

AMERICAN AIRBORNE OPERATIONS IN THE PACIFIC THEATER: EXTENDING OPERATIONAL REACH AND CREATING OPERATIONAL SHOCK

A Monograph

by

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ABSTRACT

AMERICAN AIRBORNE OPERATIONS IN THE PACIFIC THEATER: EXTENDING OPERATIONAL REACH AND CREATING OPERATIONAL SHOCK by MAJ Matthew A. Sweeney, U.S. Army, 52 pages.

This monograph utilizes the case study method to analyze three of the seven U.S. airborne operations in the Pacific Theater during World War II: the 503D Parachute Infantry Regiment's seizure of Nadzab airfield in New Guinea, the 11th Airborne Division's seizure of Tagaytay Ridge in the Philippines, and the 503D Parachute Infantry Regiment's seizure of Corregidor in the Philippines. The intent of this monograph is to demonstrate how these airborne operations extended operational reach by introducing combat elements from outside the area of operations, opening logistical lines of communication, forward positioning of indirect fire assets, and capturing key terrain. In addition, Allied airborne operations created operational shock by incorporating a third dimension to combat operations, facilitated by dropping large masses of paratroopers in minimal time.

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This monograph is dedicated to the soldiers of 2nd Battalion, 503D PIR - past, present, and future. SKY SOLDIERS, THE ROCK!

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ACRONYMS

COL	Colonel
DZ	Drop Zone
GIR	Glider Infantry Regiment
KIA	Killed In Action
LTC	Lieutenant Colonel
MIA	Missing In Action
mm	Millimeter
PIR	Parachute Infantry Regiment
RCT	Regimental Combat Team
SWPA	Southwest Pacific Area
US	United States
WIA	Wounded In Action

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INTRODUCTION

The modern world is resplendent with feats of science and technology. In this environment, technological marvels such as long-range aircraft, computers, and satellites no longer attract much attention; they have become background noise. However, a man's leap from an airplane in flight continues to give one pause and captures the imagination. This is ironic, because military parachute technology had its start in World War I, almost 100 years ago.¹ In addition, airborne forces as they are known today have been in existence since 1931, approximately 83 years.² Considering its high consumption of resources and lengthy existence, military practitioners should question if the airborne vertical envelopment remains a viable option in the context of the current operational environment.

Although airborne forces have long been considered a strategic resource, they are becoming increasingly important due to budgetary constraints and current operational realities. The United States (US) is currently in the process of reducing its forward-deployed presence in Europe and Southwest Asia. This force posture change is the result of the conclusion of Operation Iraqi Freedom, drawdown of Operation Enduring Freedom, and continued mass reduction of forces in Germany.³ The result is a greater proportion of US Army troops garrisoned within the continental United States. A side effect of this changed force posture is the lengthening of lines of communication to likely trouble spots in Eastern Europe and the Middle East. Therefore, there exists an even greater reliance on America's ability to project power using long-range aircraft. Considering this challenge, it is important to examine the past use of airborne forces in order to

¹Edward Flanagan, Jr., *Airborne: A Combat History of American Airborne Forces* (New York: Ballantine Books, 2002), xii.

²Ibid.

³"The Downgrading of Europe, Barack Obama's new defense plans neglect Europe at their peril" *The Economist* (2012): <http://www.economist.com/node/21542789>. (accessed February 26, 2014).

develop an enhanced understanding of their current potential.

Until now, the majority of literature regarding airborne operations focused on the experience of US airborne forces in the European Theater during World War II. However, further investigation into the history of airborne operations begins to reveal a second opportunity for analysis - the Pacific Theater. It is this theater that concerns the contents of this monograph. Although the literature of war in the Pacific Theater is not nearly as prolific, it is just as valuable as its European counterpart. The vast majority of books regarding the Pacific Theater fall into the following four categories: commander memoirs, battle analysis, strategic overview, and individual soldier accounts.⁴ Although fascinating, there is a dearth of analysis on how these past airborne operations square with the current understanding of operational art. Furthermore, this lack of analysis regarding the Pacific Theater is most unfortunate considering that this theater was burdened by extremely long lines of communication and constrained resources - both situations likely to befall US forces in the current, fiscally-constrained environment.

The lesser-known airborne operations in the Pacific Theater provide an excellent opportunity to explore the utilization of airborne forces. From 1940-1945, there was a total of twelve airborne operations in the Pacific - seven conducted by the US and five by the Japanese.⁵

⁴Commander memoirs include: Douglas MacArthur, *Reminiscences* (New York: McGraw-Hill Book Company, 1964) and George C. Kenney, *General Kenney Reports* (New York: Duell, Sloan, and Pearce, 1949) and Walter Krueger, *From Down Under to Nippon* (Washington, DC: Combat Forces Press, 1953). Battle analyses include: Edward Flanagan, Jr., *The Los Banos Raid: The 11th Airborne Jumps at Dawn* (Novato, CA: Presidio Press, 1986) and Gerard M. Devlin, *Back to Corregidor, America Retakes the Rock* (New York: St. Martin's Press, 1992) and Gene E. Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII* (Mechanicsburg, PA: Stackpole Books, 2010). Strategic overviews include: Ronald H. Spector, *Eagle Against the Sun* (New York: Vintage Books, 1985) and Stephen R. Taaffe, *MacArthur's Jungle War, The 1944 New Guinea Campaign* (Lawrence, KS: University Press of Kansas, 1998). Individual soldier accounts include: Marvin Miller, *The 11th Airborne Brick* (Lexington, KY: 2011) and John L. Lowden, *Silent Wings at War, Combat Gliders in World War II* (Washington, DC: Smithsonian Institution Press, 1992).

⁵Gene E. Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII* (Mechanicsburg, PA: Stackpole Books, 2010), 318.

In addition, much like the current situation today, these airborne operations were executed in a resource-constrained environment, over extremely long lines of communication.

By studying the operational use of airborne forces in their infancy, one can recognize patterns, trends, and tactics that are just as viable today as they were in 1945. Much like today, these airborne forces threatened the enemy rear area and increased the battle's tempo, thereby becoming an important component to Allied victory. This monograph attempts to strip away the mystique of airborne operations in order to gain knowledge and expose the vital components of operational success.

Airborne operations in the Pacific Theater were successful because they created operational shock and extended operational reach. The unexpected introduction of paratroopers increased the battle's tempo, thus disrupting the enemy's decision cycle and inhibiting efforts to allocate forces and appropriately respond to emerging threats. In addition, airborne operations added a new third dimension to warfare, thus liberating combat forces from ground and sea lines of communication. The use of airborne forces facilitated deep attacks into the enemy's rear. Once a tenuous foothold was gained in the rear area, Allied forces massed men and materiel in order to establish a forward operating base, thus expanding the commander's operational reach.

This monograph utilizes the case study method, conducting an examination of three of the seven US airborne operations in the Pacific Theater.⁶ The intent is to determine if airborne operations truly created operational shock and extended operational reach. The following case studies are presented in chronological order: Nadzab, Tagaytay Ridge, and Corregidor. These three case studies summarize the actions of the 11th Airborne Division (Tagaytay Ridge), and the 503D Parachute Infantry Regiment (PIR) (Nadzab and Corregidor) from 1942-1945.⁷ These operations were, without doubt, exceptionally daring; the task now is to question how they

⁶Ibid.

⁷Flanagan, *Airborne: A Combat History of American Airborne Forces*, 115.

contributed to Allied success.

To begin the analysis of airborne operations in the Pacific, it is necessary to conduct a brief typology of common airborne terms. A paratrooper is a soldier, regardless of branch, that utilizes a parachute as the primary method of transportation to the battlefield. The Allied paratroopers of World War II utilized the T-5 parachute, consisting of a 28-foot static line activated canopy.⁸ The T-5 was capable of carrying one man and his assigned equipment safely to the ground from a drop altitude as low as 125 feet.⁹ The most common transport aircraft was the C-47 “Skytrain” - it had an operational range of 1,500 miles, capable of transporting 28 paratroopers or 6,000 pounds of equipment.¹⁰

A gliderman was a soldier, regardless of branch, that rode a CG-4A Waco glider to the battlefield. The CG-4A Waco glider was constructed of steel tubes, plywood, and canvas; it had a wingspan of 84 feet, a length of 49 feet, and was capable of transporting 15 combat-equipped glidermen or 3,750 pounds of cargo.¹¹ Gliders were towed by a “tow plane” using a 350-foot long nylon rope.¹²

⁸Gordon L. Rottman, *U.S. Army Paratrooper in the Pacific Theater 1943-45* (Long Island City, NY: Osprey Publishing, 2012), 34.

⁹Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 318.

¹⁰Rottman, *U.S. Airborne Units in the Pacific Theater 1942-45*, 46.

¹¹John L. Lowden, *Silent Wings at War: Combat Gliders in World War II* (Washington, DC: Smithsonian Institution Press, 1992), 10-12.

¹²*Ibid.*

STRATEGIC ENVIRONMENT

Shortly after the United States declared war on Japan, the Allies' political leaders determined the Pacific Theater would be an American-led operation.¹³ This decision facilitated the Allied European powers to concentrate their men and materiel towards the defeat of Nazi Germany, a clear existential threat.¹⁴ The resultant Germany First policy prioritized the vast majority of Allied resources towards the European Theater.¹⁵ As a result, Allied operations in the Pacific became a continuous exercise in the stretching of resources, of making due, a perpetual holding out. The lone exception to this resource inequity was in the immediate aftermath of the Japanese raid on Pearl Harbor and subsequent siege of the Philippines.¹⁶ However, this initial surge in resources ended by autumn of 1942. From that point, the Pacific Theater received 30 percent of United States military output.¹⁷ This inequality of resources would remain in place until the Normandy invasion of 1944, when Germany's demise was fairly assured.

Furthermore, any student of the war in the Pacific Theater must account for the geographic challenges facing Allied commanders. Similar to the inequity in resources, the Pacific Theater comprised a great ocean expanse with little infrastructure.¹⁸ This was in great contrast to Europe's geographical concentration and highly developed infrastructure. An excellent case in point is General Douglas MacArthur's Southwest Pacific Area (SWPA) area of operations, which

¹³Samuel Milner, *United States Army in World War II: The War in the Pacific, Victory in Papua* (Washington, DC: U.S. Government Printing Office, 1970), 16.

¹⁴Ronald H. Spector, *Eagle Against the Sun* (New York: Vintage Books, 1985), 143.

¹⁵*Ibid.*, 143-144.

¹⁶*Ibid.*, 143.

¹⁷*Ibid.*, 143-144.

¹⁸Peter Dennis and Jeffrey Grey, *The Foundations of Victory, The Pacific War 1943-1944* (Canberra: Army History Unit of Australia, 2004), 103.

was larger than the continental United States.¹⁹ The SWPA's geographical challenges were further complicated by a severe shortage of naval warships, maritime transports, and amphibious landing craft.²⁰ Of particular concern was the absence of permanently-allocated carrier-based aircraft.²¹

In addition, the lines of communication throughout the Pacific were immensely long. This challenge lent itself to an operational approach that constantly sought to extend lines of communication, while at the same time avoiding needless dispersal. Furthermore, the SWPA's ability to mass forces on distant objectives faster than the enemy could respond was a key component toward Allied success.

