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NUMBER 7

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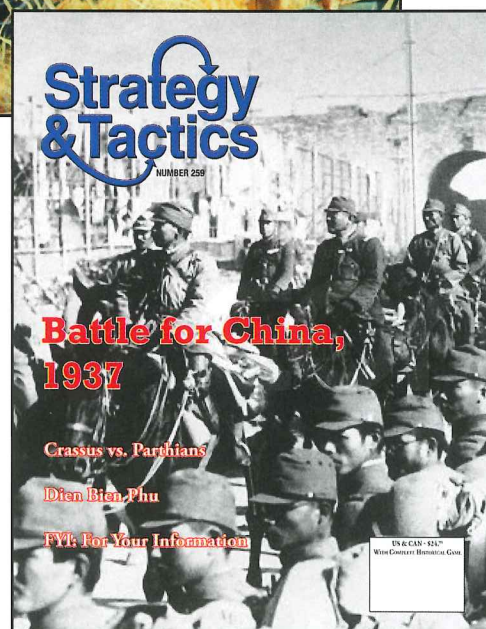
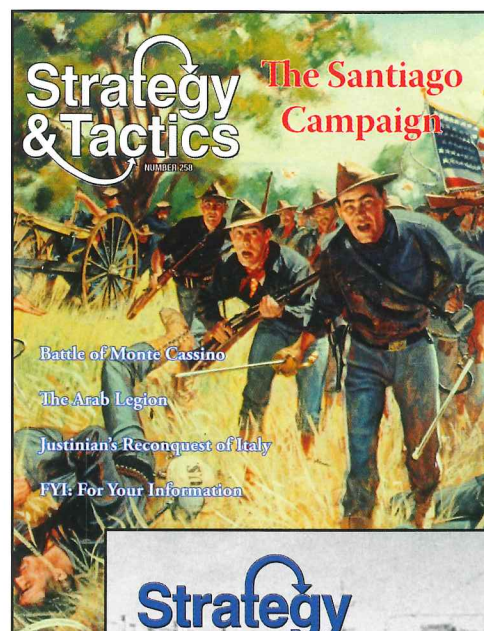
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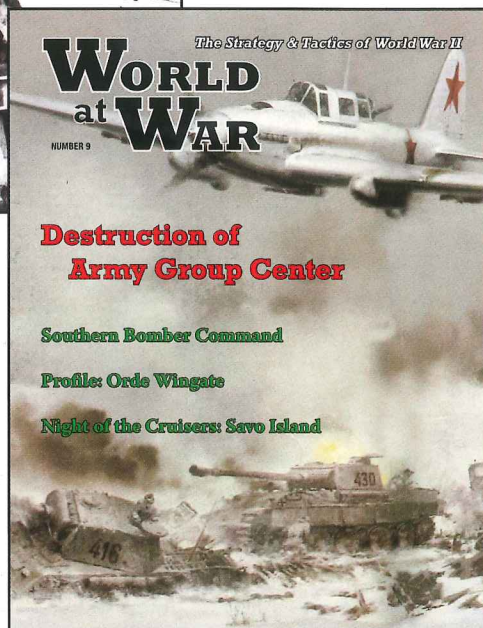
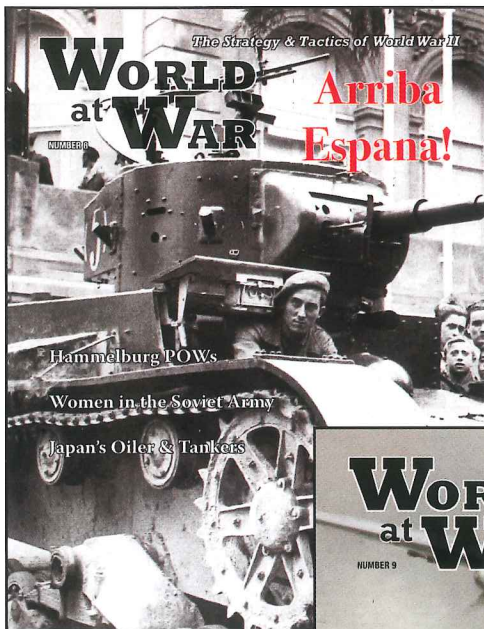
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# WORLD at WAR

*The Strategy & Tactics of World War II*

Number 7  
Aug/Sep 2009

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# The Italo-Greek War: Harbinger of Failure

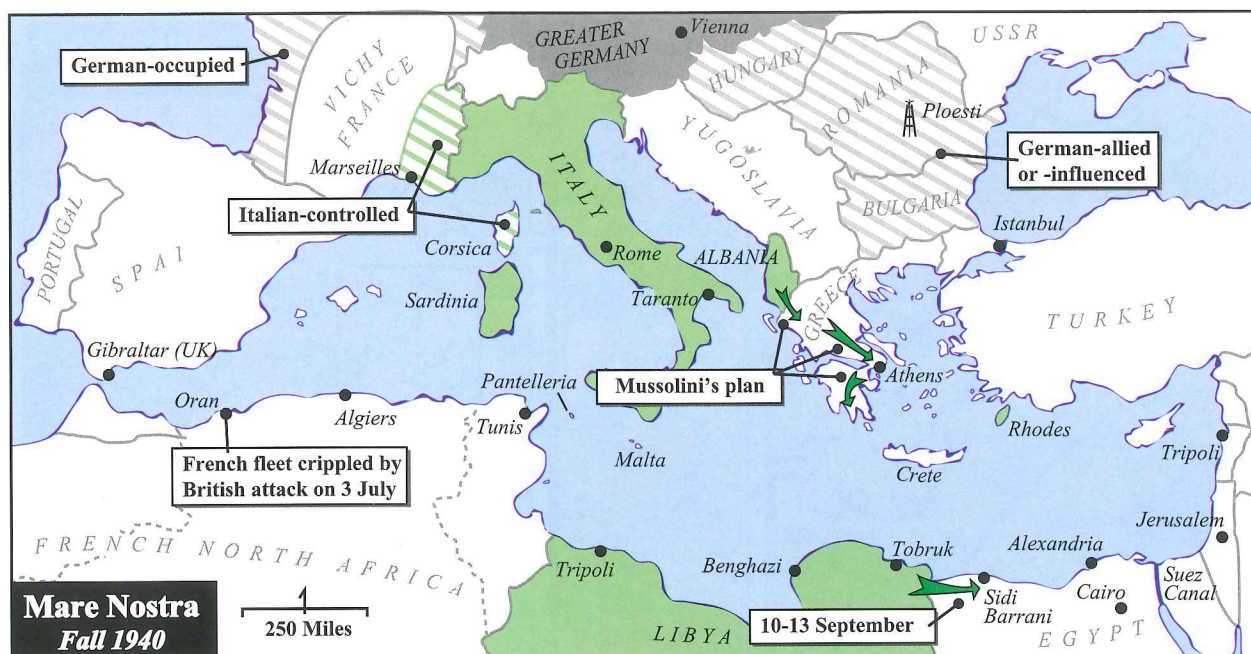
by Christopher Perello



## After

his defeat in the Battle of Britain, Hitler turned his eyes toward the long-anticipated war with the Soviet Union. One of his first preparatory moves in that direction was an agreement with Romania, which allowed German soldiers into the country on 12 October 1940 to “protect” the vital oilfields at Ploesti. That came as a surprise to Hitler’s chief ally, Benito Mussolini of Italy, who saw the Balkans as his sphere of influence, and provided one of several goads that led him to initiate a war on his own: the invasion of Greece. The ostensible Italian objective, to gain air and naval bases to fight the British in the eastern Mediterranean, was a cover for Mussolini’s true goal: the enhancement of Italy’s—and his—reputation and to avoid being completely eclipsed by Hitler’s Germany. Instead of a triumphal march, however, the ensuing campaign was an unmitigated failure that foreshadowed the collapse of the Italian military over the next two years.





## Invasion: 28-31 October 1940

On 28 October, 85,000 men of the Italian *Eleventh Army* crossed the Albanian frontier into Epirus, the northwestern corner of Greece. The Italian high command had wanted—presciently—a three-month delay to triple that army's size and improve its logistical support, but Mussolini insisted on quick action. The invaders met only scattered resistance at first, as fewer than 15,000 Greeks opposed them (the bulk of the Greek army was to the east, facing Bulgaria), but the invasion proceeded only as fast as the soldiers could walk.

The forces about to collide were poor cousins to the world's great armies. The Italians had formed some armored and motorized units, but their industrial base was too thin to provide for more than a few such formations, and their equipment was feeble. As they did in every army, those new units—along with the navy and air force—drew a disproportionate share of the educated soldiery to operate the machinery.

The great mass of the Italian army was composed of infantrymen, and even they were culled to form elite units: *Alpini*, specialized troops receiving the training and equipment needed to fight in mountains, and the *Bersaglieri*. The latter weren't really different from line infantry, just better: superior manpower with more thorough training.

With the educated and motivated removed to elite units, the line infantry was left with the least desirable recruits. Those men were willing to fight, if not especially enthusiastic, and might have made a decent showing had they been properly armed. As with manpower, though, so with materiel: the infantry got short shrift. Firepower was light and motorized transportation almost non-existent.

The lack of motor vehicles extended beyond the front-line units. *Eleventh Army* was a garrison force and had only a tenth of the 2,000 trucks it needed to keep its spearhead supplied. As a result, after just three days and a 20-mile advance, supply difficulties and increasing opposition brought the Italians to a halt.

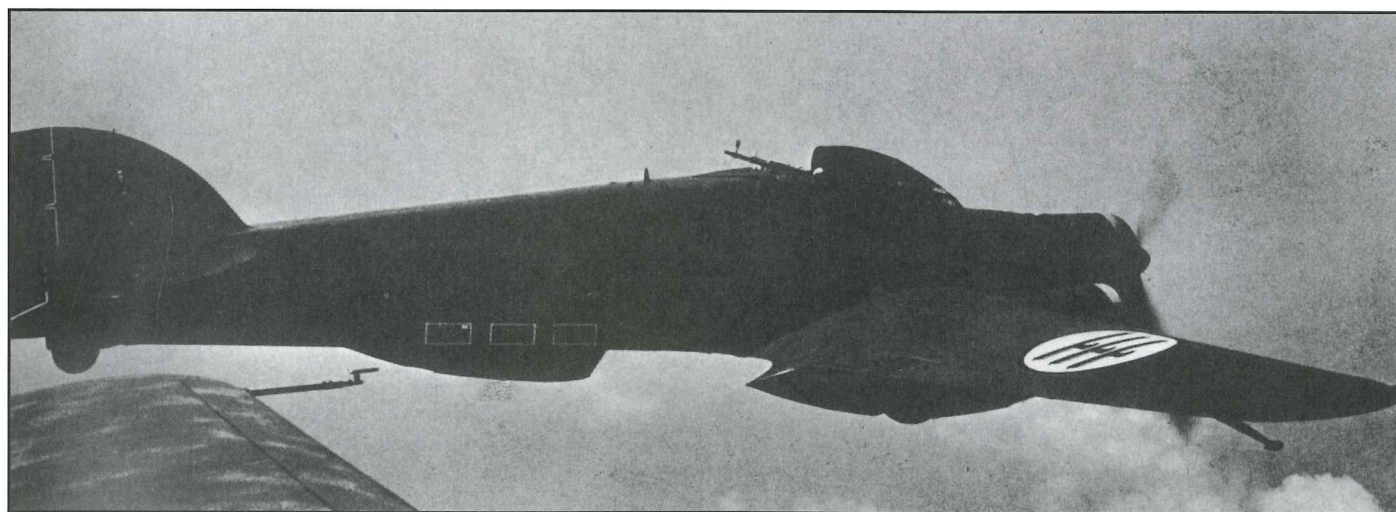
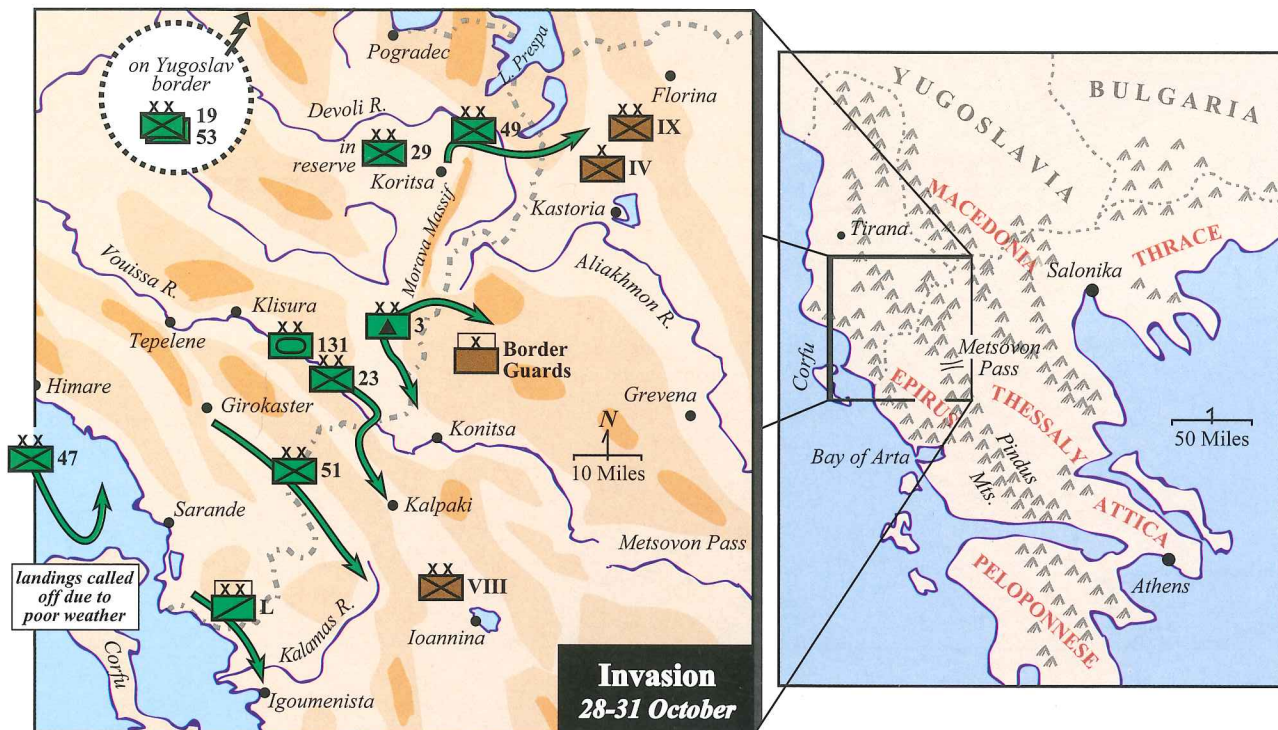
## Counterattack: 1-3 November 1940

The Greeks reacted quickly to the invasion, bringing units west from the Bulgarian frontier and mobilizing reserves. They fielded even more of an unleavened infantry army than the Italians, having even fewer cannon, fewer vehicles and no tanks. They did have several crucial advantages, though, in addition to the motivation of fighting for national survival. Every unit was organized, equipped and trained to fight in the mountains, where the Italians had only the *Alpini*. More important, because the Greeks formed few elite units (just a few regiments of *Evezoni*, roughly equivalent to the *Bersaglieri*), the full spectrum of available manpower—the motivated and educated as well the illiterate—went into the infantry. That gave the Greeks a man-for-man superiority over the bulk of their Italian opponents.

By the end of October they had a numerical superiority as well, with seven divisions on line against six Italian. The division was each army's smallest self-sufficient organization, possessing all the combat arms—infantry, artillery, reconnaissance, anti-tank and anti-aircraft—as well as a logistical apparatus, medical staff, administrative offices and so on. It was in effect a miniature army. For that reason, a nation's military strength was commonly expressed by the number of divisions it fielded.

The divisions of the major powers generally numbered 16,000 to 18,000 men. Italian divisions were small, about 12,000 men (the *Alpini* were smaller still,





*Third dimension of warfare: Italian bomber somewhere over the Mediterranean.*

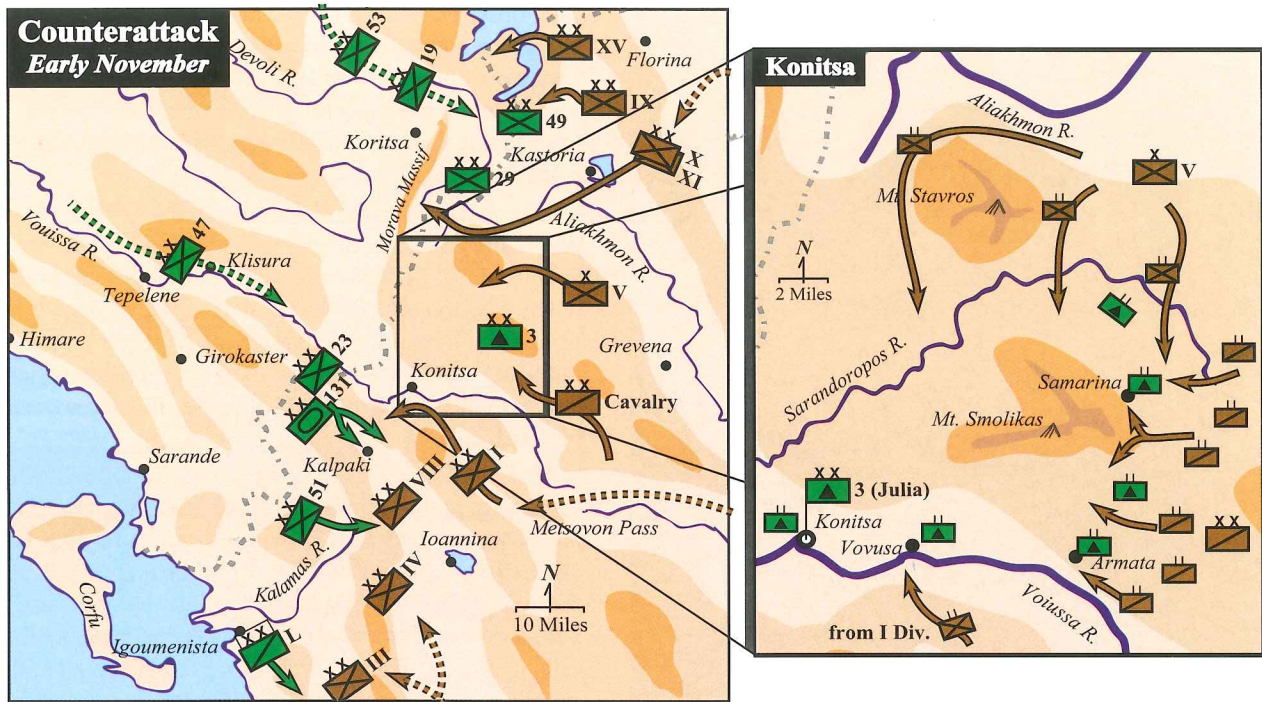
## The Air War

The closest the Italians came to success in Greece was in the air. The *Regia Aeronautica* (air force) dominated the skies over the campaign area, not surprising given their six-to-one numerical superiority (450 Italian planes to 77 Greek). That dominance achieved less than it might have. Poor communication between air and ground commanders (who weren't even located in the same city), as well as among aircraft and ground units, led each arm to fight its own war. The Italian pilots had a negligible impact on the ground fighting but caused considerable difficulties for Greek units on the march by bombing and strafing columns.

In mid-November a small British air group arrived to help the Greeks. Never amounting to more than 80 planes, the British pilots couldn't quash the Italian superiority, but they certainly took the edge off it. That was due to a fundamental difference in aircraft, favoring the British in most respects.

The *Regia Aeronautica* fell firmly into the "acrobatic" school of aerial warfare, believing in the efficacy of maneuverability over firepower. Coupled with their weak industrial base—Italian aircraft engines lagged a few hundred horsepower behind those of the other powers—that resulted in lighter planes. While excellent flyers, Italian aircraft could neither deliver nor absorb the punishment of the faster and more robust British and German models while French designs lay somewhere in between.





and the lone armored division was about half as large). That was accomplished by cutting the number of combat units assigned to each division, two regiments ("binary" divisions) instead of the usual three ("triangular").

That had been done partly for political purposes—Mussolini could brag of more divisions—but it had operational value as well. Most armies tasked their division commanders with managing a battle, rotating regiments in and out of the fight. The Italians put battle management at the corps level, expecting those commanders to rotate the smaller divisions whole. Division commanders thus could focus on one thing at a time.

Binary, triangular or square (four regiments), the shape of single divisions was actually unimportant. What really counted was the number and quality of weapons. In that regard, Italian divisions were woefully inadequate. With two-thirds the manpower of a standard division of that era, the Italian infantry division had half the cannon and less than half the weight of fire (its primary cannon were 75mm rather than the 105mm used by the German and US armies). Weapons were equally sparse and light in front line units.

Greek divisions generally had three regiments (though one had four, and at least one other had two), a mix of active duty and reserve units. Before mobilization was complete, several of the divisions were called brigades, consisting of a divisional infrastructure and a single active regiment; one of them had reached Epirus. The supporting arms were even weaker than those of the Italian units, having half the artillery and even fewer vehicles. Manpower averaged about 15,000.

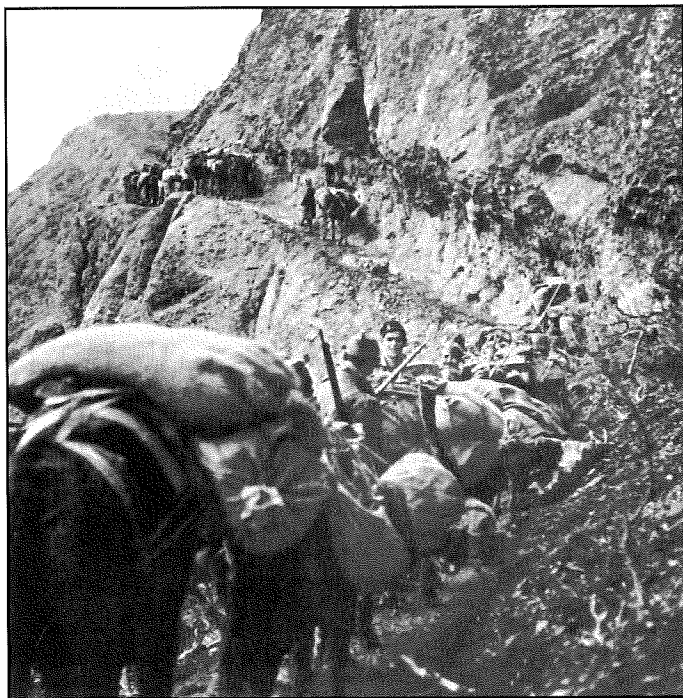
The Greek commander, John Papagos, thus had more than 100,000 men on hand and could engage the stalled

Italians all along the front. The first serious fighting occurred at the northern end of the line, where arrivals from the main army fell on the thin Italian flank guard. Outnumbered three-to-one, the Italians fell back behind the Devoli River. They halted on a narrow front formed by a lake on the north and the Morava Massif on the south, where they were reinforced by *Eleventh Army's* lone reserve division plus another from the Yugoslav frontier.



*Axis duo: Hitler and Mussolini take a stroll.*





*Meanwhile on the ground: Mountain logistics column heads for the front.*

*Eleventh Army* thus had no reserves in the center—as called for by Italian doctrine—where the Greeks struck next. The retreat in the north, coupled with the continued advance of the Italian right, combined to expose the flanks of the center columns. The main column was brought to a halt at Kalpaki, north of the regional capital of Ioannina. In the hills to the east, Greek units pushed around both flanks of the 3<sup>rd</sup> *Alpini (Julia) Division*. By nightfall on 3 November, the *Alpini* were all but surrounded.

#### **Crisis: 4-8 November 1940**

Over the next five days the Greeks attacked in force against the 3<sup>rd</sup> *Alpini (Julia)* and around Kalpaki. The resultant fighting exemplified the combat during the entire campaign.

The mountains were cut by frequent river valleys, but those valleys had few wide-open areas. Except for the *Alpini*, the Italians tended to concentrate in the valleys along the roads. That left the Greeks free to ascend the ridges, which gave them the advantage of the high ground and provided highways through the Italian front. What appeared to be a solid line on Italian headquarters maps was actually a porous and fragile string of isolated units. That kind of fighting put a premium on the leadership, motivation and firepower of small units, precisely the area in which the Greeks held their greatest relative advantage.

In both armies the smallest combat unit was the squad, whose men were rarely more than a few yards apart. The Greek squad had 12 men, an automatic rifle and a small grenade launcher. The Italians used a 21-man section of two squads, but acting like a single large unit with two automatic rifles. Regardless of the size,

each operated as a pair of components. The riflemen, carrying a bolt-action rifle with a five-round magazine, performed the quintessential task of infantrymen in every war: defending a piece of ground or rushing forward to seize one. In was in that task morale and motivation mattered most.

The other part of the squad used the automatic rifles, often called light machineguns. They were not true belt-fed machineguns, but beefier versions of an infantry rifle fed by a 20-round or 30-round magazine and capable of firing short bursts. On defense those weapons supplied the backbone of the squad's firepower; on the attack they provided covering fire while the riflemen moved forward.

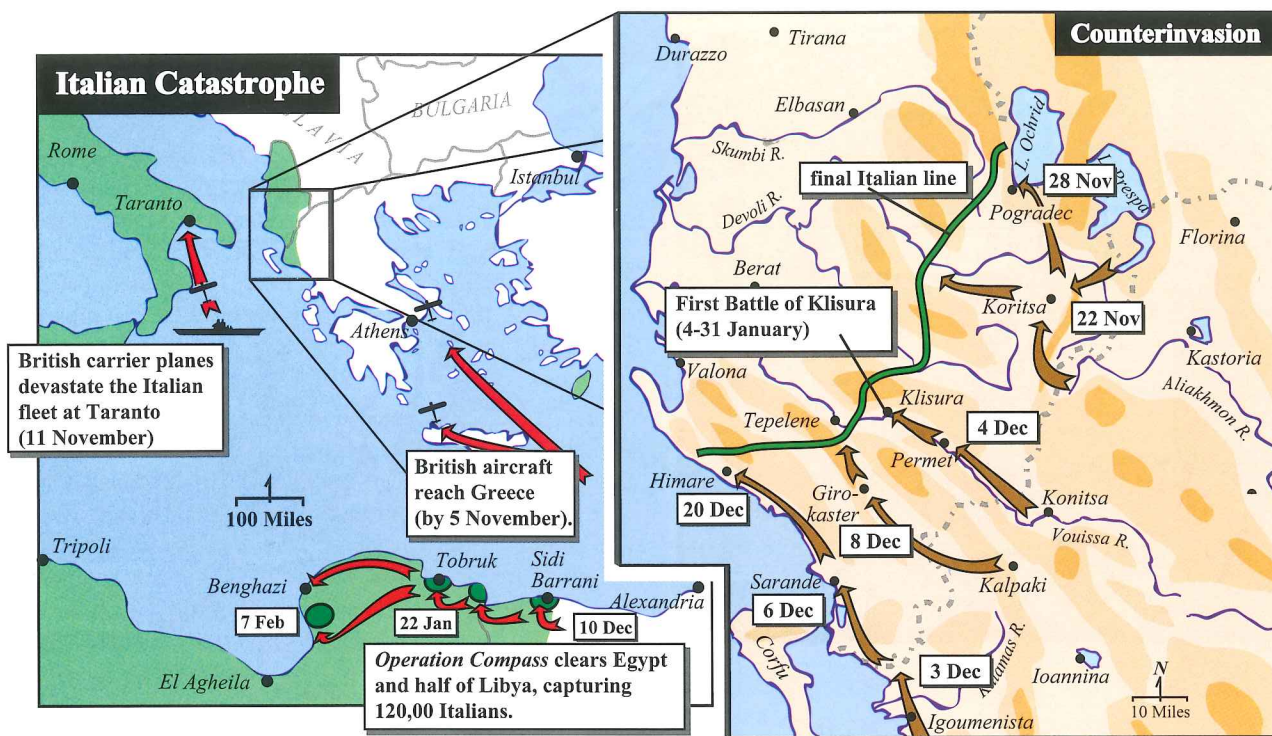
The opposing weapons were comparable, with a slight edge to the Greeks, who used a variety of models purchased from Britain, Germany, France and even Italy. The Italian weapons used a smaller bullet (6.5mm instead of the usual 7.62mm), and so had slightly less range and killing power. They also tended to be somewhat delicate, jamming frequently. The net effect, coupled with superior Greek morale and skill, was the Greeks would win most of the fights in the last 100 yards separating the armies.

The squads or sections were used as the building blocks of larger formations. Three Greek squads (the "triangular" standard) or two Italian sections formed a platoon, the largest organization that could be controlled on the battlefield by a single voice. The platoon generally maneuvered as a group, coordinating its squads against a single objective. The next higher unit was the company, formed of three (Italian) or four (Greek) platoons. The company commander normally couldn't see his entire command at one time, but moved among units, or communicated with them by runners (neither army was well-equipped with radios).

The major armies gave their platoon and company commanders a few heavy weapons to use as a base of fire or to bolster subordinate units. Neither the Greek nor Italian armies could afford to be so lavish, leaving the commanders nothing but skillful maneuvering and personal example to affect combat. Casualties were correspondingly high.

