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Operation Iceberg's Sea Defense Strategy During the Invasion of Okinawa Island in the Pacific War

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ABSTRACT

The purpose of this study was to analyze the sea defense strategy used in the Iceberg operation to strengthen the defense aspect of the country. The method used in this study is descriptive qualitative. The results showed that (1) the naval blockade was an effective strategy in winning the battle on Okinawa Island, (2) the establishment of a sea defense line in operation Iceberg supported the protection of the Allied fleet towards the Ryukyu Islands from attacks by Japanese submarines and enemy warplanes, (3) Marine aircraft were used in operation iceberg to counter the threat of floating glaciers and to monitor the movement of those glaciers, (4) Cooperation between the Allied fleets of the United States, Great Britain, and Australia in Operation Iceberg was critical to the successful invasion and protecting forces from attacks by the Japanese naval fleet, and (5) Allied forces conducted naval intelligence monitoring around Okinawa Island to monitor the Japanese naval fleet using aerial reconnaissance, radar monitoring, and submarine reconnaissance.

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INTRODUCTION

Operation Iceberg, also known as the Battle of Okinawa, was one of the largest amphibious landing operations to take place during the Pacific War. Operation Iceberg was one of the major operations carried out by Allied forces in the Pacific War of the Second World War. This operation was the largest invasion carried out in the history of Allied forces in the Pacific region and was part of a strategy designed to win the war against Japan (Appleman, 2007).m This operation was carried out by the United States and its allies against Japanese forces to seize the island of Okinawa. Okinawa Island is very strategic because of its proximity to Japan and has an important airstrip for both sides. Operation Iceberg began on April 1, 1945 and lasted for almost three months until the island of Okinawa was captured by United States forces (Burdick, 2005).

The background to Operation Iceberg began with the United States' strategy to attack Japan from the south with the aim of approaching the main Japanese archipelago. Previously, the United States had carried out attacks on Saipan and Iwo Jima to prepare for an invasion of Japan. Okinawa Island was chosen as the next target because of its strategic location and importance for the Japanese in maintaining their defense. Japanese forces in Okinawa were led by General Mitsuru Ushijima who prepared a strong defense on the island. They dug trenches, laid mines, and built bunkers in various places to deal with the attacks of the United States. The Japanese also sent many additional troops to Okinawa to strengthen their defenses.

On April 1, 1945, United States forces made an amphibious landing on the island of Okinawa with the support of a powerful naval fleet. This attack met fierce resistance from Japanese troops who used guerrilla warfare tactics and launched suicide attacks using kamikazes. The battle was very fierce and took heavy casualties from both sides. Okinawa Island is one of the important islands in the Ryukyu Islands located in southern Japan. The island has a very important strategic location for both sides in the Pacific war. For Japan, Okinawa was the last defense before reaching the main Japanese archipelago, while for the Allies, capturing Okinawa would open the way to Japan (Hustings, 2008). After nearly three months of heavy fighting, U.S. forces captured the island of Okinawa in June 1945. Operation Iceberg is considered one of the bloodiest and heaviest battles of the Pacific War, with thousands of United States and Japanese soldiers killed in the battle. This operation was the largest naval operation in history. So it is important for researchers to know the sea defense strategy carried out in this operation to reap the success of invading Japan.

LITERATURE REVIEW

The concept of sea defense strategy is an effort to protect a country's territorial waters from threats and disturbances that can come from the sea. Sea defense plays an important role in safeguarding state sovereignty, natural resources, and overall national security. In an era of globalization and the complexity of increasingly diverse threats, sea defense strategies are becoming increasingly important to consider and develop (Frank, 2013). There are several main components in a sea defense strategy that must be considered, including:

Naval Blockade

1. Establishment of sea defense lines
2. Use of marine aircraft
3. Cooperation between Allied naval fleets
4. Marine intelligence monitoring

A sea defense strategy must also be able to integrate with other defense components such as air, land, and cyber defense. Good coordination between all defense components is essential to create a solid and integrated defense system.

