Airpower:

The Decisive Force That Won the Ardennes Campaign

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Table of Contents:

Introduction

In the early morning hours of 16 December 1944, *Wehrmacht* ground troops and armored columns swelled westward, into the Ardennes Forest, surprising Allied forces. Masterminded by Hitler himself, the attack was dubbed Operation *Herbstnebel* (Autumn Fog). Simultaneously, through Operation *Greif*, the *Luftwaffe* dropped *Fallschrimjager* (paratroopers) behind Allied Lines to disrupt Allied communication. Initially caught off guard, Allied Forces scrambled to respond and over the next several weeks struggled to defend this vital piece of territory, located between the port of Antwerp and the Siegfried Line. The onslaught of German soldiers and vehicles created a deep salient heading westward, and it was this shape which would give the clash its more famous name: Battle of the Bulge. The attacks kept coming in waves and it was soon clear that this was no "mere spoiling attack."[1] At St. Dizier, Colonel Garrett Jackson of the 405th Fighter Group "roused his men from their sleep to defend their airfield."[2] *Wehrmacht* strategists had purposefully chosen a window of inclement weather to launch this offensive, in the hopes of keeping Allied air power immobilized. Two flights that did make it out that first day belonged to Lieutenant Charles Doony and Captain Woirol, pilots from the IX Tactical Air Command. They provided crucial air cover for the U.S. Army VII Corps, as it feverishly defended the town of St. Vith, an important crossroads and early objective of the *Wehrmacht*. Other fighter squadrons conducted similar desperate strikes as *Panzers* attacked from Malmedy, in the North, to Weiler, in the South.[3]

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[1] Thomas Hughes, *Over lord: General Pete Quesada and the triumph of tactical air power in World War II* (New York: The Free Press, 1995), 272.
[2] Hughes, *Over lord: General Pete Quesada,* 271.
[3] Niel Maclachlan, *Flight Records of the 509th Fighter Squadron*, (Montgomery, AL: Maxwell Air Force base, 1945), 6.

Major Harry A. Franck, who served as the Ninth Air Force's weather officer during the Battle of the Bulge, remembers the tactical difficulties of those confusing, early days. He explains how the Ninth's pilots were forced to relearn their dogfighting skills after the reappearance of the *Luftwaffe* on 16 December. Since a majority of the missions by the Ninth since D-Day had been providing air to ground support, the required skills to dogfight had become lax. Franck's book *Winter Journey through the Ninth Air Force* indicates that the American airmen adapted quickly and were soon as effective as ever. At the same time, close air support missions continued and Franck explains in detail how American airmen and Air Coordination Officers (ACOs) on the ground coordinated strikes at enemy targets.[4]

While books and movies such as *Battleground* and *Band of Brothers* often glorify the ground portion of the Bulge, air power decided this victory, which hastened the end of World War II. Air power executed the following five critical functions. First, sorties punctured deep into German held territory to provide reconnaissance photographs of troop movements, railroad junctions, amassed supplies, the oil industry and valuable potential targets. Of these, oil and gasoline would prove to be lynchpin resources; their scarcity during and following the Battle of the Bulge drove the German war machine back towards the Rhine region. Second, fighter-bombers such as the P-47, P-38, and P-51 had wing mounted machine guns capable of destroying armored vehicles and tanks. Third, these planes also decimated the German *Luftwaffe* to such a degree that the German leadership began to perceive they would be defeated. Fourth, cargo planes such as the C-47 dropped essential supplies to Allied ground forces that were under siege defending the pivotal town of Bastogne for six days. Fifth and

[4] Harry A. Franck, *Winter Journey through the Ninth: The Story of Tactical Air Power as illustrated by the exploits of the Ninth Air Force in Europe* (Tuscan, Arizona: Prince of the Road Press, 2001).

finally, expanding on a working concept that emerged during the D-day invasion, fighter-bombers communicated with ACO (Air Coordination Officers) on the ground to synchronize the aerial strikes with specific conditions on the ground. Only air power could deliver these results.[5]

Historian Carlo D'Este highlights two reasons for the German Offensive; one strategic and one retaliatory. "It seemed evident that the German attack was aimed at splitting the British and U.S. army groups"[6] he notes. Given the strong personalities and the struggle to balance British and American priorities, slicing the knife between the two seemed like playing both ends against the middle. Analysis of the contested area revealed that the ultimate objective was the port of Antwerp, which was valuable for bringing in additional resources. Additionally, D'Este writes that "a captured German officer revealed that one of the unit's objectives was to assassinate Eisenhower and other senior Allied officers."[7] Perhaps this objective is not so far-fetched given the failed assassination attempt on Hitler's own life on 20 July, 1944. As Hitler was the primary architect of the Ardennes Offensive, a measure of ruthlessness aimed at top American officials would be consistent with his state of mind.

The Ardennes Offensive, which is the proper historical name for the Battle of the Bulge, was fought from 16 December 1944 to 25 January 1945. Coming about six months after the D-day invasion on the beaches at Normandy, the Ardennes Offensive was the last major offensive by Nazi Germany on the Western Front during World War II. *Wehrmacht* objectives included splitting Allied Lines and capturing the port of Antwerp. The German High Command timed the offensive during the height of bad weather forecasted to start on 16 December 1944. *Panzers* then exploited this bad weather knowing that it would prevent American air power from

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[5] Hughes, *Over lord: General Pete Quesada,* 274.
[6] Carlo D'Este, *Eisenhower: A Soldier's Life* (New York: Henry and Holt Company, LCC, 2002), 643.
[7] D'Este, *Eisenhower*: A Soldier's Life, 650.

mounting a counter attack. In retrospect, Hitler underestimated the Allies' resolve to persevere and fly in bad weather. As the battle unfolded, each day brought different weather conditions. These weather parameters determined which aircraft could fly, and the enemy then would respond in kind. Had *Wehrmacht* forces reached the strategically important port of Antwerp it is possible that the war might have been extended by several months.[8]

The Ardennes Forest is an inhospitable place to conduct military operations. The forested landscape and rugged terrain make it a difficult area to maneuver. While there had been battles fought there before, a winter offensive was something new, and the winter of 1944-1945 would go down in history as one of the coldest ever recorded. One of the main routes for travel through the Ardennes Forest was through the Losheim Gap in the north. Travel was especially difficult south of the Losheim Gap due to the *Schnee Eilee* (Snow Mountain). The towns of St. Vith and Bastogne were coveted as they were "critical communications hubs in the region."[9] Hitler knew that the principal threat to his *Panzers* were Allied aircraft , so he gambled that the *Panzers* would be able to push forward, in spite of the bad weather, with minimal retaliation from Allied Air forces.[10]

Hitler so valued the element of surprise that he only told the front line leaders a few days in advance of the operation. This short term notification meant that leaders had not had any time to learn the terrain or prepare solutions to potential obstacles. For his part, Field Marshal Gerd von Rundstedt viewed the plan as "'nonsensical' and 'absolute madness,'"[11] but Hitler was no longer taking suggestions from the *Wehrmacht*. Gruppenfuhrer Sepp Dietrich

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[8] Charles Whiting, *The Last Assault* (New York: Sarpedon, 1994), 34.
[9] Hughes, *Over lord: General Pete Quesada,* 272.
[10] Whiting, *The Last Assault*, 23.
[11] Geoffrey C. Ward and Ken Burns, *The war: an intimate history, 1941-1945* (New York: Alfred A. Knopf, 2007), 307.

vented, “All Hitler wants me to do is cross a river… and then… take Antwerp! And all this…when the snow is waist deep…When it doesn’t get light until eight and it’s dark again at four… -and at Christmas!”[12] General Heinz Guderian had remarked on how the terrain might affect armored warfare in his book *Achtung-Panzer* in 1937. “We must strive to employ them where they can move and show their striking power to the best advantage…with the element of surprise”[13] wrote Guderian. The terrain of the Ardennes, along with the limited roadways, hindered the maneuverability of the *Panzer* forces, allowing them to become easy targets for the Allied aircraft. Perhaps Hitler was attempting to replicate Case Yellow, the *Wehrmacht* invasion of France (including Belgium) in 1940, in which Guderian participated.

In 1937 Guderian wrote extensively on the topic of aircraft and armored warfare. He specifies how the ground forces could interact with air power in order to help each other. “The tactical aircraft, air landing troops and tank forces could be assigned common objectives deep in the enemy rear with the aim of breaking the enemy’s power of resistance with the least loss of life”[14] notes Guderian. He highlights the fact that air ground operations are especially effective in the capturing of enemy airbases which are situated near the front lines. Guderian’s concept of fast moving *Panzers* working together with *Fallschrimjagers* and coordinating with air power was used during the Battle of the Bulge in order to strike at the Allied rear, but fell short of their full capabilities due to the rugged terrain, inclement weather, and fierce pockets of Allied resistance.

Journalist Gill Robe Wilson of the New York *Herald Tribune* had given the possibility of such an attack much consideration in his article “The *Luftwaffe*’s Last Stand”, published on 22

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[12] Ward and Burns, *The war*, 307.
[13] Heinz Guderian, *Achtung-Panzer: The Development of armored forces, their tactics and operational potential,* ed. Christopher Duffy (New York: Arms and Armor Publishing, 1992), 206.
[14]Guderian, *Achtung-Panzer,* 206.

September 1944. This prescient assessment reminded the American public that although the war seemed won, the fight was not yet over. He noted that Germany was still a determined foe, doggedly resisting the Allied advance. In Wilson's opinion, Germany was holding back, the only question was: "why?" This article was made public nearly three months before the Ardennes Offensive would be launched. Why then was the American military caught off guard?

Wilson continues his analysis: "Amid all the optimism and general feeling that from here on victory is an assured cinch….strategic bombing may have to finish the attack at great cost."[15] No longer were the Germans fighting Hitler's war of expansion, they were fighting for their homeland and for their families. Wilson expected the Germans to become extremely determined to defend every inch of soil against the oncoming Allied invasion. If the Allies were going to win the war, they would have to remain vigilant and on the lookout for any last minute Nazi tricks.

"Yet for some reason which the German feels justifies the attempt," Wilson explains "he maintains a definite resistance core while his armies fall apart on the approach to the Reich. It does not make sense unless it is merely the four card draw of a player who has one chip left and throws it into the pot because he has nothing left to lose."[16] Wilson was willing to acknowledge in September 1944, that perhaps Germany was not truly a defeated foe. "If this is the case the war will end before the snow flies. If it is not the case we surely must expect to see whatever hole card the mad paperhanger has to fill his hand"[17]finishes Wilson. This statement is the most compelling part of Wilson's argument. These prophetic words would later be proven true when

[15] Gill R. Wilson, "The Luftwaffe's Last Stand," *The New York Herald Tribune*, 18 September 1944.
[16] Wilson, "The Luftwaffe's Last Stand."
[17] Wilson, "The Luftwaffe's Last Stand."

Germany launched the Ardennes Offensive. Hitler played his final card in an all-out gamble to strike it big. Air power foiled his last play.

The study of air power and how it can be used to its best advantage is revisited in the wake of World War II. In his book *Bombing to Win: Air power and Coercion in War* author Robert A. Pape focuses on the American Strategic Bomber Command and how it applied "Coercion", a term which describes four main tactics employed to gain advantage over the enemy and secure capitulation: punishment, risk, denial and decapitation.[18] Air power during the Ardennes Offensive relied on all four tactics as they coordinated with ground forces to stop the German advance.

According to Pape, "Punishment" came in the form of relentless strategic bombing raids on the German home front as well as enemy supply depots vital to the Ardennes Offensive. "Risk" came with the decision to fly in the bad weather, characterized by the determination of U.S. airmen who knew they had to stop the *Wehrmacht*. The strategy of "denial" was used by the USAAF in order to prevent the *Wehrmacht* access across the hilly country side of the Ardennes. Allied Air power often followed roads knowing that enemy tanks and other armored vehicles were mostly confined to existing roads, given that the terrain was inhospitable and difficult to navigate. Finally, "decapitation" focused on the most critical staging junctions of the *Wehrmacht* to stop in its advance. Railroad yards mustering points, bridges and communication centers were all frequent targets.

Military historian Russell F. Weigley writes that "Strategic air power is a war winning weapon in its own right and is capable of striking decisive blows far behind the battle line

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[18] Robert A. Pape, *Bombing to Win: Airpower and Coercion in War* (London: Cornell University Press, 1996), 32.

thereby destroying the enemy's capacity to wage war."[19] This ability to destroy the enemy's desire to fight was the primary goal for General Hap H. Arnold the Commander of the Army Air Forces during World War II. "American air doctrine for years has been based solidly on the principle of long range bombardment" Arnold professes, "Air Forces are strictly offensive in character…war has become vertical!"[20]Air power would prove to be the essential component of the Allies' strategy, especially during the Battle of the Ardennes, when Allied bombing of German industry and transportation hubs hindered the *Wehrmacht*'s tactical performance.

On the other end of the scale are tactical operations, which are aimed at short term goals during actual combat and support for ground operations. Examples of these would include bridges, communication outposts, or even a convoy of *Wehrmacht* troops. During the Ardennes Offensive, air power mostly performed as a tactical operations force. While thwarting the German advance, air power was also able to destroy infrastructure and choke off necessary resources immediately behind enemy lines, thus denying the *Wehrmacht* access to crucial reinforcements.

Harold R. Winton has also looked into air power's role in the Battle of the Bulge. In a critical review, he divides the Ardennes Offensive into three distinct phases. The first phase belonged to the Germans from 16 to 21 December 1944, followed by a period in which the initiative was fiercely contested by both parties from 22 December 1944 to New Year's 1945, and then a third period of clear American domination from 4 January 1945 to the end of the month. Winton evaluated the inevitable power struggles which emerged throughout these time frames. He is quick to blame Eisenhower's decision to hand over American air power to

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[19] Russell F. Weigley, *The American Way of War: A history of United States Military Strategy and Policy* (London: Indiana University Press, 1973), 240.
[20] Weigley, *The American Way of War*, 240.

Montgomery, most notably the IX and XXIX Tactical Air Commands, without mentioning that General Bradley had yielded or that it was meant to be a temporary measure only. Winton also notes that the flights on 16-21 December were "as weather permitted"[21] a quote which falls short of fully acknowledging the many pilots who did in fact fly in some of the most serious weather of the war.

In order to track the progress of Air Power, one must first pin down the activity on the ground and level both praise and criticism on the Army leadership. Carlo D'Este credits General Bedell Smith for a series of phone calls in which he decried General Courtney Hodges' handling of the first few days of the Offensive. Smith slams the "First Army's failure to predict the German counter-offensive."[22] Smith didn't mince any words when he was quoted as saying, "Hodges (was) the weakest commander we had."[23] An examination of Hodges' daily diary doesn't indicate any shortcomings until 20 December when the entry reads, "However the planes and the continual traffic… makes it difficult for the General to obtain the quiet which is necessary in the making of these vast decisions."[24] One cannot imagine the same being said about Simpson or Patton, who were known for their nerves of steel. Perhaps the author Major William C. Sylvan was trying to justify holes in Hodges' performance. Another point in favor of air power was that General Pete Quesada's (Hodges' TAC officer) stellar performance more than compensated for Hodges' mediocrity. Danny S. Parker notes however, that Eisenhower later

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[21] Harold R. Winton, "Airpower in the Battle of the Bulge: A case for Effects-based Operations?" *Journal of Military and Strategic studies* (2011): 1.
[22] D'Este, *Eisenhower*: *A Soldier's Life*, 646.
[23] D'Este, *Eisenhower*: *A Soldier's Life*, 646.
[24] William C. Sylvan and Captain Francis G. Smith, *Normandy to Victory: The War Diary of General Courtney H. Hodges and the First U.S. Army* (Lexington, KY: The University Press of Kentucky, 2008), 224.

told Montgomery "Hodges is the quiet reticent type and does not appear as aggressive as who he really is."[25]

Peter Mansoor compares and contrasts the relative importance of air power at Normandy versus the Battle of the Bulge. He notes that air power over Normandy was devastating, especially inland, at places like St Lo, Caen, and the Falaise Pocket. "Air interdiction of the transportation network in France hampered German reinforcements moving to Normandy" he writes. By contrast Mansoor writes disparagingly, and perhaps erroneously, regarding air power at the Bulge "during the first week of the Battle of the Bulge, poor weather grounded most aircraft." Mansoor, a former infantry officer, gives all the credit for repelling the Germans to the ground troops, while ignoring that the air elements also played a major role in the first week of the Ardennes Offensive. [26]

British historian Peter Caddick-Adams has called the Battle of the Bulge "without a doubt the greatest battle in American military history."[27] While acknowledging that there was a British presence at the Bulge, Caddick-Adams sees the battle as an American story. The Americans stopped the last great German offensive of the war. Caddick-Adams does touch upon the air war briefly, but clearly favors the ground war and the American fighting spirit. Both Caddick-Adams and Mansoor are examples of the historiography underestimating the role of air power during the Battle of the Bulge. This thesis seeks to challenge and correct this prevailing, yet erroneous, school of thought.

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[25] Parker, *To Win the Winter Sky*, 197.
[26] Peter R. Mansoor, *The GI Offensive in Europe: The Triumph of American Infantry Divisions, 1941-1945*. (Lawrence, Kansas, University of Kansas Press, 1999), 217.
[27] Peter Caddick-Adams, *Snow & Steel The Battle of the Bulge, 1944-1945* (New York: Oxford University Press, 2015), 4.

Despite the popular perception that the Bulge was mostly a ground battle, several historians offer a more positive view of air power's importance during the Battle of the Bulge. A report by Major Albert H. Whitley and Donna C. Nicholas on the Battle of the Bulge written in 1999 states, "The Ardennes Offensive dramatically illustrated the importance of air power. From the initial advantages derived because of already established Allied air supremacy due to strategic bombing, to the successful tactical application employed for this unique operation, air power proved vital in checking this grand scale enemy offensive."[28] Allied air power operated close to ground troops and penetrated deep into enemy territory. Its scope and span allowed it to operate nearly every place it was needed in a wide variety of circumstances. The two argue that "the Battle of the Bulge illustrated, as never before, that an army [in this case the Germans] couldn't launch an offensive without first establishing air superiority over an opponent."[29]Because the Allies had the ability to control the skies over Europe, they were able to win the Battle of the Bulge.

John J. Sullivan writes in *Air support for Patton's Third Army* about the close connection between the pilots of General Opie Weyland's XIX Tactical Air Command (TAC) and Patton's Third Army. Sullivan focuses primarily upon the Ninth Air Force's XIX TAC and their role in acting as air cover for Patton. The close connection between Patton and Weyland is remarked upon, as is their ability to coordinate the air to ground elements using their Air Coordination Officers. From the beaches of Normandy to right before the Battle of the Bulge, Sullivan emphasizes how Patton's ground troops came increasingly to rely upon Weyland's pilots to clear the roads ahead of them from danger. The lessons that had been learned in their thrust across France would

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[28] Donna C. Nicholas and Albert H. Whitley. *The Role of Airpower in the Battle of the Bulge* (Montgomery, Alabama: Maxwell Air force base, 1999), 2.
[29] Nicholas and Whitley, *The Role of Airpower in the Battle of the Bulge*, 16.

later benefit the two commands when the Germans started their Ardennes Offensive on 16 December.[30]

Another report, compiled by Colonel William R. Carter on the air campaign in the Bulge, stresses three priorities in determining how the Americans had won. The first priority had been "air supremacy over the battle area." This meant that the Allies had gained control of the skies in order to assist the ground war. The airmen had also stripped the *Luftwaffe* of its fighting potential by attacking the airfields. Incidentally, the *Luftwaffe* copied this tactic during Operation *Bodenplatte* on 1 January 1945, an ill-fated attempt to wrest control over the sky. The second priority had been the "close cooperation" of the air and ground forces despite "poor weather and confusing ground battle situations." American General Elwood "Pete" Quesada, Commander of the IX Tactical Air Command (TAC) exhibited maximum determination despite snow and poor visibility and achieved "a degree of effectiveness that would have been impossible otherwise." Quesada ordered his IX TAC to fly in some of the worst weather of the war. His airmen were able to "adjust to and met the challenge of a massive, unplanned operation." Essentially, Quesada called Hitler's bluff that the Allied aircraft wouldn't fly. The Americans would fly in almost any weather in order to stop the *Wehrmacht* advance.[31]

The last priority was "air interdiction [to crush] the German army's logistical effort." The *Wehrmacht* faced logistical problems, such as a severe lack of fuel, which meant they had to accomplish their assigned task on time or face being stranded without recourse. Given the rough terrain and poor weather, Hitler had left his troops little to no room for error. The *Wehrmacht* had stockpiled most of its supplies behind the Rhine in order to keep it safe from

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[30] John J. Sullivan, *Air Support for Patton's Third Army* (London: McFarland and Company Publishers, 2003).
[31] William R. Carter, *Airpower in the Battle of the Bulge* (Montgomery, AL: Maxwell Air Force Base, 1989) 2.

Allied hands. In return, they had hoped to capture Allied supplies to compensate for their own shortages. This plan worked for about one week until the Allies counter-attacked on 23 December at which time the tide of the battle turned dramatically. Many *Panzer* divisions had run out of fuel and hence momentum. "German morale was deflated and Allied morale boosted by the constant swarming of Allied aircraft over the battlefield" wrote Carter.[32]

An official history of the United States Air Force in Europe found that the Tactical Air Commands, especially the XIX TAC, had performed exceptionally well during the campaign. In an after campaign review, it was noted that the TACs had followed "three objectives in reacting to the German Offensive on December 17th."First they had maintained air superiority, destroying the *Luftwaffe* wherever they found them and had stopped German air cover of ground operations. Second, they had destroyed the enemy's main spearhead forces. Last, they had struck at the enemy's means of supply, including bridges, rail yards, and supply depots along with communications centers to isolate the breakthrough area."[33] These targets had hindered the German advance and given the Allies time to react to the sudden onslaught.[34]

In evaluating how the Ninth Air Force gained proficiency in the field of Air to Ground tactical coordination, it is important to consider where they honed their skills leading up to the Ardennes Offensive. Author Kenn C. Rust in *The 9th Air Force* gives a day to day account of the Ninth from its formation in North Africa to the end of the war. Rust argues that the Ninth Air Force provided a critically needed role as tactical air support for the ground troops starting in the deserts of North Africa and improving as they eventually made their way to the European theater. Rust hits upon the close relationship between the air and the ground that helped the

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[32] Carter, *Airpower in the Battle of the Bulge,* 2.
[33] David N. Spires, *Airpower for Patton's Army: The XIX Tactical Air Command in the Second World War* (Washington D.C.: Air Force History and Museum Program, 2002), 190.
[34] Nicholas and Whitley, *The Role of Airpower in the Battle of the Bulge*, 6.

Allies learn to move in tandem. Base movements were common as the air forces followed the ground forces pushing back the *Wehrmacht*. Air-ground coordination also is mentioned as one of the biggest innovations, which included pilots communicating over the radio to the artillery personnel on the ground. Had they not had the trial by fire in Africa, they arguably would not have had the skills necessary to prevail against the *Luftwaffe* over Belgium. [35]

In *Aces and Pilots of the 8th / 9th Air Force*, historian Jerry Scutts discusses how the Eighth and Ninth Air Force learned lessons in air to air combat from their Royal Air Force counterparts so as to become more effective aviators against the *Luftwaffe*. He recalls stories of the Eighth and Ninth Air Forces from North Africa to D-Day, focusing heavily on the exploits of individual pilots, as compared to Rust who focuses on the Fighter Squadrons and Fighter Groups. Scutt's argument explains on how the aces of the Eighth and Ninth Air Force contributed to the annihilation of the *Luftwaffe*. The transfer of two Eighth Air Force squadrons to the Ninth Air Force on 23 December 1944 gave the Allied airmen the much needed reinforcements to help counter the German offensive. This in turn led to the eventual defeat of the *Luftwaffe* and paved the way for the Allied ground forces' victory in Europe.[36]

Perhaps historian Michael Doubler best summed up the value of close air support. "Flexibility was one of the hallmark characteristics of air-ground operations." he wrote, "The TACs were able to reallocate fighter-bomber assets to air superiority battlefield interdiction or CAS missions depending on weather and the tactical situation."[37] By December 1944, the early problems that had plagued the TACs in Normandy had been worked out and the procedures had been standardized. Together, both the air and the ground elements were able to coordinate

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[35] Kenn C. Rust, *The 9th Air Force in World War II* (FallBrook, CA: Aero Publishing Inc, 1967).
[36] Jerry Scutts, *Aces and Pilots of the U.S. 8th and 9th Air Force* (Surry, England: Ian Allen Publishing, 2001).
[37] Michael D Doubler, *Closing with the Enemy: How GIs fought the war in Europe, 1944-1945* (Lawrence, Kansas: University Press of Kansas, 1994), 85.

themselves for a combined arms operation that would be able to first stop and then push back the German offensive through the Ardennes Forest and eventually back into Germany as 1944 turned into 1945.

