

**STRATEGY
RESEARCH
PROJECT**

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STRATEGIC IMPLICATIONS OF THE BATTLE OF THE ATLANTIC

BY

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USAWC STRATEGY RESEARCH PROJECT

Strategic Implications of the Battle of the Atlantic

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ABSTRACT

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The battle of the Atlantic is perhaps the most pivotal battle of the Second World War. In it, Germany's use of asymmetric warfare, mines and submarines, once again threatened Britain's economic survival. Although Hitler correctly identified Britain's economy as its center of gravity and had success in attacking it through 1943, he failed to demonstrate the strategic vision necessary to achieve a decisive victory in the Atlantic. Hitler failed because he did not grasp the impact that submarine warfare had in WWI, he wanted a quick, decisive victory like Poland, and he underestimated both the will of the British leadership and the industrial capacity of the United States.

Allied success in this campaign enabled the successful prosecution of the war on the European continent through the sallyport of England. From an Allied perspective the Atlantic became the proving ground for the advancement of the carrier-based navy and emerging technology, gave Roosevelt a means with which to invigorate an isolationist society, and gave Britain the time she needed to develop and improve measures to fight the asymmetric threat confronting them.

This study looks at the battle of the Atlantic in closer detail while examining Hitler's overarching strategic objectives and those in this decisive theater in an attempt to explain why Hitler allowed it to simply run its course.

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STRATEGIC IMPLICATIONS OF THE BATTLE OF THE ATLANTIC

The battle of the Atlantic is perhaps the most pivotal campaign of the Second World War. This war within a war began on 3 September 1939 just two days after Germany invaded Poland and ended on 8 May 1945 when Germany surrendered. Losses on both sides exceeded 100,000 people.¹ Allied success in this campaign enabled the prosecution of the war on the European continent by Allied Forces and sealed the outcome of the war in their favor. In doing so, the Allies validated the utility of the convoy system assisted by improved doctrine and emerging technology. Germany's use of asymmetric warfare, mines and submarines, once again threatened Britain's economic survival, contrasting Mahan's theory of seapower ascribed to by all major powers at the time, that of large, surface battles waged on the high seas by capital ships. Although Hitler correctly identified Britain's economy as its center of gravity and enjoyed some success in attacking it through 1943, he demonstrated a lack of strategic vision by failing to fully commit to decisive engagement in the Atlantic when the time was right. After the war, Churchill stated, "The only thing that ever really frightened me during the war was the U-boat peril It would have been wise for the Germans to stake all on it."² Why then did not Hitler reinforce early success in the Atlantic? Hitler failed to grasp fully the impact that submarine warfare had on Britain in World War I. He viewed the Atlantic as an economy of force theater because he knew Germany could not compete with Britain at sea. He also recognized that attacking merchant shipping required stamina, patience, and endurance and he wanted quick, decisive victories such as those achieved in Poland, France, and the like. In this way, he could avoid total mobilization, quickly reconsolidate, and avoid becoming overextended. Finally, Hitler underestimated the will of the British leadership and the industrial capacity of the United States. Because of these things coupled with the Allied response to the Atlantic threat, Germany never seriously threatened Britain's lifeline from the sea. In fact, it failed to approach the effectiveness achieved in World War I when it "...helped reduce Britain's reserves of essential supplies to just six weeks, a crisis unmatched at any time in the Second World War."³ Hitler's inability to realize the potential of this theater and its impact on future operations in many ways made the outcome academic in nature. In looking at the Battle of the Atlantic in closer detail, I will examine Hitler's overarching strategic objectives as well as those in this decisive theater in an attempt to explain why Hitler allowed it to simply run its course.

STRATEGIC SETTING

The roots of the Second World War in general and the battle of the Atlantic in particular can be found in the Treaty of Versailles subsequent to the German defeat in WWI. This treaty essentially emasculated Germany by forcing it to give up land, disarm its Armed Forces, and pay reparations for its transgressions. In the 1930's, however, Germany began its resurgence under Adolph Hitler whose platform focused on undoing the damage caused by the Treaty of Versailles and advancing Germany to its rightful place as the dominant power on the European continent.