Heavier weapons became available only at the next command level, the battalion, which—because of the divided nature of the terrain—became the primary combat element for both armies. The Greek battalion had three rifle companies (about 600 men), plus a company with 12 machineguns each served by a 10-man team including ammunition bearers and riflemen for protection. Those weapons were belt-fed and mounted on tripods for accuracy, allowing for sustained firing, either *en masse* or split up among the companies. The battalions of the Italian army had three rifle companies (450 men) and eight machineguns, plus six relatively useless 45mm mortars and a more substantial logistical base. The Greek unit thus had a four-to-three advantage





in numbers and firepower. As with their squad-level superiority, that made a crucial difference in the campaign.

Three battalions (occasionally two or four) formed a regiment, the largest pure (infantry or cavalry or artillery) organization in each army. That was a soldier's "home" unit, possessing training and administrative as well as combat functions. While smaller units could be disbanded or consolidated after heavy losses, regiments rarely were. In this campaign the only real difference regimental commanders could make was in the distribution of a few 81mm mortars (six in the Italian regiment, four in the Greek) and light howitzers (four and two, respectively) to their battalions.

The larger guns of the artillery, divisional batteries in both armies, and a few heavier guns under the Italian corps commands, provided additional fire support; however, the lack of adequate numbers of radios prevented rapid shifting of artillery fire during mobile operations. As a result, the bulk of the fighting was done by small groups of infantry carrying light weapons: valor took the place of weaponry. The result was heavy casualties, mostly in the rifle squads.

Under those circumstances, it should come as no surprise the Greeks pressed steadily forward. The *Julia* barely managed to break out of their encirclement on 8 November, rejoining the main line just in time to take part in the general retreat north.

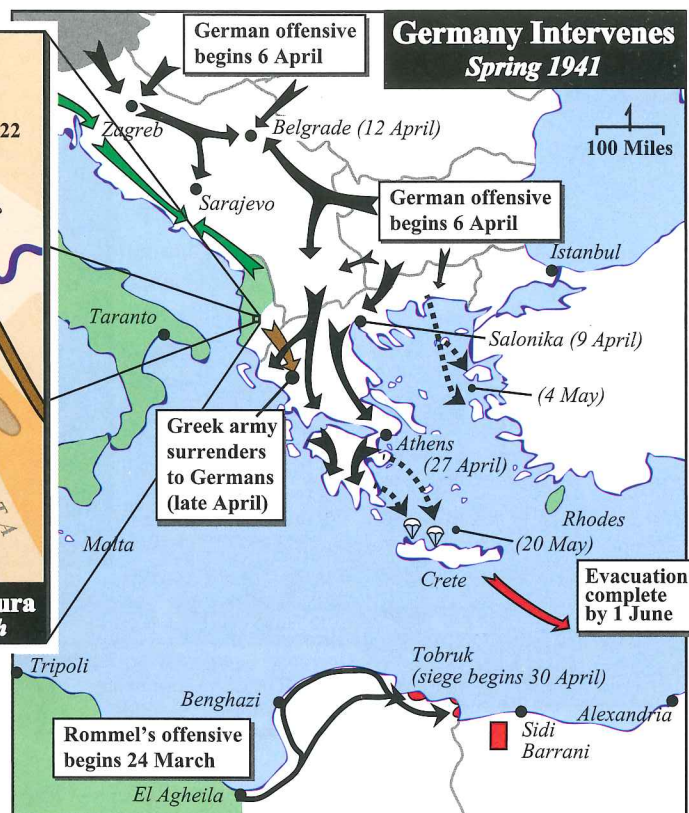
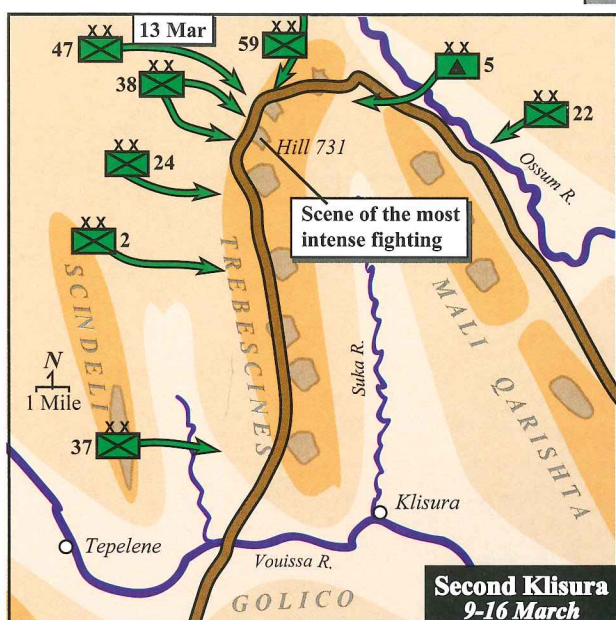
### Pursuit: 9 November—20 December 1940

As early as 6 November, it had become clear to the Italians their offensive was over. After replacing the *Eleventh Army* commander, the high command could think of no course of action except to pull back, consolidate the line, and spend the winter preparing a stronger attack in the spring. Papagos had no intention of giving the invaders that chance.

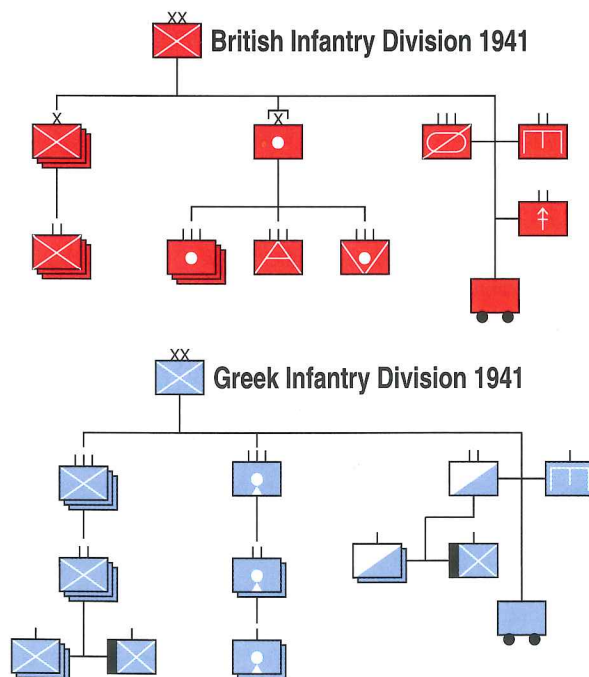
In mid-November the Greeks attacked all along the line. Once again their strongest attacks came in the north. Within a week the Italians had been driven out of Koritsa. Elsewhere the Greeks drove into Albania steadily but slowly; it was no blitzkrieg. By the end of November, infiltrating Greek battalions had taken Pogradec on the eastern end of the line, and at the other end were just 20 miles from the major port of Valona (Vlore). One more lunge and the Italians' hold on Albania would collapse.

To stave off that eventuality, the Italian high command desperately poured reinforcements across the Adriatic. That operation was even more chaotic than the initial invasion. The Italian army had started demobilizing after the fall of France in June. That order had been belatedly countermanded, but there simply were no complete divisions on hand. Individual regiments, and even battalions, were sent over as soon as they were ready, then rushed to the most threatened points. In short order the Italian line had become a crazy quilt of unit fragments. It was a line, though, and the Greeks had suffered heavily too. Once the coastal city of Himare fell on 20 December, the Greek offensive petered out.





Greek infantrymen ready for battle.



## The Widening War

The invasion of Greece took place during a relative lull in the course of World War II, other than some British naval activity in the Mediterranean, including a strike on the Italian naval base of Taranto on 11 November. The lull ended on 9 December, when the *Western Desert Force*, under the command of Richard O'Connor, launched the campaign that would bag a quarter-million Italian soldiers and threaten Libya. A few days later, German divisions began moving into the Balkans, preparatory to the strike into the USSR, but also in position to pull Italy's Albanian chestnut out of the fire.

The German threat was hardly veiled, and the Greeks, who'd hoped to keep their war limited, at last accepted the British offer of military aid. Eventually, some 60,000 British soldiers would reach Greece, far too few to staunch the German tide and far too many from O'Connor's tiny army to allow it to continue its offensive in Libya. That opened the way for Erwin Rommel to work his peculiar magic in the North African desert.



## Impasse: 21 December 1940—8 March 1941

Spurred by the failure in Albania and the growing disaster in North Africa, Mussolini replaced the Italian *Commando Supremo*, head of the armed services, with Ugo Cavallero. His first order of business was to bring order to the reinforcement and supply of the Albania front. By late December, five complete divisions had arrived, with six more in the pipeline. By mid-January 1941 there were a quarter-million Italian soldiers in Albania—exactly three months after Mussolini's invasion directive—enough to build a double-line of divisions across the front.

The Greeks struck again before the line was complete. For a bloody week the two sides fed men into a battle at Klisura, the lynchpin of the lower Voiussa valley and gateway to Valona. The Italians finally gave way on the 9<sup>th</sup>, but the Greeks could go no farther. In addition to combat losses, both sides were suffering from the winter weather; exact numbers aren't known, but each army lost at least 15,000 men to frostbite.

## Vainglory: 9-14 March 1941

For the next two months the Italian build-up continued. The Greeks conserved their strength, but remained concentrated in Albania; they counted on arriving British units to resist the looming German attack. By early March the Italians had a three-to-two superiority, and Mussolini called on his army for one last effort to snare a victory before Hitler grabbed the laurels.

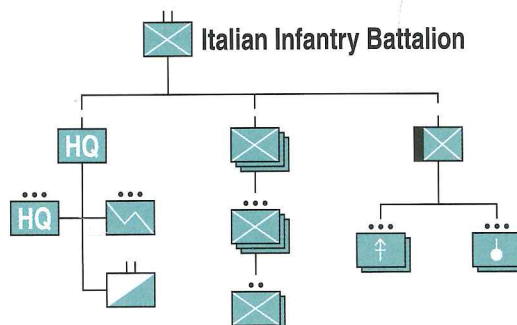
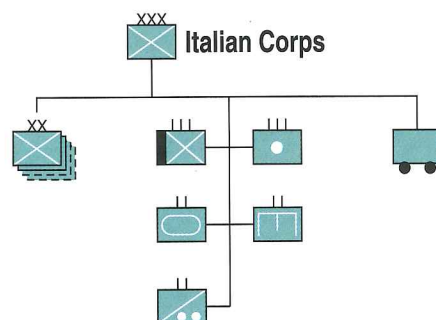
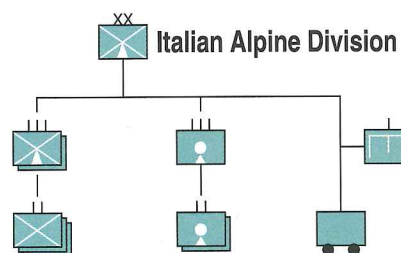
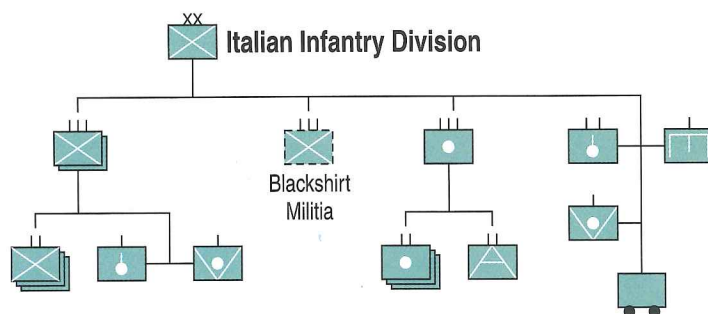
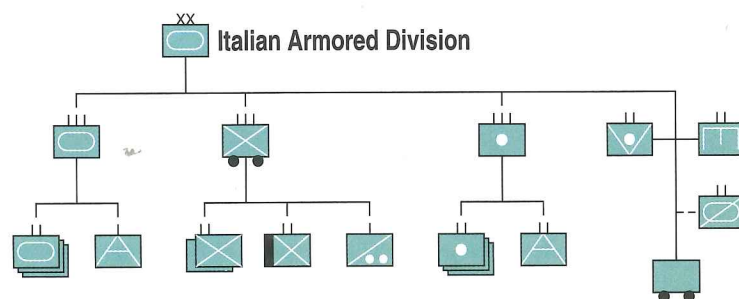
The offensive opened on 9 March, intended to retake Klisura. A heavy bombardment—by the standards of that campaign—preceded the attack, as 300 cannon fired 100,000 shells. Five Italian divisions struck, but the Greeks were more than ready. Networks of trenches five lines deep met the attackers. As soon as one trench fell, the Greeks counterattacked from another. In five days the Italians lost 15,000 men and got nowhere. It was an ignominious end to the campaign. Three weeks later the Albanian front became a backwater.

## Finale: 15 March—27 April 1941

The Germans struck on 6 April with all the force of the *blitzkrieg*. Only six Greek and two-and-a-half British divisions faced the onslaught in three separate and poorly coordinated groups. Allied defeat became inevitable. Papagos actually contemplated an offensive against the Italians to gain a bargaining chip after the war, but there was no time. Grudgingly, the Greeks pulled out of Albania. The Italians followed at a distance—though they would lose more men to Greek rearguards than the Germans would lose in the entire campaign—allowing the Germans to interpose between them and the Greeks. By the time Athens fell on 27 April, the Italians had only returned to the original Albanian frontier.

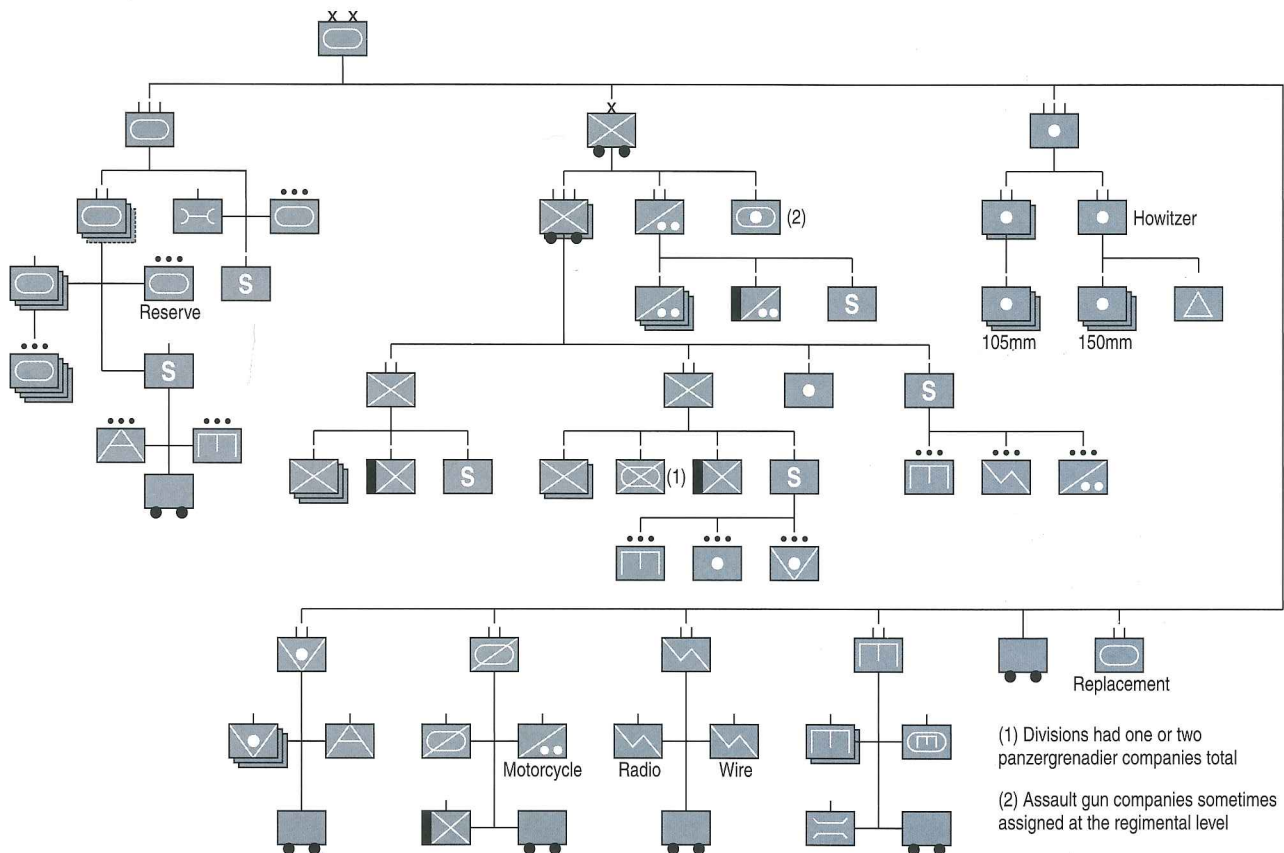
## Aftermath

The Albanian campaign, coupled with the disasters in North Africa, exposed the inability of the Italian army





## German Panzer Division: 1941



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to wage modern war. A half-million men had been committed; 63,000 of them died, and at least as many more were wounded or crippled by frostbite. The Greeks, with half the manpower and even less firepower, suffered half that number of casualties.

For all the effort, then, no ground was gained, no victories won; few prisoners were taken, and the process of the subordination of the Italian military to the Germans was begun. Pessimism swept through the Italian military, especially the army, about the war and the nation's fighting abilities. The Italian army didn't die in Albania, but it was grievously wounded in body and soul.





# Mussolini's Last Victory: The Italian Conquest of Albania

by John Lockwood



**I**n the 1920s and early 1930s, Benito Mussolini appeared to be restoring Italian power and prestige. But behind the martial posturing and fascist parades, the Italian armed forces had serious flaws in training, organization and equipment. These flaws were concealed, in part, owing to the Italians conducting some relatively successful military campaigns in Libya and Ethiopia which were to become part of Mussolini's "new Roman Empire." What was missed was that these countries were grindingly poor and lacked anything remotely approaching modern armed forces

In April 1939, as the world began the final slide into the abyss of another war, Mussolini decided to add Albania to the list. It was to be his last successful campaign. For some time he'd been increasingly jealous of his partner Adolf Hitler. Their alliance had already shown all too clearly Italy was the junior member, and growing ever more so. Hitler had achieved several bloodless conquests by that time, seizing the Rhineland, Austria, Czechoslovakia and the Lithuanian coastal strip of Memel, all without meaningfully consulting with his colleague. Mussolini therefore decided the most appropriate payback would be to make a surprise land-grab of his own.

Mussolini's ambitions always exceeded his country's abilities. The monumental-style Fascist architecture in Rome and other major cities couldn't disguise the fact early 20<sup>th</sup> century Italy still had rampant poverty. The country itself was short of natural



resources. For example, it had almost no coal or iron of its own. Italy was simply not a first-rank great power, nor could it become one. Mussolini therefore settled for attacking Albania, and it was a logical choice. Albania was a small country just across the Adriatic Sea from Italy. Albania was also among the poorest countries in Europe.

At the same time, even with much of Italy's armed forces tied up garrisoning the empire as it already was, it didn't seem it would take much to subdue the little nation. No masterful tactics were needed, no brilliant maneuvers: just land with a modest force, push the peasants out of the way, depose the country's King Zog I, and settle in.

It could even be argued seizing Albania was good strategy. In theory, at least, it would give Italy control of the entrance to the Adriatic Sea. That would put pressure on the anti-Axis government in Yugoslavia to fall into line and become another "ally." Also, if it came to a wider war, Albania could serve as a convenient base for a larger attack into the Balkans.

Italy had already prepared the ground for a possible invasion. It had heavily invested in Albania for years, and signed various trade and political agreements. In 1927, for instance, Italy and Albania concluded a treaty making them "allies." The agreement obligated both countries to assist each other if it was threatened by war. Italy had also made loans to Albania, for works programs that included the construction of roads and public buildings. Naturally, all that had led to Italian economists, engineers and military officers entering Albania to administer the various programs. Those same Italians also scouted the country, noting the sites of its military bases, telecommunications, and other infrastructure, and seeing if any locals were willing to collaborate.



*Italian heavy artillery rolls to the front.*

Once Mussolini made his decision, he began by launching a propaganda campaign against the Albanian government. In March and April 1939, the Italian media began ranting about the mistreatment of Italians in Albania. They also accused King Zog of using Italy's aid money for himself.

The Italian military's movements in the days before the invasion couldn't be fully hidden. The regime therefore began releasing various cover stories. On 4 April, for example, one Italian source claimed the troop movements were for the purposes of preparing to reinforce bases in Libya and in the Dodecanese Islands off the coast of Turkey. The Albanian government reacted by denying there was any legitimate basis for any Italian intervention in their country. Britain helped out by sternly warning an invasion would violate the British-Italian friendship accord.

In the midst of all that, on 4 April a son was born to King Zog and his wife, the half-American Queen Geraldine. They named him Crown Prince Skander, in homage to the 15<sup>th</sup> century national hero Skanderbeg. He, against incredible odds, had managed to preserve Albania's independence against the massive armies of the invading Ottoman Empire. When he died, Albania was swallowed up, and didn't regain its independence until 1912.

The royal family wasn't given much time for pleasantries. At dawn on 7 April 1939, Mussolini struck. First the Italian Air Force dropped hundreds of thousands of leaflets—copies of a proclamation by Mussolini that read, in part: "Albanians! The Italian troops landing on your soil today are troops of a people that have been your friend for centuries and proved it to you. Do not offer vain resistance, which will be immediately smashed."

Then Italy's Navy bombarded the coast, while the air force switched from leaflets to bombs. The army landed soon after.

The two sides were mismatched from the start. Italy had a population of 40 million, Albania 1.2 million. The Italian landing force had about 100,000 soldiers, while Albania had 40,000 (and, in total, they had only 15,000 rifles and about 200 machineguns). The Italian naval force had 100 ships, while the entire Albanian Navy consisted of 40 men and four patrol boats. The Italian air assault force totaled 400 planes. Albania had no air force.

Even so, the Albanians put up what resistance they could. Zog himself, wearing peasant costume, took charge of his army at the coastal town of Durazzo. He soon had to retreat to the capital Tirana, 20 miles inland, and then had to flee from there. By 10:00 a.m. on the day of the invasion, Italy had successfully occupied Durazzo and the other coastal towns of Santi Quaranta, Valona and San Giovanni di Medua. By 9:30 a.m. on the morning of the 9<sup>th</sup>, the invaders had taken Tirana and begun fanning out across the rest of the country.

Meanwhile, the queen fled by automobile with her



baby into Greece. On the 8<sup>th</sup> the king followed. Organized resistance was at an end, but some Albanian fighters retreated into the mountains to begin guerilla warfare. The Italian forces never completely subdued them. For the time being, though, Italy securely held the populated coastal region, which seemed good enough. Mussolini could boast of another addition to his empire. Total Italian casualties were estimated at about 200, while the Albanians lost about 60.

Mussolini first decided to try the iron-fist-in-velvet-glove approach; so there followed a good deal of propaganda about how the Fascists had really come to help. For example, Count Ciano, Italy's foreign minister and Mussolini's son-in-law, came to Tirana, where he was greeted by an Albanian delegation, as well as by the German and Spanish ambassadors. Ciano promised the Albanians "order, prosperity and progress."

By 11 April a former prime minister, M. Xhaler Ipi, was put in charge of a "provisional council." His first act was to broadcast the following over Tirana radio that evening:

*Duce, you have made many sacrifices for us and have saved us from many perils. You are in the heart of the Albanian people. Therefore, thanks to you, all is now possible and, though we have no right to ask anything of you, we beg you to save the Albanian people.*

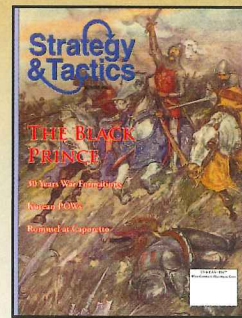
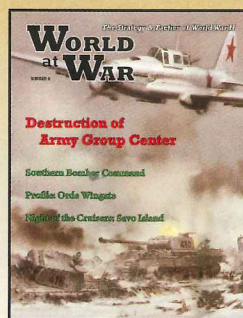
He concluded by claiming Mussolini was "a greater man than Caesar or Hannibal."

The provisional council then called a "constituent assembly," which on the 12<sup>th</sup> declared the old constitution obsolete while simultaneously calling for closer ties with Italy.

Meanwhile, on 14 April, Zog and his queen moved into a Greek hotel in which they rented 25 rooms for their family and members of the exiled court. On 22 April, Queen Geraldine turned down an offer from a US film company, and let it be known she wouldn't seek an acting career. By 3 May the royal family had moved on to Istanbul, with a reduced court of only 70 people. From there they went on to Egypt, ending up in France on 3 June. After a few more months they moved to Great Britain, where they stayed during the war.

In Albania, Francesco Jacomoni, who'd formerly been Italy's ambassador there, became lieutenant general of the country on 22 April. That same day, the Albanian cabinet decreed the fascist salute as the official mode of greeting. They also declared Mussolini an honorary citizen of Albania, and Count Ciano an honorary citizen of Tirana.

An uneasy peace settled on Albania. Partisan warfare soon broke out and continued until the country was liberated in 1944. Albania proved to be Mussolini's last victory. His invasions of Greece and Egypt turned into fiascoes that his Axis partner, Hitler, had to bail out. The year 1939 proved to be the highwater mark for his ambitions.



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# Greek Tragedy

By Joseph Miranda

Designing a wargame about a campaign that was characterized by stalemate and self-delusion, which took place in the mountains during winter to boot, was a challenge. But veteran wargame designer Richard Berg rose to the occasion with *Greek Tragedy*, the Italo-Greek war of 1940-41.

A critical thing in a situation like this is making the game interesting for the players. There are several ways that was approached in the design. One was to make combat resolution more detailed than you'd normally see in an operational-level World War II game. Thus, players can choose "aggressive" and "stand" modes of combat. They can also toss in armor, airpower and artillery, thereby allowing them to operationally tailor their battles. The Greeks' infiltration capacity is also part of that same approach: a special qualitative ability that, at least in part, counters Italian quantitative superiority.

The units represent forces that hadn't yet gotten to the standard of efficiency of other World War II armies. Thus armor and artillery are treated as separate factors, but ones that can potentially be decisive in battle *if* used correctly. Both sides have air forces, with the Italians having the edge. They actually pioneered many airpower concepts, and the Greek campaign was their chance to apply them. The historic shortcomings came from the fact Italian aircraft, while cutting-edge for the 1930s, were obsolescent in World War II.

There is also the bigger picture. Logistics, as much as anything else, determined the course of this campaign. The Italian army looked good on paper, but it lacked the logistical and industrial systems to back it up in the field. That's brought to light via the port capacity rules. The Italian player must efficiently manage that factor if he wants to bring in reinforcements and replacements and support them on the map. Port capacity is also vital for readying air units. One strategy is to destroy enemy port capacity via bombing attacks or raids by ground units. And you can increase port capacity via construction, a short-term expenditure that provides long-run benefit.

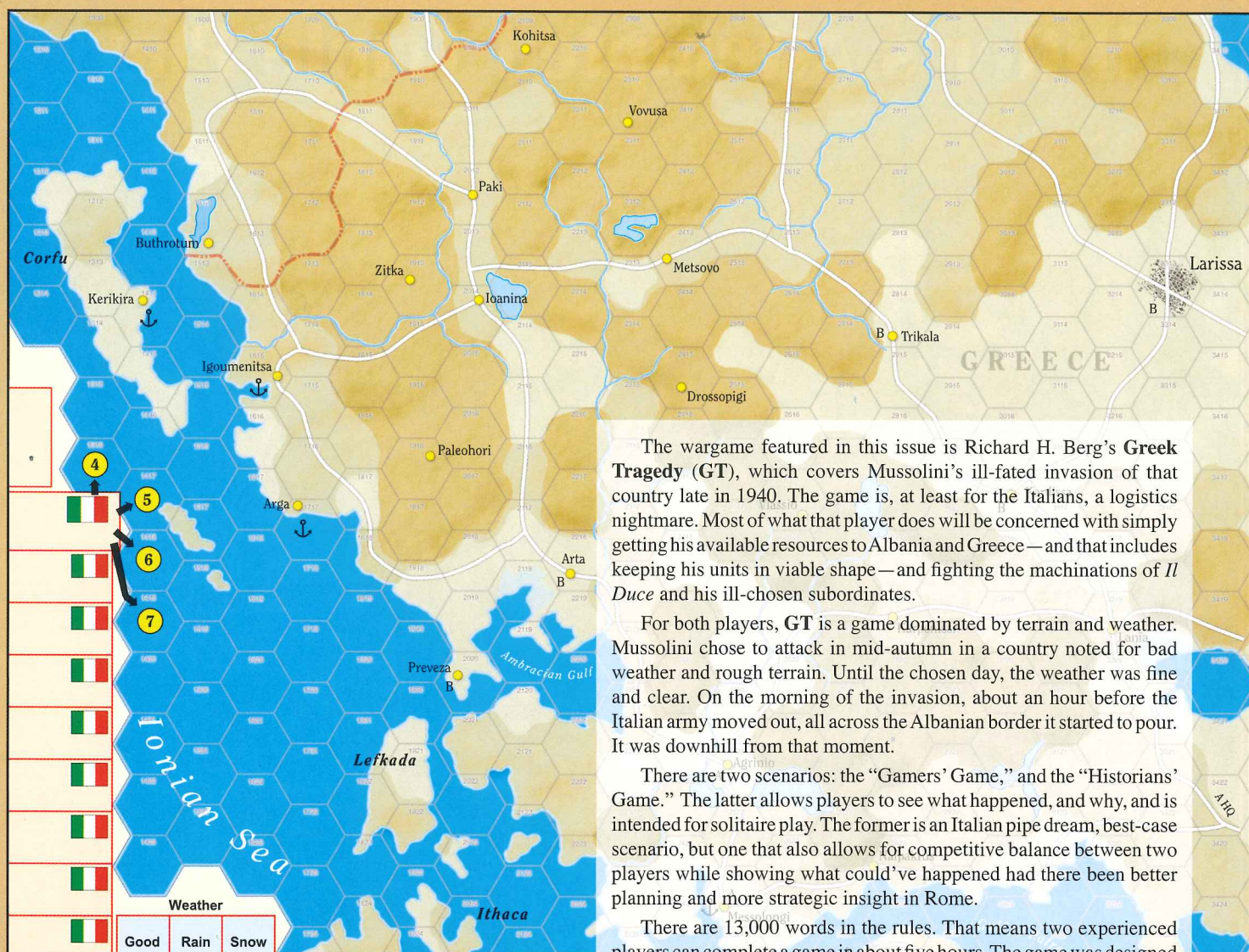
The command rules, with randomized activation, give both players opportunities they can exploit if they get their forces into the right positions. There are also random events, which bring in the larger framework within which the campaign took place. They add historical color as well as conflicting command directives. You're put in the position of an operational-level commander who must lead within a chaotic strategic environment.