Having concluded the above historiography, which provides a varied scholarly perspective on what occurred during the Battle of the Bulge, this thesis will present five chapters that will prove how air power won the Battle of the Bulge. The first two chapters will provide background on leaders and aircraft information and the other three will follow the battle as it unfolded chronologically. Chapter 1 will cover the Allied leadership and the Ninth Air Force. Chapter 2 will cover the aircraft used by each side as well as their technical specifications. Then, by breaking the Battle of the Bulge into three chronological time frames (Chapters 3, 4, & 5) this thesis will debunk the commonly held belief that air power was scarce or nearly nonexistent until 23 December 1944. Chapter 3 will cover the time period from 16-22 December and how the pilots overcame the adverse weather conditions. Chapter 4 will cover the time period of 23-29 December 1944 and how the improved weather conditions allowed the Allied air forces to dominate the fighting from the air over the Ardennes and into Germany. Chapter 5 will cover 30 December, 1944 to 30 January 1945 when air power greatly aided the successful Allied counter offensive. For all three of these chapters, the ground battle will be divided into a northern section commanded by General William Simpson, a middle section commanded by General Courtney Hodges and a southern section commanded by General George Patton. While air power is assigned to support each General's army, it must be noted that air power often went much deeper into enemy territory and was not strictly kept overhead at all times. Whenever possible, a specific TAC (Nugent / Quesada / Weyland) will be noted for its action [See Appendix for order of battle]. The conclusion will cover the aftermath of the offensive and how it ushered in the final stages of the war. The lessons learned during World War II would

help define the priorities for the newly formed United States Air Force, which became its own entity in 1947.

This thesis asserts that air power secured the victory for the Allied forces during the Battle of the Bulge. Furthermore, history has falsely characterized the presence of air power during the first week as strictly limited and ineffective. Air power was both present and effective throughout the Battle of the Bulge and performed five critical functions which could never have been accomplished by ground forces alone. Primarily air power provided critical reconnaissance information from hundreds of miles deep into enemy territory. Also, having identified these targets, air power flew sorties to destroy railroad infrastructure, oil supplies and manufacturing, mustering stations and supply depots. This thesis proposes that oil and coal were decimated to such a point that all other manufacturing was vitally impacted. Wing mounted .50 caliber machine guns and rockets had the necessary fire power to destroy armored vehicles and tanks, whereas Allied tanks had 76 mm gun that could not penetrate the three to five inch armor of most German tanks. Air power waged psychological warfare on *Wehrmacht* forces as German foot soldiers referred to P-51s, P-47s and P-38s fighter bombers as "*Jabos*" which carried a fearsome reputation. These planes sounded the death knell for the German *Luftwaffe* and their leaders were forced to acknowledge they did not have a resupply system to match the clockwork like precision that brought planes and pilots from the United States through the United Kingdom down to the European Theater. Finally, cargo planes dropped subsistence rations and medical supplies to the 101st Airborne personnel who fought hard to hold the pivotal town of Bastogne. Air ground communications which had been honed in the deserts of Africa, and applied during Operation Cobra in which Allied forces moved eastward from Normandy, supported many of the above functions which won the Battle of the Bulge and arguably turned the tide of the War in the Allies' favor once and for all.

Chapter I: The Americans and Their Adversaries

Dwight D. Eisenhower was the Supreme Allied Commander in charge of the European Theater at the time of the Ardennes Offensive. In addition to managing the many strategic demands of the European Theater, Eisenhower coordinated with the British leadership to mesh their goals and objectives with those of the Americans. British Field Marshall Bernard Montgomery proposed cutting a narrow path through Belgium in order to reach Germany. Eisenhower objected to this approach and favored a broad front. The broad front served two purposes: First, it put pressure on the Germans at every point. Second, it permitted everyone to play a vital role. A broad front strategy also distributes risk of attack somewhat more evenly amongst the various Army commands. Eisenhower's stated position is largely theoretical in that the location and strength of the troops in the Ardennes was a direct result of heavy losses on several varied fronts including Market Garden and the Huertgen Forest. In other words, the surprise attack commenced with Allied Forces spread wide and thin wherever ongoing conflicts were being fought. The downside to the broad front approach was that the *Wehrmacht* forces were able to split the northern troops from the southern troops disrupting coordination of efforts. On the other hand, one might argue that the narrow approach would have resulted in exposed flanks of any such advance. As an ironic example of this approach's shortcomings, it was the German "narrow approach" at the Bulge that got pinched.

General Omar Bradley had been warned by two of his intelligence officers, General Edwin L. Sibert (12th Army Group) and Colonel Oscar Koch (Third Army), that the Germans were preparing a counter offensive in the Ardennes. In the days just before 16 December 1944, Bradley's staff warned him that an attack was likely to come through the thinly spread Ardennes region. However, Bradley discounted much of it, believing that the cautious Field Marshal von Rundstedt was still in charge, not Hitler. The broad front strategy was favored by Eisenhower,

not because he believed the Allies had the manpower, but because the broad front allowed the best possible chance of finding breakthrough points. When the attack did come on 16 December, Eisenhower took responsibility for the decision to maintain a long fairly thin front line, but notes that he "had perceived no satisfactory solution" beforehand.[38]

British historian Charles Whiting questions how Eisenhower had left such a thin line of defense while also knowing that Hitler had gathered additional resources and was preparing some build-up in the Ardennes region. In Eisenhower's messages to his top generals he indicated that Hitler had plenty of armored reserves at his disposal. Whiting questions "how was it now, that the Supreme Commander was suddenly aware that the Germans possessed significant reserves of armor?"[39] After all, he had been allowing Middleton's exhausted VIII Corp to guard the Ardennes Forest. "Was it possible that he had lured the Germans into possibly attacking out of their fortifications and the young G.I.s of Middleton's VII Corps had been the bait?"

Historian Caddick-Adams refutes Whiting's theory that Eisenhower had purposely baited Hitler with a thin middle line in the hopes of gathering most of the *Wehrmacht*'s remaining resources in one place. Caddick-Adams argues that the behavior of all the seasoned Army Generals (Hodges, Patton, Bradley, and Simpson) had been reactive and fragmented, not in keeping with a group who knew what was coming. Patton's ambivalence about leaving the Saar and heading to Bastogne belies any kind of foreknowledge of such a plan. He also notes the high number of Sherman tanks that were out of service, with only eleven out of fifty-four operational from the understrength 70th Tank Battalion following the conflict at Huertgen Forest.

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[38] Russell F. Weigley, *Eisenhower's Lieutenants: The campaign of France and Germany, 1944-1945* (Bloomington: Indiana University Press, 1981), 463.
[39] Whiting, *The Last Assault,* 78.

Additionally, both the commanding Generals of the 101st Airborne and the XVIII Airborne Corp were not even on the main continent of Europe when the trouble began. Caddick-Adams implies that it is unlikely that Eisenhower would have permitted them to be in Washington D.C. (Major-General Maxwell Taylor) and England (Major-General Matthew B. Ridgway) respectively, if there had been clear knowledge of an impending offensive.[40]

A letter written by Brigadier General William L. Richardson to General Hoyt Vandenberg on 7 December puts to rest any notion that Eisenhower had been completely surprised by the impending attack: "Recent intelligence reports indicates that there has been a substantial buildup in the enemy fighter and fighter-bomber forces in western Germany within easy striking distance of our front lines. A-2 estimates that a penetration in force to a distance of sixty miles behind our front lines is entirely possible. Such an effort appears most likely to occur in the areas of the 1st and 9th armies and indications point towards such an attempt within the next two weeks."[41]

As a seasoned general, Eisenhower had taken note of this warning and had mentally begun to formulate a contingency plan. In Eisenhower's own words, "We had always been convinced that before the German's acknowledged final defeat in the West they would attempt one desperate counteroffensive."[42] However, there is no explicit evidence that he had lured Hitler's remaining strength into the Ardennes forest with a seemingly thin defense force in place. The arrangement of the troops on the ground and the turnovers in leadership reflects a hardscrabble array of those who remained in the wake of the failed Market Garden offensive, the huge losses in the Huertgen Forest, and other autumnal incursions towards the Siegfried

[40] Caddick-Adams, *Snow & Steel*.
[41] Franck, *Winter Journey*, 181.
[42] Dwight D. Esienhower, *Crusade in Europe* (New York: Doubleday and Co., 1948), 343.

Line, rather than a purposely created illusion or tactic. In general, heavy losses due to recent fighting had left most divisions in the area under-manned by five to twenty percent. Whiting summarizes: "For a general who advocated a broad front strategy… that Saturday Eisenhower had a remarkable number of divisions out of combat."[43]This underscores the real controversy: that the Anglo-Americans really didn't have the numbers for a broad front approach.

Amidst the early confusion of the Ardennes Offensive, Eisenhower, encouraged by General Bedell Smith, made the decision on 20 December 1944 to hand over two units belonging to General Omar Bradley to British Field Marshal Bernard Montgomery. According to D'Este, General Bradley may have had reservations about the transfer, but failed to express them in a timely fashion. By the time Bradley raised his vehement objections, Eisenhower had already made up his mind.[44] Bradley would later say that "this was the darkest of times for me. Giving Monty operational control of my First and Ninth armies was the worst possible mistake Ike could have made."[45] In his autobiography, Bradley does not take personal responsibility for the command decision and says that it was Eisenhower, not himself, who handed over the armies to Montgomery. This handover is relevant inasmuch as the distribution of air assets also shifted.

William Weidner in his article *An American Betrayal* claims that Eisenhower had played politics to placate the British leadership's insecurities. The *Wehrmacht* was able to find a weak spot because according to Weidner, "the truth was that the Americans were overstretched in the Ardennes, precisely because they had sent so many divisions north in support of Montgomery." Weidner credits Eisenhower for voicing caution that too many troops were being

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[43] Whiting, *The Last Assault,* 64.
[44] D'Este, *Eisenhower*: A Soldier's Life, 646.
[45] Omar N Bradley and Clay Blair, *a Generals Life: an Autobiography by General of the Army Omar N Bradley* (New York: Simon and Schuster, 1983), 368.

sent north under Montgomery's command, but Eisenhower failed to put his foot down to keep the troops under U.S Command. This complaint against Eisenhower was common at the time amongst the American Command Staff. However, Eisenhower knew that he had to employ diplomacy in order to keep the Anglo-American alliance strong. Consequently, "the remaining four divisions (which) under Hodges first army screened a 70 mile defensive front in the Ardennes" were either worn out or green. Ultimately, despite limited numbers, the Americans held their own long enough for reinforcements to arrive.[46]

Whiting also notes that Omar Bradley was able to see Hitler's objective almost immediately. "'If by coming through the Ardennes he can force us to pull Patton's troops out of the Saar and throw them against his counter-offensive, he'll get what he's after.'" Later in a conversation with Bedell Smith Bradley admitted that he had been hoping for such an opportunity, but conceded that this opportunity was perhaps bigger than he had bargained for. Both Eisenhower and Bradley intuitively knew that Hitler would mount one grand final attack. When artillery lit up the morning skies of 16 December 1944, the expectation became a reality and the mysteries of where and when were answered.[47]

Returning to the examination of the chain of command, the leader of the Strategic Air Force in Europe was Lieutenant General Carl A. Spaatz. According to a biographer, "It was Spaatz's ability to make quick, correct decisions based on his wide experience, common sense, and intuition, coupled with the moral courage to face such decisions that would make him an outstanding combat Air Force leader."[48] The Strategic Air Force included the Eighth, Ninth, Twelfth, and Fifteenth Air Force. By the end of 1944, the Eighth Air Force was based in England

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[46] William Weidner, "An American Betrayal," *World War II History Magazine*, 32, (April 2014), 34.
[47] Whiting, *The Last Assault,* 64.
[48] Richard G. Davis, *Carl A. Spaatz and the Air War in Europe* (Washington D.C.: Center for Air Force History, 1993), 35.

and flew sorties across the channel into Belgium and Germany. The Ninth Air Force was following the battle lines eastward across the Continent. The Twelfth and Fifteenth Air Forces were based in Italy where they could attack Germany from the south. Richard G. Davis writes, Spaatz never lost sight of '"His twofold mission… as defined at the Casablanca Conference… The support of the Allied ground forces, when required and the strategic bombing of Germany…"[49]

During the height of the Ardennes Offensive, on 26 December 1944, Spaatz wrote to Lieutenant General Barney M. Giles who was in Washington D.C. His letter states that he had sent 500 aircraft to Sweden, which were now absent from the Ardennes Offensive. Spaatz admits "while (an) additional 500 fighters would have gone a long way towards solving our escort problem, I am confident…we can keep the German Air Force impotent."[50] This comment reveals Spaatz's optimistic mindset that air power would still prevail. Spaatz could see the big picture and was not panicked over a momentary German breakthrough.

Earlier on in this letter Spaatz highlighted two methods by which German forces were rendered ineffective. The first objective was to destroy all sources of oil. The second objective was to dominate the skies. With this second objective in mind, Spaatz writes to General Giles, summarizing the air successes of 23-25 December, "In the last three days, the Eighth and Ninth Air Forces alone have accounted for 265 aircraft in the air, with the loss of 82 bombers and 76 fighters."[51] It was this kind of faith in his flyboys that allowed Spaatz to succeed and do more with less at the Bulge. It matters little that Eisenhower probably did not purposely lure Hitler's forces to the Ardennes; Spaatz would have welcomed any opportunity to exert Allied air dominance over the remaining *Luftwaffe* aircraft.

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[49] Davis, *Carl A. Spaatz and the Air War in Europe*, 532.
[50] Carl Spaatz, "United States Strategic Air Forces in Europe: Documents 1-3" 1.
[51] Spaatz, "United States Strategic Air Forces in Europe: Documents 1-3" 1.

United States and British air power had been pummeling at the *Luftwaffe* since D-Day. Craven and Cate note, "…German fighter forces lost the decisive air battles of early 1944 in an effort to protect those industries (fighter plane factories and ball-bearing factories) from bombing."[52] They pose the question whether Allied forces had spent too much effort on bombing these factories when it was clear by the Battle of the Bulge that planes were still being assembled. Furthermore, the end game proved it was the lack of trained pilots and oil that were the more effective limiting factors. In retrospect, it appears that the Allied Forces took an "all of the above" approach to targeting resources and infrastructure. This is not a mistake so long as one has the capability to do it all. In any war hindsight will reveal the factors that caused an enemy to cede defeat, but it would also be a mistake to assume that the limiting factor for this war will always be the limiting factor in any war.

In a move that proved to be both effective and efficient Spaatz had focused on bombing the German oil industry. The Germans, now facing mass shortages of oil and gasoline, had begun to consider alternate sources of fuel. Joseph A. Wyant, a historian for the 509th Fighter Squadron (IX TAC) highlights German resourcefulness: "The policy of conservatism and the recent increase in production of synthetics had yielded sufficient gasoline to permit a level of activity much higher than had been attempted through September and October when heavy bomber attacks had forced German oil production down to less than 30% of pre attack outputs."[53] The Germans needed refined gasoline in order to wage their war against the Allies, but as Theodore Ropp observes, "The campaign against oil fuel was decisive within less than a year. The Germans had more planes than fuel to fly them; tanks were hauled into action on the

[52] Craven and Lea Cate, *The Army Air Force in World War II*, 64.
[53] Joseph A. Wyant, *Airpower in the Battle of the Bulge* (Montgomery, Alabama: Maxwell Air Force Base Collection), 4.

east by oxen…The attack on German transportation was so effective that German economy was headed for collapse by the end of winter."[54] The United States Army Air Force would later report that "fuel appeared to be the governing factor on how long the enemy air power could carry on the all-out effort to which it was committed."[55]

Working down the Army Air Force chain of command one finds Lieutenant General Hoyt S. Vandenberg, who took over command of the Ninth Air Force on 8 August 1944. Under Vandenberg's focused leadership, the Ninth Air Force continued its primary task of close air support. With nearly 180,000 personnel and 4,000 aircraft, the Ninth "was the largest tactical air unit in history."[56] At the time Vandenberg assumed command, only the IX and the XIX Tactical Air Commands (TACs) had been fully organized. The XXIX TAC would be added into the Ninth Air Force later in mid-September. The Americans had divided their squadrons into TACs in order to provide more effective air cover for the ground forces with each one attached to an Army. Besides the TACs, the Ninth Air Force also included the IX Bomber Command, an engineering unit that was in charge of maintenance, and IX Air Defense Command, which protected the airbases from German air attacks. There was also a smaller command made up of supply units, which keep the Ninth Air Force mobile. Together, these commands made up the Ninth Air Force.

The appointment of Vandenberg created tensions within the air force ranks. Nearly everybody assumed General Elwood Pete Quesada would be picked to command the Ninth Air Force. Before June 1944, there had been only a single Tactical Air Command in Europe commanded by General Pete Quesada. Quesada was considered "not only a genius but also one

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[54] Theodore Ropp, *War in the Modern World* (Baltimore: The John Hopkins University Press, 1962), 358.
[55] Wyant, *Airpower in the Battle of the Bulge,* 5.
[56] Philip S. Meilinger, *Hoyt S. Vandenberg: The Life of a General* (Indianapolis: Indiana University Press. 1989), 50.

of the most forceful characters in the Air Force"[57] according to Colonel Richard D. Hughes who had served with Vandenberg as his Operations Officer. Quesada enjoyed a reputation of having pioneered the use of tactical radar and the coordination of maneuvers through the use of air ground communication. Quesada had masterminded how air operations could best protect the ground, once the invasion of Hitler's "Fortress Europe" had started. The cluster of battles near Mortain, France on 8-9 August, 1944, when German ground forces were decimated by relentless air strikes, proved that the Air Coordination Officer concept did in fact work. Biographer Thomas Hughes notes, "It was also the best single close –support operation in Europe by Quesada's fighter-bombers."[58]

Perhaps Vandenberg received command of the Ninth Air Force because he was a West Point Academy Graduate (Class of 1923) like Spaatz (Class of 1914), whereas Quesada was a "Mustang"[59] known to have a hot temper. Vandenberg was not known as a keen student, graduating in the bottom tenth of his class, but was known to be an intuitive pilot with a high tolerance for risk and experimentation. He even went so far as to fly a P-51 belonging to fellow pilot Colonel Dyke Meyer when he had not actually been checked out on such an aircraft. [60] Although Vandenberg was senior by a month at the time of promotion, Quesada most likely chaffed at this new hierarchy because of his more extensive experience. General Quesada for his part would later say that "he and Vandenberg were neither friends nor enemies but they had exchanged some unpleasantries."[61] Consequently whenever Vandenberg would visit his commands throughout the war he actively avoided General Pete Quesada's IX TAC. This, however, was actually not a problem in the overall scheme, for each TAC was responsible for its

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[57] Richard D. Hughes, *Personal Journal,* (Montgomery Alabama: Maxwell Air Force Base Collection), 58.
[58] Hughes, *Over lord: General Pete Quesada,* 239.
[59] "Mustang" is military slang for a prior enlisted man who had been commissioned as an officer.
[60] Meilinger, *Hoyt S. Vandenberg*, 53.
[61] Hughes, *Personal Journal,* 58.

own air cover of its ground elements. Furthermore, General Quesada felt he had no need for General Vandenberg to visit him to tell him how to do his job and Vandenberg tacitly concurred.

Perhaps it was this conservation of style that rendered Vandenberg surprisingly effective. He didn't waste effort on leaders who did not need micromanaging and put forth more effort where it would produce benefits. He stated a clear objective of getting everyone in his command to do their own part to reach a given goal. He was satisfied so long as the moving parts performed as expected and the goals were reached. Vandenberg visited the front lines often and got along with General Opie Weyland, commander of XIX TAC. Meilinger reflects, "Vandenberg knew when to decentralize power and when to garner it."[62]

Meilinger contends that it was likely Quesada's abilities and genius which allowed him to understand the aerial battlefields better than his commanding officer. Vandenberg chose to let Quesada have the room he needed to operate. Quesada in return vindicated himself as an astute planner throughout the Battle of the Bulge. In fact, General Omar Bradley had rated Quesada as the "fourth best American General in the [European] Theater behind Spaatz, Bedell Smith, and Courtney Hodges."[63]This ranking reflects a bias in that Bradley is praising his superiors first and then his direct subordinates. In contrast, Bedell Smith who answered directly to Eisenhower felt no such top down loyalty bias as he criticized General Courtney Hodges for his disorganization and poor reaction time in the immediate onslaughts of 16-18 December 1944.

Just four months after his promotion to the level of commander of the Ninth Air Force and mere weeks before the Bulge, Vandenberg was forced to earn his stars following an

[62] Meilinger, *Hoyt S. Vandenberg,* 50.
[63] Meilinger, *Hoyt S. Vandenberg*. 50.

accidental bombing incident in Paris. It began when a Ninth Air Force bomber dropped a bomb on an unsuspecting neighborhood on 1 December 1944. Known as the "Parham Incident" for the neighborhood that was destroyed, it became a political hot potato and there was an effort made to cover it up. Two French newspapers had published articles about the bombing. The information was quickly classified, whereupon copies of the newspapers were rounded up and destroyed as much as possible. In spite of the round up, there was a fierce, but temporary local backlash against air power in France. Vandenberg was under severe pressure to improve public relations.

On 11 December 1944, Vandenberg was notified by Lt. Barney M. Giles that Edward Folliard, a news reporter for the *Washington Post,* was coming to view the front at the request of General Hap Arnold. The goal was to "correct the many misconceptions and inaccuracies in public [opinion] of air power, its capabilities and potentialities and its proper relationship to the ground forces."[64] Public relations were vitally important for the home front. "Misconceptions in the mind of the public are not only many but also have a way of swinging back and forth according to the current news headlines,"[65] wrote Giles to Vandenberg.

Vandenberg took Folliard on a tour to educate the public through his writings on the capabilities of American aircraft and the importance of air-ground cooperation. The American Army Air Force wanted to present a positive spin on "the relationship between the air and ground insofar as it applied to the tactical employment of air (since it) is one of the most misunderstood situations insofar as the general public is concerned."[66] This incident and the article that followed are important because it set up a line of inquiry into the necessity of air-

[64]Barney M. Giles to Vandenberg, 11 December 1944, in *Personal letters to Vandenberg*, (Montgomery, Alabama, 1960), 1.
[65] Giles to Vandenberg, 1.
[66] Giles to Vandenberg, 1.

ground tactics, which were employed to achieve victory during the Ardennes Offensive, which rolled in a mere two weeks later. Incidentally, Folliard would stay on to follow the Ninth Army into the Battle of the Bulge. Folliard's article which recounts his movement with the Ninth Army appeared on 27 March 1945 and showed the war drawing to a close. In the air the Allies had such total control that he noted "the troops on the ground seldom ever bother to look up to see if a plane bears the swastika."[67]

The Ninth Air Force was formed in November 1942 in North Africa as the North Africa Air Force (NAAF) under the command of Lt. General Lewis H. Brereton. It was here that the pilots provided air cover for Patton's Western Task Force and helped drive German Field Marshal Erwin Rommel out of North Africa. The time they spent in North Africa fighting Rommel was important because it was a trial by fire that honed the air-ground synchronization that was carried back to the European theater. Rommel had gotten within a hundred miles of the port city of Alexandria, Egypt, but was ultimately stopped at El-Alamein. This victory was pivotal for the Allied forces. Rommel was summoned back to the Continent to save his reputation and to be used as a rallying point for Nazi patriotism. The remaining German forces in North Africa were placed under the command of General Hans-Jurgen von Arnim. By 12 May 1943, the remaining Axis troops surrendered. Churchhill said "One continent had been redeemed."[68] Rust writes "The western Desert Campaign especially, had provided the development of tactical and organizational methods of great importance in the evolvement of air-ground cooperation."[69]

The North Africa Air Force next turned its attention to Italy. The 12th and 340th Medium bomber squadrons along with the 324th Fighter Group paved the way for the Allied landings by

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[67] Edward Folliard, "Panzer Outfit resumes feud with U.S. 30th Beyond Rhine," *Washington Post*, 27 March 1945."
[68] Ward and Burns, *The war: an intimate history, 1941-1945*, 10.
[69]Rust, *The 9th Air Force in World War II,* 43.

bombing German defenses on the island of Sicily. The main targets of the medium bombers were the airfields, located at Foggia, Italy as well as the Sicilian airfields: Gerbini, Catania and Comiso. These Sicilian airfields were all hit by medium bombers on 28-30 May 1943. On 10 July 1943 the North Africa Air Force aided in the invasion of Sicily. The 57th and 79th Fighter Groups provided air cover for the landing forces, while the 316th Troop Carrier Group acted as transportation for the 82nd Airborne Division. Key cities such as Palermo fell to the Allies, but the Axis caused problems for the Allies at Mount Etna. 24 July 1943 saw the Allies advancing on the town of Messina where the Axis had held out.

