

Supplying Operation to Guadalcanal: From a Japanese perspective*

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Abstract

The purpose of this article is to examine the “Battle of Guadalcanal” in relation to the aspect of replenishment, focusing on why Guadalcanal came to be termed a “starvation” island and what the true situation was, and also seeking to systematically clarify these points from the perspective of the Japanese side. The Battle of Guadalcanal was characterized by a competition between Japan and the United States to concentrate their offensive and defensive forces around the island’s beachhead. Prior to the battle, when the military forces of Japan and the United States were almost equal, the Imperial Japanese forces established a supply line, which included a transport base to Guadalcanal, and attempted to transport troops and munitions from Rabaul to Guadalcanal using three major convoys. However, the Japanese failed to complete the transportation and lost control of the sea and air. From that point on, high-speed destroyers and submarines were used for transporting supplies. These ships could not carry supplies that would support a heavy military force, and their main purpose was instead to transport food for survival. The problem was that due to lack of mechanical power on Guadalcanal, it was necessary to unload, land and transport the food manually to the front lines using human power.

Introduction

There exist many previous studies on the Battle of Guadalcanal, and Hata Ikuhiko has recently reexamined it in his article “Gadarukanaru-sen no Kiten to Shuten (The Starting and Ending Points of the Battle of Guadalcanal).”¹ With regard to the Imperial Japanese forces’ supply operations on Guadalcanal, some of these studies emphasize the inadequate supply to the island to the extent that the island was referred to as a “starving” island. However, there seems to exist no research that systematically and specifically discusses why supplies were insufficient and what the actual situation was. Therefore, using historical documents held at the Center for Military History, National Institute for Defense Studies, this paper aims to examine the reason why the Japanese army fell into starvation in Guadalcanal and its actual situation by focusing on the Japanese army’s supplying operation.² Specifically, the main issues will be the following

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¹ Hata Ikuhiko, “Gadarukanaru-sen no Kiten to Shuten” (The Starting and Ending Points of the Battle of Guadalcanal), *The Journal of Military History* 57, no. 3 (no. 227 since the first issue), (December 2021).

² The Japanese troops called Guadalcanal “餓島” (the island of starvation).

three points: (1) Structure of supply lines,³ (2) Transportation to Guadalcanal under U.S. forces' aerial and naval supremacy, and (3) Local transportation within Guadalcanal.

Military supply is the means by which the military obtains the supplies required to accomplish its mission. More specifically, it refers to the “skills to ensure that the necessary munitions are present in the necessary quantity, at the necessary time, and in the necessary place.” In other words, it is a way to provide munitions that meet the military demand in the most appropriate manner through means such as procurement, accumulation (gathering), transportation, and distribution (delivery or supply).⁴ Meanwhile, as it is said that “supplying is a military service,”⁵ the military supply itself is not included in combat activities. However, what became prominent after World War I was the need to eliminate enemy interference and continue supply during operations, or to disrupt the enemy's supplying operations. These cases prove that military supply is a part of combat activities and cannot be viewed simply as logistic support. In short, military supply can be described as an operational action in itself and is integrated into military operations, giving rise to the concept of a supplying war.

Below, regarding the supplying war during the Battle of Guadalcanal, we will first clarify the basic composition of said battle. Based on this, the paper will discuss the supplying war in Guadalcanal from the two cases: first that the naval and air forces of the U.S. and Japan were almost equal, and second that the U.S. seized control of the air and sea.

1. Basic Composition of the Battle of Guadalcanal and the Supplying Posture of Both Forces

(1) Basic Composition

During the Battle of Guadalcanal, the Imperial Japanese forces based in Rabaul Island and transported the 17th Army and its supplies to Guadalcanal, approximately 900 km southeast of its base. At the same time, naval and air forces directly escorting transport convoys departed from Rabaul. Furthermore, the Combined Fleet, which was located on Truk Island, approximately 2,000 km north of Guadalcanal, was planning to support these transport convoys or destroy the U.S. fleet. The U.S. South Pacific Theater Command was in Nouméa, New Caledonia, and settled an advance base in Espiritu Santo Island, approximately 800 km north of Nouméa and around 1,000 km southeast of Guadalcanal. In other words, Guadalcanal was located roughly the same distance (900 km) from both the Japan and the U.S. military bases. Moreover, the military forces that Japan and the U.S. could project to the island were almost equal. According to the Japanese, as of July 1942, the Japanese force consisted of 12 battleships and aircraft carriers (four medium-

³ A supply line refers to a certain sequence of munitions flows (logistics line) resulting from the combination of supply services and means of supply (particularly transport and storage). This series of organizations is called a supply line. Kaigun Keirigakko Kenkyubu (Navy Accounting College Research Department), “*Hokyu Sankosho (Hokyu Gairon) Showa 19.5.27*” (Replenishment Guidebook (Replenishment Overview) May 27, 1944), the collection of the Center for Military History, National Institute for Defense Studies.

⁴ Kaigun Keirigakko Kenkyubu, “*Hokyu Sankosho (Hokyu Gairon) Showa 19.5.27*”

⁵ War operations are a general term for various requirements including those necessary for conducting operations, such as commanding and controlling the army, accounting for the survival of the army, and carrying out replenishment, as well as procedures for preparing and issuing warnings, navigation and orders, and coordinating reports. (Boei-cho Boei-kenshusho Senshishitsu (Office of War History, National Defense College, Defense Agency), *Senshi Soshō Rikukaigun Nenpyō* (War History Series Chronology of the Imperial Japanese Army and Navy) (Tokyo: Asagumo Shinbunsha, 1980), p. 362.

sized and two small),⁶ while the U.S. Fleet had nine battleships and three aircraft carriers. The only difference was that the U.S. 1st Marine Division had captured the airfield at Lunga Point first and established a beachhead.

Basically, the battle of Guadalcanal was a battle between the U.S. military, which held the Lunga beachhead, and the Japanese, who wanted to prevent the beachhead from expanding and retake the airfield. As Japanese forces headed toward Lunga Airfield, the U.S. military sought to extend the beachhead, including airfields and supply facilities, to areas where it could block effective artillery fire from the Japanese military, with the cover of ground and anti-aircraft firepower. Namely, it was a battle over the beachhead (O-3 line). However, in order to undertake such offensive and defensive battles on land, both sides needed to transport artillery, tanks and other heavy forces, as well as various supplies, from their respective bases by sea, in an attempt to gain superiority over the enemy.

In summarizing the actions of the Imperial Japanese forces regarding this transport operation, it must be noted that there were three major occasions when heavy forces and supplies were sent to Guadalcanal in convoys consisting of multiple transport ships. The first (referred to as the First Convoy in this paper) involved the mission to successfully land the Ichiki Detachment's 2nd echelon at the end of August, while the second (referred to as the Second Convoy in this paper) supplied elements necessary for the 2nd Division's all-out attack in mid-October. On the last occasion (referred to as the Third Convoy in this paper), the supplies were to facilitate the 38th Division's all-out attack in mid-November.⁷

⁶ Fuchida Mitsuo and Okumiya Masatake, *Kido Butai* (Mobile Force) (Tokyo: Gakushu Kenkyusha, 2008), pp. 24-25.

⁷ Saito Tatsushi, "Battle for Guadalcanal: As Viewed from the Perspective of Concentration of Forces," *International Forum on War History: Proceedings (2013)* (National Institute for Defense Studies, 2013) p. 88.

