

Arranging Operations: General Douglas MacArthur in New Guinea 1942-1943

A Monograph

by

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Abstract

Arranging Operations: General Douglas MacArthur in New Guinea 1942-1943, by MAJ Daniel J. Malik, 48 pages.

With the Army's renewed focus on Large Scale Combat Operations against a peer threat, past instances deserve to be studied. The current concept of arranging operations and other elements of operational design can be overlaid on these historical examples to examine their use and effectiveness. This monograph studies how General Douglas MacArthur arranged operations and incorporated other aspects of operational design in two campaigns in the Southwest Pacific Area. The first case study is of the Papuan Campaign, a slow, costly operation resulting in the seizure of Buna, Gona, and Sanananda on the north coast of New Guinea. This was the first Allied ground victory in the Pacific. The second case study covers Operation Cartwheel and MacArthur's fight to secure the Huon Peninsula. Both operations occurred during the Solomon Islands Campaign, which added complexity as all competed for resources and required coordination and cooperation. The findings of this monograph show that MacArthur was a successful operational artist, integrating ends, ways, and means while balancing risk able to arrange tactical actions and achieve operational results.

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Introduction

While the wars of counter-insurgency in Afghanistan and Iraq have seen dramatic reductions in numbers and spending to maintain conventional forces, a renewed focus on Large Scale Combat Operations (LSCO) has dominated the focus of Army thinkers and updated doctrine. The October 2017 version of *Field Manual (FM) 3-0, Operations*, is a watershed document produced by the Army that has captured this attention, primarily focused on conventional ground operations against a near-peer enemy. “Large-scale combat operations are intense, lethal, and brutal. Their conditions include complexity, chaos, fear, violence, fatigue, and uncertainty.”¹ While counter-insurgency is still relevant, it has waned in importance to conducting conventional operations. Counter-insurgency is an activity that may take place in rear areas while conventional actions are ongoing, or as part of stability operations following combat operations against potential enemies like Russia, China, and North Korea. Training rotations at the Combined Training Centers now focus on LSCO to prepare units for conventional operations that fight enemies with similar mechanized, armor, and artillery capabilities. Additionally, exercises prepare units to face foes operating in multiple domains, to include air with attack aviation and surveillance assets like unmanned aerial vehicles, as well as cyber-space. With the Russian annexation of Crimea, the Chinese military expansion into the South China Sea, and North Korean missile launches, the importance of LSCO has been renewed and its study highly relevant.

Through Operational Art, Army commanders and their staffs combine the art and science of war through a cognitive process, to develop the methods (ways) and determine the capabilities/forces (means) to achieve a desired end state (ends), with an understanding of risk.²

¹ US Department of the Army, *Field Manual (FM) 3-0, Operations* (Washington, DC: Government Printing Office, 2017), 1-2.

² Ibid., 1-20.

Operational Design on the other hand, is focused on developing a framework for campaigns and the smaller operations that result from its execution.³ Each have supporting elements. The two processes combine to form an Operational Approach which takes broad concepts and strategic guidance and produces a specific plan.⁴ The ideas and definitions of Operational Art and Design are modern-day concepts that first appeared in the 1982 *Field Manual 100-5, Operations*, and included tenets of depth and synchronization.⁵ The 1986 re-write expanded the definition of Operational Art to one more recognizable to present practitioners, and included additional elements of Lines of Operation and Centers of Gravity.⁶ Although these definitions and elements did not exist in doctrine prior to 1982, joint force commanders had still acted at the operational level of war. Historically, the best ones had demonstrated operational finesse long before the concept was ever expressed explicitly. To gain a deeper understanding of Operational Art and Design, campaigns that took place before 1982 should be reexamined under this lens.

General Douglas MacArthur is an example of one commander who used modern elements of Operational Art and Design in his campaigns during World War II. As noted, doctrine in the 1940s did not include these concepts. However, an examination of his actions in New Guinea provide terrific case studies for integrating ends, ways, and means while balancing risk. MacArthur conducted his operations against the Japanese, a near peer enemy. His early campaigns exhibit the intensity, lethality, and brutality indicative of LSCO and the conditions listed in FM 3-0 of complexity, chaos, fear, violence, fatigue, and uncertainty. Additionally, MacArthur operated in multiple domains. As the Commander of the Southwest Pacific Area

³ US Department of Defense, Joint Staff, *Joint Publication (JP) 5-0, Joint Planning* (Washington, DC: Government Printing Press, 2017), IV-1.

⁴ Ibid.

⁵ Walter E. Kretchik, *U.S. Army Doctrine: From the American Revolution to the War on Terror* (Lawrence, KS: Kansas University Press, 2001), 205.

⁶ Ibid., 212.

(SWPA), he commanded air, ground, and maritime forces in an era when the three had not been trained or operated together previously, especially for amphibious operations. Moreover, his New Guinea campaigns were not only joint operations involving multiple services, but also forces from multiple countries including the US, Australia, and New Zealand.

Historians have very biased opinions of MacArthur ranging from tremendous admiration, genius, and ranking among the best generals in American history while other critical historians may refer to MacArthur as idiotic, dangerous, and an egomaniac. With respect to the New Guinea campaigns, Australian Karl James paints MacArthur as an enraged and desperate commander concerned about Japanese reinforcement as well as being relieved of command, who ordered attacks to break the stalemate and increase tempo. Francis Pike depicts MacArthur as an out of touch commander who lacked an appreciation for the operational environment and was quick to order attacks despite costs. Alternatively, James Duffy is generally complimentary to MacArthur and argues he was a major factor for success in New Guinea. Mark Perry also writes a positive account of MacArthur in an effort to depict him as a great commander. The most detailed accounts of these campaigns are the official US histories published by the Office of the Chief of Military History, specifically *Victory in Papua* (published 1949) and *Cartwheel: The Reduction of Rabaul* (published 1959). Additionally, MacArthur and many subordinate commanders including Lieutenant General George Kenney, commander of the 5th Air Force, Lieutenant General Robert Eichelberger, I Corps commander, and Lieutenant General Walter Krueger, Alamo Force commander, all wrote accounts of their experiences. These works certainly contain some personal bias in how they recollect the authors' leadership, and benefit from hindsight.⁷

⁷ *Kokoda: Beyond the Legend; Hirohito's War: The Pacific War 1941-1945*, ed. Karl James (New York: Cambridge Press, 2017); James P. Duffy, *War at the End of the World: Douglas MacArthur and the Forgotten Fight for New Guinea, 1942-1945* (New York: Nal Caliber, 2016); Mark Perry, *The Most Dangerous Man in America: The Making of Douglas MacArthur* (New York: Basic Books, 2014); George C. Kenney, *General Kenney Reports* (New York: Duel, Sloan and Pearce, 1949); Robert L. Eichelberger, *Our Jungle Road to Tokyo* (New York: Viking Press, 1950).

None of these books study MacArthur as an operational artist in New Guinea. MacArthur was successful in the Southwest Pacific Area because he was a practitioner of operational art and operational design. More specifically, he arranged operations so well that the Japanese lost the initiative and became reactive to MacArthur's actions, culminating with the isolation of Rabaul and other pockets of Japanese strength. Arranging operations, an element of operational design, cannot be well examined on its own and must be viewed through the larger aperture of design as it relates to other elements. Two case studies demonstrate how he applied the concept of arranging operations with other elements of operational art and design: the Papuan Campaign and Operation Cartwheel. The Papuan Campaign (July 1942 – January 1943) demonstrates the importance of arranging operations (simultaneity, depth, and tempo), basing, lines of operation, operational reach, culmination and risk. It was a largely Australian action under MacArthur's command, repelling the Japanese overland attack on Port Moresby before American units could deploy to New Guinea. An often-overlooked campaign by American historians due to the majority of Australians involved, it serves as a case study demonstrating the importance of understanding the operational environment. This slow and costly campaign was a learning experience for MacArthur, his staff, and the subordinate commanders and servicemen and women that took part. Months later, MacArthur applied hard learned lessons from Papua to Operation Cartwheel (June 1943 – January 1944), with marked success in the Huon Peninsula and with operations in the Solomon Islands designed to isolate the Japanese combat and logistical center at Rabaul. Cartwheel shows how the general applied the previously mentioned elements plus the direct and indirect approach, as well as phasing and transitions. Through reframing the problem, MacArthur understood the operational environment and quickly achieved his objectives before gaining control of the rest of New Guinea.

Situation

By early 1942, the Empire of Japan had spread across mainland Asia through China, Burma and India, and in the Pacific stretched all the way from Java to the Solomon Islands.⁸ The Philippines had fallen in early 1942 and MacArthur had escaped from Corregidor to Australia to plan the defense both of the continent and the campaign that would eventually allow him to keep his promise by returning to the Philippines.⁹ Japanese lines of communication stretched from Japan to the Mariana Islands, Truk, and finally to Rabaul. Captured from the Australians and converted to a supply base, Rabaul had a large port and many airfields that could support bombers.¹⁰ The Japanese projected significant air, sea, and ground power from Rabaul against New Guinea and the Solomon Islands. If the Japanese could continue their advance through the Solomon Islands and New Guinea, it could sever the sea lines of communication from the US, isolate allied Australia, and stage for a possible invasion of the continent.

MacArthur was shocked to learn of the poor state of Australian forces. He remarked, “Its [Australia’s] actual military situation had become almost desperate. Its forces were weak to an extreme, and Japanese invasion was momentarily expected.”¹¹ Australian troops committed to the Middle East had not yet been recalled for the defense of the nation. Additionally, Australia possessed no capital ships, and its air element consisted of poorly maintained, obsolete aircraft.¹² Its existing defense plans called for defending from the continent and ceding most of Australia to the Japanese. The “Brisbane Line” would hold the south east quarter of the continent after

⁸ General Staff, *Reports of General MacArthur: The Campaigns of MacArthur in the Pacific, Vol. I* (Washington, DC: Government Printing Office, 1966), 45.

⁹ Frazier Hunt, *MacArthur and the War Against Japan* (New York: Charles Scribner’s Sons, 1944), 67.