Despite these clear shortcomings, something dynamic occurred within the Pacific Theater. The unique combination of immense pressure combined with limited resources resulted in a newfound liberation.²² Commanders were free to create, to innovate, to risk and gain a significant advantage over their enemy. Some of these advantages were facilitated through the innovative use of paratroopers. The use of airborne forces compensated for shortcomings in both equipment and lines of communication. The creative use of paratroopers in order to create operational shock at Nadzab, Tagaytay Ridge, and Corregidor are clear examples of this phenomenon.²³ In these same operations, the use of paratroopers also provided an extension of

¹⁹Walter Krueger, *From Down Under to Nippon* (Washington, DC: Combat Forces Press, 1953), 10.

²⁰Spector, *Eagle Against the Sun*, 143.

²¹Daniel E. Barbey, *MacArthur's Amphibious Navy* (Annapolis, MD: United States Naval Institute, 1969), 10.

²²William Slim, *Defeat Into Victory, Battling Japan in Burma and India 1942-1945* (New York: Cooper Square Press, 1956), 541.

²³Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 318-320.

the commander's operational reach.²⁴

²⁴Ibid.

LAE, NEW GUINEA: THE AIRBORNE SEIZURE OF NADZAB AIRFIELD

The airborne operation to seize Nadzab extended the Southwest Pacific Area's operational reach and created operational shock, both necessary for the capture of Salamaua and Lae in New Guinea. Once in possession of Lae, the Allies could dominate the western approach of the Vitiaz Strait and establish basing for the attack on Cape Gloucester, thus contributing to the further isolation of Rabaul, the Japanese stronghold in New Britain.²⁵

By January of 1943, the key port of Buna was in Allied possession following a long and bloody siege.²⁶ Buna's capture resulted in an Allied foothold in northeast New Guinea and the withdrawal of General Hatazo Adachi's 18th Army into defensive positions further north.²⁷ The Allies spent the next six months working tirelessly to transition Buna from a battle-damaged port into a massive logistical base. Day and night, masses of men and materiel poured into Buna's port; the SWPA was now postured for additional combat operations in New Guinea.

The Buna Campaign demonstrated the extreme difficulty maneuvering ground forces through New Guinea's treacherous jungle.²⁸ With this in consideration, the logical choice would have been to use maritime assets in support of amphibious operations. However, at that time, the limited capabilities of the 7th Navy in support of the SWPA lacked sufficient maritime assets to conduct a large scale amphibious operation.²⁹

However, by summer of 1943, the SWPA's 5th US Air Force was in possession of a

²⁵Douglas MacArthur, *Reports of General MacArthur* (Washington, DC: Library of Congress, 1994), 124.

²⁶Krueger, *From Down Under to Nippon*, 13.

²⁷MacArthur, *Reports of General MacArthur*, 127.

²⁸Stephen R. Taaffe, *MacArthur's Jungle War, The 1944 New Guinea Campaign* (Lawrence, KS: University Press of Kansas, 1998), 31-32.

²⁹Spector, *Eagle Against the Sun*, 236.

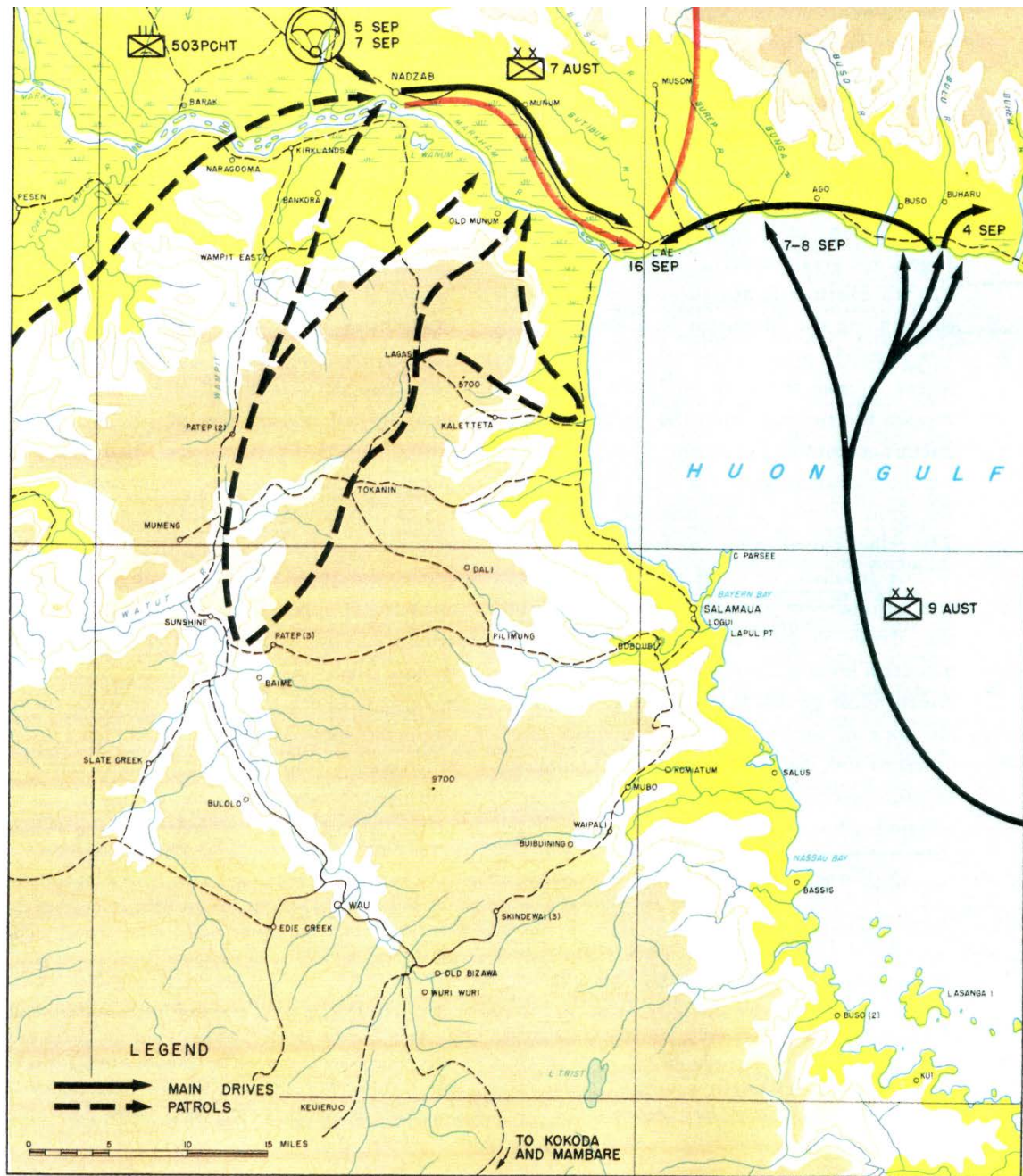


Figure 1. Nadzab and Lae.

Source: Douglas MacArthur, *Reports of General MacArthur* (Washington, DC: Library of Congress, 1994), 123.

substantial quantity of bombers, fighters, and transports. It is with these means in mind that General George Kenney, the 5th US Air Force Commander, saw Nadzab as a military opportunity.³⁰ General Kenney viewed the Pacific Theater as an expansive territory littered with airdromes in the form of islands.³¹ General Kenney envisioned what can best be described as a maritime strategy using the 5th US Air Force's airplanes in lieu of the ships the SWPA lacked.³² In addition, General Thomas Blamey, Commander of Allied Land Forces, saw promise in General Kenney's idea of trading airplanes for ships. The result was a refined plan that included an amphibious assault on Lae's left flank, followed by an airborne and air-land operation using the Nadzab airfield, thus threatening Lae's right flank.³³

The effects of this combined assault would be a massive pincer movement, an envelopment that would encircle Lae and assure its downfall. General MacArthur enthusiastically approved the plan, and later stated that, "the process of transferring troops by sea as well as by land appeared to conceal the fact that the system was merely that of the envelopment applied to a new type of battle area."³⁴ This innovative form of warfare, the tri-tribious assault, would soon end Japan's control of Lae.³⁵

The Southwest Pacific Area conducted a series of shaping operations in order to set conditions for the tri-tribious assault on Lae. These shaping operations consisted, in part, of air

³⁰George C. Kenney, *General Kenney Reports* (New York: Duell, Sloan, and Pearce, 1949), 118.

³¹Dennis and Grey, *The Foundations of Victory, The Pacific War 1943-1944*, 29.

³²*Ibid.*

³³*Ibid.*, 37.

³⁴Douglas MacArthur, *Reminiscences* (New York: McGraw-Hill Book Company, 1964), 165-166.

³⁵*Ibid.*, 136.

campaigns directed at Japanese garrisons in the Huon Peninsula and a ground offensive against Salamaua.

During the summer and fall of 1943, the 5th US Air Force conducted daily missions to interdict enemy aircraft, conduct reconnaissance, and bomb Japanese garrisons. As a result of Japan's inability to prevent the Allied air attacks, they lost large numbers of aircraft, troops, and supplies.

However, the 5th US Air Force faced significant challenges - there remained the problem of New Guinea's immense territorial expanse, coupled with the limited fighter range. This problem was further aggravated by the absence of carrier-based aircraft and dispersion of airdromes. Under these constraints, Allied fighter aircraft would have only approximately 30 minutes over Lae before needing to refuel.³⁶ The solution was found at Tsili Tsili village, four miles north of Marilinan, which contained an overgrown deserted airstrip.³⁷ In light of this discovery, the US 871st Airborne Engineer Battalion was covertly inserted into Tsili Tsili in June of 1943.³⁸ Over the next two months, they built a secret airdrome that would vastly extend the range of Allied fighter aircraft and was essential to the bombing of Wewak in the two weeks prior to the Lae operation. During this time, 350 Japanese aircraft were destroyed on the ground, thus significantly hampering the Japanese ability to challenge Allied air superiority.³⁹

The second major shaping operation consisted of a diversionary ground and amphibious assault against the Japanese garrison at Salamaua. By July of 1943, the Lae garrison contained 10,000 Japanese Soldiers of the 51st Division.⁴⁰ The intent of the Salamaua offensive was to

³⁶Kenney, *General Kenney Reports*, 251.

³⁷Ibid., 252.

³⁸Robert L. Eichelberger, *Our Jungle Road to Tokyo* (New York: Viking Press, 1950), 94.

³⁹Kenney, *General Kenney Reports*, 284.