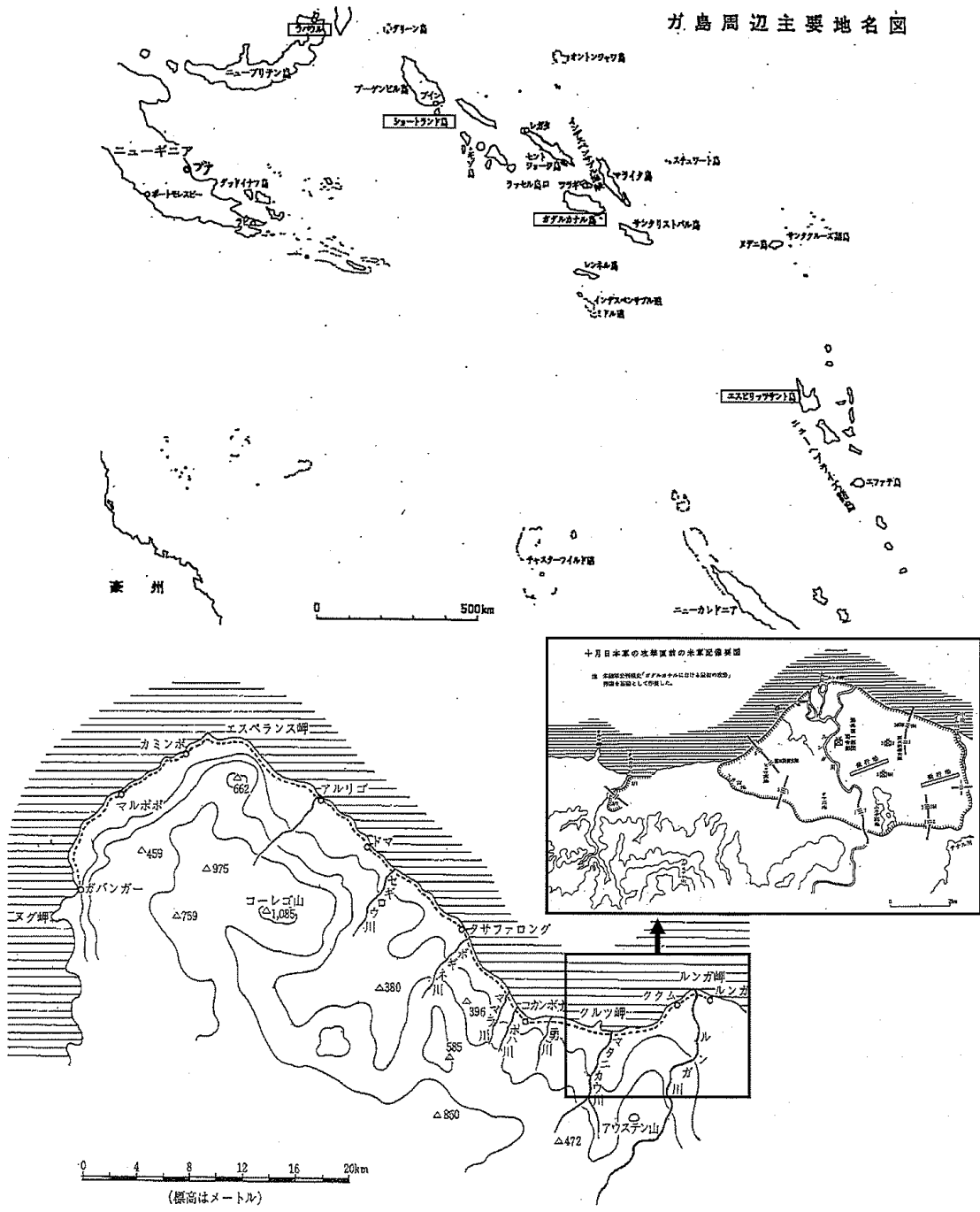


Figure 1. Guadalcanal General Map

(Source) Boei-cho Boei-kenshusho Senshishitsu (Office of War History, National Defense College, Defense Agency), *Senshi Soshō Minami Taiheiyō Rikugun Sakusen <I>* (War History Series Army Operations in the South Pacific <1>) (Tokyo: Asagumo Shinbunsha, 1969).

(2) Supply Posture

a. The Army

At the beginning of the Pacific War, Japan had no necessity to focus its effort on the supplying war in its initial operations toward Southeast Asia, because Japan had already proceeded with preparations such as establishing the facilities in Taiwan and French Indochina.

However, operations around the South Pacific including Guadalcanal had not been part of the plan, and no preparations had been made in terms of replenishment. Due to this, Japan had to overcome many challenges for the long-distance transportation under the enemy's air supremacy, especially the development of shipping ports and improvement of landing, loading efficiency, transportation of small vessels, research on special rations, malaria countermeasures, and local self-sufficiency measures. For this reason, the supply for the Japanese army had no choice but to rely on the Navy for the initial stage of the campaign.⁸ In addition, the recruited civilian ships that were transporting goods to Guadalcanal needed to dock at the mainland or Taiwan around a week for outfitting and food; they loaded troops along the way, and then had to make a nearly month-long journey of approximately 5,000 km to Rabaul.⁹

b. The Navy

The Combined Fleet built storage facilities (heavy oil tanks) and gathered various military supplies including 50,000 tons of heavy oil on Truk Island for Operation Fiji-Samoa (FS), which was scheduled to follow the Battle of Midway. They also established facilities on Saipan and used the site as a secondary supply base. At the time, supply ships belonging to the Combined Fleet were transporting crude oil and other strategic supplies from the southern occupied areas. Because of this, supply ships assigned to the Ministry of the Navy from the mainland also assisted in transporting supplies for the next operation around Truk Island.¹⁰ As a result, the routes for supply ships became so complex that they came to be known as triangular transport. For this complexity and shortage of maritime escort units, it came to be difficult to escort these transport ships, and most of the naval transportation was carried out without escort.¹¹ Before the outbreak of the war, a floating dock that could be used for destroyers was towed from Qingdao and established at Truk Island. These oil storage facilities and floating docks made a huge contribution to later operations. In particular, the floating dock was used continuously for emergency repairs of many damaged destroyers in the area of Guadalcanal, and for rerouting them to the mainland.¹²

⁸ “*Showa 16-nen–19-nen Daihonei Tosui Gaishi (Heitan) An*” (General Headquarters Command History (Logistics) Plan 1941-1994”), the collection of the Center for Military History, National Institute for Defense Studies.

⁹ *Ibid.*

¹⁰ Isobe Taro, “*Taiheiyo Senso Shoki ni okeru Kaigun no Hokyu Narabini Kaigun Unyuhonbu ni Kansuru Kaiso*” (Reminiscences about Naval Supplies and the Naval Transportation Headquarters in the Early Stage of the Pacific War).

¹¹ *Ibid.*, pp. 26-27.

¹² *Ibid.*

2. Supply to Guadalcanal

(1) When Both Sides Have Equal Control of the Sea and Air

a. Implementation of the First Convoy

Early on the morning of August 7th, the 1st Marine Division, commanded by Major General Alexander Archer Vandegrift landed on Guadalcanal, drove out the Japanese forces (mainly airfield construction units), and occupied a narrow area around Lunga Point, including the airfield, as a beachhead. In response, the Imperial General Headquarters ordered the Ichiki Detachment (approximately 2,000 soldiers commanded by Ichiki Kiyonao, which included one infantry battalion, one regimental artillery company, two rapid-firing artillery companies, one company of engineers, signal communication units, and medical units of the 28th infantry regiment) to standby at Guam (then transferred to the 17th Army on August 10th).

On the 9th, the beachhead was built around the airfield and surrounding the plains of Lunga Point. However, this area only covered 7 km east and west by 4 km north and south was too narrow to defend the airfield completely. Rear Admiral Vandegrift needed reinforcements, weapons, ammunition, various materials, and supplies to establish a complete beachhead as soon as possible.¹³

Meanwhile, at Japan's Imperial General Headquarters, the Army-Navy Central Agreement was concluded on August 12th, which decided that the Army's Ichiki Detachment and Naval Landing Force would cooperate to recapture Guadalcanal Airfield.¹⁴ This marked the first time that the Army and Navy cooperated in the Battle of Guadalcanal. However, due to the two transport ships for Ichiki Detachment being so slow, it was considered unfeasible to make a timely insertion on Guadalcanal. For this reason, it was decided that a first echelon, comprising of approximately 900 personnel, including Detachment Headquarters and an infantry battalion, along with two infantry guns, would be sent quickly to Guadalcanal by six fast-moving destroyers. Thereafter, firepower units such as a regimental artillery company, antitank companies, and other supporting units landed, and supplies were brought ashore later by transport ships (transportation of the second echelon and the First Convoy).

