 22, 1941. Commander Cunningham then sent a message to Pearl Harbor: "Enemy on island, issue in doubt."

arrived on December 11.

For the Wake Island defenders, the next week was one of repetitious air attacks by Japanese bombers that sometimes hit something important, but mostly missed their targets. Day after day. the Marines and their civilian helpers repaired damage and moved guns to avoid their being hit from the air once they were identified by observer aircraft. At VMF-211 work never stopped on repairing aircraft and trying to build others out of spare parts.

Admiral Kajioka used this time to gather his new strike force. Anxious to "save face" with his superiors, he gathered additional destroyers to replace his losses, repaired his ships—including his flagship *Yubari*—and received additional support from Admiral Inouye, who sent the modern heavy cruisers *Aoba*, *Kinugasa*, *Furutaka*, and *Kako* with additional destroyers to join in the renewed attempt to take Wake Island.

Most importantly, Admiral Kajioka received a portion of the Pearl Harbor Attack Force, then on its way home to Japan, in the form of the large carriers *Soryu* and *Hiryu*, each with 54 aircraft, as well as the heavy cruisers *Tone* and *Chikuma*, along with destroyers. This group began flying strikes against Wake on December 21, signaling to the defenders that a Japanese task force was nearby. A landing force of more than 1,200 troops was now included with the assault forces.

Admiral Kajioka left Kwajalein on December 20 and planned to reach Wake early on December 23. Admiral Frank Jack Fletcher, now commanding the Wake Island Relief Force, had departed Pearl Harbor four days earlier aboard the USS *Saratoga*, escorting ships carrying additional Marine Defense Battalion detachments. The force also included four cruisers, an oiler, and a destroyer squadron.

The task force departed Pearl Harbor at mid-day on December 16. The sailors and Marines aboard expected to have to fight their way to Wake, but, despite constant but incorrect reports of enemy sightings, the task force proceeded unchallenged. Yet, because of the oiler accompanying the force, speed was limited to 12 knots, slowing the combat ships considerably.

Warned by Commander Cunningham that the island was now under attack by carrier-borne aircraft, Admiral Fletcher became conflicted. He needed to refuel before entering a possible battle with an enemy task group, but weather prevented refueling operations. He could reach Wake without refueling, but if a battle began, he would be at dangerously low fuel levels.

Finally, on December 21, within 600 miles of Wake Island, he decided to pause to fuel his ships. Admiral Kaijoka's task force reached Wake the following day.

Wake had been attacked from the air every day but one, and this had whittled down VMF-221 to one or two planes available to oppose the enemy. News that a relief expedition was on the way bolstered morale.

On December 22, the last two of Wake's Wildcats were shot down while fighting off the daily attack. Major Putnam's men turned themselves over to Major Devereux as infantrymen and took up defensive positions around the airfield.

This time the Japanese came in silently. Knowing of the accuracy of the coastal defense guns, they fired no barrage before sending in six landing barges to Wake's south coast.

Each barge carried about 50 men, and the two patrol boats that headed for Wilkes Island carried 1,000 men each from the Maizuru 2nd SNLF.

With orders to "seize Wake Island at all costs," including "beaching the destroyers if necessary," the Japanese landed a picked force—the "Takano Unit"—on Wilkes Island in pitch darkness. As the enemy approached in the barge, Captain Platt turned on his searchlight and illuminated the landing force. Marine Gunner Clarence B. Mckinstry opened the final battle for Wake Island with a .50-caliber machine gun.

At Devereux's command post, 2nd Lt. Arthur A. Poindexter commanded a reserve force of Marines and 15 sailors led by Boatswain's Mate 1st Class James E. Barnes. Knowing that some machine guns at Toki Point were not manned, he requested and received permission to take his men there and man those guns.

Likewise, 2nd Lt. Robert M. Hanna gathered a scratch crew to man a 3-inch gun set to defend the airfield. Devereux also ordered Major Putnam to send 20 of his men in support of Lieutenant Hanna. The lieutenant and his crew were soon firing point-blank into *Patrol Craft Number 33*, wounding the captain, navigator, and five others. Japanese scrambled off the ship while behind them it burst into flame.

Flames from *Patrol Craft 33* illuminated *Patrol Craft Number 32* further down the beach. Lieutenant Hanna shifted his fire to the new target and blew holes in its sides. The crews of both vessels abandoned ship and swam ashore to join the ground troops.

Protected by Major Putnam's grounded aviators, the battle raged until the Japanese forced the Marines to withdraw, leaving only the gunners surrounded on three sides. Everywhere Marines and their Navy and civilian volunteers fought the Japanese landings. Lieutenant Poindexter and some men saw some barges in the surf, seeking a landing place. He gathered a small force and waded into the surf to toss grenades into these barges.

DECIDING THAT ADDITIONAL RESISTANCE WOULD BE USELESS AND WOULD ONLY WASTE VALUABLE LIVES, CUNNINGHAM AND DEVEREUX DECIDED UPON SURRENDER. AT 7:30, MAJOR DEVEREUX CARRIED A WHITE FLAG OUT OF HIS COMMAND POST AND WALKED TOWARDS THE APPROACHING JAPANESE.

Courtesy of the State Archives of North Carolina / Geoffrey Beaumont

As the battle went on, communications began to fail. Major Devereux lost contact with Lieutenant Hanna, with VMF-211 at the airfield, and with Battery A at Peacock Point. Soon, all he could contact was Captain Platt on Wilkes Island.

Devereux knew that the island was under attack everywhere but had no idea how it was progressing. He organized a new reserve force from Captain Bryghte D. Godbold's men on Peale Island, which did not seem to be threatened; these men he sent to support Lieutenant Hanna.

The Japanese were now also landing from within the lagoon in rubber boats, further enveloping the Marine defenses, and Japanese cruisers began bombarding the island in support of the ground assault.

Groups of Marines soon found themselves surrounded or isolated while the Japanese passed them by, moving across the island. Major Putnam's Marines were isolated around the airfield. He told his men, "This is as far as we go." Six hours later they were still holding that position.

By 5 AM on December 23 it was clear that the Japanese had established themselves on the atoll. It was at this time that Commander Cunningham sent his soon-to-be famous message to Pearl Harbor that read, "Enemy on island, issue in doubt."

Outnumbered by more than two-to-one, the Marines, sailors, and civilian volunteers continued to fight for their island. Major Putnam's survivors still held the airfield, despite being surrounded. Batteries A and E were manned and ready to fire on any Japanese ships foolish enough to approach within range. Individual Marine machine-gun posts were mostly surrounded and under attack by increasing numbers of Japanese.

Major Potter, the executive officer, now assembled the last reserve force available—administrative, service, and supply personnel—and formed a final defensive line 100 yards south of the command post. These 40 men were to block the north-south road. Major Devereux ordered Captain Godbold

to bring his entire Battery D to the command post for assignment as infantry.

Soon Lieutenant Kessler, still on Peale Island with his Battery B, reported Japanese flags flying all over Wilkes Island; a large Japanese flag flew over where Battery F was posted. Major Devereux could only conclude that Wilkes Island had fallen.

As daylight broke over Wake, a clear picture of the vast Japanese armada that surrounded the island was apparent to the defenders. Three destroyers, led by the *Mutsuke*, approached to fire on Marine positions on the island, but Battery B on Peale Island was ready for them, and, after being hit, the *Mutsuke* and its companions turned away. At Peacock Point, Battery E was also soon engaged with naval aircraft flown off the carriers *Soryu* and *Hiryu*. Although outnumbered, outgunned by naval ships, and under air attack, the Marines fought on.

By early morning, Major Devereux believed that the Japanese had possession of Wilkes Island and a good part of Wake Island. He had no reserves left and no reinforcements available. Shortly after 7 AM, he called Commander Cunningham and told him that organized resistance would not last much longer. He asked about the relief force, only to be told that it would not arrive in time.

Deciding that additional resistance would be useless and would only waste valuable lives, Cunningham and Devereux decided upon surrender. At 7:30, Major Devereux carried a white flag out of his command post and walked towards the approaching Japanese.

It was only later that Devereux learned that Wilkes Island had *not* fallen to the Japanese. Under the direction of Captain Platt, Gunner McKinstry and Lieutenant McAlister, the Marines there had been hard-pressed for some time, but had then launched a counterattack that all but eliminated the Japanese forces on Wilkes.

The "Takano Unit" of the 2nd Maizuru SNLF had landed and been put under fire immediately. In a series of brutal back-and-forth actions, the Marines had eventually prevailed and pinned the survivors of the SNLF on the beach, where they were wiped out. Four Japanese officers and 90 men were counted killed in this battle, and two wounded were captured. Four others played "dead" among the casualties until the surrender. Captain Platt had the Japanese flags removed, but not until after the reports of them flying "all over" Wilkes had reached Major Devereux.

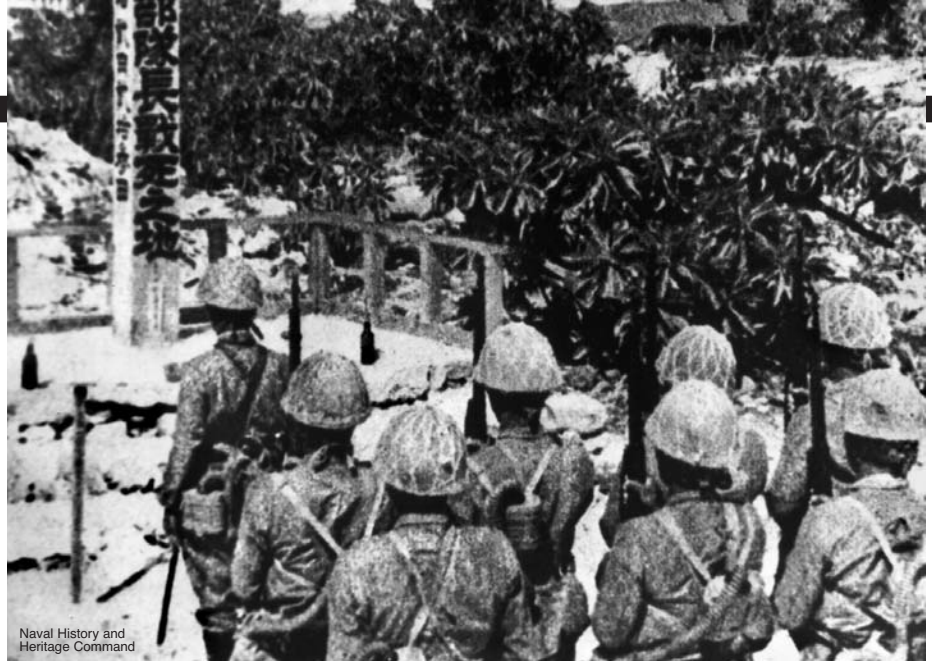
The Marines had lost all the equipment of VMF-211 and the 1st Marine Defense Battalion. The Marines had suffered 20 percent casualties but killed an estimated 500 Japanese on December 11, and on the 23rd another 100 on Wilkes Island and at least another 80 on Wake Island. Final totals for Japanese casualties in the battle come to at least 700 killed and an unknown number of wounded.

Twenty-one enemy aircraft are credited to VMF-211 and the antiaircraft gun crews. Another 51 were reported by Japanese sources to have been damaged. The Americans lost 49 Marines killed and 32 wounded. Additionally, three sailors had been killed and five wounded, and about 70 civilians had died and 12 were wounded. The five soldiers of the radio relay station all survived unhurt.

National Archives

Naval History and Heritage Command

ABOVE: After Wake fell, civilian contractors who worked for the Morrison-Knudsen Company were marched off to captivity. Some were kept on to finish construction projects, but 98 were executed in 1943. BELOW: Burned and crumpled fuel storage tanks on Wake, photographed by the Japanese after the island was captured on December 23, 1941.



Naval History and Heritage Command

ABOVE: Japanese troops stand at attention to honor their fellow soldiers who were killed in the stubborn American defense of Wake Island. BELOW: A Japanese pilot recounts his experiences of aerial combat over Wake Island to an appreciative audience. The Americans' tenacious defense, however, had dented Japanese confidence and was a portent of difficult days ahead.

National Archives

After Wake Island surrendered, several atrocities were perpetrated by the Japanese. Chief among these was the murder of about 100 of the civilians left behind on Wake Island after the bulk of the military and civilian personnel were sent to Japan. These men were forced to continue to work on defenses, but the American blockade of the island from 1942 through 1943 brought the Japanese garrison to the early stages of starvation.

Unable to feed them, unable to evacuate them, and fearing an imminent U.S. invasion, the Japanese commander, Captain Sakaibara Shigemitsu, decided to execute the remaining civilians, which occurred on March 6, 1943.

After the Wake Island operation, many of the Japanese went on to other combat actions. Rear Adm. Kajioka took part in the campaign in New Guinea and the Solomon Islands before being posted to command an escort fleet, where he was killed in September 1944.

His superior, Admiral Inouye, was relieved of his command in October 1942 and made the head of the Naval Academy before becoming Vice Minister of the Navy. He survived the war.

Rear Adm. Sakaibara, formerly Captain, was tried by a war-crimes commission and executed for the killing of civilians on Wake Island. When the Americans returned to Wake in September 1945, 609 Japanese soldiers and 653 sailors made up the garrison. Bombing, malnutrition, and disease had killed an estimated 1,288 others. Another 974 men had been evacuated from the island. The hospital held 405 bedridden patients.

Commander Cunningham, Major Devereux, Major Potter, Major Putnam, and the other American survivors spent the rest of the war as prisoners of war in various camps in China and Japan. Several, including Cunningham, attempted escapes; Lieutenants Kinney and McAlister succeeded. Many others perished in the brutal conditions of the POW camps.

Although defeated, they had not lost their pride. A large group of Marines under Sergeant Edwin F. Hassig was marching to a POW collection point after the surrender and passing a very depressed Major Devereux. They were partially stripped, unshaven, many without shoes, limping with heads down and shoulders bent. Seeing his commanding officer, Sergeant Hassig bellowed, "Snap outta this stuff! Goddammit, you're Marines!"

Instantly, they raised their heads, squared their shoulders, and marched past Major Devereux in perfect cadence. What they had accomplished on Wake Island would inspire Americans throughout the remaining years of the war. The words "Remember Wake Island" were soon appearing on recruiting posters all over America. □

Dr. Nathan Prefer, a former Marine reservist, is a college history professor and the author of several books on military history. He lives in Fort Myers, FL.

After flying 35 combat missions, a B-17 bombardier remembers staying the course.

LUCKY *all the way!*

BY SUSAN ZIMMERMAN

During World War II, many of England's Royal Air Force (RAF) Class A airfields were made available to the U.S. Eighth Air Force for use as heavy-bomber bases. RAF Deopham Green airfield, in the eastern part of England, opened on January 3, 1944 and served as home for the Boeing B-17 Flying Fortress bombers of the 452nd Bombardment Group's 728th, 729th 730th and 731st Bomb Squadrons. The 452nd was assigned to the 45th Combat Bombardment Wing, which used the group tail code "Square-L."

Between February 2, 1944, and April 21, 1945, the 452nd Bombardment Group flew a total of 250 missions and 7,279 sorties out of Deopham Green. They dropped a total of 16,446 tons of bombs on marshaling yards, aircraft-assembly plants, aircraft component works, ball-bearing factories, synthetic rubber plants, and oil installations. They lost 128 B-17s in the process.

One bombardier remembers staying the course...

Ralph Goldsticker

U.S. Air Force Art Collection

The chances of surviving a combat tour of duty as part of the U.S. Eighth Air Force's effort in Europe were very small. Lieutenant Ralph Goldsticker was one of the lucky ones to reach 35 missions in 1944. "B-17 Raid," painting by Eric Joyner. INSET: A young Lieutenant Ralph Goldsticker, bombardier with the B-17 Deuces Wild, photographed at RAF Deopham Green in 1944.

National Archives

A B-17G of the 452nd Bomb Group shown on a mission above the clouds over Germany. BELOW: The crew of Goldsticker's plane, Deuces Wild, photographed in January 1944 at McDill Field, Tampa, Florida, before being deployed overseas. Front row (left to right): Albert Fazzone (radio); James Fulmer (ball turret); J.R. Wadkins (engineer/top turret); Clayton Chapman (waist gunner). Back row: Joe Antol (pilot); Martin Atkin (co-pilot); Harry Ladanye (navigator); Ralph Goldsticker (bombardier). Not in photo: Jimmie Fogarty (tail gunner).

Ralph Goldsticker

"Berlin was the most heavily defended city in all of Europe," recalled 99-year-old Ralph Goldsticker, who served as a bombardier aboard a B-17G with the 452nd Bombardment Group's 728th Squadron. "I flew there on my 34th mission. Normally after I dropped the bombs, the navigator and I would get back to back with our flak suits still on to protect us. That day, I stayed right in the nose watching bombs going down, because I knew I wasn't coming back—but I did."

It was October 6, 1944, when Goldsticker flew his 34th mission from Deopham Green, one of 418 planes dispatched that morning to Berlin to hit a munitions dump, aircraft factories, and tank factory.

According to *The History of the 452nd Bombardment Group*, by the group's historian Marvin E. Barnes, "The 452nd had put up 38 aircraft, making up the lead, high, and low in the 45th Combat Wing, the primary target being the Aero engine plant in the Spandau Region of Berlin, eight miles west of the center of the city." That mission resulted in 17 B-17s lost, one damaged beyond repair, and 234 others damaged. Three crewmen were killed in action, four wounded, and 154 missing in action.

JUST LUCKY

Three days later, on October 9, 1944, Goldsticker flew his 35th and final mission, targeting the marshaling yards at Mainz, Germany. Historian Barnes wrote, "The 452nd put up three groups flying lead, high and low, respectively. Thirty-four aircraft attacked [one] of the main railroads serving supplies to the front lines from central Germany.... Flak over the target was barrage and tracking, 10 aircraft received minor damage and one, major damage and one [aircraft was] missing.... [It] was seen just after the target with No. 4 prop windmilling and was last seen rapidly losing altitude near the enemy lines ... all other aircraft returned safely to base."

That same day Goldsticker wrote home: "Dear folks, Today was the big day. I flew #35.... I've never been so happy to finish something in my life as this. It's a real relief to be thru with combat for a while. This idea of flying and not knowing whether you'll be shot down today or not is not good.... I was just lucky all the way....

"When we got here, no one in our squadron had ever finished, so we didn't have much to look forward to, but now things are different.... All of our original crew are finished flying, so we all got thru alive. Maybe tonight I'll get a good night's sleep for a change, knowing that I won't be shot at tomorrow...."

In 1944 alone, there were 3,500 U.S. planes shot down by German ground-based anti-aircraft fire, known as flak, and 600 planes shot down by Luftwaffe fighters, with

41,000 airmen lost. Goldsticker flew 20 missions into Germany, 14 into France, and one over Denmark.

The tour of duty was set at 25 missions when he arrived, then increased to 30. In late July 1944, a directive stated that a crewman of a heavy bomber would not be required to participate in more than 35 sorties.

Brig. Gen. Ira Eaker, commander of the Eighth Air Force, addressing the issue of a set rotation and war weariness, wrote, "The thing that makes it most difficult to maintain morale is to have no policy, leaving clearly in the mind of the combat crewman the belief that he must go on until he cracks up ... or until he is killed.... If a combat crew is worn out, they will not spring back; they are through for the war."

DEOPHAM GREEN

When Pearl Harbor was bombed on December 7, 1941, 20-year-old Ralph Goldsticker was working as a clerk at the Rice-Stix dry-goods store in downtown St. Louis for 50 cents an hour. He knew he was going to get drafted, so he applied to the Army Air Corp. It was July 6, 1942, when the St. Louis native enlisted at Jefferson Barracks Military Post. "I had seen movies with John Wayne and Jimmy Stewart, and the pilots were all glamorous, so I applied for the aviation corps and was accepted," he told this author.

Ralph Goldsticker

December 31, 1942 was the first time he was ever in a plane. After eight weeks and 46 hours flying time in a Boeing PT-17 Stearman biplane at Darr Aero Tech in Albany, Georgia, Goldsticker washed out. He wasn't going to be a pilot, but he still wanted to fly.

So he changed course and set his sights to become a bombardier. He headed first to Laredo Army Airfield in Laredo, Texas, for six weeks of aerial gunnery training and then to Childress Army Airfield in Childress, Texas, where he trained for 12 weeks as a bombardier and six weeks in navigation.

The day before Goldsticker graduated as a bombardier and was commissioned while in Childress, Texas, he lost three friends in a training accident. Two planes collided; one went down and the other landed safely. Losing friends was a reality of war.

Goldsticker was commissioned a second lieutenant on December 4, 1943, in the U.S. Army Air Force. Next stop was MacDill Air Force Base in Tampa, Florida, where Goldsticker and his newly formed bomber crew flew together for the next four months. This was critical practice time for the young pilot, navigator, and bombardier to perfect their skills.

"Joe was 22, Marty was 20, Hank was 25 (respectively the pilot, co-pilot, and navigator); the gunners were 19 and I was 22," recalled Goldsticker. On May 5, 1944, the 10 crewmen were assigned to a B-17 while at Hunter Army Airfield in Savannah, Georgia, and from there took off for England.

Their flight path included layovers in Labrador, Iceland, and Ireland. After arriving at their base in England, Royal Air Force (RAF) Deopham Green, located about 100 miles north of London, the crew was assigned their plane: *Deuces Wild*, a name inspired by the tail number 297222.

"My happy home for 10 months was a Quonset hut, but the first night there I didn't think I was going to live. The other crew in the hut had just flown their 22nd mission, and they were firing shots at each other to see how close they could come. They were flak-happy—now it's called PTSD [post-traumatic stress disorder]," said Goldsticker. The stress on bomber crews was extreme. The average age of a crew was less than 25 years old, and the chance of survival was less than 50 percent.

He recalled how he would see fellow crewmen in the morning at breakfast, then after returning from a mission and a

LEFT: Ralph Goldsticker (right) and crew chief pose beside Deuces Wild at Deopham Green. The three "2's" in the tail number inspired the plane's name. BELOW: A view of 452nd Bomb Group's B-17s parked on the hardstand at Deopham Green in East Anglia.

National Archives

National Archives

ABOVE: B-17Gs of the 452nd Bomb Group's 371st Bomb Squadron on a bombing run somewhere over Europe. The B-17 could carry from 4,000-8,000 lbs. of bombs, depending on the length of the mission. OPPOSITE: The Allies' "Pointblank Directive" established the top priority of the Combined Bomber Offensive: the destruction of German aircraft and submarine manufacturing facilities. Here a flight of B-17s drop their bombs on Regensburg, August 17, 1943. Sixty bombers—and 600 men—were lost on this Schweinfurt-Regensburg mission, emphasizing the hazardous nature of daylight bombing.

debriefing, he would go back to his quarters—happy to be alive— but would see four empty bunks. "I'd come back and those guys weren't there," said Goldsticker, sadly.