It was on 28 July that the first elements of the NAAF arrived at Comiso which was to become their new home. This stay was short and the pilots of the 340th Fighter Group were moved to Hergla. On 17 August, Messina fell to the Allies. Sicily was finally liberated. The North Africa Air Force continued to provide air support over the Italian mainland with the invasions of Salerno on 3 September 1943. On 16 October 1943, the North Africa Air Force was moved to England and renamed as the Ninth Air Force. During this time, the Ninth Air Force grew from four tactical groups to forty-five, as well as expanded its bomber force to some 1,100 bombers.

The idea for a tactical air command began in Washington D.C. with high level thinkers who wanted to utilize aviation assets using a new and integrated approach. Both the IX TAC and the XIX TAC spent an incubation period in North Africa and then moved back to England where they practiced a variety of air-ground maneuvers with input from experienced pilots. Before the IX TAC became the aerial support unit for ground troops, it had several previous incarnations. For a while, it was known as the XII Fighter Command and later on given the name IX Fighter Command. They were deployed to North Africa, where Brigadier General A.C Strickland took command. They spent time in India, and then in the Suez area and then around Egypt.

The IX Air Support Command was reorganized into the IX Tactical Air Command at the airbases located at Middle Wallop and Biggin Hill under the command of Brigadier General Elwood "Pete" Quesada on 18 October 1943. In a wartime essay *"Achtung Jabos!"* Quesada highlighted his unit's ordeals in places such as North Africa and Italy which provided them with much needed experience before D-day. One pilot reflects on lessons learned the hard way, "Some [planes]…went down so low that they were caught in the blast of their own bombs. Others came back from deck-strafing with everything from branches to nuts and bolts caught in the undercarriage."[70] The IX TAC gained extensive experience in mid-1944 as they escorted B-17s from the 8th Air Force to bomb industrial targets such as Hanover, Dusseldorf, and Cologne.

The IX TAC also employed a recon element. Reconnaissance planes known as F-5 (modified P-38 Lightnings) flew missions along the shores of Normandy that would provide invaluable intelligence in planning Operation Overlord. In addition, Quesada notes "IX TAC concentrated on three [targets]: marshalling yards, airfields, and bridges."[71] The general stressed a special relationship between the pilots and the American soldiers on the ground and how much the latter came to depend upon the former.

With the coming D-Day Invasion, the Ninth Air Force was to be the largest air force in the American Army Air Corp. These pilots were to be the lead aircraft over the beaches on D-Day providing air cover for the ground troops. On 6 June 1944, the Ninth Air Force protected the largest naval amphibious operation by providing its IX Troop carrier command to use for the paratroopers and its fighter-bombers as air cover for the ground soldiers landing on the beaches. From reconnaissance missions to close air support, the Ninth Air force was a seemingly

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[70] Pete Quesada, "Achtung Jabos: The Story of the IX TAC," *Stars and Stripes* (December 1944): 3.
[71] Quesada, "Achtung Jabos: The Story of the IX TAC," 3.

omnipresent force overhead on D-Day.[72]The IX TAC had a very real presence on D-day. Both reconnaissance planes and fighter bombers flew sorties and provided information and air cover for the troops on the ground. On D-day and D-Day +1 the number of sorties flown totaled nearly 3,000.

The mission given to the Ninth Air Force once they reached France was to provide close air support for General Omar Bradley's Twelfth Army Group. These missions continued through the summer with Operation Cobra on 25-31 July 1944, which was the breakout from Normandy. For weeks, the Americans had been trying to secure St. Lo, a vital crossroads. From there, the American First Army hoped to break out of the hedgerows that inundated the surrounding countryside.

Operation Cobra officially started 25 July 1944 and was designed so that the Allied forces could break out from the coastal pockets and drive deeper into the continent towards Paris. From there the goals were to liberate France which happened on 25 August 1944 and then continue on into Germany. Meilinger writes "The IX TAC was responsible for providing air support to the First Army under Lieutenant General Courtney Hodges."[73] Hodges took over command of the First Army on 1 August 1944. At St. Lo, he was still Deputy Commander under Omar Bradley. Many of Hodges' contemporaries found him to be a competent and professional military leader, if a little bit reserved. Nevertheless, Bedell Smith remains one of his harshest critics.

Around this time, pilots identified the need for increased air ground cooperation and thereafter pilots were embedded in tanks as ground controllers. According to Quesada, "St. Lo

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[72] Jerry Scutts, *Aces and Pilots of the U.S. 8th and 9th Air Force*, 89.
[73] Meilinger, *Hoyt S. Vandenberg,* 51.

was not only the turning point in the battle for France--it was the proving ground for air support. It was the first time fighter –bombers really had a chance to clear the path to let doughfeet and tanks through."[74] On 16 July 1944, the 406th Fighter Group (IX TAC) used rockets mounted on their planes. This was the first time Americans used rocket armed planes. The first mission was carried out by Colonel Anthony Grosseta (406th Fighter Group, IX TAC) which found fifty trains idle near the town of Nevers, France. Quesada reported to General Hap Arnold on the "excellent to remarkable results"[75] the rockets had produced. Medium bombers and fighter bombers worked together and were successful in pushing the Germans out of St. Lo. Then as tank columns moved towards Paris, they were escorted either proactively or on-demand by the IX TAC to deal with *Panzers* lying in wait.

By mid-August, the Allied armies had encircled German Army Group B at the town of Falaise, located in Normandy, France. Trapped on three sides, the Germans were able to escape with many of their troops, but lost nearly all of their heavy equipment and vehicles. One German soldier at the Falaise Pocket wrote to his wife saying "the most difficult thing has been and remain the enemy air force. It is there at dawn all day, at night, dominating the roads."[76] It was during this time that General Pete Quesada worked out the air to ground coordination between tank crews and pilots by using an Air Coordination Officer. These pilots would be assigned to the ground troops in order to help guide in air strikes to their targets. Lt. Joe "Noodles" Nolan (368 Fighter Group, 395th Fighter Squadron, IX TAC), served as an Air Coordination Officer to the Second Armored Division near the town of Mortain, France. On 8 August 1944, Nolan called in air strikes on top of the German salient. In the air, the 395th Fighter

[74] Quesada, "Achtung Jabos: The Story of the IX TAC," 3.
[75] Hughes, *Over lord: General Pete Quesada,* 190.
[76] Hughes, *Over lord: General Pete Quesada,* 246.

Squadron under Captain Joe Mclachan responded. After striking down the 88mm guns that were holding back the tanks, the P-47s went on to knock out "twenty-eight tanks, ten half-tracks and several 88mm cannons."[77] It was also in August that General Hoyt S. Vandenberg took over command of the Ninth Air Force. Simultaneously, the XIX TAC, under General Opie Weyland, was added into the command structure.

From September to November, the Ninth Air Force provided air cover for the U.S. ground forces in their thrust across Europe. The XXIX TAC under General R.E. Nugent was added on 12 September 1944 in order to meet the needs of the Ninth Army. November saw some of the toughest flying on record as the winter weather started to come into full effect. With the Allies pushing into the Ardennes region, the pilots of the Ninth were constantly moving their bases as the ground war pushed further eastward. Engineers were charged with assessing and repairing newly captured airfields almost on a daily basis.

XIX TAC was under the command of Brigadier General Otto P. Weyland. Known as "Opie", this experienced airman was described as a "brash and fun loving Texan"."[78]Both he and Vandenberg had served together during their days in pilot training at Brooks Field, Texas. Vandenberg considered Opie to be one of the best officers he had under his command. Opie and Vandenberg got along perfectly and Opie for his own part performed his job with a refined excellence. Having arrived in 1943 to command a squadron, Opie eventually was given XIX TAC in early March 1944. XIX TAC supported Patton's Third Army, which was part of the Twelfth Army Group commanded by Omar Bradley. Opie's XIX TAC was a model of airpower proficiently, which provided a role model of air to ground operations, which the other TACs emulated.

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[77] Hughes, *Over lord: General Pete Quesada,* 237.
[78] Meilinger, *Hoyt S. Vandenberg,* 51.

Historian Meilinger notes ''During the preceding months the air-ground team had hammered out a system of cooperation that was eventually to run like a fine watch."[79]

Lieutenant General George S. Patton took command of the Third Army on 1 August 1944. Patton had a larger than life public image that he played up when he knew he was being observed. Captain Richard "Dick" Hughes writes in his diary that behind closed doors "General Patton was the complete opposite of the popular concept of him. General Patton had a profound interest in, and understanding of, Intelligence."[80] Patton's own war diary reinforces this statement with details of where the Third Army was and where they were going. With almost every entry Patton methodically describes the resources necessary to achieve his next objectives. None of the flair that made up the popular concept of Patton is present. As for Opie and Patton, the two men considered themselves friends and a team that was able to coordinate nearly flawlessly. Patton would later remark that "it was love at first sight between the XIX Tactical Air Command and the Third Army."[81]

As the Allies proceeded to break out of Normandy, Patton's Third Army raced across Brittany. Opie and the XIX provided air cover for Patton's army often finding themselves "35 miles in front of Patton's columns to search out and destroy potential resistance."[82] Due to Patton and Opie's close coordination and planning, they were able to keep their tactics fluid and flexible. The pilots would perform reconnaissance for the tanks and would radio back what lay ahead. Air power played an essential role in keeping Patton's Third Army moving during July 1944.

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[79] Meilinger, *Hoyt S. Vandenberg,* 51.
[80] Hughes, *Personal Journal,* 3.
[81] Meilinger, *Hoyt S. Vandenberg,* 51.
[82] Spires, *Airpower for Patton's Army*, 74.

The XIX TAC included both the 405th and the 362nd Fighter Groups, which typically consisted of twenty-four aircraft. The 405th fighter group had been organized on 4 February 1943 at Tampa, Florida and was sent over to England on 29 March 1944. They flew P-47 Thunderbolts from their base there, starting with their first mission on 1 May 1944 and continuing until 6 June 1944. The 405th Fighter Group was briefly grounded from 6 June 1944 through 10 June 1944 because the Thunderbolts bore a resemblance to the German FW-190s and could be misidentified in the heat of battle. Nevertheless, on 29 July 1944, they were commended for destroying a *Panzer* division near Avranches located in the lower Normandy region.

The 362nd Fighter Group was a part of the Eighth Air Force up to 6 June 1944. Having been activated in 1943, the squadron was transferred to England in 1944 in preparation for the D-day landing. It was during this time that they were assigned to fly the P-47 Thunderbolt. After the Allied landings, the 362nd was transferred to the newly created Ninth Air Force. It was responsible for air cover for the medium bombers, because the bombers were bulky and therefore less agile in defending themselves. This was a role they were well adapted to, having been the primary escort for the long range bombers of the 8th Air Force prior to 6 June 1944.

A third group, the 354th, had become active on November 15th 1942. By the time of the Ardennes Offensive, it was stationed in Rosieres-en-Haye located in France and attached to the XIX TAC. In late fall, the pilots were forced to give up their beloved P-51 Mustangs and started flying P-47 Thunderbolts. Their discontent was a matter of preference as they had been trained on both. The 354th was primarily a fighter squadron. In a happy twist of fate, on 16 February 1945, the 354th Fighter Group would be reunited with their beloved P-51D Mustangs. Kenn C. Rust writes that the squadron historians noted that even the Commanding

Officer (CO) Major Gilbert Talbot "was happy to see the morale of his personnel pick up 200%"[83] with the return of the Mustangs.

Finally, XXIX TAC was under the command of Brigadier General R.E. Nugent. Added on 12 September 1944, the XXIX TAC was the newest of the three TACs. First activated at St. Quentin, France, the XXIX TAC was formed from the joining of the 303rd and 84th Fighter Wings. These two wings were joined together to form a single entity with administrative details to be hashed out later. The consolidation took just under two weeks time. By 3 October 1944 they were flying official missions together.

The XXIX Tac was assigned to provide air cover for Lieutenant General William H. Simpson who commanded the Ninth Army. One example of just how effective and coordinated the XXIX TAC had become occurred on 5 December 1944. In the heat of the battle for the Roer River area, the XXIX TAC received a desperate call for help from the 29th Infantry Division, which was trying to oust the Germans out of the Julich Sports Palace, located in Julich, Germany. The Germans were defending their position on the Roer River, having turned the massive sports palace into an impenetrable fortress. The XXIX TAC responded with P-47s and "The athletic arena was turned into an incinerator within ten minutes."[84] With the sports complex knocked out, the Allied push from the Roer River towards the Rhine River, known as "Operation Q", was back in business.

In addition to the fighter commands, the IX Bomber Division was a part of the Ninth Air Force under the command of Major General Samuel E. Anderson. Having only been in existence since 30 August 1944, it was one of the newest additions to the Ninth Air Force. The IX Bomber

[83] Kenn C. Rust, *The 9th Air Force in World War II*, 144.
[84] R.E. Nugent, "Mission Accomplished: The story of the XXIX TAC", *Stars and Stripes* (December 1944): 1.

Division's primary aircraft was the Martin B-26 Marauder. This medium bomber was just the right Allied aircraft to halt the German advance. According to a United States Army Air Force post war review, "With its massive payload of bombs, and its ruggedness, the B-26 was able to perform well in the Ardennes Offensive."[85]

During the battle, Eisenhower divided the Ardennes Forest into ad hoc sections as a result of the "bulge": a Northern Section, a Middle Section, and a Southern Section. In the North, the XXIX TAC, led by Brigadier General Nugent, supported the Ninth Army under the command of Lieutenant General William H. Simpson. Opposing the Ninth Army on the *Wehrmacht* side was SS General Joseph Sepp Dietrich's 6th *Panzer* Division. The 6th *Panzer* Division moved west along a line that included Malmedy and Liege. These towns were coveted by both sides as important geographical crossroads.

The Middle Section was defended by Hodges' First Army, backed by General Pete Quesada and his IX TAC. The middle section would suffer attacks from the *Wehrmacht*'s 5th *Panzer* Group under General Hasso Von Manteuffel. Prized cities on their list included St. Vith and Bastogne. The 509th Fighter Squadron was a part of the 405th Fighter Group attached to IX TAC. Its unit historian was First Lieutenant Neil Maclachlan. The squadron was given Republic Aviation P-47 Thunderbolts, a massive aircraft that was able to destroy German tanks with ease. The P-47 owed its deadly strength to its four massive M2 Browning Machine Guns located in each wing. These aircraft proved adept at hunting out and destroying German tanks in the open, as well as providing CAPs (combat air patrol) for the Allied ground forces. In one of his reports on the unit's operational history from December 1944, Maclachlan wrote that "December

[85] United States Army Air Force, *Ninth Air Force: USAAF* (Washington, D.C., 1945), 3.

brought about one of those last and final stands put up by the Huns and it turned out to be the mightiest counter-attack in the present phase of the war."[86]

The Southern Section was the responsibility of the XIX TAC, commanded by General Opie Weyland, who provided air cover to Major General George S. Patton's Third Army. Patton had been in the Saar Region heading east towards the Siegfried Line at the start of the battle. However, he soon received orders to swing northward to relieve the 101st Airborne paratroopers, who had come under siege in the town of Bastogne. Patton had to contend with the German Seventh Army which was led by General Eric Brandenberger. The German Seventh Army was responsible for providing backup for the German Fifth Army and had also been tasked with a secondary goal of gaining and holding Luxembourg.

In addition to CAS operations, the Ninth Air Force also conducted so called "Pathfinder missions" which were intended to help bombers find their targets. Reconnaissance pilots would find open patches in the cloud cover using landmarks to help bombing raids become more effective. This was especially helpful during periods of dense fog and heavy cloud cover. Many times the weather was so bad that the damage from the bombs could not be observed. Many Ninth Air Force documents discuss in detail these Pathfinder missions being carried out during the height of the Ardennes Offensive.[87]

Each TAC was broken down into three fighter groups which were then further divided down into three separate fighter squadrons. Two fighter groups (the 352nd and 361st Fighter Squadrons) joined the fray from the Eighth Air Force and were put under the auspices of the Ninth Air Force. They worked on defense while the Ninth's fighter-bombers took on the

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[86] Maclachlan, *Flight Records of the 509th Fighter Squadron,* 8.
[87] Richard G. Davis, *Carl A. Spaatz and the Air War in Europe* (Washington D.C.: Center for Air Force History, 1993), 532.

Luftwaffe. This ability to regroup across regions allowed for the Americans to quickly react to the German offensive. The XIX and XXIX TAC also flew reconnaissance missions providing topographical and strategic data which informed future bombing sorties and ground war efforts.

The XXIX Reconnaissance Unit was focused on the Belgian towns of Julic, Gresenbroich and Erklenz. However, only "Forty-six out of a hundred attempted reconnaissance sorties were successful"[88] writes Wyant. In this case "successful" is a relative term and was used to describe sorties that took off, flew in bad weather and returned to base. It did not necessarily mean that useful data had been collected. This 46 percent success rate would later come back to haunt the Allies, who missed the general area where the *Wehrmacht* was amassing resources to mount the offensive.

Overall, the American forces on the ground and in the air were well led and efficiently coordinated. Experienced leaders such as Vandenberg, Quesada, Weyland, and Nugent evaluated every mission objective and sent their airmen forth to face the risks of enemy hostilities and adverse weather. The pilots and airmen under their command were willing to take risks to provide air cover for the men on the ground, to fly reconnaissance missions, to drop supplies, and to bomb German depots and infrastructure. This dedication to flying in almost any weather resulted in the eventual defeat of the *Wehrmacht* forces. During the first few days the weather was extremely inhospitable and while full operations were not possible, some sorties still managed to fly. As the week wore on, there were patches of somewhat better weather and the Allied Air forces took full advantage of whatever breaks they could find. Air ground cooperation saved many lives on the ground. As the story in the *Achtung Jabos* newsletter recounts: just as the crew of one aircraft [from IX TAC] was "wheeling around to go

[88] Wyant, *Airpower in the Battle of the Bulge,* 5.

home, they heard someone from the ground control cut in on the radio channel with, 'Oh, how we love you guys!'"[89]

[89] Quesada, "Achtung Jabos: The Story of the IX TAC,"51.

Chapter II: Warplanes at the Ardennes

During the Battle of the Bulge, both sides flew aircraft that reflected their best technology. Allied war planes had been developed roughly between the years of 1938-1943, whereas the *Luftwaffe*'s dated further back to 1935. The German aircraft had first seen combat during the Spanish Civil War (1936-1939). Planes such as the BF-109 were fine for their initial aerial combat roles over Poland and into France (circa 1939-1940), however by 1944, the Anglo-Americans brought new improved aircraft into the fray. These American planes had both a qualitative and a quantitative advantage over the *Luftwaffe*'s beleaguered fleet. Nevertheless, both sides produced excellent pilots, some of whom became the greatest of Aces,[90] such as Captain John C. Meyer (24 kills) for the Americans and *Oberfeldwebel* Heinrich Bartels (99 kills) for the *Luftwaffe*. Both were at the Battle of the Bulge. Meyer survived the war, but Bartels was killed on 23 December 1944.

The Ninth Air Force employed a variety of aircraft during the Ardennes Offensive. These ranged from the North American P-51D Mustang Fighter to the Martin B-26 Marauder. Each of these aircraft played vital roles in the effort to drive back the Germans**.** The menacing American fighter-bombers (*Jadgebombers* or "*Jabos*") instilled fear amongst the *Wehrmacht* forces. Quesada summarizes the *Jabos'* effectiveness as "the most terrifying weapon on the Western Front'"[91]. This term refers to those aircraft which could perform both the role of the fighter and/or that of a bomber. The fighter-bombers stymied German operations and inflicted psychological damage to those who saw the carnage left behind. "The activities of the fighter-

[90] (An Ace was any pilot who had shot down five or more enemy planes in a dogfight. A dogfight describes intense aerial combat between aircraft with the intent to shoot each other out of the sky. These battles often include the most sophisticated of maneuvers.)
[91]Quesada, "Achtung Jabos: The Story of the IX TAC," 2.

bombers are said to be unbearable," writes Colonel Walther Reinhard of the XXLVII *Panzer* Corps, "*Leibstandarte*[92] also reports that fighter-bomber attacks of such caliber have never before been experienced."[93] Captured German prisoners of war often spoke of the fear they had for *Jabos* in that they rained down "indiscriminate death."[94] As early as the Normandy Campaign, German staff officers who were trying to reach the frontlines reported that their trip "was a nightmare of ditching the car, running for cover, being machine-gunned, resuming the journey and having these same events repeated every few miles."[95]

According to Spires, at the start of the Ardennes Offensive, "Allied air forces possessed a significant numerical advantage over the *Luftwaffe*."[96] The number of Allied fighter aircraft numbered around 4,000, while the *Luftwaffe* had approximately 2,400. The Allies had six commands that they would be able to call upon during the Offensive. These included: The British RAF Bomber command with 1,603 bombers, the American Eighth Air Force with 2,102 bombers and 1,102 fighters, the Ninth Air Force with 968 bombers and 563 fighters, two smaller commands and a curiously named "Fighter Command". These two smaller commands were the First TAC Air Force with 158 bombers and 362 fighters and the British Second TAF (Tactical Air Force) with 240 bombers and 1,053 fighters. Lastly, the "Fighter Command" was made up of 529 fighters. All together these totals made up 4,666 bombers and 4,014 fighters for a total of 8,680 aircraft.

How these planes were loaded with bombs and ammunition, called the "load out", depended upon the type of mission and aircraft. Most of the missions over the Ardennes

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[92] The 1st SS *Panzer* Division Nickname
[93] Quesada, "Achtung Jabos: The Story of the IX TAC," 2.
[94] O.P. Weyland, *Tactical Air Operations in Europe* (Montgomery Alabama: Maxwell Air Force Base Collection 1945), 55.
[95] Hughes, *Over lord: General Pete Quesada,* 145.
[96] Spires, *Airpower for Patton's Army*, 190.

involved close air support or (CAS) for the ground troops resisting the German onslaught. Normally a CAS mission would include twelve P-47s. Typically, eight would be carrying 500lb bombs while the other four would not. The Eighth Air Force included the 2nd Air Division, which had a new piece of equipment called the Gee-H. "Gee-H (had a) range of 300 miles, employed an airborne transmitter and two ground beacons to fix a target's position."[97]

Pilots and their ground crews worked around the clock in order to keep the aircraft flying. "Flights were dispatched as quickly as they could be serviced and loaded to attack targets of opportunity in the salient"[98] remembers General Otto P. Weyland of the XIX TAC. The records of flight times for each of the Ninth Air Force's squadrons confirms that many pilots were flying nearly three to four patrols a day during the initial stages of the offensive. In December alone, B-26 Marauder bombers flew 4,738 sorties (missions) compared to November where they had flown 3,694 missions. P-47 fighter-bombers in December flew 9,631 sorties compared to November in which they had flown 9,133.[99]

The Northrop P-47D Thunderbolt was the most commonly used fighter bomber on the Allied side. With its Pratt and Whitney R-2800 engine, the P-47s primary role was to hunt out German vehicles and destroy them. Using its eight, wing-mounted .50 caliber guns these aircraft were meant to be hunters, not escorts. This was because their range was not that great compared to the American P-51D or the British Spitfire. Time in flight could be extended with extra fuel canisters which could be loaded under the wings. Yet during a dogfight, the tanks would have to be dropped in order to reduce drag and the possibility of explosions, thereby

[97] Davis, *Carl A. Spaatz and the Air War in Europe*, 532.
[98] Weyland, "Tactical Air Operations in Europe", 55.
[99] Weyland, "Tactical Air Operations in Europe", 55.

shortening the range. Their primary targets included trains, trucks, and tanks, but stationary targets could also be of value if they were found.[100]

Another type of commonly used aircraft by the Allies was the Lockheed P-38 Lightning. These aircraft were favored by IX TAC in the center of the Bulge. The P-38 Lightning was a capable heavy fighter. Known as *Der Gableschwanz-Teufel* (Fork tail Devil) by the Germans, this versatile aircraft played many roles throughout the war, but was primarily used during the Ardennes Offensive as a ground attack plane and also performed reconnaissance missions and pathfinding operations for the medium bombers. Their roles included escorts, bombing, dogfighting, reconnaissance, and in a first for the Americans in World War II, night combat missions.[101]

The North American P-51D Mustang was the workhorse among the Allied aircraft. Powered by its Rolls-Royce Merlin engine, this aircraft became the main fighter aircraft used by the United States by end of the war. Able to escort heavy bombers from England to the continent and back, the P-51D had a range of 1,650 miles. Its six .50 caliber machine guns, along with its hard points for rockets or bombs under the wings, allowed it to be used in many roles. Although the Mustang mostly accompanied B-17 runs for the 8th Air Force, many did see action during the Ardennes Offensive.[102]

Allied Bombers used during the Ardennes Offensive varied from squadron to squadron. The ones most frequently called upon were the Martin B-26s, the North American B-25s, and the Consolidated B-24 Liberator. While these three bombers are not as famous as the B-17

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[100] Leonard Bridgeman, *Janes Fighting Aircraft of World War II* (New York: Monroe Street books, 1994), 23.
[101] Jacob E. Fickel, *The Effectiveness of Third Phase Operations in the European Theater*, (Fort Leavenworth, KS: Biblogov Publishing, 1945), 178.
[102] Bridgeman, *Janes Fighting Aircraft of World War II,* 35.