The first and second echelons of the Ichiki Detachment (the First Convoy), escorted by the 2nd Torpedo Squadron under the command of Rear Admiral Tanaka Raizo, departed from Truk Island on August 16th. The first echelon landed near Taivu Point (approximately 30 km east of Lunga Point) on the night of the 18th. The second echelon was scheduled to be joined by the Yokosuka Naval District's 5th Special Naval Landing Forces, which had advanced from Guam, and was going to land at Taivu Point on the 22nd with three transport ships. In order to support this landing operation, the combined fleet dispatched the 2nd Fleet (commanded by Vice Admiral Nobutake Kondo) as the Vanguard Force, and the 3rd Fleet (commanded by Vice Admiral Chuichi Nagumo) with three aircraft carriers (Shokaku, Zuikaku, and Ryujo), as a strike force from the Seto Inland Sea. Through these efforts, the combined fleet intended to destroy the U.S. fleet around

¹³ Major John Zimmerman, *The Guadalcanal Campaign* (Historical Division Headquarters, U.S. Marine Corps, 1949), pp. 55-57.

¹⁴ Tanaka Shinichi, "*Tanaka Shinichi Chujo Kaisoroku Sonoyon (Senso Dainiki / Daiyonsho)*" (Memoirs of Lieutenant General Shinichi Tanaka Volume 4 (The Second Stage of War/Chapter 4) pp. 184-185, Collection of the Center for Military History, National Institute for Defense Studies.

Guadalcanal.¹⁵ The following day, the 17th, Admiral Yamamoto Isoroku, Commander-in-Chief of the Combined Fleet, also set out for Truk from Hashirashima. Consequently, almost all of the Combined Fleet was concentrated in the southeast direction.¹⁶

The first echelon of the Ichiki Detachment anchored at Taivu Point without any hindrance at around 9:00 p.m. on August 18th. Therefore, they launched an attack toward the east side of the U.S. base from the banks of the Tenaru River in the early hours of the 21th, but failed under intense gunfire.

b. Failure of the First Convoy and Commencement of Transport Missions by Destroyers (“Rat Transports”)

At dawn on August 24th, the strike force led by aircraft carriers Shokaku and Zuikaku, along with the Vanguard Force led by the aircraft carrier Ryujo, started heading south towards Guadalcanal to support the First Convoy. At the time, two U.S. aircraft carriers Enterprise and Saratoga were located approximately 300 km east of Guadalcanal. This marked the beginning of the Battle of the Eastern Solomons. The Japanese strike force’s first attack unit was able to hit the Enterprise with three 250 kg bombs, while the U.S. side concentrated on attacking the Ryujo and sank it.

On August 24th, the convoy transport carried on southward while the strike force and Vanguard Force continued the battle against the U.S. forces. At 6:00 a.m. on the 25th, when the transports came within approximately 300 km of Guadalcanal, U.S. carrier-based bombers and B-17 bombers from Guadalcanal began attacking the convoy and destroyers. The transport ship Jintsu caught fire, and another transport, the Kinryo Maru, also suffered damage. Rear Admiral Tanaka, the commander of the 2nd Torpedo Squadron, decided to return to the Shortland Islands and regroup, believing that if they continued their advance, the entire fleet would be wiped out.¹⁷ Thus, the First Convoy’s transportation ended in failure.

The 11th Air Fleet Headquarters in Rabaul consulted with the 17th Army Headquarters regarding further convoy transports, sent a telegram to the Combined Fleet Headquarters and requested that they promptly resume transports with the cooperation of the carrier-based air forces.¹⁸ The Combined Fleet responded stating that it would be extremely difficult to send reinforcements to Guadalcanal with convoy transport without neutralizing the U.S. air force base; the Combined Fleet thus informed the 11th Air Fleet that further transportation would mainly be carried out with high-speed destroyers (“rat transports”) instead of transport ships.¹⁹

¹⁵ Ugaki Matome, *Sensoroku Zenpen* (The Diary of Matome Ugaki, Part 1) (Nihon Shuppan Kyodo Kaisha, 1952), p. 154.

¹⁶ Boei-cho Boei-kenshusho Senshishitsu, *Senshi Soshō Sensuikan Shi* (Tokyo: Asagumo Shinbunsha, 1979), p. 180.

¹⁷ Boei-cho Boei-kenshusho Senshishitsu (Office of War History, National Defense College, Defense Agency), *Senshi Soshō Minami Taiheiyō Rikugun Sakusen <I>* (War History Series Army Operations in the South Pacific <I>), p. 330.

¹⁸ Rikusenshi Kenkyū Fukyūkai (Group for Study and Dissemination of History of Land Warfare), *Rikusenshi Shū 22 (Dainiji Sekaitaisenshi) Gadarukanaru To Sakusen* (History of Land Warfare 22: Guadalcanal Island Campaigns) (Tokyo: HaraShobo, 1971), p. 64.

¹⁹ Ugaki, *Sensoroku Zenpen* (The Diary of Matome Ugaki, Part 1), p. 164.

c. The Second Convoy and Supply Line Composition

On August 19th, Lieutenant General Hyakutake Harukichi, the commander of the 17th Army, ordered Major General Kiyotake Kawaguchi, commander of the 35th Infantry Brigade, to take command of the Kawaguchi Detachment (consisting of 35th Brigade Headquarters, 124th Infantry Regiment, and other units), and to promptly secure Guadalcanal in cooperation with the Navy. Around this time, the Imperial General Headquarters was optimistic about the Kawaguchi Detachment's attack, estimating the number of U.S. troops landed on Guadalcanal to be about a few thousands.²⁰

The main force of the Kawaguchi Detachment (the 3rd Battalion of the 124th Infantry Regiment and other units attached) successfully landed at Tasimboko, near Taivu Point on Guadalcanal (approximately 30 km east of Lunga Point) on the night of August 31st, and the rest of the troops landed by September 7th. In total, approximately 5,600 Army and Navy personnel and major weapons (two anti-aircraft guns, four field artillery, six regimental guns (mountain guns), and four anti-tank guns), and two weeks' rations were transported by 50 destroyers.²¹ The transport capacity of each ship was calculated to be 110 personnel, 0.3 main guns, and two weeks' worth of rations. As is clear from this calculation, the main firepower like artillery and tanks were absolutely needed to be carried by transport ships.

As the Imperial General Headquarters ordered to dispatch the 2nd Division and other necessary units, the Army Shipping Command dispatched Lieutenant General Sakurada Takeshi, commander of the Shipping Corps, and his staff to Rabaul, a major shipping hub on the supply line.²² At the same time, the Army Shipping Command reinforced the Marine Engineer Regiments and Landing Squadrons, while also making efforts to send in advance the shipping materials, coal supply, water supply, and landing materials, considering the importance of Rabaul and in response to the inadequate port facilities in the location. In Rabaul, a major maritime hub, it was necessary to establish port facilities that could mainly accommodate the replenishment and maintenance of large ships, the landing and loading of cargo, and the gathering (accumulation) of munitions. Meanwhile, the Japanese Army settled a supplementary shipping base at Shortland Islands located between Rabaul and Guadalcanal (approximately 400 km northwest of Guadalcanal). Two Marine Engineer Regiments commanded by Major General Ito Shinobu, the commander of the 1st Transport Group, were advancing on this island with the necessary landing crafts, and they were assigned to be responsible for maneuvering the ships of the Kawaguchi Detachment.²³ The supplementary

²⁰ Tanaka, "*Tanaka Shinichi Chujo Kaisoroku Sonoyon (Senso Dainiki / Daiyonsho)*" (Memoirs of Lieutenant General Shinichi Tanaka vol. 4 (The Second Stage of War/Chapter 4)), p. 192.

²¹ Rikusen-shi Kenkyu Fukyukai (Group for Study and Dissemination of History of Land Warfare), *Rikusen-shi Shu 22 (Dainiji Sekaitaisenshi) Gadarukanaru To Sakusen* (History of Land Warfare 22 Guadalcanal Island Campaigns), p. 87.

²² "For ship transportation, the Army establishes a shipping base, shipping hub, and supplementary shipping base. The shipping base is established at domestic ports that are key to military transportation and is usually the base for shipping. A shipping hub is established at a major overseas port and served as the central terminal point for normal ship transportation. Supplementary shipping bases are established at necessary ports other than the shipping base or shipping hub. (*Sakusen Yomurei no Binran – Koryo, Tessoku Oyobi Daiichibu, Dainibu, Daisanbu Showa 17.3* (Handbook of the Operations Service Regulations Code, General Provisions, and Parts 1, 2, and 3), the collection of the Center for Military History, National Institute for Defense Studies).