In spite of the restrictions placed on Germany, its military at the end of the decade was a powerful one. The Luftwaffe was the most powerful air arm on the continent and quite possibly the world. The German Army was the second strongest in Western Europe. It would soon unleash, in conjunction with the Luftwaffe, an evolutionary style of warfare, Blitzkrieg, which caused the rest of the world to stand up and take notice. The Kriegsmarine on the other hand was a different story. It was disparately weak and largely inferior to Britain's Royal Navy, the predominant sea power of the time. Why the lack of naval preparedness in light of the resurgence of the other branches? First, the Treaty of Versailles specifically limited the amount of surface ships that Germany could have and prohibited submarines. Subsequently, the Anglo-German Naval Agreement of 1935 and the London Submarine Protocol of 1936 made further stipulations to allowable submarine tonnage. Second, the Kriegsmarine had to deal with Hitler's preoccupation with the Air Force and Army.⁴ It was obvious that the Navy stood third in line when it came to prioritizing Germany's industrial effort. Perhaps the most important reason for the Navy's lack of preparedness lay in Hitler's desire to avoid antagonizing the British. This was the diplomatic framework of his pre-war naval policy.⁵ As early as 1924, Hitler in his book, Mein Kampf, spoke of winning England's favor.⁶ In 1933, Hitler laid plans for his future naval policy by stating his intention to live in peace with Italy, Japan, and England. It was not until 1938 that Hitler began to observe a pattern of English resistance to his plans for continental hegemony.⁷ This did not deter him, however, from approving a proposal backed by the Kriegsmarine to modernize the entire fleet, which would enable it to engage the Royal Navy and interdict merchant shipping by the 1944-5 timeframe. Hitler himself assured his Naval Staff that war was not in the foreseeable future giving them the requisite time to implement their plan; he misread the resolve of the British leadership.⁸

Why did Hitler take this approach? He believed back in 1935 that Great Britain had agreed to give Germany a free hand in Europe in exchange for her offer to Britain of control of the sea. Hitler felt that by keeping Germany weak at sea, he could avoid a direct challenge to Britain until Germany's place on the continent was secure. Then, he could take on Britain.⁹ He also questioned the will of Britain's leadership in lieu of their appeasement policy. "Our enemies have no personality's; no masters, no men

of action," he said.¹⁰ Hitler was mistaken, being forced into action over Poland by Prime Minister Chamberlain's 31 March 1939 announcement in the wake of Germany's invasion of Czechoslovakia, of the Anglo-Polish Mutual Assistance Declaration, which allied Britain and France with Poland. By the end of April, Hitler had abrogated the Anglo-German Naval Agreement and with it, the expectation which he allowed himself to justify the neglect of the German fleet.¹¹

How did Great Britain reach this point? Victorious in WWI and thus instrumental in setting the conditions of the Treaty of Versailles, Britain was a cohesive society with an economy solely reliant on trade and shipping. Their policy of appeasement resulted in several agreements with Germany, attempting to set the conditions for peace by limiting Germany's ability to wage war at sea and interdict shipping. Britain's Prime Minister Neville Chamberlain called this "peace with honor."¹² Militarily, Britain maintained a powerful surface Navy, adhering strictly to those principles espoused by Mahan. The Royal Air Force, although not as powerful as the Luftwaffe, was a strong, professional air arm that could not be taken lightly. The Army was their weakest link, still rebuilding from WWI and not as critical to homeland defense as the other branches, considering Britain's strategic location. The Franco-British alliance and Chamberlain's announcement of an upcoming agreement with Poland forced Hitler to act before he wanted.

The United States was emerging as the preeminent power in the world. Under President Roosevelt and his New Deal policy, the United States started to come of age industrially. Diplomatically, the country adopted a neutral posture. A series of legislative measures reinforced a widely held isolationist viewpoint regarding intervention in European wars. The Johnson Act of 1934, for example, banned loans to countries in default of earlier debts, the main effect being that Great Britain would be unable to acquire supplies and munitions from the United States.¹³ Subsequently, a series of Neutrality Acts were passed which seriously inhibited Roosevelt in his efforts to assist Great Britain until Pearl Harbor. The 1939 Neutrality Act, passed as the war began, repealed the arms embargo stipulated by an earlier act but made cash and carry mandatory under law. Although neutral in principle, this policy was exclusionary since the British blockade prevented Germany from acquiring arms from the United States. Implementing a policy in support of the British which he referred to as "all aid short of war," and exemplified by Lend-Lease, Roosevelt continued to use his power, influence, and bully pulpit to push for support to Britain while demonstrating hostility toward Nazi Germany.¹⁴ Militarily, the Navy was growing formidable in the late 1930's and like Britain, touting Mahan's principles regarding the superiority of capital ships, the decisiveness of big battles, and command of the sea.¹⁵ These principles ultimately failed the test of combat in the Battle of the Atlantic and helped pave the way for the emergence of the carrier-based navy.