Flying Fortress, they nonetheless played essential roles in the air war over the Ardennes. Over the course of the Ardennes the medium bombers dropped a total of 55,000 bombs from medium level with good visuals on their target. Another 62,000 bombs were dropped from medium level with no visual on their targets and the last 71,000 were listed as "other".[103] Together, these 188,000 bombs destroyed infrastructure, eliminated fuel sources, and disrupted *Wehrmacht* advances. The Allied strategic and tactical bombings forced the Germans to use their limited resources to protect their advance against the Allies' air capabilities.

Right after the war, Major Jacob E. Fickel, analyzed American air power's effectiveness. He wrote that the medium bombers of the Ninth Air Force were assigned three separate tasks. 1) "The interdiction program designed to hinder rail movement between the Rhine River and the base of the counter-offensive between the Our and Kyll Rivers." 2) "The close interdiction program designed to impede rail and motor movement in the base area and destroy troops and material in that area." 3) "The close cooperation program to hinder movement within the battle area and directly behind the front lines."[104] Together, these three phases allowed for the Allied medium bombers to disrupt the German onslaught and then support the Allied counter offensive against the *Wehrmacht*.

The Martin B-26 Marauder Medium Bomber was the primary bomber of the Ninth Air Force during the Ardennes Offensive. The twin engine bomber had a crew of seven and a combat radius of 1,150 miles. The payload of the Marauder was 4,000 pounds allowing a substantial amount of ordinance to be dropped on any target below. The objective of the escort missions carried out by the Ninth Air Force was for the B-26s to hit critical objectives such as

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[103] Gerald Astor. *The Mighty Eighth: The Air War in Europe as Told by the men who fought it* (New York: Donald I fine Books, 1997), 372.
[104] Jacob E. Fickle, "The Effectiveness of Third Phase Tactical Air Operations in the European Theater" 182.

ammo dumps, communication centers and railyards. These bombers and this strategy of depriving the Germans of necessary resources would turn out to be one of the most effective factors in stopping the German's westward push.[105]

Although the *Luftwaffe* did what they could to stop these strikes, by this point in the war they were badly weakened and facing numerous shortages of essential supplies. For example, the Germans had switched from 20mm Flak to 37mm Flak which was produced in several different locations over time, as the factories faced bombings as well as disruption in the availability of the source materials. As for the *Wirbelwind* and *Ostwind* (anti-aircraft tanks), according to General Heinz Guderian "There were never enough of them…Both proved to be very effective against low flying aircraft. The interesting fact is that prototype *Ostwind* was combat tested by 1st *Waffen* SS *Panzer* Division '*Leibstandarte* SS Adolf Hitler' during the Ardennes Offensive (December 16-22 of 1944) and returned to the factory undamaged."[106]

The Ninth Air Force's operational aircraft during December 1944 consisted of eleven bomber groups, ten reconnaissance groups, and fifteen fighter groups. Out of these groups, the bombers flew a total of forty-two sorties per group per day (GPD), the fighters flew sixty-two sorties GPD, and the reconnaissance planes flew fifteen sorties (GPD). For December 1944 percentages of sorties flown sorted by individual aircraft type is as follows, the Martin B-26 Marauder accounted for 9.6 percent, the P-47 Thunderbolt accounted for 17 percent, while the reconnaissance F-5 accounted for 11.3 percent. Curiously, the North American P-51D is

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[105] Bridgeman, *Janes Fighting Aircraft of World War II,* 30.
[106] Achtung Panzer. "Flakpanzer IV Wirbelwind and Ostwind" Achtungpanzer.com http://www.achtungpanzer.com/index.hml (accessed May 30, 2016).

recorded in the flight records, but their percentage of sorties flown was not listed with the other aircraft types.[107]

Not surprisingly, December 1944 saw the numbers of credited sorties across all mission types increase dramatically from November. Dive -bomber missions accounted for 42,000, while reconnaissance missions totaled 75,000. Area coordination from reconnaissance aircraft saw 115,000 missions and escort missions for bombers saw an incredible 162,000 credited missions. The last category listed as "other" was noted to be 170,000 though no indication was given as to what "other" meant.[108]

Reconnaissance squadrons also deserve mention for their efforts during the Battle of the Bulge. During December 1944, reconnaissance squadrons took 10,000 tactical photos from missions flown over the battlefield. Another 15,000 photos of various towns and locations were taken after air strikes and 20,000 photos listed as "other". Once again, no indication was given as to what "other" meant. Reconnaissance objectives included scouting new tactical targets, tracking the German advance and quantifying the success of pervious bombing missions.[109]

One such aircraft that is often forgotten is the L-4H Grasshopper (often called "the cub" from its civilian name). This aircraft was a single prop driven aircraft that was used extensively by the U.S. Army Air Force in North Africa and Europe. First built in 1937, the Grasshopper was converted for military use in 1942. With a range of 220 miles and a crew of one, this aircraft was perfect for reconnaissance work. Two squadrons that used the Grasshopper were the 125th Liaison Squadron and the 50th Mobile Reclamation and Repair Squadron (XXIX TAC, Ninth Air

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[107] Fickle, "The Effectiveness of Third Phase Tactical Air Operations" 183.
[108] Wyant, *Airpower in the Battle of the Bulge,* 15.
[109] Wyant, *Airpower in the Battle of the Bulge,* 15.

Force). Both of these squadrons supported the United States Ninth Army during the Battle of the Bulge.

In the fall, American leadership saw the need for new and revamped reconnaissance groups. The XXIX TAC received the 363rd Tactical Reconnaissance Group on 4 September 1944, which had previously been the 363rd Fighter Group. It was also during this time that a majority of the reconnaissance aircraft were switched from P-51D Mustangs to the newer tactical photo varient P-6 Mustangs. The British 1st Tactical Air Force (TAF) also received the Provisional Reconnaissance Group (XII TAC). A new piece of technology that was just coming into use "was the SCR-584 radar set. Highly accurate and with a range of about 30 miles, it was able to direct an aircraft to within a few hundred yards of a target…"[110]notes Rust.

It was aerial reconnaissance that allowed the Allies to figure out how to stop the *Wehrmacht* advance. Although in the early stages of the campaign "the entire front was extremely fluid" [111]this would not stop the Allies from sending out sorties. By 25 December however, the front had stabilized allowing a better understanding of the situation. According to Fickel, "Reconnaissance played an important part in spotting enemy columns and concentrations enabling Allied ground forces to re-deploy to meet the assault and air units to plan their attacks."[112] With this intelligence, the Allies were able to contain the *Wehrmacht* forces and prevent the breakout that Hitler had wanted. As a German soldier noted "we all would be very happy to see a few of our fighter planes which would bring an end to the *stureren* (stubborn) which we call the artillery observers. Without any interference these dogs fly around all day in our sky. Against that one can only hide like a little mouse and do the rest at

[110] Rust, *The 9th Air Force in World War II,* 121.
[111] Fickel, *The Effectiveness of Third Phase Operations*, 184.
[112]Fickel, *The Effectiveness of Third Phase Operations*, 184.

night."[113]Without aerial reconnaissance calling in the rounds on the German positions, containing the breakout would have been a nearly impossible task.

While Allied air power dominated, the *Luftwaffe* put in a surprising effort at the Bulge. From 1943 through 1944 Allied air power steadily wore down the *Luftwaffe* so that by D-day German planes were present, but were not a significant factor. However Spires notes that by 16 December 1944, "The *Luftwaffe's* aerial striking force…had been secretly expanded to some 2,400 tactical aircraft for the campaign and moved to bases in the Rhine valley."[114] The Germans managed this by moving planes from the Eastern Front and severely limiting air activity during the months of October and November 1944 in order to mount the air war against the Allies during the Ardennes Offensive. American pilots and leadership were initially caught off guard by the sudden resurgence of the *Luftwaffe*, inasmuch as the *Luftwaffe* had been a non-factor for months. The Germans had a mixture of older aircraft and cutting edge technology, namely jets, such as the ME-262 which were put into limited use in late 1944. At any given moment Allied pilots were forced to shift quickly from the air-ground support role to a traditional dog fighting role and then back again.

At the start of the Ardennes Offensive, the *Luftwaffe* had a policy of "conservation of effort"[115] in order to stretch their limited fuel supply. The Germans tried to keep the aircraft based as close to the front as possible to minimize fuel usage. Additionally, many of the airfields were unusable or nearly so due to excessive rain which resulted in muddy fields and air strip damage. During the Ardennes Offensive there were approximately forty-one serviceable air

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[113] James A. Huston "Tactical Use of Airpower in World War II: The army experience" *Military Affairs,* 14, (Winter 1950), 179.
[114] Spires, *Airpower for Patton's Army*, 188.
[115] Fickel, *The Effectiveness of Third Phase Operations*, 176.

fields in the general vicinity and heading towards Cologne. The shrinking number of air fields "caused a concentration of aircraft at the few remaining bases and resulted in over- crowded conditions."[116] This concentration increased the demand for the bases' limited resources such as fuel, mechanics, parts, and landing strips.

Contrary to popular memory, the *Luftwaffe* was to play an expanded role in the Ardennes Offensive. Hitler wanted his ground offensive to have air cover to make sure the *Panzer* Divisions would be able to travel without fear of air attacks. However, Hitler sometimes hampered their ability to operate by issuing countermanding orders during the fighting. Unwittingly perhaps, the general order to provide close air cover to the advancing *Panzer* columns also delivered the bulk of the *Luftwaffe*'s remaining planes to one centralized location. Whether this had been Eisenhower's plan all along, or a fortuitous turn of events, the air commanders Vandenberg, Quesada, Weyland, and Nugent were able to adapt to inclement weather, scattered airfields, and anti-aircraft threats well enough to severely cripple Hitler's *Luftwaffe* and hasten an end to the war.

At the start of the Ardennes Offensive, "it was estimated that 75% of all the [German] single-engine fighter strength was based along the Western Front with the following dispositions:"[117]

Achmer Area: 280
Munster Area: 240
Essen Area: 120
Frankfurt Area: 360
Mannheim Area: 80
Frieberg Area: 40

[116] Fickel, *The Effectiveness of Third Phase Operations*, 176.
[117] Fickel, *The Effectiveness of Third Phase Operations*, 177.

Stuttgart Area: 80

Unlocated (Western Germany): 180

The BF-109 and *Focke-Wulf* 190 were the primary fighter aircraft of the *Luftwaffe*. These two planes saw the most action during the campaign as air cover for the German armored offensive. The BF-109 had first flown in 1937 during the Spanish Civil War, where German pilots such as General Adolf Galland had gained their skills. Galland was a Lieutenant General in charge of the *Luftwaffe* at the Bulge. The later FW-190 was a single pilot plane that had a single Junkers Jumo 213 A-1 engine that could reach nearly 519 miles (for sortie purposes a 250 mile trip out and then back). It had two .51 caliber guns and two 20mm cannons which were primarily used in air to air engagements.[118]The FW-190 was primarily used for air defense over Germany.

The BF-109 was the older brother to the *Focke-Wulf*. It had a large Daimler-Benz DB 605A-1 engine that was able to handle a range of nearly 530 miles. In general the *Luftwaffe*'s planes had a shorter range than their Allied counterparts. This was because the Germans had planned for their air force to be only a supporting factor in their Blitzkrieg, not its own separate entity. This would later haunt the Germans during the Battle of Britain in 1940 when their fighters' lack of range became the primary factor in determing the outcome. The fighters were unable to escort the bombers to the targets and back thus making the bombers easy targets for the Allied fighters. Although the Ardennes campaign followed the Blitzkrieg doctrine, the *Luftwaffe* had hoped to copy the Allies' style of aerial warfare which included forward reconnaissance and air to ground protection. The armament of the BF-109 was one of its redeeming features. It had two .51 caliber machine guns, one 78mm cannon, one 30mm

[118] Bridgeman, *Janes Fighting Aircraft of World War II,* 72.

cannon, and two 20mm machine gun pods that could be added under the wings. This made the BF-109 a formidable tactical fighter. In the hands of a veteran pilot it could go up against nearly any aircraft of its age and come out the victor.[119]

Germany also had its own bomber forces, but they did not compare well to their American counterparts. The Junkers JU-88 medium bomber, Junker JU-87 *Stuka*, and the HE-111 *Heinkel* were all products of Germany's effort to make their own bomber air force. By December 1944, the *Luftwaffe* was greatly depleted. Only carefully planned air operations would allow for any chance of victory. The sudden re-emergence of the *Luftwaffe*'s long range bombers was a shock to the American pilots. The primary missions of these bombers were to disrupt transportation as well as aiding ground forces.

The *Heinkel* HE-111 was Germany's principle medium bomber. First flown in 1935, these aircraft had been used during the Battle of Britain to bomb the British population. The HE-111 was a work horse along both the Eastern and the Western Fronts. Squadrons of HE-111 flew with some success during the Ardennes Offensive, to disrupt the American defenses as the German ground forces pushed into their lines. Ninth Air Force records would later report that multiple HE-111 flights had been intercepted by Allied aircraft during the Ardennes Offensive. Allied estimates placed the number of downed aircraft at eighteen with many more damaged. One of the most innovative uses of the HE-111 during the war was in the Malmedy area on the night of 16-17 December 1944. German *Fallschrimjager* with the support of the *Luftwaffe* were used to cut off the Malmedy area during the Ardennes Offensive. Wyant writes that "an

[119] Bridgeman, *Janes Fighting Aircraft of World War II,* 32.

estimated 90 JU-52's (Troop cargo planes), and probably some He-111's (medium bombers) were involved"[120] in this operation which dropped about 1,000 paratroopers.

Even though it was a twin engine bomber, the range of the HE-111 was less than its B-26 counterpart. Powered by two Jumo 211F-1 engines, the *Heinkel* had a crew of five men. This small crew carried with them 4,400 pounds of bombs with the optional extension of 7,900 pounds on the exterior. Compared to the Allied 4,000 pounds of interior only bombs, the He-111 could deliver a stronger payload than its closest American counterparts. This trade off in range for payload was a calculation on the Germans' part in their planning for operations just before the outbreak of World War II. During the Battle of the Bulge, the He-111 was used not only to soften up American ground positions for attack, but also used as a terror tool in order to strike fear into the green American ground troops of the U.S. Ninth Army.[121] The turnover was so great during the first week of the Bulge that green troops were especially terrorized by large scale bombardments dropped by the *Luftwaffe*. [122]

The Junker JU-88 was the tactical bomber of the German *Luftwaffe*. Although it was not as recognizable as the more infamous *Stuka*, it nonetheless had a 3,100lb payload that could be dropped on Allied targets. With its two Junkers Jumo 2111 J engines, it was capable of flying 1,429 miles. A crew of four eased Germany's manpower problems. The JU-88 had served in the Battle of Britain as one of the primary bomber aircraft, just like the HE-111. Ninth Air Force records and United States Air Force records both recount multiple engagements between Allied aircraft and JU-88s during the Ardennes Offensive. Most commonly these bombers were being used to soften up an Allied ground position before the Germans would strike at it with their

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[120] Wyant, *Airpower in the Battle of the Bulge,* 7.
[121] Karen Leverington, *The Vital guide to Fighting aircraft of World War II* (London, England: Air life publishing, 1995), 80.
[122] Sylvan and Smith, *Normandy to Victory,* 227.

ground forces. The JU-87 *Stuka* was Germany's primary dive bomber and was one of the most feared weapons of the German army on the Allied side. The typical night attacks of fifty to sixty *Stuka* aircraft used during the Ardennes Offensive were meant to rattle the Allies and break their will. Such flights were rare during the day as Allied forces had daytime superiority because the P-51s and P-47s found the *Stuka* slow and easy to shoot down. These night attacks were also used at the tactical level by the Germans to strike fear into the fresh American troops. American infantry would come to regard the *Stuka* with its infamous scream as one of the most terrifying psychological weapons of the war. [123]

The *Luftwaffe* deployed reconnaissance aircraft in order to aid their ground forces, just as the Allied Forces did. The primary aircraft for this role was the *Arado* 234, a four engine jet powered aircraft. Since the *Arado* was produced late in the war, only a limited number of them were put into service. However, the fact that the *Luftwaffe* Jet Force was present in the Ardennes Offensive was enough for the Allies to take notice. Both the jet powered ME-262 and ME-163 had the potential to threaten Allied control of the air. Although they were produced in limited numbers and were mechanically unreliable, they could out run and out maneuver any Allied aircraft in the sky. "ME-262 production in October (1944) was estimated at 100 (aircraft). By the start of the Ardennes Offensive, intelligence suggested that "approximately 150 jet propelled aircraft were available for operations."[124]

One of the lesser known aircraft in trials at the time was the jet propelled HE-162. Since vital metals were running low in Germany, the aircraft was made of wood which would hinder its development and design. German General Adolf Galland had argued against this aircraft in favor of the ME-262, but had been overruled by Hitler in favor of the HE-162. There was a great

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[123] Bridgeman, *Janes Fighting Aircraft of World War II,* 40.
[124] Fickel, The Effectiveness of Third Phase Operations, 177.

push to get the HE-162 designs into production, but Galland was strongly against it. In a meeting near Rastenburg on 23 September 1944 Galland had argued that "the terrific expenditure of labor and material was bound to be at the expense of the ME-262"[125]. Galland put his neck out and was alone in his assessment that it was better to build more of what they knew worked than to run after something new while under duress. Hitler got angry and Galland lost his position as General of the Fighter Arm.

Born out of wartime necessity, troubles plagued the emergence of the HE-162. First flown on 6 December 1944, Adolf Galland noted that "a test pilot died while attempting a loop… [And] the first fleet of planes did not come on line until March 1945" so perhaps Galland had been correct. Perhaps this is a moot point in as much as additional ME-262s might have been grounded anyway due to lack of fuel and pilots. In any event, Galland admits that it likely that extra ME-262s would not have stopped the Allied Offensive.

Colonel William R. Carter in 1989 noted that the *Luftwaffe* "on 16 December 1944, had consisted of a total of 2,460 aircraft."[126] Out of these aircraft, 1,770 were singe engine aircraft, with the second highest being ground attack aircraft at 390.The feared ME-262 and HE-162 were the lowest available aircraft numbering only about forty altogether. This was because Hitler had prevented the *Luftwaffe* from acquiring more of these jets in favor of the single engine fighters. In his diary, *Luftwaffe* General Adolf Galland wrote that this had been one of the many reasons that the *Luftwaffe* had lost the air war.[127] To sum up Hitler's decision to build single engine fighters instead of jets was just one of many questionable choices in a series of poor decisions.

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[125] Adolph Galland, *The First and Last* (New York, Important Books, 2014), 346.
[126] William R. Carter, "Airpower in the Battle of the Bulge: A Theater campaign perspective" 10.
[127] Adolph Galland, *The First and Last,* 24.

Chapter III: The First Week: Hanging on in the Snow

(16 December to 22 December)

The first week of the battle was characterized by extremely bad weather, Allied unpreparedness, and a disorganized response from the Allied upper echelon leadership. Each of these elements will be discussed as they unfolded day by day during the first week. The lines of Allied defenders had grown woefully thin as a result of bitter autumn fighting. "Since September, the U.S. Ninth, First and Third armies alone had suffered 134,182 battle casualties and lost nearly that many more to fatigue, exposure, and illness."[128] The Germans were starting the offensive with approximately 200,000 men as compared to the Americans who had roughly 85,000 men scattered along eighty miles of rugged terrain. The air crews were also experiencing their own fatigue, whereas others, like the 125th Liaison Squadron had just arrived on continent. Overall, as of 16 December 1944, Allied forces on the ground were outnumbered, exhausted, green, and spread thin as compared to the *Wehrmacht* forces. To compensate, Eisenhower would move every available resource to the area, and he ordered the air forces to provide air to ground coverage wherever possible.

In the still dark hours of the morning of Saturday, 16 December, 1944 "German artillery punctuated the fog-shrouded silence of the U.S. First Army line."[129] From every corner of the Ardennes region, reports were flowing to headquarters of artillery attacks and bombardments. In the air, Allied pilots had grown accustomed to striking ground targets without fear of the German *Luftwaffe,* but as Ken Rust points out, on 16 December, "the *Luftwaffe* flew some 150 ground support sorties possibly limiting the numbers so as to hide as much as possible the full

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[128] Ward and Burns, *The war: an intimate history, 1941-1945*, 306.
[129] Hughes, *Over lord: General Pete Quesada,* 272.

and true extent of the Ardennes Counter Offensive."[130] In the southern sector of the Bulge that first day, General Weyland's XIX TAC had "slightly better weather [which] permitted the flying of 237 sorties."[131]Craven and Cates note the German restraint didn't last long and that on 17 December the *Luftwaffe* flew "600-700 sorties in support of the German ground forces."[132] In the area of the First Army approximately 650 sorties were flown by Allied Air Forces on that same day

In the Northern sector on the night of 15-16 December, Colonel Leich of the 125th Liaison Squadron feared having to blow up his L-4H recon planes to avoid them falling into enemy hands at the forward airbase in Maasticht. Reports from First Army indicated that they had already been forced to do just that. However the airbase remained safe from the German offensive and Leich did not have to destroy any planes in his fleet. Nevertheless, rumors of L-4 planes flying sorties against Allied forces circulated in the ensuing days, underscoring the point that it was better to destroy such planes than to leave them intact on a contested airfield.[133]

With regards to air power, first priority was assigned to Hodges' First Army in the central region where fighting was the most intense. Second priority went to Patton's Third Army, which was making a turn away from the Saar region to intercept the oncoming Germans. Eisenhower also reassigned Patton's 10th Armored Division, commanded by Colonel William H. Morris, away from Saarlauten, a decision that angered Patton, as he was reluctant to relinquish control of

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[130] Rust, *The 9th Air Force in World War II,* 131.
[131] Wesley Frank Craven and James Lea Cate "The Army Air Force in World War II" (Washington D.C. 1983) 686.
[132] Craven and Lea Cate "The Army Air Force in World War II", 687.
[133] Ken Wakefield, *The Other Ninth Air Force: Ninth US Army light aircraft operation in Europe, 1944-45*, 70.

hard won ground.[134] Morris would lead the 10th Armored Division (the Tigers) towards Troy Middleton and his VIII Corps, who were bearing the brunt of the early attacks in the middle.

Prior to 16 December 1944, Hodges had been tasked with gaining control of the Roer River Dam which had been a priority because the dam could be used to flood roads downstream to prevent an Allied crossing. At the start of the Battle of the Bulge, Hodges refused to call off his Roer Dam Campaign. Ultimately, this goal was put on the back burner until the Ardennes Offensive was over because Hodges was forced to move towards and defend the crossroads town of St. Vith. Hodges' reluctance to shift his priorities might be an early indication that he was not appreciating the seriousness of the *Wehrmacht* advance, hence Bedell Smith's disdain.[135]

In the Northern Sector, from 16-22 December a battle would be waged over an Old Prussian camp built along the Elsenborn Ridge. On 17 December GIs from the US 99th and 2nd Infantry Divisions fought the 277th Volksgrenadiers and the 12th Hitlerjungend Divisions and brought them to a temporary standstill. Colonel Joachim Peiper might have moved a little to the North and taken the Camp with his SS units, but he chose to stay on his planned run for Stavelot. According to Wakefield, "Intelligence on the precise whereabouts of the enemy was poor, and heavy snow and poor visibility…robbed the Allies of their usually very effective air support."[136] Fickle adds that "poor weather was a serious handicap and Allied air units were constantly operating under conditions which had previously been considered non-operational. Air capabilities in this respect by heavy bombers and fighter-bombers were effective to a surprising

[134] George S. Patton, *War as I knew it* (Cambridge, Massachusetts: Houghton Mifflin Company, 1947) 201.
[135] Caddick-Adams, *Snow & Steel,* 390.
[136] Wakefield, *The Other Ninth Air Force,* 68.

degree."[137] The Ninth Air Force was the first to respond to the crisis. Jerry Scutts notes that both IX and XIX TAC "did what they could with 647 effective sorties"[138] on 16 December.

