The recipe for a successful flag officer includes four essential ingredients: (1) the luck of Vince Lombardi, who said, "Luck is the residue of hard work and skill"; (2) the killer instinct of Robert E. Lee—not just the desire to destroy one's enemy, something any soldier must have, but the ability to send men one admires and respects to their death; (3) the perseverance of George Washington; and (4) the ability of George C. Marshall to inspire the trust of both subordinates and superiors. A survey of the actions and decisions of Gen Carl A. Spaatz, US Army Air Forces (AAF), during the first six months of 1944 confirms that he had these qualities.

Luck boils down to the favorable resolution of uncontrollable variables. The manner in which generals exploit these gifts determines their fate. The shortcomings of Spaatz's enemies presented him an opportunity. The breaking of high-level German ciphers, sent via the supposedly secure Enigma code machine, vouchsafed all Allied commanders unparalleled knowledge of their enemies' intentions and situation. Vital German targets, such as synthetic oil plants and large marshaling yards, used the Enigma machine to pass damage reports to Berlin, giving the Americans instant and accurate bomb damage assessments. Intercepts of Luftwaffe traffic also validated the effectiveness of American air tactics.1

The very nature of the Nazi state and ideology played into the hands of Allied air leaders. Hitler's personal isolation, coupled with his propensity to divide responsibility for the war economy into competing fiefdoms, all dependent upon himself, resulted in staggering mismanagement. With the notable exception of Albert Speer, the highest Nazi leadership had little conception of the industrial process. Almost all major German war-production decisions and priorities rested not on economic efficiency, but on the self-interest of the entities involved.

Not only did the Nazis fritter away their industrial strength, but also their ideology and individual outlook sapped their efforts. Having gained power using tactics of terror and intimidation, Hitler preferred retaliation to passive defensive measures. Resources expended on V weapons produced technical triumphs—but at the direct expense of aircraft production. Had the Germans decided to focus on fighter production and to concentrate that production in defense of the industry in 1942 instead of 1944, Spaatz's task would have proved far more formidable.2

Spaatz possessed resources far greater than those of his predecessor Ira Eaker, for whom increases in force had come slowly. Indeed, the pipeline overflowed for Spaatz. Eighth Air Force needed 17 months to reach 20½ bomb groups, and its first long-range P-38 fighter escorts did not become operational until the day after the second Schweinfurt raid of 14 October 1943. Fifteenth Air Force, established on 1 November 1943, began life with the six heavy bomb groups that had been in the Mediterranean since May 1943. By May 1944, the Eighth had grown to 41 heavy
groups, and the Fifteenth to 21. Fighter groups in Eighth Air Force and Ninth Air Force, the latter on call to fly escort for the Eighth, grew from 12 to 33 groups. Many of these groups were equipped with the extremely long range P-51 fighter and were capable of using range-extending drop tanks, whose production bottlenecks had been solved. Finally, the introduction of radar bombing devices in the fall of 1943 allowed for bombing through clouds, but only with extreme inaccuracy. Bombing through complete overcast caused only one bomb in 70 to land within one-half mile of the aiming point. Bombing a target a mile in diameter, in good visual weather, however, was 50 times more accurate. Spaatz and his lieutenants James H. Doolittle (Eighth Air Force) and Nathan F. Twining (Fifteenth Air Force) capitalized on German inefficiency and American prodigality by greatly increasing their rates of operation. The combination of more sorties and more aircraft gave Spaatz a far bigger hammer than Eaker’s.