Two of the first B-17 planes to complete 25 missions were the *Hell's Angels* on May 13, 1943, and the *Memphis Belle* on May 19, 1943. While the *Memphis Belle* returned to the U.S. in June 1943 for a cross-country war-bond tour, *Hell's Angels* went on to rack up a total of 48 missions before returning to the U.S. on January 20, 1944, for its own flag-waving tour.

FLYING A FORTRESS

On May 14, 1944, the *Deuces Wild* and her crew were assigned as a replacement after 14 out of 24 aircraft were lost on the 452nd's mission over Brux, Czechoslovakia, two days earlier. One of the two aircraft that ditched in the English Channel, the 728th's *Why Worry?*, dropped her bombs on target, with two gunners seriously wounded and three engines out en route to Brux; they all survived.

The B-17's reputation for getting through flak and fire to complete a mission and making it home was legendary. "Without the B-17, we may have lost the war," General Carl Spaatz, Commander of the U.S. Strategic Air Forces in Europe, was often quoted as saying.

The B-17 dropped 640,036 short tons of bombs on European targets during the war—more bombs than any other aircraft in the U.S. arsenal during World War II, even though the B-17 typically carried fewer bombs than the B-24.

The debut of the B-17 in July 1935 from a Boeing field in Seattle revealed its firepower, prompting *Seattle Times* reporter Richard Williams to dub the plane the "15-ton flying fortress"—a moniker that Boeing adopted and trademarked. The prototype was equipped with five .30-caliber machine guns, which increased with the development of later models.

The B-17G, the definitive version of the bomber that entered service in the summer of 1943, and in which Goldsticker flew, was equipped with 10 .50-caliber guns that included two in the chin turret, two in the top turret, two waist guns, two in the ball turret, and two in the tail.

The four-engine heavy bomber weighed approximately 65,000 pounds and was 74 feet, 4 inches in length, with a 103 foot, 9-inch wingspan and 19 feet in height. A 4,000-pound bomb load was typical for long missions, but the B-17 was capable of carrying 8,000 pounds for shorter distances at lower altitudes and almost 17,000 pounds using the external racks underneath the wings.

The B-17's air speed was 287 mph, range 2,000 miles, and maximum ceiling 35,600

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feet. A crew of 10 (including the pilot, co-pilot, bombardier, navigator, radioman, engineer, and gunners) operated the Flying Fortress. By the war's end, approximately 12,700 B-17s had been produced by Boeing and other contractors.

A STRATEGIC CHANGE

It was mid-1942 when the USAAF arrived in England with the mission to destroy Nazi Germany's industrial operations. The 97th Bomb Group led the first B-17E raid over Europe, attacking the railroad marshaling yards in Rouen, France, on August 17, 1942. (See *WWII Quarterly*, Summer 2015.)

The first plane off the ground was flown by Major Paul Tibbets (three years later, he would pilot the B-29 Superfortress *Enola Gay* that dropped the atomic bomb on Hiroshima, Japan). This first "test" mission of 12 bombers, accompanied by four squadrons of RAF Spitfires, was successful with no losses.

However, Eaker, a fighter pilot during World War I, who rode in one of the Spitfires, wrote, "It is too early in our experiments in actual operations to say that the [B-17] can definitely make deep penetrations without fighter escort and without excessive losses."

Escort fighters still had limited range, which left the bombers exposed to enemy fighters before reaching their targets. A change in tactics was needed and near at hand.

In January 1943, at the Casablanca Conference, the Allies formulated the Combined Bomber Offensive plan for around-the-clock bombing, with the USAAF conducting daytime operations and the RAF making nighttime raids on industrial centers.

The Casablanca Conference directive stated: "Your primary objective will be the progressive destruction and dislocation of the German military, industrial, and economic system and the undermining of the morale of the German people to a point where their capacity for armed resistance is fatally weakened."

In June 1943, the Combined Chiefs of Staff issued the "Pointblank Directive,"


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ABOVE: A B-17G flies through a barrage of heavy flak with its bomb bay doors open. B-17s dropped over 640,000 tons of bombs on enemy targets in Europe during the war. OPPOSITE: Ralph Goldsticker recalled the day when three bombardment groups, including his 452nd, were caught on the ground at Poltava, Russia, during Operation Frantic and hit by the Luftwaffe. Here a B-17 from the 96th Bomb Group lies in pieces.

which was designed to destroy the Luftwaffe's operational capability before the planned invasion of Europe but which resulted in serious losses. The double-mission attack on Schweinfurt-Regensburg on August 17, 1943, lost 60 of 376 B-17s; the second attack on Schweinfurt on October 14, 1943, (known as "Black Thursday") lost 77 of 291 B-17s, with 600 crewmen killed or taken prisoner. The latter mission was considered one of the worst days of the war for the B-17 and Eighth Air Force. It was the final impetus for increasing the range of fighter escorts.

The strategy developed by the Air Corps Tactical School at Maxwell Field, Alabama, in the 1930s that called for bombers to make unescorted daylight precision bombing runs was finished; The losses from Pointblank and previous months proved it. Strategic raids over Germany were put on hold through mid-January 1944, until the North American P-51A Mustang could be fitted with external fuel tanks.

The revamped P-51D now had the range to fly to Berlin and back. The P-38 Lightning and P-47 Thunderbolt escorts were also equipped with external fuel tanks, thus extending their range.

During this bombing hold in early 1944, the original Eighth Air Force was redesignated the United States Strategic Air Forces (USSTAF), and the VIII Bomber Command was redesignated the Eighth Air Force. General Carl Spaatz now commanded the USSTAF, while Maj. Gen. Jimmy Doolittle, famous for leading the April 18, 1942, carrier-launched raid on Tokyo, commanded the new Eighth Air Force.

As the Eighth's new commander, Doolittle implemented new fighter tactics that cleared the path toward U.S. air supremacy from early 1944 onward. Fighters were now instructed to engage with enemy aircraft after they had escorted their bombers to the targets. Fighter pilots were directed to fly far ahead of the bombers' combat box formations, "clearing the skies" of Luftwaffe fighter opposition.

Doolittle ushered in the resumption of the strategic bombing campaign with Operation Argument. On February 20, 1944, more than 1,000 bombers and 600 fighters from the Eighth, RAF, and Fifteenth Air Force initiated the week-long operation, which became known as "Big Week."

The next day, some 900 bombers and 700 fighters of the Eighth Air Force hit a series of aircraft factories.

By the end of the operation on February 25, approximately 3,800 sorties by B-17s and B-24s had dropped almost 10,000 tons of bombs. "Big Week" was considered the turning point for the Luftwaffe's downfall, setting the stage for the June 6, 1944, Normandy invasion.

Hermann Göring, commander of the German Luftwaffe during the war, was quoted as later saying, "When I saw Mustangs over Berlin, I knew the jig was up."

BOMBS AWAY

The end of the "jig" was further settled when the Norden bombsight came onto the scene. The USAAF began using the device for daylight precision bombing in 1942, and then, in 1943, an improved version was issued to the Eighth.

The 50-pound, gyroscopically stabilized, telescopic Norden bombsight contained an electromechanical computer that was able to determine, with information entered by the bombardier, the exact point at which the aircraft's bombs should be released for them to hit the target. During a bomb run, the bombardier would take over the flight controls through the autopilot and, with the Norden, would guide the aircraft to the precise release point.

Bombardier Goldsticker liked the Norden. "We were dropping bombs from 25-27,000 feet—five miles up in the air. You are way away from your target when you release your bomb. I had to put in the airspeed, altitude, and wind drift—and the Norden would do the rest. We would put the crosshairs on the target, and, when the crosshairs clicked, the bombs would drop. You could set it to bomb every three seconds, or every second. The lead bombardier, equipped with the Norden, would drop the bombs and the whole group—18 planes—would drop at the same time.

"The Norden was our secret weapon, although it wasn't as good as was talked about. But it did the job and we hit the target. Let's put it this way: when you're five miles up, there's a lot of variation. But most of our targets were big aircraft plants, railroads yards, and refineries, so we would get mighty close and do damage anyway. We would drop

on the lead bombardier, but we had to be on our bombsight in case he was hit and we had to take over. We had holes in our plane all the time," said Goldsticker.

Before they reached 10,000 feet, Goldsticker said that he would arm the bombs by removing the cotter pins on the bombs in his bomb bay—sometimes six 1,000-pound bombs, or 10 500-pound bombs, or 28 100-pound bombs. He made fast work of it before needing oxygen in the unpressurized plane and before the bomb-bay doors opened.

When they reached 25,000 to 27,000 feet, the outside temperatures dropped to 30 to 40 degrees below zero, and Goldsticker would don silk gloves to operate the bombsight so his hands wouldn't freeze to the metal.

Staying warm was critical in the unheated plane. Goldsticker wore two pairs of socks, long underwear, regular pants and shirt, heated pants, fleece jacket, silk gloves, fur-lined gloves, fleece-lined boots, and fur helmet. He also wore a "Mae West" life vest (named for the "buxom blonde bombshell" actress of the 1930s and '40s), a parachute harness, a 30-pound flak suit, and a metal helmet. He was also equipped with an oxygen mask and hose, a headset, throat microphone, and heated suit—all of which had cables attached to various systems in the plane.

Goldsticker was also the only crew member authorized to carry a gun. The Norden was considered so secret that if the plane crash landed, the bombardier was instructed to fire his .45-caliber pistol into the bombsight to prevent it from getting into enemy hands. (By 1943, however, it was believed the Germans already had access to the Norden's secrets from bombers shot down over enemy territory. It was also later discovered that Herman W. Lang, a Nazi spy and a naturalized U.S. citizen who worked at the Norden factory, had smuggled the bombsight's plans to Germany in 1938.)

MISSION OVER NORMANDY

Deuces Wild's first mission over St. Valery, France, was on May 27, 1944, followed by five more missions within the next nine days—Leipzig, Reims, Schwerte, Bologne, and Villeneuve-St. George. Their June 3 target, Bologne, was the perfect "milk run"—no flak and no enemy aircraft.

Historian Milton Barnes noted that on June 4, "34 1,000-pound bombs and 65 500-pound bombs were dropped, missing the main point of impact but hitting railroad yards and fuel dumps. All aircraft returned." Then it was D-Day—June 6, 1944.

Barnes also wrote, "It was 2100 hours, June 5, 1944, when the order came ... that all flying personnel would report to their respective briefing rooms at 2200 hours. There was tension in the air, something big was cooking and many believed it was the day they [had] been waiting for, the big raid, paving the way for the invasion of Hitler's Fortress Europe.... The 452nd's target was to be the huge coastal defense guns near Caen, France, the easternmost sector of the invasion beach of the Normandy invasion."

It was 2 AM when *Deuces Wild* took off, one of 41 aircraft in the 452nd, armed with a total load of 216 500-pound and 608 100-pound bombs. There were thousands of planes in the sky, so they had to fly up to Scotland to get into formation and then head back down to the English Channel. Almost five hours after taking off, the aerial armada approached France. Their first target that morning was a heavy gun emplacement near Sword Beach, one of the five coastal landing areas.

Goldsticker saved the cotter pin from the first bomb he dropped that day and tagged it with the time: 06:58. They returned around 9:30 AM, were fed, then took off again at around 3 PM. Their second target in the afternoon was Argentan, a railroad junction about 30 miles south of the beaches.

On the first mission Goldsticker couldn't see the invasion fleet because it was cloudy, but on the second mission he had

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a bird's eye from his Plexiglass nose of the entire fleet covering endless square miles of the Channel. The D-Day Allied invasion involved some 6,000 ships and landing craft, 50,000 vehicles, 11,000 planes, and over 150,000 troops that stormed 50 miles of Normandy's fiercely defended beaches in northern France.

Over 2,300 sorties were flown by the Eighth's heavy bombers during the invasion, "but we had it easy compared to the ground troops," reflected Goldsticker, who flew 14-1/2 hours on D-Day.

MISSION OVER MUNICH

The most treacherous mission for *Deuces Wild* was the crew's 25th, to Munich on July 31. Barnes wrote, "The 452nd put up 19 aircraft plus one Pathfinder Force…. The target, a machine and workshop area in Munich, was bombed…. Flak over the target was intense, very accurate, barrage and tracking. One group sustained 100% flak damage over the target, losing [an] aircraft and crew due to a direct hit about two minutes before bombs away…. Many B-17s struggled to reach home base." *Deuces Wild* was one of them.

"We were 27,000 feet over Munich," recalled Goldsticker, "when a burst of flak went off under us right after I released the bombs. It knocked out two engines, one on each side. A piece of flak came through the bottom of the plane, then pierced the quarter-inch armored seat of the co-pilot. It tore a hole in his left thigh about the size of a baseball and then it went out through the roof."

It was 40 degrees below zero, so the blood froze as it came out, which prevented the co-pilot from bleeding to death. Goldsticker went up and sprinkled sulfa on the wound and gave the co-pilot two morphine shots, but the gaping wound was too high on his thigh to put on a tourniquet.

Once they were out of the flak zone and under attack by fighters, Goldsticker manned the two .50-caliber guns in the nose. But *Deuces Wild* couldn't keep in formation on two engines and issued a "Mayday" for help from the P-51s to drive off enemy fighters.

Deuces Wild tried to land in Switzerland because it was close by, but it was fogged in, so they headed toward England. The crew threw everything out of the plane they could to lighten the load, thinking they might have to ditch in the Channel. Luckily, they didn't.

For the last three-and-a-half hours, Goldsticker kept pressure on the co-pilot's wound to keep him from bleeding out. Afterwards, Goldsticker received a letter from Marty, the co-pilot, saying he was going to be in the hospital for two years, in a cast from his chest to his toes. He ended up staying in the hospital for four years and had 22 opera-

A P-51 Mustang (top) can be seen escorting a flight of B-17s from the 452nd Bomb Group on a mission deep into Nazi Germany.The introduction of P-51 escorts permitted long-range missions into the Third Reich.

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tions, but he survived.

"That was our worst mission. We had about 70 holes in our airplane. My parachute was cut to shreds by flak. It was by my feet at the time. The parachute would snap onto a harness we wore in case we had to bail out. Fortunately, I didn't need it," said Goldsticker.

OPERATION FRANTIC: POLTAVA, RUSSIA

The five-inch piece of shrapnel that Goldsticker has held onto for 76 years is a reminder of *Deuces Wild*'s fateful mission to Russia. Two weeks after D-Day, on June 21, the crew was awakened at 2 AM and told they were flying a mission. They went through the usual briefing procedures until the curtain was pulled back.

The target was an oil refinery in Ruhland, near Berlin, but then the tape showing the route kept going east. Their destination was Poltava in the Ukraine, located in southern Russia, between Kiev and Kharkov, over 1,400 miles from their English base. They were told they'd be gone for about a week.

Deuces Wild was flying the second mission of Operation Frantic, which permitted Americans to use three Soviet airfields in Ukraine and making it possible to fly shuttle bombing missions en route to bases in Italy and England. General Spaatz, Commander of USSTAF in Europe, was in charge of the operation. The second shuttle, Frantic II, consisted of 114 B-17s and 70 P-51s flying to Russia, then on to North Africa, and back across France to England.

Both: Author Photo

ABOVE: 99-year-old Ralph Goldsticker models his A-2 flight jacket, which still fits like a glove. His nickname "Goldie" is emblazoned on the front. BELOW: Two wartime souvenirs: a piece of German shrapnel that pierced his tent while on a layover at Poltava and the tag and cotter pin from the first bomb his B-17 dropped over Normandy on D-Day, June 6, 1944.

They took off at 5 AM, bombed Ruhland, and continued heading east. At 3,000 feet they let their guard down, thinking they were out of the flak area, but, while flying over an airfield near Warsaw, Poland, nine ME 109 started attacking the group behind them. Two B-17s were shot down before their P-51 escorts drove them off. After an 11-1/2 hour flight, they landed in Poltava, Russia, and lined up with 48 B-17s, wingtip to wingtip.

Barnes wrote, "The Germans, seeing so many American planes so deep inside Germany and headed towards Russia, knew there was something very different afoot, so they sent out a recon aircraft to follow the B-17s and P-51 escort planes. The Americans didn't know this and felt secure on their base and lined up in neat rows at Poltava. Later that night came the rude awakening; some 60 enemy aircraft attacked Poltava."

"We were on the edge of the airfield in tents," recalled Goldsticker, "when around midnight the Germans dropped a flare over our field and for the next hour they proceeded to bomb the airfield. When the bombs started dropping, we ran from the tent to the nearest slit-trench with the others. Shrapnel was hitting all around us. With the first lull in the bombing, I ran about a quarter-mile away and ended up in another trench with a Russian family."

The bombing went on for over an hour. The Germans dropped regular, incendiary, and "butterfly" bombs. Two Americans were killed and 30 Russians died trying to put out fires. When Goldsticker returned to his tent, he found a five-inch piece of shrapnel that had burned through the top of his tent sitting on his cot. He kept it as a souvenir.

Of the total 73-B-17s from the 452nd, 96th, and 388th Bomb Groups, 47 were totally destroyed, 19 were damaged, and only seven were undamaged. One P-51 and two C-47s were also completely destroyed. Of the 47 B-17s destroyed, 24 were from the 452nd Bomb Group.

In a report of the incident, Maj. Gen. John Deane, Chief of the U.S. Military Mission in the U.S. Embassy in Moscow, wrote, "The Russian anti-aircraft and fighter defense failed miserably. Their anti-aircraft batteries fired 28,000 rounds of medium and heavy shells, assisted by searchlights, without bringing down a single German airplane. There were supposed to be 40 Yaks [Russian fighters] on hand as night fighters, but only four or five of them got off the ground. Both their anti-aircraft and night fighters lacked the radar devices which made ours so effective."

During the aerial assault, the Russians would not give clearance for American fighters to attack. U.S. air operations there were governed by a 24-hour-long permission process. Though Americans initially received excellent cooperation from the Soviet Air Forces and from the local population in establishing the base, the loss of aircraft from Frantic II was a precursor of the poor cooperation that was to come from the Soviets. The following six missions were of limited success, and Operation Frantic ended in September 1944.

Goldsticker and his crew were stranded in Russia for seven days until the Douglas C-47 transport planes arrived. They then flew the southern route back home, which included overnight stops in Tehran, Cairo,

Continued on page 98

FRANCE AVENGED

Rising from the ashes of defeat and humiliation, France's army, navy, air force, and Résistance members contributed greatly to her own liberation. | BY ALAN DAVIDGE

That France made an early exit from hostilities at the start of World War II is well known. The speed with which Hitler's Blitzkrieg had enveloped Denmark, Holland, Belgium, and then France in 1940 without even appearing to draw breath gave the impression that this once-great nation had neither the resources nor the appetite to take part in another European war.

The French were accused of cowardice, of being afraid to fight the Germans again after the bloodletting of the "Great War."

This impression was reinforced by the armistice, which set up a puppet government to run the country as if it were a German vassal state, condemning its people to servitude, sending tens of thousands to concentration camps, and paying millions of francs each day in tribute to its master.

These events may have contributed to the common view today that the French simply rolled over without a fight and allowed their invaders to do their worst. In reality, however, France was still in action after the armistice had been signed and, by the end of 1944, had not only made a major contribution to its own liberation, but was fighting to end the war outside its borders, shoulder-to-shoulder with its allies.

The reasons for France's swift collapse in the face of German pressure are easy to analyze with hindsight but came as a complete shock to its leaders and people. There was no meeting of minds between France's essentially left-wing politicians and right-leaning generals. The military technology and strategies at their disposal belonged to the Great War, despite the fact that they had watched a progressive Germany develop its fighting power during the 1930s and learned nothing from their new tactics.

Conservatism and complacency were France's undoing. Their concentration on developing the defenses of the Maginot Line was a clear invitation to Germany to find another short cut into France, as they had in 1914. This time the enemy chose the Ardennes, which was not as impenetrable to German tanks as the French had believed, and once again Belgium found itself facilitating the invasion of its neighbor.

For soldiers of the British Expeditionary Force (BEF), sent to France for the second time in 25 years to help hold back the Germans, there was some resentment towards the French army for its apparent readiness to capitulate, but the Tommies couldn't be expected to know the background. All they saw was what was in front of their eyes.

Fred Gilbert, an infantryman from the 51st Highland Division, surrounded and captured after Dunkirk, commented on the sight of columns of French POWs marching past: "There were thousands of them. They were carrying food, all with their full kit. They were clean and tidy. I thought to myself, 'God, I've been fighting to save you bloody lot!'

"Then I looked at our boys with their torn, bloodstained battledress, unshaven and hungry, no equipment, nothing at all, all of them wounded, some of them incomplete. They had given their all to try and save France. It made me sad and, in a way, bitter."

During the whole sorry military debacle, which led to France's surrender, one officer stood head and shoulders above the rest. His name was Charles André Joseph Marie de Gaulle. A veteran of World War I, he had first-hand experience of combat and a critical appreciation of the politics involved in war. A platoon commander at the start of the Great War in 1914, he immediately saw front-line action and, by mid-1915, had been wounded twice and was awarded the Croix de Guerre for his gallantry.

Three French soldiers one of whom is armed with a French Chatellerault Model 1924/29 light machine gun, loosely based on the American Browning Automatic Rifle, stand guard at a log bunker in a forest on the border with Germany. Although French weapons were as good or better than German ones, Hitler's troops possessed better leadership and tactical decision-making. After only one month and 15 days of intense fighting, the French government was forced to capitulate in order to spare the country from destruction.

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In the bloodbath of Verdun the following year, where he served as a company commander at Fort Douaumont, de Gaulle was wounded twice while leading a charge against the enemy before being gassed and subsequently taken prisoner. Even then he never accepted defeat and attempted to escape five times, on one occasion dressing up as a nurse, a role not suited to his 6-foot, 5-inch frame, and which—no surprise—quickly attracted the attention of the camp guards!

As an increasingly prominent officer during the 1930s, de Gaulle developed ideas to modernize warfare, particularly in the use of tanks and the mechanization of the infantry that would facilitate faster movement on the battlefield but that did little to impress his conservative superiors. He even wrote a book on the subject which, ironically, sold more copies in Germany than in France.

By 1937 he was promoted to colonel and put in charge of a tank regiment. His self-confidence—bordering on arrogance—did not always win the approval of his peers, some of whom nicknamed him "Colonel Motors."

When war broke out in 1939, he was placed in command of the Fifth French Army's tanks, and within two weeks was leading an attack at Bitche at the same time as the Saar Offensive.

France's politicians were starting to agree with his strategic ideas, but it was too late to implement them. In May 1940, two days after the German offensive began, de Gaulle was in charge of a new tank division with orders to stop the German advance after its breakthrough at Sedan.

His command was outnumbered and being attacked by Stuka dive bombers but held its ground—a task made all the more difficult because of the lack of French air support. He ignored orders to withdraw and managed to force the German infantry to retreat to Caumont, one of the very few successes against the advancing enemy.