¹⁰ Eichelberger, *Our Jungle Road to Tokyo*, 10.

¹¹ Douglas MacArthur, *Reminiscences* (Annapolis: MD: Naval Institute Press, 1964), 152.

¹² Ibid.

retreating from and destroying infrastructure in the rest of Australia.¹³ Instead, “I [MacArthur] decided to abandon the plan completely, to move the thousand miles forward into eastern Papua, and to stop the Japanese on the rough mountains of the Owen Stanley Range of New Guinea-to make the fight for Australia beyond its own borders.”¹⁴ MacArthur reframed the situation and used his critical thinking to adopt an offensive mindset rather than accept a passive defense.

MacArthur selected Port Moresby as the initial foothold on New Guinea. Its limited port and air facilities could be expanded into a major base and work began to expand in April 1942. Situated on the southern coast of Papua, it could support air operations against the northern coast defending Australia from Japanese attack.¹⁵ A second base at Milne Bay on the eastern tip of Papua was similarly expanded to provide port and air facilities beginning in June, 1942.¹⁶ Milne Bay provided some protection to Port Moresby by limiting access to coastal trails that the Japanese could use for an overland attack on Port Moresby. Most importantly, Milne Bay was well positioned to support operations advancing up the Papuan coast.¹⁷

On March 30th, 1942, the Combined Chiefs of Staff issued a directive to MacArthur and Admiral Chester W. Nimitz establishing their positions in the newly created Pacific Theater.¹⁸ Nimitz commanded the Pacific Ocean Area, comprised of the North, Central, and South Pacific Areas. MacArthur commanded the Southwest Pacific Area which included Australia, the Philippines, New Guinea, the Bismarck Archipelago, the Netherlands East Indies, and the western

¹³ Ibid.

¹⁴ Ibid.

¹⁵ General Staff, *Reports of General MacArthur*, 45-46.

¹⁶ Samuel Milner, *Victory in Papua* (Washington, DC: Office of the Chief of Military History, 1957), 42.

¹⁷ General Staff, *Reports of General MacArthur*, 50.

¹⁸ Milner, *Victory in Papua*, 20.

half of the Solomon Islands split by the 159° E longitude. MacArthur would compete for resources with Nimitz, but also provide mutual support between commands.

The Japanese recognized the operational importance of both Port Moresby and Milne Bay and attacked each. Allied intelligence provided early warning and each attack failed. The Japanese Fourth Fleet then attempted an amphibious invasion of Port Moresby, precipitating the Battle of the Coral Sea from May 4th-8th, 1942.¹⁹ It was repelled in the first naval battle fought between carriers, in which surface forces never made contact. A Japanese assault force then landed at Milne Bay on August 25th, 1942.²⁰ Americans had reinforced in anticipation of the attack, defeating it and securing the important Allied base. The Japanese made one more attempt to seize Port Moresby. They began an overland operation with a landing at Basabua on the night of the July 21-22, 1942.²¹ From here, they secured a beachhead in the vicinity of Buna, Gona, and Sanananda on the northern coast of New Guinea. The Japanese then marched through what had been regarded as impassible terrain and, on July 29th, seized the village of Kokoda and the adjacent airfield from the Australians on the northern slope of the Owen Stanley Mountains.²² The Aussies put up an incredible fight, bitterly resisting the Japanese through the Owen Stanleys in an operation they did not receive enough credit for executing from either MacArthur or American historians. Despite limited supplies, disease and harsh terrain, the Japanese continued to advance to within twenty miles of Port Moresby.²³ They only halted after the commander, Lieutenant General Tomitaro Horii received orders limiting the scope of his operations to the

¹⁹ General Staff, *Reports of General MacArthur*, 46.

²⁰ James P. Duffy, *War at the End of the World*, 162.

²¹ Milner, *Victory in Papua*, 56.

²² David Horner, “Kokoda: An Epic in Australian History?” in *Kokoda: Beyond the Legend*, ed. Karl James (New York: Cambridge Press, 2017), 291.

²³ Mark Perry, *The Most Dangerous Man in America*, 200.

north side of Owen Stanley Range.²⁴ These were in reaction to landing on Guadalcanal by 1st Marine Division in the South Pacific Area.²⁵ The Japanese high command realized the threat posed by the landings and made Guadalcanal their priority, postponing the attack on Port Moresby until the fight at Guadalcanal had been decided and more combat power could be allocated to New Guinea.²⁶ Further orders required Horii to withdraw and defend the beachhead.²⁷ Thus, MacArthur had an opportunity to finally go on the offensive.

The Papuan Campaign

Guadalcanal frequently receives historical attention when looking at early US victories in the Pacific. However, the Papuan Campaign, culminating in the seizure of Buna and Gona, was the first Allied operation to defeat the Japanese in the field, and ended just a few weeks before combat actions on Guadalcanal terminated.²⁸ More importantly, the Papuan and Guadalcanal campaigns were essentially simultaneous, multidomain operations that competed with each other for resources. Arranging and executing simultaneous operations would seem to be effective in that it split Japanese support and created multiple dilemmas for the enemy. But it did the same for the Allies. Simultaneity refers not only to executing multiple operations at once, but also to integrating military power against the enemy. Guadalcanal and the Papuan Campaign serve as effective examples of coordinated operations across the land, air and sea domains, as tactical and operational actions were executed concurrently and in sequence to achieve objectives. Yet these

²⁴ Francis Pike, *Hirohito's War: The Pacific War 1941-1945* (New York: Bloomsbury Publishing, 2015), 423.

²⁵ Richard B. Frank, *Guadalcanal: The Definitive Account of the Landmark Battle* (New York: Penguin Publishing, 1990), 61.

²⁶ Pike, *Hirohito's War*, 423.

²⁷ Milner, *Victory in Papua*, 99.

²⁸ Robert L. Eichelberger, "Report of the Commanding General Buna Forces on the Buna Campaign," Combined Arms Research Library, Fort Leavenworth, KS, 3.

simultaneous actions also stretched Allied forces nearly to the breaking point, particularly in regard to lift capability, air, and naval support. As an operational artist, MacArthur integrated limited resources and arranged operations to seize critical bases by means of multi-domain operations at Buna and Gona and win in Papua against a determined enemy in severely restricted terrain.

The endstate of the Allied operation was to seize Buna, Gona and Sanananda.²⁹ MacArthur saw these objectives as important for basing, as these airfields could be used in subsequent operations to strike Rabaul. Additionally, port facilities could be improved to extend his lines of operation from Port Moresby and Milne Bay to move over water to resupply troops, eliminating the dangerous transit over the mountains with limited capacity. By moving a larger volume of men and supplies by water, these assets would increase his operational reach, depth, and tempo.

But conducting simultaneous operations in New Guinea while shaping operations in the Solomons strained available resources. Allied air forces under the command of Lieutenant General George Kenney split support between Papua, Rabaul, and the Solomons. MacArthur wrote, “During this period, although hard put to it in New Guinea, I did everything possible to support the South Pacific Command in Guadalcanal, where operations were not going too well.”³⁰ Further, MacArthur reported the extent of his air operations directly supporting Guadalcanal and also striking Rabaul were shaping efforts in support of his own Papuan Campaign and the Solomons.

Action in South Pacific has been supported to maximum capacity of my Air Force, using all planes that can reach targets...it is believed that our bombardment missions have had a vital effect upon the operations to date by pounding hostile air and supply installations. The major effort has been expended in Rabaul area...Am in constant contact with Ghormley [commander of the South Pacific Area] coordinating my reconnaissance with his and giving priority

²⁹ Milner, *Victory in Papua*, 101.

³⁰ MacArthur, *Reminiscences*, 163.

to his requests for attack...My own operations in New Guinea have been supported only by short-range aircraft.³¹

For a Fifth Air Force bomber to reach Guadalcanal it would require an additional fuel tank carried in the belly of the plane, thus reducing its bomb load to one half of its normal capacity (though to attack Rabaul, an additional fuel tank was not required).³² The distance from Port Moresby to Rabaul by air is about 500 miles, and to Guadalcanal is about 900 miles. Beyond the reduced effectiveness of bombers, lack of aircraft carriers required numerous airfields to extend the “fighter line” - and the time required to build them also slowed down the operational tempo of MacArthur’s forces. The P-38 and P-47 fighters used in the campaign could only fly out to 300 miles at the most before returning to an airfield, much shorter than the 1,000 miles of a bomber.³³ That range does not include any time or fuel they might consume in dogfights or loitering to support ground troops. As will be seen, these limitations made the seizure of airfields at Kokoda and Pongoni so decisive not only for the campaign against Buna and Gona, but also for follow-on operations up the Huon Peninsula.

Weather also had a critical impact on air operations. Flying over the Owen Stanleys was dangerous, and could only be done during daylight hours in an era before instrumentation and night vision. Additionally, periods of fog or heavy cloud cover reduced the effectiveness of aerial reconnaissance and often prevented flight operations. These also undermined the air dropping of supplies to soldiers. Many loads were never recovered after being misdropped, while others had hard landings and damaged the contents, including food tins which went rancid.³⁴

³¹ Ibid.

³² Ibid.

³³ Hunt, *MacArthur and the War Against Japan*, 112.

³⁴ Milner, *Victory in Papua*, 114.