⁴⁰Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at*

siphon off Japanese troops from Lae, thus reducing their ability to respond to the planned amphibious/airborne assault in September of 1943.⁴¹ Therefore, in early June, the Australian 15th and 17th Brigades attacked overland from Buna, while the US 162nd Infantry Regiment landed at Nassau Bay on 30 June 1943.⁴² By 19 August 1943, the Japanese were encircled, thus forcing their withdrawal behind the Francisco River into final defensive positions.⁴³ At this point General MacArthur deliberately slowed the Allied siege in order to prolong the diversion's effect.⁴⁴

On 30 August 1943, the Australian 2/6 Field Company Royal Australian Engineers and 2/2 Pioneer Battalion conducted an Air-Land operation at the Tsili Tsili airfield. Their mission was to improve the Nadzab airfield, making it trafficable for the C-47 aircraft carrying the 7th Australian Division. In order to execute this mission, the Australian engineers had to navigate 60 miles of the Watut and Markham rivers using collapsible rubber boats.⁴⁵ Loaded onto the rubber boats was vital machinery needed to improve the Nadzab airfield.⁴⁶ These engineers were required to be in the vicinity of the Nadzab airfield on the morning of 5 September 1943. In addition, the Australian engineers were augmented with 800 Papuan natives of Bravo Company, Papuan Infantry Battalion.⁴⁷

The time had come for Major General George F. Wooten's 9th Australian Division to embark on their amphibious assault against Lae. The amphibious task force consisted of 10,200

War in the Pacific in WWII, 130.

⁴¹Spector, *Eagle Against the Sun*, 237.

⁴²MacArthur, *Reports of General MacArthur*, 120.

⁴³MacArthur, *Reports of General MacArthur*, 121.

⁴⁴*Ibid.*

⁴⁵Kenney, *General Kenney Reports*, 286.

⁴⁶Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 119.

⁴⁷*Ibid.*

men, comprised of the 9th Division and US 2nd Engineer Special Brigade.⁴⁸ Therefore, on 1 September 1943, the 9th Division set sail from Port Moresby with the assistance of the 7th Amphibious Force.⁴⁹ After a pause at Buna in order to take on supplies, the 9th Division executed their amphibious operation on 4 September 1943 at Hopoi Beach, located 10 miles east of Lae.⁵⁰ In the skies overhead, the 5th US Air Force dropped over 96 tons of ordnance on the first day alone.⁵¹ The 9th Division continued to expand the beachhead until 5 September, when they encountered stiff enemy resistance. Of significance, this was Australia's first attempt at an amphibious operation since the disaster of Gallipoli in 1915.⁵²

Meanwhile, at Port Moresby, the 503D PIR conducted final aerial reconnaissance, practice jumps, and sand table rehearsals.⁵³ There was also a myriad of parachute rigging work being done in order to prep the 15 tons of supplies that would be dropped on Nadzab during the operation's first day.⁵⁴ This was accomplished as a result of the creation of a provisional Air Supply Company, an amalgamation of troops from the 16th Quartermaster Pack Regiment, 98th Airborne Field Artillery, and 503D PIR.⁵⁵ In addition, there were last-minute task organization changes such as the attachment of the Australian 2/4 Field Artillery Regiment and their MK-1 25 pound cannons, thus providing the 503D PIR with additional indirect fire capability.⁵⁶ Of note,

⁴⁸Ibid., 130.

⁴⁹MacArthur, *Reports of General MacArthur*, 122.

⁵⁰Kenney, *General Kenney Reports*, 273.

⁵¹Ibid., 291.

⁵²Dennis and Grey, *The Foundations of Victory, The Pacific War 1943-1944*, 63.

⁵³Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 109.

⁵⁴Kenney, *General Kenney Reports*, 293.

⁵⁵Eichelberger, *Our Jungle Road to Tokyo*, 41.

⁵⁶Kenney, *General Kenney Reports*, 292.

the Australian Field Artillery Regiment was not airborne-qualified; Nadzab would be their first jump.⁵⁷

The 5 September airborne assault would utilize all three battalions of the 503D PIR. Lieutenant Colonel (LTC) John W. Britten's 1st Battalion would jump directly onto the airfield in order to clear any Japanese forces and link up with the Australian engineer element from the Tsili Tsili.⁵⁸ LTC George M. Jones' 2nd Battalion would drop north of the airfield in order to secure the village of Gabmatzung and establish the regimental command post.⁵⁹ Finally, LTC John J. Tolson's 3rd Battalion would drop east of the airfield in order to secure the village of Gabatzung and establish a blocking position along the Marham River road.⁶⁰

During the early morning hours on 5 September 1943, the paratroopers of the 503D moved to the Port Moresby airfield, drew parachutes, and loaded their designated transports. In a powerful display of Allied airpower, 96 C-47s of the 54th Troop Carrier Wing (TCW) stood ready to take the 503D PIR to Nadzab.⁶¹ The flight to Nadzab would last approximately two hours; the C-47s would fly in three columns at a drop altitude of 400-500 feet.⁶²

Immediately prior to the 503D's arrival, the 5th US Air Force provided six squadrons of B-25 medium bombers, 100 P-39/P47 fighters, and six A-20s, for a total of 302 aircraft.⁶³ Immediately prior to the drop, the B-25s delivered a furious bombardment consisting of 92 tons

⁵⁷Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 110-111.

⁵⁸*Ibid.*, 109.

⁵⁹*Ibid.*

⁶⁰*Ibid.*, 110.

⁶¹Kenney, *General Kenney Reports*, 293.

⁶²Flanagan, *Airborne: A Combat History of American Airborne Forces*, 113.

⁶³Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 113.

of high explosive and 32 tons of fragmentation ordnance onto Nadzab.⁶⁴ Following the bombing, the six A-20s delivered a dense layer of smoke, thus obscuring the drop zone. Finally, at 1009 hours the C-47s of the 54th TCW dropped 1,700 paratroopers in one minute, ten seconds.⁶⁵ The 503D suffered three fatalities due to total parachute malfunctions and 36 various jump injuries during the airborne operation.⁶⁶

Once on the ground, the 503D headed to their rally points, secured assigned objectives, and linked up with the Australian engineers, all without a shot being fired. With the Japanese distracted by the assault on Salamaua and the Australian 9th Division's amphibious assault, the 503D PIR easily gained access to Lae's undefended rear. With the airfield secured, the paratroopers, engineers, and Papuan natives began the laborious process of clearing the airfield. Working through the night, 3,300 feet of runway were cleared.⁶⁷

At approximately 1000 hours on 6 September, the first C-47s landed at Nadzab, bringing in mini-excavating equipment and flamethrowers.⁶⁸ At 1130 hours, the Australian 7th Division Headquarters and its 25th Brigade arrived at Nadzab from Tsili Tsili. Over the next two days, a C-47 would land every 27 seconds.⁶⁹ By 10 September, the 5th US Air Force had delivered the entire 7th Division's 3,700 men, equipment, and jeeps into Nadzab.⁷⁰ On that same day, the paratroopers of the 503D PIR and the Australian 25th Brigade attacked down the Markham River Road towards

⁶⁴Kenney, *General Kenney Reports*, 293.

⁶⁵Ibid., 294.

⁶⁶Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 125-126.

⁶⁷Ibid., 113.

⁶⁸Dennis and Grey, *The Foundations of Victory*, 113.

⁶⁹Ibid.

⁷⁰Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 130.

Lae. The combined assault force encountered moderate resistance. By 11 September, the Japanese were encircled and their lines of communication were severed. The Japanese, recognizing that the situation was untenable, evacuated Lae, abandoned their equipment and melted into the jungle.⁷¹ As a result of the offensive, the Allies captured Salamaua on 12 September and Lae on 16 September 1943.⁷² In the weeks following the fall of Lae, Nadzab became an important hub for the SWPA. By October, Nadzab boasted six different runways, one 6,000 feet in length, capped with all-weather bitumen.⁷³

The use of airborne forces in order to seize Nadzab's airfield was the essential component towards the Allies' successful capture of Lae. The operation presents a textbook example of the successful use of airborne forces, extending operational reach and creating operational shock.

The original problem facing the Southwest Pacific Area was one of dispersion and concentration - how to concentrate large amounts of combat power in a short time, in order to overwhelm the enemy and establish a position of relative advantage? It was a physics problem; men and materiel must be moved, they cannot teleport themselves to the battlefield. Considering these limitations, the SWPA commander had five options: troops could self-maneuver, utilize vehicles, ride in amphibious craft, air-land, or parachute. Several of these options were immediately out of the question due to limitations in time, space, and materiel. Traveling on foot through New Guinea's treacherous jungle would take too long; vehicles were not an option due to insufficient roads; amphibious transport was in short supply, and air-land presented excessive risk.⁷⁴

Therefore, considering the situation, General MacArthur was left with one clear option:

⁷¹MacArthur, *Reports of General MacArthur*, 122.

⁷²Spector, *Eagle Against the Sun*, 241.

⁷³Dennis and Grey, *The Foundations of Victory, The Pacific War 1943-1944*, 113.

⁷⁴*Ibid.*, 20.

airborne forces. The use of airborne forces unlocked Lae's back door and facilitated the rapid introduction of the entire Australian 7th Division into the enemy rear.⁷⁵ Furthermore, what other tool could have transported 1,700 men, munitions, and equipment over 200 miles to Nadzab in two hours?⁷⁶

The airborne operation at Nadzab liberated the Southwest Pacific Area from ground and sea lines of communication. The massive 5th US Air Force armada of 302 aircraft massed troops, fires, and logistics in hours, not days.⁷⁷ The combination of sufficient cargo delivery aircraft and Alamo Force's provisional Air Supply Company ensured a steady flow of logistics onto Nadzab's airfield - 15 tons on day one.⁷⁸ The ability to deliver mass tonnage of cargo prevented the culmination of Allied ground forces, thus extending operational reach. Furthermore, while the Allies' operational reach had expanded due to the use of airborne operations, the enemy's operational reach was diminishing following the severing of their ground lines of communication. Therefore, the previous equilibrium was shattered; the airborne operation facilitated the introduction of Allied forces into the enemy's rear area, thus making their position untenable and forcing a Japanese withdrawal.⁷⁹

The airborne operation to seize Nadzab airfield created operational shock, thus leading to the enemy's paralysis and ultimate defeat. On 4 September 1943, one day prior to the 503D PIR's assault, the Japanese 18th Army was hurriedly responding to a multi-pronged siege on Salamaua

⁷⁵MacArthur, *Reports of General MacArthur*, 124.

⁷⁶Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 114-117.

⁷⁷Ibid.

⁷⁸Kenney, *General Kenney Reports*, 293.

⁷⁹MacArthur, *Reports of General MacArthur*, 124.

and the 9th Australian Division's landing at Biochi beach, 20 miles east of Lae.⁸⁰ The Japanese commander's predicament was grave, but he had means at his disposal to confront the Allies. However, the 5 September airborne assault was unexpected; it was outside the enemy commander's battlefield visualization.⁸¹ The sudden creation of a third Allied front, especially one in his rear area, rapidly accelerated the battle's tempo. This accelerated tempo disrupted the Japanese commander's decision cycle; it presented an increasing array of problems faster than he could either process information or respond, thus creating operational shock.

The value of operational shock is best demonstrated not by the 503D PIR's violence but the overall absence of violence. In many ways, Lae was a battle of position. When the Japanese defenders realized that their rear area was infiltrated, their ground lines of communication were severed, and their position was rapidly becoming untenable, they withdrew to Kiari.⁸² To remain at Lae would only have resulted in their annihilation.

⁸⁰Kenney, *General Kenney Reports*, 288.

⁸¹MacArthur, *Reports of General MacArthur*, 124.

⁸²Ibid.