De Gaulle's actions earned him the opportunity to describe the attack on French radio as part of a propaganda broadcast, and on May 23, 1940, he was promoted to temporary brigadier general. Five days later he attacked the German bridgehead at Abbeville and took 400 prisoners, which helped to create an escape route for British troops falling back to Dunkirk.

On June 1 he was congratulated by the commander-in-chief of the army, Maxime Weygand, for saving France's honor, and his new rank was made permanent. On June 5, Prime Minister Paul Reynaud gave him a government post as "Under Secretary of State for Defense and War."

As the days passed, however, the senior ministers began to consider signing an armistice despite de Gaulle's exhortations to fight on. Reynaud was replaced by Marshal Philippe Pétain, once the hero of Verdun but now the architect of an armistice that Pétain believed would protect the French people from further slaughter.

De Gaulle travelled back and forth to England to secure as much support as possible and address crucial issues such as the future of the French navy and possible evacuation of troops to North Africa. On June 17, 1940, he flew to London, having been relieved of his government post and in imminent danger of being arrested as the armistice was about to be signed. This he did with a heavy heart, feeling that he had turned his back on his government and his army. He was to remain in England for four years.

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Colonel Charles de Gaulle shows French President Albert Bebrun a new tank during Fifth Army maneuvers at an army training area near Goetzenbruck, October 1939. The country would be invaded seven months later and de Gaulle would set up a government-in-exile in Britain.

On June 18, de Gaulle was given permission to broadcast to the French people from the BBC in London. The previous day, France's new president, Marshal Pétain, had told them to stop fighting in preparation for the impending armistice, which was to be signed on June 21. De Gaulle countered this by urging his countrymen to continue to fight, saying famously that they had lost the battle for France but must continue in order to win the war.

He followed this up in a similar vein on June 19 and 22, denying the legitimacy of the new French government based in Bordeaux and asking French forces in North Africa to disobey its orders. He also tried, with minimal success, to rally support from French colonies scattered across the globe.

The British government announced after the signing of the armistice on June 21 that a French National Committee—effectively a government in exile—was to be established. The armistice took effect from June 25, and on June 28 Britain announced that de Gaulle would be recognized as the leader of the Free French. The future hopes of the French people rested on his shoulders.

Both: National Archives

ABOVE: The French garrison of Lille lay down their arms. The scene followed a parade during which the French were reviewed and saluted by their conquerors. LEFT: De Gaulle broadcasts from BBC studios in London, June 18, 1940, calling on French citizens to resist the Nazis and their Vichy collaborators.

De Gaulle's position was precarious over the next couple of months, and officially the "new" France, now referred to as the Vichy régime, was technically Britain's enemy, having signed an armistice with Germany. This was to test de Gaulle's loyalties to their limits.

The Vichy government had laid claim to the French navy. If it then became available to the Germans, it could present a threat to Britain and the Free French, so Churchill first asked it to surrender and, when it refused, reluctantly ordered its destruction while it was moored at Mers-el-Kebir in North Africa on July 3—an attack that resulted in the deaths of over 1,200 French sailors. De Gaulle had accepted this attack publicly, and it lost him support in several quarters.

His broadcasts became more regular—around three times per month—and gave heart to communities in occupied France. Listening to them was a punishable offence, but in most towns and villages there was someone with a radio who could pass on his messages by word of mouth.

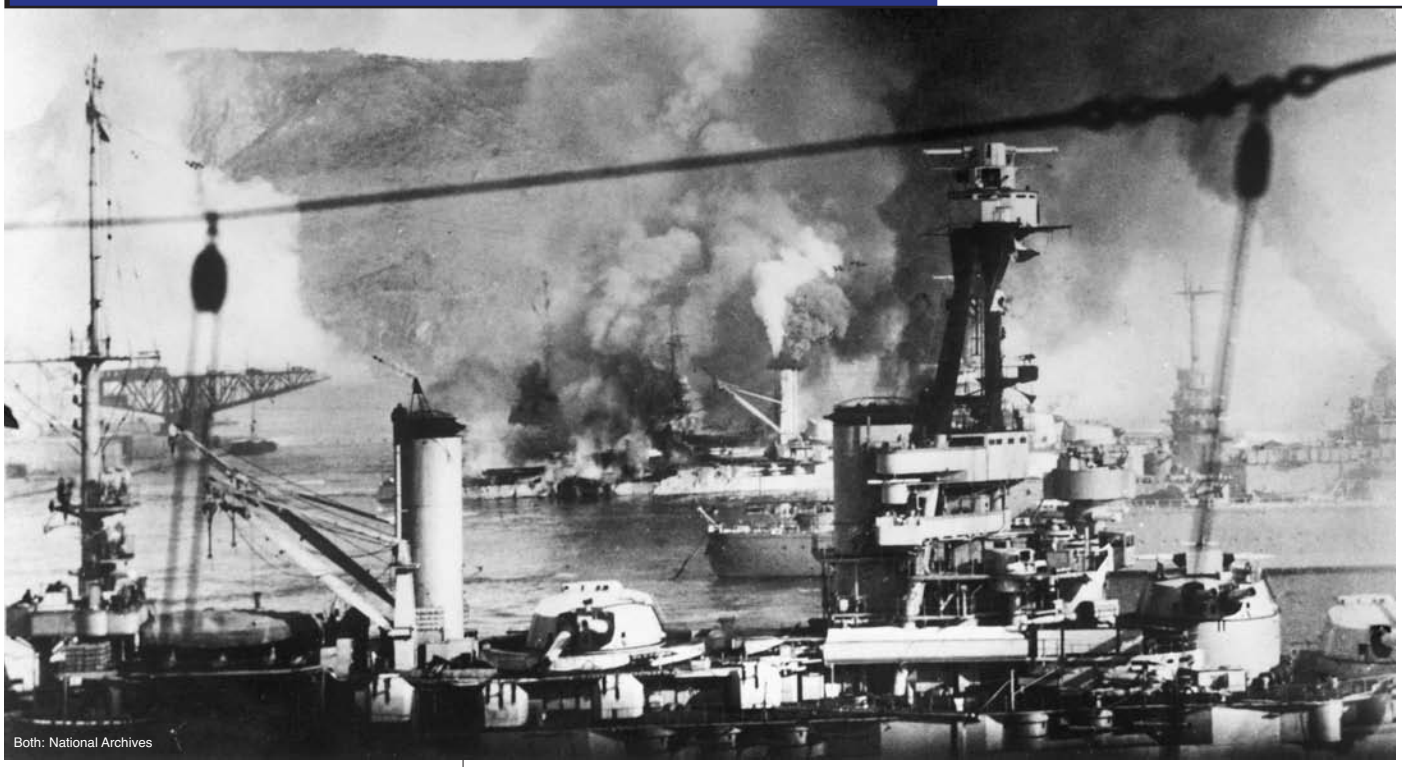
A propaganda war then began to develop between the two leaders. Vichy President Pétain's broadcasts blamed France's defeat on the general moral decline of the country, which suggested that everyone had some responsibility for all that had happened, whereas de Gaulle was more upbeat and precise in accounting for what had gone wrong, laying the blame squarely upon the politicians for the loss of his country.

France's leaders may have let them down, but the country had proved, in its recent history, that when power passed to the hands of ordinary people, anything was possible.

Elsewhere in the world, some real aggression started to take place between French patriots in exile and the Axis forces. Despite the estimate that 92,000 Frenchmen were killed in the battle for France, and two million rounded up as POWs, there were significant numbers of servicemen flying the flag elsewhere.

Upon the signing of the armistice, France's world-wide empire came under the control of the Vichy government, but some colonies very quickly demonstrated their support for the Free French side. The first of these included Cameroon, French India, French Equatorial Africa, New Caledonia, New Hebrides, French Polynesia, and Saint Pierre et Miquelon—the latter being two islands situated in the northwestern Atlantic Ocean near Newfoundland and Labrador.

The Vichy government began to lose control of other colonies, especially after



Both: National Archives

Operation Torch in November 1942, when Allied forces invaded Morocco, Algeria, and Tunisia; by the middle of 1943 practically the entire French empire was behind de Gaulle.

Although the majority of the French navy was out of action, there were plenty of opportunities for France's air-force pilots to continue the war—if they could get out of the country. Over a dozen of them crossed the English Channel in time to join the RAF and take part in the Battle of Britain during the summer and early autumn of 1940.

Among them were Henri Lafont and Réné Mouchotte who, along with four colleagues, stole a Caudron Goéland from the base where they were stationed in Oran, Algeria, shortly after the armistice was signed—otherwise they would have been required to fight for Vichy France. The stolen plane had been sabotaged to prevent just this from happening, but they made it to Gibraltar and from there on to Britain via a Free French armed trawler and were welcomed as new comrades by RAF 615 Squadron. (In August 1943, Réné Mouchotte gave his life for his country while flying a British Hawker Hurricane that was escorting a group of Flying Fortresses on a daylight bombing raid on a German strongpoint near Calais. A street in Paris and an air base are named after him.)

ABOVE: To keep it from falling into German hands, British Prime Minister Winston Churchill ordered the Royal Navy to bombard the formidable French fleet at Mers el-Kebir, near Oran, French Algeria. Here the fleet burns furiously on July 3, 1940. LEFT: Churchill and de Gaulle in London after the collapse of the French army. The two men had a love-hate relationship, with both needing the other to ensure victory.

French pilots were able to serve in other theaters of war as well. Possibly the most famous were the Normandie-Niemen airmen who fought alongside the Russians on the Eastern Front. (See *WWII Quarterly*, Fall 2011.)

Six months after Germany invaded the Soviet Union in June 1941, de Gaulle began to explore possible cooperation from the Free French; the outcome was the creation of the "Groupe Chasse GC3 Normandie" in September 1942, which became fully operational the following year.

Pilots trained in Russian Yakolev fighter planes and, after their first successes, became part of a propaganda campaign in Russia. Unfortunately, this marked them out for summary execution if captured by German forces.

Jean Tulasne was its original commander, and his group consisted initially of 12 pilots and 47 ground staff who were transported to Russia via Iran. As the Soviets took control of the Eastern Front, their base moved further into German territory; by the end of 1944 it was located inside Germany itself and had been responsible for shooting down 201 enemy aircraft.

They were then expanded in size, and the unit became a regiment. The Russians named them the Normandie-Niemen group after they helped capture Russia's Niemen River (sometimes spelled Nemunas, Nioman, or Neman).

They were awarded several Russian battle honors for their efforts, which included the destruction of trains, trucks, and even E-boats, as well as shooting down enemy aircraft, plus a number of French citations and awards. On June 20, 1945, they returned home to a heroes' welcome in Paris.

The Russian government showed its appreciation by presenting France with 37 of the Yak-3 fighter planes in which they had flown, marking the collaboration of the Free French in defending the Eastern Front and the loss of 42 of its young airmen in combat.

In colonial Africa, France faced a number of challenges, and de Gaulle selected Philippe Hauteclocque, who had been involved in the early fighting before the surrender as the commander of the 4th Infantry Regiment, to take charge in this area.

Born to a historic French family, Hauteclocque escaped France to join de Gaulle on July 25, 1940, and was promptly given the rank of major and sent to Africa as governor of French Cameroon. To avoid possible reprisals that would put his family in danger, he subsequently took on the name "Leclerc."

Leclerc consolidated the Free French position in central Africa and led a successful attack on Gabon, relieving it of its link to Vichy. He was next sent to Chad, whose border with Italian-held Libya made it vulnerable; he and his forces systematically destroyed several Italian bases in the desert.

The following year, under de Gaulle's instructions and now promoted to general, Leclerc invaded Libya and drove his troops as far as Tripoli. At this point the Free French forces were fused with Giraud's Army of Africa to form the French Expeditionary Corps.

The Army of Africa was a colorful outfit with a historic reputation. It consisted of *zouaves*, *tirailleurs*, and infantrymen from Algeria, Morocco, and Tunisia, plus the fabled French Foreign Legion. They had been sent to France at the outbreak of war but, after the armistice was signed, their numbers were limited to 120,000 men.

General Maxime Leygand, who preceded Giraud, was however able to train a further 60,000 under various guises such as auxiliary police. The combined armies subsequently supported the British Eighth Army under Field Marshal Bernard L. Montgomery in its invasion of Tunisia.

By the time the Germans and Italians had been defeated in North Africa, Leclerc had established a major role and reputation for the French among the allies, and his unit of over 4,000 men became the *2e Division Blindée* (2nd Armored Division), equipped by the Americans with new Sherman tanks and other weaponry. It was soon to have a significant role in the liberation of France.

While members of the French army in exile were playing an active role in fighting the Axis powers, there were signs that ordinary people at home were beginning to take control of their own destiny.

On the night of Easter Sunday 1941, a British Wellington bomber returning from a successful raid on an airfield near Bordeaux crashed into the center of the small town of St. Sever-Calvados in German-occupied Normandy, killing all the crew on board and nine civilians.

A Sergeant Rawlings, a gunner on board the plane, had previously bailed out with a Verey pistol to signal a spot for a safe landing, but a wing tip of the Wellington clipped a chimney on its approach, and it crashed in flames.

When Rawlings was picked up by the Germans, they paraded him through the streets, identifying him as responsible for the deaths of those innocent French civilians who had perished in the crash. This vindictive act gained no response from the townspeople and was to backfire spectacularly over the next few days.

Neighboring towns were quickly made aware of the tragedy, and when the British airmen were interred a few days later, a

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LEFT: Then-Colonel Philippe Leclerc, one of Free France's top field commanders, reviews French Senegalese troops in Chad, December 1940. The Free French army depended a great deal on colonial troops. ABOVE: A French Foreign Legionnaire scans the skies in search of enemy planes over the North African desert during the fight against Rommel's Afrika Korps.

crowd of nearly 4,000 people came to pay their respects, some cycling many kilometers to join the mourners who packed the streets.

As the population of St. Sever was no more than 1,400, this was clearly a gesture of defiance and a sign of things to come. Word spread quickly among the forces occupying Normandy, and it was decreed that anyone attending the burial of allied soldiers in the future would be punished.

French civilians are arrested by Germans. Anyone caught resisting the occupiers was subject to arrest, incarceration in a concentration camp, or death.

The message from this small French town was clear: they may have suffered a humiliating defeat and enforced occupation, but they would demonstrate their solidarity and resistance until the opportunity to get their country back presented itself.

For any public resistance to be effective, it would ultimately require coordination, and de Gaulle's speech on June 18, 1940, urging civilians not to comply with the forces of occupation, provided an initial starting point.

France also had at its disposal disparate groups that had escaped persecution elsewhere—some with experience of guerrilla fighting, such as those who had fought in the Spanish Civil War, and also Poles, German, and Italian anti-fascists and Jews from other parts of Europe. Initially, however, most of the resistance was passive and concentrated on locally printed propaganda.

By 1942 it was estimated that around 300,000 copies of leaflets were being read by two million people. These carried advice on how to make life difficult for the Germans and provided motivational stories of German defeats elsewhere.

The previous year saw the first signs of the unification of resistance groups, with Jean Moulin, the prefect of Eure-et-Loir, southeast of Normandy, as a key figure. He used his network of contacts to pull groups together and liaise with de Gaulle and the Free French. Coded messages from the BBC broadcasts provided a major source of communication.

As informal resistance groups developed into the French Résistance, which the Germans saw as a real threat, their members discovered the level of risk involved: Jean Moulin was arrested and tortured, and he died in captivity in 1943.

Many more were to suffer a similar fate for their country. A glance at the war memorials constructed in French towns from 1919 onwards often reveals names of civilians from the 1939-45 war who made the supreme sacrifice to help win the war.

In order to distinguish between the Free French and the Résistance, de Gaulle began referring to the latter as the French Forces of the Interior (FFI). The use of a generic title should not, however, create the impression that they were a unified group. Not only were resistance groups disparate in nature, but they were also diverse in their final aims; and some, like the *Francs-Tireurs et Partisans* (FTP), were connected with the Communist Party and wanted a different political outcome for France. This was to present difficulties for de Gaulle and the Free French when liberation actually occurred.

In addition to the urban resistance fighters, there were guerrilla groups called *Maquis*, based in the countryside. Some of these were men who had taken to the hills to escape conscription into the Vichy forces. They were particularly active in the Alps, Brittany, and Limousin, a region in southwest-central France. A significant number also belonged to communist groups. They were frequently well-armed and worked closely with the Special Operations Executive (SOE) of Britain. Many played a significant role in helping downed Allied airmen to escape.

As well as communication and propaganda, the main activities of the Résistance included intelligence gathering, sabotage, and actual guerrilla warfare.

In the early part of the war, intelligence was of paramount importance. De Gaulle set up a French intelligence network in London (the BCRA), which worked closely with British

intelligence and the Résistance. Information was sent and collected by radio operators (*pianistes*) and later by Westland Lysander airplanes, specially designed for low flying, short take-offs and landings, and dropping canisters full of information or supplies.

Good information meant more weapons and supplies for the Résistance, so there was a big incentive to perform well. Intelligence gathering by the French greatly assisted their liberation on D-Day as the Allies became much better informed and kept up to date about the German defenses and troop dispositions.

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Imperial War Museum

ABOVE: Sentenced to die: 7 members of the Manouchian Group, an armed resistance organization in the Paris area, await their execution, February 21, 1944. Missak Manouchian (second from left) led the communist-affiliated organization. BELOW: Goumiers, fierce fighters of the 2nd French Moroccan Division, receive a final briefing on German troop dispositions prior to relieving the U.S. 34th Infantry Division on the front line near Cassino in December 1943.

Sabotage often included damage to railway lines, such as unbolting connector plates to derail supply trains, the use of explosives to destroy tracks and bridges, or simply the undetectable mistakes made by forced-labor groups on equipment being made for the enemy.

The French who organized their own explosive production ran great risks. A renowned French female chemist by the name of France Bloch-Serazin, who was making explosives in her Paris apartment, was arrested in February 1942, tortured, and taken to Hamburg to be guillotined as a result of her activities.

More often, however, explosives were stolen from the Germans. Where sabotage was possible against strategic targets, it could be more effective than bombing raids and saved Allied resources and airmen's lives, but the risks that the saboteurs took were considerable.

Guerrilla warfare was also a particularly risky business, and not just for the perpetrators. It was practiced largely by the communist groups initially, but the assassination of a German officer on the French Metro in 1941, which was avenged so brutally on innocent civilians, provided a disincentive to French resistance groups, although they were increasingly becoming well armed. Their time, however, came after D-Day, particularly during the liberation of Paris, when they could operate in the open and put their training and weapons to good use.

While the Résistance was doing its best to subvert the German occupation, French forces outside of their homeland were doing their utmost to make the liberation happen as soon as possible. In addition to the regular soldiers who secured North Africa, other French troops were being selected for specialist and skilled duties elsewhere. One airborne group that was formed in 1940 joined the British Lt. Col. David Stirling, and the following year became the 1st French SAS Regiment.

In addition to these, a series of commando groups were created by de Gaulle and trained alongside the British Chindits and fought in French Indo-China to liber-

ate it from the Japanese, who had occupied it since 1940. They became part of the Far East French Expeditionary Force.

During the Italian campaign in 1943, the French Expeditionary Corps under General Alphonse Juin was given a major combat role. By May 1944, the FEC found themselves facing the daunting defenses of the Gustav Line and the heights of Monte Cassino which, since autumn 1943, had been devouring the finest American, British, and Commonwealth troops seeking a breakthrough that would lead to Rome and eventually Germany itself.

Their performance in tackling the Gustav Line was exemplary. The 1st French Division, with comrades from Morocco and Algeria, outflanked the German defenses and won huge praise from Fifth U.S. Army commander Lt. Gen. Mark Clark: "In spite of the stiffening enemy resistance, the 2nd Moroccan Division penetrated the Gustav Line in less than two days' fighting.

"The next 48 hours on the French front were decisive. The knife-wielding Goumiers swarmed over the hill, particularly at night and General Juin's entire force showed an aggressiveness hour after hour that the Germans could not withstand.

"Cerasola, San Giorgio, Mount D'Oro, Ausonia, and Esperia were seized in one of the most brilliant and daring advances of the war in Italy. For this performance, which was to be a key to the success of the entire drive on Rome, I shall always be a grateful admirer of General Juin and his magnificent FEC."

By this time, the tide was turning against Germany. Italy was already out of the war, and the plans for the invasion of Europe were almost complete. The French army in exile would soon be coming home. In a short while, French troops would join the D-Day liberators, squeeze the Germans out of Normandy, then land in the south of France and penetrate to the north. Paris would be the next prize, and France would belong to the French once more.

However, the social and personal divisions created during the occupation and the desire of some of the Résistance units to swing hard left politically would mean further challenges were in store for a liberated France.

The announcement of Operation Overlord (D-Day, June 6, 1944) to the French people was undertaken by the Résistance through a clever plan hatched with the Special Operations Executive (SOE) through the BBC.

When the first three lines of a poem by Jean Verlaine, *Chanson d'Automne* (Autumn Song) were broadcast, it meant that the landings were imminent; it was agreed that the broadcasting of the next lines would signify that the landings would take place within 48 hours, so that the French support-and-sabotage plans could be put into action.

The first lines were broadcast on June 1 and the next lines on June 5. The French population was going to do everything possible to facilitate the arrival and progress of Allied troops. This was the beginning of the liberation of Europe, and a successful removal of the enemy from France would provide the necessary initial impetus to carry them all the way to Berlin.

Although the D-Day landings were undertaken mostly by British, American, and Canadian troops, the day was also a homecoming for Commandant Philippe Kieffer's commandos—177 in total—who were attached to Lord Lovat's 1st Special Service

Armed with an American-made M-1921 Thompson submachine gun, a Free French Naval commando officer stands in formation with his men. French commandos took part in several operations, including the Normandy invasion on June 6, 1944.

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Brigade, which landed at Sword Beach.

Eyewitness accounts suggest that Lovat's lead boat pulled back to allow the French commandos to touch down first on the sand. One can only imagine how it felt for them and for the local population to see troops in French uniforms for the first time in four years. Their prayers had been answered!

Elsewhere in northern France, other French servicemen were taking part in the liberation. Thirty-two paratroopers were dropped in Brittany overnight and five Free French squadrons (three fighter and two bomber) were supporting the beach landings.

Despite the disaster at Mers-el-Kebir, Algeria, when the Vichy-aligned French fleet was decimated by the British Royal Navy in July 1940, the Free French had a small navy, mostly provided by Britain, and there were Free French sailors serving on some British ships.

Along the Channel coast between Omaha and Gold Beaches, the cruisers *Montcalm* and *Georges Leygues* were pounding the enemy's beach defenses. In front of Omaha Beach, the destroyer *Roselys* moved closer to the shoreline to provide supportive fire, with another destroyer, *La Combattante*, doing the same at Juno Beach.