Spaatz, like other generals, was a killer of men. In the winter and spring of 1944, he began a campaign of straightforward attrition against the Luftwaffe’s day-fighter force for the purpose of extinguishing its capacity to interfere with American bomber operations and the upcoming cross-channel invasion. This air campaign would eviscerate the Luftwaffe’s air leadership cadres, forcing it into a descending spiral of inexperience and increasing losses from operations and accidents. Within a few weeks of his arrival in London, in late December 1943, he authorized Doolittle to implement the fighter escort tactics the two men had already employed in the Mediterranean. Instead of maintaining close escort, which forced American fighters to absorb the first blow, Doolittle ordered his fighters to take the initiative by attacking and pursuing German fighters. Spaatz and Doolittle
fter risked their bombers in order to expose the enemy. As aerial combat raged and as escort fighters flew to and from their rendezvous with the bomber stream, fighter pilots found themselves at low altitudes and proceeded to strafe targets of opportunity. When Enigma intercepts alerted American air leaders that this caused havoc, Spaatz encouraged the practice. The enemy responded by setting up flak traps at likely strafing targets, which killed, wounded, or resulted in the capture of more American fighter pilots than any other tactic. Spaatz continued the low-level attacks until April 1945. Soon the Luftwaffe could no longer conduct any operations, including training and air transport, without fear of interference.

In order to force the Luftwaffe to accept battle, Spaatz ordered a continuing series of deep-penetration missions into the Reich. Starting on 11 January 1944, Americans attacked the German air industry, and both sides suffered heavy losses. When cloud cover prevented precision bombing of air plants or other specific targets, Spaatz ordered area raids on German cities, particularly Frankfurt. Forty percent of all such raids ordered or authorized by Eighth Air Force took place between February and May 1944. The Germans either opposed the raids, as they usually did, or allowed unopposed city attacks at the cost of civilian morale and production. In mid-February, under orders from Arnold, Spaatz and Doolittle—without protest—extended the bomber crews’ combat tour from 25 to 30 missions. At the end of the month, the Americans conducted Operation Argument or “Big Week,” which dealt a body blow to the enemy air industry. Spaatz was determined to initiate and continue the operation, even if it cost two hundred bombers on the first day. After Big Week, Spaatz wished to switch priorities to the German synthetic oil industry, a target system whose sovereign importance to the entire German war machine would require the Luftwaffe to defend it or die trying. As discussed below, this change was delayed until May.

Thus, at the beginning of March, Spaatz ordered a series of area attacks on Berlin that went straight over the top, making no attempt to conceal their intentions and targets from the defenders. The importance of the city as an industrial, transportation, and administrative center guaranteed a fierce response. In its first major attack on the German capital on 6 March, the Eighth lost 69 heavy bombers—the highest number ever lost on a single mission. On 8 March, the Americans lost another 37 bombers over the “Big B,” but the next mission saw no aerial opposition. By 6 June, the Americans had achieved daylight air superiority over Europe at the cost of over twenty-seven hundred bombers, almost one thousand fighters, and over 18,000 casualties—50 percent more than they had lost in all of 1942 and 1943 combined.

Spaatz’s ability to persevere reflected the courage of his convictions. In the months preceding the cross-channel invasion, one question directly affected Spaatz—in what manner could strategic bombers best aid the invasion? Gen Dwight Eisenhower’s air component commander, Air Chief Marshal (ACM) Trafford Leigh-Mallory, and Eisenhower’s deputy supreme commander, ACM Arthur Tedder, advocated the transportation plan, which called for attritional bombing of the French and Belgian rail systems to render them incapable of allowing speedy reinforcement or easy logistical support of German forces opposing the invasion. Spaatz’s headquarters originated a competing oil plan that called first for the destruction of refineries at Ploesti, Romania—the principal source of natural oil for the Axis—and then the destruction of the synthetic oil industry. Loss of oil would fatally hamper any German source to the invasion and the Soviet summer offensive.

The oil plan was the quintessential strategic bombing plan. By destroying a compact and absolutely crucial target system, with only three weeks of visual bombing, airpower would make an important contribution to the end of the war. For Spaatz, the oil plan had an additional advantage: it allowed the Americans to continue the attrition of the Luftwaffe and to fly precision missions into Germany, which justified AAF strategic doc-
"The introduction of radar bombing devices in the fall of 1943 allowed for bombing through clouds, but only with extreme inaccuracy. Bombing through complete overcast caused only one bomb in 70 to land within one-half mile of the aiming point."