The *Wehrmacht* makes an appearance via an optional reinforcement rule. Historically, the Germans invaded the Balkans in April 1941 in order to secure their southern flank before invading the USSR, and to bail out Mussolini. In the game you can gain limited German support. As with the other options, it's a way to explore various historical alternatives.





# March on Athens!



The wargame featured in this issue is Richard H. Berg's **Greek Tragedy (GT)**, which covers Mussolini's ill-fated invasion of that country late in 1940. The game is, at least for the Italians, a logistics nightmare. Most of what that player does will be concerned with simply getting his available resources to Albania and Greece—and that includes keeping his units in viable shape—and fighting the machinations of *Il Duce* and his ill-chosen subordinates.

For both players, **GT** is a game dominated by terrain and weather. Mussolini chose to attack in mid-autumn in a country noted for bad weather and rough terrain. Until the chosen day, the weather was fine and clear. On the morning of the invasion, about an hour before the Italian army moved out, all across the Albanian border it started to pour. It was downhill from that moment.

There are two scenarios: the "Gamers' Game," and the "Historians' Game." The latter allows players to see what happened, and why, and is intended for solitary play. The former is an Italian pipe dream, best-case scenario, but one that also allows for competitive balance between two players while showing what could've happened had there been better planning and more strategic insight in Rome.

There are 13,000 words in the rules. That means two experienced players can complete a game in about five hours. The game was designed with two-player play primarily in mind, but solitary play is doable.

The scale on the 34x22" map is 7.5 miles (12 kilometers) per large hex. Each turn covers one month. Units of maneuver range from battalions all the way up to divisions. Each combat strength point is the equivalent of 1,500 men. Each Air unit represents about 20 planes. There are 280 small-size, NATO-style units in the counter-mix, along with the errata-fix counters for issue number one's **Barbarossa** game.

To purchase the game that covers the battles featured in this issue send your name and address along with:

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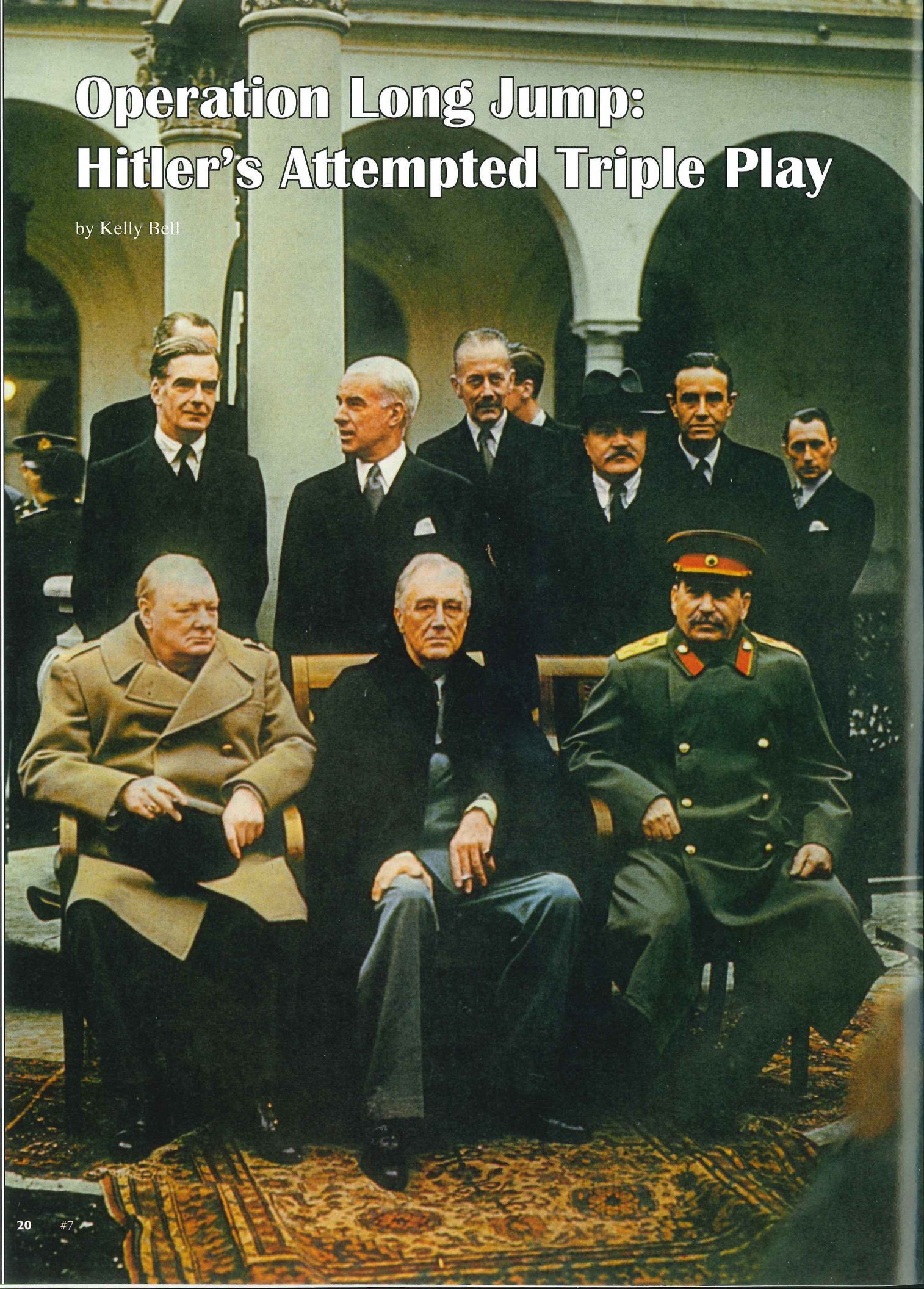
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# Operation Long Jump: Hitler's Attempted Triple Play

by Kelly Bell





**In** World War II, Iran was a corridor for US lend-lease shipments to the USSR via the Persian Gulf. Soldiers, civilians and spies of several Allied nations moved into the capital of Tehran. Even so, the 30,000 US troops in that city, commanded by Col. Norman Schwartzkopf, Sr., worked to keep things calm.

Washington ordered Schwartzkopf to reorganize the notoriously corrupt Tehran police force, but before he could do that he had to prepare for a much greater assignment—one that required him to use the Iranian constabulary as it was. One of the great Allied summit conferences of the World War II was to be held there soon; so security had to be airtight. Under American guidance, the local police made the 10:00 p.m. curfew secure by setting the minimum bribe unprecedentedly high. After that, few could afford (literally) to be caught out after hours.

By the end of 1942, Iran was also more militarily stable than it had been a year earlier. German military reverses in North Africa and Russia had pushed back the Axis to a seemingly safe distance. The country therefore seemed secure enough to host the first face-to-face summit of the main heads of state of the Allied powers. American President Franklin D. Roosevelt, British Prime Minister Winston Churchill and Soviet dictator Joseph Stalin (facing picture) were coming to Tehran for a conference planned for 28 November through 1 December 1943. Though he wouldn't be attending, Hitler nevertheless also had a delegation of his own to send to the conference.

On 30 March 1943, a Junkers-290 took off from a *Luftwaffe* airfield in the Crimea and headed south. Crossing the border into Iran, it passed unmolested over powerful Soviet anti-aircraft installations whose crews had been lulled into complacency by recent inactivity. The plane carried a handpicked group of specially trained SS assassins whose assignment was to kill the Allied leaders. The code name for their operation was "Long Jump."

The Ju-290 landed safely outside Tehran. The SS commandoes carried weapons, ammunition, transmitters, explosives and £200,000 in counterfeit British banknotes. Double-timing their way through the cold desert night, they headed for the Iranian capital, there to report to a German counterintelligence operative named Franz Mayer, who would take command of the unit.

The next morning, American Office of Strategic Services (OSS) agent Peter Ferguson also flew into Tehran. He was driven to an apartment where he met with two other American agents, Mervyn Wollheim and Ida Kovalska. Moments after Ferguson arrived, a local half-French Iranian named Khalil Chapat showed up. He was a professor at the nearby *Lycee Francais*, and he also moonlighted as an Allied agent. His ability to speak several regional languages made him useful to his British and American employers. Those four Allied

operatives then began formulating a plan for insuring the safety of the Big Three once they arrived.

During their first meeting in the apartment, Ferguson and the others laid the groundwork for the summit's security but made no specific preparation. On 29 May, the foursome got together again at Mervyn Wollheim's apartment to move things along. Ferguson made it clear their main task was to locate any clandestine Axis or Iranian operatives who might threaten the heads of state. They wouldn't have to work blindly in locating such groups or individuals. As soon as Ferguson reported to Washington, the War Department forwarded him sufficient funds to bribe locals to identify spies, terrorists and provocateurs among Tehran's populace. All four agents had been in the city long enough to cultivate dependable contacts; however, they also hired as liaison a professional wrestler who had good contacts throughout the city, Misbah Ebtehaj.

Once he was on Ferguson's payroll, Ebtehaj was a salaried employee for four separate interest groups: the Germans, the British, a group of Iranian politicians, and the Americans. Of course, none of them knew of his affiliations with the others. Whoever paid him the most would receive the lion's share of information. It was Ebtehaj and his informants who were keeping the British abreast of the activities of the German agents and assassins already in the city. The wrestler then began feeding that same information to Ferguson. The American had come to Iran hoping to take on and defeat a veritable army of Nazi secret agents and thereby cover himself with glory. He was therefore perturbed to learn from Ebtehaj just how small was the enemy's subversive presence in Iran. Though Hitler was still keen on the triple assassination project, he had yet to deploy most of his expeditionary force for the job.

Meanwhile, Kovalska had a chance encounter in a local bazaar with a young Polish woman who turned out to be the mistress of a Tehran-based Swiss double agent named Franz Merser. Kovalska introduced her new friend, named Wanda Pollock, to her espionage cell, who were naturally interested in Pollock's paramour. A double agent could be both dangerous and useful. Seasoned in subterfuge, Merser was always careful to have his own agents furtively follow his girlfriend wherever she went; so he quickly found out about her new circle of friends who were led by an American whose reason for being in the city was still unclear.

### **The Red Connection**

Soviet NKVD Secret Police Chief Lavrenti Beria had his agents enter Tehran surreptitiously by various means and routes that kept their arrival unnoticed. Before the end of the first week in April 1943, those operatives, combined with a few who'd been in the city since war's outbreak, numbered 30. Moscow's interest in Iran was such that, since the German surrender at Stalingrad on 3 February 1943, Stalin had sent 150 new agents there, with half of them stationed in Tehran. With the outline of the Cold War already forming on the horizon, those operatives were tasked with spying on the Anglo-Allies almost as much as on the Germans.



[illegible]

## Tangled Web

When the Soviet military police arrested Pollock as a “suspicious foreigner,” Merser appealed to Ferguson to help rescue her. Ebtehaj, for a fee of 3,000 pounds, found out for Ferguson where she was being held. Ferguson, Merser, Wollheim, Chapat, Ebtehaj and a few of his hired thugs then armed themselves and freed her from the Soviets. They also found, being held in the same building, a German who turned out to be SS Maj.



Winifred Oberg, who'd been arrested in the sweep that netted Mayer. Thinking the Swiss was German, Oberg asked Merse for help. On the chance they might learn something valuable from the SS man, the raiders took him with them (without revealing their true Allied affiliation).

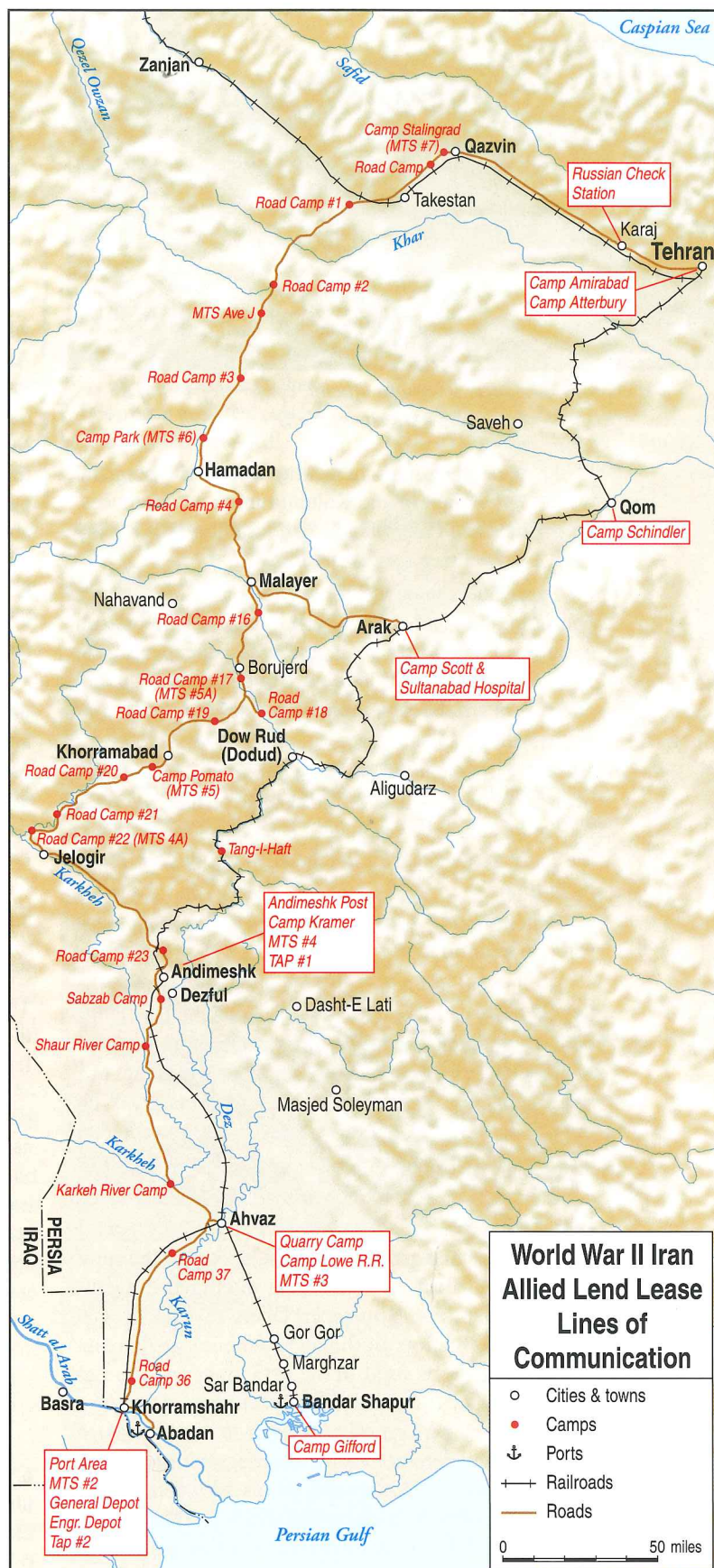
Oberg was one of SS spymaster Walther Schellenberg's "independent agents," whose assignment was to keep a furtive eye on other Axis operatives in case of disloyalty or ineptitude. Schellenberg had sent Oberg to Iran for that purpose, and he was also to set up a complete espionage network of his own to keep watch on Nazi agents who would be arriving later; however, he'd been arrested before he could set up his operation. Those in Berlin didn't know he'd been caught, though, and were waiting to be contacted by him. Perhaps, Merse mused, in Oberg's daily radio communiqués with faraway Schellenberg, he would be given some valuable information for Merse to glean.

After returning to his residence with Pollock and Oberg, Merse contacted and met with Downward, telling him of the night's adventure and asking what to do when the Soviets inevitably came looking for Pollock and found not only her but an SS major in his house. Downward (who Merse had not bothered to consult before launching his impromptu raid) was angered by Merse's action, especially considering it was the Soviets—the allies of the British and Americans—who'd been the target of the attack.

At the same time, though, Downward also knew the earlier roundup of enemy agents wouldn't have worked to fully eliminate the threat to the heads of state. The Germans were certain to send more men. Having an important Nazi operative identify himself as such and be taken in by one of his own contacts was, therefore, a stroke of luck of the greatest magnitude in that it gave him an unwitting source of information coming directly from Berlin.

Downward told Merse to treat Oberg as a friend and ally and to try to win his confidence. Though Oberg was highly intelligent, it also quickly became apparent he had a drinking problem and therefore might talk when under the influence. He also still had no way of knowing Merse was a pro-Allied double agent. Telling his guest to feel free to use the household's powerful wireless transmitter whenever he wanted, Merse thereby set up his boarder to be a new source of information. (Unaccountably, the Soviets never did come to Merse's home in search of Oberg or Pollock.)

Merse then used his second (hidden) radio room to send a message to his own *Abwehr* contact in Berlin: "In the course of a raid on the Russian intelligence headquarters, my local agents liber-







*Trenchcoat and dagger: German officials confer in front of a Junkers-52 transport plane.*

ated a man who alleges he is Maj. Winifred Oberg and quotes Schellenberg and Kaltenbrunner as references. At the moment Oberg is in my house and asks for my help. I am waiting for instructions.”

Three hours later Merser walked back into Oberg’s bedroom and handed him Berlin’s reply: “The person mentioned should be given every assistance and safe conduct with us in this way. Cooperation with him and others will become necessary later in an action of primary importance.”

Oberg then stated: “The most important enemy heads of state are soon to meet in Tehran, and on the *Fuehrer*’s orders they are to be liquidated. The necessary weapons, the commandoes, and the detailed instructions will reach us in time.”

Pretending to be skeptical, Merser promised his guest full cooperation.

By the end of October, SS espionage organs in the Middle East had learned the meeting of the Big Three would be in late November. It was therefore time for the Germans to begin final preparations to attempt one of the most monumental assassinations in history. With the Big Three dead, Allied leadership was expected to be thrown into disarray. Germany could then still hope for the tide of war to turn.

### **Big Three**

The Nazis had actually learned the date of the summit before British and American intelligence agents in Tehran but, on 6 November, Oberg revealed a vital piece of information: Berlin had communicated to him the weapons to be used in the assassinations were to be paraded into an isolated location near the town of Qum. He therefore asked Merser to send someone to pick up and deliver those arms. Merser immediately passed that on to Downward, who sent a detachment of Iranian police to pick up the weapons. The British then replaced the ammunition for the rifles, pistols and submachineguns with look-alike duds, and swapped the explosives for harmless counterfeits, all of which

they quickly delivered to Merser’s residence so Oberg wouldn’t become suspicious.

Meanwhile, the Big Three announced publicly that the location for their conference was to be Tehran. On 8 November, Roosevelt wrote Stalin: “I have decided to go to Tehran, and it makes me especially happy. The whole world is watching for this meeting of the three of us.”

The president may not have realized how accurate his phrase “the whole world” was, or that part of that world included Adolf Hitler.

On 22 November 1943, Roosevelt arrived in Cairo, where he had a preliminary meeting with Churchill. At 2:40 p.m. Schellenberg’s communications complex in the Berlin suburb of Wannsee received word of that development and the Nazi machine went into action. More Junkers-290s left the Crimea, ferrying 40 assassins to the vicinity of Tehran, but thanks to Oberg’s constant passing on of developments to Merser, the Allies were aware of that and quickly arrested the new agents, who parachuted in groups of five or six. It seemed Operation Long Jump was headed to an ignominious end, but then a mistake by the Germans gave them a final chance for success.

Six commandoes parachuted onto the wrong coordinates, missing the Allied security detachment sent to arrest them. Commanded by SS Maj. Rudolf von Holten-Pflug, and accompanied by an Anglophobe Iranian guide/interpreter, known to history simply as “Gorechi,” they began trekking toward Tehran, unaware they were Long Jump’s last hope.

Downward was frantic over the unaccounted-for unit, and prayed they’d give themselves away by contacting Oberg. That still hadn’t happened by the 27<sup>th</sup>, when Churchill’s plane landed at Tehran’s Amerabad Airport. The prime minister later wrote how he was appalled at the obviously lax security along the route to the British legation:

*Toward the center of Tehran the crowds were four or five deep. The people were friendly but noncommittal. They pressed to within a few yards of the car. There was no kind of defense at all against two or three determined men with pistols or a bomb. As we reached the turning which led to the legation there was a traffic block, and we remained for three or four minutes stationary amid the crowded throng of gaping Persians. If it had been planned out beforehand to run the greatest risks, and have neither the security of quiet arrival nor an effective escort, the problem could not have been solved more perfectly. However, nothing happened.*

The reason nothing happened was von Holten-Pflug and his squad hadn’t yet arrived, and Schellenberg had also decreed no action be taken against the heads of state except when all three were together. He realized that, if one of the Big Three was killed, the surviving two not only would be blanketed with additional security, they would immediately be whisked out of the country and



beyond his reach. Actions against just one or two were to be undertaken only as a last resort if the statesmen survived the summit and were about to depart. Should time finally run out, the assassins were to target one or two of them in hope of creating partial success.

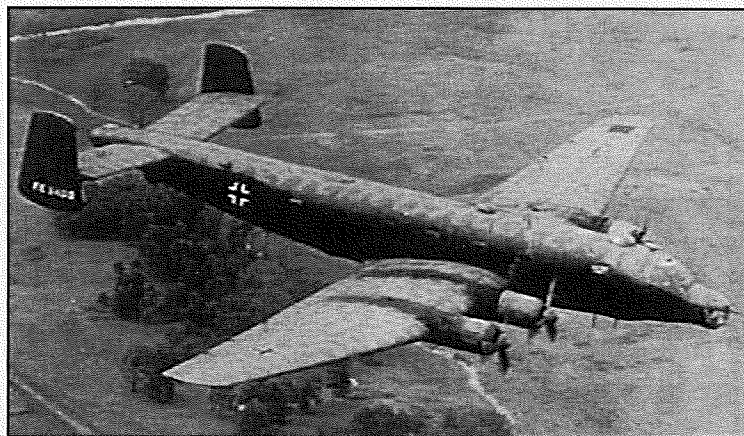
Stalin had flown into Tehran on the 26<sup>th</sup> accompanied by 3,000 NKVD secret police agents. At 4:00 p.m. on 27 November, Roosevelt, Stalin and Churchill convened the summit at the Soviet Embassy. That evening, while the Big Three were enjoying a sumptuous supper at the embassy, von Holten-Pflug and his unit arrived in Tehran.

Gorechi had entered the city ahead of the Germans in order to reconnoiter. Von Holten-Pflug had a list of locations where he and his men could supposedly hide until they made their move, but Gorechi found all those places were being watched by Allied security. They'd been tipped off to the safe houses by Merse-supplied information gleaned from the still unwitting Oberg. Gorechi advised his German counterpart not to try to contact the other squads since they, too, were likely under arrest or observation. Further, he said, his contacts in the capital told him to get in touch with a certain man who could arrange anything for a price: Misbah Ebtehaj.

Gorechi visited the wrestler, who pretended to be interested in assisting in the plot. Rather than money, Gorechi promised Ebtehaj the position of supreme police commander in postwar, Nazi Iran. Ebtehaj wasn't tempted by the offer, but played along so he could later turn in the assassins for a reward. Gorechi had blinded himself to the fact Germany was losing the war, but the endless Allied and Soviet military columns passing through his country had awed Ebtehaj. He had no desire to support the losing side and then be hanged as a spy by the victors. He therefore falsely promised to find safe hiding places for the Nazi commandos, telling Gorechi to come back in 24 hours, when those preparations would be complete. He then contacted Ferguson.

When Ebtehaj told him of the new SS unit's arrival, Ferguson focused on how he would single-handedly save the lives of the Big Three and become the greatest hero in the Western World. Wollheim, Chapat and Kovalska advised him to seek assistance from Merse and Downward, rather than attempt to abort the German plan virtually alone. Ferguson argued, since there were only six German agents, with the advantage of surprise they could catch the assassins unaware and easily arrest them, rather than be a small part of a large operation that, by its very nature, would be more complex and hence more susceptible to snafu. His colleagues reluctantly gave in to his persuasion.

Years later Kovalska expressed regret at having gone along with Ferguson's scheme: "We all felt Peter was about to do something crazy, but the whole affair was so confused we could not see clearly. Wollheim and Chapat were never sober in those days. . . . Peter's enthusiasm communicated itself to us. We also thought we could



*Luftwaffe long range aviation: Ju-290.*

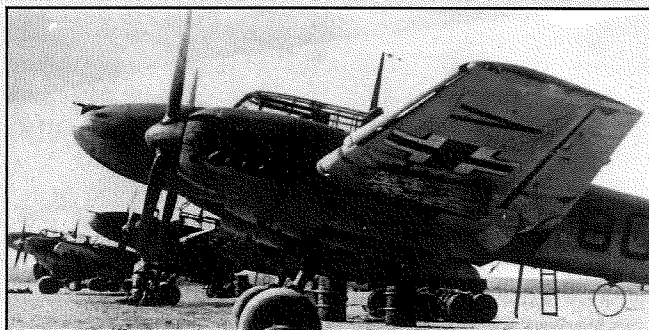
## The Junkers 290

Though it made it past the prototype stage, the Junkers-290 transport/bomber was never manufactured in large numbers, as resources were mostly allocated to such well-known *Luftwaffe* machines as the Junkers-88, Focke-Wulf-190 and Heinkel-177. Most of Germany's air transport was handled by the reliable Junkers-52 tri-motor. Even so, the long-ranged Ju-290 found occasions to serve the Reich.

The plane was built only during the two-year period from the autumn of 1942 through the fall of 1944, coming into service as the winds of war were shifting against Germany. First used in Hermann Goering's futile attempt to keep the surrounded *Sixth Army* supplied via airlift at Stalingrad in the winter of 1942-43, the *Luftwaffe* later sent its few squadrons north and west to be used as maritime patrol craft over the Mediterranean and Atlantic.

The Ju-290 was heavily armed, with five 20 mm cannon and six 13 mm machineguns. Late in the war, German engineers modified them to carry V-1 rockets underneath their fuselages and launch them from the air.

Produced in eight versions, the plane was driven by four 1,600 horsepower BMW engines that gave it a maximum speed of 280 mph. Its ceiling was 19,700 feet, and it had a maximum range of 3,785 miles. Being able to stay in the air for such long distances made them an excellent conveyance for commandos operating far behind enemy lines.



*They got the wrong man: Me-110s on an airfield.*

## Aerial Assassins

On 1 June 1943, *Luftwaffe* Me-110 fighters shot down a passenger plane outbound from Algiers, killing everyone on board. Pro-German Arabs at the airport had seen a man they thought was Winston Churchill boarding the plane, and passed on that information to local Nazi spies who quickly notified Berlin. The speed and efficiency with which the Germans reacted to the opportunity were amazing, but the man identified as Churchill turned out to be a British economist named Alfred Chenfalls, who did indeed bear a resemblance to the prime minister. Also killed in the plane was actor Leslie Howard. After the Allies figured out why their enemies had been so keen to down the seemingly insignificant aircraft, the threat Hitler posed to the Big Three came through as soberingly real. Preparations for the Tehran summit's security therefore took on a new urgency.



## Cloak & Dagger

In 1935, when Adm. Wilhelm Canaris took command of Germany's *Abwehr*, the military espionage service, many of his new subordinates didn't have favorable impressions of him. Elderly and diminutive, he struck one underling as "too old and spent for the job." Another thought he "looked more like the impresario of a music hall than a senior German officer."



Canaris was, however, generally a brilliant and imaginative spy-master. Still, he had a tendency not to bother to check on whether his orders were followed. Some inept agents took advantage of that shortcoming, leading to several major counterintelligence failures.

Even as early as 1935 the relations between the *Abwehr* and the Gestapo's *Sicherheitsdienst* (SD) counterintelligence service were strained to the point neither made any attempt to cooperate with the other. A natural diplomat, Canaris soothed the hard feeling between his command and SD chief Gen. Reinhard Heydrich, who'd served under Canaris as a naval cadet 12 years earlier.