OPERATIONAL SETTING

The Battle of the Atlantic in WWII was for all practical purposes a repeat of the WWI experience. With the exception of radar and to a good extent aircraft, the factors affecting the outcome in both world wars are identical. Nature played a key role in the execution of the Atlantic campaign, particularly in the North Atlantic, where blast force winds, towering seas, snow squalls, and ice storms ruled the winter months and fog persistent throughout the year. Such weather claimed nearly 100 ships on its own during the winter months of 1942-3.¹⁶

Germany's objective was the destruction of British shipping. When Admiral Erich Raeder, Commandant of the Kriegsmarine, heard Hitler's demand in 1939 that the German Navy prepare for war against the Allies, he responded that his Kriegsmarine "could do little more than show the world how to die gallantly."¹⁷ Although unprepared due to Hitler's gross miscalculation of the combined Franco-British response to the invasion of Poland, the German Navy deployed, prepared to strike the first blow. Raeder advocated a blockade of British shipping from the outset but Hitler initially called for restraint until the political situation became clearer. He still entertained the notion that he could come to a peaceful resolution with Great Britain "...in view of the political and military restraint shown by France and the still hesitant conduct of British warfare."¹⁸ Raeder's submarine force commander, Admiral Karl Doenitz, envisioned a tonnage war, seeking to sink the maximum amount of enemy shipping per U-boat per day. An aggressive and extremely able officer, he viewed the Atlantic as the decisive theater of operations and believed he needed a 300 boat fleet to sever England's lifeline.¹⁹ Unfortunately for Donitz, the war began years before the completion of their naval modernization program, the Germany Navy was last in priority of production behind the other branches, and in their own service, the U-boat fleet was a distant second to the surface fleet. When the war began, the German Navy had 56 U-boats in its inventory. Of those, only 22 were suitable for service in the Atlantic.²⁰

Great Britain's objective was twofold: protect its own shipping and impede German shipping. First and foremost, she needed to ensure Britain's economic survival by protecting its vital merchant fleet, which averaged some 2,000 merchantmen at sea daily.²¹ Surprisingly, they were unprepared to accomplish this initially. There were several reasons for this. First, the British were confident that they had rendered Germany's U-boat arm ineffective through the Treaty of Versailles, the Anglo-German Naval Agreement of 1935 and the London Submarine Protocol of 1936. These documents resulted in a meager German submarine fleet and outlawed the sinking of unescorted ships. Second, British fixation on Mahan closed their eyes to all but a capital ship threat. Finally, the British felt that the U-boat threat was obsolete due to the development of ASDIC (Allied submarine detection investigation committee) sonar.²² Confident that this technology would inhibit any resurgence of submarine warfare, the British

allowed preparations for antisubmarine warfare (ASW) to lapse into a minor activity, abolishing their Mine Sweeping, ASW and Trade Divisions.²³ The Royal Navy did, however, regain control of the Fleet Air Arm in 1937 and also enjoyed a positive relationship with the Royal Air Force Coastal Command, which would pay great dividends in future ASW activities.²⁴ Britain's focus was clearly on the surface warfare threat and the blockade of German shipping in an attempt to affect Hitler's economy and industrial capacity.

CAMPAIGN EXECUTION

The Early Offensive (September 1939 to June 1940)

The first four months of the Battle of the Atlantic had the British on their heels. During this period, the Germans sank 215 merchant ships and two warships taking over 1,500 lives.²⁵ Raeder had convinced Hitler to waive his requirement to warn ships prior to attacking, granting the Kriegsmarine permission to torpedo British and French merchant shipping initially and subsequently passenger vessels. Hitler was content to allow these sinkings and that of select neutral shipping under the guise of probable mine hits as long as the circumstances were sufficiently obscure. This decision was clearly influenced by the successful U-boat raid on Scapa Flow, the home of the British Fleet on 14 October 1939. Hitler remained firmly opposed to any open breach of a neutral country's rights, wanting nothing to interfere with the invasion of France.²⁶ The Germans employed mines principally during this initial offensive. Utilizing submarines, surface vessels, and aircraft, they sowed mines in harbor entrances, estuaries, and shallows of the English Channel and North Sea. Employing a newly developed magnetic impulse mine, which could not be swept by normal methods, they sunk 79 ships before the British recovered such a mine and countered its effects by running an electrically charged cable around each ship.²⁷

Surprisingly, given their successful WWI experience, the British took months to invoke a convoy system. Their policy stated, "the convoy system will only be introduced when the balance of advantage is in its favor and when sinkings are so great that the country no longer feels justified in allowing ships to sail by themselves, but feels that, for the protection of their crews, the convoy system is necessary."²⁸ They felt that the convoy system would not be needed at the outbreak of a war, which would give them time to improvise protection.²⁹ They were confident in both ASDIC and their Fleet. After all, convoys were defensive in nature. Great naval powers like the British, preferred employing their vessels on search and patrol missions rather than escort duty. As such, the British took steps to establish an effective convoy system but it was not until 1943 that Allied shipping got the protection it needed to traverse the North Atlantic.³⁰