After bitter bureaucratic infighting among Allied ground and air staffs, Eisenhower chose the transportation plan on 25 March because it offered measurable results; the effects of the oil plan, although logical, could not be verified with existing Allied intelligence.

As is true of every major decision—whether military, corporate, or political—one faction or person will not accept that decision as final. In April 1944, Spaatz was that person. Throughout March, ACM Charles Portal, the Royal Air Force (RAF) chief of staff and the officer charged with direction of the Combined Bomber Offensive by the Combined Chiefs of Staff, had refused to allow Spaatz to order Fifteenth Air Force to attack the Ploesti oil complex, producer of 25 percent of Germany's oil. Portal did not want to draw the Fifteenth away from its duties to Operation Pointblank and its assistance to the Allied ground forces; further, Portal regarded the bombing of Balkan rail yards as more militarily effective than bombing oil fields. An attack on the Romanian fields would also strengthen Spaatz's hand in the oil-versus-transportation dispute. It made little sense to strike Ploesti, forcing a greater German reliance on synthetic oil, and then ignore that target system.

On 5 April, Spaatz resorted to subterfuge. Under the guise of attacking Ploesti's main rail yard (each oil refinery also had its own such yard), the Fifteenth made its first raid on Romanian oil. As the official history of the AAF noted with some satisfaction, "Most of the 588 tons of bombs, with more than coincidental accuracy, struck and badly damaged the Astra group of refineries." On 15 and 26 April, the Fifteenth returned, again somehow missing the main rail yard and unfortunately damaging more Axis refineries. As a result of this "transportation" bombing, German im-
Oil targets. In late April 1944, Reichsminister Albert Speer complained that “the enemy has struck us at one of our weakest points. If [he] persists at this time, we will soon no longer have any fuel production worth mentioning.”
ports of finished petroleum products fell from 186,000 tons in March to 104,000 tons in April.\textsuperscript{12}

In the United Kingdom, the Eighth continued its duel with the Luftwaffe day fighters. On 18 and 19 April, however, the Germans offered little resistance to missions near Berlin and Kassel. Rather than elating Spaatz, this circumstance seemed to confirm one of his worst fears—that the Germans had begun a policy of conservation in anticipation of the invasion. Also on 19 April, the British invoked the emergency clause in their agreements with the Americans. Specifically, Tedder informed Spaatz that the threat of the German V-1 rocket had caused the War Cabinet to declare the security of the British Isles at risk. Tedder thereupon moved Operation Crossbow—bombing the V sites—to number-one priority, ahead of the Luftwaffe.\textsuperscript{13} The British move threatened to gut the AAF’s entire bombing effort at precisely the time Spaatz needed to offer the Luftwaffe more provocation to fight. The Luftwaffe never bothered to resist Crossbow bombing.

Spaatz went to Eisenhower that evening and found the supreme commander upset with the AAF. First, in spite of the decision of 25 March in favor of transportation, the Eighth had yet to bomb a single transportation target, with the invasion only seven weeks distant. Second, on the previous evening, Maj Gen Henry Miller, a member of Spaatz’s staff, had gotten drunk at a night club in London and had proceeded to take bets that the invasion would occur before 15 June. Spaatz responded promptly, phoning Eisenhower and placing Miller under house arrest. Eisenhower followed up by demoting Miller to colonel and returning him to the States.\textsuperscript{14} The discussion of policy matters took longer and generated more heat. Spaatz even may have threatened to resign.

