Abstract

Corsairs in Drain Pipes
An Examination of the Submariner Folk Group in
The United States Navy During the Second World War

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During the Second World War, United States submariners were isolated from the rest of the Navy. Submariners faced a higher level and different type of danger than the rest of the Navy. They developed their own way of speaking, a unique worldview, and their own traditions. Although it is widely recognized, especially among contemporary sources, that submariners shared a unique bond, nothing has been published that examines submariners as a cultural group. This project will examine submariners as a distinct sub-culture within maritime culture. In doing so, the author hopes to identify and examine the reasons for its formation. This project will focus on the United States Navy during World War Two. This project utilizes firsthand accounts of submariners and an examination of actual submarines, submarine memorials, and submariner material culture to identify, explain, and define submariner culture.

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An Examination of the Submariner Folk Group in the United States Navy During the Second World War

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By

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DEDICATION

For my grandfather, my family,

for any and all submariners.

For those who made it back,

and for those still out on eternal patrol.

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Introduction

Importance of project

As time goes on, fewer World War Two Veterans survive to tell their stories. The stories of heroic bomber crews, infantrymen on the front lines, and fighter pilots have all been immortalized in film and in print time and again. Their sacrifices, their triumphs, and their losses are all discussed in scholarly literature. The majority of the veterans of the Second World War have already told their stories. The exception to this rule, however, is the submarine branch of the US Navy. There are a few memoirs and several films, but the scholarly literature on this topic is lacking. It is hoped that this project can add to the scholarly base of knowledge about submariners during the Second World War. This project should serve as another chapter in the often overlooked story of the American submariner during World War Two. Hopefully, it will shed some light on what it may have been like to be a submariner, one of, if not *the,* most dangerous combat postings during the most dangerous time in recent history.

This project is important for another reason as well. Although a large portion of this project is dedicated to proving that submariners formed their own occupational folk group, it is important to note that submariners belonged to other groups as well. In fact, this entire project can be considered an investigation into one small subgroup within maritime culture. Submariners shared many of the traditions, values, beliefs, of other seafarers. This project serves not only to tell another part of the submariner's story, but also to further the knowledge of maritime culture by adding submariners as another subgroup.

Research Questions

There are three main research questions that this paper seeks to answer. The first, and quite possibly most important, being: Can submariners in the United States Navy during the Second World War be considered a folk group? This entire project is centered around this question, but it is mainly addressed in the following chapter. Building on this question, then, the rest of this paper seeks to answer the most logical of follow up questions: Why did submariners develop into a folk group? And what are the key tenets of the submariner folk group, or, what is submariner culture? These questions dictate the scope of this paper, and, without a doubt, these three are the most important research questions answered throughout this project. They are not, however, the only questions addressed. Other questions are addressed in this work as well, questions that yield answers that create more of a full picture of what submariner culture is. For example, this paper also seeks to ascertain whether or not graffiti was present on submarines. The presence or absence of graffiti on submarines is extremely important because it can yield important information about submariners, what they did on their downtime, their values as a group. A related question posed in this paper is what do the battle flags and emblems of the submarine force say about the submariners who designed them? Perhaps one of the most important of the remaining questions posed in this paper, however, is how did the submariner folk group deal with death? Death is the ultimate eventuality of every living thing. Every person alive must experience it themselves, both as an observer and a direct participant. How groups deal with this phenomenally important part of the human life cycle speaks volumes about shared group values.

Historiography

Because of its grand scale and the leading role that the United States played in this terrible conflict, the Second World War is a much discussed historical topic. But because of the secretive nature of the submarine force, little has been written about American submarines or submariners during the Second World War. The majority of scholarly literature that concerns submarines and submariners is focused on the development of submarine technology and tactics. Although this is an important field, it leaves gaps in the base of scholarly knowledge concerning submariners.

A few notable works analyze the submarine from a ship construction point of view, and trace its evolution through changes in technology. These works proved of some use to this project, as the boats that submariners lived on helped shape their identity. The works that were most heavily relied upon for this part of the project include: Robert Hutchinson's *Submarines, War Beneath the Waves From 1776 to the Present Day* (2001), John D. Alden's *The Fleet Submarine in the U.S. Navy* (1979), Philip Kaplan's *Run Silent* (2002) and Paul E. Fontenoy's *Submarines, an Illustrated History of Their Impact* (2007).