The slaughter continued in January and February with the Germans sinking 85 ships while losing only 3 U-boats.³¹ It could have been worse. U-boats at sea in operational areas during the winter of 1939-40 never exceeded ten in number and sometimes fell as low as two.³² Raeder pushed Hitler for immediate increases in U-boat production as well as a "Siege of England." In his words:

If the war continues, the siege of England must be carried out at once and with greatest intensity...all objections must be overruled. Even the threat of America's entry into war, which appears certain if the war continues, must not give rise to any restrictions. The earlier and more ruthlessly we begin, the sooner the effect and the shorter the duration of the war. Any restrictions will only lengthen the war.³³

Hitler was not ready to declare a 'Siege of England' as yet for fear of offending the neutrals before he was ready to invade the Low Countries. It is also clear that he did not want to imply priority to the war at sea until France fell and as such, did not want to divert resources earlier than he could from the Army.³⁴

Raeder also made a case for bases on the Norwegian coast being invaluable for operating against British trade. Hitler agreed that Norway must not fall into British hands. Norway's occupation could seal off the Skaggerak, inhibit movement of shipping in the Baltic and North Seas, increase German vulnerability to air attack, and affect the supply of iron ore from Sweden, an expected source of 75% of their anticipated needs in 1940.³⁵ On 3 March, Hitler decided to invade Norway before taking France. U-boats redeployed to support the invasion and British merchant shipping losses declined as a result.

A British expedition to Norway failed and Germany successfully invaded Norway, sealing Prime Minister Chamberlain's eventual ouster. The acquisition of Norway and the ensuing occupation of the Low Countries and France gave Hitler the means to turn Britain's maritime flanks. French bases in particular meant a 50% reduction in transit time to the hunting grounds of the Atlantic.³⁶ The Royal Navy responded passively, laying mines between Iceland and Scotland, which other than destroying one U-boat had little affect upon U-boat movements.³⁷ The British were preoccupied with supporting the ensuing evacuation of Dunkirk with every available vessel.

Germany's successes during this period were of immediate importance to the conduct of the war and impacted upon the battle of the Atlantic as well. They resulted in the reduction of British escort forces, the loss of the French Fleet, the seizure of bases in the forward area, and the enforced diversion of Britain's limited shipping.³⁸ Hitler's Western Attack Strategy had been successful. He now occupied the Low Countries and had secured the early defeat of France. He increased the pressure on Great Britain indirectly through his naval arm in an unsuccessful attempt to bring them to the peace table. Raeder put it rather succinctly when he said, "the U-boat will always be the backbone of warfare against England and of political pressure on her."³⁹ But with limited numbers of U-boats available, it would constitute a threat, not a deathblow to British trade.

The First Happy Time (June 1940 to May 1941)

Hitler's next step was unclear and he considered an invasion of England. Raeder believed that an invasion should only be considered as a last resort since Great Britain can be made to ask for peace by cutting off her imports once he received the U-boats needed to accomplish the task. After all, had not Hitler stated, "once the Army...has taken the most important positions, industrial production will cease to flow into the bottomless pit of the Army's battles and can be diverted to benefit the Air Force and the Navy

for war against Great Britain?"⁴⁰ Yet on 15 July 1940, Hitler called for preparations for Operation Sea Lion to commence. He knew it was necessary to eliminate Great Britain as a base from which war could be fought before turning his attention on Russia. It became apparent after a period of time; however, that England could not be successfully invaded and he postponed preparations. Unfortunately, this delayed much needed U-boat construction during a critical period. Doenitz's U-boat fleet began operating from French bases, which increased the number of boats on station. He instituted "Rudeltaktik," wolfpack tactics to counter the increased number of escorts. Wolfpack tactics provided the U-boat fleet with a method to force their way through escorts to the main body of a convoy, though they still preferred attacking independent, unescorted shipping.⁴¹ In fact, for a 5-week period in late 1940, not one convoy was molested, yet independent losses soared.⁴² In response the Admiralty extended the westward limits of ocean convoy escort but this measure was offset in large part by a November decision to allow those merchant ships making 13 knots or better to sail independently.⁴³ This was not reversed until June 1941. In the mid-Atlantic, not only were ships unescorted, U-boats had immunity from air attacks in an area of the central North Atlantic which Allied land-based aircraft could not reach. This area was known as the called the Black Pit, subsequently known as the Greenland Air Gap. No wonder the U-boat crews referred to this period as "the Happy Time." Doenitz's initial foray into the northwestern approaches netted 217 merchant vessels at a cost of only 6 U-boats. He could not maintain this attrition rate due to the lack of boats available, their need for replenishment, and Hitler's recall of U-boats back to Norwegian waters or the Mediterranean.⁴⁴ In the Spring of 1941, Doenitz lost three of his ace U-boat captains as his attrition rate approached 20%, so he shifted his operating area 200 miles to the west. This decision revealed Doenitz's concept of tonnage warfare. When defenses became too strong, he would simply shift to a soft spot even though vital Allied cargoes may be delivered. As a result there were periods in the war where the North Atlantic was left completely uncontested.