²³ "*Senpaku Sakusen Kiroku Sononi*" (The Record of the Naval Operation vol. 2), Collection of the Center for Military History, National Institute for Defense Studies.

shipping base on the Shortland Islands was also a transit point for transporting large ships and destroyers, and small vessels such as boats. Therefore, the Japanese Army needed to establish a port facility that would be able to provide services for these ships, including replenishment, maintenance, loading and landing, transshipping, and gathering (accumulating).

At the time, Rabaul Port's facilities were extremely inadequate for a shipping hub, and the strengthening of port facilities, especially the enhancement of the landing and loading capacity for cargo handling, was considered the most urgent task. Due to the lack of port facilities, the Army had no choice but to make up for the shortage by reinforcing the Marine Engineer Regiment and the Landing Squadrons, as well as dispatching coal vessels, water vessels, and engineering boats to repair damaged ships. However, this was only a temporary measure and caused dozens of ships to be held up in Rabaul Port.²⁴ Furthermore, at that time, the Army Shipping Command in Ujina had prepared 300,000 tons of ships by extracting all the ships directly under the command and some of the ships assigned to the south in order to transport the 2nd Division, the 38th Division, the 17th Army troops, and logistics units. Then, the Army Shipping Command also decided to increase the 2nd and 3rd Regiments of Marine Engineers of the 2nd Fleet, the 1st, 2nd, and 3rd Landing Squads, Ship Artillery, and Ship Communications to the southeast area.²⁵

In addition, for the circular transportation from Rabaul to Shortland, seven to eight ships were assigned, and its operation went smoothly. Then, from the Shortland Islands to Guadalcanal, approximately 30 destroyers were assigned to transport supplies. At first, things went smoothly, but from late September onwards, there were more moonlit nights and the Navy needed to allocate its forces to other operations. Due to this problem, transportation to Guadalcanal became increasingly difficult. As a result, troops and munitions waiting to be transported were concentrated on Shortland Islands.²⁶

The Kawaguchi detachment launched an attack at 8:00 p.m. on September 13, but was thwarted by the tremendous firepower of the U.S. military.

The 17th Army Headquarters, which was planning an all-out attack by the 2nd Division around October 20, recognized that it would be necessary to carry out a concentrated transport of troops and supplies to Guadalcanal by around October 11 at the latest, and requested support from the Combined Fleet. In response to the request, the Combined Fleet decided to “send the main force to the Solomon Islands area to check and destroy enemy forces and support transport operations, and some of our powerful force will be allocated to directly escort the 2nd Division's transport.”²⁷ In order to ensure the success of the convoy transport (the Second Convoy), the Combined Fleet Headquarters attempted to neutralize the U.S. air force base of Guadalcanal not only by attacking with base air units and suppressive fire with army field guns, but also by conducting naval bombardment from the battleship.²⁸

On October 4th, the Combined Fleet issued an overall operational order. The Second

²⁴ Ibid.

²⁵ Matsubara Shigeo, *Daitoa Senso ni okeru Rikugun Senpaku Senshi* (History of Imperial Japanese Army Ships in the Greater East Asia War) (Japan Ground Self Defense Force Command and Staff College, 1970), p. 83.

²⁶ Ibid, p. 81.

²⁷ Ibid, pp. 153-154.

²⁸ Boei-cho Boei-kenshusho Senshishitsu (Office of War History, National Defense College, Defense Agency), *Senshi Soshō Nanto Homen Kaigun Sakusen <2>* (War History Series Army Operations in the South Pacific <2>) (Tokyo: Asagumo Shinbunsha, 1969), p. 168.

Convoy was scheduled to land the troops at Tassafaronga on the night of the 14th. For this convoy transport, six high-speed superior ships (the Sasago Maru, Sakito Maru, Sado Maru, Kyushu Maru, Azumasan Maru, and Nankai Maru) were selected for the convoy, and their air defense weapons were reinforced. It was intended to carry the main force of the 16th Infantry Regiment, the 230th Infantry Regiment (less one battalion), one 100 mm cannon company, one 150 mm howitzer company, one anti-aircraft battalion, one independent tank company, part of the logistics unit, Maizuru Special Naval Landing Forces, ammunition, food, and other items.²⁹ At this time, the Combined Fleet planned for a fast battleship force to bombard the airfield on the night of the 13th, and for a cruiser force to do the same on the 14th and 15th.

At that time, the skies within a radius of approximately 300 km around Guadalcanal were seized by the U.S. air force. The destroyers assigned to replenish the Japanese army were forced to enter the area within 100 miles of the island only after sunset and escape before sunrise. In contrast, Japanese fighter jets could only stay in the air near Guadalcanal Island for about 30 minutes, as they departed from the Rabaul Airfield and the Buin Naval Air Base on the southern tip of Bougainville Island.³⁰ Therefore, it was difficult to suppress the U.S. air forces using air power.

d. Capture of Lunga Airfield and Failure of the Second Convoy

On October 13th, air forces from the Rabaul base conducted an attack on Guadalcanal to protect the second convoy. This was also joined by field artillery fire, damaging many enemy aircraft on the ground. In addition, the 3rd Squadron's battleships Kongo and Haruna fired a total of 920 rounds of naval gunfire at the airfield during the night. The airfield was turned into a sea of fire, accompanied by countless explosions, causing catastrophic damage. The U.S. military suffered losses that day, with approximately 40 aircraft destroyed, B-17s restricted from using the runway, and a large amount of aviation gasoline spilled.

The transport convoy was heading for Guadalcanal under the air cover of the base aviation unit and the seaplanes of the Outer South Seas Unit. On the 14th, there were four air raids starting from the morning, but none of them caused much damage. At around 10:00 p.m., the convoy safely arrived at Tassafalonga, Guadalcanal, following the scheduled route, and began unloading cargo. To cover for this, Vice Admiral Mikawa Gunichi, commander of the 8th Fleet, entered the coast of Lunga with several ships, including destroyers, and fired naval gunfire at the airfield on Guadalcanal. Air cover was provided in the early morning by seaplanes, then by fighters from the 2nd Air Flotilla, and then by fighters from the base air group.

At this time, in order to complete the unloading of troops and supplies before the U.S. aircraft began flights, the transport convoy took every possible measure to shorten the landing time, such as preparing for unloading the landing boat completely and dropping anchor 100 meters or several hundred meters offshore.³¹ Each transport ship was to give priority to the landing of weapons and heavy materials that were difficult to transport by destroyers, to be completed by

²⁹ Ibid, p. 80.

³⁰ Ito Shinobu, "*Showa Niju-nen Juichi-gatsu Daitoa Senso-kan no Senpaku Sakusen ni Tsuite*" (November 1945 - Regarding Ship Operations During the Greater East Asia War), the collection of the Center for Military History, National Institute for Defense Studies.

³¹ Ibid.

the end of the first night, and other items could be unloaded as quickly as the situation allowed.³² In addition, the amount of supplies loaded on one transport ship is estimated to be approximately 240 tons, and six Daihatsu-class landing crafts had to make four round trips between the transport ship and the landing point on land (One ship carries 10 tons, and 6 ships make 4 round trips for a total of 240 tons).³³ Although some of the ship's cargo machines (derricks and cranes) were used to load munitions from these transport ships to Daihatsu at sea and unload them onto shore, the main effort was by human power.

Rear Admiral Ito, the commander of the 1st Ship Group, attempted to land at least one ship, the Sado Maru, even under the most difficult circumstances, and personally boarded the ship to ensure a successful landing of critical supplies. The Sado Maru carried approximately one company of 15 howitzers, 10 cannons, and tanks. During the voyage, he revised the landing plan based on agreements with the embarkation team, the landing task force (vessel fleet), and the captain, and also inspected cargo lift machines in important holds. Rear Admiral Ito made every effort to ensure that unloading began promptly after anchorage and to complete the landing of critical materials during the first night. Thus, by around 8:00 a.m. on the 15th, important weapons and materials such as heavy artillery and tanks were able to be landed.³⁴ Other transport ships also carried out landings in succession, taking advantage of the darkness of the night and the absence of enemy aircraft attacks.³⁵ Daihatsu-class landing crafts were suitable for landing and loading tanks, heavy artillery, etc., and were easy to use for all aspects, including reaching the shore, disembarking, and unloading and loading cargo, and were used as the main body for landing operations. The landing task force took advantage of the pause in enemy aircraft attacks to continue with landing, and by around 9:00 a.m. they had mostly completed landing of the main materials.³⁶

Thus, the second convoy seemed to be a success. However, US aircraft continued to carry out several waves of attacks starting in the early hours of the 15th. The Sasago Maru was the first to be hit by bomb fire and began to burst into flames. Nankai Maru's unloading was completed early at around 7:00 a.m., and it left on orders from the escort squadron commander. The third wave of air raids occurred around 10:00 a.m. B-17s targeted convoys and destroyers patrolling the anchorage, and their bombs hit the Azumayama Maru. The fourth wave of air raids, which occurred around 11:00 a.m., targeted not only the convoy but also the landing point, and the Kyushu Maru suffered a huge fire from a bomb and was grounded. During this time, the landing of 15 howitzers, 10 cannons, and tanks for one company from Sado Maru had been completed.³⁷ At around 12:00, the fleet temporarily evacuated north of Savo Island, and after 15:00, turned around three times and headed for the anchorage. However, the convoy commander, Major General Takama Tamotsu, received a telegram from Major General Ito telling him to stop staying and return to Shortland

³² Ibid.