The Résistance had played an important role in providing updated intelligence for D-Day, and many groups were now able to directly help their liberators by disrupting communications that were crucial to the German response. But in doing so, many were exposing themselves to an enemy that was becoming increasingly vindictive.

Everyone had to be more careful, especially in towns and villages some distance from the coast, which could not expect to be liberated for weeks. In Beaucoudray, south of St. Lô, a series of errors among members of the local cell of postal workers engaged in a sabotage plan resulted in 11 being caught and shot on June 15. Similar tragedies were to occur elsewhere before the liberators could arrive in sufficient numbers to take charge.

De Gaulle returned to France on June 14, transported by the destroyer *La Combattante*, and landed on Juno Beach, a spot commemorated today by an enormous steel Cross of Lorraine. He went straight to Bayeux to make a speech to a crowd of 2,000 and began describing the new political structure he envisaged for France.

Thanks to Eisenhower's support and the dynamic efforts of the Free French, the country had escaped being put under AMGOT (Allied Military Government for Overseas Territories), which was what eventually happened to Germany, Italy, and Japan. De Gaulle subsequently visited Isigny-sur-Mer, between Utah and Omaha Beaches, inspecting progress on the other beaches and raising morale among the locals.

On August 1, General Leclerc arrived from North Africa at Les Dunes near Utah Beach with his 2nd Armored Division, comprising 16,000 troops, 3,000 vehicles, and 250 tanks. This event is commemorated by an open-air display, popular with French visitors and regarded as the place where *La Libération* began in earnest.

His division was part of Maj. Gen. Wade Haislip's XV Corps belonging to Lt. Gen. George Patton's Third Army. The division swung into action immediately as part of Operation Cobra, the breakout from the beachhead.

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The U.S. supplied Sherman tanks to Leclerc's French 2nd Armored Division, shown here assembling after arriving at Utah Beach in Normandy on August 1, 1944.

The 2nd Armored Division continued to play a major role alongside American and Canadian forces over the next two weeks in pushing the German army towards Argentan at the southern end of the Falaise Pocket, practically destroying the 9th Panzer Division in the process. The Germans lost 4,500 troops killed and 8,800 taken prisoner, as well as an enormous destruction of vehicles, including 117 tanks.

Leclerc's passage through French towns and villages along the way was triumphant. Not only was France being liberated, but the act was being performed by Frenchmen.

What happened next crowned Leclerc's career and helped to shape the future of France. Originally, the plan had been to bypass Paris and keep chasing the enemy

back to the Rhine, but on August 19, the Résistance in Paris started to take the law into its own hands.

The situation had been coming to a head since August 15, with strikes by police and key workers and a general strike planned for August 17. Colonel Henri Rol-Tanguy, the communist leader of the Résistance (FFI), decided that, as the German position was weakening and the Allies were on their way, the time had come for the uprising that they had been planning for months.

When the news reached Leclerc, who had just fought his way to a position where he could help to complete the planned encirclement of the German army just east of Falaise and Argentan, it placed the Free French on the horns of a dilemma.

Memories of the recent brutal crushing of the uprising in Warsaw by the Germans were too powerful to allow the FFI to take on the Germans in Paris on their own. De Gaulle felt the same and urged Supreme Allied Commander General Dwight D. Eisenhower to liberate Paris as soon as possible.

Originally, the liberation of Paris was not high on the Allies' priority list. The Americans and British did not want to get bogged down in the nightmare of an urban-combat scenario, nor be responsible for feeding millions of starving Parisians. But humanitarian concerns and the value of the boost to Allied morale if Paris were liberated outweighed the negatives.

Ultimately convinced, Eisenhower decided to leave a small contingent from the French 2nd Armored Division near Argentan to help the Americans close the Falaise Pocket on the retreating Germans. Leclerc, with the bulk of his troops, and the U.S. 4th Infantry Division were sent at full speed towards Paris to liberate the city and avert the slaughter of the FFI and civilians.

Leclerc reached the outskirts of Paris on the night of August 24, followed by the rest of his division and the Americans, who arrived the next day. This was not a moment too soon, for Hitler had issued orders for anything of value to be destroyed; dynamite charges had already been attached to bridges and public buildings.

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After the Résistance had staged an uprising, the Allies quickly decided to send Leclerc's tankers into the city first. Here Charles de Gaulle marches in a triumphant parade through Paris on August 25, 1944, just hours after the city's liberation from the Germans. OPPOSITE: Resistance fighters ("Maquis") escort a Free French M8 Gun Motor Carriage with 75mm howitzer through the streets of Avignon, August 24, 1944. The Maquis provided great assitance to Task Force Butler during its operations in Southern France after the Operation Dragoon landings on August 15.

Dietrich von Choltitz, the German commander left in charge of the city, was disinclined to see the treasures of Paris reduced to rubble and was ready to accept that his war was over. He agreed to surrender and declare Paris an "open city."

René Champion, a French-American soldier in Leclerc's division, was driving one of the first tanks—a Sherman named *Mort-Homme* (Dead Man)—to enter Paris. He recalled, "As we rode through the city streets, heads high, hearts swollen with pride, eyes shining, black berets at a jaunty angle, I almost had the feeling that the war had come to an end and that I was taking part in a victory parade."

As the platoon of tanks rolled single-file toward its objective—the Hôtel Maurice, the German headquarters—they suddenly came under enemy fire. "I heard the voice of my tank commander in my earphones: 'Faster, Champion, faster!' A moment later the tank was rocked by a tremendous explosion and it began to fill with thick billows of acrid smoke. I knew immediately that we had been hit….

"Stunned by the explosion, I let the tank roll forward for a few moments before I realized that it was on fire and that all the ammunition in it would explode at any second." Halting the tank, Champion scrambled out of the machine, then ran back and grabbed a fire extinguisher to put out the flames. Two of the crewmen, hurt but alive, had crawled out of the bottom escape hatch.

Despite sniper fire, Champion managed to run two blocks back to where an infantry unit was waiting to move forward and found someone with a stretcher. They ran back to the tank to care for the wounded.

The tank platoon's mission was successful, Champion said, "But it had also been

costly. In my platoon alone, four of our five tanks had been hit by grenades and anti-tank missiles. Two of our tank commanders had been killed. More than a dozen others, out of 25 men, had been injured. Among them were my own crew commander and my gunner, as well as Jacques Diot, the loader."

That evening, after the battle of Paris was over, an exhausted Champion lay on the ground in the Jardin des Tuileries and tried to sleep, but all he could do was think about the day: "Beautiful, wonderful Paris! How we had cherished the dream that we might someday be the ones to liberate it.... The dream had become truth and the truth had been far more thrilling and deeply satisfying than I had ever imagined."

A victory parade through the streets of Paris on the 25th was cheered by hundreds of thousands of Parisians. De Gaulle led the parade, walking proudly down the Champs Elysées as he was showered with cheers and flowers. Even the occasional sniper's bullet failed to cause him to panic. He was shot at later that day in the middle of Notre-Dame Cathedral during a prayer of thanks but again refused to flinch.

As the President of the Provisional Government of the French Republic, de Gaulle made a rousing speech at the Hôtel de Ville (city hall) to the French people, praising the role of the Résistance and the Free French army in seizing the capital but urging against complacency. The enemy was still on their soil, and France now needed a new government of national unity, reflecting the contributions all had made toward their liberation.

He was particularly concerned about bringing together the strong communist element that had driven much of the resistance internally with all other groups. He pointed out the duty France now had to help liberate Belgium and Holland as well as defeat Germany.

There was at last an opportunity to take a little time out for victory celebrations in spite of the food shortages being suffered by Parisians. Thanks to a huge effort by the Allies, supplies poured into Paris, and within 10 days the capital was ready to continue assisting with the liberation of the rest of France.

From August 15, southern and central France had been witnessing the country's "Second D-Day" as American, British, and French troops participating in Operation

ELSEWHERE IN NORTHERN FRANCE, OTHER FRENCH SERVICEMEN WERE TAKING PART IN THE LIBERATION. THIRTY-TWO PARATROOPERS WERE DROPPED IN BRITTANY OVERNIGHT AND FIVE FREE FRENCH SQUADRONS (THREE FIGHTER AND TWO BOMBER) WERE SUPPORTING THE BEACH LANDINGS.

National Archives

Dragoon drove up the Rhône Valley after having landed in Provence and secured the ports of Toulon and Marseille.

The key driving force was Army B, led by Jean de Lattre de Tassigny, a veteran of 1914-18, who joined de Gaulle in 1943. His army was composed of elements of Free French, the Army of Africa, and volunteers, and made up seven divisions which, when amalgamated with three U.S. divisions, Special Forces, and Airborne Forces, comprised Lt. Gen. Alexander Patch's Seventh U.S. Army.

De Tassigny was then joined by former FFI fighters, giving him a strength of 400,000 men. At the end of September, Army B was redesignated the First French Army.

Operation Dragoon had been a great success, achieving its main objectives in four weeks. The Germans rallied in the Vosges mountains near the border with their homeland, but they were no match for the American Seventh and French First Armies, which, by then, had been joined by Leclerc's 2nd Armored Division.

On the way there, Leclerc had liberated Lorraine and practically destroyed the German 112th Panzer Brigade. He renewed contact with his comrades in Haislip's XV Corps and then drove into Alsace, liberating Strasbourg on November 23 and receiving a Presidential Unit Citation for the actions of his division.

De Tassigny remained in the Vosges area as part of General Jacob Devers' Sixth Army during the time when the Battle of the Bulge, effectively Hitler's last stand, was taking place further north in the Ardennes.

This costly engagement, although involving mostly U.S., British, and Canadian forces, also saw a valuable contribution from the French. Two light-infantry battalions were attached to Maj. Gen. J. Lawton Collins' VII Corps, and a further six were attached to Troy Middleton's VIII Corps.

Further support came from France's 3rd SAS 1st Airborne Marine Infantry Regiment. The efforts of the Wehrmacht during the Battle of the Bulge checked the Allied advance, and it looked as if the recent gains in Alsace such as at Strasbourg, between the Vosges mountains and the German border, would have to be abandoned. But de Tassigny held on, despite heavy casualties around Strasbourg itself.

German counterattacks during their Operation North Wind in the area around Colmar, south of Strasbourg, led to four divisions from Maj. Gen. Frank Milburn's U.S. XXI Corps being placed under de Tassigny's command as reinforcements—the only time that a French general commanded a U.S. unit in World War II. Colmar was liberated three weeks later.

The capture of Strasbourg, on the German border, was of great personal significance to Leclerc and his men. On March 1, 1941, after the capture of Kufra in Libya, his first major battle in North Africa, he and his men swore an oath that has gained a page in history as "The Oath of Kufra:" "Not to lay down arms till our colors, our beautiful colors, fly over Strasbourg Cathedral."

Elsewhere in Europe, beyond its own frontiers, France was assisting in the liberation of the Benelux countries. As part of Operation Amherst, April 7-8, 1945, 700 troops from the 3rd and 4th French SAS were dropped in the Netherlands as part of a nighttime mission to spearhead the attack on key facilities held by the Germans and hold onto them until relieved by Canadian forces.

Fighting in Alsace continued into March 1945, and the 2nd Armored was then sent to Royan on the Atlantic coast, where it forced a major German surrender on April 18. On April 21, the rest of de Tassigny's French First Army took the industrial city of Stuttgart.

The French 2nd Armored Division returned to the east in pursuit of what was left of German Army Group G into Swabia and Bavaria, arriving at Berchtesgaden—known as Hitler's "Eagle's Nest" mountain retreat—during the first week of May, just as the Germans were preparing to surrender.

Sergeant Joe Guennel, a member of an American POW-interrogation team, had also made it to Berchtesgaden before any of the other U.S. units arrived. He recalled, "We woke up on a beautiful Sunday morning, but the tranquility was shattered by roaring engines. The French 2nd Armored Division tankers were in town, racing up and down the main thoroughfare of Berchtesgaden in the black Mercedes limousines that they had liberated from their garages on the Obersalzburg. I recall hearing that Generals Leclerc, de Tassigny, and de Gaulle each received one of those symbols of victory."


National Archives

General Jean de Lattre de Tassigny, head of First French Army, a part of Jacob Devers' Sixth U.S. Army, fought all the way across France to the Nazis' "Eagles Nest" mountain retreat in Bavaria.

In the last few days of the war, both at home and in lands to the east of its borders, France was giving as good an account of itself as any of the Allies that had been fighting the Axis powers during the last five-and-a-half years.

It had its new war heroes, a charismatic leader who had never given up on his promises, despite being forced out of his country, and its people had finally shrugged off those who had invaded and brutally occupied their homeland since 1940.

The French had displayed exceptional courage and had taken great personal risk to get their country back. Of course, servicemen from Britain and North America and other allied countries also gave their all, but their circumstances were a little more predictable.

National Archives

The French were brutal to their countrymen who collaborated with the Germans. Here a woman, whose head has been shaved, carries her baby by a German soldier through a crowd of angry civilians in Chartres.

They enlisted, built up a camaraderie among their mates, were comforted that there were support mechanisms for their families at home who, in turn, were supplying them with their own forms of support, whether it be letters from loved ones, or stirring words from Winston Churchill, or songs from Vera Lynn and Glen Miller on the radio.

They were driven by the dream of coming home to a hero's welcome and the chance to continue where they left off with their families.

In contrast, the French Résistants knew that, if caught, their families could be punished as well as themselves and, of course, they didn't know which of their neighbors were actually informants or collaborators.

The Free French soldiers fighting overseas were very much on their own and could not be sure whether they would be going home as prisoners to an occupied country or, as it happened, fortunately, to a free France.

Their leaders were exceptional, however, and were real role models. De Gaulle, Leclerc, and de Tassigny in particular—who, in two world wars, must have stopped enough enemy rounds between them to fill a rifle magazine—were men who faced danger every day (for de Gaulle it was the ever-present possibility of assassination), and they were an inspiration to their men.

Despite all this, France was now set to undergo a challenging and confusing post-war period in its history that saw public (and private) trials and executions of those who were deemed responsible for the misery that the country had suffered.

Women who had consorted with the enemy had their heads shaved and were paraded through Parisian streets in their underwear to face the scorn of the population. Vichy leaders were rounded up and sentenced; collaborators became, at the very least, social outcasts; and many ended up as the victims of some very rough justice as old scores were settled.

France had, however, seized victory from the ashes of defeat and humiliation, and de Gaulle's prediction in June 1940 that, although it had lost the battle for France, it would win the war, had come true. This had been achieved by a well-organized and largely invisible Résistance network at home and an army in exile, still fighting for its country around the world.

This army, which not only returned home with its allies to liberate its homeland in 1944, but then made up for lost time by joining the war effort in Europe, contributed significantly to the victory over Nazi Germany the following year. □

Three Minutes OF FURY

The era of the battleship reached its apogee at Tsushima Strait in May 1905, when Admiral Heihachiro Togo's powerful Japanese battleships annihilated the Russian fleet in the Russo-Japanese War. After Tsushima, no major naval engagement between capital ships would have more than a trifling effect on the outcome of any war.

But the long-cherished belief that battleships could decide the fates of nations refused to die, even more than 30 years later. That was the case on a tragic day in May 1941, when two British warships, the new battleship HMS *Prince of Wales* and the pride of the Royal Navy, the huge battlecruiser HMS *Hood*, emerged from the dawn to face the German battleship *Bismarck*.

The *Bismarck*, the newest German warship and the most powerful one ever built, was accompanied by the smaller but equally dangerous heavy cruiser *Prinz Eugen* as they raced southwest through the Denmark Strait towards the open Atlantic. *Prince of Wales* and *Hood* were there to stop the Germans at all costs.

The pivotal moment in a duel that lasted only minutes began at 5:51 AM on May 24, when the two Royal Navy warships turned to close with the two German ships on the western horizon. The range was 28,000 yards (15.8 miles). *Hood* had to move closer to give her shorter-ranging guns a better chance of hitting *Bismarck*. Soon the guns on all four combatants were firing.

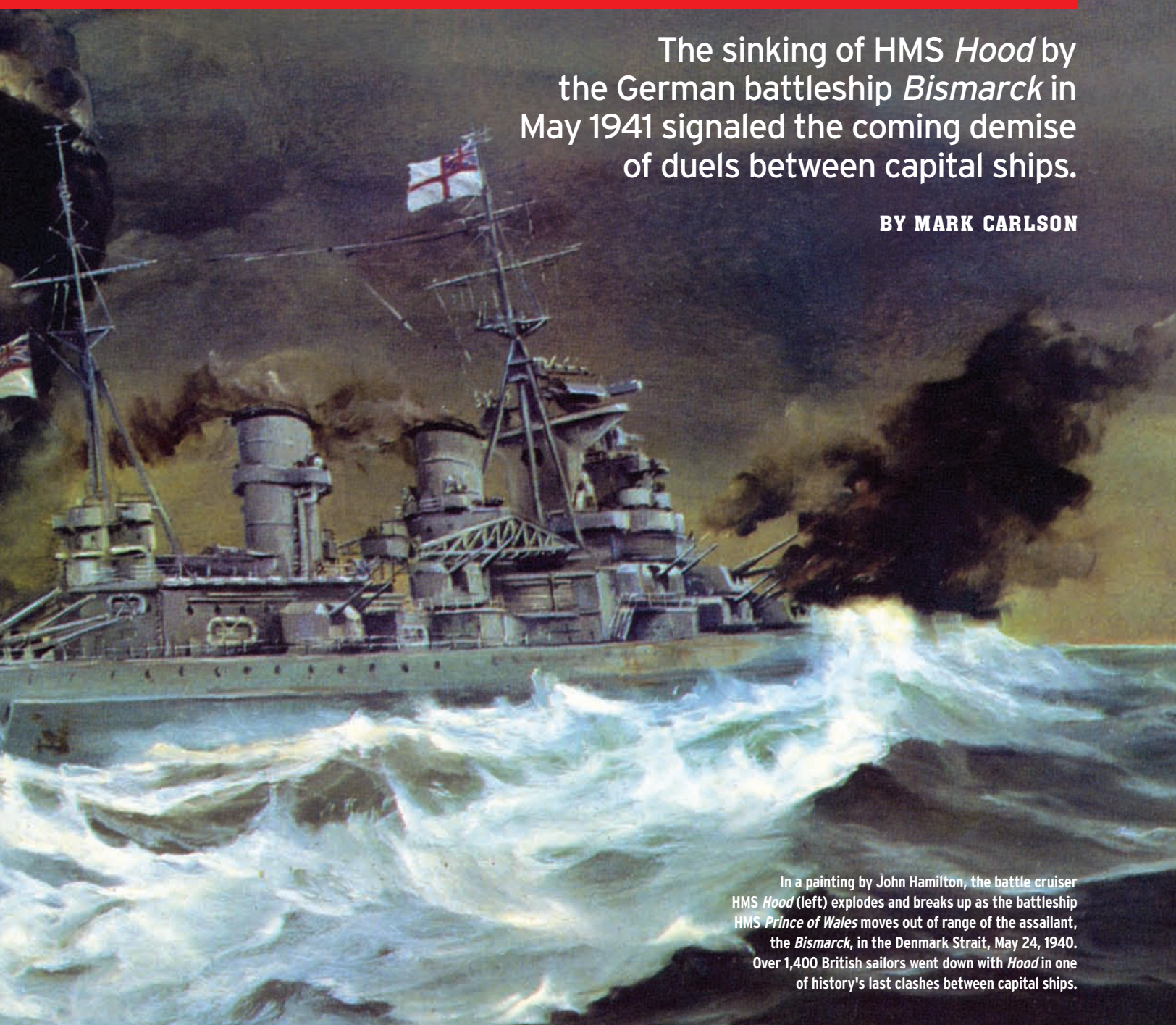
A salvo of *Bismarck*'s huge 15-inch shells screamed in an unearthly howl from the skies. *Hood* was straddled by towering columns of water. For a portentous moment, time seemed to freeze; then, the massive warship erupted into a fireball that left only floating debris behind. In those horrifying seconds, the lives of 1,415 British officers and seamen were snuffed out as if they had never existed.

The mighty *Hood* had blown up. It was the single worst disaster for the Royal Navy in its four centuries of history. *Hood* was a favorite in Britain, and her loss was a terrible blow to British pride.

It was also *Bismarck*'s only victory. Three days later, she, too, lay at the bottom of the Atlantic, a victim of German hubris and

The sinking of HMS *Hood* by the German battleship *Bismarck* in May 1941 signaled the coming demise of duels between capital ships.

BY MARK CARLSON



In a painting by John Hamilton, the battle cruiser HMS *Hood* (left) explodes and breaks up as the battleship HMS *Prince of Wales* moves out of range of the assailant, the *Bismarck*, in the Denmark Strait, May 24, 1940. Over 1,400 British sailors went down with *Hood* in one of history's last clashes between capital ships.

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ABOVE: *Hood* pictured in 1931, 11 years after being commissioned, was approaching obsolescence by the time she encountered Bismarck. RIGHT: View of *Hood* looking aft, showing her 15-inch guns, while on maneuvers off Portland, England in 1926. HMS *Repluse* is visible in the distance.

British vengeance. Ironically, *Bismarck* sank on the 36th anniversary of Togo's victory at Tsushima, a date marking both the zenith of the battleship and its final decline.

How could it have happened that the largest and most powerful warship in the Royal Navy was snuffed out in an instant?

The reasons go back to April 13, 1907, when a new warship slid into the waters from the Armstrong-Whitworth Shipyard along the River Tyne in Newcastle, England. The new battle cruiser HMS *Invincible* was the first in a line of potent warships that would dominate Admiralty doctrine for the next 10 years. Her 560-foot-long hull, displacing more than 17,000 tons, was the height of warship design. When fitted out, *Invincible* had 30 Yarrow water-tubed boilers conveying high-pressure steam to four modern Parsons Turbine engines that drove four screws to move her sleek hull through the seas at 28 knots.

Her main decks carried four heavy turrets, each mounting two massive 12-inch rifled guns capable of firing shells weighing half a ton over a distance of 12 miles. Without a doubt, *Invincible* was a radical new concept in capital warship design. But hidden under her bristling guns and gray war paint, *Invincible* was at serious risk.

The battle-cruiser concept was first set down by the father of the modern Royal Navy, First Sea Lord Admiral Sir John Arbuthnot "Jacky" Fisher. After ramrodding the innovative, all-big-gun battleship HMS *Dreadnought* into being in 1906, Fisher developed the idea of fast, heavily armed but lightly armored battle cruisers.

Fisher had decreed that in battle cruisers, "weight in armor should be sacrificed to weight invested in larger guns and heavy propulsion machinery to generate higher speeds." This became the rule by which all subsequent British battle cruisers were designed and launched.

While there were marked differences in gun caliber, speed, and tonnage, battle cruisers generally had only half the armor thickness around their turret barbettes, hulls, and decks than comparable dreadnoughts in the Grand Fleet. Most dreadnoughts, having more armor, were often 10 knots slower than the big battle cruisers.