Naval assets were also massed on the Solomon Islands. In contrast “MacArthur’s Navy” – a derogatory term used to describe the few assets MacArthur controlled at the time – consisted only of five cruisers, eight destroyers and twenty submarines of which only six were under the operational control of the Navy to support Guadalcanal.³⁵ A critical missing resource was the aircraft carrier. The limited numbers were supporting operations in the Central and South Pacific Areas and were taking significant damage and losses. Buna was the only campaign in the Pacific that was not supported by a naval bombardment due to a lack of resources, shoals and reefs off the coast of Buna limiting access, and the potential for air interdiction.³⁶ Personality conflicts between the Army General and the Navy brass, particularly Admiral Ernest King, Chief of Naval Operations, also limited any support available.³⁷

As an operational artist, MacArthur linked his ways to his means in developing his approach. The lack of strong air power and an almost non-existent naval force had several effects. First – given the lack of landing craft and the fact his command had no priority to receive any – he could not consider direct amphibious landings against Buna or Gona, and had to pursue costly ground movements through severely restricted terrain with most of his forces (though he had enough craft for smaller, supporting operations). Second, naval bombardment could not adequately prepare the objectives on Buna, Gona, or Sanananda before their assaults, partly due to a reluctance by the Navy to operate in areas near shallow reefs.³⁸ Third, his naval forces could not isolate the Buna-Gona area, and enemy ships would make multiple trips to deliver supplies

³⁵ Glenn Barnett, “General Douglas MacArthur’s Navy,” Warfare History Center. October 26, 2018, accessed February 26, 2019, <https://warfarehistorynetwork.com/daily/wwii/general-douglas-macarthur-navy/>.

³⁶ Ibid.

³⁷ Waldo Heinrichs and Marc Gallicchio, *Implacable Foes: War in the Pacific 1944-1945* (New York: Oxford Press, 2017), 41.

³⁸ MacArthur, *Reminiscences*, 164.

and evacuate wounded, mostly at night when Allied air could not detect them.³⁹ Although the Japanese still suffered from insufficient logistics, thousands of enemy soldiers could be evacuated and presumably fight another day.

The operational environment and resources available shaped MacArthur's design and led to his Operational Approach. It involved advancing on three axes of advance, which became his initial Lines of Operation (LOO). MacArthur recalled his plan: "one axis would engage the enemy in a frontal action along the Kokoda Trail; the second would involve a wide flanking movement over the Owen Stanleys east of Port Moresby against the enemy lines of communication and supply; the third axis of advance would consist of large-scale infiltration from Milne Bay along the northeastern coast of Papua. All three axes were to converge upon the Buna-Sanananda-Gona area for a final simultaneous attack against this enemy coastal stronghold."⁴⁰ Additionally, the third axis would seize Goodenough Island to prevent the Japanese from conducting naval movements through the Ward Hunt Strait.

³⁹ Milner, *Victory in Papua*, 146.

⁴⁰ MacArthur, *Reminiscences*, 162.

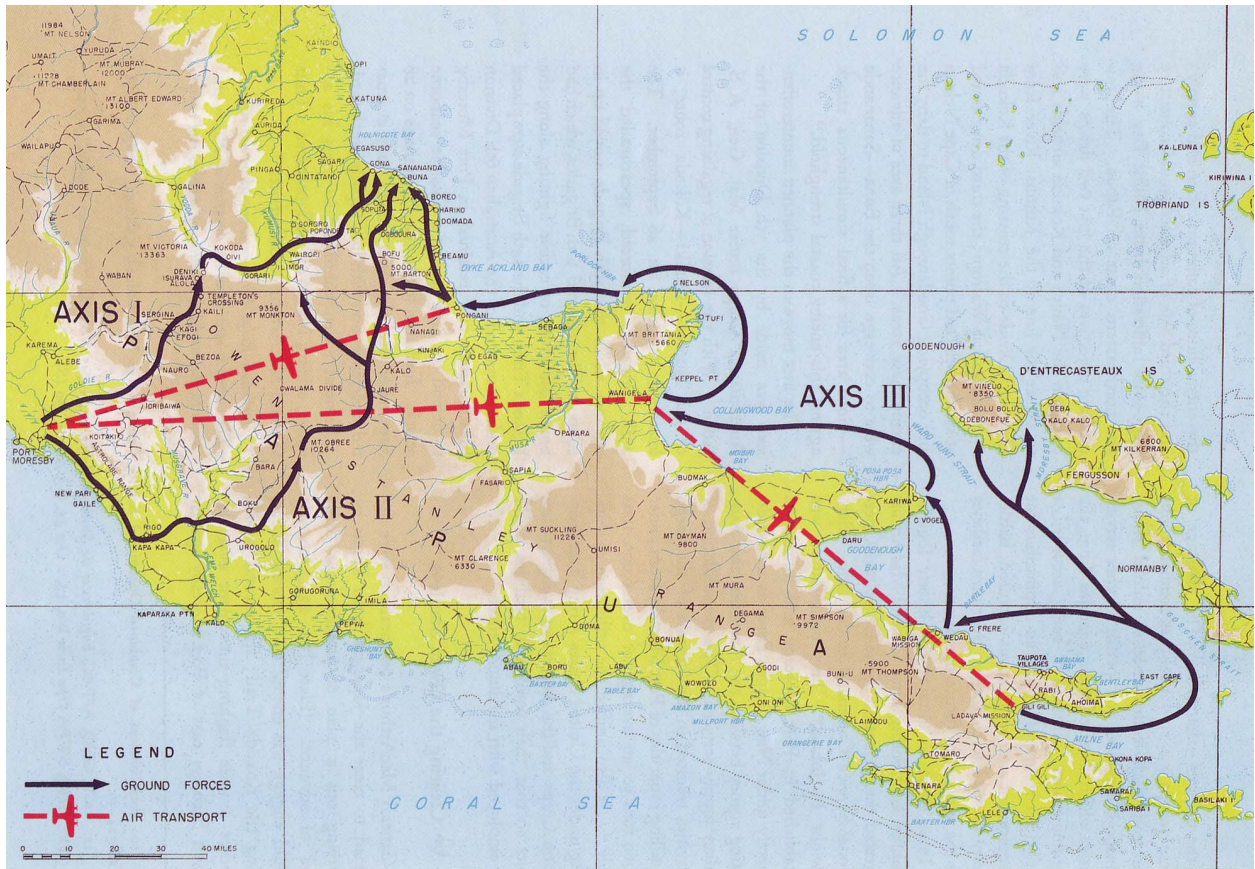


Figure 1. Axes of Advance, Papuan Campaign. General Staff, *Reports of General MacArthur: The Campaigns of MacArthur in the Pacific, Vol 1*, 76 (Washington, DC: Government Printing Office, 1994).

The Australian 7th Division, under the command of Major General Allen, attacked along the Kokoda Trail on the first axis of advance as the Japanese attack culminated on September 28th. The Kokoda Trail connected Port Moresby to Buna. It was a rough trail, not a road, and was only passable on foot. It stretched over 140 miles and climbed to an altitude of 6,500 feet above sea level to “the gap,” a saddle between mountains that peaked at over 14,000 feet.⁴¹ Moving north from the gap, there was a steep descent to the villages of Kokoda and Oivi, where the division fought its major battles.⁴² The Japanese fiercely defended key points on the trail and

⁴¹ General Staff, *Reports of General MacArthur*, 52.

⁴² Haruki Yoshida, James, “Japanese Commanders in Kokoda” in *Kokoda: Beyond the Legend*, ed. Karl James (New York: Cambridge Press, 2017), 208.

absorbed heavy losses from the Australians and the Fifth Air Force.⁴³ Australian logistics were severely strained, with supplies carried on the backs of soldiers or native porters, although air drops were also used to varying degrees of success. Yet Japanese logistics were much worse. Although the Australians also suffered from jungle diseases, fever, and lack of food, they still had food; the situation for the Japanese was dire, with the cannibalization of dead Australian troops being well documented.⁴⁴ With logistics a crucial concern, the seizure of the Kokoda Airfield was a decisive point for the Australians on November 2nd, 1942.⁴⁵ Fresh troops and supplies could now be flown in directly to support the ground offensive, and casualties to be quickly flown out to locations better capable of treating combat wounds.

US forces pushed along the second axis of advance along the Kapa Kapa Trail, specifically the 2-126 Infantry Battalion beginning on October 14th. The conditions on this trail were even worse than on the Kokoda Trail, with terrain and environment being difficult to overcome. There was no Japanese forces present on the trail. Movement was so difficult that on November 2nd MacArthur stopped the advance along this LOO. He arranged for the remainder of the Americans to fly over the Owen Stanleys and land at one of several air strips. A missionary named Cecil Abel had informed the command at Port Moresby of a pre-war airfield on the northern side of the ridge line; it was quickly improved and made C-47 capable. Additional, better airfields were also established in the same area around Pongani on the northern coast. This use of basing constituted a decisive point in the operation, as air mobility removed restrictions on weaponry and equipment that could be brought forward, precluded exhausting soldiers before

⁴³ Milner, *Victory in Papua*, 104.

⁴⁴ Ibid.

⁴⁵ U. S. Army Forces, Pacific, General Headquarters, Historical Division, 0-3, *Chronology of the War in the Southwest Pacific, 1941-1945* (Fort Leavenworth, Combined Arms Research Library, KS: 10.)

they arrived at the battlefield, and avoided the jungle diseases that consumed so many of the men who trekked along the Kokoda and Kapa Kapa trails.

The third axis of advance received the most logistical support. Moving along the coast, the Australian 2/12 Battalion fought and secured Goodenough Island on October 22-23.⁴⁶ Supply ships and transports could move from Milne Bay north as far as Wanagela. Shallow reefs and the risk of Japanese air interdiction prevented these larger boats from moving further north, and supplies were offloaded there onto smaller craft to move around Cape Nelson to Pongani – where they were transferred again into smaller native canoes and row boats for delivery to combat soldiers further along the shore. All this movement occurred at night to avoid being interdicted by Japanese air cover, which made daylight operations incredibly risky. Lieutenant General Robert L. Eichelberger, incoming I Corps Commander, wrote “scarcely a day passed that our troops were not bombed or strafed.”⁴⁷ Japanese efforts to contest the air domain limited MacArthur’s operational reach by degrading the capacity to supply his troops.

Conversely, Allied seizure of the airfields near Kokoda and Pongani also extended the depth of MacArthur’s ground operations. This advanced the fighter line and allowed Allied air to interdict and contest Japanese in the air, land, and sea. Slogging through the muddy, jungle paths of the Kokoda and Kapa Kapa Trails was slow going and costly. Sufficient supplies could not physically be carried by soldiers or Papuan porters to sustain the soldiers or supply them with sufficient ammunition or equipment. Heavy weapons could not be moved over the trails and casualties had to be carried out by native porters the same way they walked in. Aerial resupply became the only feasible means to provide for the troops on the trails. “My campaign in northern Papua is being supported and supplied entirely by air” MacArthur stated.⁴⁸ He knowingly

⁴⁶ Milner, *Victory in Papua*, 110.