In the North, SS General Sepp Dietrich commanded the 6th *Panzer* Army forging a path through the Losheim Gap, towards the towns of Malmedy and Liege. Speed was the name of the game; if they could cross the Meuse River by defeating the inexperienced 99th Division, they would face minimal resistance as they headed through the flatter terrain beyond and the goal was to continue on towards Antwerp. Lieutenant Colonel Joachim Peiper commanded the 6th *Panzer* Army vanguard. He was a notorious Nazi whose previous command had brutally "burned villages and butchered civilians" on the Eastern Front.[139]

On 17 December Peiper was so obsessed with making good time "he ordered foot soldiers to clamber up onto his vehicles and roared westward."[140] Furthermore, he chose to continue on a path which was littered with land mines, costing his *Panzers* five tanks and disabling another five. Peiper surprised the 99th Infantry Division and the 14th Cavalry Group when it took Honsfeld. Some GIs were shot and a great many others were taken prisoner. A few hours later at Dom Butgenbach, SS units took control of a fuel depot which enabled their tanks to continue their fast paced trek west. Peiper was pushing his *Panzer* forces towards the town of Stavelot, a vital supply dump that held "over three million gallons of gas just south of Spa."[141]Hitler ordered the *Wehrmacht* to capture Allied supply depots of fuel to press their own advances into the Allied lines. This was a strategy based on necessity because their fuel supplies

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[137] Fickle, "The Effectiveness of Third Phase Tactical Air Operations" 43.
[138] Jerry Scutts, *Aces and Pilots of the U.S. 8th and 9th Air Force*, 119.
[139] Ward and Burns, *The war: an intimate history*, 314.
[140] Ward and Burns, *The war: an intimate history,* 314.
[141] Hughes, *Over lord: General Pete Quesada,* 276-277.

were severely limited. Stavelot was considered a desirable goal because it would put Peiper's *Kampfgruppe* (Battle Group) within a day's travel to Liege.

The *Kampfgruppe* arrived just south of Malmedy in the early afternoon where they crossed paths with Battery B assigned to the 285th Field Observation Battalion. One of the most brutal acts of the war occurred when one hundred prisoners were marched off the road and into a field where they were gunned down as a group. There were eighty-three confirmed deaths, with twelve (some sources say as many as 50) who survived by playing dead. Peiper was well down the road when the Malmedy Massacre occurred, but many historians believed "he certainly knew what would happen."[142]

From 18-19 December, the *Luftwaffe* launched nightly attacks on Verviers-Liege. Allied Intelligence suggested that it was likely JU-88 medium bombers and JU-87 Stukas which were mounting the attacks, with the FW-190s providing escort. On 18 December, the 8th Air Force countered by sending 600 bombers with P-47D escorts of the Ninth Air Force (XXIX TAC) and set out to target the city of Cologne in Germany, located in the Northern sector. A German armored patrol, part of *Kampfgruppe* Peiper, was spotted out in the open. The Thunderbolt pilots preyed upon the German convoy enabling the American ground units "to defend several key bridges and commanders to truck reinforcements into the breach."[143] Rust sums up the fighter-bomber totals for 18 December as being around 500 sorties "while the *Luftwaffe* put up a similar number."[144]This refutes the notion that planes were grounded due to bad weather in the early days of the offensive.

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[142]Caddick-Adams, *Snow & Steel,*4.
[143] Astor, *The Mighty Eighth, 308*.
[144] Rust, *The 9th Air Force in World War II*, 132.

Fighter-bombers of IX TAC were able to launch about 300 sorties on 18 December in spite of the poor weather. General Quesada asked Colonel George Peck (67th Reconnaissance Group, IX TAC) to find volunteers to fly, in order to find *Kampfgruppe* Peiper. The 365th Fighter Group and three other squadrons attacked an armored column based on information gleaned from a recon mission. The armored column was located between Stavelot and Stoumont. This hunting mission took out fifty-six motor vehicles and thirty-two armored vehicles. This left the Allied ground units in better shape to curtail this thrust. Other attacks were launched upon key outposts of road and rail in places such as: Munchen-Gladbach (in the North), and Zulpich, Euskirchen, and Schleiden (in the South).

That same day, General Vandenberg along with Captain Hughes and William Randolph Hearst Jr., a foreign war correspondent for the Hearst newspaper syndicate, drove back to Paris to meet with General Carl Spaatz to discuss what was happening in the Ardennes. Hughes had just recently been made Vandenberg's Chief of Intelligence. After the visit to Paris, Vandenberg, Hughes, and Hearst returned to Luxembourg where the Ninth Air Force was headquartered. On their way back from Paris, they stopped at Rheims to meet with General Sammy Anderson of the Ninth Air Force Bomber Command. General Vandenberg met with General Anderson and the two men discussed how the IX Bomber Command could best be used to turn back the German Offensive. Essentially, the IX Bomber Command would continue to target key supply, road, and rail targets along and behind enemy lines. [145]

Yet by the morning of the 19th the weather had gotten so bad that the Germans were able to fly less than 200 sorties. Compared to the earlier numbers of 450-500 aircraft sorties, German aviation effectiveness was cut by more than half. For the day, Allied aircraft of the XXIX

[145] Hughes, *Personal Journal,* 58.

TAC were able to account for two of the sorties being completely shot down, while anti-aircraft claimed nine. General Nugent, who was by nature very cautious, moved the XXIX TAC headquarters on 19 December for fear of the Germans getting too close to the town of Maastricht in the Netherlands. The new location was St. Trond located an hour southwest in Belgium. General Quesada also decided to move the IX TAC Advanced headquarters from the town of Verviers to Tongress, nearly 30 miles to the northwest as well as the main headquarters to the town of Charleroi.[146]

Amongst the headquarters staff, there was a fear that *Fallschrimjager* troops would try to seize the airfields from the Allies. Fickle notes "the constant threat of damage by saboteurs that were being dropped behind Allied lines"[147] caused the Allies to move their bases for fear of losing more aircraft and crews to the *Wehrmacht* onslaught. Author Ken Wakefield wrote "as the land battle developed it became clear that many aircraft in forward positions would have to be flown back to safer areas."[148]The reconnaissance pilots of the 125th Liaison Squadron, under Nugent's oversight, had only just reunited with their aircraft in Liege on 19 December when the offensive had started. They were assigned to protect the U.S. 75th Infantry Division who were moving in support of the Ninth U.S. Army.

On 21 December, some squadrons of the IX TAC and all of the XXIX TAC were handed over to the British RAF Second Tactical Air Force for the duration of the Ardennes Offensive. Nugent later that day wrote in his diary: "This is our big chance; several days of good weather for air action followed by a heavy, well placed counteroffensive should end the war."[149] This

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[146] Sylvan and Smith, *Normandy to Victory,* 227.
[147] Fickle, "The Effectiveness of Third Phase Tactical Air Operations" 184.
[148] Wakefield, *The Other Ninth Air Force,* 68.
[149] Parker, *To Win the Winter Sky*, 209.

wish for good weather however would not be answered immediately. The weather would only get worse before it got better.

Within a few hours of the offensive many American ground troops reported seeing German saboteurs wearing captured American uniforms. These saboteurs had been dropped behind Allied lines and were under the command of Lt. Colonel Otto Skorzeny. "Skorzeny's killer commandos" had been tasked with causing paranoia, sabotage and confusion. These reports were common throughout the Bulge. Additionally, there was a fear of captured American aircraft being used by the Germans to deceive American pilots. Ken Wakefield recounts "there was now reports [16 December] of enemy L-4H Cubs flying over Allied lines and these were believed to be former First Army aircraft captured by the enemy."[150] With many of the anti-aircraft crews being fresh, untested units and suspicion widespread, these young soldiers were likely to fire on anything they could not immediately identify.

That same day, an Associated Press writer had just arrived in Malmedy, and First Army Headquarters made the decision to release the story to the public. Word of the massacre spread quickly and GIs later burned 124,000 gallons of fuel and blew up key bridges, rather than letting Peiper and the 6th *Panzer* Group gain access. There is some debate why Peiper took little backroads, as opposed to the larger N32, but it appeared that he was avoiding conflict with another *Kampfgruppe* scheduled to use the larger road and he stuck fixedly to the original plan. The Malmedy Massacre, as it would become known, reverberated through the military community. Captain Francis G. Smith Jr. and Major William C. Sylvan noted that "Quesada has

[150] Wakefield, *The Other Ninth Air Force,* 68.

told every one of his pilots about it during their briefing."[151] One can imagine that the pilots were chomping at the bit to avenge the fallen.

The fog up to this point kept the main strength of the Allied air power grounded, but General Pete Quesada of the IX TAC was undeterred. The situation was desperate and as Hughes notes "by noon only air power and a few fighting troops stood between Peiper and his goal of fuel."[152] In the center, the Allies needed to find Peiper's armored forces. Quesada ordered Colonel George Peck the leader of the 67th Reconnaissance Group (IX TAC) to enlist volunteers to scout out and if able, attack Peiper's forces. On 17 December Captain Richard Cassidy and Lieutenant Abraham Jaffe both accepted the task and took to the skies in P-6 Mustangs around 12:30 PM. The flying was treacherous. Flying "as low as 100 feet above the ground"[153] the two pilots located Peiper's battle group near the town of Stavelot. "We made three runs over that column" said Cassidy, "and the Germans were so surprised to see us that they didn't fire until the last run. Then the *Panzers* aimed everything from rifles to 20mm cannons at the Mustangs."[154] The two had encountered a section of Peiper's battle group made up of sixty tanks and various armored vehicles. Quickly climbing to escape the anti-aircraft fire, the two pilots radioed in the position of the armored column.

Back at base, Quesada ordered his Operations chief Gil Meyer to launch the P-47s in order to catch up to the German armored column. Colonel Ray Stecker, who was part of the 365th Group answered the call, but was not keen on launching in the inclement weather. Meyer prevailed over Stecker's reservations and several flights of four were launched in order to seek

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[151] Sylvan and Smith Jr., *Normandy to Victory,* 217.
[152] Hughes, *Over lord: General Pete Quesada,* 272.
[153] Hughes, *Over lord: General Pete Quesada,* 277.
[154] Hughes, *Over lord: General Pete Quesada,* 277.

out the armored column. In *Aces and Pilots of the U.S. 8th and 9th Air Force* author Jerry Scutts affirms the same events adding in that the 365th Fighter squadron was also deployed. "Missions were flown until it was too dark for the pilots to see anything" wrote Scutts "they knocked out about 32 of the sixty tanks in the column plus 56 out of 200 trucks."[155]

Major George Brooking was given the task of leading the first flight of four P-47s that afternoon at 1:05 PM. Flying through incredibly dense fog, Brooking hugged the ground all the while worrying he would crash into a 2,000 foot Belgian foothill at any second. However, his luck held and coming over a ridge he remembered the sight of the German column before him. It was as if "their weather officer had told them not to worry your little heads at all about enemy aircraft today. Nothing can fly in weather like this."[156] There was a moment in which Brooking could detect a look of shock upon the face of the turret gunner and then he ordered his flight to descend upon the German column. Captain Jim Wells was the first to get in a 500lb bomb on top of the column blowing up six tanks. Brooking and the other pilots were quick to follow using their .50 caliber machine guns to chew up the halftracks accompanying the tanks. Once the column had been found, Brooking sent out the coordinates to the follow up flights. Stecker himself brought sixteen P-47s as other squadrons, the 366th and the 404th also joined in. By the end of the day American pilots had flown over 300 sorties severely disrupting Battle Group Peiper. Already behind schedule and running low on gas, Peiper's armored column could ill afford the losses caused by the air strikes of the 366th and 404th. Despite the bad weather, United States air power was thwarting the German offensive.

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[155] Jerry Scutts, *Aces and Pilots of the U.S. 8th and 9th Air Force*, 119.
[156]Hughes, *Over lord: General Pete Quesada,* 278.

The 422nd Night Fighter Squadron of the IX TAC on the night of 16-17 December was sent out to scout the Germans' whereabouts. Flying their P-61 Black Widows, the two man crews flew along the Belgium- German border looking for signs of the German front. By the end of the night, the flights had "claimed five enemy aircraft destroyed"[157]using their radar as a guide to find the enemy. Radar on aircraft was still in its infancy, and flying at night still held many dangers for the men of the 422nd. Key targets included the marshalling yards at Rheinbach, Gemund, and Schleiden. The 422nd and [its sister unit the] 425th, "claimed 115 trucks, 3 locomotives and 16 rail cars."[158]

The chaos was worse in the middle. General Hasso Von Manteuffel's Fifth *Panzer* Army plowed through the center of the region wreaking havoc on the 106th and 28th infantry divisions. Hitler's plan included the quick takeover and requisition of "Allied supply installations that had been built up through the autumn to support the springtime drive to the Rhine."[159] Manteuffel was supposed to sieze both St. Vith and Bastogne. Beyond those goals, his 5th *Panzer* group would continue on to the Meuse River and then turn north.

Meanwhile, at First Army Headquarters, "confusion, bordering very closely on panic arose" according to Captain Dick Hughes. General Pete Quesada, the commander of the IX TAC had traveled with General Hodges to the meeting in the town of Spa which was located in the center. "General Hodges First Army headquarters was spread out among casinos and handsome old hotels in the once fashionable Belgian resort town"[160] notes Ward and Burns. Hughes, Hodges and Quesada spent the long first night of the Ardennes Offensive at Spa resigned that

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[157] Scutts, *Aces and Pilots of the U.S. 8th and 9th Air Force*, 119.
[158] Rust, *The 9th Air Force in World War II*, 135.
[159] Hughes, *Over lord: General Pete Quesada,* 273.
[160] Ward and Burns *The war: an intimate history*, 306.

there was nothing they could do until morning. Hughes wrote humorously that he half expected to see German tanks out his window the next morning.

When everyone awoke the next morning, Hughes found that "all was quiet and we soon learned that the German armored column had taken a fork in the road some four miles short of Spa and had passed by the south of us."[161] This was a lucky break for the gathered men. General Hodges' war diary states that the *Panzers* had "turned southwest from La Gleize and reports that they were a mile from the outskirts of Spa proved untrue."[162] The only units that had been defending Spa had been a military police unit that was a part of the 1st Army Headquarters. This was because the town had been considered "the Ghost Front quiet where nothing happened…however civilians reported growing numbers of Germans troops"[163] on 16 December 1944. Even so, General Hodges had been firm in his refusal to leave his command post in Spa the night before, leaving the others either trapped (since they were under his command) or as Hughes wrote "just plain ashamed to leave them all in the lurch."[164]

On 16 December 1944, the 509th Fighter Squadron, a part of the IX TAC flew in support of the U.S. VII Corps near St. Vith. Due to the snow and the weather, flight operations were extremely hazardous, nevertheless the IX TAC answered the call despite the fact they weren't necessarily "the assigned TAC." Lt. Charles Dooney and his flight of P-47s were able to ambush a German armored column near the town of Hillesheim. In later reports, it was stated that Dooney's flight had claimed "18 to 20 armored fighting vehicles on flat cars and bombed a

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[161] Hughes, *Personal Journal,* 52.
[162] Sylvan and Smith Jr., *Normandy to Victory,* 220.
[163] Ward and Burns *The war: an intimate history,* 306.
[164] Hughes, *Personal Journal,* 52.

motor convoy of 25 to 30 trucks just outside of town."[165]Another flight from the same squadron, commanded by Captain Woirol had bombed the town of Ruhrburg located near the city of Basel.

Hodges' diary from 16 December summarizes the sudden onslaught: a "savage blow directed at the VIII Corps." Malmedy, Eupen, St. Vith, and Rotgen were all reporting being shelled. In addition to the arrival of *Panzers* and artillery shelling, at First Army Headquarters, there was concern bordering on paranoia as reports of saboteurs dressed as Americans soldiers continued to circulate. In fact, Lt. Colonel Otto Skorzeny's disguised German paratroopers were landing behind Allied lines with several nefarious intentions: "to blow bridges; to cut lines and communications; [there were] teams to obtain information… and wire back the news; and teams to capture Corps and Army headquarters."[166]At scattered sites throughout the Ardennes clusters of Allied soldiers only had time to react; actual plans to counter this major offensive would take a few days to develop.

Eisenhower and Bedell Smith spent 16-17 December formulating a response to this aggressive attack. Eisenhower knew he had a limited number of resources to put into play and that chief among those were the 82nd and 101st U.S. Airborne divisions. The problem was they were still at Reims recovering from the brutal fighting in September. Neither the 82nd nor the 101st was equipped for continuous ground action.[167] The men were spent and recovering from the ill-fated Market Garden campaign that had failed to break through German defenses in Holland. Eisenhower also called the British 17th Airborne Division and the American XVIII Airborne Corps to move towards the Ardennes. There was a sense of urgency to these

[165] Maclachlan, *Flight Records of the 509th Fighter Squadron,* 10.
[166] Sylvan and Smith Jr., *Normandy to Victory,* 222.
[167] D'Este, *Eisenhower*: A Soldier's Life, 645.

commands as within forty-eight hours nearly 9,000 American troops had been cut off and surrounded by the *Wehrmacht*.[168]

On the morning of 17 December, generals Vandenberg, Quesada, Simpson and Anderson met in General Hodges' office (although Hodges was out surveying the G-3 Section) "for a conference as to the targets to be hit now and later." [169] News of the three *Panzer* divisions' progress had put a damper on their spirits. The German spearhead had broken into First Army lines and the Americans were pulling back. Hodges seemed to have realized what the Germans were doing and quickly set about making plans to move his headquarters to Chaudfontaine nineteen miles to the northwest. Sylvan and Smith speculate on what might have happened had the Germans continued on their road to Spa. They would have found First Army headquarters "with no heavy equipment and we would have been unable to resist long against this armored thrust…secondly, between us and them was our largest gas dump consisting of some 2,000,000 gallons, enough fuel to keep a *Panzer* Division rolling for thirty days."[170]

Responding to the call for help on 17 December, Opie Weyland and his XIX TAC pitched in even though he was not assigned to Hodges' First Army. "His response to the call for assistance was immediate and overwhelming," explains Sylvan and Smith, "every group in the command flew what they termed ground-force cover missions in support of VIII Corps." The co-authors continue, "A high overcast permitted our air, nine groups in all, to operate actively during the day. We had difficulty in identifying our own columns since the Boche have painted all their vehicles with American insignia and it was necessary for the pilots to go down unto (on

[168] Wakefield, *The Other Ninth Air Force*, 68.
[169] Sylvan and Smith Jr., *Normandy to Victory,* 219.
[170] Sylvan and Smith Jr., *Normandy to Victory,* 220.

to) the deck before they could tell what belonged to whom."[171] Approximately 178 sorties were flown by fighter-bombers to support the troops on the ground west of the Our and Saur Rivers.

On 17 December General Bruce C. Clarke who commanded the 38th Armored Infantry Battalion kept his cool when other leaders, such as Colonel Mark A. Devine Jr. (14th Cavalry Group, 106th Division) were losing theirs. Colonel Devine had cracked under the pressure of command and wanted to retreat. After being refused twice, he took it upon himself to leave St. Vith without orders! By contrast Clarke was so determined he even directed vehicles retreating from St. Vith to clear the road to make way for armored vehicles which would be arriving any moment. For the moment, Clarke's 38th was delayed in the 'Great Jam', a congestion of fleeing vehicles approximately nine miles to the west of St. Vith. Lieutenant Colonel Thomas J. Riggs had already had his 81st Engineering Battalion along with the 168th Engineer Combat Battalion set up a line to defend the Prummerberg Hill which commanded the main road into St. Vith. Other divisions on site included the 9th Armored, and the 28th and 106th Infantry Divisions. As Clarke's troops arrived they formed another wall of defense, although there was a quarter mile gap between the two. American General Hasbrouck made the fateful decision to postpone a counter-attack, citing lack of sufficient armored vehicles. Clarke, who was a newly minted general, didn't dispute this decision. However, this decision resulted in 8,000 men enduring a siege for the better part of a week. [172]

Meanwhile, the Eighth Air Force bombers were doing their best to target German industrial sites. Despite bad weather, on 18 December, 411 of 985 bombers hit their targets using radar at Cologne. The next day, the Eighth Air Force struck again with 312 heavy bombers, hitting several marshaling yards on the German/Belgium border. The bombers used the newly

[171] Sylvan and Smith Jr., *Normandy to Victory,* 219.
[172] Whiting, *The Last Assault,* 78.

developed H2X for most of their targets and Gee-H for eight targets. Between these two missions, the Eighth Air Force put up 2,046 bombers and dropped 5,052 tons of bombs on German airbases and communication centers in western Germany. Over time these bombers' persistence paid off and the Germans would eventually find themselves hemmed in from a lack of resources and these shortages and lack of infrastructure would turn the tide of the war. The weather then closed in on the 509th leaving them unable to fly for two days. Without air support, the American G.I.s on the ground would be hard pressed to stand up to the armor of the *Wehrmacht*. Although many squadrons suffered temporary grounding until 23 December, many still tried to get flights up as often as they could. For their own part, the 509th records indicated that they were able to remain flying throughout the Offensive despite the bad weather.[173]

On 21 December, the 1st SS *Panzer* Army was nearly cut off from resupply near the town of Stoumont. The fight for St. Vith had seen the town taken and retaken over the course of five days and had "stopped cold one of the two main thrust of Herbstnebel."[174] Yet the cost had not been cheap. Clarke's 38th Armored Infantry Battalion had suffered 3,400 causalities, eighty tanks destroyed and twenty five armored cars from the U.S. 7th Armored Brigade and 14th Armored Brigade had been destroyed in the fighting. The Germans had hoped that that a new breakout could be achieved at either Bullame or Monschau by the 1st SS *Panzer*, but this breakout never occurred.[175]

In the South, facing off against Brandenberger would be the remaining units of the United States Third Army. Brandenberger had been given a difficult task, and perhaps he was

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[173] Maclachlan, *Flight Records of the 509th Fighter Squadron,* 30.
[174] Caddick-Adams, *Snow & Steel,* 550.
[175] Whiting, *The Last Assault,* 90.

under equipped. His Seventh *Panzer* Army was ordered to cross the Our River with the goal of standing up to the attack that would follow. However, he had only been equipped with four infantry divisions that had no tanks and few vehicles of any kind. Without any tanks, Seventh Army's movement was first checked and then finally stopped by the United States VIII Corps after only four miles. Another element of Brandenberger's army, the 5th Parachute Division was able to make it twelve miles along the inner flank, but was eventually halted as well by the United States IX Armored Division at Wiltz. General Weyland's XIX TAC provided air cover for Patton's army as they pushed back the German Seventh *Panzer* Army. [176]

The Allies reported relatively quieter conditions in the south because the Germans there "possessed little artillery."[177] Key players on the Allied side included Major General Raymond Barton and Colonel Robert H. Chance who faced General Major Franz Sensfuss and his 212th Volksgrenadier Regiment, which included the 320th Regiment. Under the cover of early morning darkness, Sensfuss had gotten his Regiment across the Sauer River. By the end of the first day, the German death toll reached more than a 100 men and fifty had not reported back. Chance's regiment was "still holding the five main villages dominating his sector, Dickweiler, Osweiler, Echternach, Lauterborn, and Berdorf. During this time, the XIX TAC kept to its three main goals of keeping control of the skies, destroying the German tanks on the ground, and lastly, isolating the German Armies so that they could not be resupplied. [178]

On 19 December at 11 a.m. Eisenhower met with a cadre of generals in an old French army barracks at the historic city of Verdun. Eisenhower made the decision to give control of the First and Ninth Armies to British Field Marshal Bernard Montgomery. Montgomery wasted no

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[176] Ward and Burns, *The war: an intimate history,* 312.
[177] Whiting, *The Last Assault,* 35.
[178] Spires, *Airpower for Patton's Army*, 190.

time and arrayed his XXX Corps troops in a chain that stretched approximately sixty miles defending the Meuse River like a firewall. Later, on 22 December, elements of the IX and XXIX TAC were reassigned to British Field Marshal Montgomery's Second Tactical Air Force. Quesada complained, but it mattered little; Vandenberg had already spoken to Spaatz and received two more units from the Eighth Air Force to strengthen the Ninth.

In the south, Patton resigned himself to fighting a different battle than the one which he had started in Sauerlauten. In a meeting with Eisenhower, and several other top Generals, Patton ambitiously stated that he could be on the road towards Bastogne by the morning of 21 December. Eisenhower had thought that Patton was being overeager and urged him to be well prepared, even if it meant a delay of a day or two. D'Este points out that "Patton (was) a lifelong student of war, (and) had devised three plans beforehand, each tailored to meet any contingency Eisenhower and Bradley might direct."[179]And so, the general succeeded in getting three divisions (4th Armored, US 80th Infantry Division and US 26th Infantry) on the road on 21 December and they arrived in Bastogne on 26 December. This convoy included 133,000 tanks, trucks and sundry vehicles.