At last, Eisenhower agreed to allow the Eighth to use two visual-bombing days before the invasion to strike oil targets, in order to test the Luftwaffe’s reaction. For his part, Spaatz appears to have agreed to devote more energy to transportation bombing. The next morning, Spaatz visited Tedder.\textsuperscript{15} They
agreed that on the next suitable day, the Eighth would raid Crossbow targets and that on the next two suitable days, the Americans would hit oil targets. That day, Doolittle sent almost nine hundred heavy bombers against Crossbow. On 22 April, Spaatz began to fulfill his other pledge—638 bombers attacked Hamm, the largest rail yard in Europe. Not until 12 May did weather allow oil strikes.

The first oil strike vindicated Spaatz’s judgments. The eight hundred attacking bombers hit six synthetic plants and lost 46 bombers. The Germans reacted strongly, and the American escort of 735 fighters claimed 61 destroyed in the air and five on the ground. Luftwaffe records confirmed 28 pilots dead, 26 wounded, and 65 fighters lost. Enigma messages revealed the Germans’ immediate and alarmed response. On 13 May, the Luftwaffe ordered the transfer of anti aircraft guns from fighter production plants and the eastern front to synthetic oil facilities. A week later, an order from Hitler’s headquarters ordered increased conversion of motor vehicles to highly inefficient wood generators. When Tedder heard of the intercepts, he remarked, “It looks like we’ll have to give the customer what he wants.” A week after the raid, Speer reported to Hitler that “the enemy has struck us at one of our weakest points. If [he] persists at this time, we will soon no longer have any fuel production worth mentioning. Our one hope is that the other side has an air force General Staff as scatterbrained as our own.”

In that, he was disappointed. Once the invasion was established ashore, the Anglo-Allies moved oil targets to the highest priority, where they remained until the end of the war.

Spaatz possessed a good measure of the fourth necessary ingredient of a successful general—the ability to inspire trust in both superiors and subordinates. His chief lieutenant, Jimmy Doolittle, in an oral-history interview with Ronald R. Fogleman, then a major, stated, “I idolize General Spaatz. He is perhaps the only man that I have ever been closely associated with whom I have never known to make a bad decision.” This praise, coming from a man of enormous physical and moral courage and high intellect, speaks for itself.

In the much smaller circle of his superiors, Spaatz also inspired great trust. He was Arnold’s personal friend, confidant, and favorite.
purposely placed Spaatz in positions that would increase his stature and influence, not so much because his actions would reflect favorably on Arnold, but because he knew that Spaatz’s first loyalty was to the service. Arnold’s abiding trust and confidence meant that Spaatz always had support in the highest areas of decision making.

Spaatz also earned Eisenhower’s esteem. From June 1942 through May 1945, the two worked hand in hand, becoming close friends—even to the unlikely extent of Spaatz playing the guitar to accompany the supreme commander’s singing when the two relaxed at parties. However, the friendship did not interfere with Eisenhower’s judgment. In June 1943, he wrote of Spaatz, “I have an impression he is not tough and hard enough personally to meet the full requirements of his high position.” 21

By January 1945, Ike had changed his opinion. In urging Spaatz’s promotion to a fourth star, he declared that “no one could tell him that Spaatz was not the best operational airman in the world, [though] he was not a paper man, couldn’t write what he wanted, and couldn’t conduct himself at a conference, but he had the utmost respect from every body, ground and air, in the theater.” 22

In February 1945, Eisenhower ranked Omar Bradley and Spaatz equally, calling them the two American officers who contributed most to the Allied victory in Europe. He described Spaatz as an “experienced and able air leader; loyal and cooperative; modest and selfless; always reliable.” 23 That is an accurate and concise summary of the tongue-tied fighter pilot who became a successful general and was responsible as anyone for the happy outcome of the Normandy invasion.

Notes


6. Ibid.


15. Ibid., 392-93.


17. AAF, Ultra and the History of the United States Strategic Air Forces in Europe vs. the German Air Force (Frederick, Md.: University Publications of America, 1985), 98-99. This is a reprint of National Security Agency Special Research History no. 13 (SRH-13), written by USSTAF in September 1945.