Other works concerning the United States Submarine Force in World War Two usually center around submarine combat operations. A few of these sources provided an overall sense of how submarines were really used in the war. The first is *United States Submarine Operations in World War II*, by Theodore Roscoe (1949). This work is a great resource in that it gives a broad perspective of the war from a military strategy standpoint. One drawback with it, however, is that it is not meant to be a scholarly work. In the introduction, Roscoe (1949:xiii) writes, "This

volume is not the official operational history. Strictly speaking, it is not a history, nor is it to be studied as such...The volume's primary mission is to serve as an informative, instructive, and inspirational text for those in Naval Service who are interested, directly or indirectly, in submarines." This statement is reinforced by Roscoe's complete lack of notes. Although it contains a fairly substantial bibliography and seems well-researched, there is no way to know the exact sources of his information.

Silent Victory: The U.S. Submarine War Against Japan, by Clay Blair (1975), is very similar to Roscoe's study. It gives a broad perspective of the submarine war from a military viewpoint. The problem with this work, as with Roscoe's, is the absence of any form of citations. This work provides some excellent information; but, because of the lack of citations, can really only be used to get a general idea of the strategies used by the Submarine Command.

Charles Lockwood's *Sink 'em All* (1951) is an invaluable study that provides a sense of submarine strategy on a large scale. The reason for this is that Lockwood was in charge of submarine operations in the Pacific for the majority of the Second World War, and this book is his wartime memoir. Lockwood served on submarines during and after the First World War. It is this aspect that makes his work even more interesting. Lockwood writes about submariners from a position of authority, but he is also a submariner. So not only does this work give a broad perspective of the submarine war directly from the man who planned it, but it sheds light on what submariners thought about other submariners, and how older submariners felt about the newer generation.

Like Lockwood's work, the literature written about submariners is most often in the form of memoirs written by submarine veterans. These memoirs provide an excellent source of

information about submariners, and in lieu of personal interviews, can serve as primary sources about life on submarines. The only issue with these works is that many of these memoirs are written by captains and officers of the submarine force and are more concerned with the military operations of the submarine. Although it is possible to glean from their pages the possible existence of a submariner culture, there is not much of an analytical component to them.

It is worth noting that there is a chapter in the recently published work, *Reinventing the Ship: Science, Technology and the Maritime World, 1800-1918* (Dunn, Leggett 2012), that mentions a submarine culture. Chapter 8 in this work is written by Duncan Redford and is titled "Naval Culture and the Fleet Submarine, 1910-1917." This chapter discusses how the submarines of the British Royal Navy were used throughout the First World War. Redford argues that, when submarines were eventually deployed alone, and not as support craft for the battleships of the fleet, submariners began to develop a unique identity. This study will investigate whether or not this statement is true in the United States Navy as well. It is worth noting that Redford's work does not analyze the unique submariner identity as any sort of cultural phenomenon.

The existing scholarly literature on submariners leaves much to be desired. Most focuses on submarines and submarine warfare with only slight mentions of the submariners themselves. Aside from memoirs, what is written specifically about submariners is most often in the form of medical reports and studies. Naval medical reports for the physical as well as psychological reports for the mental well-being of submariners on long missions are currently available and give some insight into the minds of submariners. These reports do not specifically address submariner culture, however, and so they do not answer the research questions that this study poses.

Methodology

Submariner culture is best explained by submariners. For this reason it was decided to include an ethnographic history component in this project. Therefore, one of the first tasks was to compile a list of retired World War Two submarine veterans. A critical part of this project was interviewing these men about their time in the Navy. Because World War Two veterans are now reaching advanced ages, firsthand written accounts were used to supplement oral history interviews. Taped interviews used for televised documentaries served as excellent substitutes for personal interviews. Data obtained from the Department of the Navy in the United States and its equivalent departments in other countries were used to calculate casualty figures.