General Weyland, under orders from Patton to sit tight, was reluctant to give up on Operation Tink, which had been a plan to attack across the Saar River front and press on into Germany on 20 December 1944. Only when Weyland received news from General Vandenberg that Tink had been canceled did he shift his plans to providing air cover for Patton's three divisions. Weyland immediately requested "three additional fighter groups and another reconnaissance group"[180], all of which he got from General Vandenberg. In the meantime, the Ninth Air Force planned to strike across the Ardennes isolating the German spearhead and

[179] D'Este, *Eisenhower*: A Soldier's Life, 645.
[180] Spires, *Airpower for Patton's Army*, 194.

cutting off the supplies to the three German Armies. Fighter-bombers were tasked with close air support and reconnaissance, while medium bombers were to bomb bridges and railroads to hinder the German advance.

The XVIII Airborne Corps and the 101st Airborne Division were brought into play despite the absence of their commanding Generals (Ridgway and Taylor respectively). Two men filled those leadership roles and performed admirably. Brigadier General Anthony C. McAuliffe rose up from his normal position of being the 101st Artillery Commander to take charge of the 101st Airborne Division. The 101st Airborne then raced to "Bastogne in the nick of time to join an element of the 10th Armored and several other units just as the Germans began attacking the town." [181]McAuliffe led his division to Bastogne, held the town, and famously rejected a German surrender summons with a one word response of "Nuts!"

General James M. Gavin, who had been General Ridgeway's second in command for the 82nd Airborne, also stepped up. "In December 1944, Jim Gavin was the U.S. Army's most experienced airborne solider and its youngest divisional commander."[182] Gavin and his 82nd found themselves squaring off against the 1st SS Division and the 2nd SS *Panzer* Grenadier Regiment at Cheneux. Colonel Harrison's 1st Parachute Infantry Battalion (part of the 82nd Airborne) was in a third wave of men trying to cross a large field, the first two groups having already been cut down. They were pinned until two armored tank destroyers came in from the side to help. Then the paratroopers mounted a vicious attack on the Germans, killing almost all of them. The Allied forces were then able to retake Cheneux.

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[181] D'Este, *Eisenhower*: A Soldier's Life, 643.
[182] Caddick-Adams, *Snow & Steel*, 398.

Historian John C. McManus points out that "the race for Bastogne had now changed from a race to a siege."[183] The American forces had been able to seize control of Bastogne, critical for its roads out of the Ardennes. However, Bastogne had taken on a much larger meaning. It was now a political symbol of American resistance against the German offensive. As 20 December 1944 came to a close, the brave infantry and airborne troops dug in and readied themselves to face the German onslaught.

XIX TAC provided indirect support for the airborne units. On 21 December eight P-47s of the 354th Fighter Group, tasked with weather and reconnaissance duties bombed Hentern and damaged railroad cars, motor yards and a barge. Later, they did additional damage at Krettich. These targets are situated far to the east in Germany, and therefore the nearest ground forces were what remained of Patton's Third Army somewhat to the west.[184] On 22 December, the German commander of the 4th Company (5th *Fallschrimjager* Regiment), Lt. Hans Pigge, was killed while moving into and around the areas of Sibret, Honville, and Liverchamps. According to Leo Barron, "A squadron of American P-47s from XIX TAC had caught him out in the open, and he ran into a house for cover… (which) was an easier target for the fighter bombers, which dropped several bombs and obliterated the structure."[185] This is just one example of how air power literally killed the enemy's battlefield leadership, which was not easily replaced. This resulted in both short-term and long-term confusion for the enemy. Reed summed up the first week by noting that "although the daylight hours up to 23 December were characterized by low, icy, clouds, the nights were clear and the inadequacy of the night striking force of the Ninth Air

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[183] John McManus. *Alamo in the Snow* (Hoboken, New Jersey: John Wiley and Sons Inc., 2007), 253.
[184] Spires, *Airpower for Patton's Army*, 190.
[185] Leo Barron, *Patton at the Battle of the Bulge: How the Generals Tanks turned the Tide at Bastogne* (New York: New American Library, 2014) 238.

Force was made clear."[186]The American pilots still had much to learn about flying and fighting at night.

On 22 December, Montgomery and Hodges yielded the town of St. Vith in order to preserve what was left of the 7th Armored Division. The tankers had done a heroic job of stifling Manteuffel's Fifth *Panzer* Army. Yet further defense would have resulted in staggering losses. Robert Hasbrouck would later say that "Montgomery saved the 7th Armored Division."[187] At the close of the first week, Allied forces had done their best to hold their lines, but with several units in retreat, it marked one of the lowest points of the Battle of the Bulge.

The first week of the Battle of the Bulge was characterized by the rearrangement of air power in the Ninth Air Force. XXIX TAC was handed over to Field Marshal Montgomery and Quesada was forced to give up some squadrons as well. However, the Eighth Air Force sent two of their own squadrons to compensate for the lost airmen. Allied air power continued to fly despite the bad weather in order to meet the German offensive. The American generals knew that they had to keep their aircraft flying to stop the Germans and spent much time sourcing new planes and parts to keep them flying. Whenever a small window of opportunity presented itself, the Americans would take it and fly.

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[186] William B. Reed, *Condensed Analysis of the Ninth Air Force in the European Theater* (Washington D.C.: Office of Air Force History, 1946), 41.
[187] D'Este, *Eisenhower*: A Soldier's Life*,* 653.

Chapter IV: The Second Week: Contesting the Air

(23 December-29 December)

By early morning 23 December, Allied forces were making plans to pull back in an organized fashion to minimize the loss of life to the soldiers caught in pockets and engulfed by three German divisions. The withdrawal would require retreating over the River Salm. Meanwhile General Clarke's men were determined to keep fighting and their artillery units slowed the German armored vehicles. At the same time the Germans were picking off American Sherman tanks that had been caught in sodden terrain. Clarke conferred with General William M. Hoge (Combat Command B, 9th Armored Division) and they both agreed that pulling out now was a bad idea. General Hoge told General Clarke, "I'm getting hit hard in at least two places. I can't possibly disengage now."[188]

At St. Vith, panic was apparently spreading in some units. Captain Bartel called out to his 424th Regiment that it was "Every man for himself."[189] Tiger tanks were looming everywhere and suddenly the 814th Tank Destroyer Battalion realized they were surrounded. Colonel Robert Jones issued an order over the radio to destroy the vehicles and retreat by scattering through the woods. Colonel Robert Erlenbusch and his 31st Tank Battalion was holding the line in the northeast corner and wanted to disengage, but Clarke urged him to hold out so as to not leave Hoge's men without any support. One of the main concerns about retreat was the boggy roads. Suddenly, Clarke realized it was so cold the roads had frozen into solid tracks so that the *Panzers* could now advance. At 0600 the order to retreat went out.

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[188] Whiting, *The Last Assault,* 204.
[189] Whiting, *The Last Assault,* 205.

Fortunately, the clear weather allowed for the pilots of IX and XXIX TACs to fly in support of the St. Vith sector. Both General Nugent and Quesada had their pilots flying as many sorties as they could. Most of these took place in the Center and the North to assist in pushing back the German offensive. In the South XIX TAC under General Opie Weyland sprang into action flying close air support for the VIII Corp under Major General Troy H. Middleton. During this time, General Weyland praised the average flying rate of "57 missions per day for the five day period as among the highest in the command's history."[190]

In the middle of all this chaos, "Eisenhower issued his first Order of the Day since D-Day, in which he exhorted everyone to fight back and turn the enemy's great gamble into his worst defeat."[191] Specifically, Eisenhower called for the Allies "to destroy the enemy on the ground, in the air, everywhere –destroy him."[192] Eisenhower was channeling his rage over the Malmedy massacre and other similar tragedies carried out by the SS to encourage the troops to hold the line. With better weather arriving on 23 December, the scales would slowly begin to tip in the Allies favor.

The 82nd Airborne under General Hasbrouck was defending the area around Parker's Crossroad (a highway between Bastogne and Antwerp). This vital crossroads was located at the town of Fraiture-Tinlot and was to become a symbol of resistance for the Allies. Named for Major Robert Parker III, this "Alamo defense"[193] as it was called helped the American lines hold out and kept the Germans from finding a route to the Meuse River. Over the course of two days,

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[190] Spires, *Airpower for Patton's Army*, 199.
[191] D'Este, *Eisenhower*: A Soldier's Life, 653.
[192] Dwight D. Eisenhower, *Crusade in Europe* (New York: Double Day and Co. 1948), 354.
[193] John McManus. *Alamo in the Snow*, xii.

the men held onto the vital crossroads against the German 2nd SS *Panzer*. In the end, the 589th Field Artillery Battalion (a part of the 106th Division) was effectively destroyed.[194]

While the boys on the ground held, the boys in the air stepped up their operations. Over the course of two days from 23-24 December 1944, 389 aircraft of the IX Bomber Division dropped 619 tons of bombs on targets across the bulge. These vital targets included communications centers, bridges, railroad tracks, and supply yards. As Wyant notes, this was "the day on which the Ninth Air Force could put into effect its plan for the counter blow against Von Rundstedt's offensive." With his supply lines now being hampered by Allied air power, Von Rundstedt was forced to limit his movement for fear of being caught by Allied aircraft. On those same days, XIX TAC was working with the III, VIII, XII and XX Corps which consisted of both American and British ground forces. However, its most famous mission was the supply drop to the besieged 101st Airborne paratroopers at Bastogne. Other missions included reconnaissance, interception, and fighter cover for the IX Bomber Division.[195]

Patton understood the value of close air-ground support for his troops and that the weather had not been cooperating. Hoping to leverage the power of the Almighty, he called upon the Third Army chaplain, Colonel James Hugh O'Neill, to write an appropriate prayer for improved weather conditions. The invocation humbly beseeches the Almighty, "To restrain these immoderate rains" and for "fair weather", "victory", "and (to) crush the oppression and wickedness of our enemies."[196] Intermittent patches of good weather did arrive. 23 December "dawned bright and clear for the first time in weeks, and at around noon the blue sky over Bastogne was filled with U.S. C-47 cargo carriers. Hundreds of red, yellow, and blue parachutes

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[194] Whiting, *The Last Assault,* 204.
[195] Wyant, "Airpower in the Battle of the Bulge", 13.
[196] Patton, *War as I Knew It*, 208.

drifted slowly down, bearing 144 tons of medicine, food, blankets, ammunition and other supplies."[197]These provisions would sustain the men of the 101st Airborne who were under siege in Bastogne. Patton's prayer request would later gain the Third Army notoriety, but also left Hodges and his First Army feeling scorned.[198]General Hodges and his men felt that their heroic actions in the center had been ignored as compared with the praise that was given to Patton's Third Army.

The good weather also allowed the Allies to once again use their combat air power to maximum effect. Due to the heavy losses inflicted upon the *Luftwaffe*, the Allied aircraft had nearly complete control of the skies. Anthony Beevor writes "air controllers joyfully reported visibility unlimited and scrambled P-47 Thunderbolt fighter-bombers to go tank hunting."[199] Kenn C Rust also notes that "the weather began to open up on 23 December and allied air power struck back with a vengeance!"[200] With this new window of clear weather, the Allies launched as many flights of aircraft as they could, both fighter-bombers and reconnaissance aircraft were sent out to scout for the German positions. General Eisenhower writes that with the good weather on 23 December, "the air forces bombed sensitive spots in the German communications system, attacked columns on the road and sought out and reported to us every significant move of the hostile forces."[201] General Omar Bradley, in his memoir, also recalls 23 December as the turning point of the offensive. The Ninth Air Force launched around 1,200 sorties alone in order to support the U.S. ground forces. Bradley writes, "he [Field Marshal Von

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[197] Ward and Burns, *The war: an intimate history,* 321.
[198] Peter Caddick-Adams, *Snow & Steel*, 552.
[199]Beevor, *Ardennes 1944*, 461.
[200] Rust, *The 9th Air Force in World War II,* 133.
[201] Eisenhower, *Crusade in Europe,* 358.

Rundstedt] could no longer support the offensive as long as we could pound him from the air."[202]

On 23 December IX Bombardment Division, a part of the Ninth Air Force, hunted movement along roads and pinned the enemy in places, eventually forcing them to rely on supplies and support from back near the Rhine, further impeding the German Ardennes attack. The 391st and the 386th Bomber Groups were tasked with bombing the railroad viaducts at Ahrweiler, Germany. The bombers missed their escorts at the rendezvous point and were soon jumped by sixty German fighters. Bombers flew in boxes of four to defend each other against enemy attacks. The second box was targeted heavily by the enemy fighters, but was able to drop their bombs. The 391st caught the worst of it losing 16 B-26s, while the 386th received heavy anti-aircraft fire and hurriedly dropped its bombs and retreated. Other attacks on 23 December included an attack on the railroad bridge at Mayen carried out by the 387th and the 394th Bomber Groups in an effort to disrupt supply lines from Koblenz towards the west. Likewise the railroad bridge at Eller was the target of the 397th Bomber Group. The 322nd Bomber Group succeeded in eliminating the railroad bridge at Euskirchen despite suffering heavy attacks from two dozen ME- 109s and FW-190s.[203]

During the siege at Bastogne, F-5 Lightnings reconnaissance planes from XIX TAC were sent to take photos of the German forces encircling the town. At high personal risk, the pilots "penetrated the wall of flak around the town to drop aerial photographs showing enemy positions"[204] to the encircled paratroopers. Flying both day and night these pilots were able to successfully help the besieged paratroopers gain advanced warning of enemy movement.

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[202] Omar Bradley, *A soldier's story* (New York: Henry Holt and Co. 1951), 479.
[203]Scutts, *Aces and Pilots of the U.S. 8th and 9th Air Force*, 120.
[204] Weyland, "Tactical Air Operations in Europe" 56.

General Vandenberg would later write that these pilots had perfected "the outstanding performance of night photography done anywhere at any time."[205] The squadron would also be recognized later on by the 101st Airborne Division for their actions, receiving a letter of commendation.

Historian William R. Carter states that on 23 December IX Troop Carrier Command flew "962 sorties and dropped 850 tons of supplies to the defenders."[206] This air operation which took place around mid-morning gave critically needed supplies to the U.S. paratroopers. Three fighter groups from XIX TAC groups were there to protect the C-47 cargo planes from *Luftwaffe* air attacks and ground fire. Overall, a total of nine C-47s out of 260 were lost to flak, but the paratroopers got their supplies. Allied forces would hold Bastogne until relieved by Patton's Third Army. Author Jerry Scutts also notes that the Eighth Air Force's 352nd Fighter Squadron[207]nicknamed the "Blue nosed Bastards of Bodney", were moved to Chievres[208] on 23 December. Their deployment proved critical when the Germans on 1 January 1945 launched Operation *Bodenplatte* (Baseplate), which will be discussed in Chapter Five.

Robert "Punchy" Powell, a pilot in the 352nd Fighter Squadron, remembered one flight on 23 December that he believed would be canceled due to inclement weather. "The snow was coming down that hard, in fact I can remember saying that there was no way that anyone in the world could make me go flying in that miserable weather."[209] Yet despite his personal misgivings the 352nd did fly that day. The fear of failing to appear brave in front of the others drove the

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[205] Weyland, "Tactical Air Operations in Europe" 56.
[206] William R. Carter, "Airpower in the Battle of the Bulge" 8.
[207] The 352nd was a P-51D Mustang Squadron
[208] Airbase A-84 as listed on the charts of Allied Air Bases
[209] Jay A.Stout, *The Men who killed the Luftwaffe: The U.S. Army Air Force against the German Luftwaffe in World War II* (Mechanicsburg, PA: Stackpole books, 2010), 368.

airmen to take to the skies in order to support the Allied war effort. This comradery helped to keep each man from showing his fears despite the bad weather outside.

That same day (23 December), General Brandenberger realized that things were going poorly at the westernmost front near the town of Tintange, located about ten miles from Bastogne. To halt Patton's army, Brandenberger had his LXXXV Corp transfer almost all of its artillery to the LIII Corps which included a battalion of 75mm towed dual-purpose guns. However, there was not any way to transport the heavy guns and thus they were delayed.[210]

One of the worst parts of this piecemeal battlefield situation was that American airmen had to worry about accidentally hitting their own men and vice versa. Six B-26 Marauders from the 322nd Bomber Group bombed the town of Malmedy by mistakenly believing it to be the town of Zulpich in Germany. This error would be repeated again on both 24/25 December by B-24s and B-26s respectively. The navigator had gotten lost, and believed that the town of Malmedy below them was St. Vith which had fallen into *Wehrmacht* hands. Because of these attacks, "225 civilians were killed as were 37 GIs and over 1000 wounded."[211]

In the center, the 509th Fighter Squadron (XIX TAC) struck multiple targets to cut off German supplies to the front. On their way home from a bombing run that had been aimed at the German rail and motor yards, the flight led by Captain Van Etten was assailed by a lone ME-109, but it was quickly shot down. The afternoon mission was a better success as the flight led by Captain Stout and Captain Woirol found a German supply column moving towards the front. Not wanting these trucks to reach their intended destination the P-47s pilots preyed upon the convoy. This produced "a spectacular display since their targets consisted of gas laden trucks

[210] Barron, *Patton at the Battle of the Bulge*, 239.
[211] Caddick-Adams, *Snow & Steel,* 606.

with personnel which seemed to burn at the suggestion. The final claim of 108 vehicles destroyed and one gas storage house destroyed was significantly important to be plugged on the BBC in their following evening's newscast"[212] writes Maclachlan. This broadcast was meant to boost the morale of the Allied nations and remind the public that they were still winning the war.

In the south around 23 December, General Brandenberger realized the battle would be heating up in the town of Tintage. With many of the German forces either halted or retreating, the stragglers had regrouped in the high perched town. Brandenberger had sent such re-enforcements as could be appropriated from the LXXXV Corps which included *volks* artillery and a battalion of 75mm dual purpose guns. In addition, he moved the *Furher-Begleir*-Brigade as a last reserve of manpower. "By the evening of the Twenty-fourth, the staff at Seventh Army headquarters (*Wehrmacht*) sensed the tide might have shifted in favor of the Americans…They knew Martelange [located six miles to the southwest of Tintange] had fallen"[213]to the oncoming American Third Army.

Brigadier General Herbert L. Earnest was in charge of Combat Command A 4th Armored Division. He devised a plan which included the 51st Armored Infantry to "clear the enemy in zone, along the N4 highway, while to the east, 1st Battalion 318th Infantry, would seize the town of Tintange."[214] To support this mission, Earnest also had one battalion of 155mm Long Toms and two battalions of artillery in place. The goal was to take Tintage and move north to Bastogne. To the south, two badly battered battalions, the 35th Tank and 51st Armored, were staying put in Warnach to guard the rear.

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[212] Maclachlan, *Flight Records of the 509th Fighter Squadron,* 11.
[213] Barron, *Patton at the Battle of the Bulge*, 239.
[214] Barron, *Patton at the Battle of the Bulge*, 240.

The biggest flaw in the plan to take Tintange rested in the deep gorges and steep crevices that defined the path the infantry needed to take. Their progress was so delayed that they were still struggling uphill when the sun rose and the gulley they were in made a perfect shooting field for the *Fallschrimjager* lying in wait. One Silver Star awarded for that day's service went to Sergeant William J. Murphy who died while making a run towards a machine gun nest which he was able to destroy with a tossed grenade. A second Silver Star was awarded to Lt. George W. Kane who led his remaining men "up the ridge to their initial objective" in spite of being under intense fire.[215] XIX TAC meanwhile sent the 362nd Fighter Group to provide air cover for General Earnest. Weyland's pilots "flew six missions in support of the III Corps forces."[216]

While Ninth Air Force battered frontline German forces, the Eighth Air Force sent out a flight on 23 December to "pave the way for General Patton's Third Army to rescue the U.S. 101st Airborne Division surrounded at Bastogne."[217] From their airbases at Great Ash field in Britain, American B-17 crews took to the skies. Nearly 2,000 bombers along with 800 fighters struck at vital targets such as airfields, communication centers and supply depots that supported Brandenberger. However, due to the weather being overcast, the bomber crews missed their rendezvous point and were jumped by a group of BF-109s that had been hunting for Allied aircraft. Eight B-17s were lost before the escorts eventually arrived, having been delayed by bad weather. Nonetheless, Kenn Rust writes they flew "1,157 sorties…claiming many tanks and armored vehicles, 736 M/T and 167 rail cars destroyed or damaged."[218]Fighter bombers from all three TACs of the Ninth Air Force supported these operations.

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[215] Barron, *Patton at the Battle of the Bulge*, 249.
[216] Spires, *Airpower for Patton's Army*, 199.
[217]Astor, *The Mighty Eighth,* 372.
[218]Rust, *The 9th Air Force in World War II,* 136.

The 509th Fighter Squadron of IX TAC also took advantage of its first full day of clear weather on 23 December, when the Allied Air Forces had been able to strike back against the German Offensive. This aerial counter-offensive had effectively stopped the *Wehrmacht* in its tracks as Allied air power tore into the German ground forces. The 509th flew around the Ettelbruck-Echternach area on 23 December against the 7th Army of General Brandenberger in the south. Mclachlan reported that the 509th attacked Brandenberger's "southern flank and his critical supply line"[219] that crippled the general's ability to resupply his forces. While seemingly out of the IX TAC's normal area of operation, further north, such sorties were not unusual as the TACs helped each other out as targets and weather permitted.

Reed notes that the fighter-bombers performed a necessary function for which no other alternative was available: "At Bastogne fighter-bombers cooperated with the beleaguered 101st Airborne Division by attacking close-in targets which could not have been hit by American artillery because of a critical shortage of ammunition."[220] Since the holding of Bastogne was both a military victory and a much needed boost to morale, the role of air power in sustaining the men of the 101st Airborne was vital.

The 387th Bomber Group, 410th Bomber Group, 391st Bomber Group, 394th Bomber Group and 406th Fighter Group each received Distinguished Unit Citations for their efforts on 23 December. Never had so many Distinguished Unit Citations been handed out for a single day of air combat. Each of these groups had carried out their missions assigned to them with the utmost determination against the enemy.[221]

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[219] Maclachlan, *Flight Records of the 509th Fighter Squadron,* 8.
[220] Reed, "Condensed Analysis of the Ninth Air Force in the European Theater" 41.
[221] Astor, *The Mighty Eighth, 371*.

Christmas Eve witnessed one of the most impressive displays of air power. Fickle wrote "by 24 December the weather had improved and Allied air succeeded in turning back the advancing *Panzer* columns, destroying troops in the battle area and cutting off the enemy supply lines and communications west of the Rhine."[222] Togglier Al Greenburg of the 96th Bomber Group remembered the date "as supposedly the biggest operation of the Eighth Air Force."[223] The target for the day was the *Luftwaffe* airfields. Allied Command wanted to strike the *Luftwaffe* bases to hinder the Germans' air cover for their offensive. Flying the oldest plane in the squadron (B-17 #104) Green remembered the flak and anti-aircraft fire coming up and peppering his aircraft. The aircrew armed the bombs and wrote "Merry Christmas" on one in a display of grim humor. All of the bombs on the outer racks failed to drop and B-17 #104 was force to drop the bomb load manually into a nearby river before returning to base. However, the rest of the squadron had hit the airfield, making the mission a success.

Brigadier General Frederick Castle of the Fourth Combat Wing (487th Bomb Group H, Eighth Air Force) was killed in the resulting fight when his B-17(*Treble Four*) was shot down. This bombing run was to be the largest of the war. 2,000 B-17s were headed for German airbases (General Castle's target had been the base at Babelhausen), communication centers and marshalling yards to help take pressure off the U.S. Army forces fighting in the Ardennes. After crossing the front lines of the ground battle below, German fighters jumped the bombers and immediately tore into the formation. The B-17 *Treble Four* was in the lead position and was struck numerous times even after it started to spiral towards the ground. Out of the ten man crew, only four survived. For leading Mission Number 760 on 24 December, Castle was posthumously awarded the Medal of Honor. This was highly controversial amongst airmen due

[222] Fickle, "The Effectiveness of Third Phase Tactical Air Operations" 43.
[223] Astor, *The Mighty Eighth, 374*.

to the nature in which the medal had been awarded to a general. Jay Stout writes "although what Castle did was undoubtedly brave and honorable, it is difficult to say that his performance was more courageous than that of at least dozens, if not hundreds, of other pilots who were killed over Europe."[224]

Other diary accounts from the 385th Bomber Group and 357th Air Wing recount the attack. William Richards was with the 385th as a waist gunner on a B-17. He remembered "our P-51 escorts were scheduled to meet us as we crossed the front lines, minutes later there was this surprise attack. We watched in disbelief as the lead group was riddled"[225] by Messerschmitt fighters. Lewis Smith, another airman would later recall that "we could see dogfights going on all around us. A P-51 and Me-109 collided. Both pilots bailed out. One P-51 pilot bailed out and we saw a jerry [German] machine gun him. That makes you pretty mad."[226]

On 24 December, another escort flight was launched to help the paratroopers at Bastogne. Four P-47 Thunderbolts of the 354th Fighter Group (XIX TAC) along with a C-47 transport plane were launched as a first wave in order to send in critically needed personal and supplies. Historian William R. Carter explained that attached to the C-47 was a Waco Glider, which carried "five surgeons, four surgical assistants and 600 pounds of equipment, instruments and dressings."[227] These were followed by ten more C-47s and gliders carrying badly needed supplies such as "320 tons of ammunition, field rations and even cigarettes"[228] for the besieged GIs. This air drop restored the morale of the paratroopers and saved the lives of some critically injured men. Because of the ability to reinforce Bastogne by air, American GIs were able to hold

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[224] Stout, *The Men who killed the Luftwaffe*, 364.
[225] Astor, *The Mighty Eighth,* 373.
[226]Astor, *The Mighty Eighth,* 373.
[227] Beevor, *Ardennes 1944,* 542.
[228] Beevor, *Ardennes 1944*, 542.

onto one of the most critical crossroads towns in the Ardennes. Author Michael D. Doubler asserts that "the aerial resupply of Bastogne was one of the most dramatic and important air-ground operations of the campaign."[229]

Rust sums up the successes of the IX Bomber Division and the three TACs for 24 December this way, "A total of 376 medium and light bombers attacked bridges and communication targets, dropping 686 tons of bombs, without the loss of a single plane. Fighter-bombers from the three TACs flew 1,157 sorties…claiming many tanks and armored vehicles, 736 M/T, and 167 rail cars destroyed or damaged."[230]Overall, 23-24 December represented a solid two days of Allied air power reasserting its dominance and conveying dogged determination to thwart the enemy with renewed vigor, especially in light of the atrocities committed at Malmedy and elsewhere.