In a fast and furious naval engagements over a wide area, as at the Falklands in December 1914, Dogger Bank in January 1915, and Jutland in May 1916, big guns mounted

on fast ships could mean the difference between victory and defeat, between survival and annihilation.

Always a proponent of speed and big guns, Fisher knowingly and willingly sacrificed the safety afforded by heavy armor. The battle cruisers, although they could sweep far ahead of the main fleet, move in fast, and engage capital ships at extreme range, were as vulnerable as any light cruiser only half as big. Yet this did not seem to deter or even occur to the Admiralty in 1907.

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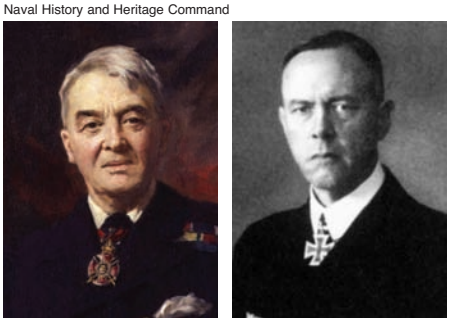

Sir John "Jacky" Fisher (left), father of British battleship doctrine, and Admiral Günther Lütjens, skipper of the *Bismarck*.

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The imposing bow of the *Bismarck*. Although slower than Hood, her 15-inch gun batteries made her a feared threat to Allied shipping.

Fisher's position and status at the Admiralty was such that no senior naval officer and few government officials could safely challenge him. He wielded immense power and brooked no opposition. Those who unwisely challenged him were buried in his characteristic tsunami of tirades, threats, memos and intimidation.

Even so, there were few men who disagreed with his daring dream of the "super cruiser" or "fast dreadnought." It was England that led the race to build the fastest big-gun dreadnoughts in the years before and during the Great War. In all, 13 such ships of increasing size and main-gun caliber were constructed after *Invincible*, eventually culminating with HMS *Hood* in 1920. Soon Germany, Japan, Russia, France and the United States followed suit, laying down the keels to their own battle cruisers.

But not all the other navies blindly agreed with the Fisher dogma. Admiral Alfred von Tirpitz, who, as Secretary for Naval Affairs, held the same status in the Kaiser's navy as Fisher in the Admiralty, felt that a warship's primary job was to remain afloat to fight, and therefore chose to accept lower speed and smaller gun caliber in favor of thicker armor.

The fast battle cruisers were meant to scout far ahead of the main battle fleet, providing information on the enemy's strength, formation, course and speed. The slower but more heavily armored dreadnoughts were the real power of a navy during the Great War, holding a status that could only be compared to the huge hydrogen bombs of the Cold War two generations later.

And while fast battle cruisers were never intended to engage enemy battleships, their big guns were too tempting for aggressive fleet commanders to discount in a clash of warships.

In addition to thinner armor, they had another fatal flaw. During the Battle of Dogger Bank in the North Sea on January 24, 1915, the SMS *Seydlitz*, flagship of the German battle-cruiser force, had received a penetrating hit on one of her after-gun turrets. The flash from the explosion went down the barbette to the shell room and

powder magazines located below the waterline. *Seydlitz* was in imminent danger of exploding, but prompt action by an officer flooded the magazine and saved the ship. (The term "barbette" usually means the entire rotating assembly of turret housing, guns, and the vertical trunk extending down into the hull.)

The danger was recognized, and the German Navy began to install double sets of anti-flash doors in the barbettes of every capital ship. Both doors could not be open at the same time, so an explosion in the turret would be stopped before it could reach the powder magazines. The Royal Navy remained blissfully unaware of this same fatal flaw in their own capital ships.

It was at the climactic battle of Jutland a year later that three of Admiral Sir David Beatty's battle cruisers exploded from exactly this type of catastrophic hit on a turret. After watching the HMS *Indefatigable*, HMS *Queen Mary* and HMS *Invincible* blow up, Beatty said laconically, "There seems to be something wrong with our bloody ships today." Fisher's decree was reaping a deadly harvest. Over 3,000 officers and men died in the three exploding ships.

Jutland also saw an hour-long duel between the heavy dreadnoughts of the German High Seas Fleet and the British Grand Fleet, none of which were lost or seriously damaged. This was undoubtedly due to their thicker armor preventing armor-piercing shells from penetrating the turrets.

In any event, Jutland patently displayed the design fault in the turrets, and changes were made throughout the fleet. Yet Fisher did not recognize or admit that his thin-skinned darlings were literally sitting ducks in a major engagement. After the battle, Fisher, never one to admit culpability, blamed the losses on the Royal Navy commanders and their lack of aggressiveness. "I have worked 30 years to build this fleet and they failed me."

In only one case did battle cruisers ever make any noteworthy contribution in the war. At the Battle of the Falklands in December 1914, HMS *Invincible* and HMS *Inflexible* were sent to the South Atlantic to

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ABOVE: The German heavy cruiser *Prinz Eugen* (pictured in 1947) survived the war only to be used by the U.S. in the Pacific to test the effects of nuclear blasts on warships. BELOW: HMS *Prince of Wales* was completed only a month before her engagement with *Bismarck*, when she was severely damaged. She was sunk in the South China Sea on December 10, 1941—three days after the attack on Pearl Harbor. OPPOSITE: In a photograph taken from *Prinz Eugen*, one of a series taken during the sea battle, two 15-inch shells from *Hood* send up spouts of water early in the action.

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intercept Admiral Maximillian von Spee's East Asia Squadron, which consisted of two armored cruisers, SMS *Scharnhorst* and SMS *Gneisenau*, and three light cruisers. Only the big guns of the British fast battle cruisers, carried by their great speed, assured victory.

By the end of the war, Fisher had left the Admiralty, still convinced of the value of his dream. In one respect, he had been right: Big guns and speed were essential factors in victory at sea. But the battle cruisers were a doomed hybrid, neither fish nor fowl. They carried big guns but did not dare engage equally armed ships. This was to have tragic consequences for a ship that had yet to be launched while Jutland still dominated the headlines.

Earlier that year, the Admiralty had learned of the proposed German *Mackensen*-class battle cruisers, which were rumored to be bigger and better-armed than the new British *Renown* class. They hurriedly laid plans for a new super battle cruiser, the *Admiral* class.

The losses at Jutland forced the incorporation of thicker armor and anti-flash doors in the turret barbettes. Four keels of the new class were laid down, but only one would be completed. The collapse of the High Seas Fleet and the imminent end of the war con-

vinced the Admiralty that the money for the other three ships could be better spent rebuilding Britain's merchant fleet, which had been decimated by U-boats.

Only one, therefore, of the mighty *Admiral*-class ships was launched and commissioned. The contract for the new warship was awarded to the John Brown Shipyards in Clydebank, Scotland, in April 1916. Her keel was laid down in September, and her massive hull slid into the River Clyde on August 22, 1918, less than three months before the Armistice.

HMS *Hood*, named for the 18th-century Admiral Samuel Hood, was the first capital ship to be commissioned after the war ended. Her hull was constructed on the same slipways where the liners *Queen Mary* and *Queen Elizabeth* would be built in the 1930s.

Hood's motto was "Ventis Secundis"—Latin for "With a Favorable Wind." From the start, *Hood* became a national favorite. The largest and most powerful warship in the fleet, she carried four main gun turrets, each mounting twin 15-inch Mark I rifles, capable of firing 1,900-pound armor-piercing shells to a maximum range of 30,000 yards. The four turrets, two forward and two aft, were designated "A," "B," "X," and "Y." The magazines for each turret held 240 powder charges and shells. Her 860-foot hull was 104 feet wide at the widest point.

Drawing more than 30 feet, her hull, deck, and barbette armor were heavier and thicker than that of any previous battle cruiser. She was more than 100 feet longer, 20 feet wider, and 13,000 tons heavier than the largest battle cruisers in the Royal Navy.

Initially, *Hood* displaced 42,300 tons, but the later installation of more armor increased her displacement to 45,000 tons; this made *Hood* ride four feet deeper in the water. In even moderately heavy seas, the waves rode over her bows and across the deck, earning her the dubious reputation as "the largest submarine in the British Navy."

In 1939 and 1940, her original 5.5-inch secondary armament was replaced with more efficient Mk XVI twin-mount, dual-purpose 4.1-inch guns, each of which had its own magazine holding 200 shells. *Hood* had four fixed 21-inch tubes for her 28 torpedoes, fitted above the waterline aft of the rear funnel.

Twenty-four Yarrow boilers fed steam to the four huge Brown-Curtiss geared turbines, with a total of 144,000 shaft horsepower. This drove the *Hood* through the water at an impressive 31 knots, better than any of Fisher's vaunted wartime fast battle cruisers.

Hood's armor along the hull and the turret barbettes was adequate to protect against armor-piercing shells from a low trajectory, but she remained vulnerable to plunging shells and bombs on her decks and turret roofs. This aspect of *Hood's* vulnerability was never fully addressed.

In fact, her popularity and stature in the Royal Navy was a detriment to any modernization or improvements that would have added to her survivability. In 1941, *Hood* had no more armor protection than she had been given in 1918.

Her armor was adequate for what the German Navy might have unleashed on

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her in the Great War, but it was too light for the later generation of high-trajectory, high-velocity, armor-piercing rounds coming into use by the end of the 1930s.

With that in mind, the Admiralty decreed that *Hood* was not to be part of the main fleet, but was instead to operate in the classic battle cruiser role of fast scout. This was her primary duty in the years before World War II.

In the early 1930s, in shipyards across the North Sea, Germany had been violating the terms of the Treaty of Versailles by constructing a series of ever-larger surface warships. Curiously, from the heavy cruisers to the so-called "Pocket Battleships" to the titanic dreadnoughts launched in 1939 and 1940, there was not a fast battle cruiser among them. While they differed greatly in size, gun caliber, and configuration, the Third Reich's big warships were fast, powerful, and clad in heavy protective armor.

The biggest and most modern of them were the sister battleships *Bismarck* and *Tirpitz*. *Bismarck* was launched in Hamburg on St. Valentine's Day 1939, with Adolf Hitler himself watching. And while she was erroneously touted in the Nazi press as the most powerful warship afloat, *Bismarck* was certainly the largest and most advanced warship ever constructed in Germany.

The British Admiralty watched with trepidation as the new battleship finished her sea trials in the Baltic in 1941. By then, most of the surface raiders had either been sunk, damaged, or forced into port. The huge *Bismarck* was a dangerous threat to the many vital Allied convoys in the Atlantic. She would have to be stopped at all cost. But *Bismarck* was faster than any battleship in the Royal Navy. So the Admiralty sent the only two capital ships capable of catching and stopping *Bismarck*: *Hood* and *Prince of Wales*.

But while the two largest combatants were almost equally armed with eight 15-inch guns in four turrets, the scale was vastly tipped in the German warship's favor.

Displacing over 50,000 tons fully loaded and with a hull 798 feet long, *Bismarck* had a beam of 118 feet. This made her heavier and wider than *Hood* and reflected the differing views of the German Navy's philosophy about armor.

Her 12 Wagner high-pressure boilers drove the three-geared turbine's 148,000-horsepower shaft. Although *Bismarck* displaced 5,000 tons more than her British opponent, she still nearly matched *Hood's* 30-knot speed.

Bismarck's armor protection was even more impressive. A belt over 12 inches in thickness girded her hull while 14 inches clad the four main gun turrets and barbettes. Additionally, German armor was far superior in tensile strength than that used in Britain. *Bismarck*'s armor constituted over 40 percent of her total displacement, as opposed to the 30 percent on *Hood*.

From a purely aesthetic standpoint, *Bismarck*'s design reflected the more modern

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An artist's rendering of the German battleships *Bismarck* and *Prinz Eugen* firing on battle cruiser *Hood* and battleship *Prince of Wales*, May 24, 1940. *Bismarck* would be sunk on May 27.

designs of the 1930s. From her raked Atlantic clipper bow to the smooth curves of the hull to the curving cruiser stern, the German ship was undoubtedly more pleasing to the eye than the angular silhouettes of most British warships.

But it was in radar and fire control that *Bismarck*'s real advantage rested. Being a generation newer than *Hood*, *Bismarck* was equipped with three FUMO-23 search-radar units. With direct input to the main fire-control stations, these sets allowed *Bismarck* to quickly fix the range of an enemy vessel. *Hood* was also fitted with fire-control radar, but her maneuvers in the fateful battle would negate their effective use.

Hood's only advantage was in the mass of her armor-piercing projectiles, which weighed 1,900 pounds as compared to her opponent's 1,800-pound shells. With these heavier shells, *Hood*'s 29,000-yard effective range was 6,000 yards less than *Bismarck*'s.

We must examine the actual circumstances of the events of that morning in order to determine how *Hood* died. The Denmark Strait, a wide northeast-to-southwest channel that separates Greenland from Iceland, was where *Bismarck* and her smaller consort, the heavy cruiser *Prinz Eugen*, were making their break for the open Atlantic.

The Royal Navy had two light cruisers, HMS *Suffolk* and HMS *Norfolk*, patrolling in the strait to shadow the two German warships until the venerable *Hood* and her brand-new companion, the battleship HMS *Prince of Wales*, could arrive. There was little doubt in the minds of the British that *Hood*, being the most powerful warship in the fleet, could easily take care of *Bismarck*.

During the night, *Bismarck*, which had been in the lead, had fired on the *Suffolk* and *Norfolk* in an attempt to sink or disable them. Five salvoes of 15-inch shells rained down on the smaller, rapidly twisting ships without hitting them.

But *Bismarck*'s FUMO-23 fire-control radar was damaged by the concussion of her guns, and Admiral Günther Lütjens ordered the cruiser *Prinz Eugen* to take station in the lead with her own functioning radar. Thus, it was *Prinz Eugen* in the lead when dawn approached on May 24.

When the British and German squadrons first sighted each other at 5:30 AM, the distance was 28,000 yards (15.8 miles), which put them on each other's horizon. *Hood*, being initially southeast of *Bismarck*, was silhouetted against the dawn sky, while the Germans were still lost in the gloom. This gave the Germans the initial advantage.

Commanded by Vice Adm. Lancelot Holland, *Hood* and *Prince of Wales* opened fire at extreme range, but because the *Prinz Eugen* had nearly the same silhouette as *Bismarck* and was in the lead, Holland initially concentrated *Hood*'s fire on the cruiser.

Both German ships aimed at the distinctive shape of the *Hood*, which was ahead of the *Prince of Wales*. Instead of relying on radar, the German fire control was initially directed by the excellent rangefinders high on *Bismarck*'s superstructure.

Hood's first salvo, fired at a range of 25,000 yards (14.2 miles) at 5:52 AM, fell short. Holland, realizing they needed to get closer, ordered a 20-degree starboard turn to the northwest to bring the two Royal Navy warships closer to *Bismarck* and *Prinz Eugen*. Well aware of his flagship's vulnerability to plunging fire, Holland also wanted to force the Germans to lower their guns so their fire would be on a flatter trajectory. Thus, the shells would hit *Hood's* thicker side armor.

But the turn towards the Germans masked the three after turrets of the *Prince of Wales* and *Hood*, depriving them of nearly half their firepower in the opening stage of the battle.

On *Bismarck*'s bridge, Admiral Lütjens ordered Captain Ernst Lindemann to open fire on *Hood* at 5:55 AM. On *Hood*, Hol-

Bundesarchiv Bild 146-1985-074-12 / Photo: Lagemann

land saw the bright flashes of *Bismarck*'s eight heavy guns. A few seconds later he heard a roar like a speeding freight train as the huge shells screamed overhead and hit the water. Tall white waterspouts towered as high as *Hood*'s foretop.

A sudden sharp shudder shook the 45,000-ton warship. *Hood* had been hit. *Prinz Eugen* added her eight smaller guns to the deadly duel, but did little damage. Still, the old battle cruiser bored in, her guns reaching out to her distant enemy. Again the flashes, and again the roar of heavy shells tore over *Hood*.

With their advanced fire-control systems, the two German ships were able to loose four broadsides at the British. *Prince of Wales*, being fresh out of the builder's yards, was unable to get all her guns firing, and *Hood* was only able to use her fore turrets. The range had closed to 16,500 yards (9.3 miles) when Holland ordered a turn 20 degrees to port, thus unmasking "X" and "Y" turrets.

It was now 5:56 AM. A shell from *Bismarck*'s fifth salvo crashed through *Hood's* afterdeck near the mainmast. That was the killing blow.

A thunderous eruption of flame, steam, smoke, and flying debris instantly smothered the place where the mighty *Hood* had been. The sound of her destruction roared over the cold waters of the Denmark Strait and echoed off the distant icy shore of Greenland.

Three minutes later *Hood* was gone, her torn remains settling onto the frigid black sea floor 9,000 feet below. From her crew of more than 1,400, only three survivors were picked from the freezing water.

The first public announcement from the Admiralty on May 24 reported that "HMS *Hood* received an unlucky hit in a magazine and blew up."

In two best-selling books by C.S. Forester and William L. Shirer, the descriptions of how *Hood* died have become the stuff of seafaring folklore. According to both books, the *Hood* had what was euphemistically called a "chink" in her deck armor on the boat deck between the two funnels. A 15-inch armor-piercing shell struck exactly at this spot at 5:56 AM and penetrated six decks and six bulkheads to explode in the main powder magazine, igniting 300 tons of high-explosive cordite. Several jets of flame and smoke burst from her superstructure, and a huge sheet of fire rose between the funnels to a height of a thousand feet. A massive gray cloud cleared and revealed the bow and stern of *Hood* jutting out of the water like "two sharks until they sank."

These accounts have long been accepted by the general public, but they fall short in two major areas: there was no so-called "chink" in *Hood*'s deck armor, and there was no main gun magazine in that area to destroy *Hood*. The two forward and two after gun barbettes were separated by nearly 400 feet. The intervening space under the funnels was taken up by the 24 Yarrow boilers and their uptakes.

So the question remains: how could it happen?

The only logical culprit had to be *Hood*'s lack of sufficient armor protection. When *Hood* was first designed in 1916, she was to be larger, faster, and more heavily armed than the biggest battle cruiser ever built up to that time. But Fisher's old refrain of a fast, heavily armed, and lightly armored ship still held sway, and *Hood's* armor was significantly thinner than that of a battleship of comparable size, even after her 1939 and 1940 refits.

The numbers leave little doubt. In 1941, *Hood*'s main protection was along her hull to prevent penetration from heavy shells and torpedoes. The belt ranged from six inches thick at the bow and stern to 12 inches along the most vulnerable areas, such as the magazines and boilers.

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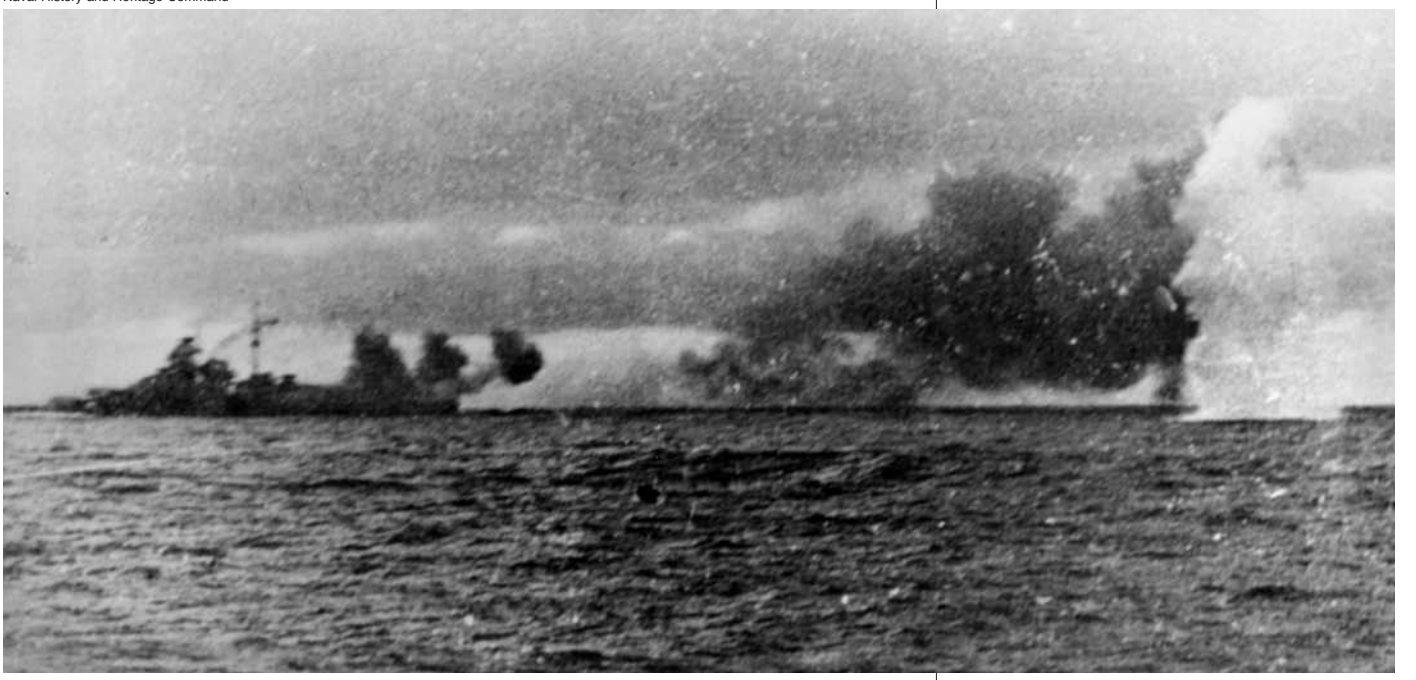

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ABOVE: The photographer on *Prinz Eugen* captures the landing of a shell from *Prince of Wales* as it explodes in a harmless, watery plume (right), while *Bismarck*, at left, lobs shells toward the British ships. LEFT: Smoke rises from *Hood* moments after the fatal hit from *Bismarck* that resulted in the immediate destruction and sinking of the British battlecruiser. OPPOSITE: The brilliant muzzle flash from a broadside fired by *Bismarck*. Advanced radar gave the German dreadnought an advantage over the older *Hood*.

The barbettes—the main structures of the turret assemblies—were sheathed in 12 inches of steel. The turret housings, the part that actually enclosed the guns, had 15 inches of armor on the front, which was intended to face the enemy warships, and 11 inches on the sides and rear. Yet, despite the hard lessons of Jutland, *Hood's* turret-roof armor was only five inches in thickness—an inch thinner than the thickest deck- armor plating.

While this might seem adequate, consider that a battleship of the same era usually had hull and deck plating that ran between 12 and 15 inches in thickness. This would stop or deflect the heaviest armor-piercing shells then in use.

There is no evidence that any of *Bismarck*'s shells penetrated *Hood*'s barbettes in those three minutes of battle. Rather, it is well-established that the fatal blow struck somewhere amidships in a manner that managed to convey the detonation to one of the battle cruiser's after-powder magazines, which were located six decks down in the very bowels of the vessel.