The end of May marked the first time a North Atlantic convoy had been escorted all the way across the ocean thanks in large part to the Royal Canadian Navy.⁴⁵ It also marked the end of the first Happy Time. Since September 1939, U-boats had sunk over 650 ships, yet only 10% had been lost from escorted convoys and one was lost when escorts included a complement of air. Conversely, 60% of all U-boats had been sunk while attacking convoys.⁴⁶

Hitler decided to attack Russia, convincing himself he could achieve a quick victory utilizing blitzkrieg warfare. The employment of the Kriegsmarine, however, would still remain directed against England. Although Hitler admitted to neglecting the battle of the trade routes, he was still guilty of "overconfidence and exaggerated hopes that assaults by the Navy and Air Force on imports might lead to victory as early as July or August."⁴⁷ Unfortunately for Raeder who pushed for an all out effort against

British supply lines, Hitler was now fixed on his last remaining enemy on the continent. In June, Germany attacked Russia as Hitler abandoned his one front war approach.⁴⁸

The Tide Begins to Turn? June 1941 to December 1941

This period was arguably the most pivotal in the battle of the Atlantic. It saw the increased involvement of the United States in support of Great Britain and a reduction of shipping losses for a multitude of reasons. In July the U.S. commenced patrol operations off the Southern Greenland coast and assumed the task of garrisoning Iceland while U.S. aircraft began patrols from there. With the approval of Lend-Lease by Congress in March, American shipyards started building destroyer escorts for the British in July as well. Roosevelt and Churchill met in August to discuss plans for American convoy escorts and produced the Atlantic Charter, a statement of war aims by England and the United States. On September 4th, the USS Greer was attacked by a U-boat and responded, evoking this statement from President Roosevelt, "From now on, if German or Italian vessels of war enter the waters, the protection of which is necessary for American defense, they do so at their own risk."⁴⁹ And indeed, the latter part of 1941 saw great reductions in shipping losses for three reasons:

First the extension of the convoy system to take in the faster ships brought in a greater number under its protection; second, as 1941 progressed greater skill at codebreaking and its bedfellow, evasive routeing, made convoys safer. Last and conversely, the German decision to concentrate on pack operations under the previous two circumstances tended to improve the survival chances of independents and convoys alike.⁵⁰

This left U-boats faced with pursuing independents by surfacing to do so or attacking protected convoys. British defenses continued to improve making surfacing extremely risky. The British introduced escort carriers which, when combined with aggressive escort tactics, had a devastating effect on wolfpack operations and raised doubts as to their future in the Eastern Atlantic. Although the Germans had some success in the Greenland Air Gap where Norway-based Luftwaffe aircraft sunk 44 ships from June through August, the attack on Russia considerably reduced the number of aircraft available to attack British shipping.⁵¹ Next to its effect on U-boat production caused by continuing to produce hardware for the Army and Luftwaffe, this was the most serious result of the decision to invade Russia.⁵² U-boat diversions to the Mediterranean coupled with bad weather hampered the German effort in the Atlantic as well. Raeder insisted Britain would be finished if he could sink close to the highest rates achieved in WWI for a period of just six months, but his message went unheard.⁵³ He pushed for the elimination of enemy shipyards as vital to the prosecution of the war as a whole, but Hitler was fixed on the east. Doenitz and his U-boat fleet, on the other hand, began planning their first campaign in North American waters.⁵⁴