METHODOLOGY

This research uses descriptive qualitative to gain a deep and descriptive understanding of phenomena or issues related to the issue of sea defense strategy in iceberg operations. Data collection is obtained by literature review or literature review by collecting various articles, books, journals, or other sources related to sea defense strategy in operation iceberg and the implications and application of defense policy. The analysis techniques used in accordance with the theory of Milles, Huberman and Saldana (2014) are *data collection*, data *condensation*, presenting data (*data display*), and drawing conclusions or verification (*conclusion drawing and verification*). The validity test of the data used is *Credibility* (Internal Validity), *Transferability* (External Validity), *Dependability* (Reliability) and *Confirmability* (Objectivity) carried out at each stage it is described in the following research design:

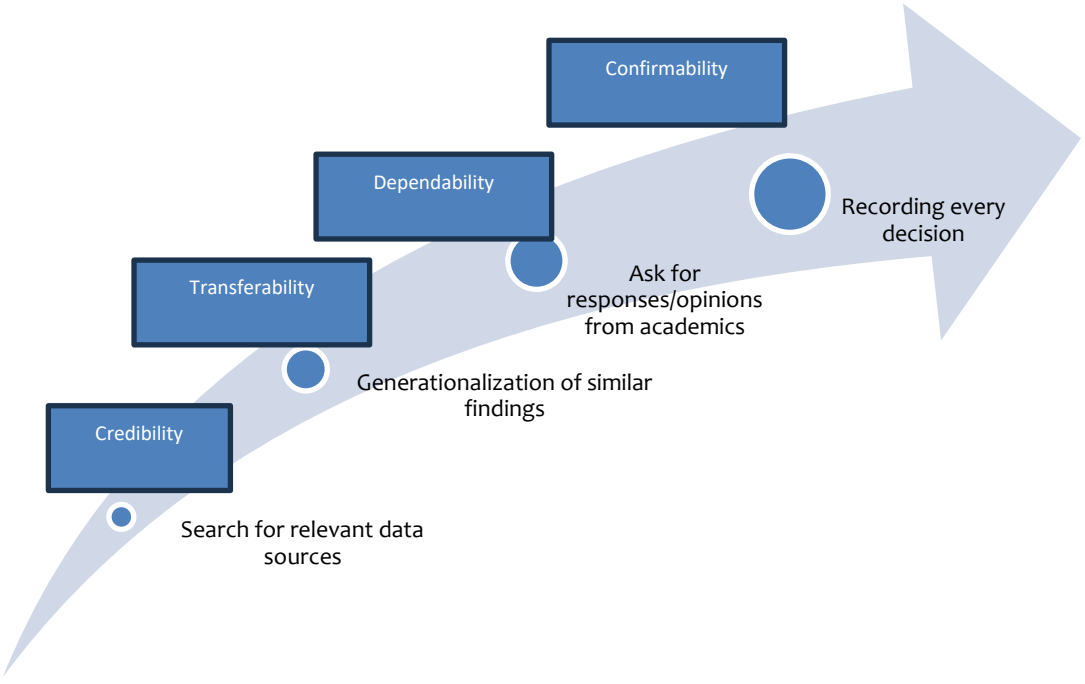

Figure 1 Research Design

Source : Data Processed by the Author, 2023

The above is done in order to obtain the accuracy of research results and the approach used by researchers is really consistent if used by other researchers in different topics (Gibbs, 2007 and Creswell, 2017).

RESEARCH RESULT

Iceberg Operation Chronology

Operation Iceberg began on April 1, 1945, when Allied forces made landings on the beaches of Okinawa. United States forces, led by General Simon Bucker, faced fierce resistance from Japanese forces led by Lieutenant General Mitsuru Ushijima. The battle on Okinawa Island lasted for nearly three months, and became one of the bloodiest battles in the history of the second World War. U.S. forces had great difficulty in dealing with Japanese resistance in Okinawa. Lieutenant General Ushijima led the Japanese forces with highly effective guerrilla tactics, taking advantage of the island's undulating terrain and natural caves. In addition, Japanese forces also carried out suicide attacks known as kamikazes, which caused heavy losses to United States forces.