The archaeological aspect of this project consists of three main tasks. Phase 1 involved an investigation of three United States submarines. This phase of the investigation involved looking for any kind of graffiti in or on three different World War Two era submarines. These submarines were USS *Pampanito*, USS *Torsk,* and USS *Cobia*. The second phase of the archaeological component was an inventory of the artifact collections of three different museums. The three museums visited for this project were already mentioned above: The Wisconsin Maritime Museum, the USS *Pompanito* Museum, and the Submarine Force/USS *Nautilus* Museum. To analyze the material culture on board submarines, many objects found in each artifact collection visited were placed into a catalogue. Once this catalogue was complete, it was checked for similarities, differences, and any interesting or unusual items. A similar catalogue was also kept of the graffiti, battle flags, emblems, and any other shipboard modifications made by

submariners. The catalogues were then compared to find similarities, differences, and underlying themes.

Historical Background

Evolution of Submarine Technology, Pre-WWII

The United States has had a long and somewhat difficult relationship with submarines. An American submarine was the first to attempt an attack on a surface ship when, on 7 September 1776, Sergeant Ezra Lee of the Continental Army used David Bushnell's *Turtle* to try and attach an explosive charge to the British ship *Eagle* in New York Harbor. And it was a Confederate submarine, CSS *Hunley,* that achieved the first successful sinking of a surface ship when, on 17 February 1864, *Hunley* sank the Union ship USS *Housatonic.*

After sinking *Housatonic,* however, *Hunley* was itself lost at sea. This event is symbolic of the fate of the submarine in the United States in the late-19th and early-20th centuries: despite some early successes, the submarine as a weapon was mostly disregarded. In fact, the watershed moment for the submarine in the United States was not until the Second World War.

In 1900, the United States became the second nation, after France, to purchase submarines specifically for military use (Blair 1975:30). But despite being one of the first to purchase submarines, the United States still lagged behind other nations in two key areas of technology, necessary for the success of submarines: torpedo and engine design. For these crucial parts of a submarine, the United States relied on designs from other nations. The United States was so far behind in submarine manufacturing and technology that, in the summer of 1917, when asked by the British to send a contingent of submarines to the war zone, the Navy

could barely find enough combat ready boats to comply. After major overhauls, the United States Navy sent 12 of their best submarines to aid in anti U-boat patrols in the Azores and off southwest Ireland. None of these submarines were successful in sinking any enemy ships (Blair 1975:43-4. Fontenoy 2007:14).

Unlike the United States submarine force, German U-boats were not strictly delegated to coastal defense roles. By sending their U-boats to seek out high value targets, merchant or military, the Germans achieved great success and revolutionized naval warfare. In fact, German U-boats during the First World War were responsible for sinking ten allied battleships, eighteen cruisers, twenty-one destroyers, and nine submarines. They also sank 5,708 allied merchant vessels, totaling approximately 11 million tons. The casualty rate for U-boats was very high, however. The Germans lost 178 U-boats out of the approximately 373 that were built during the war. The rate of loss was around 7 U-boats each month. For every U-boat lost, however, 32 allied ships were sunk (Blair 1975:44-5).

Largely because of the German U-boat's excellent performance, the United States made great strides in developing submarine technology after the First World War. The United States still did not envision using submarines independently, however. In fact, they wanted to use submarines as scouts and support vessels for the rest of the fleet. The term "fleet boat," often used to describe submarines of the inter-war to World War Two time period, comes from the fact that these submarines were designed to operate within the rest of the fleet. United States submarine design in the inter-war period was largely dictated by Plan Orange (Blair 1975:46-7). Plan Orange was the United States Navy's battle plan in case of a war with Japan. Inspired by Alfred Thayer Mahan, Plan Orange dictated that the United States' Fleet would steam towards

Japan and engage the Japanese fleet in a decisive battle. This caused problems for submarine designers. For submarines to be incorporated into the Navy's battle plan, they had to be able to keep up with the rest of the fleet at an average of 17 knots, during continued, strenuous operations on the open ocean. The Navy's current top of the line submarines, the S-class, were too slow, not seaworthy enough, had engines that were not very reliable, and could not carry enough fuel or torpedoes (Blair 1975:47-8).

Because of the shortcomings of the S-class, the Navy moved to design a new submarine that could meet the specifications dictated by Plan Orange. However, submarine design during this period was hampered by three main issues: diesel engine construction, political ideology, and the Great Depression. The United States still lagged behind other countries in diesel engine construction. Because Plan Orange dictated that submarines be able to carry increased quantities of fuel and torpedoes, the next generation of submarines had to be larger. These larger submarines also had to meet the requirements of a 17-knot surface speed, as also dictated by Plan Orange. This required a more powerful diesel engine. Unfortunately, American-made diesel engines were notoriously faulty, and would continue to cause problems even through the end of the Second World War.