³³ "Ga To Sakusen no Kyokun (Lessons from the Guadalcanal Campaign) – Sumiya Tei collection," the Center for Military History, National Institute for Defense Studies.

³⁴ Ito, "Showa Niju-nen Juichi-gatsu Daitoa Senso-kan no Senpaku Sakusen ni Tsuite" (November 1945–Regarding Ship Operations During the Greater East Asia War).

³⁵ Ibid.

³⁶ Ibid.

³⁷ Boei-cho Boei-kenshusho Senshishitsu (Office of War History, National Defense College, Defense Agency), *Senshi Soshō Nantō Hōmen Kaigun Sakusen <2>* (War History Series Army Operations in the South Pacific <2>), p. 84.

because of the bright moonlit night, and so headed back to Shortland. Similarly, the Combined Fleet ordered its support unit to “turn around and head north” after the 5th Squadron’s airfield bombardment mission was completed.³⁸ However, it was precisely after that that cover for the landing force became necessary.

The supplies carried by the six transport ships were left in piles after being unloaded on the coast line. The most important aspect of Japan's transport operations was to quickly move these supplies away from the coast and disperse and hide them in the jungle, but there was a delay. One of the most important aspects of this transport operation was to quickly move these supplies away from the coast and disperse and hide them in the jungle. However, there was a shortage of manpower to accomplish it. For this reason, the commander of the 1st fleet was assigned all the embarked troops and took overall command of the landing. However, the landing beaches were heavily bombarded by the U.S. air force, which made it even more difficult to isolate and disperse the ships. Many of the supplies, which had been exposed and accumulated near the coast, were heavily damaged by bombing on the 16th and by naval gunfire from U.S. destroyers on the 17th. In addition, the large and small landing crafts and patrol boats carried by the convoy for landing and security were repeatedly attacked by enemy aircraft. For several days after the landing, most of them were destroyed. The debris blocked the landing beach and impeded further landing operations.³⁹

At the same time, the 17th Army Headquarters rejoiced to hear that a convoy had arrived at Guadalcanal and that the landing was approximately 80% successful. However, from the report of the staff officer who inspected the landing site, it was determined that only 10 to 20% of the ammunition and half of the food had been successfully landed. The 17th Army, concerned about the 2nd Division's lack of offensive capability, requested the Navy to transport a second transport unit (the 228th Infantry Regiment) as well as additional ammunition and provisions. However, the Combined Fleet refused the request, saying that it could not agree to conduct another transport operation without neutralizing the enemy’s airfield.⁴⁰ At this stage, the 2nd Division consisted of approximately 20,000 personnel, 15 15mm howitzers, 3 10mm cannons, and 10 light tanks, although their ammunition was limited. The second convoy arrived at Guadalcanal, but lost most of the supplies that had been landed.

Due to the failure of the Second Convoy, the 2nd Division postponed the start of the offensive from October 22nd to October 24th and was forced to make a surprise attack on the U.S. side’s beachhead by taking a detour through the jungle. The 2nd Division launched an attack on October 24th, but was stopped on all fronts on the 26th before reaching the beachhead. Therefore, Lieutenant General Hyakutake, commander of the 17th Army, ordered the attack to be halted at 6:00 a.m. on the 26th.

³⁸ Ibid, p. 85.

³⁹ Ito, “*Showa Niju-nen Juichi-gatsu Daitoa Senso-kan no Senpaku Sakusen ni Tsuite.*”

⁴⁰ Boei-cho Boei-kenshusho Senshishitsu (Office of War History, National Defense College, Defense Agency), *Senshi Soshō Minami Taiheiyo Rikugun Sakusen <1>* (War History Series Army Operations in the South Pacific <2>), p. 88.

e. The Turning Point in the Struggle for Sea and Air: the Battle of the South Pacific

Most of the forces that could be used for the Combined Fleet's active operations were concentrated in the Truk area. Therefore, the necessary fuel for ships began to be transported from the occupied southern territories, and the first bottleneck in this process was the Battle of the South Pacific. The 3rd Fleet loaded almost all of the heavy oil for the battle with the U.S. task force near Guadalcanal that had stored in trucks at the time in preparation. Meanwhile, the battleships "Yamato" and "Mutsu," the flagships of the Combined Fleet, remained on Truk Island, serving only as fuel tanks for supply ships coming from the front lines.⁴¹

Around October 21st, there were four aircraft carriers in the 3rd Fleet - Shokaku, Zuikaku, and Zuiho - and Junyo was assigned to the Vanguard Force. The Combined Fleet estimated that the U.S. Navy would have two to three aircraft carriers, two battleships, and six to eight cruisers⁴² (actually, there were two aircraft carriers: Enterprise and Hornet).

On October 24th, Vice Admiral William Frederick Halsey, Jr., commander of Southern Pacific Theater Command, ordered Rear Admiral Kincaid, commanded the aircraft carriers Enterprise and Hornet, to advance into the northern waters of the Santa Cruz Islands. This position was to attack the left flank of the Japanese fleet approaching Guadalcanal south from Truk.⁴³ On the evening of the next day, the 25th, based on the Combined Fleet's order, Rear Admiral Nagumo ordered the strike force under his command to move south from a point 900 km northeast of Guadalcanal Island at the same time as the 2nd Division's attack began.⁴⁴ This was the beginning of the Battle of the South Pacific.

On October 26, Japanese aircraft first attacked and disabled the aircraft carrier Hornet. The second wave of attacks hit the Enterprise with three bombs, inflicting heavy damage, while also damaging the battleship South Dakota and the anti-aircraft cruiser San Juan. Meanwhile, US attack planes caused heavy damage to the aircraft carrier Zuiho and directly hit Zuikaku with four 500kg bombs. As a result, the strike force lost two aircraft carriers and 92 out of a total of 173 carrier-based aircraft.⁴⁵ By this time, the Third Fleet had already consumed a considerable amount of fuel, and the destroyers were only able to carry out combat for a few hours, apart from returning to Truk. At that time, it was impossible to dispatch supply ships that had the experience and equipment to supply tugboats from Truk Island or other regions.⁴⁶ For this reason, in preparation for the upcoming battle on Guadalcanal and the rebuilding of the aircraft carrier force, Admiral Yamamoto replenished the carrier-based aircraft of each unit on the Junyo and left it on the truck, while moving the 3rd Fleet, including the damaged aircraft carrier, to mainland Japan.

After this battle, the 3rd Fleet remained in Japan for maintenance and crew training, and was not dispatched until the Battle of the Marianas. In other words, the Battle of the South Pacific

⁴¹ Ugaki, *Sensoroku Zenpen* (The Diary of Matome Ugaki, Part 1), p. 204.

⁴² *Ibid.*, p. 268.

⁴³ E.B. Potter, *Kiru Jappusu* (Kill Japs), trans. Akiyama Nobuo, (Tokyo: Kojinsha, 1991), p. 274.

⁴⁴ Suikokai, "Moto Kaigun Chujo Kusaka Ryunosuke Danwa Shuroku Sononi Showa 35.2" (Recorded Discourses of Former Navy Vice Admiral Ryunosuke Kusaka 2, February 1960), p. 41, the collection of the Center for Military History, National Institute for Defense Studies.

⁴⁵ Fuchida and Okumiya, *Kido Butai* (Strike Force), p. 115.