TAGAYTAY RIDGE: THE ENVELOPMENT OF MANILA

The airborne operation to seize Tagaytay Ridge extended the Southwest Pacific Area's operational reach and created operational shock, both necessary for the Allies to capture Manila, the capital of the Philippines and a key logistical node. By January of 1945, the Japanese forces on Luzon were significantly depleted due to the siphoning off of troops to Leyte in order to confront the Allies' invasion.⁸³ Nonetheless, General Tomoyuki Yamashita possessed 152,000 Japanese troops, organized into three major combat elements: the Shimbu Group, Kembu Group, and Imperial Marines.⁸⁴ General Yamashita resolved to fight a protracted defense throughout Luzon in order to buy time for Japan.⁸⁵ Therefore, General Yamashita positioned the bulk of his forces in three locations: the Cagayan Valley (Kembu Group), the mountains east of Manila (Shimbu Group), and within Manila (Imperial Marines).⁸⁶

The SWPA commander, General MacArthur, envisioned a two-pronged attack in order to wrest Luzon from its Japanese occupiers.⁸⁷ The main effort consisted of a massive amphibious landing of General Walter Krueger's Sixth Army (I and XIV Corps) at Lingayen Gulf on 9 January 1945.⁸⁸ The Sixth Army attacked from the north in order to envelope Manila from the east.⁸⁹ The Allied invasion from the north was followed by a similar effort at Nasugbu by General Robert L. Eichelberger's Eighth Army (XI Corps, 11th Airborne Division) on 31 January 1945.

⁸³Ibid., 266.

⁸⁴Gerald E. Wheeler, *Kinkaid of the Seventh Fleet* (Annapolis, MD: Naval Institute Press, 1996), 416.

⁸⁵Spector, *Eagle Against the Sun*, 520.

⁸⁶MacArthur, *Reports of General MacArthur*, 266.

⁸⁷MacArthur, *Reminiscences*, 245.

⁸⁸Krueger, *From Down Under to Nippon*, 219.

⁸⁹MacArthur, *Reports of General MacArthur*, 273.



Figure 2. The Envelopment of Manila.

Source: Douglas MacArthur, *Reports of General MacArthur* (Washington, DC: Library of Congress, 1994), 268.

General Eichelberger's amphibious operation formed the lower half of General MacArthur's pincer movement in order to envelop Manila from the south.⁹⁰ In only three weeks' time, the Allied force within Luzon consisted of approximately 400,000 troops attacking along interior lines and defeating enemy forces in detail.⁹¹

On 22 January 1945, General Joseph Swing's 11th Airborne Division received notification of General MacArthur's decision to open a second Allied front south of Manila.⁹² The 11th Airborne Division's amphibious assault at Nasugbu would provide the Allies control of Highway 17, the high speed avenue of approach to Manila.⁹³ Once ashore, the 11th Airborne Division had three primary tasks: block Japanese reinforcement efforts, seize Tagaytay Ridge, and envelop Manila from the south.⁹⁴ In order to accomplish its mission, the 11th Airborne Division had to negotiate 55 miles of enemy controlled highway, bracketed by large terrain features - the most significant being Tagaytay ridge - eight miles long and 3,000 feet tall.⁹⁵ In addition, Allied intelligence estimated that approximately 7,000 Japanese troops held strong defensive positions guarding Manila's mountainous approach.⁹⁶

The 11th Airborne Division planners recognized the value of combining amphibious and airborne operations. With this in consideration, the amphibious portion of the operation would be

⁹⁰MacArthur, *Reminiscences*, 245.

⁹¹Wheeler, *Kinkaid of the Seventh Fleet*, 416.

⁹²Gerard M. Devlin, *Paratrooper* (New York: Saint Martin's Press, 1979), 566.

⁹³Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 236.

⁹⁴Ibid.

⁹⁵William B. Breuer, *Retaking the Philippines: America's Return to Corregidor and Bataan October 1944-March 1945* (New York: Saint Martin's Press, 1986), 137.

⁹⁶Devlin, *Paratrooper*, 566.

conducted by the 187th and 188th Glider Infantry Regiments (GIR), while the division's remaining regiment, the 511th PIR, would conduct an airborne assault onto Tagaytay Ridge.⁹⁷ Naval support for the operation would be provided by Admiral Augustus F. Fechteler's 7th Amphibious Force, to include destroyers and aircraft carriers for close air support.⁹⁸ In addition, General Kenney's 5th US Air Force would provide A-20 light bombers and P-38 fighters.⁹⁹ The amphibious operation was scheduled for 31 January 1945, with the airborne assault onto Tagaytay Ridge slated to occur two days later on 2 February.¹⁰⁰

In support of the airborne operation, the 511th PIR's task organization was supplemented with the 457th Parachute Field Artillery Battalion and a platoon of medics from the 221st Airborne Medical Company.¹⁰¹ Due to a theater-wide shortage of transport aircraft, the airborne operation would occur in three iterations.¹⁰² The first drop would occur at 0815 hours on 2 February consisting of 2nd Battalion, 511th PIR and half of 3rd Battalion, 511th PIR.¹⁰³ The second drop would occur at 1315 hours, consisting of 1st Battalion, 511th PIR, 221st Medical Company, and the remainder of 3rd Battalion, 511th PIR.¹⁰⁴ Finally, the third drop would occur on 3 February, bringing in the 457th Parachute Field Artillery Battalion.¹⁰⁵ Recognizing the vulnerability of paratroopers isolated in enemy territory, the 11th Airborne Division planners sought to carefully

⁹⁷Ibid.

⁹⁸Wheeler, *Kinkaid of the Seventh Fleet*, 425.

⁹⁹Marvin Miller, *The 11th Airborne Brick* (Lexington, KY: Marvin Miller, 2011), 40-41.

¹⁰⁰Devlin, *Paratrooper*, 566.

¹⁰¹Ibid.

¹⁰²Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 237.

¹⁰³Ibid.

¹⁰⁴Ibid.

¹⁰⁵Ibid.

synchronize the airborne assault with the glidermen's advancement along Highway 17.

During their final days on Leyte, the 11th Airborne Division conducted training, built sand tables, and mentally prepared for the complex mission ahead. On 27 January 1945, the 11th Airborne Division Headquarters, 187th and 188th GIR, loaded landing craft infantry and landing ship tank transports bound for Luzon.¹⁰⁶ Simultaneously, on the same day, the 511th PIR loaded their C-46 transports bound for San Jose Airfield, Mindoro, where they would stage for the airborne operation.¹⁰⁷

At 0730 hours on 31 January 1945, the 187th and 188th GIR of the 11th Airborne Division staged offshore in their amphibious landing craft waiting for the completion of the 7th Fleet's air and naval bombardment of the beachhead opposite Nasugbu.¹⁰⁸ The bombardment lasted approximately one hour. Upon its completion, Colonel Ernest H. LaFlame's 188th GIR led the assault and crashed ashore.¹⁰⁹ The 188th GIR took up a rapid advance towards Manila, leaving the 187th GIR to secure the beachhead and the 11th Airborne Division's rear areas.¹¹⁰ The 188th GIR encountered minimal resistance, rapidly establishing a secure beachhead, thus facilitating the efficient transfer of the majority men and materiel onto Highway 17 by noon.¹¹¹

The next objective for the 11th Airborne Division was the capture of the Palico Bridge, spanning a 200-foot gorge. At approximately 1500 hours, the lead elements of the 188th GIR overwhelmed the Japanese engineers rigging charges to fell the bridge, thus securing the bridge

¹⁰⁶Devlin, *Paratrooper*, 567.

¹⁰⁷Miller, *The 11th Airborne Brick*, 40-41.

¹⁰⁸Devlin, *Paratrooper*, 567.

¹⁰⁹Breuer, *Retaking the Philippines: America's Return to Corregidor and Bataan October 1944-March 1945*, 138.

¹¹⁰Devlin, *Paratrooper*, 568.

¹¹¹*Ibid.*, 567-568.

intact and facilitating the division's advance towards Tagaytay Ridge.¹¹²

The rapid advance of the 188th GIR continued until 1 February 1945, when the column came to a halt in the face of strong Japanese resistance in the vicinity of Aga Pass. At this location, Highway 17 was bracketed by Mount Cariliao and Mount Batulao, making it an ideal chokepoint.¹¹³ The 188th GIR battled the Japanese throughout the day, being supplemented by the 187th GIR by nightfall. After 36 hours of continuous fighting, the 11th Airborne Division achieved a breakthrough on the evening of 2 February.¹¹⁴ As a consequence of the delay, General Swing postponed the 511th PIR's drop to the morning of 3 February 1945.¹¹⁵

At Mindoro's San Jose airfield, the paratroopers of the 511th loaded 48 C-47 transports, and began making headway towards Luzon at 0700 hours, 3 February 1945.¹¹⁶ Immediately prior to the drop, the 317th Troops Carrier Wing began a deception operation by dropping 240 dummy paratroopers onto Mount Malepunyo, 20 miles southwest of Tagaytay Ridge.¹¹⁷ Upon completion of the deception operation, the airmen dropped their paratroopers onto Tagaytay Ridge at 0815 hours.¹¹⁸

The first 18 C-47 loads of paratroopers landed with complete precision on account of a skillful adherence to jump procedures and use of pathfinder-emplaced smoke pots and radio

¹¹²Eichelberger, *Our Jungle Road to Tokyo*, 190.

¹¹³Devlin, *Paratrooper*, 568.

¹¹⁴Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 239.

¹¹⁵Miller, *The 11th Airborne Brick*, 54.

¹¹⁶Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 239-240.

¹¹⁷*Ibid.*, 240.

¹¹⁸Devlin, *Paratrooper*, 570.

beacons.¹¹⁹ Unfortunately, the next 30 C-47s in that lift dropped their paratroopers six miles east of the drop zone (DZ).¹²⁰ The confusion was caused by several transports in the lead of the formation that accidentally dropped their cargo bundles short of the DZ; the trailing jumpmasters interpreted the bundles for the lead stick of paratroopers and subsequently gave the order to jump.¹²¹ By 1200 hours, the mis-dropped paratroopers were consolidated and assembled at their previously-assigned rally points.

The second lift, carrying the remainder of the 511th PIR, appeared over Tagaytay Ridge at 1210 hours on 3 February 1945.¹²² Similar to the first lift, they also prematurely jumped, landing six miles east of the assigned DZ.¹²³ This mis-drop was caused by the lift's jumpmasters identifying hundreds of discarded parachutes on the ground from the operation's first lift. Once again, the jumpmaster, believing this to be the correct drop zone, released their personnel, despite objections from the 317th Troop Carrier Wing's pilots.¹²⁴ Once on the ground these paratroopers, like their brethren four hours earlier, made their way to their assigned rally points six miles west of their present location. On a positive note, the 511th PIR no longer needed to worry about being cut off and isolated; the 188th GIR successfully reached their position by 1500 hours.¹²⁵

The third lift arrived over Tagaytay Ridge at 0815 hours on 4 February, consisting of the 457th Parachute Field Artillery Battalion.¹²⁶ Unlike the majority of the 511th PIR, the artillerymen

¹¹⁹Ibid., 571.

¹²⁰Ibid.

¹²¹Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 241.

¹²²Flanagan, *Airborne: A Combat History of American Airborne Forces*, 316.

¹²³Ibid.