Another major problem with the development of submarine technology was political. Many Americans still believed that submarine warfare was immoral. The German U-boats and their practice of unrestricted warfare during the First World War directly contradicted the principle of freedom of the seas, an ideal that the United States had fought multiple wars to defend. The United States' participation in the War of 1812 and the First World War revolved around the defense of this principle Holwitt 2008:2,11). The sinking of *Lusitania* and other

passenger liners was a major contributing factor towards the United States' entry into World War One. And prior to World War Two, few were willing to endorse a weapon of war that was most effective when targeting merchant ships filled with civilians, especially with the sinking of ships like *Lusitania* fresh in their minds. Because of the popular opinion that submarines and unrestricted submarine warfare was immoral, it was difficult for the United States to advance submarine technology. In fact, it was difficult for military officials to even keep the submarine and commerce warfare from being banned altogether (Holwitt 2008:18-30).

Submarines were also still seen as a weaker nation's alternative to combating a stronger enemy navy. Critics of submarines were quick to state that the United States Navy was already larger than that of Japan, and that even though the British had a larger Navy, they were strong allies. The third obstacle to developing an acceptable fleet submarine was the Great Depression. Submarines had never been a priority, and because of budget cuts, submarine development was slowed (Blair 1975:48-9).

The Navy overcame the majority of these issues, however. In 1932, they held a competition to see if private industry could develop a better diesel engine. Because of this competition, three superior designs were produced. These basic models of engines were revised over time, but these three companies continued to make submarine diesel engines for the Navy through the Second World War (Alden 1979:44). A solution to the budget problem came in 1933 with the National Industrial Recovery Act. Through this act, President Franklin D. Roosevelt allocated $238 million to the Navy for the purpose of building ships and aircraft (Alden 1979:35).

Peacetime Designs

With an influx of government funds and new designs for diesel engines, the Navy set out to create the next generation of submarines. What they designed was a series of submarines called the P-class. The P-class was the first successfully designed fleet boat. P-class boats were capable of reaching speeds of almost 19 knots, had an operating depth of 250 ft., a battery of 6-8 torpedo tubes, could carry 16-24 torpedoes, had a range of 11,000 miles, and had a patrol endurance of 75 days (Alden 1979:58. Fontenoy 2007:25). The P-class were the first submarines to have air conditioning, and the *Shark* class boats within the P-class were also the first submarines to be made of all welded instead of riveted construction. The P-class were also the first submarines to use diesel-electric reduction drive (Fontenoy 2007:25).

It is worth noting, however, that submarines of the P-class were made at three separate locations: the Portsmouth Navy Yard, the Mare Island Navy Yard, and at the Electric Boat Co. building yard. The Navy gave each yard license to change certain design aspects of the submarine, and so none of the submarines were made exactly the same. For example, the submarines made at the Electric Boat yard were the only ones to be welded, whereas the submarines built at the two navy yards were all riveted. Similar differences between submarines persisted through the end of the Second World War, as each yard added their own changes to the designs that the Navy sent them. Between 1934 and 1940, the United States Navy constructed 38 P-class submarines. These 38 submarines formed the core of the United States submarine force at the beginning of the Second World War (Fontenoy 2007:25).

As the threat of war loomed closer, the United States continued to progress in submarine design. In 1939, the Navy introduced the new *Tambor* class submarine. The *Tambor* class was

the last submarine designed before the United States entered the Second World War. *Tambor* class submarines had several improvements over their predecessors. Whereas the P-class was designed to have a battery of only four torpedo tubes forward and two aft, the *Tambor* class had six forward and four aft, for a total of ten torpedo tubes. Partly because of the increase in torpedo tubes, *Tambor* class boats could also carry an increased standard loadout of 24 torpedoes. These submarines had a length of approximately 307 ft. 3 in. and a beam of 27 ft. 3 in. They also had a crew of 60 to 79 officers and men. Twelve *Tambor* class boats saw combat in the Second World War, and seven of these submarines were lost due to enemy action (Alden 1979:74).