⁴⁶ Isobe, "Taiheiyo Senso Shoki ni okeru Kaigun no Hokyu Narabini Kaigun Unyuhonbu ni Kansuru Kaiso" (Reminiscences about Naval Supplies and the Naval Transportation Headquarters in the Early Stage of the Pacific War), pp. 28-29.

resulted in the loss of the functionality of Japan's strike forces for a long period of one and a half years, and the Combined Fleet was transformed from an offensive fleet to a defensive fleet. In the absence of Japanese strike forces, sea and air control in the South Pacific was transferred to the U.S. military.

(2) When the US Retains Sea and Air Control

a. Third Convoy and Bottlenecks in Ship Transport

The 17th Army headquarters believed that the diversionary attack by the 2nd Division had been conducted out of necessity due to the failure of the second convoy, and that the attack should be resumed.⁴⁷ Around November 4th, the 17th Army was planning an all-out offensive by combining its main forces from the Matanikau River direction at the end of December. The transportation status of the Japanese and U.S. forces to Guadalcanal at that time was as follows. In early November, the Japanese military used 20 destroyers to land approximately 4,200 soldiers, including 38th Division Commander Lieutenant General Tadayoshi Sano, as well as food and ammunition. Meanwhile, in early November, the U.S. military landed various supplies, including the new 8th Marine Regiment, 147th Marine Regiment, and artillery units, using more than 13 transport ships. Additionally, on the 12th, part of the Americal Division's 182nd Regiment was scheduled to be reinforced.

The Combined Fleet had already tracked the convoy of the American 182nd Regiment on the 11th, but could not come up with a good plan to destroy it.⁴⁸ On the contrary, as the U.S. military strengthened its vigilance with newly deployed torpedo boats and other equipment, it became increasingly difficult for the Japanese side to even implement "rat transportation." In order to overcome this predicament, the Japanese Army and Navy decided to carry out one large convoy transport (the Third Convoy) in mid-November for the next attack.⁴⁹

Admiral Yamamoto, Commander-in-Chief of the Combined Fleet, planned to bombard Guadalcanal's airfield on the night of November 12th and transport a third convoy of 11 ships on the 13th. Generally, the standard for loading was 3 tons of people and 9 tons of horses (5 tons of people and 10 tons of horses in tropical regions). However, due to the shortage of ships, the IJA had to use various measures to exceed the load amount. On November 9th, the supporting force's the aircraft carrier Junyo and the Vanguard Force departed from Truk. At this time, the Combined Fleet overestimated the result of the recent Battle and believed that the U.S. Navy had no aircraft carriers capable of operating.⁵⁰

At that time, ships were concentrated in Rabaul and Shortland Island as a terminal point for large transport ships. In particular, warships were concentrated in Rabaul, which served as a strategic base (shipping center) for both the army and navy in the southeastern direction. As of early November 22 transport ships (8 Army and 14 Navy), 5 warships, and 20 other vessels were anchored in the narrow port. As a result, air attacks by enemy aircraft were carried out every night. For this reason, the control of ships in the port, the improvement of landing and loading

⁴⁷ Konuma Haruo, "Ga To ni okeru Dai 17 Gun no Sakusen" p. 231, Collection of the Center for Military History, National Institute for Defense Studies.

⁴⁸ Ugaki, *Sensoroku Zenpen* (The Diary of Matome Ugaki, Part 1), p. 224.

⁴⁹ *Ibid.*, pp. 200-201.

⁵⁰ Fuchida and Okumiya, *Kido Butai* (Strike Force), p. 122.

capabilities, and the reinforcement of port air defense had emerged as urgent issues.⁵¹

These inadequacies in shipping ports formed the biggest bottleneck in shipping and caused the most trouble for those in charge of supply. For this reason, the Army Shipping Command in Ujjina focused particularly on sending floating jetties and materials for the jetty to the front lines. Due to the local situation, it was necessary to increase the repair capacity for small ships, so a factory ship was dispatched. The Japanese military strived to land and load the ships in a short time by reinforcing ship engineers and landing forces and ordering front-line troops to carry out cargo handling at ports.⁵²

At that time, the situation regarding army transportation between the mainland, Rabaul, and the Shortlands was as follows.⁵³

- (1) Due to a decline in sailing rates by a lack of escorts and an increase in demurrage by a lack of port capacity, the length of the voyage between the mainland and Rabaul reached 50 to 60 days.
- (2) For the above situation, the Japanese military changed the direct shipping route to Rabaul, and set up a route that divided into the Rabaul and New Guinea directions, with Palau as a relay point. As a result, the importance of Palau increased.
- (3) Towards the end of 1942, it became difficult for large ships to operate between Rabaul and the Shortlands, so the Japanese forces switched the operation to night sailing from island to island and from base to base. In relation to such changes, marine trucks, sailboats, and fishing boats were diverted through the mainland, and efforts continued to be made to send Daihatsu-class landing crafts later.
- (4) Although efforts had been made to improve the port capacity of Rabaul and the Shortland Islands, the increased demand and enemy interference outweighed the increased capacity, leading to increased demurrage and damage to ships.
- (5) In order to improve port cargo handling, even land-based corps had no choice but to use operational units for landing and loading operations by military orders, and these were called “Quick loading and unloading operations.”

b. The Naval Battle of Guadalcanal and the Failure of the Third Convoy

The U.S. forces were aware through codebreaking that the Japanese forces was planning an offensive for mid-November. Lieutenant General Halsey strongly believed that “we must protect our supply line and we need to counterattack against the impending attack by the enemy.”⁵⁴ His idea was also thoroughly shared by his subordinates. On November 11th, Vice Admiral Halsey ordered Rear Admiral Thomas Casin Kinkaid to immediately dispatch the aircraft carrier Enterprise and the battleship South Dakota, both of which were undergoing repairs in Hawaii but were already operational. The Japanese side required four months to complete repairs to the aircraft carrier

⁵¹ Matsubara, *Daitoa Senso ni okeru Rikugun Senpaku Senshi* (History of Army Ships in the Greater East Asia War), p. 83.

⁵² “*Senpaku Sakusen Kiroku Sononi*” (Ship Operation Record 2).

⁵³ Matsubara, *Daitoa Senso ni okeru Rikugun Senpaku Senshi* (History of Army Ships in the Greater East Asia War), p. 83.

⁵⁴ *Kingu Gensui no Hokokusho (Jokan)* (Official Reports by Fleet Admiral Ernest J. King) (Volume I), trans. Yamaga Moriharu (Toyko: Kokusai Tokushinsha, 1947), p. 100.

Shokaku and two months to the Zuiho, while the U.S. managed to return the Enterprise to the battlefield in just 20 days.⁵⁵

On the night of November 12, the battleships Hiei and Kirishima, protected by the 10th Squadron and the 4th Torpedo Squadron, were about to enter Lunga Roads from the north of Guadalcanal to bombard the U.S. airfield. As they rounded Savo Island, the cruisers and destroyers commanded by Rear Admiral Daniel Judson Callaghan also entered the island, and the two fleets suddenly encountered each other in darkness (The Naval Battle of Guadalcanal). Both fleets fought a fierce battle that lasted 30 minutes. During this battle, the battleship Hiei was hit more than 50 times by radar-equipped American ships. The Hiei was then sunk by persistent attacks from the carrier-based aircraft of the Enterprise. Also, on the night of the 14th, the battleship Kirishima headed south toward Guadalcanal Island again for naval gunfire, but was sunk by a U.S. battleship. In just three days, the Combined Fleet lost two battleships.