However, the United States troops did not remain silent in the face of Japanese resistance. They used heavy bombs, artillery, and air support in an attempt to destroy Japanese defenses. In addition, U.S. forces also imposed a naval blockade on Okinawa that isolated Japanese forces and prevented them from obtaining supplies from the mainland. The fighting in Okinawa was very fierce and took huge casualties. U.S. forces lost more than 12,000 soldiers and 38,000 wounded, while Japanese forces lost about 110,000 soldiers and were mostly killed in battle.

Sea Defense Strategy in Operation Iceberg

Operation Iceberg was the code for the invasion of Okinawa Island carried out by Allied forces during the Pacific War on April 1, 1945. It was one of the largest operations ever conducted in the Pacific War and one of the bloodiest battles in the history of war. The sea defense strategy used in Operation Iceberg was crucial to the successful invasion of Okinawa Island. Allied forces led by the United States carried out various naval defense strategies involving naval fleets from the United States, Great Britain, and Australia. Some of the sea defense strategies used in Operation Iceberg include:

Naval blockade

To ensure the success of the invasion, Allied forces conducted a naval blockade around Okinawa Island. The naval blockade was imposed to prevent supplies and aid from Japan to Japanese forces defending on Okinawa Island. The Allied naval fleet patrolled the waters of Okinawa Island to destroy any ship or aircraft attempting to cross the naval blockade. The naval blockade used in this operation involved the United States navy isolating the island of Okinawa and destroying Japanese supplies. The title of the forces involved in this operation was the Fifth Fleet of the United States Navy under the command of Admiral Chester W. Nimitz. The Fifth Fleet consists of various destroyers, aircraft carriers, submarines, and cruisers that play a role in launching naval blockades and battles around Okinawa (Hoyt, 2009).

Establishment of sea defense lines

The Allied forces formed a strong sea defense line around the waters of Okinawa Island to protect the invasion fleet from the attack of the Japanese naval fleet. This sea defense line consists of warships, aircraft carriers, submarines, and marine aircraft ready to attack any Japanese naval fleet approaching Okinawa Island (Stille, 2014). The establishment of a sea defense line in operation Iceberg was an attempt to protect the Allied fleet and forces during the voyage to the Ryukyu Islands. Allied forces had important considerations in planning this line of sea defenses because they had to deal with potential Japanese submarine attacks and threats from enemy warplanes. The presence of Japanese submarines around Ryukyu waters posed a serious threat to the Allied fleets and the success of their operations (Morrison, 2014).

One of the strategies used in the establishment of sea defense lines was to include warships, aircraft carriers, submarine hunters, and maritime patrol aircraft to conduct surveillance and protection of the Allied fleet. It is intended to maintain the security of the fleet from enemy submarine attacks that can disrupt the course of invasion operations to the Ryukyu Islands. With the support of various types of naval guns and fighter aircraft, the Allied fleet was able to protect itself from threats coming from the sea and air (Till, 2013). The establishment of a sea defense line also involved the organization of effective communication between all elements of the Allied navy. Good coordination between combat ships, aircraft carriers, and maritime patrol aircraft is essential in detecting and responding to impending threats. Effective communication is also needed to organize sea defense strategies, including patrols, aerial surveillance, and emergency evacuation if needed (Hattendorf, 2019).