An accomplished violinist and fencer, Heydrich could be urbane, but at heart he was a merciless and ambitious SS officer who was also an ardent Nazi. Heydrich was unscrupulous, and stepped on anyone he needed to in order to further his

career, caring for nobody but himself. He nevertheless realized cooperating with Canaris was likely to be more profitable than being his rival. The two therefore reached an accommodation by which the *Abwehr* would be in charge of military espionage and counterespionage while the SD would concentrate on political police work. To assure mutually productive operations, they would hold regular conferences among their department heads. Despite that ostensible cooperation, however, there was never any real trust between Canaris and Heydrich, both remained suspicious of the other.

Realizing Hitler was leading Germany into war, Canaris began to waver in his support for the regime in the late 1930s. When the army's two top commanders, Field Marshals Werner von Blomberg and Werner von Fritsch, were cashiered on charges of sexual impropriety in 1938 (von Blomberg had married a former prostitute, and von Fritsch was accused of homosexuality), Canaris launched an independent investigation. He soon learned it had been Heydrich who produced false evidence against von Fritsch, which then led to that officer's acquittal in his court-martial.

Canaris's actions in that case branded him, in Hitler's eyes, as less than reliable. It also tainted his opinion of the *Abwehr* in general. Forced from his position in 1944, due to the 20 July bomb plot, the aged admiral was executed in the war's final days. Though the SD possessed much higher esteem in the *Fuhrer's* eyes, Heydrich was also long gone by then, having been assassinated by Czech commandos in Prague in June 1942. Another ambitious young man named Walter Schellenberg then took Heydrich's place.

SS Maj. Walter Schellenberg was only 31 when he was given command of the SD. Possessed of a quiet demeanor

first try something on our own, and if we failed there would still be time to ask for help."

Ebtehaj was demanding \$20,000 in exchange for betraying von Holten-Pflug's whereabouts. He also promised he could persuade the assassins to stay where they were and take no action before the evening of 29 November. Ferguson doubted he could come up with such a sum; so he decided to try to trick Ebtehaj into divulging the needed information.

By that time the conference was in full swing. Time was running out for both sets of agents. On the night of 29 November, Ebtehaj kept an appointment to meet with Ferguson, who showed up without the \$20,000. He promised to hand it over the following evening, and then Ebtehaj would lead the American and his friends to the killers. Ebtehaj promised he would meanwhile have the Germans disarmed and tied up by a group of his hired thugs. Ferguson could then simply march the captives to the nearest Allied military outpost, turn them over and bask in international glory. So it was all agreed, with Ferguson continuing to hope that during the next 24 hours he might yet trick Ebtehaj into telling him the Germans' location.

Wollheim, Chapat and Kovalska were terrified the assassins would move before Ferguson's still evolving

plan would come to fruition. They told him that, if he couldn't learn where to find the SS unit before midnight on the next day, they would turn in Ebtehaj to the authorities at the US Embassy. Ferguson then rushed to Merser to ask him for the money, promising every penny would be used in support of the Allied cause. Merser said he didn't have such a sum, but might be able to get it provided he knew more about how exactly it would be used. The American's response surprised Merser, who until then hadn't understood just how much Ferguson knew about the situation.

"You and your friends are hiding numerous Germans in town, waiting for the appropriate moment to arrest them. Until now I did not know what the whole thing was about. Now I know," said Ferguson. "The Germans are preparing an attempt on the lives of Roosevelt, Churchill and Stalin. No one has taken the trouble to inform me of this; so you cannot expect me to trust you more than you trusted me."

### Time Runs Out

Ferguson had yet more to tell him that convinced Merser to take him seriously: "Nobody knows—nobody except myself—that a German commando unit succeeded in slipping through the net, became suspicious and decided not to contact the others."



and good looks, his young looking face concealed a mind that was devious, suspicious and rampantly ambitious. One of his first actions to get ahead in the Third Reich's hierarchy was to divorce his first wife (a working-class woman) and marry someone more prominent. He then had her followed wherever she went.

Determined to make his own agents fearful of him, and hence more productive, Schellenberg made it no secret he was having them spied on while they worked. One of his own men, reduced to a nervous wreck by having to constantly dodge both Allied and German operatives, stated in exasperation: "He has an ear at every wall."

Schellenberg also wasn't averse to going into the field himself. Operating under the name "Capt. Schaemmel," he'd identified the two most significant spies of Britain's M16 espionage network in the Netherlands soon after the war's outbreak. Claiming to represent a group of dissident German officers who wanted to overthrow Hitler, he lured the two English spies, Maj. R. Henry Stevens and Maj. S. Payne Best, to a café just across the Dutch border from Germany on the morning of 10 November. As soon as the agents appeared, three Gestapo staff cars surrounded them, and the Germans dragged them from the car, thrust them into one of their own, and roared across the frontier back into Germany. The capture of Stevens and Best was one of the war's great counterintelligence coups. The two British spies spent the rest of the war as prisoners, their absence working to paralyze Britain's espionage network inside Germany. Hitler was impressed, and later gave Schellenberg the even more important assignment in the Middle East.

"And you know where they're hiding out?" asked Merser.

Ferguson replied: "If I knew I would have acted, but if I can lay my hands on \$20,000 by tonight I shall know."

When Merser asked the American why he hadn't asked his own superiors for help, Ferguson became evasive, and Merser then realized it was because the American was out for personal glory. Considering Ferguson's story was actually the first real lead in locating the missing SS unit, Merser then agreed to provide the money, but would only hand it over himself to Ferguson's contact, and then Ferguson could personally arrest the assassins. The two arranged to rendezvous at 10:00 p.m. at Wollheim's apartment, and to go from there to Ferguson's contact, and then to get the Germans.

After Ferguson left, Merser telephoned his bank and then Downward, who made arrangement for Ferguson's raiding party to be backed up (without Ferguson's knowledge) by 20 plainclothes British security men and 150 military police, all of whom would follow at a discreet distance. They were to intervene only as a last resort.

Slightly before midnight on 1 December, then, Ebtehaj appeared as arranged at Wollheim's flat. Merser had arrived earlier with the money, and became enraged when

## Iran in World War II

Iran declared itself neutral upon World War II's outbreak, but the country's geographic location meant it couldn't expect to be left in peace. Hitler's invasion of the Soviet Union on 22 June 1941 meant the Western Allies desperately needed to transport war material to Russia through Iran. Not giving the Iranians a chance to say yes or no, the Soviets invaded the country from the northwest on 26 August 1941, while the British simultaneously entered by force from the west and south. Though the Iranian military tried to oppose those incursions, resistance quickly collapsed and the British escorted Shah Reza out of the country and into exile in South Africa, where he died in July 1944.



*The Shah.*

Other Iranian officials then signed a treaty of alliance with the UK and USSR in January 1942. The country essentially became an Allied nation in exchange for promises the Allies would respect Iranian independence and withdraw their forces no more than six months after war's end. In September 1943 Iran officially declared war on Germany. By the war's conclusion the Western Allies had transported more than 5 million tons of weapons and war materiel across Iran and into Russia.

Though some Iranians—especially railroad executives and black marketers—profited greatly from the war, the massive influx of outsiders swelled the population beyond the infrastructure's ability to accommodate them. Food shortages and rampant inflation plagued the middle and lower classes. The huge numbers of foreigners forced social change at a fast rate, causing unrest. Many rural Iranians also migrated to the cities, where they were forced into close proximity to their traditional tribal enemies, further exacerbating tensions.

Still, there were few outbreaks of serious violence, which was to the advantage of the Soviets and Americans, both of whom had their eyes on postwar oil concessions with Iran. On Germany's surrender, all occupying powers honored the agreement and left the country. The Americans circumvented Soviet influence in 1947 by signing a new agreement that provided for a US advisory team to train the Iranian Army. For the next 32 years the US and Iran were allies, but that friendship ended in 1979 when Islamic fundamentalists ousted the royal family and declared Iran an Islamic Republic.

he learned Ferguson's source of the information was one of his and Downward's own contacts. Seething, Merser tossed Ebtehaj the sack of banknotes, and the Iranian then gave him and Ferguson the address where the Germans were hiding. He then sat down to wait, as arranged, for the raiding party to return.

At midnight, 19 Iranians, led by Ebtehaj's younger brother, barged in on the Germans, disarmed them and tied them up. Ferguson, Wollheim and Chapat jumped in a car and set off, never noticing the line of British security cars following them at a distance.

The younger Ebtehaj left two men to guard the five Germans and one Iranian until the Allies arrived;



however, that tied-up Iranian wasn't Gorechi. He was a messenger Gorechi had sent to tell von Holten-Pflug that he (Gorechi) would be back from grocery shopping around midnight. Young Ebtehaj didn't know Gorechi; so, when he found the five Germans and one Iranian in the building on Abbassi Street, he assumed he'd netted the whole crew, assigned two guards and went home. Gorechi was standing across the street watching.

Drawing his pistol, he slipped inside, shot both guards in the back and freed the prisoners. Von Holten-Pflug and his men grabbed up what weapons they had, including 20 live grenades, and followed Gorechi as they ran off into the night. Moments later, Ferguson, Wollheim, Chapat and, in a couple minutes, Downward and his crew arrived to find the house empty.

Downward frantically gave orders for all Germans then under surveillance to be immediately arrested. He even had Ebtehaj arrested on suspicion of having helped von Holten-Pflug escape. By morning all assassins besides the missing unit (including Oberg) had been brought in. The Allies also searched the houses and businesses of every known anti-Allied Iranian in the city, but Gorechi had foreseen that and led his charges to the nearest police station. There he paid the duty officer £5,000 (counterfeit) to put him and the Germans in adjacent cells, thereby hiding in the one place that would go unnoticed. Just before dawn, Gorechi bribed police Lt. Sadra Movaggar to move all of them to his own house.

Von Holten-Pflug was as determined as ever to carry out his mission, and rumors were flying the Big Three would be leaving Tehran on 2 December; so time was critical. The killers agreed that, because of the seemingly impenetrable security around the compounds where the statesmen were billeted and conferring, the best way to attack them was during the drive to the airport at the summit's conclusion. The routes and times of the motorcades were therefore essential data. Gorechi had no idea Ebtehaj had been behind the arrests; so he visited the wrestler (who'd been released after a few hours) to get that information.

Ebtehaj was enjoying the evening meal with his wife and children when Gorechi, livid with excitement, began pounding on his door. Gorechi gave Ebtehaj another 5,000 counterfeit pounds, and promised him another 10,000 the next day if he came through with the routes the Big Three would take and provide lookouts to tip off the assassins to their victims' approach. At 6:00 a.m. Gorechi was to return, with the Germans, to Ebtehaj's residence, pay him off and receive the information. As soon as Gorechi left to carry that news back to von Holten-Pflug, Ebtehaj prepared to head to Downward, but before he could leave, Peter Ferguson appeared.

The American demanded to know the Germans' new hiding place. At first Ebtehaj refused to tell him, but after a few minutes Kovalska, Wollheim and Chapat showed up and they all ganged up on the flustered Iranian, who

finally gave in and told them the assassination squad would be arriving there at 6:00 a.m. The foursome were elated and settled down in their unwilling host's home to await the arrival of their prey.

Punctually at 6:00 a.m., von Holten-Pflug, Gorechi and the other four assassins arrived. Ebtehaj showed them into an empty room and told them his hired thugs would conduct them two at a time (to avoid moving through the early morning streets in a suspiciously large group) to the vantage points where they would await their high-ranking quarry. One at a time he led them to a neighboring building where, he said, they would continue via a tunnel. As each one in turn entered that building's basement, Chapat, Wollheim and Ferguson overpowered, disarmed, bound and gagged them. Gorechi came last. Either the Iranian had become suspicious, or his reflexes were faster than the Germans, for when the American agents sprang at him, he jumped aside and pulled a grenade from his pocket.

Ferguson had explosives training, and recognized the bomb. Whipping out his pistol, he shot Gorechi through the chest, screamed "Out!" and led everyone pounding up the stairs. They threw themselves onto the ground outside just as a explosion blew Gorechi and the Germans to bits. A few hours later the Big Three safely left Tehran. Ironically, the Germans had been done in by one of their own agents.

The affair didn't immediately reach the media, which were preoccupied with covering the summit itself. Surprisingly, the egotistical Ferguson didn't seem to care. It was the first time he'd ever killed anyone. He was sobered by the experience and never trumpeted his exploit. That was the case with all the Allied operatives closely involved in the matter, as Merse later explained: "No one was really proud of himself, not even Ferguson. The fact he had killed a man had a strange effect on him. At last he had the adventure he craved, but he seemed confused. We were all confused without knowing exactly why. The whole affair was somehow irregular."

When Hitler learned of the failure of Operation Long Jump he seemed unsurprised. By that time the Free World press was reporting copiously on the conference and the plot to kill the Big Three. Hitler, perhaps fearing retaliation, had Propaganda Minister Josef Goebels announce the media were lying about the assassination attempt. He claimed there'd been no plot to kill the statesmen. It was, he said, nothing more than "a fantastic invention in the Hollywood style."



#### Further Reading

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- Whiting, Charles. *Canaris*. Ballantine Books, 1973.



# STRUGGLE FOR THE GALACTIC EMPIRE

In the far future, Earth is a distant myth. When mankind gained the means to transit the vastness of space safely and quickly, a great human wave extended across the galaxy, and humans soon inhabited thousands of worlds. Communities of worlds formed alliances; alliances became federations, and eventually a galactic empire was born. That empire existed for millennia, growing and consolidating, bringing most of the inhabited worlds under its control.

Despite its size and apparent success, though, all is not well in the Galactic Empire. There are rebels, usurpers, those who want to create empires of their own, and aliens of every imaginable form. Over the long millennia, even the form of man is taking a new shape with genetic engineering.

Struggle for the Galactic Empire is a solitaire science fiction game. You assume leadership of the forces of the Galactic Empire as it strives to maintain and expand its dominion while fighting off the forces of chaos that seek to destroy it. You make all the military, political, social and economic decisions to deal with the threats that arise, keep the far-flung empire stable, and still expand and bring new glory through discovery, colonization and conquest.

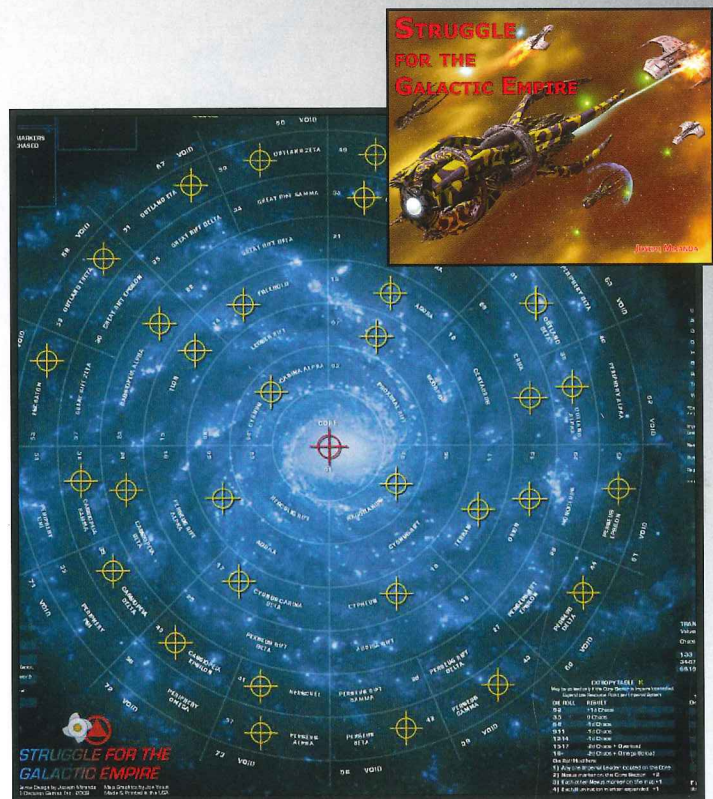
The map shows the entire galaxy divided into sectors of star systems. Production is carried out by nano-assemblers to create starships and world-sized weapons. Units include combat and colonization ships, control groups and leaders. Units have two types of combat values: weapons and morphogenetic systems. Weapons destroy the enemy, while morphogenetic systems change them into friends. Loyalties switch back and forth depending on the situation.

Threats are generated by over 100 randomly drawn chaos markers. They include: rebels, usurpers, independent empires, invaders and alien forces, as well as technological, economic, social, political and military events. You can also launch expeditions to attempt to gain new knowledge and technology. Other rules allow you to use psychosocial warfare and propaganda to repress rebellions.

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## Contents:

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- 1 34" x 22" Map
- Rule booklet
- Player Aid cards
- 1 Die
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## World at War No. 9: The Destruction of Army Group Center

This new version of **DAGC** is a thorough redesign by Ty Bomba of the game originally published by SPI in the early 1970s. The campaign under examination is Operation Bagration, the Red Army's summer offensive of 1944, during which they destroyed more German manpower and equipment than was lost at Stalingrad.

Without question an asymmetric affair in terms of which side is 'shaping the battlefield' and 'controlling the tempo,' we've made things interesting for both players by broadening the map to cover not only Byelorussia, but all of the Baltic Republics as well as the northwest Ukraine. That expansion gives both players more options and strategies in terms of how to pursue victory.

Each hex on the 34x22" large-hex map equals 16 miles (26 kilometers). Each of the nine game turns equals one week, from IV June through IV August. Units of maneuver are corps and static "fortified localities" for the Germans, and armies and cavalry-mechanized groups for the Soviets. The latter's great airpower advantage is represented in the form of 10 air armies. There are 176 large-size unit-counters included, most

done in NATO-style, but also including some iconic-style markers. The system is an adaptation of the one used in issue number three's *Bulge*, and there are about 11,000 words in the rules, which works out to mean experienced players can finish a match in about three to four hours.

The historical scenario provides exact set-ups for both sides, but there's also a free deployment option. The Bold Stroke scenario allows the Soviet player to try the approach the Germans were expecting: putting the weight of the offensive in the western Pripyat Marshes and driving straight for Königsberg. Other options allow the investigation of such historic "what ifs" as the failure of the Western Allies' D-Day landing or no July bomb plot against Hitler. Beyond what's already been mentioned, the rules also cover such things as: *ad hoc* German *Korps Gruppen*, Soviet inter-front restrictions, western Pripyat logistical constraints, entrenchments, German armor concentrations, enhanced shock army attacks, and air army fatigue. Add-on rules and counters for issue number six's *Greater East Asia War* design are also included.

Issue #	Month	Game Topic & Lead Article
8	Oct 09	Arriba Espana!
9	Dec 09	Destruction of Army Group Center
10	Feb 10	Coral Sea Solitaire
11	Apr 10	Afrika Korps: Decision in the Desert
12	Jun 10	1940: What If?
13	Aug 10	East Front Battles



## Strategic Back Waters

### From the River to the Sea

It was only years after the Second World War ended that one of its most tragic chapters came to worldwide attention. In 1954, French author Pierre Boulle published his novel *The Bridge Over the River Kwai*. That fictionalized account of the sufferings of Allied prisoners of war forced to labor under brutal tropical conditions by sadistic Japanese overseers was then followed by a super-successful movie version.

British Commonwealth POWs were indeed forced to build a railroad along part of the course of the River Kwae Noi (Kwai) under inhuman conditions while suffering treatment that killed them in large numbers. There was also a POW-built span over the stream at Tamarkan, Thailand. It's now a major tourist attraction billed as "The Bridge on the River Kwai." Nearby is a cemetery containing the bodies of thousands of men who died building the railroad. Yet many prisoners also survived the misery of building the railway and bridge. As impossible as it may seem, what they endured afterward was even worse when, in September 1944, the Japanese selected the fittest among them to be sent to Japan as laborers.

One of the main reasons for Japan's waning military fortunes was the way US submarines were systematically wiping out imperial cargo shipping. Millions of tons of supplies and reinforcements, sorely needed to support Japan's far-flung war effort, were being sent to the ocean bottom by sniping US submersibles.

In perhaps the cruelest of all the tortures inflicted on the River Kwai POWs, the Japanese didn't bother to display red crosses on the ships carrying their captives, which would've served to indicate they held prisoners or wounded. Having no way of knowing they were killing their own, US submariners sank two of the POW transports in a catastrophic case of death by "friendly fire."

*Rakuyo Maru* and *Kachidoki Maru* were packed with over 2,000 Britons and Australians. On September 11 1944, the *USS Sealion* sank *Rakuyo Maru*, and *Kachidoki Maru* swiftly went under after being torpedoed by the *USS Pampanito*. Most of the POWs from *Kachidoki Maru* were picked up by imperial vessels and sent on to slave labor in Japan, where many more died. The ordeal of those on the *Rakuyo Maru* was more horrific.

That ship had held approximately 1,300 prisoners. Clinging to wreckage and a few life preservers and rafts, they became widely separated as they drifted. Many drowned or were eaten by sharks, while many others went mad or died after swallowing seawater or oil. After four days there were only about 250 still alive, counting Japanese crewmen, Korean guards and a few prostitutes.

Late on the afternoon of 14 September, the *Pampanito*, running on the surface, chanced across a few of those last survivors. After hearing their report, the skipper radioed the news to all US subs in the sector and every boat within hearing converged to search despite the dangers of being caught on the surface by Japanese aircraft or warships, as well as by an approaching typhoon. The submariners pulled 159 survivors from the water. Seven of them died soon afterward.

Not much of the railway along the River Kwai or of the storied POW-built span at Tamarkan remains today. After the war much of the rail line was dismantled. The track running through the lands of the Karen and Mon people was first to go, as tribesmen pulled up and sold the valuable high-quality steel rails. The Thai government ripped up the tracks passing through its territory and replaced them with the standard gauge used in that part of the world. The actual Bridge on the River Kwai is still there. By war's end it was virtually unusable due to bomb damage

from attacks by Allied planes. Under a reparations agreement the Japan Bridge Company, Ltd., pulled down the three mangled spans of curving girders and replaced them with two spans of a parallel chord type. Though most of the rail traffic now crossing the bridge is local, a large percentage of it is also made up of tourists, mostly British and Japanese.

~Kelly Bell

## What If?

### German-Japanese Air Transport Plans

As Germany's armies drove into the Soviet Union after 22 June 1941, Hitler's foreign minister proposed establishing an air transport link to Japan using recently introduced long-range cargo aircraft, particularly the Ju-290. Politically it would've been a major coup, demonstrating Allied impotence in the face of Axis ingenuity. Operationally it offered a means of transporting sensitive information, technical experts and strategic materials, more rapidly and at less risk than by sea.

Both Hitler and the Japanese government approved the idea in principle, and left it to the respective air forces to work out the details. Germany's Chief of the Air Ministry, Field Marshal Erhard Milch, ordered a feasibility study on how to achieve the objective. Planning went forward quickly. The most suitable aircraft and best routes were identified almost immediately. Air Ministry planners were confident they could initiate the operation by mid-1942; however, the Japanese Foreign Ministry attached the condition that under no circumstances were the planes to fly over Soviet air space or be launched from Soviet-claimed territory. That political condition, imposed to maintain Japanese neutrality and compliance



with its non-aggression pact with the Soviet Union combined with the distances involved and the state of German aviation technology, to prevent the idea from reaching fruition.

Early planning called for the Germans to send sensitive classified information, including what was known about US defenses and communications codes, to the Japanese. In exchange, Japan would dispatch critical morphine and tungsten back to Germany. Milch immediately grasped the plan's political significance and operational advantages, and he ordered his planners to select the aircraft and routes required to achieve the mission. They considered three aircraft, the Fw-200, the Heinkel-177 and the BV-222 seaplane. The Heinkel-177 was rejected early on because of reliability problems. The Fw-200 Condor was favored at first, but as negotiations over the route stretched out, Air Ministry officials shifted their focus to the six-engine BV-222 because of its longer range and larger cargo capacity over the Condor (3,977 nautical miles and 20 tons versus 3,200 and 10).

Their plans involved flying a "Great Circle" route from Kirkenes, in occupied Norway, across the Arctic and down through mid-Siberia into Manchuria (if Condors were used). There, the planes would refuel and fly on to Japan. Tokyo rejected that plan because of the long over flight of Soviet Siberia. The alternative BV-222 plan called for a flight from Kirkenes to Japanese air bases on southern Sakhalin Island; then refueling and flying on to Japan. It too was rejected because the route passed over Soviet territory in eastern Siberia.

**Attention readers:** We're always looking for authors for FYI for *Strategy & Tactics* and *Observation Post* for *World at War*. If you'd like to try your hand at writing short (under 2,000 words), pithy articles for this column, on virtually any aspect of WWII military history, contact Ty Bomba, FYI editor, at: [WhiteRook@att.net](mailto:WhiteRook@att.net).

As 1942 wore on, planners next examined routes emanating from Bulgaria across the Black Sea, Iran, India and into Japanese-controlled inner Mongolia; however, aircraft range limitations also worked to preclude planes on that route from flying over at least some Soviet territory. As negotiations continued, the Ju-290 flight program's successful completion in 1943 brought that aircraft to Air Ministry attention. Its 4,500 nautical mile range and 21-ton cargo made it an attractive platform. Three of the newest production models were taken in hand and modified for the mission: armor and weapons were removed and extra fuel tanks installed. The resulting aircraft could carry up to 24 tons of fuel and 21 tons of cargo. The modifications would have given the plane a nearly 6,000 nautical mile range with a full cargo load.

Flight testing began in February 1944. By May the planes were considered ready. They were fueled in Berlin and flew to Odessa and Mielec to await Japanese clearance to fly to Manchuria. They were to carry blueprints and plans for rocket and jet planes, sensitive classified information on Allied communication systems, as well the replacement for Germany's air attaché in Tokyo.

Unfortunately for the Axis, the planes never made the flight. As with its earlier rejections, Tokyo remained firm in denying approval for any route that originated from, or anywhere crossed into, Soviet territory. By August 1944 the Red Army's westward advance had worked to make it impossible for any German flights to reach Japanese territory, except for those that flew from Kirkenes over the Arctic. But Japan's position remained unchanged. The seemingly attractive plan of 1941 was ultimately killed by political considerations that imposed operational requirements the *Luftwaffe's* airframes couldn't overcome.

~Carl Otis Schuster

## True Action Adventure

### Nancy Wake: The White Mouse

In 1932, 20-year-old Nancy Wake left Sydney, Australia, for London. There she completed a course in journalism and then went on to France where she got a job as a reporter in the Paris office of the *Chicago Tribune*. During the next few years she traveled over much of the south of France and made several trips to Germany and Austria. While on one such assignment, she met Henri Fiocca, a businessman from Marseilles and, shortly after the war began in September 1939, they married.

During the Phony War period and the brief and victorious German blitzkrieg campaign that ended it, Nancy served as a volunteer ambulance driver for the French Army. After the Allied defeat, she and her husband—who'd also served in the French Army, had been taken prisoner, and was then paroled as part of the settlement that created Vichy France—went to live in his native Marseilles. (Her marriage to a Frenchman got her a set of identity papers that were acceptable to Vichy authorities.)

Soon thereafter, while having drinks in a hotel bar, the couple met a young British officer who was on day-parole from the nearby fortress-prison of Saint Jean, where he and about 200 other British POWs were being held under a much looser regime than would've been the case for German-held prisoners.

Nancy promised to obtain cigarettes, food and a radio for the inmates and, within a few days, had managed to smuggle in all those items. She and her husband met more of the prisoners on daily parole, and invited many of them into their home for meals. Inevitably, the idea of their escape from France was discussed. Nancy then managed to get in contact with the nascent resistance movement that was beginning to take form in



the city. She took part in setting up an escape network that eventually, over the course of the entire occupation, managed to channel some 2,000 POWs and other refugees over the Pyrenees and into Spain.

Nancy traveled the Vichy zone, and in one instance even went outside it as far as Paris. On those trips she distributed funds, anti-Nazi pamphlets, and radio parts, while also contacting would-be escapees and delivering them back into the Marseilles network. It was dangerous work, as there were many collaborators and informants among the French population, and the Vichy regime itself became more stridently anti-Allied and more fully collaborationist with the Germans as time went on. When German troops were sent to occupy all of Vichy in November 1942, the *Gestapo* set up a paramilitary French-manned police force known as the *Milice*, which was specifically intended to crush the resistance.

Soon thereafter, Nancy got word the *Gestapo/Milice* had begun to compile a dossier on a suspected resistance operative they'd code-named "White Mouse," and that she was their prime suspect. She knew it was only a matter of time before they came for her, and that would also mean her husband would be arrested. She therefore put herself into the escape network she'd help set up.

She tried six times to get across the Pyrenees, but each time was kept back, either by security patrols or bad weather. On one occasion she was actually picked up during a general *Milice* roundup of suspects. She was beaten and spent four days in a cell before a well-placed friend in the resistance was able to convince her captors she was innocent. During another escape attempt, to try to avoid an identity check on a moving train, she jumped from it, was fired on, and got away unharmed. On another try she had nothing to eat for eight days and became infected with scabies after sleeping in a pigpen.

On her seventh attempt, three months after originally setting out, she crossed the border into Spain

hidden in a coal truck. An arduous two-day hike through the mountains followed, after which she was caught and thrown into a Spanish jail cell. Soon, though, the British consul in Barcelona got her out of there and into Gibraltar, from where she took ship for England.

In London, her anti-German urges still unquenched, she'd soon talked her way into a posting in the Special Operations Executive (SOE), a British intelligence organization that had been set up to foment rebellion within occupied Europe. After completing a rigorous training program, she was parachuted back into France in March 1944, near Montluçon in the Auvergne region, to make contact with *Maquis* resistance fighters. She was sent in with John Farmer, a British Army officer, and soon also linked up with SOE Area Chief Maurice Southgate, who said of her she was the "most beautiful girl I think I've ever seen."

