



Long before D-Day, he had seen his faith in airpower borne out in combat.

Eisenhower,

Return from the fight. A B-26 Marauder, decked out in invasion stripes, passes over the secured Normandy beachhead on its return to England. Scores of these medium bombers and their escorts roared out to attack German positions on June 6, 1944, and afterward.

Master of Airpower

DWIGHT D. Eisenhower, the American general who led Allied forces in Europe to victory in World War II, was from the start a believer in airpower. In fact, Eisenhower's understanding of and appreciation for airpower led him in 1942 to make it the linchpin of the plan for what became the Normandy invasion of June 1944.

Over the years, the supreme commander learned hard lessons about the complexities of air allocation, air apportionment, and operational control, but in victory, he paid airpower an eloquent tribute. In his memoir, *Crusade in Europe*, Eisenhower wrote: "Foremost among the military lessons was the extraordinary and growing influence of the airplane in the waging of war."

Allied air forces became overpowering and, in Ike's words, "an ever-present asset of incalculable power." In the early years of the war, however, he took it mostly on faith that airpower could be decisive in the battles ahead. Where did he acquire this confidence in airpower? He was a pilot, having earned his license when stationed in the Philippines in the 1930s, but the education of this master of airpower really began years earlier.

Direct quotations throughout this article come from various sources. Among the most important, in addition to Eisenhower's *Crusade*, are

Stephen E. Ambrose, *Eisenhower*, Vol. I; Matthew Cooper, *The German Army, 1933–1945*; David Eisenhower, *Eisenhower at War, 1943–1945*; Edward M. Mark, *Aerial Interdiction: Air Power and the Land Battle in Three American Wars*; David R. Mets, *Master of Airpower: General Carl A. Spaatz*; and Samuel W. Mitcham Jr., *The Desert Fox in Normandy: Rommel's Defense of Fortress Europe*.

Eisenhower graduated from West Point in 1915 but never got to France for World War I. He took a course on tank warfare at Ft. Leavenworth, Kan., and then was assigned to a unit training to employ tanks. Eventually, he wound up in charge of a large tank training camp near Gettysburg, Pa. In November 1918, Eisenhower finally got orders to embark for France as commander of a tank unit building up to be part of a big Allied offensive in 1919. That thoroughly planned campaign was to revolve around large-scale use of tanks and aircraft in mobile warfare, and the young Eisenhower expected to be a key part of it. Then came the armistice.

"Open Warfare"

Nearly a decade later, in January 1927, Eisenhower went to Washington to work for Gen. John J. "Black Jack" Pershing, the retired general who had commanded the American Expeditionary Force in France and was in 1927 head of the American Battle Monuments Commission.

Eisenhower's job was to take World War I US unit histories and battle-field maps and write a guide to American actions in the Great War. His guidebook contained incredibly detailed accounts of highly mobile campaigns of 1918, where tanks and airplanes were used to good effect.

The act of writing the guidebook steeped Eisenhower in the intricacies of what Pershing liked to call "open warfare." These American battles did not feature the stalemates, trenches, and meat-grinder artillery duels that virtually defined combat on the Western Front for most of World War I. By the time American forces fought their major engagements, the conflict had changed, and doctrine stressed the advantages of speed and mobility.

The American and Allied air forces were thoroughly integrated into all of the major campaigns of 1918. The air arms of a thousand or more airplanes would seize air superiority each morning and then fly sorties to keep back German fighters and to bomb and strafe second echelon forces. Aircraft controlled back areas and protected tanks as they pressed ahead. Observers provided a constant stream of photos and intelligence both at the division level and to higher headquarters. The Allied commander, Marshal of France Ferdinand Foch, had an air intelligence picture of the battlefield refreshed with hourly updates. One grainy picture in Eisenhower's guidebook was captioned,



Comrades in Overlord. Before and during the invasion, Lt. Gen. Jimmy Doolittle (left) commanded Eighth Air Force, whose bombers did much to soften up Nazi forces in northern France for Eisenhower (right). The officer in the background is Maj. Gen. Frederick L. Anderson.

“German gun destroyed by American aviator.”

Pershing was pleased with Eisenhower’s work. He kept the younger officer on his staff for some months more to help redraft several chapters of his memoirs. In this position, Eisenhower wrote extensively on the mobile Argonne and St. Mihiel offensives where airpower had played a key role. Moreover, in the next year, Eisenhower took his family to Paris for 15 months so that he could work on a second edition of the guidebook.

All told, Eisenhower spent more than two years immersed in the details of early mobile ground and air warfare as it emerged in the last battles of World War I.