In addition, sufficient funding is also needed in the establishment of sea defense lines. The procurement of military equipment, fuel and maintenance of the warships was part of the preparations that had to be made before the Iceberg operation began. An adequate budget will ensure the readiness of the navy in facing any eventuality that occurs during the implementation of the operation (Symond, 2011). One example of a significant contribution to the establishment of sea defense lines is the participation of the United States Navy. In operation Iceberg, the United States Navy provided resources that supported the establishment of sea defense lines, including battleships, aircraft carriers, fighter aircraft, and submarine hunters. The existence of the United States naval fleet played an important role in creating a balance of power and supporting the success of Allied operations in the Ryukyu Islands. Overall, the establishment of a sea defense line in the Iceberg operation is an important stage that requires sufficient planning, coordination and resources. With the presence of a strong naval fleet and effective communications, the Allies were able to protect their fleet from enemy threats and ensure a successful invasion of the Ryukyu Islands.

Use of marine aircraft

Aircraft such as aircraft carriers, hunting ships, and aircraft carriers were used by Allied forces to conduct air raids against the Japanese naval fleet and Japanese forces on Okinawa Island. This naval aircraft was also used to bomb Japanese defensive positions on Okinawa Island. The use of seaplanes in iceberg operations is one effective method to counter serious threats caused by large floating glaciers in the ocean. These operations are usually carried out by interested parties such as governments or maritime safety agencies to address the risk of collision with these floating glaciers. The use of seaplanes in Operation Iceland involves everything like monitoring, preventing, and removing floating glaciers that are dangerous for shipping.

Sea aircraft are one of the aircraft commonly used in this operation because it has a capable ability to patrol large and difficult to reach sea areas. In iceberg operations, marine aircraft are equipped with special equipment such as radar, thermal cameras, and other sensors that can detect the presence of floating glaciers from a safe altitude and distance. Seaplanes can also be equipped with equipment to sample water and ice from floating glaciers for further analysis. In addition, marine aircraft are also used to monitor the position and movement of floating glaciers so as to provide accurate information to ships sailing around the area. With complete and real time information, ships can avoid collisions with floating glaciers and reduce the risk of marine accidents caused by these glaciers.

In addition, marine aircraft can also be used in iceberg operations to conduct risk assessments and planning appropriate actions to address threats posed by floating glaciers. By conducting surveys from the air, marine aircraft can help stakeholders determine effective strategies to deal with such threats, such as manual removal or blasting of dangerous floating glaciers. There are several examples of the use of marine aircraft in iceberg operations that can be used as a reference, including surveillance operations and monitoring of floating glaciers in the Arctic region by the United States Coast Guard using long-range patrol aircraft such as HC-130 Hercules and MQ-9 Guardian long-range reconnaissance aircraft. The operation aims to protect ships passing through the Arctic region from the growing threat of floating glaciers due to climate change.

In addition, the Royal Canadian Navy also uses marine aircraft in iceberg operations around Newfoundland and Labrador waters to assist commercial vessels and fishermen in dealing with the threat of floating glaciers. The marine aircraft used in this operation is the CP-140 Aurora maritime patrol aircraft equipped with advanced sensors to detect floating glaciers from the air.

Cooperation between Allied naval fleets

Allied naval fleets from the United States, Great Britain, and Australia cooperated in setting up sea defense strategy in Operation Iceberg. Coordination and cooperation between naval fleets was essential to ensure a successful invasion and protect Allied forces from attacks by the Japanese naval fleet. Cooperation between the naval fleets of the Allied nations was very important in naval warfare strategy during World War II. Each ocean fleet has its own strengths and weaknesses, but with good cooperation, they can complement each other and improve the effectiveness of military operations carried out. Operation

Iceberg itself is one example of successful fleet-to-war cooperation in organizing sea defense strategies and protecting Allied forces from Japanese naval attacks (Toll, 2006).

For example, the United States brought a huge naval force to the operation. The United States naval fleet consists of warships, aircraft carriers, submarines, cruisers, and amphibious assault ships that all play an important role in landing operations on Okinawa. Meanwhile, the United Kingdom and Australia also contributed the strength of their naval fleets, which played a role in protecting U.S. forces during the operation. Cooperation between fleets not only focuses on direct contact between warships, but also involves coordinating sea defense strategies, patrols, and surveillance of territorial waters. This is very important in dealing with threats from the Japanese naval fleet which also has a large force in the Asia-Pacific region. With good coordination and cooperation, the Allied naval fleet was able to set up an effective naval defense strategy and reduce the risk of enemy attack.