Another SOE operative in the area, Francis Cammaerts, later came to share that appreciation: "[Nancy was] the sexiest woman it has been my privilege and pleasure to know."

The British duo made their way into the mountains to join the mutually suspicious and often antagonistic groups and sub-groups of the *Maquis* that were already there. Their total numbers are estimated to have been between 4,000 and 8,000, with many having come in only recently in order to escape forced labor on the Germans' "Atlantic Wall" fortifications or deportation to Germany itself to work as forced labor in the Reich's war industries.

*Gestapo* spies and infiltrators were a major problem for the *Maquis*, and Nancy and Farmer therefore found themselves under suspicion. A few tense days passed during which they were in danger of being executed by the people they'd come to aid. It was only when a third SOE agent, Denis Rake, arrived with a two-way radio that they were able to contact London and establish their bona fides.

In the days that followed, Nancy again traveled the region, meeting



with various groups, assessing their situations, and accepting or refusing their requests for weapons and other supplies. In her roles as funds distributor and *Chef du Parachutage*, she often took tough stands with unruly groups. She authorized Allied largess only for those who would adhere to London's plans and strategy. Those who resisted that guidance got nothing. The policy did much to rapidly unify the resistance in the final days before the Allied return to the continent in June 1944.

The Normandy invasion signaled uprisings and sabotage all over France, with fighting in the Auvergne becoming constant. While driving a car hauling ammunition and explosives to a *Maquis* unit engaged in a fight with some German troops, a rare *Luftwaffe* fighter plane strafed and disabled the vehicle. Nancy got out just before it blew up.

On another mission, while attempting to slip past a German sentry to break into a building where camping equipment was stored, the soldier turned unexpectedly and she had to fight him. She killed him by breaking his neck, but not until he'd given her a long bayonet cut along her arm.

The Germans began a large-scale offensive against the *Maquis* in the Auvergne, deploying some 22,000



troops. The Frenchmen tried to resist but, increasingly surrounded, they had to break off the fight. They split into groups of 50 to 100 and took off in all directions to try to find weak spots in the tightening German ring. Nancy's team spent four days with one such group, finally managing to get outside the battle area.

During that trek they destroyed their codebooks and radio in order to ensure they wouldn't fall into German hands. That meant the team was unable to report its escape to London. Knowing there was an SOE agent in Chateauroux, some 130 miles away, Nancy found a bicycle and went off to contact him. With no identity papers, she avoided roadblocks and checkpoints whenever she could and bluffed her way through when she couldn't.

The Chateauroux agent had gone to ground due to the heavy German presence in the area. Pedaling around without a clue as to what to do next, Nancy chanced to meet a *Maquisard* she knew, and he took her to his group. They allowed her to use their radio to report to London. That done, she then rode her bicycle back to her own group, an epic and roundabout ride of some 300 miles in 72 hours. So saddle sore she couldn't walk, she had to be lifted off the bike and carried to a bed.

A few days later, a Gaullist Free French army colonel arrived, saying he'd been sent to take over the *Maquis* in that area and begin running it along lines of strict military discipline. She and the rest of the SOE team weren't comfortable with that idea and, along with some 200 *Maquisards* who shared their view, they moved out on their own heading north. As they prepared to go, the SOE dropped them another radio along with an American radioman.

They made camp near Ygrande, in the Department of Allier, where they were joined by two more Americans who parachuted in with an arms drop that included bazookas. The next night their camp came under attack by a large force of Germans, and the Americans, who spoke almost no

French, had to instruct the *Maquisards* in the use of those heavy weapons, using Nancy as interpreter, all the while under fire. They were only saved when another group of *Maquis* came in behind the Germans and attacked using some machineguns that had only recently been airdropped to them.

From then on the team kept constantly on the move, arranging airdrops of weapons and explosives that arrived in hundreds of containers and were delivered to resistance groups over wide areas. They didn't know it at the time, but that huge increase in airdrops was in anticipation of the US and Free French landing on the Mediterranean coast of the country.

That 15 August landing of the Americans and Free French on the beaches of the Riviera was the signal for all the resistance organizations in southern France to go fully into action. At that time, along with a party of *Maquis*, Nancy and her team took part in an attack on the German headquarters in Montluçon. They prepositioned weapons and explosives in a house nearby, then went to collect them at noon as the Germans were sitting down to lunch. Nancy was one of those who went in through the back of the building, opening doors and throwing in grenades, then spraying with Sten guns. The building was wrecked and 38 of the headquarters staff were killed.

The *Maquisards* around Nancy and her team soon swelled to about 300. They next moved to attack the main German fortified position in the town. They drove out the original defenders, then held the place through three days of German counterattacks before having to abandon it.

After the Germans completed their retreat out of southern France in September, Nancy made her way back to Marseilles in search of her husband. Sadly, she only then found out he'd been arrested shortly after her escape from France. He'd been held and tortured for five months and was then executed.

After the war Nancy demobilized from the SOE, moved to England

and worked for the Air Ministry and Foreign Office. In 1956 she married ex-RAF pilot John Forward, and returned to live in Australia. Her tally of wartime awards included: the British George Medal, the France and Germany Campaign Star, the French *Chevalier de la Legion d'Honneur*, the Officer's Badge, the *Croix de Guerre* with two bronze palms and star, the *Medaille de la Resistance*, and the US Medal of Freedom with palm. As of this writing, early in 2009, she was living in a retirement home in London.

~John Brown

## Behind the Lines The Special Fuehrer Train

With his accession to power as chancellor of Germany in 1933, Adolf Hitler traveled in state to cities within Germany and to surrounding European countries. To do so, he eventually required two special trains each known as the *Fuhrersonderzug* (Special Fuehrer Train). The first was intended for normal diplomatic travel. In the late 1930s a second train was put together with a set of specially constructed dark green Pullman cars. Those cars had solid steel construction, each weighing over 60 tons. That second train was designated for wartime use, and was eventually codenamed *Amerika*. (It was named after the continent, not the United States, as there were also trains named *Afrika* and *Asien*.)

Despite Hitler's frequent travels, there's only limited information available about those trains. Most of it comes from Hitler's personal staff, who wrote about their experiences while railroading with the *Fuehrer*. A typical train composition included: locomotive, flak car, Hitler's Pullman car, a conference car, a car for his SS guard detail, two cars for the staff, a bath car, a press car, another flak car, and a trailing engine to provide internal power for the cars. The trains ran on a schedule designed to cause



the least disruption to normal rail timetables.

During the war Hitler used his trains to travel to his various headquarters. The Nazis planned or constructed 20 FHQ (*Fuhrerhauptquartier*) throughout Europe. Some of them weren't completed before the end of the war, but all the designs included rail access. That design requirement was intended to limit the distance from the rail siding to the headquarters complex itself. Rail access also required the train be protected by a tunnel, fortified siding, or to be heavily camouflaged.

Regulations required all passengers on the *Fuhrersonderzug* to possess a first-class ticket to board. Those tickets were provided by an SS adjutant. Hitler's secretary, Traudl Junge, recalled the staff wasn't told until the last minute about pending train trips for security reasons. Junge also described the accommodations as "simple but luxurious." Meals were provided by staff cooks, including Hitler's personal vegetarian dietician.

Most travel was scheduled to allow Hitler to arrive late at night. The official reason was to prevent large crowds that might form when the *Fuehrer* was recognized; however, the memoirs of the staff indicate Hitler didn't like seeing the extent of the destruction from the Allied bombing of German cities. During the day the train usually traveled with all the shades pulled and the lights on in the compartments.

There are stories from the surviving staff about unpleasant experiences on the trains. During one stop the staff opened the shades to reveal a troop train full of wounded soldiers from the eastern front parked alongside. Another disturbing story tells of the train being stopped alongside a train full of people being taken to a concentration camp.

When traveling on the train, Hitler's penchant for nocturnal living was enforced. Daily military conferences were held in the late afternoon. Late evening dinners were served for the staff members Hitler selected to dine with him. At every stop the



*Hitler's headquarters train.*

communications team would connect the train to the telephone and telex system, and adjutants would take the *Fuehrer's* dog for a walk.

The internal security detail was supplemented by local military units during each stop. The train normally carried 20 to 30 *Fuehrer Begleit* (*Escort*) Battalion and SS guards. The train was also accompanied by railroad police who had primary jurisdiction at station stops. The train's schedule was kept secret, even though hundreds of personnel were involved in supporting it along the way. When traveling, the train was preceded by a locomotive 15 minutes farther up the line. That lead locomotive was intended to trigger any mines on the track. Occasionally the *Fuhrersonderzug* was also followed by another special train. Sometimes that would be Hitler's diplomatic train being used in support or another special train belonging to one of Hitler's senior leadership team.

The assignment of a special train to any official was a sign of great prestige in the hierarchy of the Reich. There were 13 additional special trains including: Himmler's mobile SS headquarters, two trains for the army chief of staff, a diplomatic train for Ribbentrop, a train for Reichmarshall Goering, and three additional *Luftwaffe* trains. The collection and utilization of those trains often became a logistical nightmare for the

railroad authorities.

Hitler also traveled frequently by airplane during his rise to power. Indeed, the documentary of the 1936 Nazi Party rally, *Triumph of the Will*, begins with him arriving in Nuremberg in a Ju-52 transport. With the opening of World War II, however, the railroad became his preferred mode of travel. In 1939 he went by train to oversee the invasion of Poland. On 8 May 1940 he left Berlin and took his train to the Belgium-Luxembourg border to witness the invasion of the West. On 15 January 1945, he left his western headquarters for the last time as his Ardennes offensive ground to a halt. He returned to Berlin where he remained to the end of the war; so that was his final train trip.

The constant bombing of the capital required the *Fuhrersonderzug* to be moved from its regular home at Anhalter Station in Berlin to Bruck, Austria. Some of the high command who fled Berlin then took it over to use it as the headquarters for the last-ditch defense of the ultimately aborted "Alpine Redoubt." When Germany surrendered, the security detail blew up Hitler's Pullman car. The rest of the cars were captured and used by Allied authorities until they were returned to the German government in the late 1950s. The fate of those cars since is unknown.

~Roger Mason



## Mysteries Revealed

### Mars: God of War & Chocolate

"Melts in your mouth, not in your hands," is the familiar catchphrase for an even more familiar treat: M&Ms candies. What's less well known is that during World War II American troops were the only recipients of the candy and are responsible for making the colored confections a national institution.

Frank Mars began making candy in his kitchen in Tacoma, Washington, in 1911; in 1923 he developed the *Milky Way* bar, which quickly became a nationally known candy in an era when national brands were starting to edge out locally made products. In the next two decades the Mars Company further extended its product line with *Snickers* (named for the family racehorse) and *3 Musketeers*. In 1932 the company went international when Frank's son Forrest moved to England to set up a candy business there (and also expanded into pet foods).

Forrest visited Spain during the Spanish Civil War in the late 1930s and saw soldiers eating *Smarties*, a

chocolate morsel covered with a hard sugar shell so the chocolate wouldn't melt. Inspired by that idea, Forrest came up with his own recipe for candy coated chocolates.

When World War II broke out, Forrest returned to the US. He received a patent for his candy coating process on 3 March 1941 and established M&M Limited in Newark, New Jersey, taking the name from his initial and that of 20 percent investor Bruce Murrie, son of Hershey president William Murrie. The arrangement allowed the candies to be made with Hershey Corporation chocolate, which had practically total control of all chocolate (a wartime rationed item).

The hard-coated chocolates were originally made in six different colors: brown, yellow, orange, red, green and violet, and came packed in a cardboard tube. The candy was originally marketed as "Plain Chocolate Candies" before becoming simply "M&Ms." (The letter "M," originally in black, wasn't printed on the candies until 1950.)

Production started at 200,000 lbs. per week. By war's end, with help from Ingmar Monson, an engineering contractor from Fairfield, New Jersey, who put in 80 to 90 hours a week, the plant's capacity was gradually increased to 600,000 lbs. per week.

The tiny chocolates were soon adopted by the US military, which included them in C-rations because they withstood extreme temperatures. During the war every M&M

produced was sold exclusively to the US military. The company's advertising, largely on billboards, reflected that all-out wartime theme with the slogan: "Now 100% at War."

When the war ended, returning veterans came home eating M&Ms; taking them to every corner of the US. The candies were especially popular in the summer, when, in the days before widespread air conditioning, chocolate had a tendency to turn into a gooey mess. Its ability to handle all climates was eventually summed up in the slogan: "The milk chocolate that melts in your mouth—not in your hand!"

M&Ms weren't the only chocolate issued to soldiers. The Hershey Company, at the request of the army, developed a chocolate ration that would sustain a soldier who had nothing else to eat and could be carried in his pocket unmelted. Throughout the war, Hershey turned out a half million bars a day of "Ration D," a four-ounce, 600-calorie chocolate bar. Regular chocolate bars were also available at the PX, where they were the second most popular item after cigarettes. When American troops invaded Europe, the chocolate bar became closely associated with the GIs, who turned chocolate into the all-purpose medium of exchange that could be bartered for everything from antiques to sexual favors.

~David W. Tschanz





## Turning Points

### The Schweinfurt-Regensburg Air Battle, 17 August 1943

Maj. Gen. Ira C. Eaker, newly promoted in the summer of 1943, took over command of the 8<sup>th</sup> Air Force from Maj. Gen. Carl A. Spaatz. Almost immediately he approved a plan formulated by the 8<sup>th</sup> Bomber Command's staff, headed by Brig. Gen. Frederick L. Anderson. That plan would send the bombers flying deep into Germany's heartland. Deepest Germany held some choice targets, but the bombers would be without fighter escort once they passed Maastricht.

Schweinfurt seemed a plum target for the planners. A town of around 60,000 inhabitants in northern Bavaria, it occupied a place in Germany's industrial war effort out of all proportion to its size. The ball bearings vital to vehicles, ships and planes were in production there. There were three major ball bearing plants: Kugelfischer (KGF), and two Vereinigte Kugellagerfabriken A.G. (VKF 1 & 2). The total output of those factories amounted to roughly half of all Germany's ball bearing requirements. Other smaller factories, such as Fichtel & Sachs, producers of motorcycle engines, were also targeted by the staff planners. The Germans were naturally aware of the area's importance, and it was therefore well protected by flak. It was also a garrison town, as well as the training and replacement depot of the 36<sup>th</sup> Panzer Regiment.

Eaker and Anderson were putting something in place they thought of as an "air battle" rather than simply an "air raid"; it was to be an operation that would be of far reaching strategic importance. A distracting raid, to be carried out a little earlier, was to draw the German fighter defense from Schweinfurt. That decoy mission would involve even deeper penetration into German territory. It was to make its way to attack a large aircraft factory at Regensburg, which mass produced the Messerschmitt 109 only 40 miles from the Czechoslovakian border.

The B-17s attacking that target

wouldn't return straight to England, but would instead fly to American bases in North Africa. It was hoped that would further confuse the German fighters. The Regensburg bombers would lead the battle; the Schweinfurt bombers would follow and then fight their way back to England.

The final plan of action was that the bombers of the 4<sup>th</sup> Bombardment Wing, consisting of 146 B-17 Flying Fortresses, would leave England and cross the North Sea at 8:00 a.m. to attack the Messerschmitt works at Regensburg, over three hours flying away. At 8:10 a.m. a further 230 bombers of 1<sup>st</sup> Bombardment Wing would take off. They hoped to slip through the German defenses to hit Schweinfurt.

The Regensburg force was expected to encounter the majority of the German fighters; so they would have the benefit of the fighter escorts. The escorts would then return to England to refuel and rearm and, by the time the Schweinfurt aircraft had fought their way back from the target to the Dutch border, they would be up in the air again to meet them and shepherd them safely home. Eaker summed up: "This battlefield is going to be 1,000 miles long and five miles up in the air. It will be fought in sub-zero temperatures, and the gladiators will wear oxygen masks."

The Regensburg force got up and away on time. They found their fighter escorts and made their way across the North Sea. Just after they entered enemy airspace over Holland and Belgium, the first of the flak began to burst around them and immediately started to take a toll. Soon the flak was joined by German fighters. From then until they reached Regensburg almost two hours later, combat and losses were continuous.

The Germans had learned the hard way it was inefficient to send all their aircraft up at once. Earlier in the war they would send up their fighters in a

mass, right at the outset of a raid, but they had since realized any bombers that made it through that initial onslaught then had a clear run to their targets. Their new tactic was to spread out the fighters along the most likely route to be taken by the bomber stream, as far as they could estimate; so the intruders could be subjected to continuous attacks all the way. They had also established several turn around airfields; so fighters could land whenever they ran out of fuel and ammunition, be replenished, and then have another go at the bombers as they were on their way home.

Initially the fighters attacked cautiously at the outside edges of the bomber formations; they didn't want to get caught up with the American fighter escorts. Their turn came later above Aachen, the first city in Germany on the path of the bomber stream, when the P-38s and P-47s turned for home to refuel.

It was a rare occurrence for a B-17 Flying Fortress to be shot down by flak, though some direct hits were seen. When that did happen, the results could be horrifying, not just to those in the aircraft but also to those crews who witnessed the event. The shells were fused to explode at the altitude at which the bombers were flying; so the formations had to fly through the explosions, where they were showered with jagged, red-hot



*B-17s in formation.*



pieces of shrapnel. The shrapnel would damage the aircraft, sometimes critically, and cause death and injuries to the crews. If damage was sufficient to cause a plane to drop out of formation, it would then fall victim to the German fighters, who would pick it off at their leisure.

With the Low Countries behind them and their escorts a fading memory, the bombers passed deeper into German territory, heading relentlessly toward their target. The Germans had learned the weakest point of defense of the Flying Fortresses was dead ahead. To the side and rear they could direct the fire of six to eight of their machineguns at their attackers. Directly ahead they could defend themselves with only two guns, or at most four. The German Me-109s and 110s therefore flew straight into the front of the 15-mile-long stream of bombers.

Stricken Fortresses flipped out of line and spun down toward the earth. Horrified crews from the surviving bombers watched anxiously for blossoming parachutes from the falling aircraft. Ten such parachutes would mean the whole crew had escaped. All too often it was fewer than 10; sometimes none would appear at all. The remaining aircraft moved to fill the gaps and keep the formation tight.

While many raids were spoiled by bad weather over the target, that wasn't the case over Regensburg that day. Visibility was excellent at around 25 miles. The leading bombers began their run into Regensburg at about 10:30 a.m. The flight leader, Col. Curtis LeMay, was surprised to find the anti-aircraft fire fell quiet. Over the next 25 minutes the formation dropped over 300 tons of bombs onto the Messerschmitt works at Regensburg from the unusually low altitude of 17,000 to 20,000 feet. (That factory was of such importance they wanted to ensure the bombing was as accurate as it could be.) The Norden bombsight did its work well: by the time the last of the bombers passed, not a building in the works remained undamaged.

As the bombers left Regensburg, the German fighters returned to strike again, and they kept on until

the Americans were over the Alps. From then on the bombers made it unimpeded to the distant North African airfields, their only remaining enemies being lack of fuel and the effects of damage they'd taken getting that far. The crews sighted the North African coast at 5:50 p.m. After their long ordeal, they found they'd lost 24 of their aircraft—one out of every six that had taken off. That still wasn't the end of it. The facilities in North Africa proved inadequate to make 55 of the badly damaged Fortresses sufficiently airworthy for a return flight to Britain.

On the airfields in Britain the 230 bombers that should've followed LeMay's formations into Germany had been delayed in taking off by bad weather over their bases. It wasn't until almost midday they began to get into the air. It then took over an hour to assemble the formation before setting course for their target. That force only started to cross the English coast at 1:13 p.m. The Germans were aware of what was happening and were ready for them even before they crossed onto the European mainland.

Because of the delay, any benefit that might've been obtained from the decoy attack on Regensburg had long since dissipated. The Germans even brought in more fighters from other operational areas to meet the new wave of attackers. Despite the fighter escort the bombers had across Holland and Belgium, which also included some RAF Spitfires, the German fighters attacked with enthusiasm.

During its journey to Schweinfurt the 1<sup>st</sup> Bombardment Group lost 21 aircraft. Another eight were lost over the target area. On the return trip seven more went down before the escort fighters could return to cover the withdrawal. The loss rate of one in six, suffered by the Regensburg attack, was thus repeated and, when aircraft damaged beyond repair were taken into account, the aggregate loss rate of the two operations amounted to one out of three of the planes that took part. The Germans lost a total of 16 fighters during the course of the day.

Further, the results at Schweinfurt weren't as impressive as those at Regensburg. The targets at Schweinfurt were more dispersed, so much so that the accuracy of the bombing suffered. The delay in taking off had also forced a change in plan for the bombing run. Consequently bombardiers had less time to make last-minute adjustments, and some didn't get to drop their bombs directly onto the factories. Ball bearing production was restored a little over a week after the attack, though it was reduced by 35 percent.

Bombardment crews of the 8<sup>th</sup> Air Force attended another briefing on October 14. As the cover was drawn back from the briefing board the hushed crews learned their fate. They were going back to Schweinfurt. That attack fared no better than the first: the entire 8<sup>th</sup> Air Force was thrown in and lost 60 aircraft. Clearly there was need for a new strategy.

The Flying Fortresses were vulnerable when they were beyond the range of their own protective fighter escorts. At first the Americans debated the idea of switching to night raids, but that idea was never seriously considered. The British had adopted that strategy after RAF Bomber Command had taken severe losses in daylight raids, and they urged their allies to do the same, but it came at the cost of bombing accuracy. Another solution therefore had to be found.

The P-51 Mustang fighter, with its long-range fuel drop tanks and superb engine, had begun to appear that summer, but the air force leaders were reluctant to accept the fact their Fortresses needed extra protection.

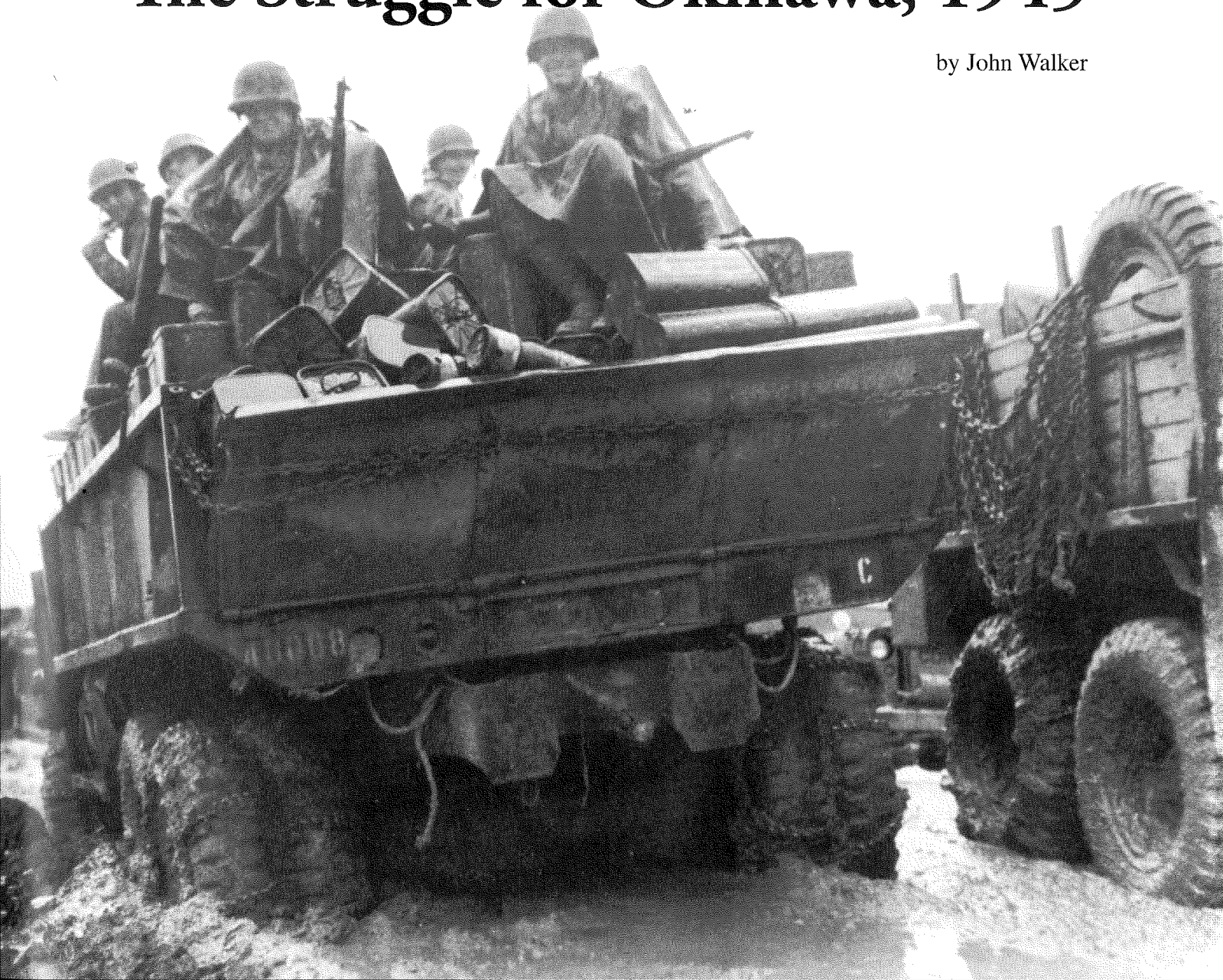
In December 1943, then, there was a change of leadership at the top. Eaker and Anderson left for other endeavors, and in came Maj. Gen. James H. Doolittle, the man who bombed Tokyo. He was more pragmatic and less of a "bomber man." He realized the Mustang could clear the skies over Germany. Thereafter the *Luftwaffe's* days as a daylight fighter force were numbered, and the bombers went to work. Schweinfurt's days were also numbered. After repeated bombings by both the American and the British, it was no longer considered to be a viable target after October 1944.

~Gareth Scott



# The Struggle for Okinawa, 1945

by John Walker



**By** mid-1944, American forces had captured the island of Saipan in the Mariana Islands and broken through Japan's outer defensive perimeter. On 9 September, Fleet Adm. Chester Nimitz, Commander-in-Chief of the Pacific Ocean Area, met with Fleet Adm. Earnest King, Chief of US Naval Operations, to determine how best to deliver the final blow to the Japanese Empire. King advocated an invasion of Formosa, which would then be converted into a base for the planned invasion of the Japanese home islands. Nimitz believed Okinawa would provide a better springboard, since it was closer to those enemy home islands. Lt. Gen. Simon Bolivar Buckner, Jr., *Tenth Army* commander, and senior fleet commanders, Adm. Raymond Spruance and Fleet Adm. William 'Bull' Halsey, awaited the outcome of the debate, as did Gen. Douglas MacArthur, who hoped

King would approve of his own planned invasion and liberation of the Philippines.

The American command finally determined Okinawa would become the target. Meanwhile, on 5 October, Nimitz announced US Army forces led by MacArthur would invade the Philippines in December, and other Army and Marine Corps units would target Iwo Jima and Okinawa early in 1945. Allied control of the latter two islands would cut off Japan from its petroleum supply sources in Burma, Borneo and Sumatra. American medium-range bombers could reach the Japanese mainland from airfields on Okinawa, and the island's harbors and anchorages would serve as a final staging area for the strike against Japan proper.

The assault on Okinawa was codenamed Operation Iceberg. Nimitz designated Adm. Spruance the officer in charge, with the responsibility of protecting the invasion



force before and during the battle. Vice Adm. Richmond K. Turner was in command of the amphibious force. Spruance's *Fifth Fleet* included more than 40 aircraft carriers, 18 battleships, 200 destroyers and hundreds of support ships. Gen. Buckner, son and namesake of a Civil War Confederate general, would command the ground force. His *Tenth Army* consisted of four Army divisions: the 7<sup>th</sup>, 27<sup>th</sup>, 77<sup>th</sup> and 96<sup>th</sup> of Major Gen. John Hodge's *XXIV Corps*, along with three Marine divisions, the 1<sup>st</sup>, 2<sup>nd</sup> and 6<sup>th</sup> of Major Gen. Roy Geiger's *III Marine Amphibious Corps* (III MAC). Initial air support would be provided by 14 escort carriers. Over 220 Marine fighter planes of *Tactical Air Force, Tenth Army*, a joint-service air force under Marine command, would be moved ashore from four escort carriers as airfields were captured.

The naval units assigned to *Task Force 51* would transport and deliver the landing force, sustain them ashore, provide air cover and close air support, and deliver naval gunfire support. The *Fifth Fleet's Fast Carrier Striking Force* (TF 58) and *British Carrier Force* (TF 57) would attack Japanese airbases in the Home Islands, Formosa and the Ryukyus, and be prepared to engage any remnants of the imperial fleet that might sortie. *Twentieth Air Force* B-29s would continue to attack Japan with long-range bombing raids, and the Pacific submarine fleet would establish a barrier between Japan and Okinawa.

The burden of eradicating the island's defenses would fall to the amphibious assault force of 183,000 soldiers and Marines. The Army divisions had each been reinforced to a strength of some 22,000 men, and the three Marine divisions to about 24,000. The exception was the 27<sup>th</sup> *Infantry Division*, which was on loan to *XXIV Corps*. That division, a former New York National

Guard unit that numbered only 16,143, had suffered high casualties on Saipan, and its performance had been considered subpar. For Operation Iceberg, the 27<sup>th</sup> was therefore designated a floating reserve, to be employed as occupation troops once the invasion was concluded.