¹²⁴Devlin, *Paratrooper*, 571.

¹²⁵Ibid., 573.

¹²⁶Flanagan, *Airborne: A Combat History of American Airborne Forces*, 317.

jumped onto the correct DZ.¹²⁷ The 11th Airborne Division was now consolidated, and continued their attack north along Highway 17 in order to envelop Manila. Furthermore, the advance of the 11th Airborne Division was significantly enhanced by the sudden arrival of 17 2.5 ton trucks pushed up from the Nasugbu beachhead by the 11th Quartermaster Battalion.¹²⁸ These trucks were used throughout the advance, shuttling rear units ahead of the formation and greatly increasing the division's rate of march.

By nightfall of 4 February, the 11th Airborne came to a halt at the Paraque River, which formed the southern boundary of Manila.¹²⁹ The Paraque River was the beginning of the 6,000-yard-deep defensive structure known as the Genko Line. The Genko Line stretched from Nichols Field/Fort McKinley to Mabato Point on Laguna de Bay, and consisted of 1,200 pillboxes manned by 12,500 Japanese Marines.¹³⁰

It was this formidable defensive network and its defenders that blocked the 11th Airborne's rapid assault on Manila. Beginning on 4 February, the 11th Airborne Division's rapidity of advance was replaced by intensive sieges and urban warfare.¹³¹ Despite this challenge, the 11th Airborne Division and 1st Cavalry Division leveraged Allied armament, ranging from tanks, artillery, and airpower. During the siege of Manila, the daily ammunition consumption was over 900 tons.¹³² This overwhelming mass of combat power and materiel finally wore down the Japanese defenders. On 6 February, the 187th and 188th captured the Nichols Field. Subsequently,

¹²⁷Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 241.

¹²⁸Flanagan, *Airborne: A Combat History of American Airborne Forces*, 316.

¹²⁹*Ibid.*, 317.

¹³⁰Eichelberger, *Our Jungle Road to Tokyo*, 195.

¹³¹Flanagan, *Airborne: A Combat History of American Airborne Forces*, 317.

¹³²Krueger, *From Down Under to Nippon*, 322.

the 511th PIR captured Fort McKinley on 12 February.¹³³ As a result of the efforts of the 1st Cavalry Division and 11th Airborne Division, all Japanese resistance within the city crumbled on 21 February - Manila was liberated.¹³⁴

The use of airborne forces in order to seize Tagaytay Ridge was an essential component towards the Allies' capture of Manila. The Tagaytay Ridge operation presents an excellent example of the successful use of airborne forces, thus extending operational reach and creating operational shock. The 11th Airborne Division's use of airborne operations extended operational reach in three ways. First, the use of airborne operations enabled the 11th Airborne Division to introduce a capability from outside the current area of operations. From 31 January – 3 February 1945, the 511th PIR was located in Mindoro, over 80 miles away. Significantly, the regiment that was furthest in the rear became the lead element of the Eighth Army's advance towards Manila on account of the airborne assault.

Secondly, on 4 February, the last element of the 511th PIR arrived, the 457th Parachute Field Artillery Battalion. The airborne insertion of the field artillery battalion onto the high ground was, in essence, an artillery raid. By emplacing their 75mm cannon and forward observers onto the 3,000-foot Tagaytay Ridge, the 11th Airborne Division was able to maximize indirect fire assets.

Finally, the 187th and 188th marched over 35 miles uphill from the beachhead at Nasugbu, both regiments fighting an intense series of battles over the previous 48 hours. The airborne drop on 3-4 February facilitated the insertion of three fresh battalions of infantry and one battalion of field artillery directly onto the high ground. These forces had not borne the effects of the previous 36 hour battle, nor the long march to Tagaytay Ridge. Therefore, the newly arrived paratroopers injected positive energy into the Allied advance. The 11th Airborne Division's ability to increase

¹³³Ibid., 249.

¹³⁴Devlin, *Paratrooper*, 574.

tempo at the decisive moment was a key component of success.

The airborne operation created operational shock in several ways. First, on 1-2 February, the Japanese utilized the pass between Mount Cariliao and Mount Batulao in order to block the Allied advance for 36 hours. Therefore, it was very likely the Japanese planned to affect a similar block using Tagaytay Ridge. The 511th PIR's unexpected seizure of Tagaytay Ridge effectively took this option away from the Japanese commander. The Japanese commander's inability to effectively adapt to the rapidly changing environment created paralysis, a condition facilitated by operational shock.

Secondly, system shock was created as the result of the rapid introduction of Allied troops in a compressed amount of time. On the morning of 3 February, the Japanese commander faced a two-regiment front (187th and 188th GIR) augmented with fires from the 5th US Air Force. Over a four-hour period during the morning of 3 February (0815-1200), the 11th Airborne Division increased their combat power by an entire regiment, one that dominated the high ground. Conversely, the Japanese force continued to be severely degraded, lost the high ground, and lacked operational mobility. This disparity in combat power, resources, and posture facilitated operational shock.

Finally, the largest indicator that the airborne operation instilled operational shock was not the violence of action on 3-4 February, but the absence of violence. The 11th Airborne Division's ground assault, coupled with the insertion of airborne forces, demoralized the Japanese. The ability of the 511th PIR to take the high ground was a positional victory, one that placed the Japanese in a position of relative disadvantage. The use of airborne forces in the 11th Airborne Division's attack up Highway 17 represents an extremely efficient use of men and materiel. Of note, the 11th Airborne Division experienced minimal enemy resistance until they reached the Genko Line forming the border of southern Manila.

CORREGIDOR: AMERICA'S RETURN TO THE ROCK

On the surface, one could argue that the battle for Corregidor, a tiny island straddling Manila Harbor and the South China Sea, carried only tactical significance. A closer look, however, uncovers a much broader operational impact. The airborne operation to seize Corregidor provides another compelling case study for examining how the use of paratroopers extended the Southwest Pacific Area's operational reach and created operational shock, both necessary for the Allies to set conditions for continued offensive operations within Luzon and Operation Downfall, the Allied invasion of Japan.¹³⁵

By the beginning of 1945, Japan was reeling from their recent defeat in the Philippine islands of Leyte and Mindoro.¹³⁶ The Allied operation on Mindoro was followed by the invasion of the Philippines' main island, Luzon. In response to the invasion, General Yamashita planned a protracted defense, thus buying time for Japan's homeland defenses.¹³⁷ General Yamashita established four defensive strongholds on Luzon: the Cagayan Valley, Clark airfield, the mountains east of Manila, and Manila Harbor.¹³⁸

On 9 January 1945, General Krueger's Sixth Army came ashore at Lingayen Gulf in order to seize Manila from the north.¹³⁹ In addition, on 31 January 1945, General Eichelberger's Eighth Army conducted an amphibious assault on Nasugbu, in order to envelope Manila from the south.¹⁴⁰

¹³⁵MacArthur, *Reports of General MacArthur*, 124.

¹³⁶Krueger, *From Down Under to Nippon*, 207.

¹³⁷MacArthur, *Reports of General MacArthur*, 263-266.

¹³⁸*Ibid.*, 266.

¹³⁹Krueger, *From Down Under to Nippon*, 219.

¹⁴⁰MacArthur, *Reminiscences*, 243.

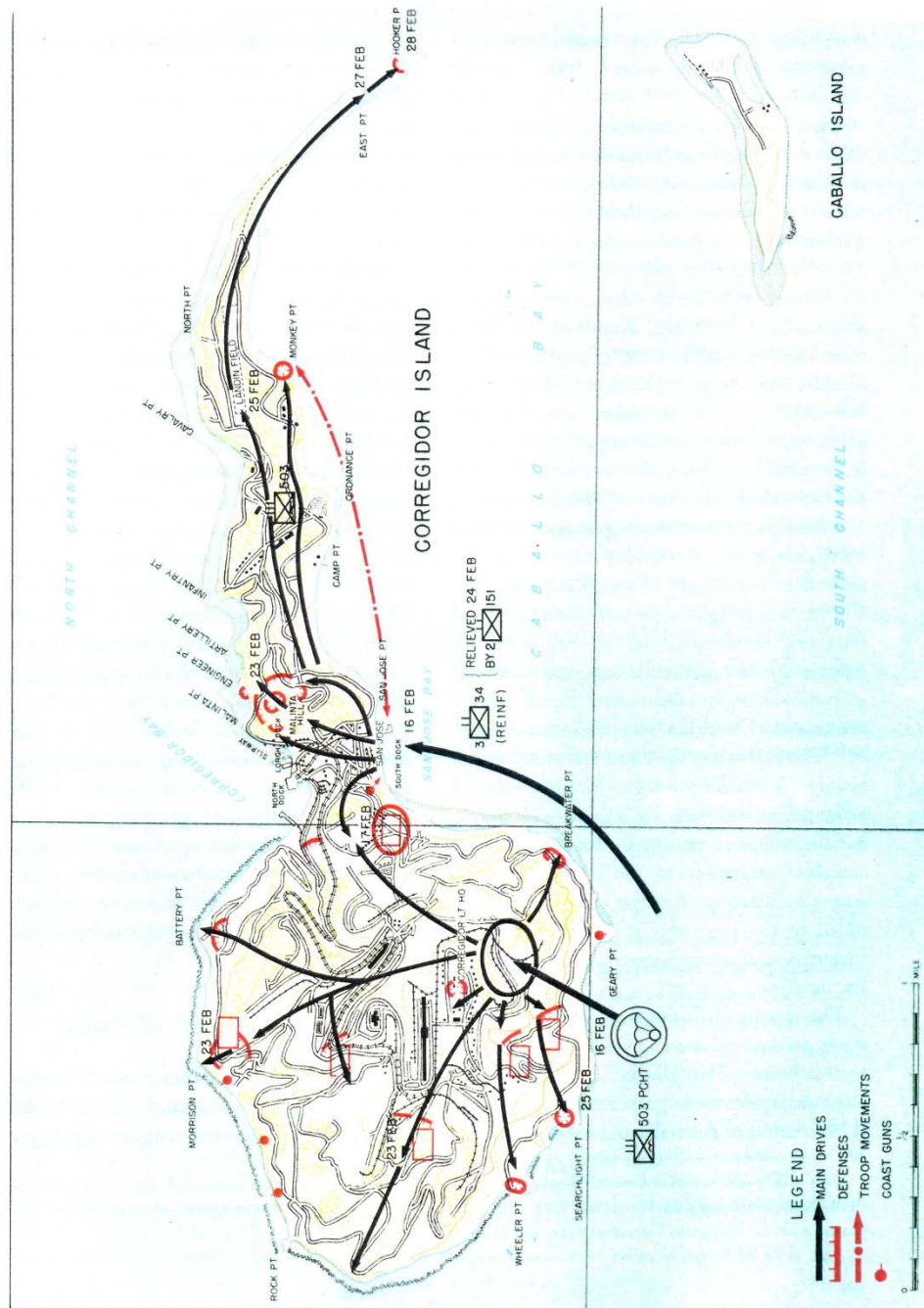


Figure 3. The Island of Corregidor.

Source: Douglas MacArthur, *Reports of General MacArthur* (Washington, D.C.: Library of Congress, 1994), 279.