On November 12th, the 11-ship convoy, loaded with ammunition, provisions, the 38th Division, and approximately 13,000 naval troops, was escorted by 13 destroyers of the 2nd Torpedo Squadron, departed the Shortland Islands and headed south-east. Originally scheduled to enter on the night of the 13th, it was postponed by one day due to the Naval Battle of Guadalcanal, and the fleet evacuated north for the time being and returned to the Shortland Islands. Around 3:00 p.m. on the 13th, the convoy headed south again, and on the morning of the 14th, it was spotted by a U.S. military B-17 when it was about 36 km north of New Georgia Island. The B-17s began attacking the convoy in response to radio orders from Rear Admiral Halsey to target the convoys.⁵⁶ Both Enterprise's aircraft and Marine aircraft from Guadalcanal took off one after another. The 11 Japanese transport ships were bombed five times in a row starting early in the morning, and seven of them sank or fell behind, with only four barely making it to the Lunga anchorage and being grounded on the beach. Of the 10,000 soldiers, only 4,000 landed safely on Guadalcanal, with only 5 tons of munitions, 260 cases of ammunition, and 1,500 bags of rice.⁵⁷

The Combined Fleet, which lost its strike force and main ships in this battle, did not deploy any main ships or transports in the area thereafter. With the failure of the third convoy, the Japanese offensive and supply operation aimed at recapturing the island of Guadalcanal ended in failure. The Combined Fleet was unable to successfully protect the first to third convoys to Guadalcanal. The 17th Army Headquarters felt that the heavy damage to the convoys had sealed the fate of Guadalcanal.⁵⁸

After this, on November 16th, the 17th Army received an instruction from the Imperial General Headquarters to change its mission from offensive operations to defensive operations. On November 19th, Vice Admiral Halsey was appointed admiral in recognition of his accomplishments in overcoming the crisis and gaining sea and air control over the Solomons. With this sea and air control, the U.S. military forces were able to continue providing their supplies to Guadalcanal.

⁵⁵ Kimata Jiro, *Nihon Kubo Senshi* (War History of Japanese Aircraft Carriers) (Tokyo: Tosho Shuppansha, 1997), p. 410.

⁵⁶ Potter, *Kiru Jappusu* (Kill Japs), p. 292.

⁵⁷ Kimata, *Nihon Kubo Senshi* (War History of Japanese Aircraft Carriers), p. 415.

⁵⁸ Konuma, "*Ga To ni okeru Dai 17 Gun no Sakusen*," p. 266.

c. Local Transportation within Guadalcanal

After U.S. forces seized the control of air and sea, the 17th Army had to continue fighting for survival while resisting American forces with superior equipment in Guadalcanal. For this reason, the Japanese military set up a landing site near Kamimbo, far behind the enemy's front lines, and devised various methods for secretly transporting cargo at night.

In order to reduce the landing time on Guadalcanal as much as possible during the process of “rat transports” by destroyers, transport using drums was newly implemented. The method involved tying 50 drums aboard a destroyer with ropes, dropping them offshore from the landing point, and letting them drift away with the rising tide in the morning. The IJA attempted this operation on November 30th with eight destroyers of the 2nd Torpedo Squadron, but just before the landings began, the U.S. surface ships appeared. The Japanese had to abandon the drums and turned to a naval battle, resulting in failure. Although the attempt on December 3rd was successful, it required a large number of people to bring the drums back to land, and there were many problems such as ropes getting tangled in coral reefs. In the end, only one-third of the drums were recovered. An attempt to transport continued after that but with little success.⁵⁹ Furthermore, while drums were convenient for storage after landing, they also had the disadvantage of being limited in the items they could transport and difficult to be used when distributing.⁶⁰ Using rubber bags instead of drums was also tried but it was also unsuccessful.⁶¹

From November onwards, as the enemy's air force increased, transport by destroyer gradually decreased and was replaced by submarine transport. The first attempt was carried out on November 22nd and failed, while the second attempt on November 25th was successful and was continued thereafter.⁶² The results of submarine transport during the mid-to-late stages of the Guadalcanal Campaign were good, and the ships were able to successfully land a wide range of food items, in comparison with the transport using drums, which involved the limitation of items that could be transported. In particular, the “cargo tube (*unka-to*)” invented at the end of the campaign succeeded in transporting around 20 tons of cargo at one time.⁶³

Cargo tubes were the safest and more effective means of transporting and landing relatively large amounts of supplies than destroyer transport. A cargo tube was a special submersible for transporting supplies and landing that would be separated from a submarine in the water off the coast of a landing point. It was an excellent method of transportation in many respects: a single driver would sit on the control tower and could operate freely; when reaching the coast, they would be carried out one after another; and it was difficult for enemy aircraft to detect them. However, transporting personnel, large weapons, and heavy materials by this method was not feasible.⁶⁴

⁵⁹ Matsubara, *Daitoa Senso ni okeru Rikugun Senpaku Senshi* (History of Army Ships in the Greater East Asia War), p. 98.

⁶⁰ Second Division Accounting Department, “*Soromon 'Ga To' Sen ni Okeru Kyuyo Hokyū no Kyokun*” (Lessons on Replenishment During the Battle of Solomon's Guadalcanal) Collection of the Center for Military History, National Institute for Defense Studies.

⁶¹ Matsubara, *Daitoa Senso ni okeru Rikugun Senpaku Senshi* (History of Army Ships in the Greater East Asia War), p. 98.

⁶² *Ibid.*, p. 98.

⁶³ Second Division Accounting Department, “*Soromon 'Ga To' Sen ni Okeru Kyuyo Hokyū no Kyokun*” (Lessons on Replenishment During the Battle of Solomon's Guadalcanal).

⁶⁴ *Ibid.*

From the end of December to the beginning of January, during the period when the cargo canister transport was not ready and transport by destroyers and submarines was not possible due to the moonlight, supplying operations by airplanes were carried out. However, in operational areas such as Guadalcanal with a wide area covered in dense forest, many of the supplies dropped were lost, while only about 40% of the small amount dropped was recovered. In the end, air resupply was somewhat effective for small units, but not for large units. In addition, replenishing dense forest areas resulted in a large amount of waste (non-recovery goods), making it unsuitable for continuous supply.⁶⁵

In particular, the most difficult task for the 17th Army in terms of transportation within the Guadalcanal was transportation from the landing point on the coast to the destination and its cover. The 17th Army had no way of knowing the contents of the supplies landed ashore,⁶⁶ and if they could not complete the processing (accumulation, sorting, and concealment) by sunrise, they would be discovered by enemy aircraft.⁶⁷

The Chief of the Accounting Department of the 17th Army opened seven or eight distribution stations over 60km from the Kamimbo landing point to the front lines. In order to manage this operation, he led the cargo factory manager and his subordinates, and continued to perform superhuman activities such as landing work, accumulation, storage, advance transportation by boat, and delivery, and worked hard to secure food supplies.⁶⁸ The Chief of Accounts of the 17th Army opened seven or eight distribution stations over 60km from the Kamimbo landing point to the front lines. In order to run this operation, he led the chief of the department responsible for supplying goods and his subordinates, played a remarkable role in landing operations, accumulating and storing supplies, and transporting supplies forward by boat, and tried to ensure the success of supply operation. The delivery stations for the Guadalcanal operation were divided into some mountainous jungles and mostly on the coast, and efforts were made to disperse their locations to avoid air attacks. Food and other supplies were stored in trenches and concealed with coconut leaves in a palm grove on the coast, and an office was set up in a dense forest close to the assemble point, usually 500 to 800 meters away.⁶⁹

The only road in Guadalcanal that was passable for automobiles did not lead to Kaminbo. The 17th Army borrowed several automatic wagons for front-line artillery to transport ammunition and provisions, but it was not very effective. In addition, during daytime operations, there was a lot of damage due to the lack of anti-aircraft cover, and during nighttime operations, heavy rain deteriorated the road surface, making this extremely difficult. Additionally, due to fuel shortages, the operation of carrier truck was extremely limited.⁷⁰

Throughout the Guadalcanal campaign, the most effective transportation was the landing crafts (Daihatsu-class or Shohatsu-class) from the landing point to the delivery point. The transportation capacity of a single boat was far superior to that of a truck. With one or two large-

⁶⁵ Ibid.

⁶⁶ “Ga To Sakusen no Kyokun” (Lessons from the Guadalcanal Campaign) – Sumiya Tei collection.

⁶⁷ Ibid.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Second Division Accounting Department, “*Soromon ‘Ga To’ Sen ni Okeru Kyuyo Hokyū no Kyokun*” (Lessons on Replenishment During the Battle of Solomon’s Guadalcanal).

engine boats, daily transportation could be carried out in general, and there was little danger of being detected by the enemy if one or two boats were used for night transport. However, night transportation by boats required a great deal of time and labor for loading and unloading, and the forwarding under moonlight was severely restricted by enemy torpedo boats and night aircraft. In the end, the 17th Army was unable to carry out even half of its transportation plan.⁷¹

On Guadalcanal, the only way to transport ration and ammunition from these distribution points to the front lines was by manual transport. In addition to the time of landing, but also at the beginning of the operation, when boat transport to Cokambona was sufficient, all prior transport from Cokambona, especially along the Maruyama Road, was carried out manually. The recipients of food and ammunition from each unit on the front line advanced on foot to delivery points such as Esperance, received food and ammunition, and carried them back to the front line by hand. In fact, most of the resupply on Guadalcanal was done by human labor, and its achievement was remarkable.