⁴⁷ Eichelberger, *Report of the Commanding General Buna Forces on the Buna Campaign*, 19.

⁴⁸ General Staff, *Reports of General MacArthur*, 89.

accepted this logistical risk to his entire campaign. Aircraft could be interdicted, or weather could ground planes for several days at a time that had the potential to stop supplies from reaching troops. This was necessary to maintain tempo. If he chose not to use aerial resupply as the primary means up supporting soldiers, then a much slower tempo would result from massing supplies at points along the trail, requiring significant time and affording the Japanese the opportunity to further delay.

Such precarious lines of supply actually forced the culmination of the Allied attack. On November 19th, the first Allied attack on Gona failed due to a shortage of ammunition.⁴⁹ A stalemate followed with a period of incredibly low morale, critical supply shortages, and casualties from sickness. Eichelberger arrived in New Guinea to take command of I Corps.⁵⁰ MacArthur was becoming angry with a lack of progress and needed Eichelberger to reinvigorate the command. His orders were simple: “I want you to take Buna, or not come back alive...And that goes for your chief of staff too.”⁵¹ Immediately Eichelberger immediately relieved his West Point classmate, Major General Harding, commander of the 32nd Infantry Division, and noted, “the troops were deplorable,” referring to their discipline, health, and equipment.⁵² Recognizing the shattered and exhausted state of men and organization, he took an operational pause, and relieved most senior officers and battalion commanders.⁵³ He also reorganized his forces and sorted through the supply issues. These changes, along with his inspired, front line leadership reinvigorated the American troops.

⁴⁹ MacArthur, *Reminiscences*, 164.

⁵⁰ Duffy, *War at the End of the World*, 168.

⁵¹ Eichelberger, *Our Jungle Road to Tokyo*, 21.

⁵² *Ibid.*, 25.

⁵³ Pike, *Hirohito's War*, 529.

This dangerous logistical situation made MacArthur anxious to increase operational tempo. Risk grew the longer Allied troops were on the trails, as sustaining them became more difficult and they became physically weaker. Malaria, dysentery, dengue fever, and jungle ulcers were all common ailments facing the Allies in the jungles. At one point Eichelberger recalled ordering medics to take the temperature of an entire company, and every soldier had a fever.⁵⁴ Evacuation was not an option, as there would be no friendly troops remaining to fight the Japanese. The jungle and weather were more of a threat to the force than the enemy soldiers. “If the Japanese could not be driven from their comfortable coastal positions, and quickly, the whole Buna Force would meet defeat and death in the swamps. Retreat back over the mountains was impossible.”⁵⁵ There was now no turning back; committed forces could not be withdrawn, and the men were too weak to walk more than a hundred miles back across the Owen Stanleys. So much cost and effort had gone into this operation already that a loss would have been devastating to morale.

Even with new leadership at the front, the advance was still slow. While Gona fell to the Australians on December 9th, 1942, the attacks on Sanananda and Buna had stalled completely. The Australian 8th BDE was re-missioned to support the American 32nd Division’s attack on Buna. Short of tanks, artillery, and other heavy weapons, Allied assaults against well-prepared defensive positions failed, casualties grew, and tempo slowed.⁵⁶ Moreover, Japanese Zeros intercepted shipping containing machine guns and mortars. Kenney believed his Fifth Air Force could provide the needed firepower, telling MacArthur before the campaign began “tanks and heavy artillery can be reserved for the battlefields of Europe and Africa. They have no place in

⁵⁴ Eichelberger, *Our Jungle Road to Tokyo*, 23.

⁵⁵ Ibid.

⁵⁶ Eichelberger, *Report of the Commanding General Buna Forces on the Buna Campaign*, 90-91.

jungle warfare.”⁵⁷ He was wrong. The Fifth Air Force, as well as it performed and as well integrated as it became, could not destroy the Japanese defensive positions. Only tanks and several highly prized 105mm howitzers that had been disassembled and flown over the mountains could break the stalemate.

Eichelberger arranged for a platoon of M-3 tanks to secretly land at night at Hariko and move up the beach at low tide, with aircraft overhead to drown out their engine noise.⁵⁸ They were in position for a surprise attack on December 18th and helped to turn the tide of the battle for Buna, particularly against Japanese defensive positions including log bunkers. By January 3rd, 1943, Buna had been seized and Allied combat power could be focused on Sanananda, which proved to be the toughest of the three objectives. The Allies were unaware the Japanese had anti-tank guns, which destroyed most of the M-3s during this battle.⁵⁹ Eventually, its encirclement completed, Sanananda was captured on January 22nd, 1943.

The official history of the US Army states “the fighting in Papua had been even costlier than had first been thought, and the victory there, proportionate to the forces engaged, had been one of the costliest of the Pacific War.”⁶⁰ In contrast with the simultaneous and more famous fight on Guadalcanal, the odds of an American being killed were three times more likely in Papua.⁶¹ MacArthur learned from this costly victory: “No more Bunas!”⁶² Moreover, he remarked, “Of the nine campaigns I have fought, I have not seen one where conditions were more

⁵⁷ Pike, *Hirohito's War*, 522.

⁵⁸ Eichelberger, *Our Jungle Road to Tokyo*, 44.

⁵⁹ Pike, *Hirohito's War*, 536-537.

⁶⁰ Milner, *Victory in Papua*, 372.

⁶¹ Pike, *Hirohito's War*, 539.

⁶² Harry A. Gailey, *MacArthur's Victory: The War in New Guinea* (New York: Presidio Press, 2004), 47.

punishing of the soldier than this one.”⁶³ 3,095 American and Australian soldiers died in this campaign and 5,451 were wounded.⁶⁴ Unlike Guadalcanal, where the Americans fought from the shore inland, in Papua the Allies were fighting through swamp and jungle toward the coast and were “prisoners of geography” as Eichelberger so aptly phrased it, where conditions were much worse. Fighting overland complicated and stressed logistics without having the advantage of landing supplies from the sea. Of the 10,825 Americans that Eichelberger commanded, 9,688 were casualties with 7,125 due to sickness and disease alone, nearly 90%.⁶⁵ The Australians had similar numbers.

Frequent critical critiques of MacArthur during this campaign focus on his lack of understanding the operational environment, and excessively pushing his commanders to attack with little regard for the lives of soldiers. There is some truth to the former, in that MacArthur did not have an accurate understanding of his current operations. In a letter from Eichelberger, he wrote, MacArthur’s “knowledge of details was so faulty that his directives to me, e.g. a letter of December 24th spoke of attacking ‘by regiments, not companies, by thousands, not hundreds’ indicated that he knew nothing of the jungle and how one fights there.”⁶⁶ As for the issue of overly aggressive attacks, MacArthur’s understanding did suffer from poor intelligence: Official estimates of enemy strength at Buna were 300 soldiers, but there were actually 3,000; at Sanananda, these numbers were 500 and 5,000, respectively.⁶⁷ The complexity of well camouflaged and protected Japanese defenses were underestimated. These intelligence failures, as well as the staunch resistance of the Japanese, slowed and delayed Allied advances and produced

⁶³ Duffy, *War at the End of the World*, 182.

⁶⁴ Milner, *Victory in Papua*, 371.

⁶⁵ Ibid.

⁶⁶ William Manchester, *American Caesar: Douglas MacArthur 1880-1964* (Boston: Little, Brown and Co., 1978), 326.

⁶⁷ Eichelberger, *Our Jungle Road to Tokyo*, 61.

great frustration. The fact that MacArthur never personally went to Buna, and returned to Australia before the campaign came to an end, only exacerbated the situation.⁶⁸

Many historians do not separate MacArthur's leadership and interpersonal skills from the decisions he made as an operational artist. From the standpoint of operational art, though, these criticisms are beside the point. Being present at Buna and trekking along the Kokoda Trail, for example, would have certainly shown the soldiers that the general cared about them, likely raised their morale, and given MacArthur a much more informed understanding of the tactical environment. But as the Commander of the Southwest Pacific Area, such would not have helped with the larger campaign or preparation and planning for the next campaign. In fact, MacArthur understood the operational environment better than most. His effort to push tempo reflected his understanding that the Japanese maintained the ability to reposition and reinforce their elements using destroyers and submarines under the cover of darkness. Seizing objectives before they could be significantly reinforced was critical. MacArthur also understood that the longer his forces were on the trails and pinned by restrictive terrain in the swamps, the more casualties he would take from disease. A high tempo may have caused more combat casualties, but a loss of tempo certainly would have resulted in many more casualties from disease as was indicated by the final casualty numbers reported earlier. Additionally, MacArthur understood that after Pearl Harbor and the fall of the Philippines, the Allies needed a victory in the Pacific to boost morale and the Papuan Campaign was that first victory.

Operation Cartwheel and MacArthur in the Huon Peninsula

Buna and Gona provided Allied forces with critical bases from which they could project power and threaten significant Japanese locations to secure a foothold on the northern coast of Papua.⁶⁹ Along with Halsey's success on Guadalcanal, they checked Japanese advances and

⁶⁸ Manchester, *American Caesar*, 327.

⁶⁹ MacArthur, *Reminiscences*, 100.

allowed for long-range planning with more ambitious goals. For MacArthur, the most immediate of those goals would be Rabaul. And whereas his previous campaign had been characterized by limited depth, slow tempo, and high expenses in men and material, the next would show his improving prowess as an operational artist.