By mid-February, the Allies had made considerable progress. The Sixth Army was busy clearing northern Manila, and similarly, the Eighth Army had finally broken through the formidable Genko Line and was clearing southern Manila. General Yamashita, recognizing the significance of Manila, positioned 17,000 Japanese troops under the command of Rear Admiral Sanji Iwabuchi in order to deny Allied access to its airfield and harbor.¹⁴¹ The Allies were now engaged in a ferocious street battle that became the Pacific Theater's version of Stalingrad - over 100,000 Filipinos perished in the process.¹⁴² Manila, once the pearl of the orient, was a scorched version of its former self. Despite the city's liberation, Manila Harbor remained inaccessible due to the enemy's possession of Corregidor.

The Island of Corregidor was one of four island fortresses in Manila Bay that provided interlocking fields of fire in the narrow intersection of Manila Harbor and the South China Sea.¹⁴³ The island's dramatic near-vertical cliffs rise to a height of 500 feet on the north, west, and southern sides.¹⁴⁴ The island can be further described as consisting of three parts: Bottomside, Middleside, and Topside.¹⁴⁵ At 3.5 miles long and 1.5 miles wide, Corregidor's small size betrays its operational significance.¹⁴⁶ Apart from being a geologic curiosity, Corregidor was an ideal defensive structure, and furthermore, controlled access to one of the world's finest deep water

¹⁴¹MacArthur, *Reports of General MacArthur*, 272.

¹⁴²Edward Flanagan, Jr., *The Los Banos Raid: The 11th Airborne Jumps at Dawn* (Novato, CA: Presidio Press, 1986), 62.

¹⁴³Edward Flanagan, Jr., *Corregidor: The Rock Force Assault, 1945* (Novato, CA: Presidio Press, 1988), 23.

¹⁴⁴Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 250.

¹⁴⁵Breuer, *Retaking the Philippines: America's Return to Corregidor and Bataan October 1944-March 1945*, 181-182.

¹⁴⁶Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 221.

ports.¹⁴⁷

Prior to its Japanese capture from the US in 1942, the Island of Corregidor contained 56 coastal artillery cannon, capable of launching an armor-piercing shell over 17 miles with accuracy. To supplement its coastal artillery, the island had 24 anti-aircraft guns and 48 50-caliber machine guns.¹⁴⁸ To complement Corregidor's lethality, the US Army built an extensive tunnel network throughout the island. The most extensive tunnel complex was beneath Corregidor's Malinta Hill, dubbed the Malinta Tunnel: 1,400 feet deep with 25 adjoining lateral 400-foot-long tunnels.¹⁴⁹ This underground network provided bombproof living quarters, a communications center, a hospital, food stores, ammunition dumps, and bulk petroleum storage. These underground facilities made Corregidor a resilient strongpoint.

The SWPA staff presented General MacArthur with three options for the assault on Corregidor: amphibious, airborne, or a hybrid combination. Recognizing the heavy price paid by the Japanese in their 1942 amphibious assault on Corregidor, he chose the combined airborne and amphibious assault.¹⁵⁰ The operation to capture Corregidor consisted of three shaping operations and one decisive operation.

The first shaping operation began on 6 February 1945, when the 13th and 5th US Air Force initiated a ten-day saturation bombing campaign on Corregidor.¹⁵¹ Every bomber, fighter, and dive bomber not committed to other missions was pulled to bomb Corregidor. In total, over

¹⁴⁷Smith, *U.S. Army in World War II- The War in the Pacific: Triumph in the Philippines*, 335.

¹⁴⁸Gerard M. Devlin, *Back to Corregidor: America Retakes the Rock* (New York: Saint Martin's Press), 5-7.

¹⁴⁹*Ibid.*, 7.

¹⁵⁰Smith, *U.S. Army in World War II- The War in the Pacific: Triumph in the Philippines*, 336-337.

¹⁵¹Kenney, *General Kenney Reports*, 520.

2,000 sorties were flown, dropping 4,000 tons of bombs, firing hundreds of thousands of rounds of ammunition, and dumping massive quantities of napalm on Japanese positions.¹⁵² In addition to bombing, a vigorous effort was made to conduct aerial reconnaissance of Corregidor. This reconnaissance effort accurately identified major Japanese defensive positions and patterns of life.¹⁵³ Of note, Corregidor was the most heavily bombed target in the Pacific during World War II.¹⁵⁴

The second shaping operation began on 13 February 1945 with a three-day naval bombardment, facilitated by the Light Cruisers Cleveland, Denver, Montpelier, Boise, and Phoenix of the US Navy's 7th Fleet.¹⁵⁵ In addition, the navy conducted minesweeping operations, clearing dangerous underwater obstacles surrounding Corregidor.¹⁵⁶ Japanese troops, in a display of their continued determination and lethality, utilized Corregidor's coastal artillery to attack the navy's minesweeping force on 14 February 1945, resulting in the loss of minesweeper YMS-48 and severe damage to minesweeper YMS-8.¹⁵⁷

Finally, the third shaping operation consisted of XI Corps, Eighth Army's occupation of the Bataan Peninsula.¹⁵⁸ By 14 February 1945, XI Corps attacked down both sides of the Bataan Peninsula in order to clear the entrance to Manila Harbor.¹⁵⁹ In addition, on 15 February 1945, the 151st Regimental Combat Team (RCT) conducted an amphibious operation on Bataan's

¹⁵²Ibid.

¹⁵³Gerard M. Devlin, *Paratrooper*, 581.

¹⁵⁴Kenney, *General Kenney Reports*, 520.

¹⁵⁵Barbey, *MacArthur's Amphibious Navy*, 305-306.

¹⁵⁶Krueger, *From Down Under to Nippon*, 266.

¹⁵⁷Barbey, *MacArthur's Amphibious Navy*, 305-306.

¹⁵⁸MacArthur, *Reminiscences*, 249.

¹⁵⁹MacArthur, *Reports of General MacArthur*, 277.

Mariveles Beach, immediately opposite Corregidor.¹⁶⁰ Once ashore, the 151st RCT destroyed Japanese coastal artillery positions.¹⁶¹ Mariveles Beach would become the staging point for the 3rd Battalion, 34th RCT's amphibious assault onto Corregidor. The conditions were now set for the decisive operation - the combined airborne and amphibious assault on Corregidor.

General Krueger's Field Order No. 48 formally established the task organization for what became known as Rock Force. The airborne component of Rock Force consisted of Colonel (COL) George M. Jones' 503D PIR, augmented with the 462nd Parachute Field Artillery Battalion and the 161st Parachute Engineer Company.¹⁶² In addition, the amphibious portion of Rock Force consisted of LTC Postlethwait's 3rd Battalion, 34th RCT, 24th Infantry Division.¹⁶³ In order to facilitate unity of command, the 3rd Battalion, 34th RCT would fall under COL Jones, the Rock Force commander, once on Corregidor.¹⁶⁴

With the operation's task organization formally established, COL Jones' staff finalized their detailed planning, resulting in Field Order No. 9, which outlined the operation's scheme of maneuver.¹⁶⁵ The assault on Corregidor would consist of three battalion-sized airborne assaults and a battalion-sized amphibious assault. On 16 February 1945 at 0830 hours, the 3rd Battalion, 503D PIR would drop onto DZ Alpha and DZ Bravo to secure Topside and provide overwatch for the 3rd Battalion, 34th RCT's amphibious landing to secure Malinta Hill, scheduled for 1030

¹⁶⁰Smith, *U.S. Army in World War II- The War in the Pacific: Triumph in the Philippines*, 332-334.

¹⁶¹MacArthur, *Reports of General MacArthur*, 277.

¹⁶²Flanagan, *Corregidor: The Rock Force Assault*, 174.

¹⁶³*Ibid.*

¹⁶⁴Devlin, *Back to Corregidor: America Retakes the Rock*, 35.

¹⁶⁵Flanagan, *Corregidor: The Rock Force Assault*, 178.

hours.¹⁶⁶ These operations would be followed at 1215 hours by the 2nd Battalion, 503D PIR's airborne assault, in order to conduct a relief-in-place with 3rd Battalion, 503D PIR. The 1st Battalion, 503D PIR was designated as the Rock Force reserve and was scheduled to jump at 0830 on 17 February 1945.¹⁶⁷

On 16 February 1945, Rock Force was awoken at their Mindoro base in the early morning hours. They ate breakfast, drew parachutes, and boarded 58 C-47 transports. The flight from Mindoro to Corregidor was approximately 75 minutes. Similarly, across Manila Harbor, the 3rd Battalion, 34th RCT boarded 25 amphibious transports for their journey to Corregidor's Black Beach.¹⁶⁸

In preparation for the assault, Corregidor endured a furious aerial and naval bombardment provided by 24 B-24s, 11 B-25s, 31 A-20s, and three navy destroyers.¹⁶⁹ As expected, the heavy bombardment drove the island's Japanese defenders into their underground strongholds. As the Japanese sought refuge within Corregidor's tunnels, the bombers gave way to C-47 transports.

At 0833 hours, the sky filled with the blossoming parachutes of 3rd Battalion, 503D PIR's paratroopers.¹⁷⁰ The effect on the Japanese defenders below was one of total confusion; they believed an airborne assault onto Corregidor was impossible due to its small size.¹⁷¹ As a result, the majority of Japanese defenses were focused on locations vulnerable to amphibious assault.

¹⁶⁶Smith, *U.S. Army in World War II- The War in the Pacific: Triumph in the Philippines*, 339.

¹⁶⁷Flanagan, *Corregidor: The Rock Force Assault*, 178.

¹⁶⁸*Ibid.*, 192.

¹⁶⁹Smith, *U.S. Army in World War II- The War in the Pacific: Triumph in the Philippines*, 340.

¹⁷⁰Krueger, *From Down Under to Nippon*, 266.

¹⁷¹Flanagan, *Corregidor: The Rock Force Assault*, 206.

The 3rd Battalion, 503D PIR leveraged this Japanese paralysis by consolidating forces and organizing for the follow-on attack.

The 3rd Battalion secured the DZs and established overwatch positions covering Black Beach in preparation for the follow-on amphibious assault. At this time, the 3rd Battalion spotted an enemy observation post on a rock outcropping immediately below Topside. Inside this observation post was Corregidor's Japanese Commander, Captain Itagaki, who was intently watching 3rd Battalion, 34th RCT's amphibious assault onto Black Beach; he was quickly eliminated.¹⁷² Not only was Corregidor's commanding officer dead, but the 3rd Battalion neutralized the island's only command center. Captain Itagaki's command center lacked lateral communication lines, and once cut, the Japanese lacked a method for coordinating their defensive efforts.¹⁷³ This one action likely determined the Allied operation's success.

At 1028 hours, the lead elements of 3rd Battalion, 34th RCT encountered only light resistance and successfully landed on Black Beach.¹⁷⁴ The battalion quickly secured Malinta Hill, cleared Bottomside, and blocked the approach to Topside.¹⁷⁵ Utilizing five separate iterations of beach landings, the 3rd Battalion, 34th RCT began the laborious process of landing heavy equipment and supplies. The biggest challenge immediately facing the battalion was landing heavy equipment in a congested space in the midst of mortar fire and land mines.¹⁷⁶ Despite these challenges, the battalion successfully unloaded key equipment, to include M-4 Sherman tanks and self-propelled 75mm artillery.