On Christmas Day a flight of eight P-47s (377th Fighter Squadron, 362nd Fighter Group[231]) dropped every bomb they had for a total of 8,000 pounds of regular general purpose bombs and 4,000 pounds of incendiary bombs. This barrage started at least six large fires. In addition, pilots from the 362nd Fighter Group flew nine missions aiding the U.S. III Corp on Christmas Day, a majority of which were the men of the U.S. 4th Armored Division. In addition, the pilots of the 378th and the 379th Fighter Squadrons (362nd Fighter Group) participated in the attack on Tintange.

The Germans by mid-day were holed up in a barn where they came under heavy artillery fire. There was a lull in the artillery as the fighter-bombers arrived. The Germans were ordered

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[229] Michael D. Doubler, *Closing with the Enemy,* 215.
[230] Rust, *The 9th Air Force in World War II,* 136.
[231] Based in Etain, France

to come out of the barn and put their hands up. They chose to destroy their own weapons, and then were rounded up and sent to a holding camp near the city of Arlon. Tintange demonstrated that the *Jabos* signaled defeat to the Germans and sped up their surrender.[232]

On that same day, the 509th Fighter Squadron found forty German tanks on the road near Tintange. Captain Massey as the flight leader ordered his flight of P-47s to attack and promptly destroyed the armored vehicles. The mission also entailed multiple attack runs on "trenches and gun installations and a bridge."[233] Due to the Allied attacks the roadways were becoming cluttered with broken down or destroyed German vehicles. The German offensive, which had started off as a shock to the Allies, was slowly being forced back.[234] Now, the Germans were feeling the shock.

A second flight of the 509th that day saw Captain Collins and his flight locating the German rear supply lines at Troisvierges. Although the Germans had hidden their forces under the cover of the trees, the American pilots were able to locate the vehicles. Three tanks were damaged and eight were destroyed outright. Momentary panic struck the pilots when a ME-109 fighter appeared suddenly. Another member of Captain Collins' flight reacted quickly and shot down the enemy plane. Records for the XIX TAC reported that "the enemy seems to be taking a greater interest in the Luxembourg area. He is aggressive and sometimes enthusiastic in combat."[235]

In his book *War as I Knew It,* General Patton writes "The 101st Airborne had got some supplies by airdrop and had not been attacked during daylight, probably because the enemy was

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[232] Whiting, *The Last Assault,* 197.
[233] Maclachlan, *Flight Records of the 509th Fighter Squadron,* 11.
[234] Whiting, *The Last Assault,* 205.
[235] Parker, *To Win the Winter Sky*, 295.

afraid of our fighter bombers."[236] As Patton was making his advance, the weather continued to frustrate him. The *Wehrmacht* was also holding against his relief operation until Patton was finally able to create a corridor to reach Bastogne on the night of 26-27 December. On that same day, 900 aircraft consisting of P-47s and C-47s, along with gliders were launched in order to drop supplies to the defenders. General McAuliffe had warned the pilots to expect heavy German resistance, and he urged them to fly in a more circumspect route, but his warning was not heeded. Twenty-three aircraft were shot down from German anti-aircraft fire. Furthermore, Beevor notes that eighteen gliders out of fifty were shot down.[237] Although this air operation was a short term success in that the supplies made it to the Allied defenders, it was not decisive in that the Germans had not yet given up on taking Bastogne. From the time period of 26-27 December, the XIX TAC "flew 1,102 sorties in support of the Third Army,"[238] a considerable amount for two days.

General Patton would later call the efforts of the XIX TAC "superb air support."[239] During this time, multiple squadrons from the XIX TAC were striking at different points across the German rear lines, targeting the supply depots of the *Wehrmacht*. The 367th Fighter Group (XIX TAC) was able to escort medium bombers against targets over Euskirchen against twenty-four ME-109s. They were able to shoot down eleven German aircraft for the loss of one of their own. Another squadron of the 362nd Fighter Group (XIX TAC) ambushed a German convoy headed for St. Hubert. They would later report that they "strafed and bombed 45 motor transports filled with troops on the road, with excellent results."[240]

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[236] Patton, *War as I Knew It*, 201.
[237] Beevor, *Ardennes 1944*, 559.
[238] John J. Sullivan, "Air Support for Patton's Third Army", 154.
[239] Wyant, *Airpower in the Battle of the Bulge,* 14.
[240] Wyant, *Airpower in the Battle of the Bulge,* 14.

One squadron that was particularly active around Bastogne was the 406th Fighter Squadron. Flying P-47s, these pilots were critical with regards to the success of the Americans holding Bastogne. Using their rockets and wing mounted machine guns, the pilots of the 406th lived up to their motto to "ascend and defend."From 23-27 December they destroyed or damaged "13 enemy aircraft, 610 motor vehicles, 194 armored vehicles, and many horse drawn wagons, bridges and supply dumps."[241] For this, they would earn their second Distinguished Unit Citation.

The Eighth Air Force also pitched in for the besieged paratroopers. David Nagel, a B-17 gunner who was a part of the 305th Bomber Wing remembered "we went through all the camps, took galoshes and a set of long underwear from each man and then dropped them haphazardly to the guys on the ground, hoping they'd get some of it. We'd come in low over the flaps and lower the wheels to slow down the B-17. Canisters attached to parachutes were released through the bomb bay. The canisters contained food, medicine and ammunition"[242] for the ground troops who were in desperate need of these supplies.

Due to the fact that Germans were using captured Allied equipment, American aviators were having a hard time distinguishing between repurposed Allied equipment captured by the Germans and friendly ground equipment. Maclachlan recalled "as our own counter attacks pushed forward, identification became even more difficult."[243] By 29 December, the 509th reported that the situation had mostly been solved. Allied Command had started to warn their ground troops to be alert when encountering an Allied unit and pilots were often required to do a flyby of the target before they could engage. The 509th reported that same day that they had

[241] John J. Sullivan, "Air Support for Patton's Third Army" 155.
[242] Astor, *The Mighty Eighth, 376*.
[243] Maclachlan, Flight Records of the 509th Fighter Squadron, 12.

destroyed a German marshalling yard that harbored captured American equipment. Although this would not end the problem, it did give the pilots of the squadron a morale boost.

Adolf Galland claimed later that "for a whole month, the strategic air forces of the Allies had to be extensively [used] in tactical operations supporting the English and American armies and these diverted [them] from their original task of raiding Germany."[244] This was not as accurate as Galland might have preferred it to be. The clear weather of 23 December had answered the American's prayers. The Ninth Air Force attacked the *Wehrmacht* at places such as Tintange, while aiding in supply drops to the besieged paratroopers at Bastogne. The Eighth Air Force for its own part continued to strike at Germany and German supply lines hindering the offensive. With the feared *Jabo* flying once again, the Germans were forced to limit their movements for fear of being caught out in the open. As the second week came to a close, American air power had struck a major blow to the German war machine, weakening its resolve.

[244] Galland,*The First and Last*, 348.

Chapter V: The American Counter Offensive: Dominating the Skies

(30 December to 30 January 1945)

By 30 December 1944, the Allies had started their own counter offensive against the *Wehrmacht*. As German supply lines were cut and tanks ran out of fuel, the Allied forces started to advance again towards the Siegfried Line. With the clear weather of 23 December, U.S. air power had struck a major blow against the German advance, forcing them to start back towards Germany. It was during this time that the Ninth Air Force focused on destroying the *Wehrmacht* stragglers. Every tank, vehicle, and truck destroyed meant that Germany had one less resource to hold back the Allied Forces.

Kenn C. Rust wrote that "If any hope remained for the success of the Ardennes Counter offensive, if any hope remained to save Germany from being totally overrun in a short time, it could only be accomplished through the elimination of Allied fighters and bomber aircraft based close to the fighting line."[245] *Wehrmacht* leadership formulated a plan to attack strategically located Allied Air Bases. The original name for this operation was to be Hermann, named after Hermann Goering. It had originally been planned by General of the Fighters Adolf Galland to be launched in November as a *"Grosser Schlag"* (Great Blow), but bad weather as well as Hitler's own paranoia had prevented it from launching until 1 January 1945. In November, the *Luftwaffe* "had eighteen fighter wings and 3,700 aircraft"[246] ready to commit to the planned operation, but most of this strength had been wasted during the course of the Ardennes Offensive when

[245] Rust, *The 9th Air Force in World War II,* 137.
[246] Edward S. Sims, *Aces in Great Fighter battles of World War II* (New York: Harper &Brothers Publishers, 1958) 211.

the German *Luftwaffe* had "lost more than 600 aircraft and almost 350 pilots by New Year's Eve."[247]

By January, the operation had been renamed to *Bodenplatte* (Baseplate). This lesser known part of the Ardennes Offensive was a component of the German effort to revive its war prospects. Conceived by Lt. General Dietrich Peltz and his staff, *Bodenplatte* was to have nearly 1,500 aircraft strike at sixteen Allied airbases throughout France, Belgium and the Netherlands. Jay Stout writes "*Bodenplatte*, had potential…for one, it accounted for the poor training level that was typical of most of the German pilots and did not call for them to perform at a level beyond reasonable expectations."[248] While some people might have thought the New Year's date was meant to catch the airmen unprepared, this was not the case. *Bodenplatte* had originally been intended to coincide with ground operations, but the foul weather that had hindered the Allies had also hindered the *Luftwaffe*.

In order to carry out this attack, the *Luftwaffe* deployed ten fighter wings. They planned to "attack sixteen airfields of the British Second and U.S. Ninth Tactical Air Force in Holland."[249] The German commanders had been given strict orders to maintain radio silence up until the moment of the attack. The timing for the attack was to be 1 January 1945, at 9:20 am in the morning. Sergeant Werner Moge, a pilot for the *Luftwaffe* remembered, "When we turned in at the field, a fantastic sight spread out in front of our eyes, the aircraft of all the *staffeln* had been taxied from their dispersals by the ground crews and were lined up at the fields as if for parade inspection. [There was] fifty FW-190D-9s in the last light of the moon."[250]

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[247] Jack Fellows, "Luftwaffe's Last Blow: it's final major offensive: an aerial Battle of the Bulge" *Aviation History*, (March 2015), 25.
[248] Stout, *The Men who killed the Luftwaffe*, 369.
[249] Fellows, "Luftwaffe's Last Blow", 25.
[250] Fellows, "Luftwaffe's Last Blow", 25.

That morning as the fighters took off from their bases; there was a renewed sense of purpose as the *Luftwaffe* took to the skies en masse.

On New Year's Day 1945, the *Luftwaffe* struck Allied airbases across Belgium, France, and the Netherlands. General Weyland reported that "Only one airfield of this command (XIX TAC, 9th Air Force) was attacked, the effort could be considered quite effective, although costly for the attackers."[251] The Germans, having lost momentum on the ground, were hoping to stop the Allies in the air. The Allies had been maintaining stand-by flights in case of German ground attacks on the airfields, but had not expected the enemy to attack from the air. The forward airbase at Metz, located only a mile from St. Vith was attacked by German aircraft who "came in on the deck [just above the tree line, to avoid radar detection], thus providing no early warning whatsoever."[252]

The attack at Eindhoven was a noteworthy success, destroying forty aircraft and damaging sixty more. However, attacks on other bases showed the lack of experience in the *Luftwaffe* aircrews. At Antwerp-Deurne, American Lieutenant Ronie Sheward, of the 263rd Squadron, remembered yelling "weave, you stupid bastards"[253] as the German aircraft flew straight into the anti-aircraft fire. Captain Denys Gillam was critical of the German pilots: "if any of my boys put on a show like that, I'd tear them off a strip."[254]William B. Reed in 1946 claimed that "more than fifty percent of the attacking force was destroyed as fighter-bombers and anti-aircraft units combined in their most effective counter-air force teamwork of the war"[255]

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[251] Weyland, "Tactical Air Operations in Europe", 57.
[252] Weyland, "Tactical Air Operations in Europe", 57.
[253] Frank Norman, *Battle of the Airfields: Operation Bodenplatte, 1 January 1945* (London, Grub Street, 2000) 353.
[254] Fellows, "Luftwaffe's Last Blow", 27.
[255] Reed, *The Ninth Air Force in the European Theater of Operations*, 42-43.

For the *Luftwaffe,* despite its audacity, the attack was a disaster. Fighter Squadron JG-26 found that their target airfield at Grimbergen, Belgium had been deserted for the most part. Unbeknownst to the Germans, the British RAF had moved their squadrons to the Netherlands. In spite of their limited numbers, the remaining defenders mauled the Germans badly. As Fellows notes, "to destroy a few B-17s, a Lancaster, a Mustang, and a few Spitfires, JG-26 traded 21 planes and 17 pilots", which was not a favorable trade-off.[256] The assets may have been moved, but the airbase was still being defended by anti-aircraft fire.

The Allies were able to meet the attack with anti-aircraft fire and nearby fighter patrols. The records state that all German aircraft "were accounted for, but two of the attackers got away."[257]To prevent this from happening again, the Allies implemented several protective measures into place. Smoke pots were distributed to stop the Germans from having clear targets of grounded Allied aircraft. These were ignited by crews that would create a smokescreen over the airbase making visual strafing difficult for German aircraft. Weyland would later note that these measures had mostly been unsuccessful.[258]

Colonel J.C. Meyer of the 352nd Squadron (353rd Fighter Group, IX TAC) remembered the attack on its airbase at Asch (Y-29). On 1 January 1945, Meyer didn't believe that the weather would allow for many flights that day. However, after many discussions with Pete Quesada on the phone, Meyer was granted permission to fly. Just as his flight was about to take off at 9:40 AM, fifty planes of *Jagdgesgwasder* 11 (JG-11) appeared over the horizon and started to strafe the base. Meyer feared he might not get off the ground. By some miracle, the FW-190 decided to attack the nearby parked C-47 instead. Once airborne, Meyer quickly lined up the FW-190

[256] Fellows, "Luftwaffe's Last Blow", 27.
[257] Weyland, "Tactical Air Operations in Europe" 57.
[258] Spires, *Airpower for Patton's Army*, 198.

and fired. He recalls that with the "holes and chunks torn out of the belly…it is an unbelievably short fight."[259] Meyer pulled up on his stick having finally registered in his mind that the Germans had launched an assault on the airbase. On the radio, confusion was everywhere and Meyer was trying to make sense of it all.

Spotting another FW-190, Meyer swung his P-51 around and came up behind the enemy. Meyer scored some hits, but the aircraft stayed together. It was at this moment that a Messerschmitt came down upon Meyer, forcing him to break off his attack. Just as the BF-109 was about to get a line of sight on him, another Mustang from Meyer's squadron intervened and shot down the *Luftwaffe* pilot. One of the biggest problems that Meyer was encountering was not the Germans, but the anti-aircraft squadrons assigned to Asch. During the fight, Meyer took a number of hits from friendly fire during the mayhem. Due to the similarity of the P-51D and BF-109 profiles, it is easy to understand how anti-aircraft gun crews might have mistaken a friendly P-51 for a BF-109.[260]

To Meyer, the attack on the airfield seemed almost unreal. Running low on fuel and ammunition from downing two bandits, Meyer was ordered to pull out of the battle and to seek refuge at another nearby friendly airfield. By eleven o'clock that morning he had flown forty-two miles north seeking friendly airbases where he hoped to be able to land. Meyer found that every airfield he approached was under attack. Finally, nearing empty, Meyer made a critical decision and decided to return to Asch. Eventually he found Y-29 and took his plane in. This base had been attacked earlier, but the German aircraft were nowhere in sight, and the field was intact. Meyer recalled that "the damage was surprisingly light, considering the length of the German

[259] Sims, "Aces in Great Fighter Battles of World War II" 219.
[260] Bridgeman, *Janes Fighting Aircraft of World War II,* 35.

attack that morning."[261] Upon successfully landing the aircraft, Meyer learned that he had become "the highest scoring ace in the European Theater of Operations for an American fighter pilot"[262] with thirty-seven confirmed kills including the two "bandits" he bagged that morning. General Spaatz and General Quesada would later visit Y-29 to observe the damage that had been done to the airbase.

While the damage to Allied air bases was significant, the loss of *Luftwaffe* aircraft and pilots made any German success pyrrhic. By noon the operation was over and the *Luftwaffe* had retreated back into Germany. Reports flooded in from all over from the stunned Allied airbases, "Evere lost 34 aircraft destroyed, nine damaged, and others like Heesch in the Netherlands and Le Cullot in Belgium got off virtually unscathed"[263] wrote Fellows. German Sergeant Stefan Kohl was shot down and captured. Insolent to his captors, he pointed out the burning airfield and asked defiantly "what do you think of that?" A few days later, Major George Brooking, the man who had interrogated Kohl, brought him out to the airfield to behold brand new P-47s, freshly arrived from Paris to replace the lost aircraft. It was as if *Bodenplatte* had never happened. A grinning Brooking asked Kohl, "What do you think of that?" to which a grumbling Kohl replied "That is what is beating us."[264] The *Luftwaffe* would never be able to match the 100,000 aircraft that had been produced in America during the previous twelve months.

General Spaatz's own records also discussed the aftermath of Operation *Bodenplatte*. Army Air Force Command Europe notes that nearly 800 German aircraft had attacked sixteen airbases throughout France, Belgium and the Netherlands. The Allies suffered 196 aircraft

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[261] Sims, *Aces in Great Fighter Battles of World War II*, 226.
[262] Sims, *Aces in Great Fighter Battles of World War II*, 227.
[263] Fellows, "Luftwaffe's Last Blow" 28.
[264] Norman, *Battle of the Airfields: Operation Bodenplatte,* 423.

destroyed, but only thirty-six of them were American aircraft, a loss rate of just 5 percent. Spaatz would tour two bases (one of which was Y-29) and noted that the damage was almost nonexistent. The Germans however had "suffered catastrophic losses"[265] to American anti-aircraft fire and poor training of their own pilots. General Galland, the German Fighter Commander, later noted that the Germans had lost 220 planes with many of the crews consisting of "irreplaceable instructor pilots and veteran squadron leaders."[266]

Operation *Bodenplatte* was a complete failure for the *Luftwaffe*. The Allies had suffered a total of 250 destroyed and 150 damaged aircraft on the ground. The total losses suffered by the Germans had been "more than 200 pilots killed or captured [including three wing commanders five group commanders and fourteen squadron leaders]."[267]The difference was that the Allies could replace the aircraft, but the Germans could not replace their experienced pilots. Jay Stout writes his own assessment of the *Bodenplatte* operation noting "if the planned force of 1,500 fighters had been available, if a third of the force had not gotten lost and if the attack had been executed according to plan, the results could have been spectacular."[268]Dave Nagel, a bomber pilot in the Eighth Air Force wrote in his diary "a sneak assault [happened today] by enemy fighters on American planes sitting on the ground in Belgium. As many as 100 U.S. planes were destroyed or damaged."[269]Nevertheless, after 1 January 1945, the *Luftwaffe* never again posed a serious threat.

Still the overall war was not yet won. The next day, 2 January 1945, the 9th Air Force resumed its close air operations. For instance, Captain Paul R. Massey's flight pounced on a

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[265] Davis, *Carl A. Spaatz and the Air War in Europe*, 547.
[266] Davis, *Carl A. Spaatz and the Air War in Europe*, 547.
[267] Fellows, "Luftwaffe's Last Blow" 28.
[268] Stout, *The Men who killed the Luftwaffe*, 377.
[269] Astor, *The Mighty Eighth,*379.

Panzer formation located in southern Germany. The pilots reported "nine damaged and eight unobserved"[270] tanks as well as some armored cars and troop mortar carriers. Mysteriously, it was reported that a Jet type aircraft was spotted during this mission, but it had remained unaggressive. Although what type of aircraft it was is not recorded, this sighting remains curious in as much as the only jets in production at the time were the German Messerschmitt ME-262 and the ME-163 Comet. Both of these craft had become operational in mid to late 1944. Both of these aircraft could outperform and outrun the American P-47s and P-51s. It is likely the pilot was either unaware of the Americans or forbidden from engaging them in combat due to the restrictions placed on him by the *Luftwaffe*, post *Bodenplatte*.[271]

On 3 January, 1945 the 509th Fighter Squadron began to patrol the area around Trier-Kaiserslautern in southern Germany. Squadron records indicated that four rail yards and ten locomotive trains were damaged or destroyed during the time period between 1-3 January. Approximately 163 boxcars had been destroyed and a few staff cars had been strafed. Yet, by the third, the bad weather was setting in again and the 509th was forced to delay their actions. 3 January also saw the Allied ground forces of the U.S. First Army advancing in the Northern Sector against the *Wehrmacht*. The U.S. First Army reached the town of Houffalize in time to meet the advance ground elements of Patton's Third Army. The U.S. First Army and Patton's Third Army had planned to eliminate the bulge before advancing on towards the Siegfried Line. However, the Germans had escaped and no enemy units were left within the western tip of the Bulge.

5 January, saw the 362nd Fighter Group (XIX TAC) flying in support of the III Corp along with the 406th Fighter Group (XIX TAC) flying in support of VIII Corp. These two groups were

[270] Maclachlan, Flight Records of the 509th Fighter Squadron, 7.
[271] Galland, *The First and Last*, 350.

flying in support of Patton's Third Army, which was headed for Saarburg, Germany. It was believed that the Germans were trying to reinforce a bridge that would be needed to cross the Moselle River. In order to gain reconnaissance photos, Captain Robert J. Holbury of the 31st Photo Reconnaissance Squadron (XIX TAC) flew at dangerously low levels (25 feet and below at points) to return with 212 photos of the Germans working on the defenses. Spires contends that this was "one of the most spectacular flights of the Ardennes period."[272]

Patton was worried that the town of Merzig-Saarbruecken could be used as a possible staging point for a renewed German offensive. General Weyland agreed and had his XIX TAC ready for 10 January. The 362nd Fighter Group was ordered to strike at the bridges, barges, and pontoon bridges that had been photographed by Holbury. These results were poor and the Germans ably defended the bridges with anti-aircraft fire and flak. The bridges remained in use and Weyland's XIX TAC soon began a race against Anderson's IX Bomber Command to see who could knock the bridges out first. Weyland won. The 509th returned to action, with Lt. Charles Dooney leading the first flight out. This flight knocked out a bridge while retreating German ground forces were in the process of crossing. By this time, most of the enemy had escaped back into Germany across the Rhine River. Maclachlan notes, "The January battle of the diminishing bulge was almost at an end. German troops now held at month's end but a twelve mile fringe at the widest point near Houffalize and the Third Army was again in range of gun fire from Germany proper."[273]

The Germans were faced with a new threat on 12 January when the Russians launched a powerful offensive from Poland into Eastern Prussia. Hitler ordered the now weakened 5th and 6th *Panzer* Armies to leave the Ardennes and move east to meet the advancing Russian

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[272] Spires, *Airpower for Patton's Army*, 222.
[273] Maclachlan, Flight Records of the 509th Fighter Squadron, 25.

onslaught. With the Germans rapidly attempting to reshuffle their forces from the Bulge, the Anglo-Americans intensified their drive towards the Rhine.