The Japanese commanders, meanwhile, had begun building their own veritable "iceberg" of coral and concrete within the ridges crisscrossing southern Okinawa. Gen. Ushijima, in overall command of the island, his chief of staff, Major Gen. Isamu Cho, and his senior operations officer, Col. Hiromichi Yahara, used wisely

the nine months they had to prepare for the US assault, organizing a well-trained, well-armed force consisting of the 77,000-man *Thirty-Second Army* reinforced by 9,000 Imperial Japanese Navy (IJN) seamen, supported by 24,000 conscripted militia and 15,000 laborers. The *Thirty-Second* originally consisted of the 9<sup>th</sup>, 24<sup>th</sup> and 62<sup>nd</sup> *Divisions* and the 44<sup>th</sup> *Independent Mixed Brigade*. That army suffered a blow, however, when its best division, the 9<sup>th</sup>, was withdrawn and sent to Formosa, diluting Okinawa's defenses and leaving Ushijima enough strength to properly defend only about a third of the island.

Col. Yahara, who supervised the design and implementation of the defenses, was a gifted strategist and operational genius. He planned a static, yard-by-yard war of attrition against the invaders. That was a radical departure from traditional Japanese mobile tactics, though it was also one that had been in the making for the past year. In prior island defenses battles the Japanese unsuccessfully attempted to annihilate the enemy at the water's edge, often launching massive counterattacks referred to as *banzai* charges. Those tactics had failed in the face of massive American firepower.

After correctly surmising where the US landings would take place—on the beaches near Hagushi village on the island's western side, just below the Ishikawa Isthmus—Yahara declared there would be no forward defense of the beaches, no fortified delaying points near the water's edge, and no reckless *banzais* against the enemy's vastly superior firepower. Japanese strategy would be to destroy or drive off the massive Allied fleet with waves of conventional and *kamikaze* aerial attackers, and then annihilate the stranded invasion force.

Yahara had his troops and laborers first dig intricate fortifications on the east-west ridgelines from which heavy artillery could strike any point in southern Okinawa. He then enlarged scores of natural caves into subterranean living quarters for tens of thousands of Japanese defenders. A network of caves beneath ancient Shuri Castle formed the center of the defenses and provided a haven for Ushijima and his staff that no American bomb or shell could penetrate. All of that was called, appropriately enough, the Shuri Line.

Yahara also stockpiled hundreds of artillery pieces and heavy weapons of every caliber—150mm howitzers, 120mm mortars, 47mm anti-tank guns and 320mm spigot mortars—all in hidden caves and concrete bunkers that were virtually impervious to artillery and aerial attack. The one major ground weapon he was short of was tanks.

Yahara harbored no illusion about his army's ability to hold the ridge system indefinitely. In fact, Ushijima and Yahara both realized the withdrawal of the 9<sup>th</sup> *Division* had made victory on Okinawa impossible. The objective, therefore, became not to win a battlefield victory but to wage a prolonged and vicious war of attrition. Their slogan became "one plane for one ship and one



Gen. Ushijima



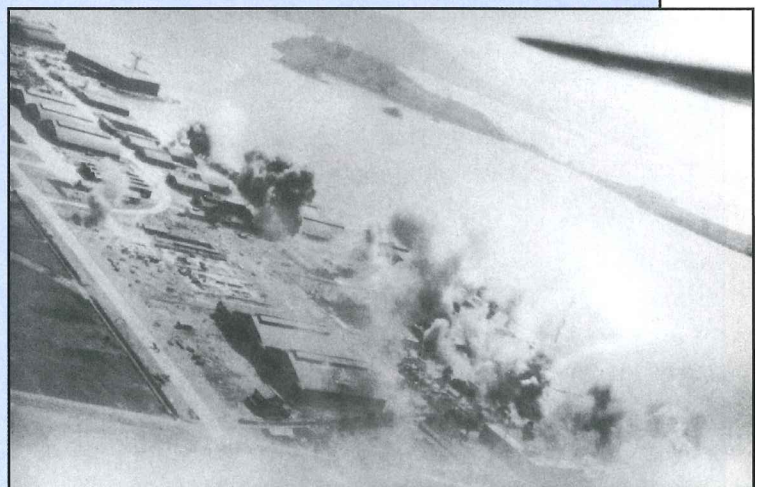


## The Island

The outbreak of hostilities in China during the 1930s initially had little impact on the inhabitants of the Ryukyu Islands, a chain that lay 350 miles southwest of the southernmost Japanese home island of Kyushu. Okinawa was the largest of the Ryukyus, covering about 480 square miles, with a population of 435,000. The island is 60 miles long and up to 18 miles wide. A narrow, two-mile "waist," known as the Ishikawa Isthmus, separates the mountainous northern two-thirds of the island from the southern third, where the majority of the population was concentrated in the spring of 1945. That southern third consisted of rolling, hilly countryside, suited to defensive warfare and marked by steep, natural escarpments, ravines and ridges aligned east and west. Thus attackers would encounter a succession of fortified east-west ridges. Each time one position was taken, a new one would have to be assaulted. The port and commercial center of Naha was the island's capital, with a population of 65,000.

Okinawa had been a prefecture of Japan since the late-19<sup>th</sup> century, but it held only minimal importance in Tokyo's overall strategy when World War II began. It was considered a rear area, used as an air support and supply base for Japanese forces fighting in the Philippine and Mariana Islands. It had neither surplus food nor a great deal of industry to assist the Japanese war effort. Its main contribution lay in its production of sugar cane, which could be converted into alcohol for torpedo and engine fuel.

The Japanese considered the inhabitants of the Ryukyus, who maintained their own separate religion, language and culture, to be their inferiors (though not enough to impede them from drafting thousands of Okinawan men into the militia). They also had no qualms about forcibly expropriating land and farms to begin constructing air bases throughout the Ryukyus. As the battle for Okinawa loomed, the Japanese shipped 80,000 Okinawan natives to Kyushu to work in factories, and they relocated another 60,000 into the sparsely populated northern region of Okinawa to reduce the burden on Japanese garrisons in the south.



*Stepping stone to the home islands: Allied aircraft attack Okinawan docks.*



If the *Thirty-Second Army* could exact a horrendous price in American blood, they might shrink from the idea of invading the Japanese homeland and instead agree to a negotiated settlement, rather than insisting on unconditional surrender. As will be seen, the actual battle demonstrated that strategy wasn't unreasonable.

American forces first secured the Kerama Islands (7-26 March) and the Keise Islands (31 March), which lay southwest of Okinawa. Those place would provide anchorages for ships and artillery positions to back up the landings planned for 1 April. Some 350 suicide boats planned for use against the US fleet were also captured on the Keramas.

The people of Okinawa had long been used to the severe typhoons that periodically swept their island, but nothing in their experience equaled the *tetsu no bow*—"storm of steel"—that pounded them on the morning of 1 April. At 5:30 a.m., 10 battleships, nine cruisers, 23 destroyers and 177 gunboats began the heaviest concentration of naval gunfire to ever support an amphibious landing, followed by napalm strikes that blanketed six miles of landing beaches. While the men of 2<sup>nd</sup> Marine Division conducted a demonstration landing on the southeast beaches, to deceive the defenders about the location of the main effort, the 7<sup>th</sup> and 97<sup>th</sup> Infantry Divisions and the 1<sup>st</sup> and 6<sup>th</sup> Marine Divisions crossed the Hagushi beaches at 8:30 a.m. against virtually no resistance. Some 16,000 troops landed in the first hour, and by nightfall more than 60,000 were ashore. Another 122,000 were offshore as reserves and reinforcements.

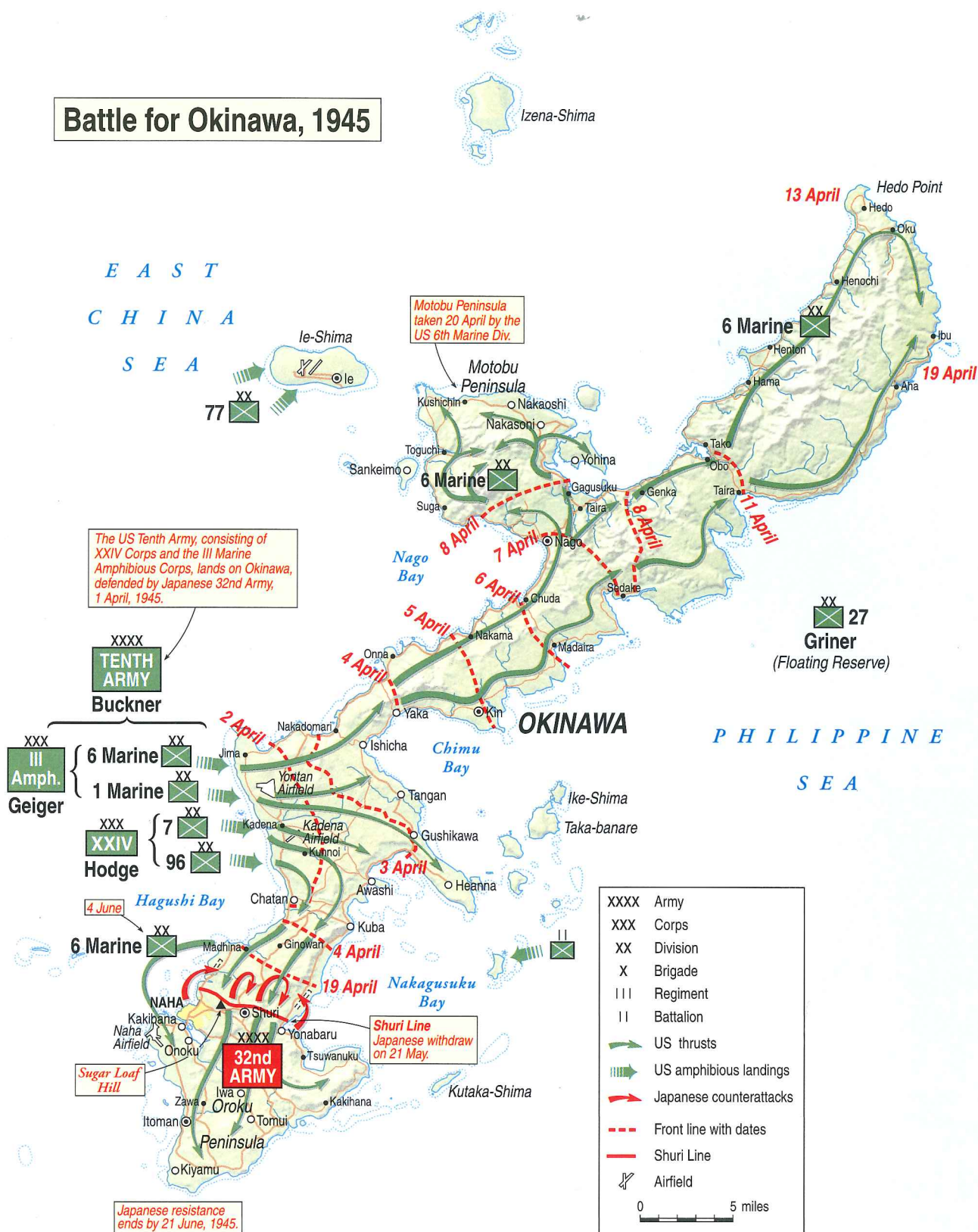
American forces then pushed east and cut the island in two in just four days, well ahead of schedule. Marines of the 6<sup>th</sup> Division then wheeled and turned north, moving up the island until they reached the Mutobu peninsula, where they encountered Japanese infantry entrenched around the rugged hills of Mount Yae-take.

*continues page 45*





# Battle for Okinawa, 1945







## *Kamikazes & the End of the Yamato*

As the American war machine approached Okinawa, which was obviously to become the base for the Allied invasion of the home islands, the chief objective of the Japanese high command remained the destruction of American sea power. Only sea power could make possible an invasion of the Japanese mainland, as had been attempted only twice before in the nation's 3,000-year history: in 1274 and 1281, Kublai Khan's Mongol armadas sailed from China and Korea. Both those invasions have been stymied by "divine wind" (*kamikaze*) typhoons that swept away the invasion fleets. Maybe, the Japanese reasoned, a new divine wind could save them again, only this time it would be created by modern military power.

Reports of the modest successes achieved by members of the *Kamikaze Special Attack Corps* in the recently concluded Philippines campaign gave the Japanese some hope. The *Kamikaze* were essentially one-way air units, with the pilot instructed to fly his bomb-laden aircraft right into the decks of American warships.

The first organized suicide attacks had taken place on 15 October 1944, at the beginning of the Battle of Leyte Gulf. They succeeded in destroying and damaging a number of American warships, including some of the vital aircraft carriers. The Japanese concluded a massive new *kamikaze* corps could improve the chances for a successful defense of Okinawa and perhaps even serve to prevent enemy landings in the home islands. A plan called *Ten-Go*, or "Heavenly Operation," was devised. New armies would be formed from a reserve of military-aged men previously deferred for essential labor to man the defenses of Okinawa and the home islands. Meanwhile, a powerful new air force built around the *kamikaze* would be organized to destroy the American fleet. More than 5,000 aircraft, both suicide and conventional, would launch all-out attacks, joined by hundreds of suicide motorboats operating from Okinawa and the Kerama Islands. The aerial assault would be followed by a one-way dash of Japan's remaining warships, including the super battleship *Yamato*.

The *Yamato* was the largest warship in the world, displacing 72,000 tons and protected by armor up to two feet thick. She was served by a crew of over 3,000 sailors and boasted a main armament of nine 18.1-inch guns.

Following the initial American landings on Okinawa, the Japanese put *Ten-Go* into motion. Starting on 6 April, *kamikaze*, flying from Formosa and Kyushu, sank 27 US ships and damaged 164. In return for the sacrifice of a few hundred half-trained pilots, vastly more damage was inflicted on the US fleet than the Japanese surface fleet had accomplished since Pearl Harbor. Only the overwhelming strength of the US Navy, together with the diminishing skills of Japanese aircrew, enabled the Americans to withstand losses on such a scale. Despite their individual successes, at no time during the battle for Okinawa did it appear the *kamikaze* could reverse the American advance.

Tokyo also launched the long-promised sea attacks on the Allied fleet off Okinawa, dispatching the *Yamato*, the light cruiser *Yahagi*, and eight destroyers to attack the American fleet. The squadron flew the flag of Vice Adm. Seiichi Ito, the 54-year old commander of *Second Fleet*, and was given only enough fuel for a one-way trip. The *Yamato* was to do as much damage as it could to the US Navy and then scuttle herself on the shore, where she was then supposed to serve as an artillery platform, fighting until eliminated. The squadron was denied air cover on the grounds every plane was needed to support other *kamikaze* operations.

*End of a battleship: the Yamato under attack from American aircraft.*



Without air cover, the *Yamato* task force was easily spotted by US reconnaissance aircraft. At 10:00 a.m. on 7 April the first strike aircraft took off from the flight decks of Adm. Marc Mitscher's *Task Force 58*: 132 fighters, 50 dive-bombers and 98 torpedo-bombers. At 12:42 p.m., through intermittent rain and a sky empty of Japanese aircraft, the opening wave of Mitscher's air attack struck. The first bomb destroyed *Yamato*'s radar, leaving the ship's guns dependent on visual direction. Despite their intense anti-aircraft fire its guns generated, the *Yamato* shot down few of the intruders. Again and again, bombers pounded the battleship and her escorts while fighters strafed their upper decks to decimate the anti-aircraft crews.

Torpedoes began to slam into the great ship's hull, causing massive damage below the water line. Soon streams of men were emerging onto the upper deck. Those above were reluctant to slam hatches on crew members still trapped in the engine rooms, but the order was given to flood some compartments to correct the growing list. Exposed light flak gun positions were strewn with dead and wounded. The upper decks were deluged with water from near misses and blood from shattered bodies. Half of *Yamato*'s bridge crew were dead by the time the third wave of attackers struck. Below decks, a wardroom crowded with wounded suffered a direct hit from a bomb that wiped out its occupants. Ito remained in his chair on the bridge even as a fresh explosion hurled flying bodies against him.

The torpedo-carrying US Avenger aircraft pressed their attacks. They customarily came in at 300 feet, but on that afternoon many flew much lower, braving the *Yamato*'s fire to release torpedoes well inside the usual 1,500 yard range.

The *Yamato*'s crew pumped thousands of gallons of seawater into a hull bulge to correct a list as the ship struggled to maintain course and continue firing; nonetheless, she was slowing down. By then, four destroyers and the *Yahagi* were wrecked or sunk. At 2:10 p.m. a bomb jammed *Yamato*'s rudder and all power failed. The huge ship listed steeply, her port side awash. No vessel of the Japanese navy carried rafts or lifebelts: such accessories might suggest it was desirable to survive defeat.

Ensign Mitsuri Yoshida, one of the few survivors, later wrote: "At that instant *Yamato*, rolling over, turns belly up and plunges beneath the waves; she emits one great flash of light and sends a gigantic pillar of flame high into the dark sky...Armor plate, equipment, turrets, guns—fragments of the ship fly in all directions. Soon thick dark brown smoke, bubbling up from the ocean depths, engulfs everything."

The pall of smoke was visible on Kyushu, a hundred miles distant. The last US planes departed the scene at 2:43 p.m., just two hours after the carnage began. The surviving Japanese destroyers awaited formal orders from the mainland to break off the operation, which were finally received at 5:50 p.m. A total of 269 of *Yamato*'s crew were recovered, while 3,063 perished along with 1,187 of the escort crews. The destruction of Ito's task force, still 250 miles from Okinawa, cost Mitscher's squadrons just 10 planes and 12 killed; the only consolation for the Japanese was that, during the planes' absence from the US fleet, *kamikaze* hit and badly damaged the *USS Hancock*, killing 72 and injuring 82. The most ambitious *kamikaze* mission of all, that led by the battleship *Yamato*, ended in utter failure.



*Divine wind: US carrier takes a hit from a kamikaze.*

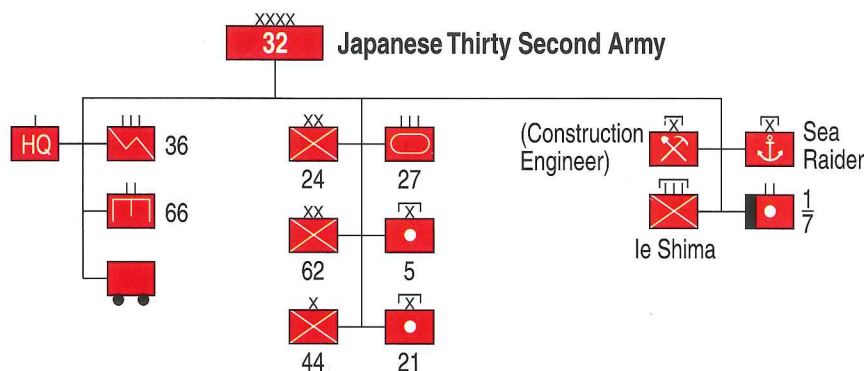
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## Kamikaze

As the 7<sup>th</sup> and 96<sup>th</sup> Divisions moved south and approached the first ring of the Shuri Line fortifications—anchored by the Machinato inlet on the west and on the east by the town of Ouki—the Japanese launched their first massive aerial assault on the Allied armada offshore and against the radar-picket destroyers northeast of the island. On 6-7 April, conventional and suicide planes flying from Kyushu hit 14 US ships, sinking four and damaging 10 others. On 12 April the *kamikaze* struck again with devastating results. A total of 350 Japanese bombers and fighters sortied from Kyushu and damaged some of the largest ships in the invasion fleet: the carriers *USS Essex* and *Enterprise*, battleships *Missouri*, *New Mexico* and *Tennessee* and dozens of minesweepers and destroyers.

Also on 6 April, a task force that included the giant battleship *Yamato*, the light cruiser *Yahagi* and eight destroyers set out on an ill-fated one-way trip to Okinawa. The Japanese plan was for the *Yamato*, the largest battleship ever built and boasting nine massive 18-inch guns, to scuttle herself on the Okinawa shore and enter the battle as both an artillery platform and as a diversion to draw off Allied aircraft from their support of the ground invasion. Given enough fuel for a one-way trip, she was to fight until eliminated, but the task force was quickly spotted and attacked by US aircraft. The *Yamato* was sunk in the last Japanese naval offensive of the war.





On Okinawa, the initial objective for American ground forces pushing south, Kakazu Ridge, looked like an unassuming hill. The Japanese had actually made it one of their most formidable positions, boasting interlacing machinegun positions backed by heavy concentrations of mortars and artillery that bracketed every inch of the approaches to the hill. Three companies of the Army's 383<sup>rd</sup> Infantry Regiment, 96<sup>th</sup> Division, fought their way to the top of the ridge, only to be pushed back after a full day's combat, much of which was hand-to-hand. On the US left (the island's eastern side), soldiers of the 7<sup>th</sup> Division pushed into the town of Ouki, only to be repulsed after heavy fighting. In the center, the Americans advanced up the hill they called "Tombstone Ridge," but were pushed back by Japanese infantry armed with flamethrowers.

After six days of intense fighting, the Japanese had managed to halt the American advance, albeit at a heavy cost. While the attackers suffered 451 killed, 2,198 wounded and 241 missing, the Japanese lost 5,570 killed or severely wounded and out of action. Some Japanese officers, citing their irreplaceable losses, began calling for a counterattack to reverse the tide of battle.



Gen. Cho

Gen. Ushijima was reluctant to launch such an offensive. He was finally persuaded, however, and the Japanese attacked on 12-14 April. Rather than repeat the disastrous *banzai* charges of past battles, the Japanese put their hopes on stealth, sending hundreds of squad-sized units into the night to infiltrate American lines and ambush rear elements the following morning. Only one of the attacks succeeded, however; the rest were detected by the defenders and destroyed piecemeal. A Japanese survivor later wrote: "Continuous

mortar and machinegun fire lasted until dawn, when we, having suffered heavy casualties, withdrew...the company fell apart during withdrawal."

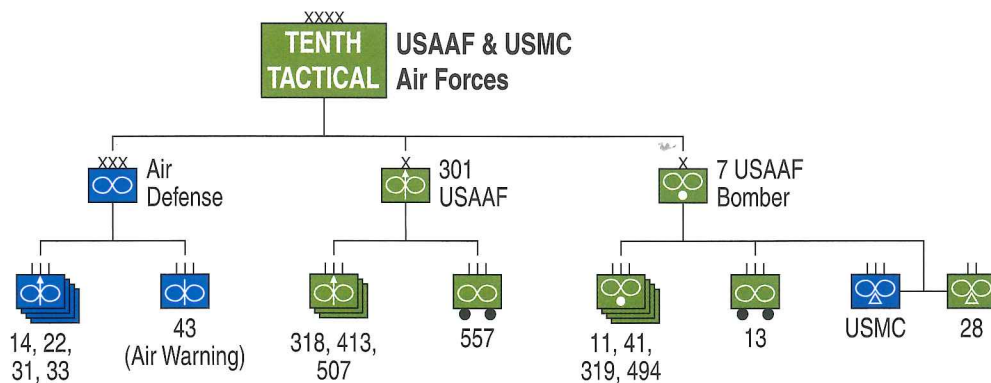
Despite that Japanese failure, it was becoming apparent to Buckner that two infantry divisions wouldn't be sufficient to crack their defense. He came ashore on 14 April and, in an attempt to get the stalled advance moving, reshuffled his line. Though the 27<sup>th</sup> Division hadn't been intended for combat operations, he deployed it on the far right of the US line (on the western side of the island, opposite the Japanese left). He also moved the 96<sup>th</sup> into the center, leaving the 7<sup>th</sup> in place on the east coast.

Following an enormous 19,000-shell artillery barrage, the Americans on 19 April resumed their offensive all along the line, only to be repulsed once more with heavy losses: 720 killed, wounded and missing. A US armored column, unsupported by infantry, was virtually wiped out with the loss of 22 tanks at Kakazu Ridge by Japanese anti-tank guns and suicide attackers strapped with satchel charges. The continuing American pressure, however, was beginning to wear down the Japanese. By the fifth day of the offensive, the defenders had suffered crippling casualties and their lines were being breached in many sectors. With the exception of two pockets in the center and on their right flank at Ouki city, where the line held firm, the Japanese began pulling back. It was 18 days after the first Americans approached the Shuri Line.

Buckner again regrouped his forces. The 1<sup>st</sup> and 6<sup>th</sup> Marine Divisions were moved down from the north and assigned positions on the US right, relieving the battered 27<sup>th</sup> Division. The 96<sup>th</sup> Division, in the center, was relieved by the 77<sup>th</sup> Division and, after a 10-day rest, the 96<sup>th</sup> would relieve the 7<sup>th</sup> on the eastern coast.

The Japanese command then decided to risk an all-out offensive, committing thousands of fresh reserves. On 4-5 May, hundreds of Japanese combat engineers were transported on barges, in an attempt to outflank the US positions on both coasts, while combined tank-infantry formations assaulted the US center. On the west coast the engineers landed in the wrong sector and were quickly wiped out. On the east coast they encountered stiff resistance and were destroyed in a matter of hours. The ground offensive against the American center also





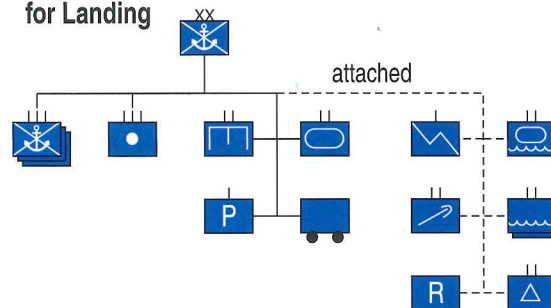
faced resistance and made no progress. The attackers were wiped out by the second day of fighting. Against just 335 American casualties, the Japanese lost over 5,000 troops in the failed offensive, which Yahara later called “the decisive action of the campaign.”

Adm. Turner, with the *Fifth Fleet* being hit hard by Japanese aerial attacks, pressured Buckner to reassess his “straight down the middle” strategy of frontal assaults across the entire island. Likewise, senior Marine officers questioned Buckner’s generalship and called for an amphibious landing in the Japanese rear using a reserve division. In response, Buckner cited his strained logistics for his refusal to open up a second front, declaring *Tenth Army* couldn’t properly supply the forces that would be used in another amphibious assault.

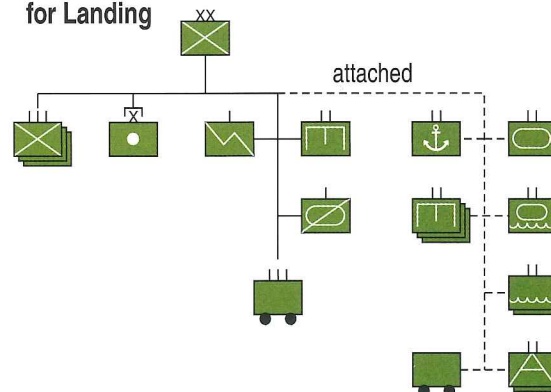
On 11 May the US offensive against the Shuri Line resumed, two corps abreast. From west to east, the American line consisted of the 6<sup>th</sup> and 1<sup>st</sup> Marine Divisions, then the Army’s 77<sup>th</sup> and 96<sup>th</sup> Divisions, with the 7<sup>th</sup> Division in reserve. Once again, Army units in the east ran up against fierce resistance all along the line. Closest to the coast, XXIV Corps bogged down for two days, at a key height called Conical Hill, before gaining a foothold on the crest and withstanding vicious Japanese counterattacks for three days. Farther west, 77<sup>th</sup> Division won through at Ishimmi Ridge, a 350-foot rise just a third of a mile from Shuri.

The two Marine divisions fighting along the western half of Buckner’s line faced a particularly daunting task in their efforts to crack the Shuri defenses. Four locations in particular tested the Marines’ tenacity: Dakeshi Ridge, Wana Ridge, Wana Draw and, above all, Sugar Loaf Hill, a name that became indelibly lodged in Marine Corps legend. On 12 May men of the 6<sup>th</sup> Marines made their first contact with fanatic defenders dug in and around Sugar Loaf, who held out against repeated ground assaults until 19 May. In the 10-day period up to the capture of Sugar Loaf, the 6<sup>th</sup> Marine Division lost 2,662 killed and wounded and another 1,289 cases of combat fatigue, about the same number incurred during the entire invasion of Tarawa. The 29<sup>th</sup> Marine Regiment suffered 82 percent losses and virtually ceased to exist.

### Typical US Marine Corps Division Organization for Landing



### Typical US Army Division Organization for Landing



### Continued Fighting

While the two armies remained locked in a life-and-death struggle ashore, the carnage in the skies above Okinawa continued unabated. Between 6 April and 22 June, the Japanese mounted 10 massive suicide attacks involving 1,465 *kamikaze* along with conventional air attacks by another 4,800 planes. The *kamikaze* sank 27 ships and damaged 164 others, while the conventional aircraft sank one and damaged 63 (see sidebar). On 11 May, Vice Adm. Marc Mitscher’s *Task Force 58* flagship, the carrier *Bunker Hill*, was struck by *kamikaze* and heavily damaged: 396 crewmen were killed and 264 wounded.

