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THE NORWEGIAN CAMPAIGN: HOW MUCH WAS THE KRIEGSMARINE WORTH?

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Exercise Solo Flight

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A power that wants to land in Norway, whether in the south or in other places, must rule the sea, and the power that rules the sea has no need to land in Norway

– Admiral Diesen, Commander In Chief, Norwegian Navy 1939¹

INTRODUCTION

The Norwegian Campaign was fought over the strategic importance of the Norwegian iron ore mines as well as the geographic location to support war efforts in Germany and Britain.² The strategic importance of this neutral nation caused much consternation to British and German governments, leading frequent military planning concerns on how to react to a possible enemy occupation of the Scandinavian nation. The German interests laid in several areas, to including an iron ore hub, air bases and sea ports. “A new enemy front up there would not only bring the whole Baltic effectively under enemy control but would also bring enemy air bases into deadly proximity to our Baltic provinces.”³ The British, dominant force of the sea, were eager to use the Norwegian seaports in order to have a shorter and more robust line of operation towards their efforts of blockading the German Navy, the *Kriegsmarine*, in the North and Baltic Seas, cutting off the iron ore supply to the German war effort, and limiting the reach of the German Air Force, the *Luftwaffe*. The political and military strategic importance of Norway caused concern for the British First Lord of the Admiralty, Mr. Winston Churchill, who understood the value of its

¹ Henrik O. Lunde, *Hitler's Pre-Emptive War: The Battle for Norway, 1940* (Drexel Hill, PA: Casemate, 2008), pg 1.

² Maurice Harvey, *Scandinavian Misadventure: The Campaign in Norway 1940* (Barnsley: Pen & Sword Military, 2010), pg 38.

³ Erich Raeder, *Grand Admiral Erich Raeder My Life*, ed. US Naval Institute, trans. H. W. Drexel (Mensha, Wisconsin: George Banta Company, 1960), pg 302.

geographic location, and who was unable to convince the British War Council on sending forces to support and fortify the Norwegians from possible German or Russian invasion.⁴

The *Kriegsmarine* played a vital role in the Norwegian Campaign as they were required to transport and support the ground forces through the occupation and ward-off any amphibious assault by the Allies.⁵ In order to do this, almost the entire *Kriegsmarine* was forced to partake a role in the invasion and defend itself against the numerically superior Royal Navy (RN).

The scale of operation meant that practically the whole German Navy would be involved, and the hazardous nature of the undertaking was stressed by the fact that, although the all-important conditions of secrecy and surprise might be achieved for the initial landings, the really dangerous part for the navy would be their subsequent return to German ports.⁶

The support and sacrifice by the *Kriegsmarine* allowed Germany to successfully occupy and retain Norway as well as its vital resources and location for the duration of the war. “The occupation of Norway was a tremendous benefit to the German war effort. Shipment of Swedish ore from Narvik was assured, and remained practically uninterrupted for almost the entire war.”⁷ The losses for both navies were high, but were more devastating to the *Kriegsmarine* due to their surface combatants being reduced by nearly half.

The near annihilation of the *Kriegsmarine*, and its operational and strategic level support of Germany’s war effort on their Western front were greatly affected. This paper will argue that the near annihilation of the *Kriegsmarine* resulted in the loss of an effective deep water navy at the expense of the occupation of Norway for their natural resources and tactical geographic

⁴ Peter Dickens, *Narvik: Battles in the Fjords* (London: Allan, 1974), pg 14.

⁵ Lunde, *Hitler's Pre-Emptive War: The Battle for Norway, 1940*, pg 69.

⁶ Andenæs, Johannes, Riste, Olav., Skodvin, Magne, *Norway and the Second World War*. (Oslo: Tanum, 1966), pg 41.

⁷ Raeder, *Grand Admiral Erich Raeder My Life*, pg 311.

location. The German Armed Forces, the *Wehrmacht*, launched *Operation Weserübung*, the invasion of Norway and Denmark on 9 April 1940. This plan was very tri-service focused requiring support from the *Luftwaffe* during the invasion phase of the occupation, and still resulted in heavy losses for the *Kriegsmarine*. This paper is divided into sections that discuss key issues relating to two operational concepts, the near annihilation of the *Kriegsmarine*, and follow-on effects experienced by the *Kriegsmarine* after the Norwegian Campaign.