The Second Happy Time

December 1941 to December 1942

The Japanese attack on Pearl Harbor brought the United States officially into the war against the Axis. The attack was a complete surprise to the Germans who ill advisedly declared war on the U.S. on 11 December 1941. The time had come for U-boats to attack vulnerable U.S. shipping. Doenitz deployed 5 U-boats to the eastern seaboard of the U.S. having received orders to retain a large portion of his U-boat fleet in the Mediterranean.⁵⁵ Operation PAUKENSCHLAG (DRUMROLL) was designed to take advantage of unprotected shipping and paralyze the movement of raw materials along the coast to American industrial areas. Joined by 6 additional U-boats, they operated independently attacking at night hitting unarmed merchantmen, some of whom had their running lights still on. Wolfpack tactics were unnecessary, defensive measures being entirely inadequate. The effect was devastating: losses almost tripled from the previous month and climbed to over 535,000 tons in March. The Eastern Sea Frontier was totally unprepared to respond to the U-boat attacks, "possessing negligible surface forces and only 9 patrol aircraft by the end of 1941."⁵⁶ The U.S. Navy resisted all manner of advice from the British, gleaned nothing from the experience of their Allies over the period two years hence. Convinced that "a convoy without adequate protection is worse than none," an adage completely invalidated by the British experience, the Eastern Sea Frontier resorted to a series of emergency measures including hunter groups, patrols, and decoy vessels with concealed armament. The lack of value added by these measures is evidenced not only by the destruction of 23 ships in April but also in the fact that not a single U-boat had been lost during the first three months of Operation DRUMROLL. Small wonder that the U-boat crews referred to this period as the "Second Happy Time."⁵⁷ In November losses soared to over 800,00 tons for the first time in the war. Consequently the British lent a hand in February providing the U.S. with 24 trawlers and 10 corvettes, all with the latest ASDIC equipment. Unfortunately, it took until May for the U.S. to establish an effective convoy system on the East Coast. "Escort is not just one way of handling the submarine menace," wrote Admiral King, "it is the only way that gives any promise of success."⁵⁸ February also marked the introduction of a new cipher, Triton, used by the U-boat fleet in the Atlantic to communicate via radio. The TRITON code enabled the fleet to operate without being compromised until December when the British broke it.⁵⁹ Meanwhile, the British continued to make adjustments of their own, revising convoy procedures based on research and analysis of data gleaned since the start of the war. They decreased the frequency of sailings out of Halifax from 5 to 7 days while increasing the convoy size. They also provided two escort groups for service in American waters. Once the Americans established a convoy system, Doenitz shifted his boats southward into the Caribbean and the Gulf of Mexico. He continued to move south upon the establishment of an Interlocking Convoy System, which enabled ships to transfer at sea from one convoy to another, and attacked independent shipping off the coasts of Trinidad, Rio de Janeiro, and Capetown, South Africa. In doing so, Doenitz took advantage of his newly fielded supply boats or "milch cows," to double the length of time on station.⁶⁰

Actions against Brazilian shipping provoked Brazil into declaring war against Germany, an unintentional consequence of operating there.⁶¹ Finally, with the establishment of regular convoy routes in this area coupled with the destruction of 2 U-boats, Doenitz ceased operations in the Southwestern Atlantic. Returning to the Mid-Atlantic, he was directed to divert a significant portion of his strength to attacking Allied convoys on the Murmansk Run to North Russia.⁶² He still believed; however, that the Mid-Atlantic was still the theater in which he could attain decisive victory. With U-boat production rates rising he could take more risk in attacking convoys and he did so, concentrating on the still-existing Black Pit area. In November 1942, losses for the month reached 807,000 tons before Doenitz was forced to commit forces to North Africa in an attempt to counter Allied landings there.⁶³

In 1942, U-boats sunk over 6.25 million tons of shipping, three times that of 1941; however, U-boat sinkings climbed as well from an average of 3 per month to a spike of 17 in July 1942.⁶⁴ Convoy operations had matured and there appeared to be little or no soft spots left. By the end of the year, Hitler had seen his U-boat arm shift from an offensive orientation to a defensive one. He now understood that sinking the greatest amount of shipping possible would only slow Allied offensive operations and that he was living on borrowed time.⁶⁵ Hitler had failed to dominate the trade routes and consequently Great Britain because he provided too little support too late to the U-boat effort.

Return to the Mid-Atlantic January 1943 to May 1943

The Allied heads of state met at Casablanca in January 1943 and agreed that the defeat of the U-boat arm must be paramount among their efforts. They ordered a staff conference to organize convoy control concluding that a lack of coordination was responsible in large part for the difficulties they were having. In the end they adopted Admiral King's zone control method for transiting the Atlantic and agreed to continue the Interlocking Convoy System.⁶⁶ Research analysts continued to pour over data and make recommendations regarding convoy size and escort coverage, thereby reducing losses by some 64%.⁶⁷ Allied losses declined in April and Doenitz, now the Commander-in-Chief, Kriegsmarine prepared for a major offensive in the Mid-Atlantic. The intervention of Anti-submarine Support Groups, escort carriers, and long range aircraft outfitted with high frequency 'Huff-Duff' direction finders, which could instantly take a bearing on any transmitting U-boat, signaled the beginning of the end of the Battle of the Atlantic.⁶⁸ In the first three weeks of this offensive, 12 convoys crossed the Black Pit losing a total of 5 ships while Allied air and surface escorts sunk 13 U-boats. The U-boat fleet lost 41 boats in May and was essentially forced from the North Atlantic.⁶⁹ Doenitz had seen the operational life of a U-boat go from more than a year in 1942 to less than 3 months. His submarine service suffered a casualty rate of 75%, highest of any service arm in any nation. He knew he had lost the Battle of the Atlantic.⁷⁰