The United States entered into the Second World War without knowing how important submarines would soon become. In fact, the Second World War was the watershed moment for the submarine in the United States. Although still a small group, amounting to less than two percent of the Navy, never before had the United States had so many submarines or submariners on active duty at one time. And at least in the eyes of submariners, the United States Navy relied on submarines more heavily after the Japanese attack on Pearl Harbor (Russell 1995:xii). According to Fleet Admiral Chester Nimitz, "It was our submarines that held the line against the enemy while our fleets replaced losses and repaired wounds" (Naval History Division 1963:ii). United States submarines managed to sink around 60% of the Japanese Merchant Marine and were responsible for 30% of the total amount of Japanese naval ships sunk (Joint Army-Navy Assessment Committee 1947:47). The submarine war against Japan was so effective that, in 1945, pig iron imports to Japan fell 89%, iron ore imports fell 95%, soda and cement imports fell 96%, lumber imports fell 98%, and not even one ounce of sugar or raw rubber made it safely to mainland Japan (Parillo 1993:218).

Chapter Summarization

Each chapter of this project, except for chapter two, is organized according to the defining traits of the submariner folk group. Chapter two is an investigation into folk groups. This chapter details the prerequisite factors needed for a group to be considered a folk group, seeks to prove that submariners were indeed a folk group, and then investigates the reasons for the formation of the submariner folk group. Chapter three begins the chapters that are dedicated to discussing what this study has revealed as the most important facets of the submariner folk group. This chapter is titled: "The Experience of Combat." Throughout this chapter, the importance of the experience of combat to the submariner folk group is highlighted. Excerpts from memoirs, statements from personal interviews, photographs, and even submariner-designed memorials are utilized to support the argument that combat was extremely important to the submariner folk group.

After discussing the experience of combat, the next chapter focuses on a related topic: the submariner's attachment to his submarine. Chapter four is entitled: "Emotional Attachment to Their Submarines," and relies most heavily on memoirs. This chapter seeks to prove that another key tenet of submariner culture was that submariners were often emotionally attached to their submarines. A key part of this argument is that submariners relied on their submarines for survival, and that most often, a submariner's fate was tied to that of his submarine. Chapter five provides an evaluation of a perceived shared worldview among submariners. This chapter is titled: "A Rejection of the Surface World." This chapter argues that submariners used their folklore to reject the surface world and embrace the underwater world as their home. Cartoons,

memoirs, and poems supply evidence for this argument. This chapter also includes an in-depth discussion of the symbolism of the most prevalent piece of submariner iconography: the Submarine Qualification Insignia.

Chapter six is titled: "Death and Memorialization." This chapter investigates the ways in which submariners dealt with death. This argument relies heavily upon Stewart's (2011) work, which is used as a template through which to analyze submariner memorials. This project also investigated the deaths of submariners in non-sinking incidents, and used the death and burial of Ralph Clark Huston, Jr. as a case study. The reason for this is that deaths in a non-sinking incident were rare on submarines, and they were often not thoroughly documented. Documentation of the case of Ralph Clark Huston, Jr., however, survives in multiple forms. Chapter seven, the final interpretive chapter, is titled: "Key Submariner Cultural Ideas." This chapter discusses major elements of submariner culture that were not mentioned earlier. Examples of these elements are a more relaxed social structure and the development of a collective sense of humor.

In summation, this project seeks to shed light on one of the most important groups of the Second World War. Because of the secrecy inherent in submarine service, many submarine veterans did not share their stories with the general public. And as the years go by, there are fewer and fewer of these underwater warriors left. The final national convention of the United States Submarine Veterans of World War Two was held in September 2012. After the convention, the national organization was forced to disband due to a lack of members. As an interesting parallel, the remaining members of the Doolittle Raid also shared their last toast on 9 November 2013. World War Two veterans are disappearing at an alarming rate. The importance of

submariners to the war effort alone should be enough reason to justify this project, but their rapid rate of loss adds an element of urgency. It is the author's hope that this project does right by all of the submariners who contributed to the project, all of the submariners who are still around to read it, and all the submariners now on eternal patrol.

Chapter 2

Submariners as a Folk Group

As previously mentioned, this project seeks to answer a few fundamental questions, the most important being: can the submariners of the United States Navy during the Second World War be considered a folk group? And, if so, what caused the formation of this folk group? This chapter seeks to answer both of these major questions. This chapter will clearly demonstrate that submariners should be considered a folk group because they meet the established criteria for such a designation, and that this folk group formed because of four main reasons to be explained later in the chapter.