Considering her size, this bears closer examination. In the Great War, a dreadnaught's fire was directed visually from rangefinders in the foretop high over the superstructure, and most naval battles were fought at ranges of less than 15,000 yards (nine miles). But the advent of radar for fire control made it possible to fight naval engagements at ranges of more than 25,000 to 30,000 yards, (14.2 to 17.0 miles), often far beyond visual range.

Main gun turrets could elevate the guns as high as 30 degrees, which imparted a high-arc trajectory to the shell, which then plunged downward into the decks of enemy ships. But *Hood's* deck armor was only two inches thick at the bow and stern, and increased in thickness to just over six inches on both the main and boat decks.

Accounts from witnesses on the light cruisers *Suffolk* and *Norfolk* and survivors from *Bismarck* described the cataclysm. To the majority of witnesses, the explosion was amidships near the funnels. *Hood's* after-portion seemed to break away from

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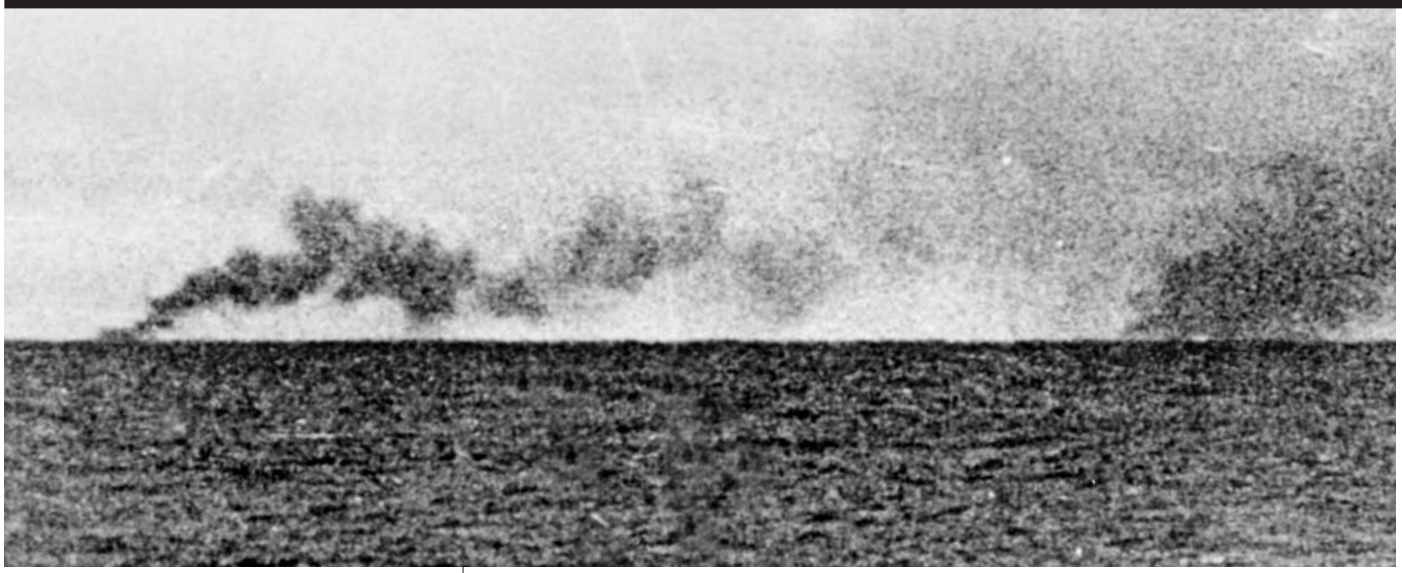


ABOVE: A plume of smoke at left marks where *Prince of Wales* turned to escape the range of the German ships. The smoke at right marks the spot where HMS *Hood* exploded and sank with almost all hands aboard; only three men survived. OPPOSITE: Underway after the engagement, *Bismarck* is visibly down by the bow, the result of two hits received during the battle. *Bismarck* would be sunk three days later when the RAF and Royal Navy caught her off the coast of France. Of her 2,221-man crew, only 115 survived.

the main hull and sank first. Apparently one or more of the magazines had exploded in the after-portion of the hull.

With the exception of *Prince of Wales*, all other ships viewed *Hood* from either port or starboard. The new battleship, being aft of *Hood*, had a view that revealed what really happened. Captain John C. Leach on *Prince of Wales*' bridge later described the column of flame shooting up from the vicinity of *Hood*'s mainmast, which was on the after-portion of the boat deck and just forward of "X" turret. He said the blast obscured and then obliterated the entire after portion of *Hood*. While there were no main guns on the amidships superstructure, it did contain the 12 twin-mount 4.1-inch guns, each of which had its own magazine with 200 shells.

The official board of inquiry report, released on June 2, 1941, stated, "...the probable cause of the loss of HMS *Hood* was direct penetration of the protection by one or more 15-inch shells at a range of 16,500 yards, resulting in the explosion of one or more of the aft magazines."

While the findings were straightforward, they almost immediately came under criticism. The circumstances of the battle and its aftermath meant that there were no immediate verbatim statements taken from any of the witnesses, neither British nor German.

Then other theories emerged, including one in which *Hood* had been destroyed by the internal detonation of her own torpedoes, located in the hull aft of the rear funnel. *Hood* did carry 28 torpedoes, theoretically more than enough to destroy her. But from the start, there was good reason to discount this theory, and it was never given much credence.

A second inquiry, held in September 1941, taking into evidence the testimony of over 100 witnesses, was more thorough, but came to much the same conclusion: *Hood* died from an explosion in either her 4.1-inch or 15-inch after-magazines.

The most likely probability was that the 4.1-inch magazines, located closer to the mainmast, exploded first, starting an instantaneous chain of explosions in the larger magazine. This seems to fit the eyewitness accounts. If a shell had penetrated at this point, it could have started an intense fire in the engine room that tore through the ventilators into the after-powder magazines.

Another element that supports this position was the multiple eruptions of smoke and fire—witnessed by Captain Leach and surviving Germans—that seemed to shoot up from the engine-room vents. The engine rooms were located aft of the boilers on either side of the barbettes and magazines. If an explosion in the after 4.1-inch magazines or the boiler rooms occurred, the blast would almost certainly have destroyed the bulkheads, which were only four inches thick.

The original long-accepted view of a "chink" in the deck armor allowing a shell to explode the magazines must be addressed. When *Hood* exploded, the combatants were about 16,000 yards apart, which meant that *Bismarck* would have had her guns elevated to about 14 degrees. This made the shells' trajectory nearly flat. Any shell coming in from an angle of 14 degrees could not have reached *Hood*'s after-magazines without first penetrating the 12-inch hull armor belt.

While a so-called weak spot might have allowed a shell to enter the superstructure, it would not have gone downwards. At most, it would have torn across the width of the superstructure. Of course, this is where the 4.1-inch barbettes were located, with their corresponding magazines just below.

One theory involved a report from *Prince of Wales* that "unusual discharges" were coming from one of *Hood*'s forward guns. This testimony was taken at the second inquiry, and it promped the suggestion that *Hood* had suffered a Jutland-type of explosion following a flash fire in a forward magazine. But the fact that it was the battle

cruiser's after-portion that was the center of the large explosion seems to refute this theory. Also, *Hood's* bow would have been extremely difficult for anyone on the following battleship to see clearly.

The 2001 discovery and exploration of *Hood's* watery grave revealed how violent the explosion had been. She lies in 9,200 feet of water, with her remains scattered across three distinct debris fields. The large midsection is overturned, while the stern is several hundred feet away. The bow and superstructure are likewise separate from the main section. The wide gap between the main hull and stern proves conclusively that the magazines for either "X" or "Y" turrets did explode. The hull broke apart on the surface.

The rudder is still set at port, exactly where Holland had ordered it just before the fatal blow. Curiously, *Hood's* bow is gone just forward of "A" turret. One clue as to the reason for this may be found in a hit on *Prince of Wales*, which was taken under fire by *Bismarck* after the destruction of *Hood*. A 15-inch shell fell short and slid into the water 80 feet off her side and penetrated the hull 30 feet below the waterline beneath the armor belt. It tore into the warren of compartments and bulkheads but failed to explode.

This could conceivably also have happened to *Hood*. One shell might have struck the water off her starboard quarter and exploded in the after-powder magazine. The wreck reveals that nearly the entire starboard hull in the region of the fuel-oil tanks has been torn open from an internal explosion. If a shell did penetrate and explode under the waterline, it could have ignited the fuel from stern to bow and possibly been responsible for blowing off *Hood*'s bow, as well as igniting the aft magazines.

Obviously, there are many theories and explanations for the sinking of *Hood*. But using Occam's razor, the most likely cause was a hit in or near one of the 4.1-inch magazines, which then, either directly or via the engine room, reached the 150 tons of cordite in the handling room of the after turrets. At that point, the blast erupted upwards through the ventilators and hatches that dotted the boat deck and superstructure, creating the "sheet of flame and smoke" described by so many witnesses. That blast obscured what was happening as the entire after-portion of the hull tore open and fell away.

In any event, the explosion that killed *Hood* and over 1,400 men was almost certainly the result of the same type of blasts that sank three British battle cruisers at Jutland almost exactly 25 years earlier.

There lies the mighty *Hood*, 150 fathoms down in a black, icy grave, the last monument to Jacky Fisher's flawed dream of the fast battle cruiser.

Despite the Battle of the Denmark Strait and the sinking of *Bismarck* being one of the most famous naval engagements in history, it played virtually no role in the Battle of the Atlantic or the outcome of the war. The primacy of the battleship had reached its apogee at Tsushuma. Never again would the big-gun warship play a significant role in the fate of wars and nations.

This was dramatically proven in late 1941, when HMS *Prince of Wales*, along with the battle cruiser HMS *Repulse*, were sent to the Pacific to protect British interests in Singapore. On December 10, both warships were sunk with absurd ease by Japanese land-based aircraft using bombs and torpedoes. Even *Prince of Wales*' heavier armor was not enough to protect her from Japanese air attack.

But a new concept, unheard of in 1907 when *Invincible* slid into the water, was beginning to appear on the seas in the late 1920s. Due to the limitations of the 1922 Washington Naval Treaty, three of Britain's smaller battle cruisers, HMS *Courageous*, HMS *Furious* and HMS *Glorious*, were converted into aircraft carriers. The United States followed suit by converting its last two battle-cruiser hulls into the aircraft carriers USS *Lexington* and USS *Saratoga*.

Ironically, the speed of the fast battle cruiser, as envisioned by Fisher, was critical to making them effective aircraft carriers. The big-gun warship had reached and passed its apogee and was soon to become a supporting element to the carrier. □

Naval History and Heritage Command

A camouflaged half-track playing the role of a tank destroyer pauses in the blistering desert heat of the American West during maneuvers. Desert training in the United States was intended to prepare American soldiers for the hardships of combat in North Africa.

COMPANY B's Tunisian Adventure

In the early days of the American advance into Tunisia, a tank destroyer company went on a risky but successful offensive—virtually alone.

BY CHRISTOPHER MISKIMON

For the United States Army, the long road to Germany began in the mountainous deserts of Tunisia in mid-November 1942. Earlier in the month thousands of GIs had come ashore in the Vichy French territories of Morocco and Algeria. After the brief fighting with French troops ended and a political settlement had been reached, the Americans turned their attention to the east, toward the Germans and Italians. On May 13, 1943, those enemies would capitulate, ending the North African campaign. Although their British allies were seasoned veterans of the desert war, the roughly six-month period between landing and surrender would be a tough one for the U.S. forces. The newly resurgent U.S. Army was taking its first, tentative steps into the realm of modern warfare.

These soldiers had courage, ingenuity, and motivation. What they lacked was experience in ground combat against a battle-hardened, mechanized opponent. Mistakes were made and blunders committed. The GIs learned as they went and suffered accordingly, though they were fast learners. It is actually a testament to them that their first bloody lessons didn't break them; in a few instances, their perhaps naïve boldness paid off in victory.

A sterling example of such victory is the two-day offensive of Company B, 701st Tank Destroyer Battalion. Part of the first tank destroyer unit to see combat in North Africa, it garnered an impressive tally of enemy tanks knocked out, prisoners seized, and ground taken. What makes this feat even more astounding is that it did so without any support from its higher headquarters; no infantry, armor, or artillery support; and no intelligence whatsoever. The company commander, Captain Gilbert A. Ellman, called it the "absolute absence of any information on the enemy forces." Nevertheless, Company B was ordered forward to carry out its mission.

Company B was organized along the standard lines of a tank destroyer company of the time. It contained three platoons, each with two sections of two tank

All photos: National Archives

American soldiers prepare to load and fire a half-track-mounted artillery piece during the North African campaign. Company B, 701st Tank Destroyer Battalion won a hard-fought victory against the battle-hardened Germans during the desert conflict.

destroyers each, for a total of four per platoon and 12 per company. Two platoons were "heavy," equipped with the M3 tank destroyer, basically a half-track mounting a 75mm Model 1897 cannon (the famous French 75 of World War I) adapted as an antitank gun. A shield was mounted on the cannon to protect the crew from small-arms fire. The other platoon was classified as "light," using the M6 tank destroyer, a three-quarter-ton truck that mounted a 37mm antitank gun in the bed, also with a thin armored shield.

Earlier in November, an order had been issued to replace the light tank destroyers with the larger, more effective M3s. That order came too late for the units going to North Africa, and they deployed with their M6s, which had only been intended as training vehicles rather than for combat use. Each platoon also had a headquarters section, a two-gun antiaircraft section, and a 12-man security section meant to protect the tank destroyers from enemy infantry. During the company's mission, it also had a reconnaissance platoon attached from the battalion recon company.

Developed as a response to the whirlwind victories of the German blitzkrieg tactics used so effectively earlier in the war, tank destroyer doctrine of the period dictated that units would block enemy armor penetrations by quickly moving to the point of the breakthrough and using their firepower and mobility to stop the attacking tanks. This doctrine proved flawed in the face of actual German tactics, which were not simple tank attacks but combined arms assaults, with tanks acting in concert with infantry, artillery, antitank guns, and aircraft. It also assumed that field commanders, unschooled in tank destroyer doctrine, had the necessary communications links set up to warn of an enemy breakthrough and could clear jammed rear-area roads for their movement when needed and that a unit of self-propelled guns could simply sit around waiting for such an attack during combat operations.

None of these assumptions proved realistic, and it was the failure of the last assumption that resulted in Company B's attack. As the U.S. Army moved into Tunisia, it felt its way along, hoping to seize territory and population centers as quickly as possible. This required units with mobility and speed.

By doctrine, Company B had been organized to destroy enemy armor and nothing else, but it did have some hidden strengths. While its tank destroyers were stopgap designs hurriedly placed into service until a more ideal design could be produced, the company did possess a large amount of firepower. Though lightly armored, all its guns were indeed mobile, and the security sections each platoon possessed could double as infantry in a pinch, at least in the view of those unschooled commanders. The tank destroyer men themselves were equally eager for a mission, even one that went against their training.

And so it was that Captain Ellman received his orders to take the town of Gafsa on November 22, 1942. His company had just arrived in the area of Feriana, some 47 miles northwest of Gafsa, during the night of the 21st. The previous six days had seen the company moved 1,000 miles from Oran, Algeria. The attack was ordered for dawn. Ellman prepared his unit, refueling and loading ammunition. When finished, the men were able to rest for only a mere half hour before proceeding to the targeted town in a night road march.

Gafsa lies in central Tunisia and is a road junction for routes east to Sfax, southeast

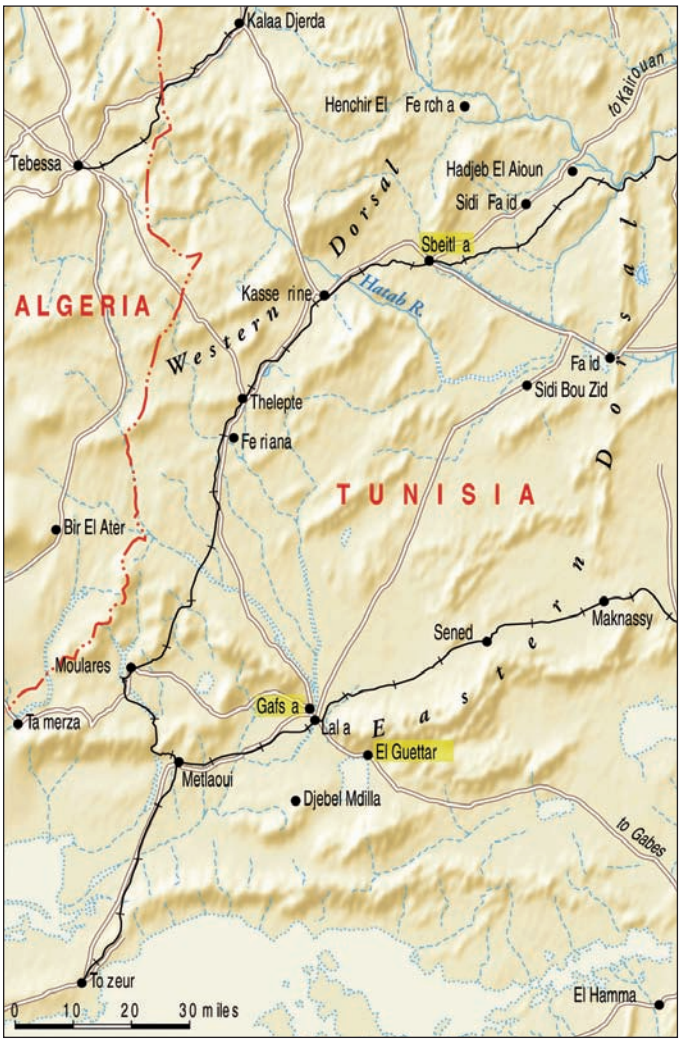
to El Guettar and Gabes, and north to the various towns around Kasserine, soon to become famous for the American defeat there. An oasis and a French barracks were located at Gafsa. Ellman had no idea whether anyone even occupied the town, though it was a good bet someone was there. For this first attack, two Lockheed P-38 Lightning fighters were to strafe the town before Company B's assault. Accompanying the tank destroyers was a pair of ancient French armored cars.

The captain organized his company with the two heavy platoons leading the attack, with the light platoon and its vulnerable M6s kept in reserve. Ellman's account states he had two platoons of M6s, rather than the normal one. Possibly they were attached from another company of the 701st Battalion. There was no cover on the approach to the town, so speed was a key. According to Ellman, "We made the best of a bad situation."

The P-38s roared overhead, their cannons and machine guns blazing as they strafed the town's defenders. Company B attacked right on the heels of the fighters, hoping to deny the defenders any time to recover from the aerial assault. The first objectives were two clusters of buildings outside Gafsa itself, on each side of the road leading out of town toward the west and Feriana. One platoon moved to each and immediately began to take fire from German snipers. In response, the tank destroyers began hitting the occupied buildings with 75mm high-explosive rounds. Most of the buildings collapsed after one hit. Continuing past these ruined structures, the two platoons ran into a line of trenches that had been thrown across the road and continued to each side of it. The two French armored cars stayed on the road as they advanced. Both opened fire on these trenches.

This time Ellman and one platoon paralleled the road to the south to avoid mines and advanced directly on the town from the west. The other platoon was sent on a flanking maneuver to the north. Sniper fire continued from the town itself as the tank destroyers moved past the entrenchments. Both of the armored cars, still moving along the road, hit mines. The resulting explosion blew all four wheels off one vehicle, and both were disabled.

Careful to skirt the minefield, Ellman and the accompanying platoon entered the town. Once there, a youthful French civilian approached the GIs and volunteered to show them where the German positions were. Ellman readily agreed, and the boy



ABOVE: In this captured Axis photograph, Italian soldiers are seen rushing forward at the front in Tunisia. Company B encountered a mixed unit of Germans and Italians. LEFT: Desert warfare was in some ways akin to war at sea. Small but deadly encounters were commonplace across the arid expanse, similar to the experience of the soldiers of Company B, 701st Tank Destroyer Battalion in the vicinity of Gafsa. BELOW: Following a bitter battle, the town of Sbeitla, Tunisia, burns furiously. Company B captured the town, capturing 100 Italian prisoners.

lived up to his word. As before, high-explosive rounds and machine gun fire answered the German snipers, and the town's defenders were quickly overwhelmed. The Germans had armed some 300 Arabs to assist in the defense of the town. These men fled into the oasis and groves in and around the settlement, where the Americans had to round them up and disarm them. After a few hours of combat, Gafsa had fallen.

Ellman now took stock of his situation. There were several roads leading to enemy-held territory, so he positioned tank destroyers at each of them to guard against counterattacks. Word of this expected counterattack came just after noon. A German armored column had been spotted moving toward Gafsa from the southeast along the road that led to El Guettar and Gabes. It was quickly decided that Gafsa was not the place to meet a German armored attack because of its terrain, which was not advantageous for a defensive fight. At 2:30 PM, the company advanced toward El Guettar, hoping to find suitable terrain for a defense.

"We hoped to be able to pick our ground and surprise the tanks," Ellman wrote. He placed his attached reconnaissance platoon in the lead with a heavy platoon behind it. His command group followed with the second heavy platoon behind it. The light platoon brought up the rear. This formation would prove an effective one for Company B throughout its fighting in North Africa.

The Americans covered the roughly 10-15 miles to El Guettar without contacting the enemy. The recon platoon continued through the town to scout the road eastward as the tank destroyers reached its western edge. As the recon vehicles crested a small hill on the eastern edge of town they received a shock. Spread out in front of them was the enemy armored column, its tanks on a second rise farther down the road. The American scouts beat a hasty retreat as the enemy opened fire. One jeep driver turned too quickly, and his jeep flipped over, throwing him and his two comrades into a ditch. They had to crawl back to the town but arrived safely.

ABOVE: U.S. soldiers travelling by jeep pause near El Guettar to report on potential enemy targets. Company B's attached reconnaissance platoon scouted ahead, followed by a heavy platoon. OPPOSITE: Early in the war in the North African desert, half-tracks armed with 75mm cannon served as tank destroyers and mobile artillery. Here, medical personnel rush to the aid of a soldier who has been wounded in combat with Axis forces.

The recon troops informed Ellman of the enemy contact, so he sent one platoon to the left of the road and one to the right through the town's oasis. The light platoon was sent to the south to skirt around the Chott El Guettar, a salt lake outside the settlement. From there it could protect the company's flank.

The German force contained 10 tanks, and these now proceeded to flank the town to their own right, directly into the path of the heavy platoon Ellman had sent around to his left. The two forces met, and first blood went to the Americans, whose gunners quickly knocked out four opposing tanks. Such heavy losses inflicted so rapidly compelled the German tankers to retreat the way they had come. Ellman's group arrived at the eastern edge of the oasis just as the six remaining enemy tanks went past on the road. The GI gunners fired a number of 75mm rounds toward the enemy tanks, but they all succeeded in getting past. Though they did not know it at the time, the tank destroyer men had damaged several of the tanks, which were found a few days later, out of fuel.