Eisenhower knew he had a future in the Army and, like many officers of the time, he believed there might be another European war. In the 1930s, Eisenhower served as chief military aide to Gen. Douglas MacArthur, the Army chief of staff. MacArthur wrote a fitness report that said simply, “This is the best officer in the Army. When the next war comes, he should go right to the top.” Eisenhower also demonstrated prowess in the field. In the Army’s Louisiana Maneuvers of 1941 Ike helped lead the Third Army to victory. That wargame featured extensive use of airpower, with fully 60 percent of the air-to-ground sorties devoted to interdiction, 22 percent to strikes on armor, and 18 percent given over to close air support

missions. The Louisiana Maneuvers demonstrated that Eisenhower and other Army leaders were well aware of the potential impact of airpower at the operational level of war.

One week after the Dec. 7, 1941, Japanese attack at Pearl Harbor, Eisenhower arrived at the War Department to work on the staff of the Army chief of staff, Gen. George C. Marshall. Marshall assigned him first to the desperate task of finding ways to reinforce the US position in the Pacific war, but Japan’s air superiority had put a stranglehold on theater operations. The Navy could not resupply the Philippines while the sea was controlled by Japanese land-based airpower. In February 1942, Eisenhower wrote in his diary that the US Navy should “quit building battleships and start on carriers and more carriers,” which indeed, the Navy was just beginning to do.

Origins of Overlord

It was not long before Marshall gave Eisenhower the task of drawing up plans for what became known as Overlord, the invasion of Nazi-controlled Europe. In early 1942, the Americans were about the only ones who believed an invasion of northern Europe would work, but the belief was strong and constant. According to Eisenhower, the use of airpower was “the keynote of the invasion plan.” American war plans from the outset

incorporated “independent” airpower as a means to shape and control the deep battlespace. In this, Eisenhower was backed by Marshall, another prominent believer in airpower.

At the core of the plan lay determination to win control of the air and use air attacks to strike deep at German forces. As Eisenhower recalled, the plan was based on “the conviction that, through an overpowering air force, numbering its combat strength in thousands rather than in hundreds, the German’s defenses could be beaten down or neutralized, his communications so badly impaired as to make counter-concentration difficult, his air force swept from the skies.”

In June 1942, Marshall made a fateful move. Eisenhower had pointed out that the Army Air Corps would be the first American organization to go to war against the Axis forces in Europe. For that reason, he recommended that Marshall send an Army Air Corps officer to London to oversee the buildup there and commence planning. Eisenhower recommended Maj. Gen. Joseph T. McNarney because, in Eisenhower’s words, “McNarney firmly believed in the Air Force’s ability to make ground invasion of France possible.”

Marshall sent Eisenhower instead.

Well before Normandy, then, Eisenhower had chances to test his faith in airpower as a deep striking force, and he and his commanders learned difficult but profitable lessons. North Africa came first. Disasters at Kasserine Pass and elsewhere thoroughly discredited the idea of parceling out control of aircraft to local ground commanders and demonstrated the need for central control of air forces.

Close Call at Salerno

Lesson No. 2 came with the invasion of Salerno, Italy, on Sept. 9, 1943. Three reinforced Allied divisions totaling 60,000 troops came ashore against just one German division, the 16th Panzer, which was stretched across a 20-mile sector. Allied aircraft suffered from range limitations. Only heavy bombers could reach railroad targets from bases in North Africa. They struck Italian marshaling yards, rolling stock, and roads in an effort to cut off the Germans. But it did not work. Two other Panzer divisions drove 130 miles north to Salerno and

were in the line by Sept. 11. Two days later, the Germans brought up elements of two Panzer corps from 100 miles away, and two other Panzer units raced 200 miles to join the line near Salerno.

On Sept. 13, the Germans counterattacked, pushing to within two or three miles of the beachhead and inflicting heavy casualties on the American 36th Division. Eisenhower ordered his air commander, British Air Chief Marshal Sir Arthur W. Tedder, to send “every plane that could fly” to hit “sensitive spots in the German formations.”

On Sept. 14, the fighters surged from less than 100 to almost 600 sorties over the battlefield. Bombers from North Africa flew 2,000 deep-interdiction sorties covering some areas of the battlefield with tons of bombs. Eisenhower acknowledged that his deputies had warned him about not having enough air cover. He wired the combined chiefs of staff that he would “give up my next year’s pay for two or three extra heavy groups right this minute.”

The surge in airpower helped hold Salerno. A German commander later commented that “from 13 September on, any forward movement of reserves or any other movement on the field of battle resulted immediately in attacks by Allied air forces,” according to an Air Force report. Eisenhower said of the air offensive: “So badly did it disrupt the enemy’s communications, supplies, and mobility that, with the

aid of naval gunfire, the ground troops regained the initiative and thereafter German counterattacks were never in sufficient strength to threaten our general position.”

However, it was a close call. Eisenhower later admitted that, “in some respects, the operation looked foolhardy, but it was undertaken because of our faith in the ability of the air forces, by concentrating their striking power, to give air cover and emergency assistance to the beachhead” and because of naval gunfire.