Throughout the Papuan Campaign the Joint Chiefs in Washington, DC, continued to develop future operations in the Pacific. After the victory at Midway, a strategic opportunity presented itself to seize the initiative. The Joint Chiefs had specified three tasks in July 1942. One was seizing Tulagi and Guadalcanal, achieved by forces under Halsey as of early 1943. The other two tasks fell to MacArthur's command – encompassing units from both Southwest Pacific Area and the South Pacific Area – including to “capture the remainder of the Japanese-held Solomons and of Lae, Salamua and other points on the north-east coast of New Guinea,” and “the seizure and occupation of Rabaul itself, and of adjacent positions.”⁷⁰ At the Casablanca Conference in January of 1943, though Allied plans for the remainder of the year emphasized European operations, they included plans to capture Rabaul.⁷¹

Situated at the eastern tip of New Britain in the Bismarck Archipelago, Rabaul was the largest Japanese base in the Southwest Pacific Area and could project air power throughout the Solomon Island chain and across the Solomon Sea against the northern coast of New Guinea. It is 440 nautical miles from the New Guinea coast and 585 nautical miles from Guadalcanal, allowing the Japanese to use land-based bombers to support their operations.⁷² Rabaul had been captured from a small contingent of Australians early in the war and the Japanese had expanded its capacity, in particular by constructing five major airfields.⁷³ The port had four harbors and

⁷⁰ Ibid., 5.

⁷¹ Ibid., 8.

⁷² Ibid., 2.

⁷³ Eichelberger, *Our Jungle Road to Tokyo*, 90.

repair facilities, and was the largest logistical base which supported the Japanese fleet and all the ground forces forward.⁷⁴ All the supplies that went to New Guinea or the Solomons went through Rabaul, which also supported Japanese attempts to sever the sea lines of communication between the continental US and Hawaii with Australia and New Zealand. Modern doctrine defines a center of gravity as the “source of power that provides moral or physical strength, freedom of action, or will to act.”⁷⁵ For these reasons, Allied planners understood Rabaul to be the operational center of gravity in the South Pacific and Southwest Pacific Areas.

The Joint Chiefs ordered MacArthur and Halsey to accomplish several tasks, including the seizure of individual objectives at Lae, Salamua, Finschhafen, and Madang, the occupation of New Britain, and seizure of the Solomons north to Bougainville.⁷⁶ With the Joint Staff simply outlining basic objectives, MacArthur continued to refine his plan as an operational artist and arrange operations by identifying intermediate objectives, overlaying his lines of operation, and working with Halsey to phase and sequence them without overstretching his operational reach and avoiding culmination. The basic framework of the plan involved two simultaneous advances on mutually supporting axes of advance from Papua and Guadalcanal, converging on Rabaul. The general’s plan needed to involve operations in the land, air, and maritime domains to be successful against an enemy contesting each. Elkton III was the third version of MacArthur’s plan, altered to align the means he commanded with the ends and ways to accomplish the Joint Staff’s tasking. After approval it was code named Cartwheel and released on April 26th, 1943.

MacArthur structured Cartwheel into three phases and multiple subphases. Actions by the Southwest Pacific forces were phases I, II, and III, while the South Pacific forces executed phases

⁷⁴ Gailey, *MacArthur’s Victory*, 100.

⁷⁵ US Department of Defense, Joint Staff, *Joint Publication (JP) 5-0, Joint Planning* (Washington, DC: Government Printing Press, 2017), IV-23.

⁷⁶ John Miller, Jr., *Cartwheel: The Reduction of Rabaul*, (Washington, DC: Office of the Chief of Military, 1959), 19.

A, B, and C (see Figure 3, page 39). Cartwheel called for thirteen invasions and was tentatively scheduled for eight months in duration, but the timetable was somewhat flexible and scheduled to begin on June 1, 1943.⁷⁷ However, major operations would not begin until June 30th due to delays moving troops.⁷⁸

The operation called for simultaneous amphibious landings on Kiriwina and Woodlark Islands in phase I and simultaneous infiltration from Guadalcanal to New Georgia or Santa Isabel Island in phase A. Phase I was to last two months. Kiriwina and Woodlark Islands were important for basing. These islands are approximately 270 miles from Rabaul and 300 miles from Bougainville, allowing both ground-based fighters and medium bombers to strike targets directly.⁷⁹ This followed MacArthur's theory of action by advancing the "fighter line" to escort bombers onto their targets.⁸⁰ Additionally, this air cover would allow for greater control of the maritime domain by further contesting the Solomon and Bismarck Seas. These islands were also not occupied by the Japanese, increasing the speed and reducing the cost and risk of establishing airfields there. MacArthur understood the compounding effects of controlling critical basing on land, and their effect on other domains. To enable phase I, the South Pacific command planned to land a small force at New Georgia and/or Santa Isabel (phase A) with the intention of drawing Japanese attention to the Solomons while phase I was ongoing.⁸¹ Additionally, plans called for heavy bombers to attack Rabaul, Bougainville, and Buka to temporarily neutralize Japanese air forces and allow these ground actions to take place.⁸² Collectively, phase I and A created multiple dilemmas for the Japanese in all domains.

⁷⁷ Ibid., 27.

⁷⁸ Ibid., 30.

⁷⁹ Ibid., 26.

⁸⁰ MacArthur, *Reminiscences*, 165.

⁸¹ General Staff, *Reports of General MacArthur*, 117.

⁸² Miller, *Cartwheel, The Reduction of Rabaul*, 26.

Phase II and B were generally planned to be executed sequentially, not simultaneously. However, each area would act in support of the other through synchronized operations across all domains. Phases II and B were expected to be approximately four months in duration. Following the South Pacific's actions in phase A, their ground forces would take an operational pause allowing them to plan and prepare for future operations, while supporting the Southwest Pacific's attack up the Huon Peninsula with naval and air power. The South Pacific forces would not conduct any major operations and would instead support the Southwest Pacific forces' attack to seize Lae in II(a), Salamaua and Finschhafen II(b), and Madang II(c).⁸³ Lae was the major objective for basing reasons, with a harbor and access to the Markham Valley where suitable terrain existed to build additional airfields. Salamaua was a deception to allow for increased tempo to seize Lae, while Finschhafen was critical to set conditions for phase III while also offering a port.⁸⁴ Phase B included the seizure of New Georgia, Fasi in the Shortland Islands, and Buin on the southeastern approach on Bougainville following the conclusion of II(b). Phase B used aircraft from Kiriwina and Woodlark Islands to support their operations.⁸⁵ These objectives extended MacArthur's lines of operation, but also extended his operational reach by including harbors crucial to supplying troops over longer lines of communication.

Cape Gloucester and Arawe were the major objectives in phase in III(a), and advances to Gasmata and Talasea in III(b) by Southwest Pacific forces. Seizing these locations on New Britain would deny the Solomon Sea to Japanese naval forces by controlling the Vitiaz Strait across from Finschhafen. Almost simultaneously, South Pacific forces would capture Kieta and then Buka on Bougainville in phase C.⁸⁶ After these operations were complete, air power to

⁸³ Ibid., 27.

⁸⁴ General Staff, *Reports of General MacArthur*, 120-125.

⁸⁵ Miller, Cartwheel, *The Reduction of Rabaul*, 26.

⁸⁶ General Staff, *Reports of General MacArthur*, 125.

include light bombers would pummel Rabaul and Kavieng to soften the targets before amphibious landings would take place to seize Rabaul, the operation's targeted endstate.⁸⁷

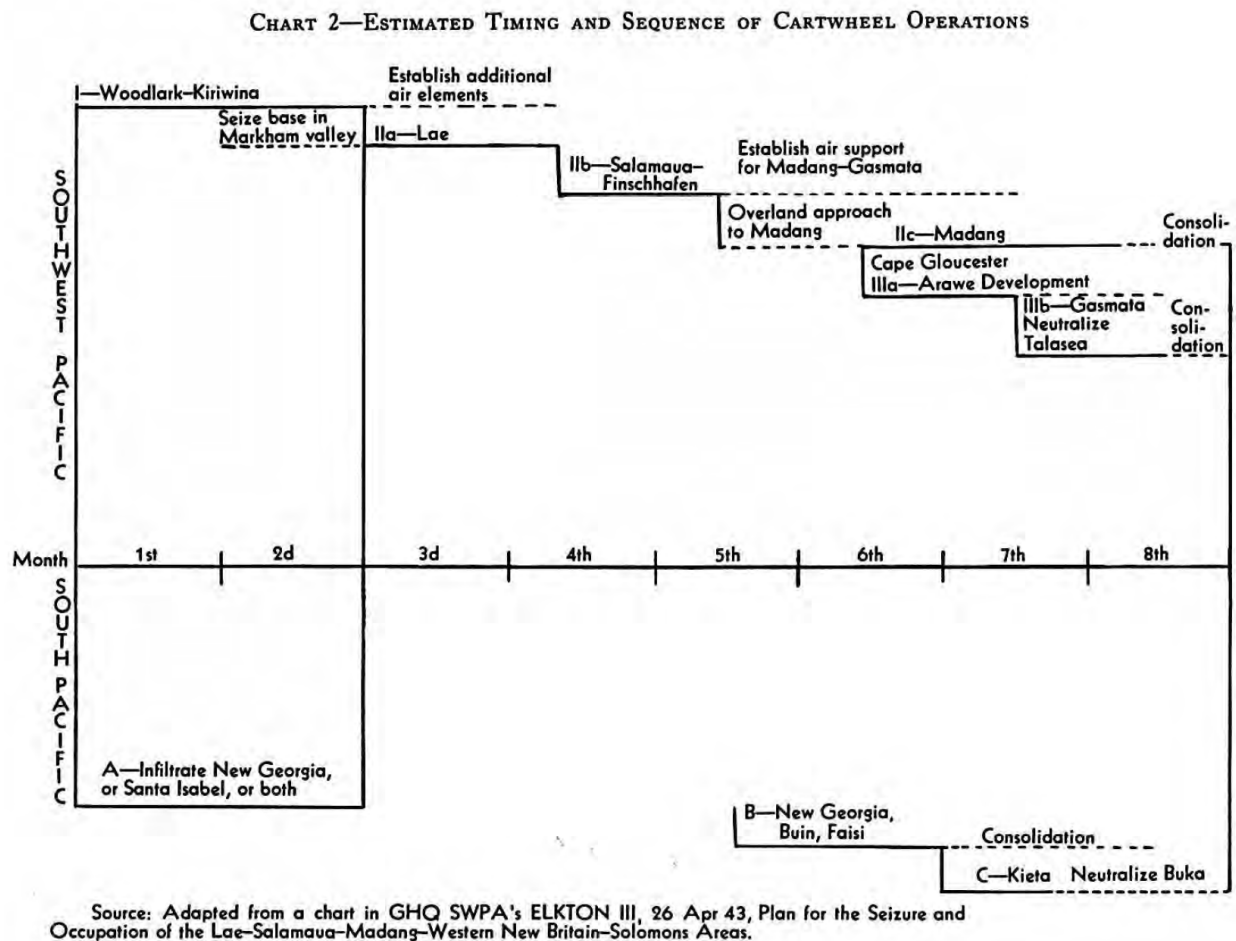


Figure 2. Estimated Timing and Sequence of Cartwheel Operations. John Miller, Jr. *Cartwheel: The Reduction of Rabaul*, Center of Military History, accessed April 1st, 2019, https://history.army.mil/html/books/005/5-5/CMH_Pub_5-5.pdf.