It was now 1700 hours. With darkness approaching, the men of Company B reformed and went back to Gafsa, hoping for some time to work on their vehicles and get some rest. Unfortunately, it was not to be. As the unit rolled into Gafsa, the men found they had been selected for yet another difficult task. Some 120 miles north of Gafsa lay the town of Sbeitla, which had been occupied by French troops. Earlier in the day, the Germans had reportedly captured the town along with a large cache of supplies and two companies of French infantry. Apparently Company B's successes had earned it a reputation as a force that could get the job done. The French commander now wanted Ellman to take his men to Sbeitla with a vague order to "do something about it." Ellman

later wrote that such vague commands were normal during the early days in Tunisia, particularly for the tank destroyer units.

The situation was again daunting. Just getting to Sbeitla required another night road march through an area where the front lines were still fluid. At the end of that march, Company B would again have to attack an enemy force of unknown composition and strength, which had been allowed some time to prepare its defenses. Still, the tank destroyer company was the only unit available to do the job, so the men topped off their gas tanks and started back to Feriana, which they reached at about midnight. The light platoon had been left behind to help defend Gafsa. Ellman and his troops got two hours of sleep before starting the final 76 miles of their journey to Sbeitla.

The company used the same formation as before, but with a few modifications to increase its security. The tank destroyers were staggered to each side of the road so each would have a field of fire to the front in case of another engagement like the one at El Guettar. The scouts of the reconnaissance platoon were sent forward and told to be particularly thorough. One M3 of the lead platoon was sent with the scouts so it could support them in case of enemy contact. Its alert crew kept a round in the chamber of its 75mm gun, ready to fire at a moment's notice.

So disposed, Company B moved northeast, no doubt tense with expectation and fear at the idea of meeting another advancing enemy or, worse, passing one in hiding to find themselves ambushed or cut off. As they moved, the recon platoon checked every likely enemy hiding place for lurking Axis troops or tanks. Any buildings, wooded areas, even clumps of bushes were inspected. After a few hours with no enemy spotted, the unit reached the town of Kasserine. The locals told the Americans that the enemy had reached the town but then fallen back toward Sbeitla.

This increased the tension even more because it meant they were almost sure to find the enemy ahead. Pressing on, the scouts came upon a roadblock some five miles outside Kasserine. Stones had been piled on the road in the saddle between two hilltops. It was a good spot for the enemy to mount a defense to delay any advance on Sbeitla. The recon troops moved cautiously forward, probing for the expected enemy ambush, but found nothing. Inexplicably, the roadblock was not defended or even booby-trapped. The stones were moved off the road, and the company continued on its way.

Visibility grew poor as rain began to fall. After proceeding another 10 miles, the tank destroyer group came to a wrecked bridge that had once spanned a deep canyon. There was no apparent way across. The recon platoon fanned out and soon discovered another crossing point. The men of Company B knew from their maps that they were close to Sbeitla now, approaching from the southwest.

The maps were wrong, however. The road actually came into town from the northwest, a fact the GIs discovered only when the recon jeeps crested the rise of a north-south ridge and found Sbeitla spread out in front of them. An orchard was situated on the western edge of the town, extending from the south side of the road. An old Roman arch was located north of the road at the edge of the settlement. In the distance, another road led out of Sbeitla to the northeast, crossing a large wadi. No fire greeted the jeeps at the rise or as they proceeded toward the orchard. As the Americans later learned, the Italian

troops in the town were fortuitously having a meal when Company B arrived. Either they had not bothered to post sentries or those posted were not alert.

The Americans' luck could not last, though. Just as the approaching GIs began to make out the forms of camouflaged tanks, trenches, and machine gun pits in the orchard, an Italian tanker spotted the Americans and sounded the alarm. The 47mm guns of the Italian medium tanks began to spit shells at the jeeps, and machine guns joined in. The American machine gunners replied, and a fierce firefight developed as the rest of the company now raced to the aid of the scouts. The reconnaissance platoon leader's half-track, still up near the rise, used its heavy .50-caliber machine gun to cover the jeeps as they pulled back. The attached tank destroyer then opened up with its cannon right over the heads of the men in the jeeps.

Ellman again decided to split his force by platoons, dividing the recon jeeps so they could use their machine guns to support the tank destroyers. One platoon flanked to the left, taking a position at the end of the ridge and opening fire on the orchard. The jeep's machine gunners fired on the enemy tanks surrounded by the trees. This had a double effect. It kept the enemy tankers buttoned up in their tanks, reducing their visibility, and it marked the positions of the tanks for the tank destroyer crews as the tracer fire ricocheted off their hulls.

The second platoon then moved up to the crest of the ridge some 900 yards from the enemy and began firing on the troops in the orchard, distracting them from the first platoon. This enabled the first platoon to move up to the Roman arch by bounding, one section covering the other as it moved to the new position, where it then provided cover for the other to move. Both sections took up good firing positions near this arch.

Meanwhile, the second platoon had succeeded in knocking out every Italian tank visible in the orchard. The rest of the Italian tanks and infantry now began to retreat into the town. Caught in a deadly crossfire between the two American platoons, more tanks fell prey to the American gunners.

The enemy force was, in fact, a mixed unit of Germans and Italians. The Germans saw the battle turning against their allies and decided to pull out. Manning a number of trucks, they retreated through a rear gate to the northeast road. The three remaining Italian tanks quickly followed the Germans. One tank destroyer from the first platoon tried to move from its position near the arch to cut off the retreating enemy trucks and tanks, braving heavy machine gun fire. The enemy tanks opened fire and succeeded in disabling it, wounding one of the crewmen. This was the only casualty Company B sustained during the entire two-day operation.

A LOST AMERICAN JEEP MAY HAVE BEEN USED BY THE GERMANS

When Company B, 701st Tank Destroyer Battalion was advancing through El Guettar, its attached reconnaissance troops came barreling over a rise on the east side of the town and straight into contact with an approaching tank force. These recon troops used both jeeps and motorcycles to search out the opposing force. On this occasion one of the jeeps tried to turn too quickly and flipped over into a ditch. The three soldiers manning the jeep were unharmed but now in full view of 10 Axis tanks. Quickly they scuttled back to safety using the ditch for cover, leaving behind their jeep, which was abandoned after the fight as B Company moved back toward Feriana after its victory at El Guettar.

It was not the last the men of the 701st would see of their lost vehicle, however. Because American jeeps were prized for their reliability and toughness, the Germans made use of captured ones when they could, as both sides often did with captured weapons and equipment during the desert war. Apparently this is what became of the jeep the scouts had been forced to leave behind. It apparently reappeared in enemy hands during later fighting.

More than two months later, in February 1943, the men of the 701st were fighting at Sidi Bou Zid when an unknown party began transmitting on their company radio net. The speaker was using the correct frequency but not the correct radio call sign. Instead, the man identified himself with an older call sign that had not been used since the fighting at El Guettar. As the company commander, Captain Gilbert A. Ellman, listened, he heard the speaker trying to direct one of B Company's platoons toward a certain area. Ellman immediately thought it was a trick. He knew the men of his company and he did not recognize this voice; it had an accent that was "not quite right."

Ellman listened a little longer and then decided he had had enough. He got on his own radio and told the German to get off the air. Eventually the man did stop transmitting, and Ellman later learned that the speaker had been trying to lure one of his platoons into an ambush. Knowing the German habit of using any captured equipment that suited them, he was sure this was the missing jeep with its radio. The Germans had obviously continued to monitor the radio and found the old call sign somewhere on the jeep.

A month later another tank destroyer battalion, the 601st, battled an enemy armored force using an American jeep to ferry ammunition to its tanks. This was in the area of El Guettar. By this time German troops had no doubt experienced numerous opportunities to capture American vehicles, so there was no way of knowing whether this was the 701st's missing recon jeep. Still, the episode highlights the Germans' battlefield experience and willingness to use every trick in the book against their opponents.

An Allied armored car races past the hulk of a German Mark IV panzer destroyed in earlier fighting. Losses in armor, both Allied and Axis, were tremendous during the desert war.

A medic was summoned as the Germans and Italians made good their escape. The medic reached the wounded man on foot. Along the way, he had to jump a large ditch. To his surprise, this ditch was full of Italian troops, all of whom surrendered to the unarmed medic.

Ellman now ordered the rest of his tank destroyers to move into the town. They approached cautiously, firing at any enemy they saw. A number of the intersections in the town had enemy machine guns posted nearby. The half-track crews quickly silenced them, sometimes by actually running over the positions with their vehicles. Sbeitla's remaining defenders surrendered. Company B had fought its third successful action in two days.

One platoon of M3s and a recon section were posted on the northeast road in case of a counterattack. Ellman sent a scout on a motorcycle to bring up a company of paratroopers that was supposed to be following Company B. About 100 Italian soldiers had been captured; these were searched and taken to the rear. Many of the townspeople had been rounded up and secured in two buildings, one for the men, and the other for the women. Curiously, the children had not been collected and many wandered the town, which some Arabs had taken the opportunity to loot. The GIs found a trio of these children wounded and hiding in an abandoned German truck; they were turned over to a town official who himself had just been freed.

A short time later, a French force consisting of a company of infantry supported by an artillery battery arrived to take up the defense of the town. Company B was told to return to Kasserine, where it was finally able to get some rest. Its actions during the preceding two days had resulted in 15 enemy tanks destroyed and more than 400 prisoners taken. The company had covered 400 miles in its movements from Feriana to Gafsa and El Guettar, then back to Feriana before advancing to Kasserine and Sbeitla and finally returning to Kasserine. That it accomplished all this with only one man wounded and two half-tracks lightly damaged is an impressive achievement, especially considering the company's lack of support during most of its operations.

Company B's success was also a tribute to the courage and spirit of its soldiers. For men as inexperienced as they were so early in the conflict, they moved with a speed and daring that no doubt contributed greatly to their victories. Certainly, their opponent's lack of security and defensive preparations contributed to the American accomplishments, but the victories required men with a will to exploit such opportunities despite their relative rawness. Indeed, one could argue that more experienced troops would not have tried such risky endeavors in the same situation. In this case, their boldness paid off.

The towns Company B took and fought in would change hands, in some cases several times, during the remainder of the North African campaign. The ground the tank destroyer men had fought for was shortly to turn into a bloody proving ground for the United States Army, one that would see months of hard combat for the GIs. The small but whirlwind victories accomplished by Company B, 701st Tank Destroyer Battalion during two days of fighting in North Africa are a tiny yet proud moment in that epic conflict. □

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BY KELLY BELL

Struggle for Stalin's Skies

The burgeoning strength of the Red Air Force and staggering Luftwaffe losses doomed the German Sixth Army at Stalingrad.

Early in the attempt to defeat the Soviet Union, German aircraft controlled the skies. Here three Junkers Ju-87 Stuka dive bombers fly high over their target city of Novgorod. The dive bombers proved effective as airborne artillery against ground targets, but the growing number of Soviet fighters soon took their toll of the Luftwaffe.

On February 3, 1943, Lieutenant Herbert Kuntz of the 100th Bomber Group made the last flight by any German pilot over the Soviet city of Stalingrad. He circled at 6,000 feet in blinding fog and then descended until the ceiling fell away at just 200 feet. His Heinkel He-111 bomber was skimming over a combat-ravaged landscape, seemingly devoid of life.

Suddenly, Kuntz thought he saw men below but could not tell whether they were friend or foe. Nevertheless, he gave the order, "Load away!" The twin-engine bomber was carrying bread. The loaves spilled from the bomb bay doors and into the freezing tempest, almost certainly never to be found. His mission accomplished, Kuntz turned his plane westward. Stalingrad had seen the last of the Luftwaffe.

In millions of minds, "Stalingrad" is synonymous with the turning point of World War II in Europe. British Prime Minister Winston Churchill called it "the end of the beginning," in this case of a global conflagration whose first three years had generally been dominated by the criminal Axis powers. The reasons for the Red Army's triumph at Stalingrad are numerous, but the air forces of both sides played key, ofter underappreciated roles.

Hitler's predilection for overwhelming air power was the soul of his success in overrunning western and southern Europe and a gargantuan expanse of Soviet Russia. Air power had emerged as the dominant factor in a new era of warfare in which the heavens had become battlefields and the abode of terrifying machines. By 1942, aerial warfare was having an infinitely greater impact than thought possible a short time before. For the first time in history, entire cities could be devastated by warplanes. Nowhere was the power of air forces more evident than on the Russian front.

The titanic invasion of the Soviet Union, Operation Barbarossa, had seen his air arm, the Luftwaffe, used mainly as a "fire fighting" instrument. Air units were rushed to various sectors to assist foundering ground forces. Such situations multiplied as 1941 waned and Russian resistance stiffened. Airborne firepower was a major factor in saving the front from collapsing late in the year.

By April 1942, Hitler expected his airmen to support infantry and armored formations, as well as target Russian railways and storage facilities behind the front. Warplanes also would provide a protective umbrella against the steadily swelling formations of the Red Air Force (the Voyenno-vozdushnyye sily, or VVS.)

The Luftwaffe's senior commander in Russia, General Wolfram von Richthofen, was well qualified to direct aerial operations, but felt stifled by the unavoidable restrictions and responsibilities that came with his fleet's new dedication to low-altitude close support. To him, the air

force seemed totally at the beck and call of the army. Still, von Richthofen, who took over his post in southern Russia in April 1942, performed his new duties brilliantly. In the end, however, it would not be enough.

The Holy Grail for Germany in the spring and summer of 1942 was Soviet oil. The Third Reich had few sources of this lifeblood other than the fields in Romania, and those fields were insufficient to adequately support the rampaging Wehrmacht. The Soviet Union's heavily industrialized Caucasus region harbored one of the richest sources of crude oil on earth in the state of Azerbaijan. The province's capital city of Baku alone produced 24 million tons of oil in 1942.

LEFT: General Friedrich Paulus tried to save his Sixth Army from disaster at Stalingrad, but Hitler let him down. RIGHT: Luftwaffe General Wolfram von Richthofen commanded air operations in Russia. RIGHT: A column of German horsemen illustrates that the beast of burden is still viable on the Eastern Front as it passes a convoy stalled for lack of fuel in a Russian village. The German Sixth Army's march to Stalingrad was protected overhead by von Richthofen's aircraft.

While Soviet dictator Joseph Stalin, who erroneously believed the Nazis would attempt to repeat the previous year's drive on Moscow, was massing the bulk of his forces to oppose an offensive that would never come, Hitler was planning to lunge for the Caucasus far to the south. The industrial city of Stalingrad was in the path of the Wehrmacht's coming thrust.

Hitler did not initially consider the outright capture of Stalingrad a necessity. He figured his aims could be accomplished simply by razing the city to the point that the Red Army could not use it as a staging point for counterattacks on German forces. Situated on the deep and busy Volga River, Stalingrad would also be an ideal base for supply and reinforcement convoys. Its usefulness as an armament-producing and transportation center made its destruction essential.

Although von Richthofen's Fliegerkorps IV struck at Stalingrad as early as April, bombing a tractor works and gun factory in three heavy nocturnal raids, most of the Wehrmacht's efforts in the summer of 1942 were devoted to the bloody conquest of the huge Crimean peninsula. By the time the Germans were able to turn to their Führer's overall objective, the summer was waning, but there was still plenty of time to commence the most important battle of World War II.

Late in July, the German Sixth and Fourth Panzer Armies were bearing down on Stalingrad. Hitler, however, was worried about Soviet General Rodion Malinovskii's Southern Front in the central Don River area. To ensure that Malinovskii could not interfere with the drive on Baku, the Führer detached the Fourth Panzer Army southward. He also took most of Sixth Army's armor and gave it to the First Panzer Army for its assault on Rostov. On July 20, 1942, Hitler ordered the Sixth Army, alone and virtually without armor, to attack and secure Stalingrad. Paulus and his troops were dangerously overconfident. With the bulk of the Red Army still clustered uselessly around distant Moscow, the early stages of the German advance had been deceptively easy, but opposition was already beginning to mount.

The air unit most involved in supporting Paulus at this point was Fliegerkorps VIII, commanded by General Martin Fiebig, whose specialty was close air support. By this time, von Richthofen ordered Fiebig to direct his command's efforts against the city and the increasingly stubborn defenses along its approaches. Richthofen also transferred General

Kurt Pflugbeil's Fliegerkorps IV from the Caucasus to assist in the investment of Stalingrad and to deliver supplies to German ground forces. On August 19, von Richthofen noted in his diary, "The enemy there is increasingly stronger and fights with more determination."

On the morning of August 7, the Sixth Army's 14th and 24th Panzer Corps, beneath massed formations of Pflugbeil's and Fiebig's aircraft, had cut from north and south into the base of a salient protruding westward from the town of Kalach, linking up and trapping the Soviet 62nd Army. The 51st Army Corps rushed to help the two Panzer corps crush Russian resistance within the huge pocket, killing a massive number of Red Army soldiers while capturing 50,000 prisoners and 1,100 tanks.

The Red Air Force did its best, but the planes available to it throughout this period were no matches for the Luftwaffe's. Germany's Eastern air fleet was still technologically and numerically superior to the Soviet 8th Air Army, which was all that was available in the Stalingrad sector. Although 447 VVS warplanes were delivered between July 20 and August 17, few lasted long. On August 12, a formation of 26 Soviet planes attacked German airfields. Interceptors shot down 25. The following day 45 VVS planes tried to disable the lethal Nazi air bases. The Germans shot down 35 of these. In neither attack did the Luftwaffe lose a single plane. With the threat of the 62nd Army gone and the skies above him dominated by German aircraft, Paulus continued toward Stalingrad.

By August 18, the Sixth Army had bridged the Don River at several points, establishing a bridgehead 35 kilometers long. On August 21, Paulus sent his 51st Army Corps on a surprise attack on Vertyachiy. Astonished by this aggressive assault ordered by a general they had been told was timid and hesitant, the Soviets collapsed and fled eastward in disorder. Throughout their flight, the Soviets were subjected to murderous strafing by Fliegerkorps VIII. Later that afternoon von Richthofen personally flew his Fieseler Storch reconnaissance plane over the bend of the River Don north of Kalach and was stunned by the "extraordinarily many knocked-out tanks and dead."

Before dusk, Junkers Ju-88 bombers wiped out two Soviet reserve divisions caught on open ground 150 kilometers east of Stalingrad. By 4 PM on that eventful day, the 14th Panzer Corps, following flocks of bombers from Fliegerkorps IV and VIII, rumbled into Stalingrad's northern suburbs. The day was still not over.

Just after von Richthofen's observation flight, Fiebig launched a major attack on the city itself. Waves of twin-engine bombers commenced a three-day orgy of destruction, unloading an almost continuous shower of high explosives. Stalingrad was not well prepared for air attackers. Antiaircraft batteries and air raid shelters were few. The 900 tons of bombs dropped by Fieberg's aircrews killed an estimated 40,000 civilians. Hits on oil storage tanks and tankers docked on the Volga coated the river with a blazing black sheen that temporarily stopped the flow of supplies and reinforcements.

However, this spectacular destruction did little for Nazi ground forces. Lt. Gen. Hans Hube's 16th Panzer Division entered the northern suburb of Rynok but quickly bogged down before stubborn opposition from the Red Army and armed civilians. Using rubble as defensive emplacements, these resolute, bereaved defenders, virtually all of them mourning the loss of loved ones to German bombs, refused to let the panzers enter the adjacent Spartakovka industrial district.

On August 29, in spite of their differences, the service branches cooperated bril-

During the summer and fall of 1942, the Luftwaffe pounded enemy positions at Stalingrad with as many as 3,000 sorties per day. Here a factory district in the city goes up in smoke and flames.

liantly as powerful air units paved the way for General Hermann Hoth's 4th Panzer Army, which charged from the southwest and drove all the way to the Volga to bolster Hube's bogged down troops. Prudently abandoning their positions before they could be surrounded, the Russian 62nd and 64th Armies fell back into the suburbs and hastily set up defenses.

Believing the city's fall imminent, von Richthofen ordered a fresh round of intensive bombing raids. Using every airplane at his disposal, Fiebig commenced a 24-hour terror attack on Stalingrad September 3, destroying the rubble from the earlier bombings, obliterating 62nd Army's command center, and leveling several VVS airfields east of the Volga.

By this point, General Georgi Zhukov, recently promoted to Soviet deputy supreme commander, had taken over Stalingrad's defense. Eager to dissipate the growing German momentum, he launched a large counteroffensive from north of the city at dawn on September 5. Despite grievous losses inflicted by the swarming Luftwaffe, the Soviet 1st Guards and the 24th and 66th Armies ground forward for five days, heartened by the steadily increasing number of their own aircraft coming to their support. The planes were from the understrength but game 8th and 16th Air Armies and Lt. Gen. Golanov's long-range bombing group. Still, Hoth's tanks managed to cut a corridor between the 62nd and 64th Armies on September 10. Three days later, German troops finally managed to leave the suburbs, enter Stalingrad itself, and commence clearing streets of defenders.

By this point, virtually round-the-clock combat activity was significantly cutting into German air strength. By September 20, Luftflotte IV, reduced to just 129 airworthy planes, found itself increasingly on the defensive. At the same time, the strength of the VVS was waxing.

The Soviets had noted the German aversion to night fighting. The Luftwaffe lacked the specialized navigation and bomb-aiming equipment for nocturnal warfare, so the Red Army defenders began to step up night action, when they need not fear interference from enemy aircraft. As General Vasili Chuikov later noted, "The enemy could not fight at night, but we learned to do so out of bitter necessity."

Russian fighting strength within the city was maintained by a small but steady flow of supplies and reinforcements from the east bank of the Volga despite constant losses to air attacks. Yet even in daylight this lifeline began making increased deliveries because of the attrition of local Luftwaffe units. By month's end, von Richthofen's air fleet had fallen to just 396 operational combat planes, a little more than one third of its original strength, and the bulk of these were occupied with ground support, leaving few craft available to assail the Volga supply pipeline. Also, the small size of the ferries and barges carrying men and materiel across the river made them difficult targets, and many bombs and bullets splashed harmlessly into empty water.

The defenders even managed to construct a couple of 300-yard footbridges on floating barrels lashed together with ropes. Because these slender avenues proved virtually impossible for Junkers Ju-87 Stuka dive-bombers to hit, thousands of Soviet reinforcements used them to cross the river. Furthermore, Red Army antiaircraft units in and around Stalingrad were significantly strengthened in October, providing yet another hazard to von Richthofen's dwindling air arm. The Luftwaffe was severely overtaxed along the massive length of the Russian front, and few reserves were available.

On September 26, despite growing resistance and diminishing air support, Paulus reported to Berlin that the heart of Stalingrad was firmly in German hands. It was, but his report made the situation sound much more promising than it was in reality. The weather was also getting colder.