Folklorist Barre Toelken (1996:56) defines a folk group as "any group of people who share informal vernacular contacts that become the basis for expressive culture-based communications." As Stewart (2011:14) is right to point out, one of the key parts of Toelken's definition is the informality of folklore. Stewart (2011:14) makes an excellent metaphor about students attending university, that is a perfect parallel to submariners attending the New London Submarine School. Stewart writes that students attend school to learn the curriculum, which is formal and should not be considered folklore. But, while at school, students also participate in folk group activities. These activities could include but are not limited to: attending parties, dressing a certain way, or exchanging stories about professors. The key point is that these

activities are taught to the new students by members of the folk group (Stewart 2011:14). Students who attended the New London Submarine School went to learn about submarines. While there, however, they interacted with other members of the submariner folk group; the instructors were all submariners themselves. The students at the school were taught formal curriculum, but also learned about Spritz's Navy, submariner slang, and how to actually survive aboard a submarine. This was the beginning of their initiation to the group.

To illustrate this point, one has to look no further than wartime memoirs. One in particular stands out. Claude C. Conner served aboard USS *Guardfish* during the latter part of the Second World War. Conner was rushed into submarine duty, however, and never attended Submarine School. Because he had never attended the school, he had never been educated about the ways of the group. Possibly the best example found in his memoir occurs when Conner is being shown around the boat by a submariner named Dudrey. Dudrey, a *Guardfish* veteran, knew his way around a submarine. As Conner followed his guide through the submarine, he noticed that Dudrey had a certain way of doing things. Conner wrote: "Although I listened carefully to Dudrey's explanations as we coursed our way through the narrow boat, I was really more intent on watching him. After opening a bulkhead door with a deft turn of the long lever handle, he slipped through the small opening like a trackman jumping a hurdle...I tried my best to imitate him" (Conner 1999:15). Conner followed Dudrey to the bulkhead door to the engine room. Dudrey "hurdled" through the door and continued walking with an "almost unbroken stride." When Conner attempted the same hurdle, however, he smashed his head into the boat's air conditioner compressor unit (Conner 1999:15). As evidenced here, something as simple as walking through doors and hatches on a submarine could be difficult for the uninitiated. And

while there was no "official" way to walk through a submarine, submariners learned to hurdle through hatches by watching other submariners. This process is an excellent example of the informal folk group educational process.

This example of informal learning alone does not prove that submariners should be considered an occupational folk group, however. According to Toelken's definition, and Stewart's interpretation of said definition, an occupational group can be considered a folk group only if it meets the requirements of informal learning *and* "expressive culture-based communications" (Stewart 2011:14; Toelken 1996:56). Stewart interprets this phrase to mean that, to be a folk group, the group would have to develop its own traditions, of which shared beliefs, values, and a unique worldview form a part. Stewart goes on to write that these ideas can manifest themselves in the group's rituals, jokes, songs, and even material culture (Stewart 2011:14). Throughout this paper, it will be demonstrated that submariners meet these requirements. As will be shown, submariners demonstrate informal learning, a development of folk group values, beliefs, and a unique worldview.

Before an investigation of these elements of the group, however, it would be pertinent to investigate how folk groups form. According to Toelken's definition and Stewart's interpretation, all a group needs to do to be considered a folk group is to develop a shared body of tradition. Jansen (1959) argues that a group develops its own folklore, or shared tradition, in three separate instances. These three instances are also elaborated on in Stewart's (2011:16) work. In fact, because Stewart has already adapted Jansen's conditions for the development of folklore to mariners, they seem appropriate to apply to submariners. Jansen (1959:206-207) states that there are two major kinds of folklore that apply to the relationships between groups and those outside

of the group. These two types of folklore are called esoteric and exoteric folklore. Esoteric folklore involves how the group perceives itself, while exoteric folklore concerns how outsiders perceive the group.

Esoteric Folklore

Jansen's (1959:209-211) three instances in which esoteric lore usually develops are as follows: The first is in groups that are isolated in some way. Stewart (2011:16) states that isolation tends to foster closer bonding within the group, as well as developing exoteric folklore about the group. The second instance in which esoteric folklore can develop is when a group possesses some specialized knowledge or skill set. Stewart elaborates on this point by stating that these special skills could be anything from a vocabulary that could not be understood by outsiders to job related skills. And the third instance is when the group is perceived as being especially interesting or different (Stewart 2011:16). This is especially true in occupations that are romanticized.