The rather ambiguous command relationship directed by the Joint Chiefs between MacArthur, naval units, and Halsey's forces created significant turmoil for the general. He had urged the Joint Chiefs to appoint a single commander with all control. Ultimately, on March 28th the Joint Chiefs agreed that Halsey's operations in the Solomons would be under MacArthur's

⁸⁷ Miller, *Cartwheel: The Reduction of Rabaul*, 27.

“general directives.”⁸⁸ Practically, MacArthur would only control Halsey’s forces in the Solomons, and only those naval vessels the Joint Chiefs had specifically allocated for his campaign. All other naval assets remained under Nimitz, as the Navy was reluctant to give up assets to an Army commander. Though MacArthur strongly opposed this arrangement, he and Halsey enjoyed a friendly relationship, and they coordinated with a loose command structure.⁸⁹

Two significant events took place between the conclusion of the Papuan Campaign and the beginning of Cartwheel. The first was the defense of Wau from a Japanese attack in late January of 1943. Wau was a critical objective for both Japanese and Allied forces, especially from a basing perspective, as it had an airfield as well as land suitable to construct additional ones.⁹⁰ It would prove essential to operations supporting MacArthur’s drive up the New Guinea coast, with the airfield used to support Allied attacks on Lae and Salamua and to defend Port Moresby. This battle marked the last major Japanese offensive in New Guinea. The second major event was the Battle of the Bismarck Sea in the beginning of March 1943, when Kenney massed over 100 aircraft to destroy a 16-ship convoy carrying 7,000 Japanese soldiers.⁹¹ The battle was a decisive point, as the Japanese could no longer reinforce the area by surface vessels as they had at Buna and Gona (except for submarines or destroyers moving at night), which significantly degraded their sustainment capabilities.⁹² Moreover, denied the ability to reinforce, resupply, or reposition forces by sea, Japanese forces became reactive instead of proactive, and were forced to move overland, dramatically slowing their tempo.

⁸⁸ Ibid., 18.

⁸⁹ MacArthur, *Reminiscences*, 173.

⁹⁰ Charles Bateson, *The War with Japan: A Concise History* (Ann Arbor: Michigan State University Press, 1968), 250.

⁹¹ Duffy, *War at the End of the World*, 198.

⁹² General Staff, *Reports of General MacArthur*, 111.

The amphibious landings of June 30th at Kiriwa and Woodlark Islands, Nassau Bay, and by Halsey's South Pacific forces at Vanganu and Rendova Harbor, are all impressive examples of simultaneous maneuver. Constituting phases I and A, each operation in itself required complicated coordination between ships, planes, and ground forces. Executing all of them on the same day limited the combat power available to each landing, but also required the enemy to split his air support in opposition to the landings.

The first action for Cartwheel was on June 21st when a small unit of Marines landed at Segi Point on the southeastern tip of New Georgia as part of Phase A. This was followed by the main body of the 43rd Division that landed on June 30th at Vanganu Island and Rendova Harbor, in line with Elkton III's timeline.⁹³ All landings went well with little opposition ashore, but were met with an intense enemy air and naval action. The 43rd attacked Munda Airfield in a hard-fought battle on July 8th and with the 25th and 37th Divisions supporting, seized it on August 5th. Munda was critical for two reasons. First, it was used by the Japanese to refuel planes enroute from Rabaul to attack Henderson Field on Guadalcanal; denying it to the Japanese would protect basing and material. Secondly, it would be needed for action against Bougainville later in the campaign, and was an important objective in Halsey's lines of operation: without Munda, only carrier-based fighters would be able to support an attack on Bougainville.⁹⁴ The Japanese appeared to focus their resistance on defending the attack onto New Georgia, attacking with over 300 aircraft and precipitating several naval engagements; these cost the Japanese over 50% of their aircraft as well as several cruisers and destroyers.⁹⁵ This operation differed from the original timeline that was not intended to complete the seizure of New Georgia until phase B, but MacArthur recognized an opportunity to increase his tempo and committed three Divisions to an

⁹³ Ibid., 118.

⁹⁴ Miller, *Cartwheel: The Reduction of Rabaul*, 11.

⁹⁵ General Staff, *Reports of General MacArthur*, 118.

operation that only planned for one. Although the campaign lasted over three months, culminating with the capture of a critical airfield at Vella Lavella on October 7th, the action to seize the island was shorter than it would have been if the original plan had not been modified. Vella Lavella provided the necessary airfield and allowed Allied forces to bypass Kolombangara, an island with a high enemy concentration, one of the original operations in Cartwheel.⁹⁶

Phase I under MacArthur's direct command began on June 23rd when advanced engineer elements landed on both Woodlark and Kiriwina Islands. Alamo Force, an entirely American command under Lieutenant General Walter Krueger, came ashore on June 30th. These were unopposed landings with no Japanese on the islands. MacArthur's staff knew this, but did not tell the troops in an effort to exercise their amphibious operations for the first time under combat conditions in the Southwest Pacific and build experience. Airstrips were quickly constructed, and the 67th Fighter Squadron was ready on Woodlark by July 24th, with the 79th Royal Australian Air Force (RAAF) Fighter Squadron ready on Kiriwina by August 18th.⁹⁷ Meanwhile, the 162nd Infantry Regiment's landing at Nassau Bay was conducted over a nine-day period. They then fought their way to the northwest, linking up with the Australian 17th Infantry Brigade on July 2nd.⁹⁸ The Australian troops had traveled by foot all the way from Wau, and the beachhead at Nassau Bay much improved their operational reach by reducing reliance on aerial resupply and significantly shortening the distance for ground resupply. This base also facilitated the arrival of heavy weapons and artillery, both of which would be essential to destroying Japanese defensive positions. There was almost no interference to the Kiriwa and Woodlark actions except for a

⁹⁶ Miller, *Cartwheel: The Reduction of Rabaul*, 186-187.

⁹⁷ Ibid., 117.

⁹⁸ Miller, *Cartwheel: The Reduction of Rabaul*, 66.

single bombing run, and only light resistance at Nassau Bay.⁹⁹ After this landing, the surviving Japanese withdrew to Salamua, pursued by the Allied forces.

Shaping the battlefield for the transition to phase II, Kenney executed a series of bombing missions at Japanese air fields that could be used to repel the pending attack on Lae and Salamua. Targeting Wewak, Hansa Bay, and other smaller airfields in late August, Kenney's attacks destroyed over 350 aircraft, mostly bombers, and killed 1500 aircraft ground maintenance personnel.¹⁰⁰ Along with the loss of trained pilots, the Japanese lost a significant capability to intercept Allied movements and repel attacks; the cost for the Allies was only 18 aircraft.¹⁰¹ This degraded Japanese air capability, along with the advance of Allied ground forces on Salamua, set the conditions to attack Lae directly. These bombing attacks made it nearly impossible for the Japanese to do any more than contest the air domain, enabling ground maneuver and making logistical movements more secure.

MacArthur had the advantage of a central position after securing eastern Papua. Although not an objective of Cartwheel, MacArthur saw its advantage as his operational approach developed. From there, his air element could mass on the Japanese right in Wewak, and then on Rabaul, in sequential operations that each would achieve local overmatch, thereby minimizing Allied aircraft losses. However, these came at the risk of taking significant losses in hard-to-replace aircraft. But massing his air force was a risk Macarthur was willing to take, and it proved to be the right decision. The spoiling attacks at Wewak and later, at Rabaul, succeeded in part because they both surprised the enemy and were able to destroy Japanese planes on the ground. Over the course of two days at Wewak, "we had destroyed on the ground and in the air practically the entire Japanese air force in the Wewak area, had burned up thousands of drums of gasoline

⁹⁹ General Staff, *Reports of General MacArthur*, 118.

¹⁰⁰ Kenney, *General Kenney Reports*, 284.

¹⁰¹ Ibid.

and oil...It was doubtful the [Japanese] could have put over a half dozen aircraft in the air from all four airdromes combined.”¹⁰²

Salamua was the next objective in phase II(b). Salamua itself was of no operational or strategic value. Its only airfield was out of action. This was a shaping operation, a feinting attack on Salamua that began on July 1st with the Australian 3rd Division’s advance, designed to divert enemy forces away from Lae, which was MacArthur’s primary objective.¹⁰³ MacArthur believed Lae was vital for several reasons. It contained a harbor that could be improved and used by the Allies as they continued up the New Guinea coast, essential to extending operational reach and avoiding culmination. A more expedient logistical node at Lae would also allow Allied forces to increase their tempo maneuvering to other intermediate objectives in the area. Additionally, several trails leading to other Japanese strong points further up the coast converged at Lae. The port was also an entrance to the Markham Valley, which contained many flat areas suitable for the construction of airfields.¹⁰⁴ “The main purpose of the Allied attack on this small isthmus on the east coast of New Guinea was to siphon off enemy strength from his Lae defenses and lure his troops and supplies southward to be cut to pieces on the Salamua front.”¹⁰⁵ The deception was successful, and of the 10,000 Japanese troops in the Lae-Salamua area, the majority were repositioned to Salamua.¹⁰⁶ The Allies seized Salamua on September 11th.¹⁰⁷ While these actions were taking place, preparations and movements were underway to seize Lae.