Human-powered transport enables avoiding enemy aircraft during the day and night, except on coastal roads, but it also has many disadvantages. For example, the amount that can be transported is small, a large number of troops is required, and it is extremely physically exhausting and requires a huge amount of time to transport. However, under the special conditions faced at Guadalcanal, it was the last resort and the only option to rely on. The extraction of large numbers of troops for manpower transport had a major impact on the front-line military strength.⁷² In particular, from November onwards, the loss of front-line troops increased, and the military strength was further reduced due to frequent cases of malaria-related diarrhea and fever, and the situation was such that there was no longer enough power left to even send the soldiers who would receive food for transportation. The selected soldiers who received the rations endured illnesses such as fever and beriberi, and traversed a distance of nearly 10 miles plodding with barefoot and canes.⁷³

Meanwhile, in a situation where even the supply of ration and ammunition was not smooth, supplying clothing was also a difficult task. Although a few packages of summer clothes, summer undergarments, and lace-up shoes were landed from the transport ships, there was simply not enough to be distributed to each unit. These clothing items were, thus, provided only to a few units that were particularly severely damaged. In addition, supplies, office consumables, flashlights, candles, matches, feeding equipment, and similar items were mainly brought in by individuals when they landed.⁷⁴

d. Amount of landed food supplies

The amount of staple food (milled rice) supplies for the 17th Army were 349g in October, 433g in November, 203g in December, and 236g in January, but, reportedly, front-line troops sometimes spent days without food.⁷⁵ In the case of the Second Convoy, the amount of supplies per soldier was set as 600g after October 14th, and semi-quantified after October 26th. However, the actual

⁷¹ Ibid.

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Ibid.

⁷⁵ The 17th Army Accounting Department, “*Ga To ni okeru Ryomatsu Yoriku Kofu Suryo Shirabe*” (Quantity Record for Unloading of Food for Soldiers and Cribs for War Horses) – Sumiya Tei Collection, the Center for Military History, National Institute for Defense Studies.

quantity of supplies was determined by the transport capacity, and, in fact, only about one-third of the total amount was supplied. In addition to seasonings, the quantity of side dishes was supplied less than 10%. Moreover, on Guadalcanal, where local resources for self sufficiency were scarce, the lack of calories, such as protein, enzymes, vitamins, and hormones, weakened physical strength, especially resistance to disease, and worsened conditions that should have been recovered. This was also exacerbated by shortages of medicine. On the other hand, the 38th Division received only a little less than one-sixth of the rations per day during December, but by the 23rd, they had run out of rations and were forced to go without food. Ammunition was in short supply, sanitary materials had not arrived, and patients could not be transported, and many soldiers were lying in the jungle, drenched in the daily rain.⁷⁶

In early December, a considerable variety of provisions were landed at Kamimbo and Esperance by submarine. However, the already poor local transportation capacity was further reduced by enemy interference and weather conditions, and the advance rations consisted mainly of staple food and powdered soy sauce, leaving other rations in vain.⁷⁷ Even if advance rations were to be unloaded due to the supply ratio, the desire to fill the stomach and the advance delivery situation of supplies on Guadalcanal indicated that only a few items would be delivered, and others would be left behind. This also highlighted the problem of unbalanced eating.⁷⁸

The average ratio of supplies transported from Rabaul to Guadalcanal and accumulated at the delivery point during the operation was 18% of the amount transported for ammunition, 14% for food (staple food), and 27% for sanitary materials. At some points, however, there were none at all.⁷⁹

Regarding the staple foods that were landed (delivered) to Guadalcanal, the table “List of Staple Food Supply Status During the Guadalcanal Campaign” below shows which transport method had the highest effect on landing. According to the list, submarines had the highest ratio (delivered) at 69% (5% for transport ships, 19% for destroyers). For this reason, the historical document “Ga To Sakusen no Kyokun (Lessons from the Guadalcanal Campaign)” concludes by stating that “Replenishment in maritime operations must be organized using submarines on the coast and armored vehicles on land.”

⁷⁶ Matsubara, *Daitoa Senso ni okeru Rikugun Senpaku Senshi* (History of Army Ships in the Greater East Asia War), p. 98.

⁷⁷ Second Division Accounting Department, “*Soromon ‘Ga To’ Sen ni Okeru Kyuyo Hokyū no Kyokun*” (Lessons on Replenishment During the Battle of Solomon’s Guadalcanal).

⁷⁸ *Ibid.*

⁷⁹ “*Ga To Sakusen no Kyokun*” (Lessons from the Guadalcanal Campaign) – Sumiya Tei collection.

Table 1. List of Staple Food Supply Status During the Guadalcanal Campaign

Legend: R – Rabaul, S - Shortland

Tens of thousands of man-days – expressing how many tens of thousands of people are served in one day

Classification		Transport ship		Destroyer		Submarine		Other	
Plan	By area	R	S	R	S	R	S	R	S
	Sub-total	272	—	170	20	6	51	23	—
	Total	272		190		57		23	
		542 (Unit: tens of thousands of man-days)							
Implementation	By area	272	—	110	20	6	36	21	—
	Sub-total	272		130		42		21	
	Total	465 (Unit: tens of thousands of man-days)							
Landing (Delivering)		14		22		29		2	
	Total	67(65) (Unit: tens of thousands of man-days)							
Landing (delivery) ratio to plan		5%		11.5%		52%		8%	
		13% (12%)							
Landing (delivery) ratio to implementation		5%		17%		69%		10%	
		16% (15%)							

(Source) “Ga To Sakusen no Kyokun” (Lessons from the Guadalcanal Campaign) (Collection of the Center for Military History, National Institute for Defense Studies)

Conclusion

As we have discussed above, in the effort to recapture Guadalcanal, the Imperial Japanese forces formed a supply line from Rabaul to the front line of Guadalcanal and fought desperately to continue providing supplies by breaking through the area under the U.S. force’s air control, mainly with three convoy operations, and continued the replenishment war; but all these attempts failed. During the operations, destroyers and submarines were used for transport, and some food and other supplies were landed. However, due to the poor local transportation system within Guadalcanal, almost no supplies reached the front line.

The main reason for this situation was that the Navy failed to perform its responsibility of delivering to Guadalcanal the troops and supplies needed for the counterattack against the beachhead constructed by the U.S. forces. Sir Winston Leonard Spencer Churchill remarked during the Invasion of Normandy, “The Navy’s task was to enable the Army to cross the English Channel safely, to support the landing in every way, and thereafter ensure the timely arrivals of reinforcements and supplies, regardless of the dangers posed by the enemy and the sea.”⁸⁰ The Combined Fleet tried to pursue dual objectives simultaneously: to protect the transport convoys and to destroy the American task forces. Nevertheless, the primary objective of the Combined Fleet remained the destruction of the U.S. task forces by the 3rd Fleet as the Mobile Force, and

⁸⁰ Winston Churchill, *Chaachiru Kaikoroku Dai 20 Kan* (Memoirs of Winston Churchill vol. 20), trans. Translation Committee of Mainichi Shimbun (Tokyo: Mainichi Shimbun 1954), p. 15.

protecting the transport convoys was only a secondary objective. In the end, neither objective was achieved. However, from a broader perspective, the responsibility is not solely on the Navy. In constructing the supply line from Rabaul to Guadalcanal, the poor quality of the shipping ports that served as transit points and local transportation within Guadalcanal, delays in mechanization, and lack of air defense measures were particularly noticeable. Why did the Japanese' effort result in such a failure? This was because the Japanese military itself did not recognize the importance of resupply, which was to have the necessary munitions in the necessary quantity, at the necessary time, and in the necessary place. The problem lied in the failure to recognize the importance of the concept of supplying – Having the necessary munitions in the necessary quantity, at the necessary time, and in the necessary place. The Japanese forces did not recognize the importance of replenishment, did not actively consider how to establish replenishment and how to achieve it, and did not prepare and practice in a way that could be planned and operated in an integrated manner with the integrated operations of the army and navy.

In the end, resupplying operation for Guadalcanal, which was actually under the U.S. military forces' air control, was not an easy task that the Japanese could accomplish by dispersing its army and navy military forces.

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