For the purpose of this paper, the *Kriegsmarine* will be specifically related to major surface combatants, destroyer size and larger, of the German Navy. The *Unterseeboot*, U-boat, and merchant marine services will be referred to as separate entities.

EVENTS LEADING UP TO THE INVASION

The port city of Narvik, located in the northern arm of Vestfjord, was a primary commercial sea port in Norway and was one of two ports through which 10 million tons of iron ore was shipped to Germany annually, the other being Lulea, Sweden which was iced in from December until May.⁸ The iron ore being shipped from Narvik to Germany onboard German registered vessels remained inside Norwegian territorial waters (TTW) and because of Norway's neutrality, the Royal Navy (RN) was unable to legally stop these ships. The British government petitioned the Norwegian government several times about supporting the Allied war effort against Germany and allowing Allied aircraft and ships access to Norwegian TTW and air space (TTA); all petitions were denied with Norway re-emphasizing their neutrality.⁹ The catalytic

⁸ Raeder, *Grand Admiral Erich Raeder My Life*, pg 300.

event for the violation of Norwegian TTW and TTA was when M/V *Altmark*, a German registered merchant ship, was carrying British Prisoners of War (POW) and under Norwegian escort, was intercepted and boarded by HMS *Cossack* inside Norway's TTW.¹⁰ This act by both Germany and the British violated Norway's sovereignty. Mr. Churchill attempted, with aid from French representation, to convince the War Council for the RN to sea mine the approaches of Vestfjord and other Norwegian ports and inshore waterways in an attempt to force German shipping into International Waters and deny them access to the Norwegian ports.¹¹ These propositions were denied several times until, not known to the Allies, the Germans had already launched their assault on Norway.¹² After all the attention, concern, and planning in the event of a German invasion of Norway, the late actions by the British were ineffective from preventing or disrupting the Germans landing an invasion force in Norway. "The German plan, if it was ruthless in conception, was carried out with skill and determination; and in spite of all our preparations to meet that very eventuality we were caught completely by surprise."¹³

OPERATIONAL CONCEPTS

The Operational Concepts of Annihilation and Manoeuvre Warfare are applicable and relevant to the Norwegian Campaign. These concepts can be found in the actions of both the German and British sides of the conflict. This section will define these two concepts and how they applied in the Norwegian Campaign, from a naval perspective, by analysing the definition

⁹ J. L. Moulton, *A Study of Warfare in Three Dimensions: The Norwegian Campaign of 1940* (Athens: Ohio University Press, 1968), pg 48.

¹⁰ *Ibid.*, pg 52.

¹¹ Stephen Wentworth Roskill, *The Navy at War, 1939-1945*. (London: Collins, 1960)., pg 60.

¹² Dickens, *Narvik: Battles in the Fjords*, pg 43.

¹³ Roskill, *The Navy at War, 1939-1945*, pg 61.

of the concept against the actions of the military force. It will be found that annihilation was the end result of the RN effort against the *Kriegsmarine* during the Norwegian Campaign.

The *Kriegsmarine* suffered a near annihilation as a result of their role in the Norwegian Campaign. Total annihilation is not a relevant term in describing the outcome of the Norwegian Campaign because the *Kriegsmarine* retained half of their surface fleet and the majority of the U-boat fleet. Near annihilation is applicable in this description as it forced the *Kriegsmarine* to withdraw back to German territorial waters and limited their raiding and attempts for a large naval breakout past the blockading British. The resulting limitations forced the *Kriegsmarine* to play a more minor role in the remaining time of the Second World War as result of these losses. Clausewitz defined Annihilation as:

...simply as diminishing an opponent's forces at a rate proportionally greater than that suffered by friendly forces. Destruction could range from 'total' to 'a degree only sufficient to prevent the foe from carrying on the fight,' and one could achieve the foe's destruction 'by killing or wounding, or by other means.'¹⁴

The RN suffered losses as well, but due to their larger number and ability to replace and repair ships at a greater rate than the Germans, the annihilation concept does not apply to the RN following the Norwegian Campaign. Commencing at the outbreak of the Second World War, the RN sought a decisive battle with the *Kriegsmarine*, similar to the Battle of Jutland in the First World War, to decide the dominant force on the sea. The German's knew their force was smaller than the British, but had intentions of expanding their numbers to support *Operation Sea Lion*,

¹⁴ Antulio Joseph Echevarria, *Clausewitz and Contemporary War* (Oxford [England]; New York: Oxford University Press, 2007), pg 134.

the invasion of England. Based on this knowledge, they limited the *Kriegsmarine* exposure to the RN threat by keeping them in close range of German *Luftwaffe* and shore based support.