One concrete example of fleet-to-fleet cooperation in Operation Iceberg was in guarding the waters around the island of Okinawa. The naval fleets of the United States, Great Britain, and Australia worked together to conduct sea patrols and monitor the movements of the Japanese naval fleet that could potentially attack Allied forces. With this cooperation, Allied forces were able to protect their landings on Okinawa and secure supply lines to the island (Sloan, 2000). Furthermore, fleet-to-sea cooperation in Operation Iceberg also involved the exchange of intelligence. Accurate and fast intelligence information is essential in organizing sea defense strategies and anticipating enemy attacks. The United States, United Kingdom, and Australia share intelligence with each other to ensure the success of their military operations in Okinawa.

In the context of cooperation between the Allied naval fleets, principles such as mutual trust, mutual support, and mutual respect became the main keys in achieving common goals. Without good cooperation between the Allied nations, military operations such as Operation Iceberg would be impossible to succeed. Therefore, cooperation between the fleets of the United States, Great Britain, and Australia became very important in dealing with the threat of the Japanese naval fleet during World War II.

Marine intelligence monitoring

Allied forces conducted naval intelligence monitoring to monitor the activities of the Japanese naval fleet around the waters off Okinawa Island. This naval intelligence monitoring involved aerial reconnaissance, radar monitoring, and submarine reconnaissance to detect any movements of the Japanese naval fleet that could endanger Allied forces (O, Brien, 2006). Monitoring of marine intelligence became one of the strategies that played an important role in determining the victory of the Allied forces over the Japanese in the battle. Marine intelligence monitoring involves various types of activities such as aerial reconnaissance, radar monitoring, and submarine reconnaissance to detect enemy naval fleet movements that could endanger one's own forces (Morrison, 2001).

Operation Iceberg, which was the code name for the Allied forces' invasion of Okinawa Island, involved a sophisticated and detailed sea defense strategy. With effective monitoring of naval intelligence, Allied forces were able to observe and respond to every movement of the Japanese naval fleet quickly and precisely. This gave the Allied forces a tactical advantage in protecting the invasion fleet and achieving victory in the battle (Willmot, 2002). In the historical context of the Pacific War, the Battle of Okinawa is considered one of the bloodiest battles in world military history. Many casualties from both sides fell in this battle. However, the success of the Allied forces in gaining a strategic military base on Okinawa Island was crucial in ending the Pacific War and winning the war against Japan. The monitoring of marine intelligence in the Battle of Okinawa also shows how vital the use of advanced military technology and strategy is in the context of modern warfare. With effective monitoring of naval intelligence, Allied forces could reduce risks and losses in combat and increase the effectiveness of their military operations.

CONCLUSIONS

Some of the sea defense strategies used in Operation Iceberg include the following:

1. Sea blockade. The naval blockade was an effective strategy in winning the battle on Okinawa Island. By imposing a naval blockade, the Allied forces succeeded in isolating Japanese forces and preventing aid and supplies from Japan. The Fifth Fleet of the United States Navy led by Admiral Chester W. Nimitz was instrumental in enforcing this naval blockade. Thus, the naval blockade served not only to destroy enemy supplies, but also to ensure successful invasion and control of the desired territory.
2. The establishment of the sea defense line. The establishment of a sea defense line in operation Iceberg supported the protection of the Allied fleet towards the Ryukyu Islands from attacks by Japanese submarines and enemy warplanes. The strategy involves warships, motherships, submarine hunters, and maritime patrol aircraft for fleet surveillance and protection. Effective communication between naval elements is critical in detecting and responding to threats. Sufficient funding for equipment procurement and ship maintenance is also crucial, and the contribution of the United States Navy provides substantial support. The establishment of a sea defense line was an important step with good planning and coordination to protect the Allied fleet and ensure a successful invasion of Ryukyu.