Kampfgruppe 55's meteorologist, Friedrich Wobst, later described how "a fine summer and autumn were behind us, and the Luftwaffe was in control of the region. Hence we viewed with anxiety the inevitable season of bad weather—the Russians' best ally because it would tie the Luftwaffe's hands."

The pilots of the proliferating VVS fighter squadrons fought as fanatically as did their brethren on the ground, hurling themselves with utter abandon into German bomber formations. When their ammunition ran out, Soviet pilots would often ram German planes, sacrificing themselves to eliminate just one more of the hated Stukas. Still, for now, the Luftwaffe remained in general control of the airspace above Stalingrad.

On September 27, Chuikov appealed directly to the region's political commissar, future Soviet Premier Nikita Khrushchev, for increased air support, noting that the problem

ABOVE: German troops enter the ruins of the "Red October" factory, autumn 1942. The Soviet troops used the extensive rubble of Stalingrad as cover, emerging from their hiding places to inflict heavy losses on the Wehrmacht. OPPOSITE: Leaving its target along the Volga River on the outskirts of Stalingrad burning, a Stuka dive bomber pulls up and heads for its home base.

with the VVS was not its quality, but its still relatively small numbers. Khrushchev replied that Moscow was already giving the Stalingrad sector all it could but promised to "press for increased air cover for the city."

On October 1, Luftwaffe planes and 88mm flak guns hurled back a major Soviet offensive north of Stalingrad, destroying 60 tanks and downing 18 VVS planes with no air losses of their own. Heartened by this success, Fiebig launched a heavy raid on oil storage facilities near the Red October factory the following day. Chuikov had thought the immense petroleum tanks were empty, but when hit by bombs they exploded like volcanoes, inundating nearby Soviet positions in blazing oil. Reaching the Volga, the burning crude spread across its surface, immolating barges, ferries, and anything else combustible. Despite such spectacular air assaults, German ground troops continued to advance at a glacial pace.

On October 12 and 13, many of Fiebig's units returned from temporary assignment in the Caucasus. German ground forces had spent the past week regrouping, fending off minor counterassaults, and absorbing meager reinforcements. On the 14th, the Germans made their last major effort to secure the rest of Stalingrad, hurling the 14th Panzer Division, the 305th and 389th Infantry Divisions, and some assorted smaller units against the remnants of the 62nd Army holding the Dzerzhinski tractor factory and the surrounding industrial district.

Following bombers that unloaded 600 tons of high explosives on the defenders, almost 200 tanks ground into the twisted but easily defended detritus harboring an army of desperate men and women determined to die rather than let the Nazis pass. The Soviets were stunned by what Chuikov later called the attack's "unprecedented ferocity." A major factor in motivating the Germans to fight with such reckless abandon was their frantic desire to secure the city before the onset of the dreaded Russian winter.

The determination of the defenders, however, was stronger. After digging deep into the ruins, they emerged following the hellish bombing in numbers that surprised the invaders, closing with the Germans in fighting of surreal violence. Although the besiegers were still gaining ground, they were also running out of steam. By the end of October, the attack had been going on two weeks rather than the two or three days Paulus had envisioned. The Russians were proving themselves superior to the Germans in urban fighting, and as winter closed in the Red Army was coiling to strike back.

During the first week of November, German pilots began reporting an apparent buildup of hostile forces north and south of Stalingrad. On November 19, which dawned with a howling blizzard, more than 3,500 artillery pieces and mortars cut loose on the Romanian 3rd Army. One hour later, waves of screaming Soviet infantrymen clad in ghostly white winter camouflage broke over the shocked, decimated Romanians.

Largely the brainchild of Zhukov, the Soviet autumn counteroffensive had been in the works since early September. The Russian high command had kept feeding Chuikov, who for security's sake was not privy to the pending operation, just enough reserves to keep him hanging on and convince the Germans that victory was imminent. This kept Paulus distracted from his

Bundesarchiv Bild 101I-326-2857-19; Photo: Dressler

ABOVE: In the cramped cockpit of a Heinkel He 111 bomber, the co-pilot (left) studies a map of Stalingrad before taking off to bomb the city. OPPOSITE: With the winter of 1942-43 beginning to settle in, German soldiers unload supplies desperately needed by Paulus' encircled Sixth Army. Hitler and Göring both believed the besieged Germans could be saved by the Luftwaffe's airlift.

vulnerable flanks while Zhukov built up his units facing what he called his enemy's "satellite forces." He considered these Hungarian, Romanian, and Italian troops less experienced and less motivated than the veteran German forces.

By November 19, the Soviets had delivered and deployed more than a million men, 13,540 mortars and artillery pieces, 894 tanks, and 1,115 priceless, state-of-the-art warplanes. Sweeping from north and south to link up in the German rear, the counteroffensive, code-named Operation Uranus, could not be stopped.

German aerial opposition was negligible during the battle's crucial first days because of atrocious weather, and on the evening of November 23 two massive Russian pincers joined up outside the appropriately named town of Sovietskii. Virtually the entire German Sixth Army was encircled. More than 250,000 troops, about 100 tanks, nearly 2,000 heavy guns, and 10,000 assorted vehicles were trapped in a pocket just 40 kilometers from north to south and 50 kilometers from west to east.

Luftwaffe Chief of Staff General Hans Jeschonnek wasted no time rushing to Hitler's headquarters in East Prussia to discuss the new situation in the east, arriving that same day. Jeschonnek, possibly sensing his Führer was hoping for good news, rashly assured his chief that the Luftwaffe would keep the Sixth Army supplied until its encirclement could be broken.

Jeschonnek based his promise on the fact that his aircraft had successfully sustained about 100,000 troops temporarily surrounded in and around the city of Demyansk the previous winter. The chief of staff should have realized that this comparison was unrealistic. The soldiers in the Demyansk pocket, the 2nd Army Corps, had been less than half the number now trapped at Stalingrad. Also, there had been virtually no VVS presence over Demyansk to interfere with the delivery of the approximately 300 tons of supplies required daily by the German forces there, enabling the Luftwaffe easily to deliver the required tonnage until 2nd Army Corps could be rescued. Lastly, Germany had many more aircraft available in late 1941 than in late 1942.

The 250,000 Wehrmacht troops in the Stalingrad pocket would require a bare minimum of 750 tons of supplies daily—an impossible amount for the depleted German transport and bomber fleets to deliver. By the time of Zhukov's huge counterattack, the Red Air Force was out in great numbers over the battlefront, presenting an aerial barrier to the proposed airlift. All this was much more evident to the men at the front than to their faraway Führer, who eagerly placed great faith in Jeschonnek's foolish assurances. Hitler emphatically forbade Paulus to attempt to break out to the west (an operation for which he lacked sufficient fuel anyway) and instructed him to await his coming manna from heaven.

By the time Göring finally became involved, it was November 27, and the trapped troops of the Sixth Army were fighting for their lives and exhausting their supplies. "Göring," asked the Führer, "can you keep the Sixth Army supplied by air?" Raising his right hand, the corpulent air chief replied, "Mein Führer, I assure you that the Luftwaffe can keep the Sixth Army supplied."

General Kurt Zeitzler, chief of the general staff, however, had made detailed calculations on the proposed airlift's requirements based on the number of men to be supported, the number of suitable aircraft available, their fuel requirements, and allowing for interference from the VVS and immoderate Russian weather. Zeitzler's figures indicated that in favorable weather aircraft would have to ferry a minimum of 500 tons of supplies daily. "I can do that!" stammered Göring. "Mein Führer," yelled Zeitzler, "That is a lie!"

For perhaps a minute Hitler silently pondered everything his bickering commanders had just told him. Finally he mildly replied, "The Reichsmarschal has made his report to me, which I have no choice but to believe. I therefore abide by my original decision [to support Sixth Army by air]." This meeting was the last realistic chance to save Paulus and his troops. Had the available aircraft been used solely to fly in fuel and ammunition, the Sixth Army might still have been able to break out of the city with air support and a counterthrust by German forces to the west.

Ordered to stand fast, a quarter million men would soon be too weakened and decimated by the Red Army, hunger, and numbing cold to break out even had they been per-

mitted to try. Göring, meanwhile, did not deign to assist in the coming airlift's planning and execution. Instead, he boarded his luxurious private train, *Asia,* and set out for a lengthy shopping spree in Paris.

Because of the demand for transport aircraft to supply Wehrmacht forces in North Africa, the bulk of the aircrews and planes diverted to the Stalingrad sector had to come from the Luftwaffe's training programs. Trainers and instructors were soon en route to southern Russia, shutting down teaching facilities that provided sorely needed replacements for lost aircrews.

By the first week in December, the aircraft had been delivered. Most were the reliable Junkers Ju-52s, but there were also Heinkel He-111s, Junkers Ju-86s, Heinkel He-177s, Focke-Wulf FW-200s, Junkers Ju-90s, and Junkers Ju-290s. It all amounted to the impressive sounding total of 500 planes, but this was still far too few to ferry the required 300 tons a day. Also, many of these aircraft had not been designed to transport cargo; they were very unwieldy to load and unload as well as being prone to mechanical problems in the brutal winter of the Russian front.

When Luftwaffe squadrons had been forced to evacuate many of their airfields ahead of Zhukov's November counteroffensive, the Soviet advance had been so swift that the Germans had not had time to adequately pack. They left behind a great number of snowplows and heating devices for thawing cold aircraft engines. As the airlift got underway, Fiebig had just 90 serviceable fighters, far too few to escort the transports, which soon began suffering losses to VVS fighters. Even so, crashes during takeoffs and landings on perpetually blizzard- swept runways would destroy more cargo planes than the Red Air Force. Through the first half of December, the Sixth Army received less than 20 percent of its minimum daily needs.

Finally recognizing the hopelessness of the situation in what he was calling "Fortress Stalingrad," Hitler authorized Hoth to launch a rescue mission on December 12 with his 6th and 23rd Panzer Divisions from Kotelnikovo, 110 kilometers from Stalingrad. Followed by rifle regiments and antitank units, the expedition's 230 white-painted tanks made fair initial progress. Soviet units in the path of Hoth's advance were taken by surprise in the sudden assault.

Recognizing the danger, General Alexandr Vasilevskii managed to convince Stalin to release the crack 2nd Guards Army from its position on the Don front so that it could block Hoth's path. With air activity on both sides severely curtailed by weather, Hoth clawed forward through stiffening resistance for a week, reaching the Mishkova River 50 kilometers from the pocket. At this point the would-be rescuers were halted by powerful tank formations from the 2nd Guards.

General Erich von Manstein, now in overall command, radioed Berlin that the only way to save the Sixth Army was for it to break out and link up with Hoth's stalled divisions. Hitler abruptly decided he was unwilling to abandon Stalingrad after all. Instead, he instructed Paulus to open a corridor to Hoth so that fuel, ammunition, reinforcements, and supplies could be delivered overland to enable the Sixth Army to hold the city. This would require the Luftwaffe to deliver the impossible amount of 4,000 tons of fuel to the trapped troops.

While Fiebig's airmen tried vainly to meet Hitler's demands, the Russians assaulted Hoth's spearhead, driving him back from the Mishkova on Christmas Day. As the rescue offensive lost steam, a sense of hopelessness settled in throughout the pocket as aircraft were only able to fly in a meager 129 tons of supplies daily.

The Red Army had assembled a powerful curtain of flak around the German enclave, with the main concentration clustered under the airlift's flight paths. Between these antiaircraft batteries, VVS fighters, and hostile weather, Fiebig lost 62 of his precious Junkers Ju-52s from December 28 to January 4.

By mid-January Soviet ground forces had captured Pitomnik, Tatsinskaya, and Morozovskaya airfields, the main landing strips inside the pocket. Their loss essentially ended the airlift as a viable operation. Even before these fields were overrun, Fiebig's dwindling air fleet had managed to fly in an average of only 145 tons per day.

On January 14, Hitler ordered Field Marshal Erhard Milch, deputy supreme commander of the Luftwaffe and its air inspector general, to take over administration of the airlift. Milch tried hard at his impossible task, but on the morning of the 17th, as he was being driven to inspect Taganrog airstrip, a train appeared out of a thick fog bank at a crossing and broadsided his staff car. Milch's two bodyguards were killed instantly while he suffered a severe head wound, major back injuries, and several broken ribs. He regained consciousness encased in plaster and gauze. Ignoring his injuries, high fever, and doctor's orders, Milch immediately left the field hospital where he had been rushed and returned to his duties.

Milch did all he could, even experimenting with using gliders to deliver supplies, but nothing could break the vengeful Red Army's stranglehold on the shrinking Stalingrad perimeter. On January 24, Paulus sent the high command this despondent message: "Troops without ammunition and food. Collapse inevitable. Army requests immediate permission to surrender in order to save the lives of remaining troops." Hitler typically refused.

As the number of aircraft available to the Germans continued to dwindle, the number of Soviet aircraft kept increasing. Here pilots of the Red Air Force suit up for another engagement with the Luftwaffe.

At 6:15 on the morning of January 31, the Sixth Army's radio operator transmitted from its command post in the cellar of a destroyed department store: "Russians at the door. We are preparing to destroy [the radio equipment]." An hour later, Paulus sent his final message: "We are destroying [the equipment]." Just before noon, Paulus, obeying his Führer's orders to not surrender his army, surrendered only himself and what was left of his staff. The previous day Hitler had promoted him to field marshal. He was the first German field marshal ever to surrender to an enemy. Over the next three days, the last Nazi holdouts in the city laid down their arms.

From the airlift's inception on November 24, 1942, until February 2, 1943, German planes delivered only about 8,350 tons of supplies to the encircled troops. They flew out 30,000 sick and wounded soldiers. The VVS and inclement weather accounted for 166 German aircraft lost, 108 missing, and 214 damaged beyond repair. It was the equivalent of more than one full air corps. About 1,000 of the Luftwaffe's finest pilots, aircrew, and instructors had been killed or captured.

Hitler's 1942 summer offensive was Germany's greatest military undertaking of World War II. Mainly through the efforts of his air force, he nearly achieved his quest. Now, though, the Third Reich was mortally wounded.

Hitler's late July decision to deviate from the original plan to send nearly all available German forces directly for the oilfields of the Caucasus was critical. Encouraged by the crusade's early successes, Hitler divided his forces and attempted to take the Caucasus and Stalingrad simultaneously, spreading his air and ground forces too thin. The oil metropolis of Baku alone, to which the panzers had come so tantalizingly close, continued to provide 80 percent of all Soviet petroleum production.

Von Richthofen, Milch, Fiebig, and their subordinates were among the most competent German commanders, but they could not overcome the fatal obstacle of inadequate resources. Even before Stalingrad fell, von Richthofen began reorganizing his air fleet for future tasks. These assignments would be almost exclusively defensive as the front commenced an inexorable westward movement. □

Kelly Bell has been writing professionally about World War II for 17 years. Working from his home in Tyler, Texas, he has contributed to Command, World War II History, *and* Strategy & Tactics. *He is a former newspaper staff writer.*

Karen James is a noted journalist and expert in relationships.

Ask The Expert | Health, Marriage, and **Love After 50!**

Men in Italy Don't Need ED Drugs. Now We Know Why…

Famous for their passion and energy, Italian men in their 70s and 80s finally reveal their well-kept, insider secret!

A Secret Any Man Can Use…

This month I got a letter from a reader in Texas about a "little secret" that has renewed her love life with her husband!

Tina writes: Dear Karen,

For years my husband and I had a wonderful love life, but when he reached his 50s, he really slowed down and lost some of his old spark, especially in the bedroom. For the past few years, it's felt like we were roommates, not husband and wife.

Well, last month he came home from a business trip in Europe and shocked me with more energy and passion than he's had in years. He took me in the bedroom like we were newlyweds and gave me a night I'll never forget. It was just incredible, and our love life has been like that ever since. So here we are, closer and more intimate than ever… in our 50's!

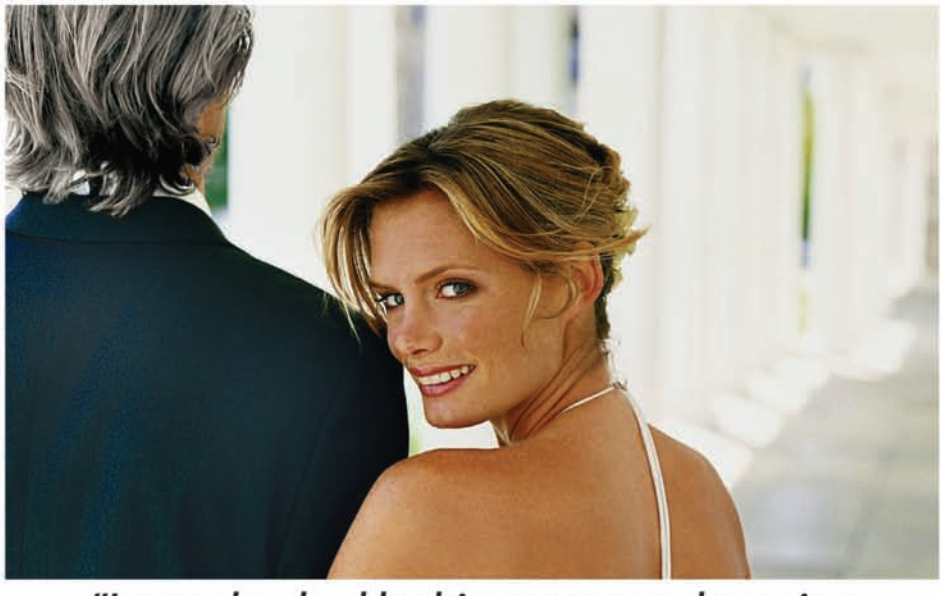
On his trip, he stayed next to an older, but very energetic Italian couple. Every day he'd see them out riding bikes or playing tennis. If that wasn't enough, they were just as "energetic" at night. Let's just say the hotel walls were paper thin…

Envious, one morning at breakfast he asked how they stayed so "active." Instead of being embarrassed that they'd been found out, they were positively glowing and happy to share their "secret." The man pulled out a small pack from his leather satchel, gave it to my husband and said "These tablets come from a small town up north and are made from naturally pure extracts, packed with densely rich sexual nutrients. They will give you back all the vigor and passion you had as a young man." Then he laughed and said, "You will become an Italian Stallion - like me!"

Karen, my husband is back to the man I fell in love with. He's full energy, beaming with confidence, and his desire for me is through the roof - I love it! But now the pack is almost empty and we both desperately want more. Do you know about these European tablets and can we get them in the States?

Sincerely,

Tina D., Fort Worth, TX



"I was shocked by his energy and passion. He took me in the bedroom like we were newlyweds!"

Tina, you're in luck, I do know about them. Ever wonder why older men from Italy and all over Europe are famous for staying energized, passionate, and sexually active well into their 80's? For years, these men have relied on a unique blossom seed extract to enhance their energy and libido.

Milled on the fertile northern plains, and sold under the brand name Provarin, these pure plant extracts have a legendary reputation throughout Europe. As Giovanni from Milan put it, "It's like bedroom rocket fuel - especially for us older guys!"

All-natural and safe to take, Provarin is a well-kept secret for those in the know. An old-school, family business, they still harvest product by hand and don't even have a website. Long-time customers and word of mouth ensure their limited stock is sold out every year.

Provarin is surprisingly inexpensive but I know of just one importer. A spokesman told me they were proud to produce the highest quality product for men and if any of my readers call and mention this article, they'll get a one-time double-discount, plus free shipping, AND A BONUS PACK OF 30 TABLETS FREE!

Wow, so there you go, Tina - and the rest of you readers! The offer is only good while supplies last so just give them a call today. The number is **1-800-585-9957.**

Aren't you glad you asked?

Karen

B-17 BOMBADIER

Continued from page 53

Tripoli, Casablanca, and, finally, England.

WE HAVE TO FIGHT FOR IT

Now, 76 years later, Goldsticker still remembers that after his final mission, "They were training returning airmen for B-29s for flight over Japan, and I had been shot at enough." Luckily, a position for a group awards officer at Deopham Green opened up; Goldsticker took it, and he remained there from October 1944 through March 1945. After that, he headed to bombardier instructor school back in the U.S.

"When the war ended in Europe, I was in Midland, Texas, at instructor school. We didn't celebrate too much because we were still fighting. When the war ended [with Japan], I was teaching French cadets in Big Springs, Texas. That night everyone got drunk. The war was over and I survived," said Goldsticker.

After three years, four months, and 13 days, Goldsticker was discharged on October 20, 1945. He had flown 22 missions in *Deuces Wild*, 13 missions in other B-17s, and three missions as navigator in just over four months; over one 17-day, period he'd flown 11 missions.

COMING HOME

Goldsticker served in the Reserves until 1958 and was promoted to captain during the Korean War but was never called to active duty. For his service, he received five Air Force medals, a medal from the Russian Government, the French Legion of Honor, the French Jubilee Victory Medal, and the Distinguished Flying Cross—the latter his most treasured award since it is the one that both Jimmy Doolittle and Charles Lindbergh also received.

"My only plan [after returning home] was to buy a car. I wasn't worried about anything. I was 22 at the time," said the veteran. But when he returned from the war, he was offered a job back at the dry goods store as a traveling sales representative that paid $175 a month, five percent commission, and a car.

He couldn't pass it up, and for the next 48 years he made his living as a clothing-manufacturer's representative covering areas in the Midwest. He retired in 1994, but he's still driving. "I'm good to 102," laughed Goldsticker, who'd just passed his driver's test. (He turned 99 on October 26, 2020.)

Goldsticker returned to his hometown of St. Louis, where he married in 1948, raised three boys, and now has five grandchildren and two great grandchildren. Helen, his wife of 63 years, passed away in 2012.

Taped to a page of a scrapbook are two letters he wrote in 1944 that were returned to him; one was marked "Deceased" and one "Missing." They were sent to his roommates from flight training at Maxwell Field in Montgomery, Alabama, and Darr Aero Tech in Albany, Georgia. Four out of his six roommates from flight training were killed during the war. Both envelopes have remained unopened since the day he sealed them, seemingly a quiet tribute to those airmen Goldsticker knew and lost.

As we page through a stack of photos of flak-damaged planes, he comments, "There is flak and more flak; you can really see it burst. There is that one plane that was cut in half, but it landed. We couldn't do evasive action with 18 planes. We went straight and level right to the target. People would always say to me, 'You had the best seat [in the nose turret].'"

"I was one of 16 million who served in the U.S. Armed Forces during WWII. Four hundred thousand didn't come home," said Goldsticker.

The only crew member he kept in touch with was Marty the co-pilot, who was 85 when he passed away. These days, he gets together with a small group of war veterans, but they, too, are getting fewer.

The cotter pin Goldsticker pulled from first bomb on D-Day and the piece of shrapnel that he's held onto all these years are reminders that this bombardier stayed the course. □

Susan Zimmerman is a frequent contributor to WWII Quarterly. *She lives in St. Louis, MO.*

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