The *Kriegsmarine* remained a threat to the RN following the Norwegian Campaign because of their ability to elude the British surveillance line and send ships and U-boats to the North Sea, Atlantic Ocean and Mediterranean Ocean. Because of their continued threat, and half of their surface vessels remaining afloat, it can be argued that Germany did not suffer a near annihilation following the Norwegian Campaign. The remaining surface combatants retired to German waters under the protection of shore based and U-boats assets as was standard German practice. Following the Norwegian Campaign, the *Kriegsmarine* continued to threaten the RN and Atlantic convoys, albeit less frequently and in smaller numbers. The expansion into Norway allowed the *Kriegsmarine* the ability to project force into the Norwegian and Barents Seas and disrupt convoys' enroute to Russian ports, primarily Murmansk and Arkhangelsk¹⁵, therefore, caused the RN to expand their surveillance zone further west and north to include the Icelandic Gap. The return to established patterns and practice of the *Kriegsmarine* following the Norwegian Campaign indicates that they did not suffer a near annihilation but rather a significant reduction in their operationally capable surface combatants to harass and raid Allied shipping.

The full value of the freedom of action thus won was not realized, however, until war between Germany and Russia broke out and the Allies started to ship great quantities of war supplies to their new ally through northern waters and the Russian port of Murmansk. From our new bases in Norway, our submarines, surface ships, and air craft could make deadly attacks on the Allied convoys to Murmansk.¹⁶

¹⁵ Andenæs, Johannes, Riste, Olav., Skodvin, Magne, *Norway and the Second World War*, pg 30.

¹⁶ Raeder, *Grand Admiral Erich Raeder My Life*, pg 312.

The Norwegian Campaign was costly for both the RN and *Kriegsmarine* with respect to the loss of ships, aircraft, sailors and airmen. The greatest effect was felt by the Germans because it reduced their surface combatants by half, and since their force was already smaller than the RN, increased the delta between these two warring nations, thus reducing the effectiveness of a threat to the Allies.¹⁷ Although the RN did not receive their decisive victory over the *Kriegsmarine*, the Norwegian Campaign did reduce and limit Germany's ability to put a threatening surface force to sea and challenge the RN. "Accounts of Admiral Whitworth's annihilation of the [German] destroyer flotilla at Narvik on the previous day had reached London, and in the ensuing euphoria it was now thought that the capture of Narvik should not prove too difficult."¹⁸ There were two major sea battles for Narvik in the Vestfjord and several other skirmishes between the *Kriegsmarine* and the RN during the Norwegian Campaign which resulted in the near annihilation of the *Kriegsmarine*. The RN also took a severe hit in their order of battle as they lost an aircraft carrier, battle cruiser, several destroyers, and some smaller war ships, but were able to rebound and cover off these losses because of their greater numbers, emphasis on sea control, and ship building industry.

Based on the Clausewitz definition above, the *Kriegsmarine* did suffer a near annihilation as a result of sea battles with the RN during the Norwegian Campaign. The *Kriegsmarine's* participation in the Norwegian Campaign supported the larger German campaign to occupy Norway but placed them against the dominant force upon the sea. As a result of *Operation Weserubung*, the *Kriegsmarine* needed to rely on their smaller force size and surprise in order to successfully complete their mission. Avoiding a sea battle with the RN was important for the

¹⁷ Harvey, *Scandinavian Misadventure: The Campaign in Norway 1940*, pg 300.

¹⁸ *Ibid.*, pg 102.

operation, especially with extended lines of support, but if battle was to occur than the *Kriegsmarine* units would try to confront and trap the RN units in the fjords and engage them with surface and subsurface units.