3. The use of marine aircraft. Marine aircraft are used in operation iceberg to counter the threat of floating glaciers and to monitor the movement of those glaciers. Marine aircraft are equipped with special equipment such as radar and thermal cameras to detect floating glaciers from the air. They can also take water and ice samples from floating glaciers for further analysis. The sea plane provides accurate information to the surrounding ships to avoid collisions and sea accidents. Examples of the use of seaplanes in operation iceberg include surveillance operations of floating glaciers in the Arctic by the United States Coast Guard and in Newfoundland and Labrador by the Royal Canadian Navy.
4. Cooperation between the Allied naval fleets. Cooperation between the Allied fleets of the United States, Great Britain, and Australia in Operation Iceberg was critical to the successful invasion and protecting forces from attack by the Japanese naval fleet. Each ocean fleet has its own strengths and weaknesses, but through good cooperation, they can complement each other and improve the effectiveness of military operations. Coordination of sea defense strategies, patrols, surveillance of territorial waters, and exchange of intelligence information are key to success. The principles of mutual trust, support, and respect are also important in achieving common goals. Cooperation between naval fleets was a vital factor in dealing with the threat of the Japanese naval fleet during World War II.
5. Marine intelligence monitoring. Allied forces conducted marine intelligence monitoring around Okinawa Island to keep an eye on the Japanese naval fleet using aerial reconnaissance, radar monitoring, and submarine reconnaissance. This strategy assisted the Allied forces in responding to Japanese naval fleet movements that could potentially endanger them. In Operation Iceberg, Allied forces managed to gain a tactical advantage with effective monitoring of naval intelligence. The Battle of Okinawa is considered one of the bloodiest battles in military history, but the Allied success in gaining a strategic military base on the island was crucial to ending the Pacific War. Monitoring of marine intelligence shows the importance of modern military technology and strategy in winning battles and reducing the risk of losses.

ADVANCED RESEARCH

Still conducting further research to find out more about Operation Iceberg's Sea Defense Strategy During the Invasion of Okinawa Island in the Pacific War.

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REFERENCES

Appleman, Roy E. Okinawa: The Last Battle. U.S. Army Center of Military History, 2007.

Burdick, William L. The Last Parallel: A Marine's War Journal. University of Oklahoma Press, 2005.

Hastings, Max. Retribution: The Battle for Japan, 1944-45. Knopf, 2008.

Hattendorf, John B. et al. The Influence of History on Sea Power. Routledge, 2019.

Hoyt, Edwin Palmer. The Battle of Okinawa: The Blood and the Bomb. Jove, 2009.

Morison, Samuel Eliot. History of United States Naval Operations in World War II, Vol. XIV: Victory in the Pacific, 1945. Little, Brown and Company, 2014.

Morison, S. E. (2001). History of United States Naval Operations in World War II: Volume XIV - Victory in the Pacific, 1945. Champaign, IL: University of Illinois Press.

O'Brien, F. (2006). The Pacific Campaign in World War II: From Pearl Harbor to Guadalcanal. Oxford, UK: Osprey Publishing.

Symonds, Craig L. The Battle of Midway. Oxford University Press, 2011.

Stille, Mark. The Imperial Japanese Navy in the Pacific War. Osprey Publishing, 2014.

Sloan, Samuel. Defense of the Third Reich 1941-45. Greenhill Books, 2000.

Toll, Ian W. Six Frigates: The Epic History of the Founding of the U.S. Navy. W.W. Norton &; Company, 2006.

Till, Geoffrey. Seapower: A Guide for the Twenty-First Century. Routledge, 2013.

Willmott, H. P. (2002). The Barrier and the Javelin: Japanese and Allied Strategies, February to June 1944. Annapolis, MD: Naval Institute Press.