¹⁰² Kenney, *General Kenney Reports*, 279.

¹⁰³ Miller, *Cartwheel: The Reduction of Rabaul*, 200.

¹⁰⁴ MacArthur, *Reminiscences*, 178-179.

¹⁰⁵ General Staff, *Reports of General MacArthur*, 121.

¹⁰⁶ Miller, *Cartwheel: The Reduction of Rabaul*, 194.

¹⁰⁷ General HQ, *Chronology of the War in the Southwest Pacific*, 13.

Two key factors determined the timing of operations against Lae. One was the expansion of port facilities at Buna, now serving as the staging area for the 9th Australian Division that landed near Hopoi Beach, about eighteen miles east of Lae.¹⁰⁸ The other factor was the weather, because clear skies were necessary to support the landings, as well as to conduct what would be the first parachute assault in the Pacific Theater. Kenney determined the dates of the attack in consultation with his weather teams, and decided that the best window of time for the operation would be between September 4th and 7th.¹⁰⁹

The Allies would envelope Lae. The plan called for an amphibious landing by Major General Wooten's 9th Australian Infantry Division east of Lae. This division was supported by the 2nd Engineer Special Brigade which piloted all the landing craft. Also in support were five destroyers for protection of the naval convoy and to bombard the beaches before the first assault wave went ashore.¹¹⁰ In a well-executed landing, the division went ashore between September 4th and 6th and began its movement west toward Lae. Making several river crossings, the 9th Division closed in on the its objective on September 16th.¹¹¹

Farther west, the plan called for the seizure of the old airfield at Nadzab. Colonel Kinsler's 503rd Parachute Infantry Regiment boarded 96 C-47s in Port Moresby on September 5th, one day after the initial landing by the 9th Division.¹¹² These transport aircraft rallied with over 200 fighters and bombers enroute to Nadzab. The 503rd jumped in and seized the airfield with tasks of: capturing Nadzab; establishing a road block across the Markham Valley Road to

¹⁰⁸ General Staff, *Reports of General MacArthur*, 122.

¹⁰⁹ Kenney, *General Kenney Reports*, 288.

¹¹⁰ Miller, *Cartwheel: The Reduction of Rabaul*, 206.

¹¹¹ *Ibid.*, 210.

¹¹² *Ibid.*, 208.

prevent enemy reinforcement; and preparing the landing strip.¹¹³ Australian and American engineers quickly repaired the airfield. Major General George Vasey's Australian 7th Division was then transported by air from Port Moresby over the Owen Stanleys to Nadzab, placing one division to the east and one division to the west of Lae.¹¹⁴ The 7th Division met the 9th on September 16th and captured Lae.

The Japanese never expected an airborne invasion of Nadzab and consequently did not have any forces positioned to resist it. With a contingent of cargo planes, an entire division moved to a location it otherwise could not have secured without first seizing Lae. This came with significant risk. Since air power would be the only way to resupply, reinforce, or evacuate, the unit was vulnerable during this operation. Bad weather or incorrect intelligence on enemy forces could have proven disastrous. But this ability to extend the depth of the battlefield allowed MacArthur to conduct envelopments of most objectives on the Huon Peninsula instead of frontal assaults, which surely reduced casualties and preserved his force.

With a foothold on the eastern tip of New Guinea and increasing control of the skies, MacArthur could move faster than the enemy. By forward positioning fighters at Wau as well as Kiriwina and Woodlark Islands, Japanese sea lines of communication in the Solomon Sea became dangerous to transit as the Allies attempted to dominate the air and sea domains. This prevented the rapid movement of Japanese troops by water and required marches overland, slowing Japanese tempo and reducing their endurance as well as reach. It also provided the Allies the benefit of moving much faster by sea compared to Japanese forces, as well as sustaining those forces by water, both of which increased operational reach and tempo.

Consequently, ground forces seized Lae faster than anyone at MacArthur's headquarters had expected. With Lae in Allied control, and new intelligence reports that the Japanese 20th

¹¹³ 7th ID OPORD #5: "Operation Outlook," Combined Arms Research Library, Fort Leavenworth, KS, 1.

¹¹⁴ Duffy, *War at the End of the World*, 242.

Division was moving overland to reinforce Finschafen (a port on the eastern tip of the Huon Peninsula defended by 1,000 soldiers), MacArthur made a deliberate decision to move up his date and attack Finschafen, part of phase II(b).¹¹⁵ Originally intended for mid-October, it instead occurred on September 22nd. By attacking before Japanese reinforcements arrived, he increased the pace of his own operation and likely reduced casualties. Moreover, the experience of many previous landings gave MacArthur and his staff the flexibility to modify his plans and integrate the required air, land, and naval forces on short notice. This was not without risk however. Japanese bombers were located on New Britain, within sixty miles of the landing site, and Kenney could not guarantee air cover for the operation.¹¹⁶

In a supporting effort to seize Finschhafen, the Australian 9th Division moved inland and northwest through the Markham River Valley to first secure Kaiapit on September 19th, and then Gusap on October 4th.¹¹⁷ Along with Nadzab, these locations were recognized as important bases that provided good airfields for attacks further up the New Guinea coast, as well as to support scheduled operations across the Vitiaz Straights to New Britain. Simultaneously with the 9th Division's advance, 20th Brigade from the 7th Division made a highly contested landing just north of Finschhafen on September 22nd, securing the port city on October 2nd. An intense counter-attack was repelled between October 16th and 20th.¹¹⁸ A road was then built from Lae to Nadzab, and completed by December, which alleviated the resupply task from the Air Corps, freeing those planes for future operations.¹¹⁹ With these two simultaneous thrusts, one along the coast and one

¹¹⁵ Miller, *Cartwheel: The Reduction of Rabaul*, 214.

¹¹⁶ Duffy, *War at the End of the World*, 247.

¹¹⁷ General Staff, *Reports of General MacArthur*, 125.

¹¹⁸ Perry, *The Most Dangerous Man in America*, 241.

¹¹⁹ Miller, *Cartwheel: The Reduction of Rabaul*, 213.

inland, the Huon Peninsula had been bisected, phase II(b) was complete, and airfields and a key port secured in preparation for an assault on New Britain and to close the Vitiaz Straits.

While MacArthur's forces on the Huon Peninsula consolidated their gains and worked to improve their logistic capability, shaping operations to support phases II(c) and B were underway. Kenney's 5th and 13th Air Forces began to attack Rabaul and Buka from mid-October to early November.¹²⁰ These bombing raids were supported with fighters from the previously secured Kiriwina and Woodlark Islands. Most notably, Kenney massed 349 aircraft for a strike on Rabaul on October 12th, similar to his attacks on Wewak in preparation for the attack on Lae.¹²¹ Air Forces from the Southwest Pacific Area shielded Halsey's movements as he landed at Mono Island on October 27th, Choiseul on October 28th, and – his main effort – at Torokina (Empress Augusta Bay) on the island of Bougainville on November 1st.¹²² This was a change in the original concept of taking Kieta and Buin, but was altered due to intelligence reports of Japanese troop concentrations.¹²³ With a foothold on Bougainville, Allied forces could use airfields within 250 miles of Rabaul, within range of land-based fighter aircraft (which would then escort the bombers all the way to Rabaul).

To continue across the Vitiaz Straits, MacArthur needed the airfields at Lae, Finschafen and in the Markham Valley completed for use by the fighters in order to extend his reach and depth. Since the amphibious assault force would be vulnerable to Japanese air attack, fighter presence was essential. Attacks to Arawe and Cape Gloucester had been planned for November 20th, but the airfields were not finished in time and operations were pushed back to December. Meanwhile, the Japanese moved considerable numbers of aircraft into theater and threatened the

¹²⁰ General Staff, *Reports of General MacArthur*, 128.

¹²¹ Kenney, *General Kenney Reports*, 313.

¹²² MacArthur, *Reminiscences*, 181.

¹²³ General Staff, *Reports of General MacArthur*, 128.

New Britain landings.¹²⁴ Allied preparatory bombardments of New Britain began in early December, to weaken enemy positions and to deceive the enemy as to where forces would come ashore. Arawe was never bombarded until December 15th, when the 112th Cavalry Regiment landed and secured the area quickly.¹²⁵ The Japanese responded harshly with air attacks, committing over 350 sorties in the three days following the landings.¹²⁶ Then on December 26th, two combat teams from Major General William Rupertus' 1st Marine Division landed at Cape Gloucester to seize two airfields defended by a division-size element of Japanese troops.¹²⁷ Like Arawe, ground resistance was overcome, but Japanese air attacks were persistent until Allied fighters had attrited the enemy force.¹²⁸

Sensing an opportunity and deviating from the original plan, MacArthur maintained his momentum after the tactical success on New Britain and attacked Saidor on the northern coast of the Huon Peninsula. With Japanese forces retreating under heavy Allied pressure, a rapid amphibious landing at Saidor cut off the withdrawal.¹²⁹ The success at Cape Gloucester allowed MacArthur to use forces originally planned as reserves to support the 1st Marines' assault on Saidor instead, showing the flexibility and rapid decision-making cycle that allowed for this quick tempo. By using depth and jumping ahead of enemy forces on the Huon Peninsula, MacArthur cut the enemy defenses in two, dividing the Japanese 18th Army. Japanese forces decided not to assault Saidor, and instead marched 200 miles west through the jungle to Madang.¹³⁰ Although

¹²⁴ Ibid., 129.

¹²⁵ Miller, *Cartwheel: The Reduction of Rabaul*, 284.

¹²⁶ Ibid., 131.

¹²⁷ First Marine Division, "Special Action Report: Cape Gloucester Operation, Annex C."

¹²⁸ General Staff, *Reports of General MacArthur*, 131.

¹²⁹ Ibid., 132.

¹³⁰ Miller, *Cartwheel: The Reduction of Rabaul*, 304.