The second Operational Concept to be discussed is Manoeuvre and it will be applied to both the British and German side of the campaign. “Manoeuvre warfare is a thought process, not a particular set of tactics or techniques. It is based on a firm belief that the enemy should be trapped rather than merely pushed away.”¹⁹ The RN used this concept as they were able to restrict the majority of *Kriegsmarine* assets to the Baltic and eastern North Sea and maintained their hopes that because the German surface combatants were ‘trapped’ the Germans would attempt to break through en-mass and have a decisive battle. The German invasion in Norway occurred one day prior to the intended Allied invasion so the British had to utilize the RN to locate and destroy German ships as well as transport their ground units to Norway in an attempt to remove the German invaders. The RN’s approach was to engage the German ships outside Norwegian Territorial Waters (TTW) with superior numbers and far enough out to sea to avoid interference from the *Luftwaffe*.

In the attacks against shipping, the *Luftwaffe* achieved only modest success... The poor returns did not justify the effort expended in terms of ships sunk or damaged, but the indirect effects were more substantial, for the potential risks persuaded Admiral Forbes [Commander Home Fleet] to abandon surface operations south of Bergen and in other ways constrained the effort which the RN could bring to bear on the campaign...²⁰

The German forces were able to penetrate the British surveillance line and invade Norway by sea and air. This action by the Germans proved that they were able to threaten the Allies and

¹⁹ John F. Antal, "Thoughts about Maneuvre Warfare," *Maneuver Warfare - an Anthology* (1993), pg 57.

²⁰ Harvey, *Scandinavian Misadventure: The Campaign in Norway 1940*, pg 197.

challenge the dominance of the RN. The RN however, once the German invasion became known, was able to organize a force to expel the Germans from Norway. The RN was able to achieve the upper hand in trapping the *Kriegsmarine* in the fjords, mainly Vestfjord, and use their superior numbers to engage German ships outside the fjords. One of the major blunders of the RN was not sufficiently protecting their carrier, *Courageous*, and as a result, 2 German battleships, the *Scharnhorst and Gneisenau*, through superb manoeuvre warfare, were able to isolate and sink the carrier.²¹ The *Kriegsmarine* was effective in manoeuvring the RN ships into the fjords but due to U-boat launched torpedo malfunctions, the result of the battles were not favorable for the *Kriegsmarine* and lead to heavy losses. The torpedo malfunction issue will be discussed in the next section.

Although the Manoeuvre Operational Concept was evident on both sides of the campaign, in the comparison with the above definition, it was not clear that either side intentionally used the concept and relied on lessons learned and tactics from the previous war in which one side, the dominant, wanted a decisive battle and the other side, the weaker, avoided an all-in confrontation and relied on surprise and manoeuvre to conduct their style of warfare.

The Operational Concepts of Annihilation and Manoeuvre were used and affected both sides of the campaign to various degrees. Through the comparison of events of the Norwegian Campaign and the definitions of each concept, annihilation was the most applicable concept for the *Kriegsmarine* during the Norwegian Campaign. The near annihilation of the *Kriegsmarine* in their efforts to support the German Army, the *Heer*, in the occupation of Norway ensured the continued and secure transportation of iron ore from Narvik as well as pushing and expanding the British surveillance line further west granting greater freedom of the seas. The future impacts

²¹ Ibid., pg 293.

on the employment and operational effect of the *Kriegsmarine* based on near annihilation will be discussed further in the third section of the paper.

THE NUMBERS

The declaration of war between Germany and Britain, on 3 September 1939, found the RN the dominant force upon the high seas. The RN had stretched the British influence on a global scale and continued to act as a display of force in the remaining British colonies and on the international stage. The *Kriegsmarine* was the least prepared of the German Armed Forces, the *Wehrmacht*, when Germany declared war on Britain and France.²² Restricted by the Treaty of Versailles, the German Navy was limited to 35 percent of the RN size. In 1935, Hitler negotiated and signed the Anglo-German Agreement which allowed Germany to produce vessels larger in size and more numerous than the Treaty of Versailles outlined.²³

The RN had ships positioned throughout various parts of the world at the outbreak of the Second World War, but retained a large force in their Home Fleet, positioned at Scapa Flow, the North Atlantic Command, and in home waters under Coastal Command. These forces combined provided the British with a very formidable and the largest naval force in the European theatre of war. The Mediterranean Fleet, based out of Alexandria, was able to support their homeland but were occupied with minor German and major Italian combatants operating in the Mediterranean and approaches.

²² Ibid., pg 36.

²³ Raeder, *Grand Admiral Erich Raeder My Life*, pgs 106, 178.