As May drew toward its close, after two months of heavy fighting with no end in sight, monsoon rains turned the contested slopes and roads of Okinawa into





*End of their battle: Japanese surrender to an American*

a boggy morass resembling a World War I battlefield. Troops lived, fought and died on a landscape made sodden by continuous heavy rains, part garbage dump of wrecked equipment and part graveyard of unburied enemy corpses, but progress was made. The best of Ushijima's forces had been destroyed. His three major combat units—the 24<sup>th</sup> and 62<sup>nd</sup> Divisions and the 44<sup>th</sup> Independent Mixed Brigade—had all been reduced to remnants. The Americans were winning the war of attrition as soldiers and Marines slowly crept toward Shuri Castle.



*American infantryman.*

On 24 May, Ushijima ordered a withdrawal south to the final defensive position on the Kiyamu peninsula, leaving behind rear guard elements to slow the inexorable US advance. As the Shuri Line crumbled, the extent of the Japanese losses became appallingly apparent. The Americans reported 64,452 enemy dead against just 465 prisoners taken: a clear indicator of the savage nature of the Pacific fighting compared to that in northwestern Europe.

The two Marine divisions had suffered 1,718 killed and 8,852 wounded between them, while the Army divisions had lost 2,871 killed and 12,319 wounded. Not until May came to a close did the Americans realize the Japanese had pulled back and were dug in on the southern end of the island.

### **Final Push**

The first days of June found Hodge's two weary Army divisions occupying a line across more than 6,000 yards of soft clay. About 1,500 yards to the south stood the craggy Yaeju-dake and Yuzu-dake hills. They were barriers that, with Hill 95 on the east coast, formed a wall across the entire corps sector. The highest point was the 290-foot Yaeju-dake peak, which stood at the west end of the Japanese line and tapered off to Kunishi Ridge, which extended across the sector manned by the two Marine divisions of III MAC. It would require two more weeks of intense combat, followed by two additional weeks of mopping up operations, until the battle finally ended.

From 5 until 17 June, the surviving Japanese troops who'd escaped to the south fought on and died at a rate of about 1,000 a day. The Japanese were by then only a mass of uncoordinated troops, presenting no integrated



system of defense, as the *Tenth Army* juggernaut pushed toward them. The terrain was ideal for the use of US tank-mounted flamethrowers, which poured fire into caves, rocky crags and wooded areas, either incinerating the defenders or forcing them into lanes of machinegun fire.

By 17 June, *Thirty-Second Army* had degenerated into a mob, its morale shattered and discipline gone. Except for the small Madeera pocket, the Japanese front line almost disappeared by 21 June. Some 15,000 to 18,000 defenders hid in the great cliffs that walled the southern coasts, in caves, brush or coral. Some waited for an opportunity to surrender, while most fought on with mortars and machineguns. Over the next 14 days, vicious fighting resulted in an additional 9,000 defenders killed and 4,000 captured. Ushijima and Cho committed suicide on 22 June. During the last two weeks of June, 80,000 Okinawan refugees, more than a third of them wounded, crawled from caves lining the southern tip of the island.


On 18 June, Buckner stopped at a forward observation post manned by men of the *8th Marine Regiment, 2nd Marine Division* (which had only recently come ashore), near the southwest tip of the island. While he watched the progress of the fighting, an enemy shell exploded nearby, killing him instantly. His second-in-command, Gen. Geiger, assumed command of *Tenth Army*, holding that position until he was relieved on 23 June by Gen. Joseph Stillwell.

On 2 July the US command declared the Ryukyu campaign was officially over. US Army casualty figures for the 82-day campaign showed a total of 142,058 civilian deaths, more than a third of the island's pre-battle population. Many of them were suicides, due to the fact the Okinawans had been told capture by the Americans meant rape, torture and death. Thousands more were suffering from wounds. No battle of World War II, except Stalingrad, had seen as massive a loss of civilian lives. US military authorities placed the number of enemy dead at 107,539, with another 10,755 captured.

The combined American land-sea-air forces suffered 49,151 total battle casualties: 12,520 were killed and another 36,631 wounded. The British carrier force suffered 62 killed and 82 wounded, along with four ships damaged and 98 aircraft lost. Some 26,119 Americans became non-battle casualties as well, by far the largest number of any battle in the entire war. The latter, also called "combat stress casualties," were caused by constant exposure to the fighting that exacted a terrible drain on Allied front-line strength. The rate of losses due to combat stress, expressed as a percentage of those caused by combat wounds, was a staggering 48 percent. In the Korean War, by comparison, where US soldiers and Marines fought in some of the most severe physical conditions ever faced by Americans, the rate was between 20 and 25 percent.

#### Unit Symbols

 **HQ**  
or  
 **HHC** Headquarters

 Armor

 Infantry

 Marine

 Amphibious Recon

 Amphibious Tank

 Amphibious

 Armored Cavalry

 Artillery

 Anti-Aircraft

 Rocket Launcher

 Mortar

 Construction

 Engineer

 Pioneer

 Replacement

 Signal

 Medical

 Quartermaster

 Service

 Transportation


 Military Police

 Forward Observer

 Shore Party

#### Air Units

 Aviation

 Fighter

 Bomber

 Aerial recon/observer

 Air Logistics


#### Unit Sizes

xxxx Army

xxx Corps, Air Command

xx Division

x Brigade, Air Group

 Temporary or provisional grouping, approx. size indicated in the box on top

|| Battalion, Squadron

I Company

The US Navy's manpower losses, 4,907 killed and missing and 4,824 wounded, were also the worst in its long history. One sailor was killed for every one wounded, as compared to the Marine figure of one killed for every five wounded. Some 34 Allied vessels of all types were sunk, the majority of them as a result of mass suicide attacks. A total of 386 additional vessels were damaged and 763 combat aircraft lost. The Japanese lost 7,830 aircraft and 16 combat ships.

American losses on Okinawa were so appalling that members of Congress considered calling for an investigation into the conduct of the commanders. Not surprisingly, the cost of storming and capturing Okinawa, in terms of lives, time and materiel, weighed heavily in the decision by American policy makers to use atomic weapons against Japan just six weeks later.



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# History Turned at Fort Eben Emael

By Frank Joseph

**L**uftwaffe Gen. Kurt Student, commander of Germany's airborne forces, described the assault by his paratroopers on Belgium's Fort Eben Emael as "the greatest military victory man has ever won." That was hyperbole, but even so, the assault by a company of glider-borne assault troops on 10 May 1940 was a coup that would lead the way to the *Wehrmacht* overrunning Belgium, Holland and France.

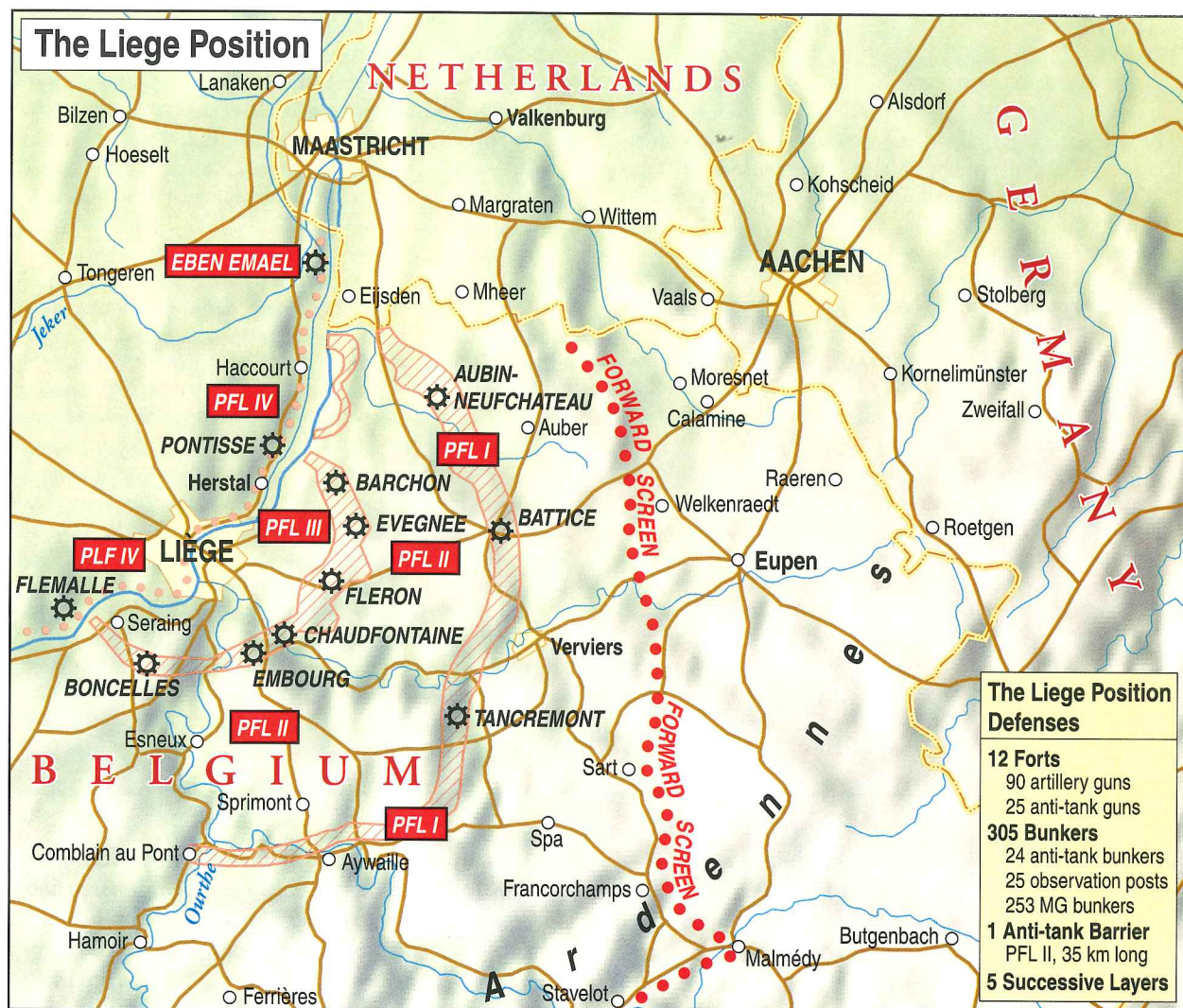
## Hitler Turns West

Following Germany's overrunning of Poland in September 1939, the Third Reich found itself confronted on its opposite flank by the armed forces of Britain and France, while both Belgium and the Netherlands maintained neutrality. Hitler sought to solve the problem by ordering the *Wehrmacht* high command to plan an offensive into the West. One constant assumption was, neutral or not, Belgium would have to be invaded. Only that approach would work to give the mechanized divisions room to maneuver and to outflank France's Maginot Line. While the German armed forces were vastly superior to those of Belgium, there was one major obstacle: the frontier fort complex of Eben Emael.

No one was more impressed with Eben Emael's defenses than Hitler. He knew if his forces were to break cleanly through the Ardennes, Eben Emael would first have to be overcome. His general staff was divided over how to take it. The more conservative strategists called for a massive frontal assault, similar to those of World War I, which might take the place in the span of a month with heavy casualties. The most optimistic among them concluded such an assault could be successfully concluded in six days. "That's still too long," the Fuehrer insisted. That would give the Belgians time to bring up their reserves and link up with the British Expeditionary Force (BEF) and the large *Army of Northern France*. The Allies could then launch a counter-offensive against the Germans who would be bogged down around the fort's walls. "If nothing else, any delay on our part will give the Belgians sufficient time to destroy all their bridges, greatly slowing our advance into the country. Time will be working against us," Hitler concluded.

Airpower provided an alternative. Hermann Goering came forward to say the bombs of his *Luftwaffe* had—in theory—sufficient penetrating power to disable the fort,





but there could be no absolute guarantee. To frustrate matters further, German intelligence about the fort was inadequate, relying on the dubious reports of a few deserters and photographs taken from pre-war picture postcards.

Ironically, A.G. Hochtief of Essen and Dycherhoff & Widmann in Wiesbaden had been employed as project subcontractors in the early stages of the building of Eben Emael, but they'd then been dismissed when the Nazis came to power in Germany in 1933. Those two German firms showed their old construction plans to the *Wehrmacht* commanders, but the exact completed structure and characteristics of the Belgian position remained unknown.

At the Berghof, his chalet in the Bavarian Alps, Hitler went over and over the Eben Emael problem, finally conceiving a unique operation that might take the fort in a day. The plan emerged from his earlier consideration of two new weapons. Years back, he came upon descriptions of the "Monroe Effect," a discovery made in 1888 by the American explosives expert C.E. Monroe. The phenomenon occurs when an explosion produces a

powerful detonation wave against the surface of a hollowed-out area, causing a convergent shockwave that creates high pressure and temperature. Hitler ordered his military engineers to apply that principle toward improved bomb design, adding a metal sheet lining to focus the detonation of the explosive cavity. The result was the first *Hohlladung*, or "hollow charge" explosive.

Tests soon proved the destructive power of hollow charge explosives was greater than anything previously experienced. Its main drawback, though, was their inability to be accurately dropped from the air. The hollow charge had to be carefully hand-emplaced. By 1940, then, two versions of the weapon were available, a bell shaped 25-pounder and a two-piece 110-pounder. The former was a kind of satchel-charge that one man could emplace, but the 110-pounder required a pair of soldiers, each lugging half the device, to dash for the target, assemble it against the enemy position, run for cover, and remotely set off the detonation.

The other part of Hitler's plan for Eben Emael came from his personal observation of military gliders that had



## The Fort

Fort Eben Emael, named after a nearby village, was a product of 1914, when German forces overran Belgium on their way into France. To prevent such a recurrence, leaders of the postwar Belgian Army envisioned what was to become one of the most imaginative and formidable defensive networks the world had known. Europe's unstable economic situation in the interwar years, and the lack of any threat from an enfeebled Weimar Germany throughout the 1920s, for a time worked to relegate those fortification plans to military drawing boards. Political indifference evaporated, however, with Hitler's rise to power in 1933; so the Belgian parliament allocated an unheard of 35 million francs for construction of the fort. Army engineers hadn't been totally idle during the previous decade, and their ongoing research began to manifest itself in a highly advanced technology of defense.

Eben Emael was the centerpiece of Belgian frontier defenses, serving as the keystone of a system of defense-in-depth straddling the frontier with Germany. That system included one of the wonders of the industrial world, the Albert Canal, an 80-mile long waterway (and military barrier) controlled by half a dozen sets of triple locks capable of flooding or emptying the entire waterway in an hour. Located along its length were a series of interlinking forts, all within artillery range of each other. Eben Emael dominated that system. Situated on a high cliff overlooking the strategic Meuse River, its position provided unobstructed views for miles. The fort actually looked to

be an outgrowth of the canal, which formed its highest wall as a nearly perpendicular rampart. It was joined by other sharply inclined embankments of reinforced concrete, all connecting to a narrow serpentine, the Jaar River, 150 yards to the east.

The entire complex was surrounded by a tangled forest of barbed wire, interspersed with triangular steel anti-tank obstacles and an expanse of minefields. It was over-watched by machinegun bunkers set up to fire into preset crossfire lanes. That maze of death was bolstered to the west by a deep, water-filled moat more than 1,300 feet long. Eben Emael resembled nothing so much as a fantastic battleship grounded to its gunwales in the Belgian interior. Casements of steel-reinforced concrete jutted from its walls like massive ships turrets, bristling with 60mm anti-tank guns and 7.9mm machineguns at every critical point.

The formidable walls concealed a platform 3,300 feet long from north to south and 2,400 feet across, forming the roof of the fort. Below its bombproof shelter were three levels containing ammunition storage bunkers, half a dozen 175 horsepower generators, a repair shop, a signals center, a command post, a hospital, lavatories, showers and barracks for 1,200 officers and men. The levels were connected by stairways, elevators and hoists that brought ammunition directly to the above-ground, dome-shaped cupolas made of foot-thick steel. Their 75mm and 120mm guns dominated a 12-mile radius. Overlapping that radius were other forts on either side of Eben Emael.

performed with surprising precision at the annual Nazi party congress at Nuremberg in 1936. The *Wehrmacht* had in the meantime created a small but highly motivated airborne corps, capable of deployment by parachute and glider. Hitler envisioned commandos transported by gliders to the Belgian fort. Landing directly atop the target at night, they would achieve complete surprise and disable the installation with hollow charges.

The more Hitler investigated the scheme's possibilities—glider load ratios, the feasibility of landing in darkness, the ability of the still untried hollow charges to penetrate Eben Emael's reinforced armor—the more his enthusiasm grew for the daring raid. He ultimately rescheduled the whole campaign to begin an hour after the men landed at the fort. While the earlier conservative estimates claimed it would take days or weeks to capture Eben Emael, Hitler gave the paratroopers 60 minutes. The progress of the rest of the enormous invasion hinged on the outcome of that single attack.

The men who were hand-picked for the operation belonged to an elite outfit, the 7<sup>th</sup> *Flieger Division*, the world's first large airborne force to be made operational. The troops had been primarily trained to deploy by parachute, and so felt uneasy at first in the flimsy canvas-covered gliders. Still, months of intensive training along the former Czech border against the pre-war Czech fortifications, which bore at least some resemblance to the Belgian target, gradually endeared them to the durable, if not comfortable, DFS 230 gliders.

Actually one of the outstanding high-performance gliders of all time, the *Deutsche Forschungsanstalt fuer Segelflug*, an affiliate of the Rhoen Research Institute, "attack glider" was so efficiently designed it could carry a cargo almost as heavy as its own 2,790 lbs, up to 10 fully armed soldiers. Rugged and responsive, several hundred were available only a few months after the completion of its final design in 1939, in time for the opening of hostilities.

A reinforced platoon, designated "Granite," comprised two officers, 73 *Fallschirmjaegern* (paratroopers), and 11 pilots, were placed under the command of Rudolf Witzig. The 23-year-old lieutenant was a skilled engineer and dedicated professional officer. On the night of 9 May 1940 he received final orders for the attack.

What Witzig's force lacked in numbers it tried to make up in firepower. Besides rifles and machineguns, the gliders transported 56 hollow charge weapons, plus Bangalore torpedoes to blast through barbed wire, and flame-throwers. The total was in excess of five tons of explosives, an average of 110 pounds per man.

## Assault

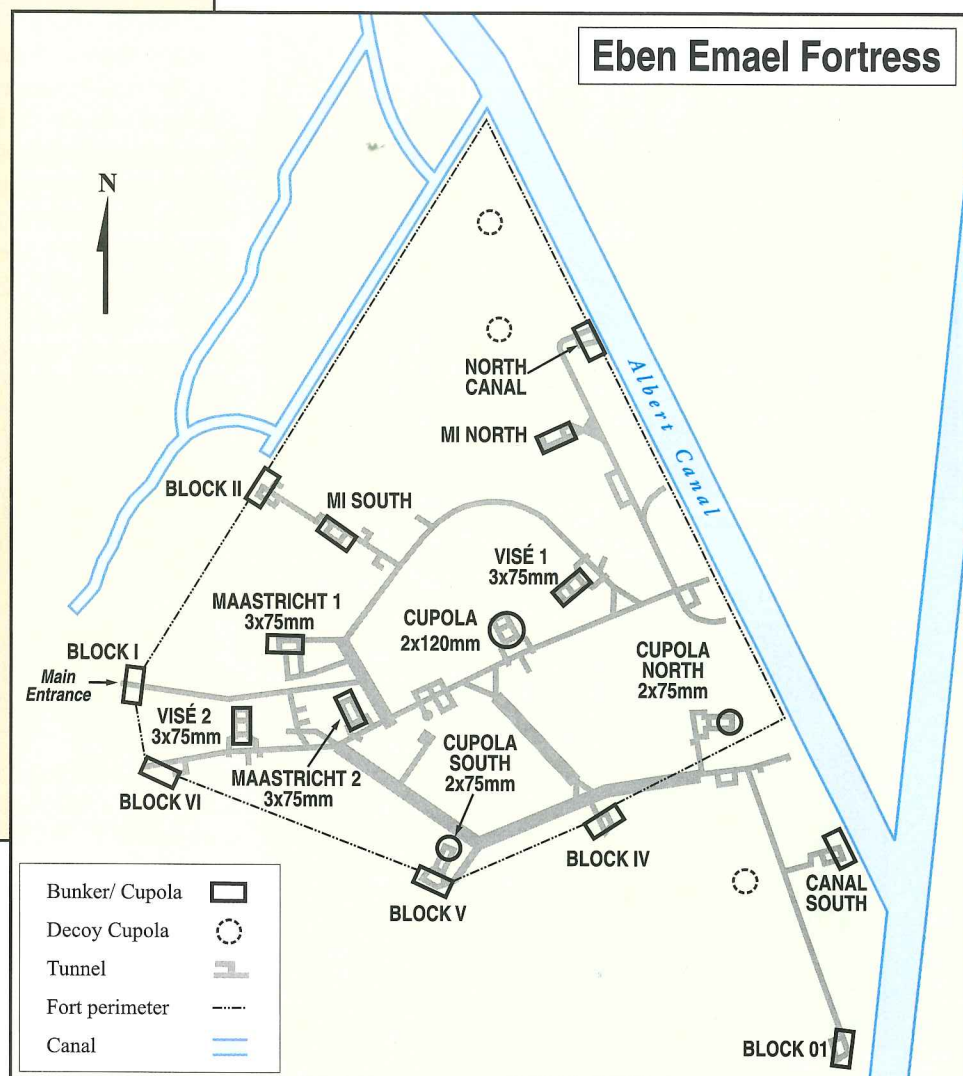
May 10 was the assault date, and by 3:35 a.m. the last glider was airborne, each following its own tow-plane, a tri-motor Junkers 52, into the darkness above the *Luftwaffe* airdrome at Ostheim, near the Belgian frontier. During their 50-minute trip to the target, Witzig's men sang the paratrooper anthem, *Rot Scheint die Sonne* (*Red Shines the Sun*), to calm their nervous anticipa-



The casements had been tested to withstand the largest explosives of the time. To protect from attack from above, anti-aircraft emplacements studded the perimeter of the fort. They were specifically designed to knock down dive-bombers and decimate parachute attacks.

If, in spite of all those defenses, an enemy somehow penetrated even one entry point, a pair of doors, more massive than those of bank vaults, automatically closed six feet from each other, falling in place to block the main tunnel connecting the three subterranean floors and blocking access to the interior.

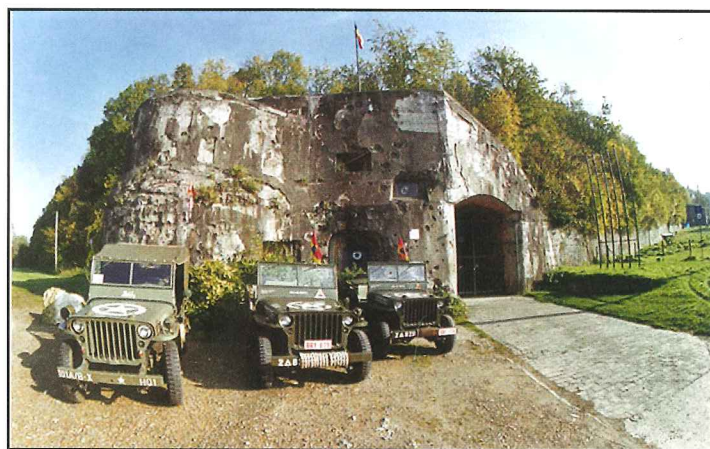
The officers and men of Eben Emael were highly trained technician-soldiers, comprising something of an elite force in that they were required to understand, service and operate sophisticated weapons. They were, moreover, deeply motivated, taking special pride in what was believed throughout the world to be the insurmountable embodiment of their country's defense.



tion; however, if they imagined their arrival in enemy territory would be unexpected, they were wrong.

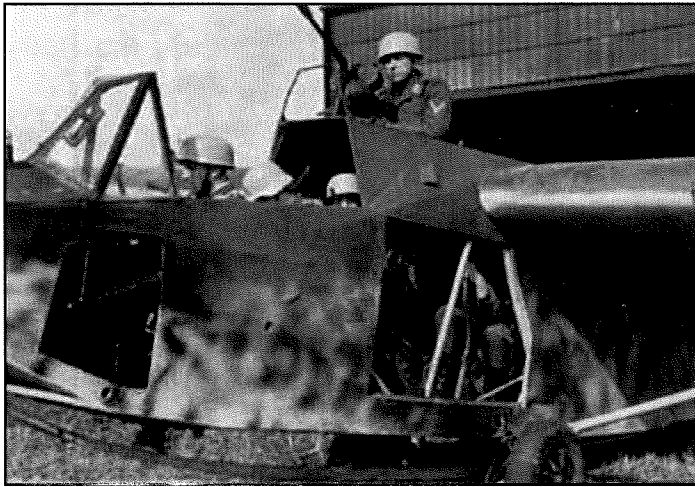
As *Platoon Granite* was winging its way toward Eben Emael, a cacophony of claxons was blaring throughout the fort's halls. The entire country had been put on alert as word of German troop movements across the frontier were broadcast throughout Belgium. At Eben Emael, Maj. Jean Fritz Lucien Jottrand, a regular army officer of many years service, soon had his entire command alerted and ready to fight, with his men at their stations confidently waiting for action, though they expected an attack from the ground. Around 4:00 a.m., Jottrand received a report from one of his above-ground observers: "Airplanes are overhead! Their engines have stopped! They stand almost motionless in the air!"

Before the major could reply, one of the fort's anti-aircraft machineguns began firing. Dimly visible in the clear dawn, Witzig's gliders were slowly and gracefully winding their way down toward the roof of the fort. That had a mesmerizing effect on the defenders, who were too dumbfounded to respond. When they came to their senses and realized what was happening, they filled the air with machinegun tracers arcing upward, but it



*After a world war: Eben Emael fort years later.*





*Air assault: German DFS glider.*

was too late. The gliders were already making perfect landings, sometimes within feet of their objectives. It was 4:25 a.m. and the first combat airlanding assault in history had begun.

Jottrand reacted by ordering the nearby bridge over the Albert Canal at Canne destroyed. It blew up just minutes before another *Luftwaffe* glider troop could save it for the advancing panzers. Jottrand then directed machinegun fire on the downed gliders, which were chewed to pieces.

Unfortunately for the Belgians, by then the gliders were empty. The German paratroopers were at that moment already racing unseen toward one of the major artillery emplacements. They ran right up to its casement, assembled a 110 lb. hollow charge, fixed it against the base, set the fuse, sprinted down the slope and fell



*Attack from the sky: German paratrooper prepares to jump from a Ju-52.*

flat on the ground. The entire fort shook a few seconds later with a loud explosion. The 120mm gun, the object of that first sortie, had been blown off its mounts and fallen down the shaft of its own emplacement, killing every man in the cupola and several below.

Other paratroopers then set a 25 lb. charge against the steel doors of a 75mm cannon emplacement that, upon detonation, flew across its casement, striking the rear wall and wrecking the interior. The Germans leapt into the gaping hole torn by the blast, spraying machinegun fire farther into the fort's interior. Jottrand ordered closed the colossal steel doors, sealing off the underground installations. He then telephoned the two neighboring forts, ordering them to concentrate their fire on the top platform of Eben Emael. There the Germans were going about their infernal business, blowing up one gun emplacement after another with their hollow charges. That intensifying fire forced Witzig and his men to take cover inside the cupolas and casements they'd already put out of action. Eben Emael's garrison then attempted counterattacking, but the Germans beat them back with machinegun fire and grenades.

Though they'd badly crippled the fort, the paratroopers still hadn't fully disabled the final threat to the German troops now advancing toward Maastricht: Casement 12. Witzig's men assailed it. A 25 lb. hollow charge first tore the 75mm gun from the floor and sent it crashing into the wall; bouncing off, the wildly spinning artillery piece then tumbled 60 feet to the bottom of a stairwell, destroying everything and everyone in its path while also knocking out the electric power on the first subterranean level. Plunged in terrifying darkness, the Belgians stumbled about in shocked and impotent confusion. Hitler had given his men an hour to silence Eben Emael; they'd largely accomplished that goal in 20 minutes.

Jottrand, however, still had no intention of surrendering. Secure inside the deepest part of the fort, he intended to wait for reinforcements from outside that were surely on their way to his relief. In reality, though, the Allies were about to be swept back toward Liege by German divisions no longer imperiled by the silenced guns of his fort. The finale of the assault came, then, when a 25 lb. hollow charge blew in the steel doors of Jottrand's redoubt as though they were made of fiberboard.

At 12:15 p.m. a single bugle sounded the call for surrender. As the plaintive music continued, firing on both sides dwindled away, followed by a stillness that settled across the smoking ruins of the fort. With Eben Emael's capitulation, the entire line of Belgian frontier defenses collapsed, and other *Luftwaffe* glider-troops captured bridges intact. Within hours, German armored columns were streaming over them into the heart of the country.

Jottrand remained in his quarters for a while, burning military documents. He then tried to comfort some wounded men before being approached by a German



colonel, who asked him: "Will you give me your word of honor that you have placed no delayed mines within the fort?"

Jottrand truthfully assured him there were no such devices within Eben Emael. That same German colonel, looking over the dejected and wounded Belgians, told them: "I congratulate you on your courage. Someone must be defeated in war. I am sorry that this must happen to you, but this is war. I must now send you to Germany."

## Aftermath

The German offensive in the West moved with the speed required, catching the Allied armies off balance and splitting them apart. The key to starting that rapid advance had lay in the taking of Eben Emael. Had it successfully resisted for the six to 60 days originally predicted, the German blitzkrieg in the West wouldn't have been possible.