AFTERMATH

The U-boat fleet continued to wage war against the Allies right up until Germany surrendered in May 1945, but its effect had been neutralized. The wolfpacks were large, relatively blind, and no match for the bait and kill, hunter-killer tactics employed by Allied Forces. Doenitz continued to shift operating areas but the desired effect gained by the Allies was the unimpeded passage of Allied convoys in the 12 months before the invasion of Normandy. Germany's strategy of tonnage warfare collapsed under the weight of improved ASW measures and a remarkable increase in Allied shipbuilding. In July 1943, Allied ship production at last exceeded worldwide shipping losses from Axis action. By the end of 1943, Britain and the U.S. produced 14.4 million tons of merchant shipping, which exceeded German estimates by some 40%.⁷¹ The tide had turned.

CONCLUSION

The Battle of the Atlantic could very well have been the decisive theater in World War II. In 1940 conditions existed for Germany to exploit the weaknesses of Britain's maritime strategy, the United States stood neutral by law, and Germany had brokered a deal with the Russians under the aegis of the Non-Aggression Pact, which enabled them to secure most of Poland unimpaired. Hitler's failure to foresee that Great Britain's critical vulnerability was its lines of communication and his failure to realize that the submarine was the decisive weapon to exploit this revealed his lack of strategic vision. Hitler's reluctance to reinforce success in the Atlantic after the fall of France resulted in a missed window of opportunity and sealed the fate of Germany.

The Battle of the Atlantic became a proving ground for the advancement of the carrier-based Navy, gave Roosevelt a means with which to incite an isolationist society, and gave Britain the time she needed to develop and improve measures to fight the asymmetric threat facing it. The gratuitous declaration of war by Hitler, who was not treaty-bound to do so, gave Roosevelt the opportunity to pursue his "Germany first" strategy, which would otherwise have been a hard sell to an American public which was irate at the Japanese.

Ultimately, it was up to the commander of the U-boat fleet, Admiral Doenitz to wage war in the Atlantic, very much so without guidance, direction, and proper resources. His tonnage warfare strategy that included avoiding decisive battle was the only concept that allowed him to fight a sustained action. Although the impact of the U-boat arm's efforts did not reach the levels it did in World War I, it certainly could have had the Kriegsmarine and ultimately the Fuehrer himself, been willing to commit to it.

Word Count: 5,609

ENDNOTES

- ¹ William T. Y'Blood, "The Battle of the Atlantic," in Great American Naval Battles, ed. Jack Sweetman (Annapolis: Naval Institute Press, 1998), 323.
- ² R. A. Bowling, "Mahan's Principles and the Battle of the Atlantic," in To Die Gallantly, The Battle of the Atlantic, ed. Timothy J. Runyan and Jan M. Copes (Boulder: Westview Press, 1994), 231.
- ³ Dan Van der Vat, The Atlantic Campaign, World War II's Great Struggle at Sea (New York: Harper and Row Publishers, 1988), 13.
- ⁴ F. H. Hinsley, Hitler's Strategy (Cambridge: The University Press, 1951), 4-5.
- ⁵ Ibid., 6.
- ⁶ Ibid., 9.
- ⁷ Ibid., 6.
- ⁸ Y'Blood, 305.
- ⁹ Hinsley, 9.
- ¹⁰ Ibid., 24.
- ¹¹ Ibid., 13.
- ¹² The New Encyclopaedia Britannica, "Neville Chamberlain," vol 3 (USA), 65.
- ¹³ Van der Vat, 69.
- ¹⁴ Nimitz, Chester W., Henry Adams, and E. B. Potter, Triumph in the Atlantic, the Naval Struggle against the Axis (Englewood Cliffs, NJ: Prentice-Hall Inc., 1960), 79.
- ¹⁵ Bowling, 232.
- ¹⁶ David M. Kennedy, "Victory at Sea," March 1999; available from <http://www.theatlantic.com/issues/99mar/victory4.htm>. Internet; accessed 18 January 2000.
- ¹⁷ Timothy J. Runyan and Jan M. Copes, To Die Gallantly, The Battle of the Atlantic (Boulder: Westview Press, 1994), xiii.
- ¹⁸ Hinsley, 31.
- ¹⁹ Barrie Pitt, The Battle of the Atlantic (Chicago: Time-Life Books, 1980), 22.
- ²⁰ Nimitz, 69.
- ²¹ Ibid., 75.