The RN numbers of Atlantic based ships, by vessel type, were: 7 Battleships, 4 Aircraft Carriers, 22 Cruisers, 91 Destroyers, 21 Minesweepers, and 23 Submarines. The Fleet Air Arm comprised of 190 aeroplanes in airplanes and seaplane carriers, plus spotter planes that were catapult launched from the larger ships.²⁴ The North Atlantic Command was responsible for the protection of convoys, and could not always be present in Britain, so when the fleet was not in Britain, the force protecting Britain from attack was short: 2 Cruisers, 9 Destroyers, 2 Minesweepers, and 2 Submarines from the above list. This was not a significant reduction to the Home Fleet and Coastal Command in order to defend and project British power in the European and Scandinavian theatres.

Germany, in 1937, commenced 'Z Plan'²⁵, which ignored all agreements and treaty restrictions imposed on German naval production, and started building larger ships and in greater numbers. Because of the Treaty of Versailles and Anglo-German Agreement, the Germans started their ship production later than the British, and when war was declared, had the following vessel numbers: 2 Battleships, 2 Old Battleships, 3 Pocket Battleships, 2 Heavy Cruisers, 6 Light Cruisers, 22 Destroyers, 20 Torpedo Boats, and 62 Submarines.²⁶ The surface ship numbers were significantly smaller than the RN but the submarine numbers greatly favoured the Germans. The 'Z Plan' had planned for many more ships, including 2 Aircraft Carriers to be built, but it was unable to complete the forecasted and greatly desired ships.

The Norwegian Campaign, although a successful German invasion of Norway, had heavy losses at sea for the *Kriegsmarine*. "In fact I emphasized then, and reiterated many times later,

²⁴ "Fleets of 1939." <http://ww2-weapons.com/fleets-1939/>

²⁵ Raeder, *Grand Admiral Erich Raeder My Life*, pg 272.

²⁶ "Fleets of 1939."

that we could lose our entire fleet in operations for the establishment of such bases, and that I would consider ourselves very lucky if we could hold the losses to as little as a third.”²⁷ Following the campaign, the operational vessels of the German fleet included 3 Cruisers and 4 Destroyers and all but 6 submarines.²⁸ There were other vessels that remained afloat but received damage that required repair before they were fully mission capable. “That we would suffer heavy losses was inevitable. For the Naval War Staff, and for me personally, it was a bitter decision to have to make, but Germany had no other choice, and the only solution was to make the jump into Norway ahead of the enemy.”²⁹ The RN lost one aircraft carrier, two cruisers, seven destroyers and a submarine, much less than the Germans, and the loss was less of an issue for the RN. The RN number of losses would have been greater, and arguably the German’s losses would have been less, if it wasn’t for the U-boat torpedo malfunctioning that caused numerous torpedo engagements to be ineffective against RN surface ships.

The German invasion of Norway caught the Allies by surprise. The *Wehrmacht* was able to launch a successful invasion force by air and sea in order to occupy Norway and deny the Allied forces the strategic location of Norway’s sea and air ports. “The Germans had, by ruthless opportunism combined with the acceptance of substantial risk, achieved both strategic and tactical surprise; and they had made a good start towards accomplishing their purpose of occupying the whole country.”³⁰ Germany also secured Narvik, which was one of their primary iron ore shipping locations, making up 40%³¹ of their iron ore usage. Once on the ground, the *Heer* quickly secured the access points necessary for the resupply route to be established in order

²⁷ Raeder, *Grand Admiral Erich Raeder My Life*, pg 304.

²⁸ John Robert Elting Time-Life Books, *Battles for Scandinavia* (Alexandria, Va.: Time-Life Books, 1981).

²⁹ Raeder, *Grand Admiral Erich Raeder My Life*, pg 309.

³⁰ Roskill, *The Navy at War, 1939-1945*, pg 67.

³¹ Raeder, *Grand Admiral Erich Raeder My Life*, pg 300.

to maintain their occupation. The proximity to German air bases allowed the southern and central assaults into Norway to be provided air cover by the *Luftwaffe* but in the north the distance was just out of reach. The *Heer* was able to secure air bases in the south and central regions to allow support for the northern operations and the securing of Narvik. The occupying force was quickly resupplied from Germany as well as by the crews of the ships lost during the invasion. “By the beginning of May [1940], the re-supply organization was becoming remarkably efficient and was one of the main reasons why the Germans were able so successfully to secure a stranglehold on Southern and Central Norway.”³² The Allied assault on Norway in an attempt to remove the German occupation force was done by sea. The RN transported personnel to Norwegian ports following bombardment and naval gun shelling, in order to gain a foot hold and secure the necessary ports (air and sea). The British found initial success in forcing the Germans from the shoreline and were able to gain some air ports, but the Germans had been too well resupplied and were able to counter attack the Allies and forced them to evacuate by sea.