Need To Do Better

Still, the struggle at Salerno pointed out that the Allies would have to do a much better job of isolating the landing areas and hitting German forces while they moved into position for the counterattack.

Four months later, at Anzio, Italy, airpower again failed to isolate the battlefield or break up the German redeployment to counterattack. Eisenhower had returned to London, but he and the Allies watched from afar this second attempt to slow German reinforcements with airpower.

The Allies landed almost unopposed at Anzio on Jan. 22, 1944. However, the German commander, Field Marshal Albert von Kesselring, soon had elements of 14 divisions converging on Anzio. Some came by rail from as far away as Avignon, France, and Yugoslavia. The Allied breakout attack on Jan. 30 was repulsed, and the Allies took up defensive positions,

eventually holding off the German counterattack on Feb. 16.

The German general who had to explain the failure to Hitler said they needed more allocations of ammunition, “but that it was impossible to bring them to the front, owing to the daily severance of rail communications in Italy by bombing attacks.”

Air interdiction had some impact, but the failure to restrict German maneuver doomed the Allies to spend four months on the defensive while the British and American navies brought them supplies.

Salerno and Anzio showed that air superiority was a prerequisite for ground operations. The Germans were vulnerable to air attack while on the move, but these deep attacks would have to come faster. For Normandy to succeed, the air plan would have to work much better than it had in Italy.

By February of 1944, Eisenhower knew what he had to do to apply airpower to make the invasion succeed. His priorities were clear. He wanted airpower to isolate the Normandy battlefield and was willing to try any combination of tactics to make it happen. Eisenhower also wanted command of all air units—from fighters to heavy bombers, American and British—while preparing for and executing Overlord.

The Key Three

Eisenhower’s plans had three key elements. First, as all agreed, the Allies must have air superiority. Next, they had to thwart the arrival of enemy reinforcements by decimating the French rail system. The Germans had 58 divisions in the west, and their strategy was to counterattack against any invasion with a mobile reserve commanded by Field Marshal Erwin Rommel, in tactical charge of defending forces. Finally, Eisenhower planned for airpower to disrupt the Panzers in Army Group West and parry a counterattack that could defeat the landing force.

To make this happen, Eisenhower first had to win agreement from his British and American allies that he would control all aircraft and allocate their striking power in accordance with his plan to isolate Normandy and interdict the Panzers. He had to overcome British concerns about French civilian casualties and resistance from some airmen eager to



Pulverized from above. A US soldier surveys bomber damage to a German gun emplacement in France. Much of the Nazis’ vaunted “Atlantic Wall” looked like this after heavy and medium bombers did their work preparatory to D-Day.



Battle scarred. Ground crew members rush to use foamite to extinguish a fire that started when the wounded pilot of this heavily damaged P-47 crash-landed at a newly created base in France.

bomb oil facilities to debilitate the Luftwaffe.

On the last Saturday in March 1944, Eisenhower convened a meeting to settle the issues. On the Wednesday prior, he grimly thought through the idea that if he did not get the decision he wanted, "I am going to take drastic action and inform the combined chiefs of staff that unless the matter is settled at once I will request relief from this command." Many issues plagued Eisenhower that spring, but this was the only one that made him consider calling it quits. It was an indication of the importance that he attached to the full use of airpower.

When the Saturday meeting began, everyone agreed that the German air force targets were still top priority. Big Luftwaffe losses were beginning to bite, and worse was soon to come. Yet the military leaders disagreed over other targets. Lt. Gen. Carl A. "Tooey" Spaatz, commander of the US Strategic Air Forces in Europe, presented the case for concentrating on oil targets because he thought attacks on the transport system would not bring up the German fighters, whereas "we believe they will defend oil to their last fighter plane."

What Eisenhower really wanted was to defeat the German air force and hinder transportation so that the Germans could not maneuver rapidly to oppose the landing

in strength. Germany had large stocks of oil in Normandy, probably enough for the critical early phases of the battle. Perhaps more important, German forces already had 12 Panzer divisions in the west. Eisenhower reminded the group that the whole plan was "conditioned on no more than 12," with three near the landing areas. To Eisenhower, "delaying the arrival of one division would be worthwhile." This was the key Eisenhower had identified two years earlier: making Allied air supreme over Normandy at the

right moment to prevent effective German maneuver.

Eisenhower won his point. All aircraft were to come under his control by mid-April 1944.

Rommel's Intuition

Rommel nearly figured out what Eisenhower was trying to do. The "Desert Fox" noticed that "Allied airplanes were bombing all the bridges into Normandy, as if they were trying to isolate it." He began to suspect that Normandy would be the landing site. "My only real anxiety," Rommel wrote in April, was that "any large-scale movement of motorized forces to the coast will be exposed to air attacks of tremendous weight and long duration." To compensate, he moved troops closer to the coast and put them to work building more obstacles on the beaches.