²² Pitt, 18-20.

²³ Nimitz, 69.

²⁴ Ibid., 70.

²⁵ Pitt, 8.

²⁶ Hinsley, 58-59.

²⁷ Nimitz, 71.

²⁸ Ibid., 69-70.

²⁹ Ibid., 70.

³⁰ Pitt, 21.

³¹ Nimitz, 74.

³² Ibid., 71.

³³ Hinsley, 33.

³⁴ Hinsley, 42.

³⁵ Ibid., 49.

³⁶ Nimitz, 74.

³⁷ Ibid., 71.

³⁸ Hinsley, 61.

³⁹ Ibid., 3.

⁴⁰ Hinsley, 37.

⁴¹ Nimitz, 74.

⁴² Ibid., 76-77.

⁴³ Ibid., 76.

⁴⁴ Ibid., 77.

⁴⁵ Ibid., 78.

⁴⁶ Ibid., 79.

⁴⁷ Hinsley, 162.

⁴⁸ Ibid., 163.

⁴⁹ Nimitz, 82.

⁵⁰ Jock Gardner, "The Battle of the Atlantic, 1941 – the First Turning Point," in Seapower: Theory and Practice, ed. Geoffrey Till (Frank Cass & Co. Ltd., 1994), 119.

⁵¹ Nimitz, 83.

⁵² Hinsley, 167.

⁵³ Ibid., 168.

⁵⁴ Nimitz, 84.

⁵⁵ Ibid., 85.

⁵⁶ Ibid., 86.

⁵⁷ Ibid., 86.

⁵⁸ Ibid., 87.

⁵⁹ Kennedy.

⁶⁰ Nimitz, 87.

⁶¹ Ibid., 88.

⁶² Ibid., 89.

⁶³ Ibid., 91-92.

⁶⁴ Hinsley, 206.

⁶⁵ Ibid., 208.

⁶⁶ Nimitz, 92.

⁶⁷ Nimitz, 93.

⁶⁸ Ibid., 94 and Cajus Bekker, Hitler's Naval War (Garden City, NY: Doubleday & Company, INC., 1974), 338.

⁶⁹ Nimitz, 94.

⁷⁰ David M. Kennedy, "Victory at Sea," March 1999; available from <http://www.theatlantic.com/issues/99mar/victory5.htm>.

⁷¹ Nimitz, 94.

BIBLIOGRAPHY

- Bekker, Cajus. Hitler's Naval War. Garden City, NY: Doubleday & Company, INC., 1974.
- Bowling, R. A. "Mahan's Principles and the Battle of the Atlantic." In To Die Gallantly, the Battle of the Atlantic, ed. Timothy J. Runyan and Jan M. Copes, 231-250. Boulder: Westview Press, 1994.
- Cresswell, John. Sea Warfare 1939-1945. Los Angeles, CA: University of California Press, 1967.
- Gardner, Jock. "The Battle of the Atlantic, 1941 – the First Turning Point?" In Seapower: Theory and Practice, ed. Geoffrey Till, 109-123. Portland: Frank Cass & Co. Ltd., 1994.
- Hinsley, F.H. Hitler's Strategy. Cambridge: The University Press, 1951.
- Kennedy, David M. "Victory at Sea." March 1999. Available from <http://www.theatlantic.com/issues/99mar/victory.htm>. Internet. Accessed 18 January, 2000.
- The New Encyclopaedia Britannica, "Neville Chamberlain." vol 3, USA, 1998.
- Nimitz, Chester W., Henry H. Adams, and E.B. Potter. Triumph in the Atlantic, the Naval Struggle against the Axis. Englewood Cliffs, NJ: Prentice-Hall Inc., 1960.
- Pitt, Barrie. The Battle of the Atlantic. Chicago: Time-Life Books, 1980.
- Runyan, Timothy J and Jan M. Copes. To Die Gallantly, the Battle of the Atlantic. Boulder: Westview Press, 1994.
- Scales, Robert H. Future Warfare. Carlisle: U.S. Army War College, 1999.
- Van der Vat, Dan. The Atlantic Campaign, World War II's Great Struggle at Sea. New York: Harper & Row Publishers, 1988.
- Y'Blood, William T. "The Battle of the Atlantic." In Great American Naval Battles, ed. Jack Sweetman, 305-323. Annapolis: Naval Institute Press, 1998.