The British were able to conduct these landings and extractions from seaward because of the dominance of the RN and the near annihilation of the *Kriegsmarine*. If the *Kriegsmarine* was able to have avoided such heavy losses, they would have been able to provide a viable threat to the shipping lanes and intercept some of the ground forces before they reached the Norwegian shore. The *Luftwaffe* was able to provide an aerial threat to vessels that transited close to land³³ but was unable to influence the deep sea routes that the *Kriegsmarine* ships would have been able reach. This was also the case for the extraction of Allied forces as well as the Norwegian Royal Family and Parliament. The greatly reduced number of German surface ships impacted

³² Harvey, *Scandinavian Misadventure: The Campaign in Norway 1940*, pg 77.

³³ *Ibid.*, pg 98.

Germany's ability to project their constant presence in the Norwegian Ocean and had to rely on the *Luftwaffe* to maintain patrols and act as a first line defender.

The U-boat force had a substantial number of boats able to extort convoy and Allied shipping at the outbreak of the Second World War. The U-boats ordered to join in *Operation Weserbung* were both modern and crewed by experienced submariners.³⁴ The RN units which attacked the German surface ships in Vestfjord were surrounded by no less than 4 U-boats and were engaged numerous times, including the *Warspite*, a RN battleship. This RN task group was responsible for sinking 8 German destroyers in the fjord while the U-boats were unable to account for any success against the RN ships in the confined waters due to malfunctioning torpedoes. The presence of a U-boat threat was known to the RN commander but because there was no damage or casualties caused by U-boat attack, he continued to proceed north in the fjord and prosecute the German destroyers. The U-boats engaged the RN task group once the surface ship entered the fjord and at regular intervals during the transit to Narvik. The same U-boats re-engaged the RN ships during their return transit to the Norwegian Sea, after the torpedo crews attempted to rectify the weapons' shortcomings. It was later determined that although not all attacks conducted by the U-boat crews would have been lethal, most would have caused significant damage and provided a greater effect to the RN. The malfunctioning issues were reported to Admiral Donitz, Vice Admiral and Commander of the U-boat service, and the issue was inspected by top German torpedo technicians in order to rectify the problem.³⁵ The problem was isolated to a faulty magnetic influence pistol, the device used for firing the weapon. That effectively meant that when the torpedo was launched from the U-boat it did not activate itself or

³⁴ Donitz, Karl., Stevens, R.H., *Ten Years and Twenty Days* (Barnsley: Frontline, 2012), pg 206.

³⁵ *Ibid.*, pg 87.

it activated too late in the intended line of fire and was therefore a dud torpedo. If the torpedo malfunctioning issue was discovered and rectified prior to the start of the Norwegian Campaign the result of the near annihilation of the *Kriegsmarine* may have been different and the loss of British shipping could have been significantly higher.³⁶

THE FUTURE ROLE

The result of the investigation into the torpedo issue and the subsequent actions taken proved to be correct in negating any issues with the effectiveness of U-boat launched torpedoes. With the threat of the U-boats increasing and their effect felt immediately, British and Allied navies were focusing on the subsurface and aerial threats more than the German surface threat. The *Kriegsmarine* continued to conduct raiding and disturbance missions into the North Sea and Atlantic Oceans but their distance and duration away from shore based support was always limited. The surface combatants of the *Kriegsmarine* remained involved in the Battle of the Atlantic, primarily in commerce raiding and minor sea battles as well, but most of the offensive campaigns in the Baltic Sea, Mediterranean Ocean, and Black Sea were conducted by U-boats. The allocation of U-boats and of small ships for these tasks allowed the major surface combatants to be freed up for the Battle of the Atlantic.