It was too late. By the end of April, the Germans had to move 18,000 workers out of Normandy, where they were building defenses, and set them to work repairing railways. Another 10,000 workers were moved in May. The air attacks slowed down coal shipments to the plants that were churning out concrete to build defensive positions in Normandy. The plant that was Rommel's main source closed down.

When the Allied invasion came, Rommel's real dilemma would be how to move infantry to the landing zone to hold the line at a time when he was forming up the key Panzer



Maximum vulnerability. Allied troops swarm ashore during one of the most courageous military operations in history. As this photo demonstrates, command of the air over the beaches was of critical importance.

divisions being held in reserve. The infantry traveled by rail, but the Panzers moved with their own tanks and trucks. Speed was vital. "If we cannot get at the enemy immediately after he lands, we will never be able to make another move, because of his vastly superior air forces," Rommel told his boss that spring. "If we are not able to repulse the enemy at sea or throw him off the mainland in the first 48 hours, then the invasion will have succeeded and the war will be lost."

The air attacks on French railways would make it nearly impossible to move infantry and supplies. The Germans had been moving 100 trains a day into Normandy, but in April, the average fell to 48 per day, and by the end of May, to fewer than 20. By D-Day, June 6, the Allies had cut every railway bridge over the Seine south of Paris. "Normandy was, for all practical purposes, a strategic island," concluded one scholar.

Rommel was in Germany on June 6. As he raced back to Normandy, his counterattack was already being put into motion. It depended on moving up three key units: 21st Panzer, 12th SS Panzer, and Panzer Lehr. But his units were already in trouble. The 21st Panzer Division had a hesitant commander who committed it first against Allied paratroopers, then sent it toward Caen, France, after noon on June 6.

Hitler released the 12th SS Panzer Division and Panzer Lehr in the afternoon on June 6. When the 12th SS Panzer Division began to move toward Caen at 4 p.m. on D-Day, clearing weather exposed it to Allied air attack. Air attack halted the division's movement until night came, and it did not reach its designated area near Caen until June 8. It averaged only four miles an hour on its 44-mile journey and ran out of fuel as it reached the battle zone.

Panzer Lehr, the best of the three divisions, had 90 miles to go to reach Caen. Allied aircraft detected Panzer Lehr's movement late on the afternoon of June 6. "Air attacks had been severe in daylight and everyone knew everything that could fly would



Beginning of the end. Roadways suddenly materialize as long lines of Allied troops and materiel stream into Hitler's "Fortress Europa." A flow of troops onto the Continent marked the first step in the German collapse in the West.

support the invasion," said Panzer Lehr's commander, Gen. Fritz Bayerlein. "My request for a delay until twilight was refused. We moved as ordered and immediately came under air attack. I lost 20 or 30 vehicles by nightfall," said Bayerlein.

"Serious Losses"

At daylight Bayerlein received a direct order to proceed. According to an Air Force report, he recalled: "The first air attack came about half-past five that morning, near Falaise. By noon it was terrible; my men were calling the main road from Vire to Beny-Bocage a fighter-bomber racecourse. Road junctions were bombed and a bridge knocked out at Conde. This did not stop my tanks, but it hampered other vehicles. By the end of the day [June 7] I had lost 40 tank trucks carrying fuel and 90 others. Five of my tanks were knocked out and 84 half-tracks, prime-movers, and self-propelled guns." Bayerlein concluded: "These were serious losses for a division not yet in action."

Rommel's first counterattack, planned for June 7, simply never happened. Panzer Lehr straggled to Caen on June 8. Air attacks debilitated command post communications. Panzer Group West headquarters delayed the counteroffensive to June

9. The attack of June 9 met an almost simultaneous offensive by British forces. In the midst of the fighting, Allied aircraft found Panzer Group West headquarters and decimated it. Rommel himself had left the headquarters only an hour before the bombing.

On June 10, Rommel concluded that Allied air superiority had been the No. 1 reason for his enemy's success and his own failure. Rommel reported: "The enemy has complete command of the air over the battle up to about 100 kilometers behind the front and cuts off by day ... almost all traffic on roads, or byroads, or in open country." Air superiority almost entirely prevented movement of German forces by day. His one chance to push the Allies back into the sea was gone.

Eisenhower's masterful planning succeeded, and his faith in airpower was vindicated. It did not decide every one of the countless individual engagements of infantry and tanks that made the Normandy campaign an Allied victory, but it was air attack that isolated the Germans in Normandy and blocked Rommel's plan for a rapid counterattack. As late as June 18, just five German armored divisions had arrived in Normandy.

By taking the initiative away from Rommel, Allied airpower spoiled Germany's best chance for defeating the invasion and protecting Festung Europa—just as Eisenhower had planned. ■

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