Lt. Witzig's casualties amounted to six killed and 20 wounded, about a third of his platoon, in little more than a day of combat. Belgian losses included 58 fatalities and more than 300 wounded. While it's true the fort's garrison wasn't at full authorized strength, its 780 defenders were entirely capable of manning all of Eben Emael's weapons. In any case, numbers had really nothing to do with its fall, which was brought about by the unexpected use of gliders and the then destructive power of the hollow charges. Of course, neither of those factors would've meant anything without the swiftness and determination of Witzig's assault force. Further, to give the devil his due, the ultimate credit for the operation's success unquestionably goes to Hitler, who envisioned the bold strike where everyone else had seen only an insurmountable obstacle.

The military gliders of Germany and went on to win more laurels throughout the war, most notably in the invasion of Crete and the rescue of Benito Mussolini from his 10,000 foot-high imprisonment atop the Gran Sasso. And the redoubtable hollow charge is still used in various improved forms by armed forces around the world. It was, however, the first and deadly combination of both, at the Belgian frontier on that spring day in 1940, which resulted in a unique military achievement. If it may be said of any single battle, the course of history hinged on the fate of Fort Eben Emael.



*The ground drive: German recon unit drives across northern France.*

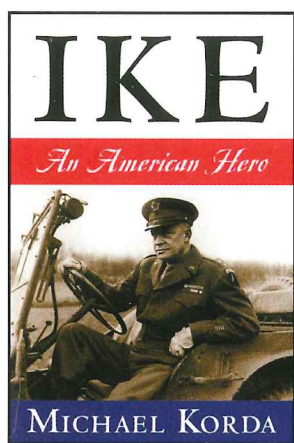


*The victors: Rommel in Cherbourg, inspecting British prisoners of war.*

### Further Reading

- Horne, Alistair. *To Lose a Battle*. Boston: Little, brown & Co., 1969.
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- Meesen, L. *Ce Que J'ai Vu A Eben Emael*. Liege: Collection Nationale Civisme, 1953.
- Melzer, Walter. *Albert Kanal und Eben Emael*. Frankfurt: Kurt Wohlq-inckel, 1957.
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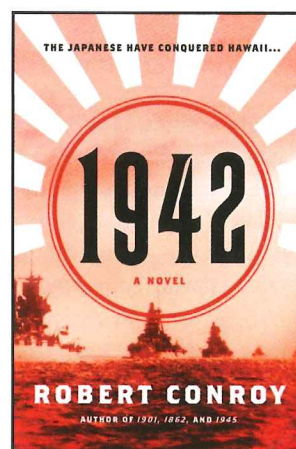
*Ike: An American Hero*, by Michael Korda (hardback: HarperCollins, 2007; soft cover: Harper Perennial, 2008). Reviewed by Chris Perello.

**In Sum:** This is a softcover reprint of Korda's biography of Dwight D. Eisenhower. The focus of the book, naturally enough, is on the WWII years, with a hefty dose of his early career and a somewhat thinner slice of post-war and the presidency.

**Good Stuff:** There is nothing particularly remarkable about the book, but it does offer a comprehensive history of Eisenhower as a military man. The development of his thinking and command style are highlights. The maps are generic, but adequate for the purpose.

**Bad Stuff:** There's nothing really wrong with the book, either, though I think the postwar period gets somewhat short shrift; after all, it amounted to a complete second career.

**Overall:** If you like biographies, this is a good one and certainly must be considered part of a complete bibliography on one of the most important men of the 20<sup>th</sup> Century.



*1942*, by Robert Conroy (Ballantine Books, 2009). Reviewed by Chris Perello.

**In Sum:** This is an alternative history novel based on the premise that Japan invaded and conquered the Hawaiian Islands in the months after Pearl Harbor. Without giving away the ending, most of the book deals with American efforts to drive them out with the scarce resources available in the early months of the war.

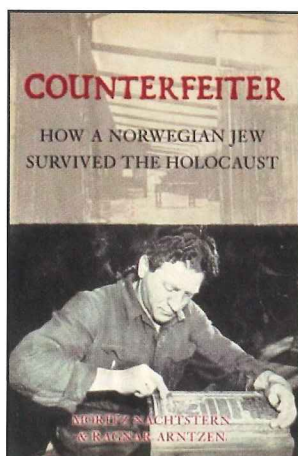
**Good Stuff:** This is yet another ripping yarn from Conroy (along with 1862, reviewed in an earlier column, 1901 and 1945). It moves right along, and in broad-brush is plausible and exciting. From a purely historical perspective, it is the best—bar none—discussion of the logistical aspects of running a naval war in the vastness of the mid-Pacific (I wish John Adams' otherwise excellent *If Mahan Ran the Great Pacific War*, reviewed earlier, had done half as much). Uncommon in the alt-hist genre, the actual historical characters are drawn three-dimensionally.

**Bad Stuff:** As is common in the genre, the characters are all overly-prescient and give too many long expositions describing the situation. It also shares the tendency for a near-apocalyptic resolution. Maps would have been nice: one each for the Pacific, another for the Hawaiian chain, and individual maps of Hawaii (the big island) and Oahu.

**Overall:** This book covers a gap in the historical analysis of the war; most other discussions of possible post-Pearl Japanese moves are dismissed fairly quickly if discussed at all. It is a quick read, and a good addition to the study of the Pacific war.

**Attention readers:** We're looking for media reviewers for *Strategy & Tactics* and *World at War*. Any media will do: book, magazine, film, website, etc. Absolute max is 500 words. We want it to be a critical analysis, not just a description. Contact Chris Perello at: [cperello@calpoly.edu](mailto:cperello@calpoly.edu).





*Counterfeiter: How a Norwegian Jew Survived the Holocaust*, by Moritz Nachstern & Ragnar Arnitzen (Osprey Publishing, 2008). Reviewed by Chris Perello.

**In Sum:** This really is two books in one. The main portion is Nachstern's memoir, published in Norway in 1959. Nachstern was one of the few of Norway's small Jewish population to survive the war. He did so by becoming involved in Operation Bernhard, an SS plan to destabilize the British pound and later the American dollar. That was done by the printing of unbelievably good forgeries (good enough to fool Swiss bankers) of the currency, which was to be dropped *en masse* by air. Nachstern was one of a small group of uniquely-skilled men—his skill saving him from the gas chamber at literally the last moment—engaged in the production. The book opens with two lengthy essays describing Bernhard, and two short post-war interviews with Nachstern.

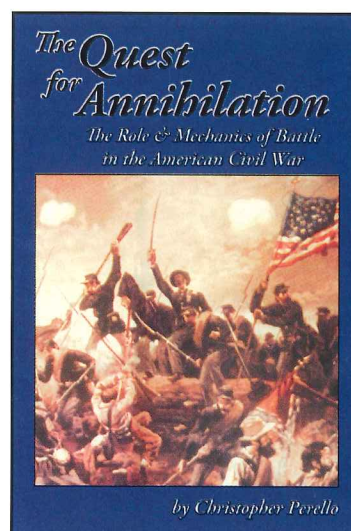
**Good Stuff:** The personal stories of those who lived through the death camps are always poignant; that this particular one is tied to one of the most interesting schemes dreamed up during the war makes it all the more compelling. In addition to pictures of the author, there are a number of photographs showing where and how the work was done, and several of the actual forgeries.

**Bad Stuff:** I cannot imagine what else could be added.

**Overall:** A small story and an unusual one, well worth the read.

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## Mega Feedback Results from issue #5

The Mega-Feedback survey for the games to be added to the schedule out to issue #25 ran in issue #5 and concurrently on the S&T Press web site. We appreciate all of the feedback about what readers would like to see in the magazine, what format after-publication rules support should take, and how folks are playing the games. Thanks again for all the feedback responses, suggestions, and letters of encouragement. We appreciate your support!

O.k., let's get down to the games we're adding to the schedule—below is a schedule by year and month of release.

In other questions, we asked about how games are getting played. Playing solitaire at least once a month was reported by 81% of respondents while 36% reported at least monthly games with live opponents (and another 27% play live at least once a year apparently at conventions and other annual events). Monthly use of the various computer formats (Cyberboard, Vassal, Aide de Camp, and HexWar) was reported at less than 10%

however huge interest was expressed in our planned line of computer games and subscription programs especially the games with AI support (30% already pledged for the subscription program and 58% more planned to subscribe or buy individual games). The first games are in beta testing at the time this issue went to press.

Two questions were asked about additional support for game rules after publication rules, one for magazine games and the other asking the same question regarding boxed games. No significant difference was present between the two formats. Respondents favored the current situation of living rules available for download by a majority (55%). Among the alternatives, 18% wanted errata/delta pages plus PDF updates, 16% wanted the PDF updates and either living rules or errata/pages, and 12% wanted the current system replaced with errata/delta pages. For now, we will continue with the current living rules system. The possibility of making PDF updates available 6-12 months after publication as a premium service is being discussed as a future possibility.

Issue #	Month	Game Topic & Lead Article
#8	Oct 09	Arriba Espana (the Spanish Civil War)
#9	Dec 09	Destruction of Army Group Center (Bomba's Drive system with the Soviets driving)
#10	Feb 10	Coral Sea (a solitaire game in which the player attempts to stop the Japanese drive)
#11	Apr 10	AfrikaKorps: Decision in the Desert (Miranda takes to the desert)
#12	Jun 10	1940 What-if (Bomba gives us a look at the Eastern alternative for 1940)
#13	Aug 10	Guards Tank (the first of the East Front Battles series)
#14	Oct 10	<i>Invasion Pearl</i> (What-if the Japanese followed their raid with a landing?)
#15	Dec 10	<i>Soft Underbelly</i> (1943 Italian Campaign)
#16	Feb 11	Partizan! (Resistance is not futile!)
#17	Apr 11	Leningrad (Miranda gives us Manila on the Baltic)
#18	Jun 11	New Guinea Campaign (using the Red Dragon system from S&T#250)
#19	Aug 11	Hardest Days (John Butterfield focuses on the critical period of the Battle over Britain)
#20	Oct 11	<i>Rhineland</i> (What-if the reoccupation had been opposed?)
#21	Dec 11	East Front Battles #2
#22	Feb 12	<i>Green Hell</i> (four battles for Burma: Admin Box, Imphal, Operation Thursday, and Meiktila)
#23	Apr 12	<i>Sedan</i> (the decisive battle of the 1940 French campaign)
#24	Jun 12	<i>Savoia</i> (battle of Keren)
#25	Aug 12	<i>Berlin Solitaire</i> (The player attempts to hold back the Soviet onslaught)



# War In Europe

Windows Edition

*War in Europe* is a computer-moderated simulation of the European Theater of Operations in World War II. There's no computer/AI player in the game; players make all the critical decisions. You decide on production schedules, declare war on neutral nations, and control the ground, air, sea and strategic forces of the Axis, Allied and Soviet powers in order to change or recreate the events of the war. The game is a division-level simulation, with some brigade and corps-sized ground units. Play takes place on a 159x133 hex map of Europe and North Africa. Naval power and air power are abstracted as points rather than on-map units, including: surface fleet, U-Boat, transport, amphibious assault, tactical air and strategic bomber points.

- ◆ Battle on three fronts—War in the West (two-player, Allies versus Axis); War in the East (two-player, Soviets versus Axis); and War in Europe (three-player, Axis versus Allies & Soviets).
- ◆ Select from 10 scenarios (shorter games focused on a single major offensive), or 16 campaigns (the whole war from a specified date through May '45 or the defeat of one side).
- ◆ A unique "tabbed" map display allows each player to define his own set of map views, while also allowing one-click switching between areas of interest.
- ◆ Multiple map overlays show the supply net, territory ownership, air range, and zones of control.
- ◆ Fully integrated PBEM mode, with autosend, inbox, browse mode and multiple file load/save tracking.
- ◆ Support for any screen resolution; multiple customizable map sets and customizable icons.
- ◆ Fully featured game editor for creation of new scenarios and campaigns; create new units, new setups, and edit the data tables used in the game.

**\$59.<sup>95</sup>**

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38	9	Asia, Australia

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V/MC #	Exp.
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Phone #	



### System requirements :

OS : Windows 98/ME/NT/2000/XP/Vista (XP/Vista recommended)  
 CPU : Pentium III 800Mhz (Pentium 4, 1.2Ghz recommended)  
 RAM : 128 MB (256 MB recommended)  
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# Decision Games...

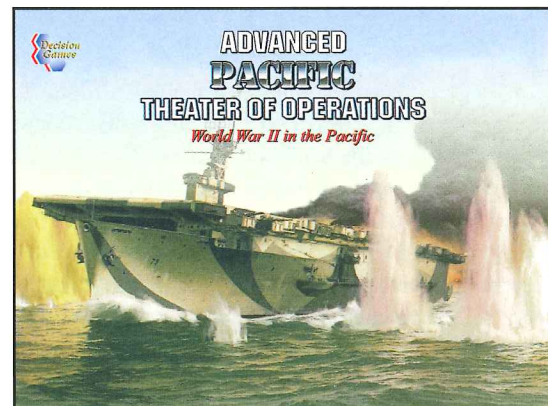
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Here is the Pacific Theater like never before. *Advanced Pacific Theater of Operations* is the most comprehensive game ever published on this topic, encompassing the entirety of the war in the Pacific. From the Japanese invasion of China in 1937 to the end of the war, the entire conflict is portrayed.

Like *Advanced ETO*, the forces in *APTO* are exactly accurate and have been exhaustively researched. There's no guesswork; every piece is based on the most thorough study ever devoted to a wargame. It even features all the Soviet and Japanese forces that engaged in the "Nomonhan Incident," along with the units of every nationality that fielded a military in the war. Indeed, this is actually a division-level game, and is even more detailed than the acclaimed *Advanced ETO*.

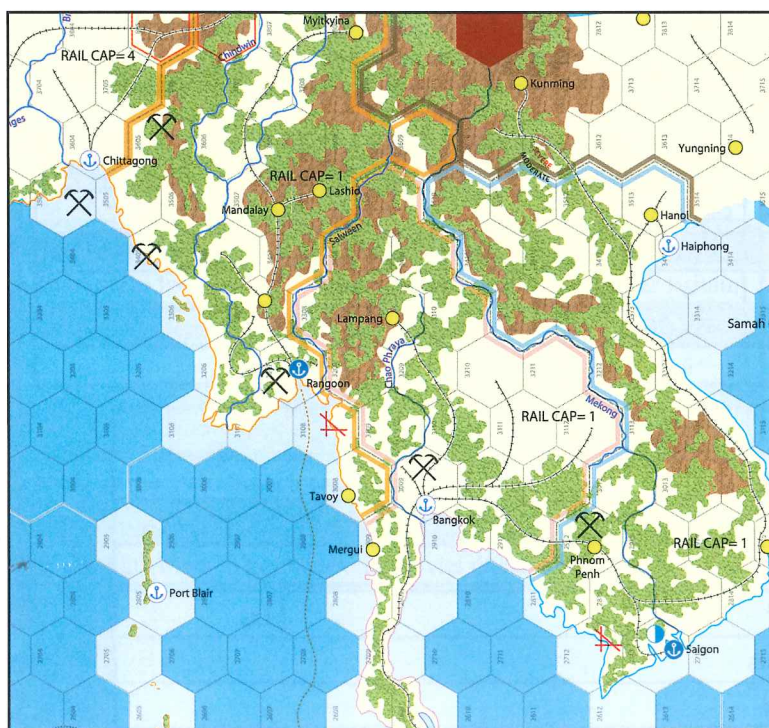
*APTO* and *AETO* can be linked to simulate the entire Second World War more accurately than any other game ever produced. This is more than an *AETO* supplement; though, in that it features special rules for: elite pilots, atomic bombs, midjet submarines, coast-watchers, tropical disease and more.

*Advanced PTO* is the most realistic yet playable game on the subject; it includes admirals and generals, every type of aircraft and every capital ship that existed in the Pacific Theater, and even some refits. *APTO* represents the ultimate blend of playability and detail. In conjunction with *AETO* and also *Africa Orientale Italiana* (the East African expansion for *AETO* and *APTO*), no World War II strategic series has ever been so all-encompassing, detailed, playable and realistic.



## Contents:

- 1,680 Die cut counters
- 2 34" x 22" Map
- 2 Rule booklets & 1 Scenario booklet
- Player Aid cards & display
- 3 Dice
- Storage bags





# Available Summer 2009

## Africa Orientale Italiana—AETO Expansion

The first game to cover the *entire* East African Theater of Operations during World War II, *Africa Orientale Italiana* (Italian East Africa or AOI) is designed to expand *Advanced European Theater of Operations* into Africa and the Middle East, as well as presage the general war in Europe, beginning with the Italian invasion of Ethiopia in 1935, and continuing into the Second World War as British and Italian forces fight for control of the vital Red Sea region.

AOI also includes an entire map of India and the Indian Ocean that will link to *Advanced Pacific Theater of Operations*, thus being the only corps-level World War II game ever published that connects every front of the war via uninterrupted hexagonal maps. Further, a Global Administrative Map is also included that allows you to manage off-map movement.

AOI also includes a full counter sheet (280 units) that features the Ethiopian order-of-battle, all the Italian and British forces that operated in East Africa, as well as a complete *AETO* upgrade that includes 40 new types of aircraft, such as the Me-163 Comet, the Mig-3, the PBY Catalina, and the Gloster Meteor. AOI also includes new rules specifically for *AETO*,



such as: combat veterans, naval night movement, mountain pass movement, fire bombing, German Flak, Manstein and more.

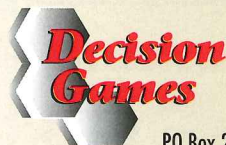
AOI also includes a map of Spain that adds additional Atlantic Ocean sea areas to AETO, and incorporates an entire Spanish Civil War scenario with a complete order-of-battle of Nationalist and Republican land, air and naval units. With AOI, AETO and APTO players can experience all of World War II. AOI has been designed to link with the AETO and APTO maps, or to be set-up alone as a scenario of the Ethiopian campaign.

*This is an expansion kit for Advanced European Theater of Operations. You must own the base game to play this expansion.*



QTY	Title	Price	Total
	Adv Pacific Theater Op.	\$120	
	Africa Orientale Italiana	\$40	
	Adv European Theater Op.	\$110	
	Shipping		

Name	
Address	
City/State/Zip	
Country	
V/MC #	Exp.
Signature	
Phone #	



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Bakersfield CA 93390  
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### Contents:

- 280 Die cut counters
- 1 34" x 22" Map
- 2 11" x 17" Maps
- 1 Rule booklet
- Player Aid cards & display
- Storage bags

SHIPPING CHARGES		
1 <sup>st</sup> unit	Adtl units	Type of Service
\$12	\$2	UPS Ground/USPS PM + \$5
24	4	Canada
34	8	Europe, South America
38	9	Asia, Australia



# New Games for 2009!

## D-Day at Omaha Beach 6 June 1944

*D-Day at Omaha Beach* recreates America's most bloody and heroic day of World War II. In this solitaire game from the designer of the solo classics *RAF* and *Ambush*, you control the forces of the US 1<sup>st</sup> and 29<sup>th</sup> Divisions landing under fire on the Normandy shore, and struggling desperately to establish a viable beachhead. The game is also great for two players playing cooperatively, each controlling one US division.

US units include assault infantry, amphibious tanks, artillery, engineers and HQs. The game system controls the hidden German defenders in *Widerstandsnest* resistance points on the bluffs overlooking the beaches. US forces that manage to break through the deadly coastal defenses and reach the high ground must then contend with German mobile reinforcements in the bewildering hedgerows of Normandy's *bocage*. An innovative diceless combat system highlights unknown enemy deployments and the importance of utilizing the right weapons and tactics.

Event cards keep the action flowing and the rules simple, while controlling German strategy and introducing extensive historical detail. The game includes amphibious landings, German artillery and rocket barrages, US naval bombardment, tides, engineer operations, and intangibles such as US leadership under fire and the initiative of the American GIs.

**Scenarios:** *The First Waves* (two to three hour playtime) introduces the basics of the game in a recreation of the initial assault. *Beyond the Beach* (four to five hours) picks up on the high ground at 10:00 a.m. and adds rules for German tactics. *D-Day at Omaha Beach* (seven hours) covers the entire day, from 6:15 a.m. to 6:00 p.m. Optional rules explore what-ifs, such as more pre-invasion bombardment or the arrival of German armor.

### Game Contents:

- 352 5/8" Counters
- One 34x22" Full-Color Game Map
- 55 Event Cards
- Rules Booklet
- Historical Study Booklet
- Player Aid Cards.

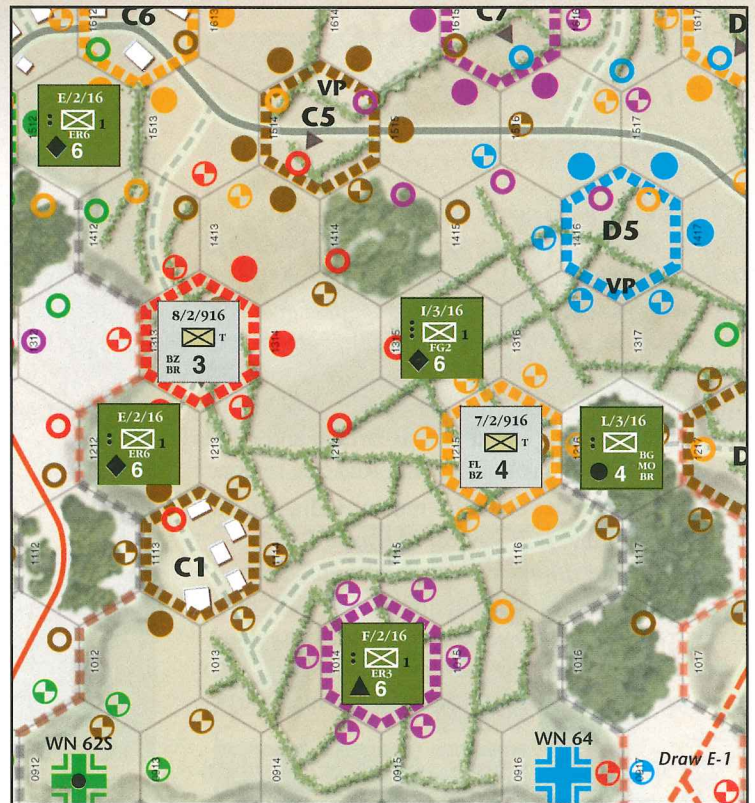
### Game Scale

Time: each turn equals 15 minutes in the basic game, 30 in the extended game.

Units: companies for both sides.

Map: each hex equals 275 yards (250 meters).

Players: one or two.



### Landing ♦A ▲A ●B

**2-10:** Germans report crisis. Place German reinforcements; 1 each in Zones A, C and G (9.3).

**11-20:** German Plunging Fire. Treat sporadic fire dots in beach hexes bordering protective hexsides as steady fire dots.

**21-31:** Take a naval fire marker (8.5).



02

### Landing ♦B ▲A ●A

**2-20:** Take a naval fire marker (8.5) and place a German reinforcement in Zone C (9.3).

**21-31:** Snipers target runners. Command radius for 16 HQ limited to one hex this turn.



2 88 105

06



**ALL NEW EDITION:  
SOLITAIRE & TWO-PLAYER**

# RAF

## The Battle of Britain, 1940

France has fallen. England stands alone against the might of a triumphant Germany, defended only by the Spitfire and Hurricane squadrons of the Royal Air Force. Hitler orders his mighty *Luftwaffe* to destroy the RAF in preparation for *Operation Sealion*—the invasion of England. German fighters and bombers fill the English skies and the RAF responds.

Now you command the RAF or the *Luftwaffe* in history's greatest air campaign—the Battle of Britain. Improving on his award winning solitaire classic, designer John Butterfield ramps up the historical accuracy, tension and play options with three complete games.

**RAF: Lion** puts you in control of British Fighter Command, responding to German raids.

The game's unique card system generates targets and forces, which may remain hidden until after you commit your squadrons. Your foe is no mindless system: the *Luftwaffe* has priorities and a strategy. Scenarios range from one raid day, taking an hour to complete, to the full campaign, playable in 12 hours.

**RAF: Eagle** puts you in control of the *Luftwaffe* forces raiding England. You schedule raids and assign missions to your bombers and fighters, attempting to deliver the knockout blow. Can you take out the British radar system and cripple their aircraft production? The game controls the RAF response to your strategies. How does a foe so close to defeat keep coming back?

**RAF: 2-Player** pits you against a live opponent, one controlling Fighter Command and the other the raiding *Luftwaffe* forces. Historical features include: German high command priorities, close escort, free hunt, the Channel Patrol, *Jabos*, day and night bombing, radar, the Observer Corps, weather, ULTRA intercepts, squadron patrols, "big wings," altitude advantage, ace squadrons and flak.

### Game Scale

**Time:** each game turn equals a "raid day" with six two-hour segments.

**Units:** British squadrons and German *Gruppen*.

**Map:** one inch equals 20 miles (32 kilometers).

### Contents:

- 176 Die cut counters
- 165 Cards
- 3 34" x 22" Map
- Rule booklets
- Player Aid cards & display
- 2 Dice
- Storage bags

**3 Days Elapsed** Repair 5

Replacements	Experienced Pilots
Hurricane 7	VPs 1
Spitfire 5	< -25 1
Blenheim 0	-24 to -10 2
German Fighter 5	-9 to +14 3
Level Bomber 4	> +14 4

**Event:**  
L: Increase Fighter Escort if ...  
• the VP total is +8 or higher, or  
• the Luftwaffe is depleted, or  
• the date is after 10 Sept.  
Add cards 87-90 to the Force deck, and cards 129-134 to the Raid Event deck. Reshuffle both decks.

**Approach Event**  
L: Channel Patrolers Hunt. raid target is coastal or inland.  
E: 2: Escort Rendezvous Failure. All [A] Gruppen in Close Escort box leave raid.

**Target Event**  
L: Secondary Target. All [C] Gruppen bomb secondary target.  
E: 2: Squadron turnaround.

**L: Time Advance:**  
2 [no AW]

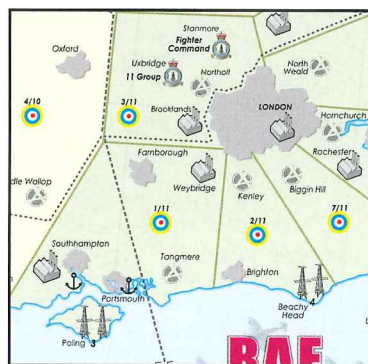
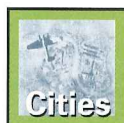
101

**Portsmouth** Coast  
Port 1/11 Strategic Value 3  
Luftflotte: 3 Me 109s: Yes  
Radar Nets: 2,3,4 OCV: 1/1/0

Warning:	N	L	S	E
Enroute: 1/11	1	2	3	3
In Range: 4/10	-	-	2	2
2/11	-	-	1	2
3/11, 7/11	-	-	-	1

Secondary Target:  
**Southampton** Industry

24



QTY	Title	Price	Total
	RAF: Lion vs Eagle	\$75	
	D-Day at Omaha Beach	\$55	
	Shipping		

Name	
Address	
City/State/Zip	
Country	
V/MC #	Exp.
Signature	
Phone #	



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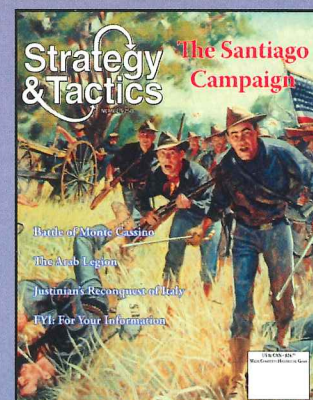
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\$12	\$2	UPS Ground/USPS PM + \$5
24	4	Canada
34	8	Europe, South America
38	9	Asia, Australia



# TURNING THE PAGES OF HISTORY

*Strategy & Tactics magazine covers all of military history and its future possibilities. The articles focus on the 'how' and 'why' of war, and are richly illustrated with maps, diagrams and photos. Use the subscription card or order online. Don't miss a single issue!*

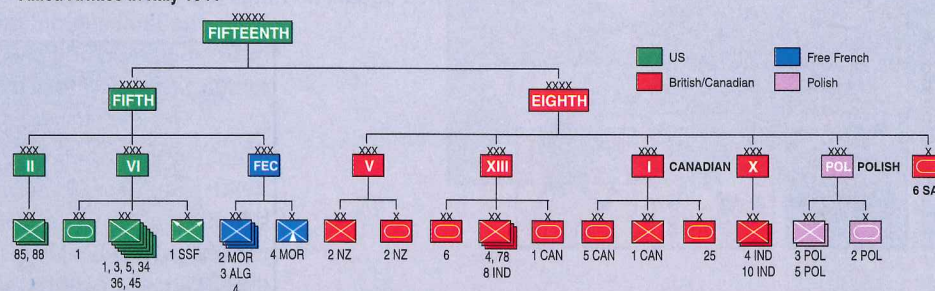


## IN-DEPTH ANALYSIS

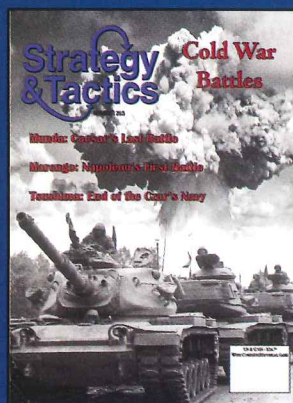


## DETAILED MAPS

Allied Armies in Italy 1944



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