The near annihilation of the *Kriegsmarine* left the German Navy with fewer surface ships than necessary to maintain a significant surface threat to Allied shipping. This shortcoming forced the *Wehrmacht* to rely on the U-boat fleet and *Luftwaffe* to apply pressure on Allied convoys and project power at sea. As previously stated, the remaining surface combatants of the German Navy remained close to German TTW with the occasional raid on shipping in the

³⁶ Ibid., pg 90.

Norwegian Sea, Mid and South Atlantic, and Mediterranean Oceans. U-boats remained a viable threat to Allied shipping, both in the Atlantic, reaching all the way to the Eastern Seaboard of North America, as well as in the Mediterranean. U-boats would even station themselves near Malta, Gibraltar and the Suez Canal in an attempt to isolate these ports to cut off Allied shipping. The *Luftwaffe* was also a significant threat to these ports as well due to proximity of Axis air bases. “As the radius of action of air craft increases, so will this handicap on sea power increase also.”³⁷

U-boats, because of their size, were cheaper, easier, and quicker to produce than major surface combatants. As the war waged on, the time and resources required to create these vessels became more attractive to higher German military commanders as they were able to have a greater effect on Allied shipping at a far less cost in war material and personnel. As the ground war increased, the German war effort and resources were being prioritized away from the *Kriegsmarine* and although large ships were still being built, the U-boat provided the best return on resources. At the declaration of war, the Germans had 97 vessels under construction, 78 were completed, including: 50 submarines, 13 Minesweepers, 12 Destroyers, 1 Heavy Cruiser, and 2 Battleships. These numbers of completed vessels indicates the ease and importance of submarines to the German war effort, when compared to the larger and more expensive vessels.

The surface vessels that were completed provided the *Kriegsmarine* with three very capable capital ships, one was the *Bismarck*, which encouraged the surface fleets to expand and increase their commerce raiding and participation in the Battle of the Atlantic. These additional

³⁷ Joseph Montague Kenworthy Strabolgi, *Narvik and After: A Study of the Scandinavian Campaign* (London: [s.n.], 1940), pg 187.

ships bolstered *Kriegsmarine* numbers but their overall operational success was minimal. The new ships allowed the German navy to expand its engagements of Allied shipping resulting in the sinking of 1 RN capital ship, HMS Hood. The dominance of the U-boat caused it to become the main effort for the *Kriegsmarine* and surface combatants were continued in their construction but priority shifted to the boats.

CONCLUSION

The Norwegian campaign proved costly to both German and British military forces. The Germans commenced their occupation of Norway one step ahead of the British forces and were able to achieve tactical success due to their earlier arrival and ability to occupy their vital land centers. The *Kriegsmarine* was able to secure the iron ore transport routes and support the invasion of Norway. The invasion and occupation of Norway permitted greater range for aircraft and additional protected ports for ships, allowing for greater disruption to the Atlantic and Northern convoys. Although the *Kriegsmarine* was still able to conduct commerce raids, their near annihilation during the Norwegian Campaign reduced their level of threat to the Allies. “Logically the Germans should not have been able to seize and hold Narvik without air power, or Warburton-Lee to immobilize ten large [German] destroyers with five small ones; yet both were done and the *Warspite* survived.”³⁸

The navies, merchant marines and maritime air arms engaged in one of the deadliest campaigns up to that point in the war. The near annihilation of the *Kriegsmarine*, this early in the war, caused setbacks to Germany’s plan for the conquest of the United Kingdom as they no longer had the number of maritime assets that would be able to transport invasion forces to the

³⁸ Dickens, *Narvik : Battles in the Fjords*, pg 158.

island. The existing ships of the *Kriegsmarine* were forced to stay closer to German TTW and controlled waters which limited their exposure to RN and RAF threats. This reduction of the German blue water force allowed the Allies to have greater and almost uncontested access to the English Channel in their preparations for a beach landing as well as supporting the Italy Campaign in the Mediterranean.

Although the invasion of Norway was a success, the cost of the Norwegian Campaign was high for the *Kriegsmarine* as it took away a strong force that could have greatly impeded the Allied shipping both on the surface and subsurface. The reduction in the surface fleet applied additional pressure on the *Luftwaffe* in the defence of their Western front. The resources needed to support the war on two fronts left the Germans with little choice in not rebuilding their maritime power. The iron ore from Narvik and the airfields of Norway were required by the German forces but due to the shift in momentum in the ground war, the *Wehrmacht* relied on their U-boats instead of their near annihilated *Kriegsmarine*.

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