13 January saw the XIX TAC flying 546 sorties which destroyed 137 vehicles and 16 tanks. The 362nd Fighter Group hit multiple marshalling yards and train stations in Neunkirchen, Germany. The 338th Fighter Group (Eighth Air Force) encountered a ME-262 on a raid over Giebelstadt airbase about which Walter Konantz recorded:

> "I noticed a couple of planes taxiing on the ground; it was a ME-262, not yet accelerated to high speed. We had the new K-14 gyro sight installed…and I had never fired the guns with this sight. It worked perfectly and I clobbered him all over with 40 strikes, setting his left engine on fire."[274]

14 January again granted the XIX TAC clear weather allowing them to send out 750 sorties, "the biggest day since summer" for close air support. The Germans tried to retaliate as best they could by sending out Ar-234 Blitz jet bombers from KG-76 based in Munster. These bombers aimed to hit the American artillery positions at Bastogne, but risked being jumped by American aircraft as they took off or landed. This had become a constant worry for the *Luftwaffe*, now that the American pilots had returned to the skies.[275]

On 15 January, General Nugent, as the head of the XXIX TAC, met with his top commanders in order to discuss ideas for what could be done to defend the airfields. Most of the creative ideas required convoluted plans and none of them were implemented. Instead, extra anti-aircraft crews were added to defend the bases. In the South, Opie Weyland's XIX TAC focused on attacking the remaining hostile pockets of the German army. Flying along the roads and railroads, the pilots of the XIX TAC targeted whatever they could find. "The overall objective remained to isolate the battlefield and disrupt any attempt at orderly withdrawal"[276] writes

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[274] Parker, *To Win the Winter Sky*, 466.
[275] Parker, *To Win the Winter Sky*, 467.
[276] Spires, *Airpower for Patton's Army*, 226.

Spire. The TACs flew sorties from 15 to 16 January in support of Patton's Third Army. In the meantime, Colonel Hallett, assigned to XIX TAC, had developed a list of priority targets for the pilots. In case the main target for the day was inaccessible due to weather, the pilots could still press home attacks without needing to radio back to base for instructions.

Wakefield summarizes the end of the Ardennes Offensive: "it [the bulge] was not fully contained until 17 January, following attacks on the northern side of the bulge by the Ninth Army and on the southern side by General Patton's Third Army."[277] These two armies met at Houffalize, as discussed above, and then pressed onwards towards the town of St. Vith. Meanwhile the Third Army's VIII Corp and III Corp, along with the First Army, headed for the Our River. A unit historian of the XIX TAC writes that the "Belgian Bulge had been reduced to a mere bump."[278] Spires notes that while this assessment was essentially correct, the Germans would hold out desperately for another week before fully completing their retreat. The *Luftwaffe* tried to cover the *Wehrmacht*'s retreat on 16 January, however American aircraft were present and the *Luftwaffe* lost fourteen fighters, while the Allies' three TACs combined lost only five. Also of note on the 17th, was the return of the U.S. First Army to General Bradley's command. [279]

General Weyland visited his commands on 19-20 January and then returned to Luxembourg City in order to meet with General Quesada and Major General Anderson. It was there that Weyland agreed to the return of the 365th Fighter Group back to Quesada's IX TAC and the 361st Fighter Group back to the Eighth Air Force from which Weyland had borrowed it. However, these moves were not entirely completed by 28 January and the administrative details dragged out until 1 February 1945.

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[277] Wakefield, *The Other Ninth Air Force,* 69.
[278] Spires, *Airpower for Patton's Army*, 227.
[279] Rust, *The 9th Air Force in World War II,* 140.

The *Luftwaffe* also faced its own problems on 22 January 1945. The top remaining aces in the *Luftwaffe*, including Adolf Galland, Hermann Graf, Gunther Lutzow, Gustav Rodel, Johanne Steinhoff, and Hannes Trautloft all gathered to deliver their grievances to Goering. Goering for his part threatened to have them all shot, however no charges were ever filed, but each of the men was either forced to retire or sent off to units where their careers were left to wither. This event was later called "the munity of the aces"[280] and effectively destroyed the last remaining leadership in the *Luftwaffe*. Although the war would continue on for four more months, the *Luftwaffe* would no longer play an effective role.

On that same day, in the North, General Nugent's XXIX TAC attacked the enemy at Duren, totaling 163 sorties. The 36th and the 373rd Fighter Group both claimed "15 locomotives and 628 rail cars and four German planes on the ground." The two Fighter Groups were rewarded with "1-0 armored vehicles, 6-1 locomotives, 150-89 rail cars 15-24 M/T, 2-0 horse drawn vehicles, 65-15 buildings, 46 rail cuts and 3 highway cuts." These numbers vary due to what was claimed by the pilots and what was officially awarded to the units after some investigation.[281]

On 22 January, IX Bomber Command under Major General Anderson destroyed the bridge at Dasburg, Germany, which "created a monumental bottleneck for the Germans and a magnificent opportunity for Weyland's fighter-bombers."[282] Captain Wilfred B. Crutchfield of the 362nd Fighter Group had been flying his reconnaissance aircraft when he spotted an amazing sight near the town of Prum, Germany. Nearly 1,500 German vehicles of various types were headed on their way east towards the Russian Front, all belonging to the Sixth SS *Panzer* Army.

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[280] Galland, *The First and Last*, 402.
[281] Parker, *To Win the Winter Sky*, 481.
[282] Spires, *Airpower for Patton's Army*, 232.

Further to the south, another reconnaissance pilot, Lt. Howard Nichols (10th Photo Reconnaissance Group) found 400 vehicles located at the bridge crossing at Dasburg.

This bottleneck at Dasburg, as well as at the Our River (XII Corp), created indescribable consternation for the Germans. The Allies flew every available aircraft and at 1300 hours the reconnaissance pilots ushered in the first wave of fighter-bombers. In all, 57 missions and 627 sorties were launched in pursuit of this fat target. The TACs were able to claim 1,177 trucks, tanks, and motor vehicles destroyed along with another 536 damaged. However some vehicles had already escaped across the Our River into safer territory.

It was with full confidence that General Opie Weyland was able to telephone Vandenberg and report that "the last remnants of the Ardennes bulge were collapsing like a punctured tire."[283] General Carl Spaatz thanked General Vandenberg for the work that the Ninth Air Force was doing. Vandenberg, wanting to improve morale, forwarded it to all the TACs. It read: "Operations of the Ninth Air Force today were most outstanding. Their effect on the enemy must have been terrific. My heartiest congratulations to all concerned."[284] In wrapping up the campaign, Ninth Air Force concentrated on the German Seventh Army and the Fifth *Panzer* Army. Trying to escape back across the Our River, the Germans became sitting ducks for the feared *Jabos.* One American aircraft strafed the headquarters of the LIII Army Corps, wounding nearly everyone. No *Luftwaffe* aircraft came up to defend the ground troops. Due to a shortage of pilots, planes and leadership, the *Luftwaffe* was no longer functioning as a fully dedicated force.[285]

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[283] Spires, *Airpower for Patton's Army*, 232.
[284] Parker, *To Win the Winter Sky*, 482.
[285] Galland, *The First and Last*, 402.

The ground war saw St. Vith retaken by the Allies on 23 January 1945. The Allies had fought back against the German offensive and turned it into a rout. From Dasburg to Elsenborn, the Germans were in full retreat and the Americans were finally able to restore their lines to the way they had been prior to 16 December 1944. Rust writes "by the end of January the Battle of the Ardennes was a part of history, technically being completed on 28 January."[286] On the ground, 28 January 1945 saw the Allies get their first ground patrol across the Our River. In the north, Montgomery's takeover of the Ninth army lasted until 4 April 1945 when the end of the war was in sight (VE Day-8 May 1944). Opie Weyland wrote in his diary "the reduction of the Ardennes was officially completed."[287]

On 30 January, 1945 German Minister of Armaments Albert Speer went to Hitler to discuss the state of the war. Having been notified that the Ardennes Offensive was a failure and that the Soviets were advancing in the east, Speer was forced to admit to Hitler that "the war can no longer be pursued militarily."[288] In the air, the Ardennes had dealt serious damage to the *Luftwaffe* and *Wehrmacht*. Parker, one of the first historians to credit air power during the Battle of the Bulge, summarizes Allied tally from the air for the period from 16 December to 30 January 1944: "11,378 motor transports, 1,161 tanks and armored vehicles, 507 locomotives, 6,266 rail cars, 472 gun positions, 974 rail cuts, 421 roads cut, and 36 bridges."[289] By then, the war in the West was won.

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[286] Rust, *The 9th Air Force in World War II,* 142.
[287] Spires, *Airpower for Patton's Army*, 233.
[288] Parker, *To Win the Winter Sky*, 497.
[289] Parker, *To Win the Winter Sky*, 485.

Conclusions and Aftermath

During the Battle of the Bulge air power executed five critical functions. First, aircraft sorties were launched by the Ninth Air Force that targeted railroad junctions, depots of amassed supplies, the oil industry and similar high value targets, as well as provided critical reconnaissance photographs of troop movements. Second, using aircraft such as the P-47 and the P-51, the Americans were able to search out and destroy the frontline enemy units. Third, the decimation of the *Luftwaffe* during the battle helped to expedite the end of the war by enabling the Allies to cross the Rhine. Fourth, cargo planes such as the C-47 dropped essential supplies to Allied ground forces, most notably to help the besieged paratroopers at Bastogne. Finally, expanding on a working concept that emerged during the hard slog through North Africa, Italy and then the D-day invasions, Air-Coordination Officers were utilized to synchronize the aerial strikes to specific conditions on the ground. Together, these five points gave the allies a major advantage over the Germans, all of which made the difference in the Ardennes.

The Germans had counted on the bad weather to stop the Allies from noticing their marshalling of forces and to a certain extent they were right. Nevertheless, the Allied Air reconnaissance personnel had taken pictures of the massing of troops and vehicles. Caddick-Adams notes, "The 1944 winter campaign was a vast series of loosely interconnected battles…"[290] With 9,000 Allied forces cut off from their counterparts in the rear, groups found each other and held their small patches of ground as best they could. Wakefield summarizes, "Intelligence on the precise whereabouts of the enemy was poor, and heavy snow and poor visibility…robbed the Allies of their usually effective air support."[291] The situation was patchy,

[290] Caddick-Adams, *Snow & Steel,* 266.
[291] Wakefield, *The Other Ninth Air Force,* 68.

fluid, and obscured by bad weather. It was a reconnaissance nightmare until the weather cleared around 23 December.

The Germans surged westward in one of the largest attacks of the war, one that peaked around the 22nd of December. Yet, Allied air power continued to fly, even during the worst weather of the campaign. With clearer skies opening up on the 23rd, the Allied Forces were able to fully utilize their air power and began to push the *Wehrmacht* forces back towards Germany. Germany lost the bulk of its remaining combat power, including a majority of its famed *Luftwaffe* planes, pilots, tanks, armored vehicles, petrol, and essential infrastructure like roads and bridges. Hitler had gambled that his surprise offensive in bad weather would split the American line from the British-Canadian line and yield him the prized port of Antwerp. He Lost.

In 1947, the newly formed United States Air Force had its historians go back over the role of air power during the Second World War. They noted that "in terms of final results it mattered little whether the Germans planes were destroyed in the factories, on the ground, or in the sky."[292] Perhaps this is an academic oversimplification of the war effort, but nonetheless the Air Force had carried out its mission under the toughest of circumstances. Michael Sherry strongly disagrees with this statement writing that "it mattered a great deal for it greatly altered the cost and nature of victory as well as the doctrine on which the newly [formed] Air Force rested its claim to supremacy and virtue."[293] Without its ability to strike from the skies and cause destruction behind the lines, the Air Force had no reason or purpose that was not already being filled by another branch of service.

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[292] Michael S. Sherry, *The Rise of American Air Power: The creation of Armageddon* (New Haven, Connecticut: Yale University Press. 1987), 165.
[293]Sherry, *The Rise of American Air Power: The creation of Armageddon*, 165.

Historian Theodore Ropp notes "that even a first class military power – rugged and resilient as Germany was-- cannot live long forever under full scale and free exploitation of air weapons over the heart of its territory."[294] The strategic bombing of German industry by Allied bombers and aircraft had been going on since 1942. The Ardennes Offensive had "cost the Germans more than they could afford, it brought home to the German troops their incapacity to turn the scales and thereby undermined such hopes as they had retained."[295] With the removal of the *Luftwaffe*, a product of Ardennes fighting, Allied strategic aircraft bombing would intensify with less resistance. This allowed a continuation of a severe bombing campaign of major points of industry within Germany. "Nearly half of the 2,697,473 tons of bombs dropped by the Western Allies during the war fell on Germany"[296] wrote Ropp.

So, how effective was air power on the destruction of key industries? The production of weapons was crushed by Allied bombings. The Bulge accelerated Germany's economic demise. Coal that was normally shipped from Essen and Cologne dropped off to thirty-nine percent and sixteen percent of previous levels, respectively. "By Christmas 1,100 trains and 75,000 to 100,000 cars stood idle. That number rose to 1,994 by January 18. "[297]Crippling transportation by railway hastened the end of the war. As a result of industry and train bombings three major power plants were shut down entirely. Iron ore deliveries dropped eighty percent and tank production was halved due to lack of parts. "On January 19, the system embargoed all freight everywhere excepting *Wehrmacht* and coal traffic."[298]

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[294] Theodore Ropp, *War in the Modern World* (Baltimore The John Hopkins University Press, 1962), 358.
[295]Ropp, *War in the Modern World*, 358.
[296]Ropp, *War in the Modern World*, 358.
[297]Davis, *Carl A. Spaatz and the Air War in Europe*, 537.
[298]Davis, *Carl A. Spaatz and the Air War in Europe*, 537.

The German ball bearing industry, so vital to create tanks and aircraft finally collapsed in December 1944. Tank production was hit the hardest and dropped from 114 tanks in October to 65 in January due to a lack of parts. As a result of Allied aircraft bombings of key industries and train systems three major power plants in the Ruhr area were no longer able to generate power. In turn, other major industries could no longer function and vital war materials were running short due to both lack of parts and lack of transportation to get them where they were needed.[299] By the end of January 1944 the *Wehrmacht* was a shadow of its former self. Raw materials, energy, transportation and military cohesiveness had been destroyed and it was only a matter of time before the Germans would be forced to concede defeat. Shipments of the stockpiled weapons to aid the *Wehrmacht* in the Battle of the Bulge left nothing in reserve. *Karabiner*-98K rifles, the main rifle of the German infantryman, went from a ten day supply to three. Supplies of STG-44 assault rifles decreased from a four month supply to a three week supply. The 88mm flak cannon, feared by both the Allied aircrews and the ground soldiers, went from a one month surplus to two weeks.[300]

Henry Dull summarizes the toll taken on the *Luftwaffe*'s aircraft. The Germans had lost nearly 1,600 aircraft during the offensive. In the first week alone, 600 aircraft had been destroyed. The *Luftwaffe* could ill afford to lose this staggering number of planes. "The *Luftwaffe* received its deathblow in the Ardennes…it was decimated while in transfer on the ground, in large air battles, especially during Christmas and was finally destroyed"[301] writes Dull, a sentiment shared by Galland later in his book written in 1954. The *Luftwaffe* had been sorely damaged by the constant day and night raids of the Anglo-American forces. With regards to

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[299] Ward and Burns, *The war: an intimate history, 1941-1945,* 302-303.
[300] Weyland, "Tactical Air Operations in Europe" 58.
[301] Dull Jr., "Post Mortem Writings on Indications of Ardennes Offensive" 13.

point three, the words of *Luftwaffe* General Adolf Galland summarizes it quite succinctly: "The *Luftwaffe* received its death blow at the Ardennes Offensive."[302]Germany's air power was removed as an operational force after *Bodenplatte*. Allied air power had played a vital role in the defense of the Allied ground forces and helped to stop the German forces from reaching Antwerp. The German offensive had been stopped in its tracks. Allied aircraft had been strained with round the clock missions to not only support the Allied ground defensive, but also had been tasked with taking the war back to the Germans' rear lines.

As Wakefield describes there was a factory like quality to the Allied war effort that brought new men, new planes, and new gear from America, through Scotland, to southern England and then to the front. Hitler had no such vast resources from which to draw strength. In fact, with Goering's departure from service in late 1944, the *Luftwaffe* had fallen into disorganization with factions of leaders vying for supremacy and resources. Whereas the Allies had honed their air-ground skills in North Africa and Italy and had learned from it, *Luftwaffe* pilots had been fighting with their backs to the wall since 1943. Many irreplaceable flying instructors had died in battle and the remaining pilots were either battle weary or new and inexperienced.[303]

After the war, von Rundstedt was reported to have said that "Allied air power made it impossible [to allow for the] reshuffling of troops and robbed us of all mobility."[304]The Field Marshal, in spite of this concession, bragged that "if not for Allied air power he could have taken Paris."[305] Another unnamed German general was reported to have said "it was like playing chess

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[302] Galland, *The First and Last*, 312.
[303] Wakefield, *The Other Ninth Air Force,* 69.
[304] Meilinger, *Hoyt S. Vandenberg,* 57.
[305] Meilinger, *Hoyt S. Vandenberg,* 57.

where your opponent took three moves to your one."[306] On the American side, Vandenberg wrote "we have bottlenecked the enemy's supplies and throttled his offensive power. The rules underscore the fact that tactical air power has come of age."[307]

General Anthony McAuliffe, who had been in charge of the 101st at Bastogne, would later personally thank Vandenberg "for the tremendous support that was a vital contribution to his division's successful defense."[308]Air power had helped the besieged troops at Bastogne to maintain their defiance against the *Wehrmacht*. C-47s and B-17s of both the Ninth and Eighth Air Force had dropped critically needed supplies to the ground troops. For many scholars, Bastogne represents the lynchpin of the entire American defensive. As historian John McManus writes "Bastogne was the vital pivot point that they [Germany] needed to exit the Ardennes swiftly but they failed to take it."[309]The men that held it and the pilots who supplied them from the air illustrate the very best example of the two forces working together.

General Alfred Jodl would later testify at the Nuremburg trials that "we still had lots of material and sent it to the front in hundreds of trains but the trains got there only after weeks or not at all"[310] due to the air strikes and bombings. All of which impeded the German offensive. After the war, Vandenberg spoke to the imprisoned Reich Marshal Hermann Goering about which operations had caused him the most headaches. Goering was said to have replied:

> "The attacks on the marshalling yards were the most effective, next came the low level attacks on troops and then the attacks on bridges…The low flying airplanes had a terror effect and caused great damage to our communications. Also demoralizing were the umbrella fighters which after escorting the bombers would swoop down and hit everything including the jet planes in the process of landing."[311]

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[306] Carter, Airpower in the Battle of the Bulge: A Theater Campaign perspective" 2.
[307] Meilinger, *Hoyt S. Vandenberg,* 57.
[308] Meilinger, *Hoyt S. Vandenberg,* 57.
[309] John McManus. *Alamo in the Snow*, xii.
[310] Meilinger, *Hoyt S. Vandenberg,* 57.
[311] Meilinger, *Hoyt S. Vandenberg,* 57.

Air power during the Battle of the Bulge hindered the Germans' ability to move men and supplies. The destruction of key targets such as the marshalling yards, communication centers and the near elimination of of the *Luftwaffe* helped to bring a faster end to the war.

After the war, Vandenberg assessed the role of tactical air power including how it had prevailed in World War II and how it would remain pivotal to future military campaigns of the United States. "In western Europe tactical air power was a dominating and decisive factor which contributed largely to the neutralization of enemy air power, the destruction of enemy troops and materiel in closest cooperation with the ground forces."[312] Vandenberg also issued a book which contained paintings he commissioned to commemorate the mission of the Ninth Air Force throughout World War II. In the foreword to the book, he wrote:

> "We have an enviable record, to which all personal have contributed. The Ninth has added new and glorious pages to the history of air warfare. Its valor and fighting spirit may, perhaps be equaled in the future most certainly can never be surpassed."[313]

As a result of the Ardennes, German high command instigated tighter restrictions upon the *Luftwaffe* on 22 January 1945. It prohibited any pilots from flying over enemy territory or engaging against enemy targets (including heavy bombers) in any "but the most favorable circumstances."[314] These restrictions curtailed the *Luftwaffe*'s effectiveness and hampered their ability to fight against the Allies. Secondly, the majority of the *Luftwaffe* was transferred back to the Eastern Front, once the Ardennes Offensive had failed. With its limited resources, Germany could no longer divide its air force to fight a two front war. Hitler decided that the Soviets were

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[312]Ward and Burns, *The war: an intimate history,* 302-303.
[313] United States Army Air Force Collections, "Ninth Air Force USAAF" 1.
[314]Davis, *Carl A. Spaatz and the Air War in Europe*, 545.

the bigger threat. The Allied forces had gained control of the skies over the western front once again.

There is a myth that surrounds warfare that says that airmen get a detached view of any war, that only boots on the ground see things up close and personal. The truth is air power is not just fueled by gasoline, but by human determination. As this excerpt from a letter written on 5 December 1944 by Captain Quentin Aanenson of the 366th Fighter Group, a part of the XXIX TAC, (it was never mailed) illuminates there was no shortage of horrifying ways for airmen to perish.

Dear Jackie,

> I have purposefully not told you much about my world over here, because I thought it might upset you. …so let me correct that right now. I live in a world of death. I have watched my friends die in a variety of violent ways. Sometimes it's just an engine failure on takeoff, resulting in a violent explosion… Other times it's the deadly flak that tears into a plane. If the pilot is lucky, the flak kills him. But usually he isn't and he burns to death…as his plane spins in. Sometimes they bail out and die when they don't jump clear of the tail. I've watched close friends be killed in their parachutes by the German gunners, or have their chutes catch fire so they just fell hopelessly to their death. So far I have done my duty in this war. I have never aborted a mission or failed to dive on a target no matter how intense the flak. …I may live through this war and return to Baton Rouge, but I am not the same person you said good-bye to…"[315]

Quentin Aanenson survived the war and went home to Baton Rouge, but suffered PTSD the rest of his life. While Captain Aanenson did not fly during the Battle of the Bulge, his letter is an eloquent testimony to the horror and hardships that airmen faced. Theirs was not a sanitary war, removed from bloodshed. Tough leaders like Quesada, Weyland, and Nugent, and the brave men who flew in combat in less than ideal conditions were the real power within the term air power. People and planes together kept Hitler's military force contained and thus hastened the end of World War II.

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[315] Richard H. Kohn and Joseph P. Harahan *USAF Warrior Studies: A condensed history of the Ninth Air force in the European Theater of Operations* (Washington D.C: Office of Air Force History, 1984), 9-10.

Air power had provided close air support, flown numerous recon missions, and dropped critically needed supplies to the paratroopers at Bastogne. Close air-ground co-operation, which had been tried by fire in the North African campaign, had matured to a point that Allied forces dominated the aerial battle and turned the tide of the war. United States air power contributed greatly to the destruction of the *Wehrmacht* during the Battle of the Bulge. After the Bulge, the United States Army Air Forces ruled the skies and provided assistance to the men on the ground. Generals Vandenberg, Weyland, Nugent, and Quesada had led their commands through some of the toughest fighting during the war. Air power had played the decisive role in ending both the Battle of the Bulge and by extension, the war in Europe.

United States Order of Battle at the Ardennes

Allied Forces

SHAEF Supreme Headquarters Allied Expeditionary Forces
General of the Army Dwight D. Eisenhower

12th Army Group

LT. GENERAL Omar N. Bradley

U.S. First Army

LT. GENERAL Courtney H. Hodges
V Corps- Major General Leonard T. Gerow
VII Corps- Major General Joseph Lawton Collins
XVIII Airborne Corps – Major General Matthew B. Ridgway

U.S. Third Army

LT. GENERAL George S. Patton, Jr.
III Corps – Major General John Millikin
VIII Corps- Major General Troy H. Middleton
XII Corps- Major General Manton S. Eddy

U.S. Ninth Army

LT. GENERAL William H. Simpson
XIII Corps – Major General Alvan C. Gillem Jr.
XVI Corps – Major General John B Anderson
XIX Corps- Major General Raymond S Mclain

Allied Air Forces

US Army Air Corps

Ninth Air Force - U.S. Ninth Air Force
Lt General Hoyt S. Vandenberg
IX Tactical Air Command (supporting First Army)
Major General Elwood R. Quesada
70th Fighter Wing
365,366,367,368,370,474 Fighter Groups
67 Tactical Reconnaissance Group
422 Night Fighter Squadron
XIX Tactical Air Command (supporting Third Army)
Major General Otto P. Weyland
100th Fighter Wing
354,358,362,405,406 Fighter Groups
10 Photo Reconnaissance Group
425 Night Fighter Squadron
XXIX Tactical Air Command (supporting Ninth Army)
Brigadier General Richard E. Nugent
84th and 303rd Fighter Wing
36, 48,373,404, 363 Fighter Groups

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