¹⁷²Smith, *U.S. Army in World War II- The War in the Pacific: Triumph in the Philippines*, 345.

¹⁷³Devlin, *Back to Corregidor: America Retakes the Rock*, 74.

¹⁷⁴Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 271.

¹⁷⁵Flanagan, *Corregidor: The Rock Force Assault*, 211.

¹⁷⁶*Ibid.*

Although the 3rd Battalion, 34th RCT rapidly established a secure beachhead, they could not establish a link-up with the 503D PIR on Topside; the road linking Bottomside and Topside remained firmly under Japanese control, dividing Rock Force and preventing the Allies from transporting needed supplies or evacuating casualties.¹⁷⁷ Until the road was opened, the paratroopers on Topside would subsist off of C-47 airdrops.¹⁷⁸

At 1240 hours, Major Lawton B. Caskey's 2nd Battalion, 503D PIR began to drop onto Topside's DZs.¹⁷⁹ However, unlike the previous drop, the Japanese were now very much aware of the paratrooper's presence, thus the 2nd Battalion encountered significant enemy resistance in the form of small arms, mortars, and anti-aircraft fire. By 1400 hours, the 2nd Battalion, 503D PIR was assembled on the ground and had conducted the relief-in-place with 3rd Battalion, 503D PIR.¹⁸⁰ This action allowed 3rd Battalion to expand Topside's clearing operation and attack Japanese forces blocking Rock Force's access to the road leading to Black Beach.¹⁸¹ As 3rd Battalion, 503D PIR worked their way down the road, they encountered severe resistance. The road, bracketed by steep hills, was infested with enemy cave complexes.

As darkness fell on the island, COL Jones directed Rock Force to cease offensive operations and establish defensive perimeters.¹⁸² In addition, in recognition of the day's high percentage of jump casualties (14.2%), he cancelled 1st Battalion, 503D PIR's jump; they would

¹⁷⁷Ibid., 235.

¹⁷⁸Ibid., 228.

¹⁷⁹Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 273.

¹⁸⁰Flanagan, *Corregidor: The Rock Force Assault*, 223.

¹⁸¹Ibid.

¹⁸²Ibid.

instead arrive via amphibious assault at Black Beach the following day.¹⁸³ At this very moment, Rock Force was at its most vulnerable point. They were divided; their supply line was cut, and they were outnumbered three to one. Literally beneath their feet, there were 6,000 Japanese troops.¹⁸⁴ If the Japanese had been able to wage a coordinated counterattack, they would have likely overwhelmed the Allied ground forces and retained possession of Corregidor.

While the evening of 16 February was relatively quiet for the paratroopers on Topside, it was anything but for the infantrymen of 3rd Battalion, 34th RCT. At midnight, Malinta Hill shuddered as the Japanese attempted to trigger a massive explosive-induced landslide to block the road to Topside and bury 3rd Battalion, 34th RCT soldiers.¹⁸⁵ However, due to an excessive quantity of explosives, the hill was merely obliterated, thus leaving the road intact and troopers unscathed.¹⁸⁶ The explosion on Malinta Hill was followed by a series of Japanese frontal assaults, facilitated by their scaling of near-vertical cliffs.¹⁸⁷ Despite the attack's obvious fanaticism, the Japanese attack was uncoordinated and failed. 3rd Battalion, 34th RCT survived their first night on Corregidor.

By 17 February, COL Jones was desperate to gain access to Black Beach. He had numerous wounded paratroopers in urgent need of evacuation. In addition, the C-47 transport parachute drops of supplies were not keeping up with the regiment's demands, especially in regards to water. Therefore, on the afternoon of the 17 February, LTC Postlethwait devised a plan to use M-4 Sherman tanks and self-propelled artillery pieces to run the Japanese gauntlet to

¹⁸³Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 277.

¹⁸⁴*Ibid.*

¹⁸⁵Flanagan, *Corregidor: The Rock Force Assault*, 230.

¹⁸⁶*Ibid.*

¹⁸⁷*Ibid.*

Topside in order to deliver water and evacuate wounded.¹⁸⁸ This daring convoy made two round trips before the day was over. Based on the sheer quantity of small arms damage to the vehicles, it was fortunate that the Japanese were without anti-tank weaponry.¹⁸⁹

The day concluded with the welcome arrival of 1st Battalion, 503D PIR at 1635 hours.¹⁹⁰ However, the 1st Battalion's amphibious operation was not without drama. During their initial landing, the paratroopers experienced heavy machine gun fire, forcing them to abort.¹⁹¹ The 1st Battalion then withdrew to the relative safety of Manila Harbor, while navy destroyers targeted the Japanese machine gun position with their 5-inch guns.¹⁹² Following the destruction of the Japanese machine gun positions, the 1st Battalion continued their amphibious assault with only sporadic resistance and rapidly secured a perimeter around Black Beach. However, due to the rapidly approaching darkness, Rock Force dug in for the night; offensive operations would resume at daybreak.¹⁹³

The main effort on the 18th was the operation to open the road linking Topside and Bottomside. In pursuit of this objective, the 1st Battalion, 503D worked its way up, while the 3rd Battalion 503D PIR worked its way down.¹⁹⁴ As the paratroopers methodically cleared the Japanese caves, an ingenious and lethal system began to emerge. Using naval and air force ground liaison teams, the paratroopers coordinated both air and naval fires onto Japanese

¹⁸⁸Ibid., 235.

¹⁸⁹Ibid.

¹⁹⁰Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 277.

¹⁹¹Flanagan, *Corregidor: The Rock Force Assault*, 249.

¹⁹²Breuer, *Retaking the Philippines: America's Return to Corregidor and Bataan October 1944-March 1945*, 219.

¹⁹³Devlin, *Back to Corregidor: America Retakes the Rock*, 135.

¹⁹⁴Flanagan, *Corregidor: The Rock Force Assault*, 253.

defensive positions.¹⁹⁵ When these efforts failed, paratroopers suppressed identified caves with machine gun fire to facilitate the approach of a flame thrower team.¹⁹⁶ Once in position, this team liberally doused the cave in napalm, followed by hand grenades. Using this system, the road was reopened by nightfall.

On the morning of the 19th, it was the 503D PIR's turn to encounter the fanatical Banzai attacks that, up to this point, had been received only by the 3rd Battalion, 34th RCT. At 0600 hours, Lieutenant Endo and approximately 600 Japanese Marines launched an attack on Topside.¹⁹⁷ However, despite their fanatical fervor, they faced prepared defensive positions reinforced by 75mm artillery. By 0800, the Japanese attack was soundly defeated.¹⁹⁸

From 19-23 February, the Allies on Corregidor worked to systematically clear Topside and Bottomside. By the end of this period, they had killed thousands of Japanese either directly or indirectly by sealing them in underground tombs with explosive charges. Corregidor had become a hellish nightmare of dead bodies, flies, and groaning explosions emanating from deep underground, as Japanese troops committed suicide rather than surrender. By the 23rd, the western half of Corregidor was declared secure; clearing operations would now extend to the eastern half of the island.¹⁹⁹

On the morning of 24 February, Rock Force set out to clear the eastern half of Corregidor.²⁰⁰ In response to the clearing action, the Japanese conducted a final counterattack

¹⁹⁵Ibid.

¹⁹⁶Breuer, *Retaking The Philippines: America's Return to Corregidor and Bataan October 1944-March 1945*, 219.

¹⁹⁷Flanagan, *Corregidor: The Rock Force Assault*, 261-265.

¹⁹⁸Ibid.

¹⁹⁹Ibid., 285.

²⁰⁰Smith, *U.S. Army in World War II- The War in the Pacific: Triumph in the Philippines*, 347.

against Rock Force. Massing in the vicinity of Infantry Point, the Japanese counterattack began at 2100 hours.²⁰¹ The Japanese advanced in close order formation, making no effort to avoid the lethal Allied artillery.²⁰² Despite the carnage, the sheer volume of Japanese troops managed to briefly penetrate Rock Force's perimeter. However, regardless of their motivation, the Japanese were unable to transition these breakthroughs into anything of significance.²⁰³ The battle that began the previous evening had ended by 0400 hours the following morning.²⁰⁴ The Allies once again set into their routine of systematically destroying isolated pockets of Japanese resistance.

On 26 February, in the course of clearing operations tragedy struck 1st Battalion, 503D PIR. The Japanese defenders of Corregidor had relinquished all hope of continuing further defensive resistance. Rather than bear the shame of surrender, they resolved to honor the emperor by destroying themselves and a large portion of Corregidor in a massive explosion.²⁰⁵ At 1100 hours, the Japanese ignited a massive ammunition dump beneath Monkey Point on Corregidor's eastern end, disintegrating the ridgeline and sending men and materiel hurling hundreds of feet into the air.²⁰⁶ The explosion instantly killed 52 1st Battalion, 503D PIR paratroopers and grievously wounded another 144.²⁰⁷ A massive recovery operation ensued in an effort to free buried Rock Force soldiers. The 1st Battalion, 503D PIR, no longer able to function as a cohesive unit, withdrew to Topside, where it functioned as Rock Force's reserve. The explosion on

²⁰¹Flanagan, *Corregidor: The Rock Force Assault*, 291.

²⁰²*Ibid.*, 293.

²⁰³*Ibid.*, 294.

²⁰⁴*Ibid.*

²⁰⁵Smith, *U.S. Army in World War II- The War in the Pacific: Triumph in the Philippines*, 348.

²⁰⁶*Ibid.*

²⁰⁷Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 280.

Monkey Point marked the end of major combat operations on Corregidor. What followed was best labeled as a continuous series of mopping up operations until 2 March 1945. During the course of the operation, Rock Force sustained 1,105 casualties (KIA, WIA, and MIA) out of a total force of 4,560 men. The Japanese suffered approximately 5,980 casualties out of a force of 6,000 men; only 20 Japanese were taken as prisoners.²⁰⁸

On 2 March, Corregidor received a special visitor, the Southwest Pacific Area Commander, General Douglas MacArthur.²⁰⁹ After a brief tour of the battlefield, he was greeted by a formation of proud soldiers gathered around Corregidor's flagpole. As General MacArthur approached the formation, he addressed COL Jones and instructed, "Have your troops hoist the colors to its peak, and let no enemy ever haul them down."²¹⁰ For three long years, Corregidor had been a painful reminder of Allied defeat, and was now a symbol of Allied victory.

In spite of what may seem to be merely a tactical victory, the airborne operation to seize Corregidor extended operational reach and created operational shock. First, the rapid destruction of Japanese forces on Corregidor directly led to the opening of Manila Harbor. Unlike previous operations in the SWPA Theater, Allied operations in Luzon had to maintain long lines of communication.²¹¹ By the time the Sixth and Eighth Armies had arrived in Manila, they were beginning to culminate due to the rapid pace of operations and extended supply lines.²¹² Prior to the reestablishment of Manila Harbor, Allied supplies entered Luzon through beachheads established at Lingayen Gulf and Nasugbu; both were inadequate for large-scale logistical

²⁰⁸Ibid.