Allied troops did not react fast enough to block the escape of these forces from the peninsula, the jungle sapped the enemy strength and troop numbers the way it had the Americans in the Papuan campaign, evidenced by the hundreds of emaciated bodies of Japanese soldiers found on jungle trails and mountain ridges.¹³¹

With the capture of Saidor on January 2nd, the Huon Peninsula was under Allied control.¹³² The landings on New Britain as well as Bougainville had closed the Solomon Sea to Japanese surface ships, and Allied airfields were now within easy reach of Rabaul. Strong concentrations of Japanese troops had been bypassed and little could be done to resupply or reposition them due to Allied air and naval dominance, leaving them to conduct long, strenuous marches with a small chance of reaching friendly territory.

Overall, Cartwheel demonstrated MacArthur's finesse in employing operational depth. Major operations on the Huon Peninsula all had multiple avenues of approach for each objective, with the exception of Nadzab. Coupled with a flexible air component, the enemy was always faced with multiple dilemmas from multiple domains while an operation was underway. Using deception, MacArthur was able to prevent the enemy from predicting his next move.

Cartwheel saw several significant changes to its broad plan. Only ten of the originally planned thirteen sub-operations were executed, the others being Kolombangara (New Georgia island chain), Kavieng, and Rabaul. In particular, the Joint Staff determined that Rabaul and Kavieng should be bypassed, thereby changing the endstate of the operation.¹³³ Quite simply, Rabaul and Kavieng were now unnecessary to seize. Allied airpower had neutralized the harbors and airfields that allowed those Japanese bases to project power, and were no longer threats. Thereafter Allied forces took an indirect approach, landing in the Admiralty Islands to the

¹³¹ General Staff, *Reports of General MacArthur*, 132.

¹³² *Ibid.*, 300.

¹³³ Perry, *The Most Dangerous Man in America*, 243.

northwest on February 29th and Emiru Island to the north on March 20th, completely isolating Rabaul; it was never attacked by ground forces.¹³⁴

Conclusion

The two case studies examined in this monograph show MacArthur acting as an operational artist and arranging operations. Papua proved to be a long operation with limited logistical support, frustrated movement speeds and very limited maneuver. The Japanese advance in 1942 culminated, facilitating MacArthur's defense of Port Moresby and the counterattack along the Kokoda Trail. The lack of tempo and depth in the campaign contributed to the incredible casualty rates, mostly from disease, fighting along the Kokoda Trail with limited firepower. The culminating attacks on Buna, Gona, and Sanananda could only be accomplished with the arrival of artillery and armor. Air power alone could not overcome the lack of firepower supporting the light infantry. The Japanese also used interior lines to reposition forces and defend against sequential attacks. Rough terrain limited cross-coordination between friendly units and any ability to flank or envelope the enemy. MacArthur understood the conditions on the ground at the operational level and took the appropriate actions of pushing tempo and replacing leadership when needed. Eichelberger's reinvigoration of the ground troops in particular played a key role in successful assaults to seize critical airfields on the northern coast. The Allies thus achieved victory against the Japanese in all domains, and secured vital basing for follow-on campaigns. MacArthur learned from the problems encountered in Papua and applied those lessons in his next campaign.

Operation Cartwheel demonstrated MacArthur's potential when he had significant means with which to prosecute his operations in the Southwest and South Pacific Areas. He used simultaneity, depth, and tempo successfully throughout the operation. While 1942 had been a tough year for the Allies in the Pacific, 1943 saw a dramatic reversal with MacArthur's major

¹³⁴ General Staff, *Reports of General MacArthur*, 133-135.

victories. Coordinating with Halsey and the South Pacific Command, MacArthur conducted complementary attacks sequentially and simultaneously to overwhelm the enemy. The use of air power in shaping operations to prevent enemy aircraft from interfering with ground operations, as well as interdicting maritime traffic, crucially assisted ground operations and demonstrates how MacArthur understood the cumulative effect of operations across all domains. Air power increased the depth of the battlefield as airfields were built sequentially. As a result, rapid air transport enabled MacArthur to increase his tempo and move faster than the enemy could predict or react. Instead of attacking every enemy position, MacArthur isolated powerful enemy concentrations of troops and attacked weakly defended ones to seize ports and airfields critical for basing. Bypassing enemy formations increased tempo, depth, and reduced friendly casualties. Finally isolating Rabaul and preventing any significant interference from the forces there, MacArthur was able to springboard along the northern coast of New Guinea leaping great distances to Aitape, Hollandia, Wakde, Biak and eventually the Vogelkop Peninsula.

Applying the concepts of arranging operations, lines of operation, phasing, basing, operational reach, and objectives to these campaigns is important for modern operational artists and joint staff planners to analyze. Although MacArthur would not be familiar with modern doctrinal terminology, he effectively applied these ideas while planning and providing guidance to his staff. Modern joint doctrine has described how operational artists arrange operations and these same factors can be overlaid on any campaign map for present and future conflicts. Geographically, with President Obama's "pivot to the Pacific," a renewed focus has been placed on the recently renamed Indo-Pacific Combatant Command. The area is full of similar islands with rugged terrain, hot temperatures, heavy rains, and disease. Similar operations in the future would require overcoming these same challenges.

Geography is only one aspect of why modern planners should look to these case studies. Future great power conflicts will pose near-peer militaries against each other. It is not difficult to imagine conflicts when Allied powers do not outnumber the enemy and decisions must be made

to attack a variety of objectives simultaneously, or mass combat power on a single objective to achieve overmatch in combat power only for the duration of the operation. Force projection and securing sea lines of communication through the Pacific or other theaters will be a challenge the way it was in 1942. Penetrating enemy Integrated Air Defense Systems will be required to strike deep targets and shape operations for the close fight. Moving faster, using deception, and a good source of intelligence will continue to allow planners to outmaneuver the enemy and maintain a tempo of operations with which the enemy cannot keep pace. Although the technology has changed from World War II, the need to plan with these principles of simultaneity, depth, and tempo are still essential for a decisive victory.

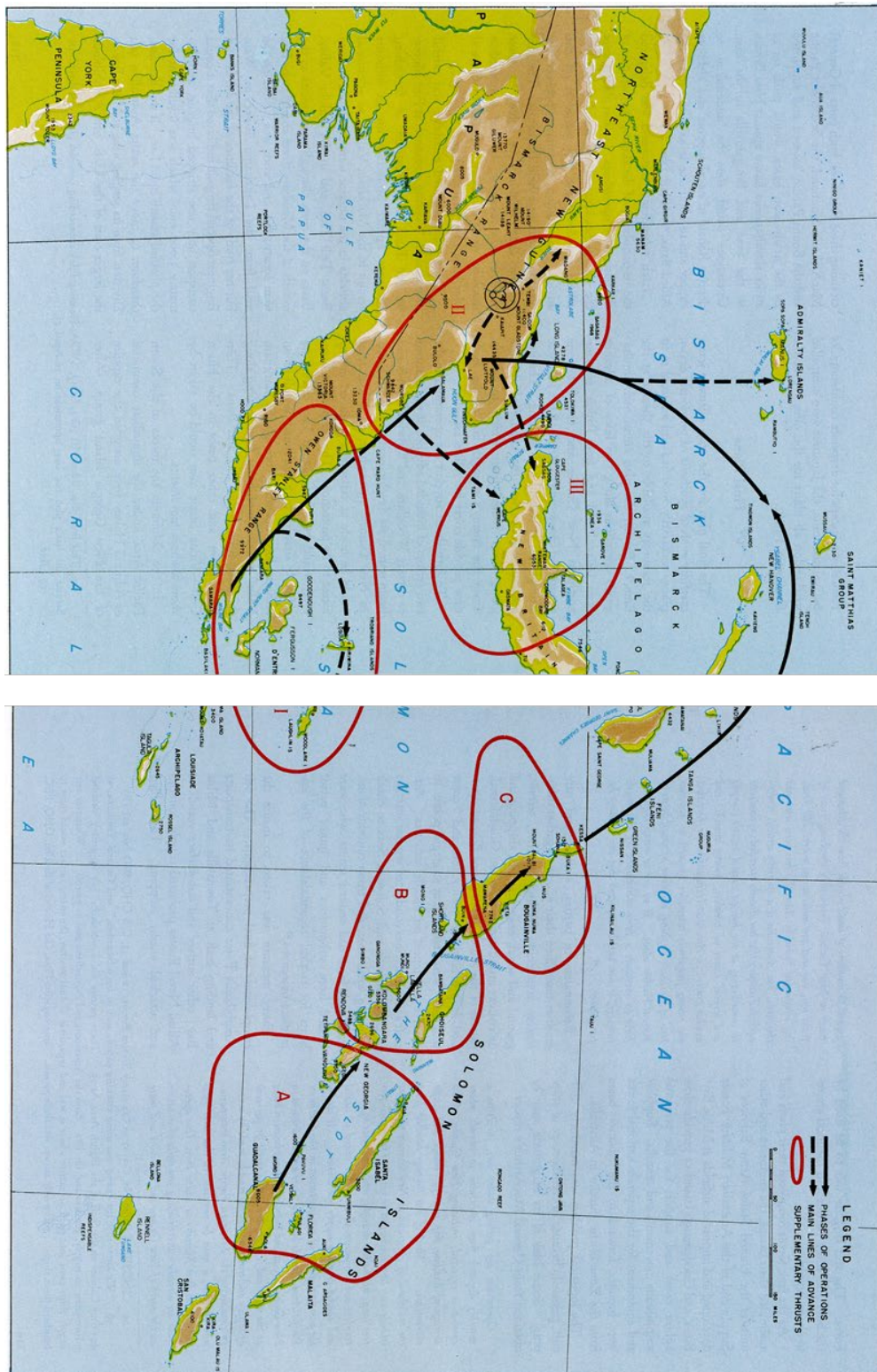


Figure 3. Axes of Advance, Papuan Campaign. General Staff, *Reports of General MacArthur: The Campaigns of MacArthur in the Pacific, Vol 1*, 114-115 (Washington, DC: Government Printing Office, 1994).

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