²⁰⁹Breuer, *Retaking The Philippines: America's Return to Corregidor and Bataan October 1944-March 1945*, 255.

²¹⁰MacArthur, *Reminiscences*, 250.

²¹¹Krueger, *From Down Under to Nippon*, 225.

²¹²Kenney, *General Kenney Reports*, 519.

operations.²¹³ It must also be remembered that Allied offensive operations continued within Luzon after the liberation of Manila and Corregidor.²¹⁴ In addition, the Allied war effort in the Pacific envisioned the Philippines as a major staging base in preparation for the invasion of Japan.²¹⁵ The Philippines would become the Pacific version of England, in regards to establishing an intermediate staging base for the invasion of Japan.²¹⁶ In order to facilitate the invasion, massive quantities of war materiel were needed, thus making the Allied liberation of Manila's port a necessary requirement.

Secondly, it is important to note that the 503D PIR was garrisoned in Mindoro, the island immediately south of Luzon, prior to the combined airborne and amphibious assault on Corregidor.²¹⁷ Therefore, General Krueger, the Sixth Army Commander, was able to leverage an asset outside of his immediate area of operations. Through the use of C-47 transport he was able to introduce a new variable into the Allied offensive operations in Luzon. The ability to maneuver a force over this considerable distance in only 75 minutes was a clear demonstration of airborne operations expanding operational reach.²¹⁸

The airborne assault on Corregidor demonstrated operational shock in three distinct ways. First, the shock value of using paratroopers was made evident by the immediate paralysis instilled in Corregidor's Japanese defenders.²¹⁹ By capturing the high ground and severing the island's

²¹³Ibid.

²¹⁴MacArthur, *Reports of General MacArthur*, 281.

²¹⁵MacArthur, *Reminiscences*, 197.

²¹⁶MacArthur, *Reports of General MacArthur*, 395.

²¹⁷Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 251.

²¹⁸Flanagan, *Corregidor: The Rock Force Assault*, 293.

²¹⁹Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 270.

command and control network, the Allies denied the enemy from not only comprehending the environment, but also from any coordinated response.

It is important to note that, in 1942, the Japanese conducted a five-month siege of Corregidor with 400 artillery pieces, and six 16-inch siege cannons. The siege culminated with a successful 2,000-man amphibious assault.²²⁰ In 1945, the Allies captured Corregidor's 6,000-man garrison in 15 days with a force of 4,560 men.²²¹ The significant difference between the Japanese assault in 1942 and the Allied assault in 1945 was the use of airborne forces in conjunction with the amphibious assault.

Secondly, the sudden defeat of Japanese forces on Corregidor increased the tempo of operations in Luzon. General Yamashita's operational plan was to fight a protracted defensive campaign in order to buy time for Japan.²²² Therefore, the rapid destruction of Corregidor was counter to the Japanese general's endstate. The airborne assault on Corregidor facilitated operational shock, which degraded the enemy's ability to fight a protracted defense.

Finally, the use of airborne forces in such a prominent Allied victory instilled operational shock on a psychological level. How could the Japanese defenders in Luzon perceive their comrades' rapid demise on Corregidor as anything other than a harbinger of events to come? This nagging question likely worked to degrade the cohesion of the Japanese forces throughout Luzon.

Corregidor is unique because its small land mass presented clear operational and strategic impacts. Operationally, it was the key to converting Manila from a burned out hulk into a functioning Allied base of operations.²²³ Strategically, it was significant because it became a

²²⁰Ibid., 280.

²²¹Ibid.

²²²MacArthur, *Reports of General MacArthur*, 266.

²²³Smith, *U.S. Army in World War II- The War in the Pacific: Triumph in the Philippines*, 309.

symbol of victory, a turning point in the Pacific war. Gone was General Jonathan M.

Wainwright's humiliating surrender to the Japanese; the new image was one of triumph - an image of a promise kept, and the pride felt by all Americans when the colors were hoisted above the battle-scarred terrain of the Rock.

CONCLUSION

The successful airborne operations at Nadzab, Tagaytay Ridge, and Corregidor have unmistakable commonalities in regards to their ability to create operational shock and extend operational reach. Through careful analysis of these three airborne operations, there are four ways in which they all extended operational reach and three ways in which they created operational shock.

The first way in which these operations extended operational reach was their ability to rapidly introduce an element outside the area of operations directly into a particular operation. During the Nadzab operation, the paratroopers of the 503D PIR staged at Port Moresby, a mountain range and 200 miles away from the ongoing offensive to capture Lae. Similarly, for the seizure of Tagatay Ridge and liberation of Corregidor, the 511th PIR and 503D PIR staged at San Jose Airfield in Mindoro 140 miles away. Therefore, the positioning of airborne forces in a non-contested area permitted the later introduction of a thoroughly cohesive force into the midst of a chaotic environment.

Furthermore, it must be noted that during the three airborne operations, the flight time from the staging area to the drop zone was less than 80 minutes. Therefore, airborne forces were far enough away to avoid being absorbed into the immediate fight, but close enough to provide the commander flexibility in a rapidly changing combat environment. During the Tagatay Ridge and Corregidor jump, the commander either postponed the drop of paratroopers (Tagatay Ridge, 511th PIR), or altered the way paratroopers entered the battle (Corregidor, 1st Battalion, 503D PIR).

The second way the three airborne operations extended operational reach was by facilitating the logistical sustainment of ground forces. During the Nadzab operation, the 503D PIR established a C-47 capable airfield in the enemy's rear area, thus allowing for the arrival of

the 7th Australian Division and multitudes of C-47 loads of materiel. Similarly, the Tagatay Ridge operation prevented the Japanese from using the 3,000-foot mountain to block the Allied advance to Manila. Finally, the use of airborne operations at Corregidor directly facilitated the reopening of Manila Harbor. The Allied war machine was heavily dependent on merchant vessels in order to deliver immense quantities of war materiel. Without the re-establishment of Manila Harbor, the Allies on Luzon would rely on lines of communication from Lingayen and Nasugbu, both impractical for sustained logistical operations.²²⁴

The third way that airborne operations extended operational reach was through the forward positioning of indirect fire assets. These artillery raids were made possible through creative innovations such as breaking down the artillery cannons into under-wing drop bundles. During the Nadzab operation, the 2/4th Field Artillery Regiment pioneered the use of airborne artillery in the Pacific.²²⁵ Within several hours after the initial drop, the gun crews had four operational cannons in the enemy's vulnerable rear. Similarly, during the Tagatay Ridge operation, the 457th Parachute Field Artillery Battalion dropped onto the region's highest point, Tagatay Ridge. This commanding position provided excellent fields of fire, as well as clear observation of the valley leading to Manila. Finally, during the Corregidor operation, the drop of field artillery enabled the 503D to utilize both plunging fire onto Bottomside, but also direct fire in order to destroy Japanese bunkers.

The fourth way these airborne operations extended operational reach was by capturing key terrain. During the Nadzab operation, the 503D PIR secured an airfield and road junction that led into Lae, thus facilitating the air-land insertion of the 7th Australian Division. During the Tagatay Ridge operation, the use of airborne forces directly led to the capture of the region's

²²⁴Smith, *U.S. Army in World War II- The War in the Pacific: Triumph in the Philippines*, 309.

²²⁵Salecker, *Blossoming Silk against the Rising Sun: U.S. and Japanese Paratroopers at War in the Pacific in WWII*, 123.

high ground. Finally, during the Corregidor operation, the use of airborne forces allowed for the immediate capture of Topside, the dominant terrain containing the enemy's observation platform and communications network. The use of airborne forces immediately captured key terrain; this positional warfare allowed the Allies to place the enemy in a position of relative disadvantage without fighting costly battles.

The first way airborne operations created operational shock was by combining the amphibious assault with the vertical envelopment. Of interest, the three airborne operations displayed a new three-dimensional warfare; Allied troops confronted the enemy by means of the sea, land, and air. The ability to sequence offensive maneuvers in three dimensions, conducting many things at once, enabled the Allies to increase the operation's tempo to a point the enemy could neither process nor respond. It was this process that ultimately paralyzed the enemy, thus creating operational shock.

The second way airborne operations created operational shock was in their ability to drop large masses of troops into a concentrated area in a short span of time. During the Nadzab operation, the 503D PIR dropped three infantry battalions and one field artillery regiment in less than two minutes.²²⁶ Similarly, the Tagaytay Ridge operation bore witness to the successful drop of the entire 511th PIR in only four hours. Therefore, in a brief span of time, General Swing, the 11th Airborne Division commander, was able to increase his combat power by a third and capture the region's key terrain in the process. Finally, during the airborne assault on Corregidor, the 503D PIR dropped two battalions onto a small drop zone during the first 24 hours of the battle. This ability to suddenly appear in mass where one is not expected changes the battlefield's calculus and immediately places the enemy in a position of relative disadvantage.

Supplemental to this analysis, there are certain aspects of the Southwest Pacific Area's environment that demand recognition. Of significance, all Allied airborne operations in the

²²⁶Kenney, *General Kenney Reports*, 294.

Pacific were conducted with air superiority, provided by the 5th US Air Force. It is doubtful that these airborne operations would have enjoyed any measure of success if conducted under a condition of air parity. The C-47 transports would have been extremely vulnerable to air interdiction. In addition, the lightly equipped paratroopers depended on close air support to leverage fires, as well as aerial cargo deliveries to sustain their operations. Therefore, the use of airborne forces requires local air superiority at a minimum.

Another consideration of Allied airborne operations is that they occurred on islands or in densely vegetated terrain. The dense jungles of New Guinea, Leyte, and Luzon prevented the enemy from rapidly transferring enemy forces in order to confront airborne forces. Therefore, considering the Allies' ability to move large amounts of men and materiel using C-47 transports in conjunction with the treacherous jungle terrain gave the Allies a clear advantage. In short, given an immensely dispersed and difficult theater, the Allies could rapidly concentrate forces on a particular desired location; the Japanese could not do this by 1943.

In addition, all three airborne operations were conducted with insufficient quantities of C-47 transports. As a result, the airborne operations at Nadzab, Tagaytay Ridge, and Corregidor were all sequential battalion-sized drops. This was contrary to the experiences gained from the Knollwood Maneuvers and Field Manual 31-30, which favored the use of mass drops. Despite these challenges, the 11th Airborne Division and 503D PIR, in conjunction with the 5th US Air Force, made excellent use of very limited resources.

Considering that the airborne operations in the Pacific Theater occurred over 70 years ago, it is amazing how relevant they still remain. Similar to 1945, future airborne operations will require air superiority in order to transit enemy-controlled territory and access rear areas. In addition, the United States will likely face a similar equipping shortfall in regards to transport aircraft due to budgetary shortfalls and reductions in force structure. The consequence will be an adaptation, a making do, likely in the form of multiple lifts, as opposed to large-scale mass drops.

Furthermore, it is important to recognize that Allied airborne operations in the Pacific were not airborne operations in isolation. On the contrary, they were large-scale efforts massing the effects of air power, ground, and amphibious assault. In short, it was three-dimensional warfare, doing many things at once in order to throw the enemy off balance. Examining the use of these operations in the lesser-known Pacific Theater offers relevant insight into how this powerful tool can be leveraged by a commander to extend operational reach and create operational shock.

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