Submariners fit all three of these categories. Not only were submariners isolated from the outside world for up to 75 days at a time during every war patrol, but they were isolated from the rest of the armed forces as well. They stayed in separate hotels when on shore leave, and even engaged in a self-imposed isolation because they could not risk details of their activities becoming public knowledge. In fact, a common piece of submariner folklore is that the Japanese during the early stages of the war were setting their depth charges to detonate at too shallow of a depth. In other words, the Japanese were underestimating the submergence capabilities of United States Submarines. The story goes that this bit of information was leaked to a public official,

who then spoke it aloud on the radio. Because of this blunder, according to the story, the Japanese adjusted their depth charges to explode at a deeper depth, directly resulting in the losses of more submarines (Tate 2012, pers. comm.). Because of incidents such as this, submariners often chose not to associate with anyone but other submariners, and they especially did not speak to non-submariners about their submarines. This behavior earned the submarine service the title of "The Silent Service." They adopted a general code of silence about their profession, because, at least in their minds, outsiders could not be trusted.

Submariners fit the second category as well. Every submariner possessed a very specialized skill set. In fact, all submariners, even the cooks, were required to pass a qualification exam. This exam tested the submariner on all facets of operating a submarine. The reasoning behind this comprehensive exam was that every submariner should be able to operate every piece of equipment on the submarine, in case the original operator was incapacitated or killed. Submariners also used a vocabulary that probably would not be intelligible to others, even those speaking the same language. They developed nicknames for the equipment that surrounded them, and evolved a unique way of speaking.

The third of Jansen's instances for the development of esoteric folklore also applies to submariners. In fact, because of their isolation, special skills, and the secrecy that surrounded them, submariners were extremely interesting to others (Casey 1945:1-3). And even submariners romanticized their own occupation. Roaming the seas like a band of pirates, going deeper underwater than anyone had ever gone before, being part of a branch of service that was cloaked in mystery and secrecy, submarine service was ripe for romanticization.

Stewart (2011:17) elaborates on Jansen's work in one more way. He asserts that the folk groups that are the most "high context," or those that communicate most effectively without explicit statements, are those that have to form bonds in order to deal with highly dangerous or highly stressful work. Stewart states that examples of these groups can be found in loggers, pilots, and military units among others (Toelken 1996:38,75). This piece of information definitely indicates that submariners should be considered a folk group.

Exoteric Folklore

Just as important as the development of esoteric folklore for the existence of a folk group is the development of exoteric folklore. Because submariners possessed specialized skill sets, were surrounded in secrecy, and worked in a somewhat romanticized occupation, exoteric folklore formed a large part of the submariner's identity. Perhaps the best example of exoteric submariner folklore comes from the work of Robert J. Casey. Casey was a war correspondent in Honolulu, Hawaii during the Second World War. The first chapter in his book is titled: "Men Who Walk Apart." This chapter, and the entire book, is about submariners. Casey begins his work by describing submariners as being "creatures apart" (Casey 1945:1). It is interesting that Casey begins his narrative by describing submariners as "creatures" and not men. In Casey's eyes, submariners were so different, in fact, that they could not even be definitively classified as human. Casey continues to state that new Navy recruits were awed by submariners and older veterans looked at submariners with respect.

Possibly the most interesting part of this chapter is that Casey makes mention of a submarine being depth charged by a friendly destroyer. More specifically, he writes about a

submarine that he saw in the channel: “We had heard the legend of how one of them had to work for two days to get the channel patrol to quit dropping depth charges on it” (Casey 1945:1). This episode is interesting because it is definitely based on truth, but has clearly become folklore. Submariners developed esoteric folklore about this exact situation as well. This will be elaborated upon shortly, but it is interesting to note that the situation in question most likely involved USS *Thresher* returning to Pearl Harbor in 1941. In fact, *Thresher* was reportedly depth charged by multiple “friendly” destroyers and aircraft (Blair 1975:101-2; Howard 2013).

The Development of the Submariner Folk Group

Because submariners developed their own folklore and others developed folklore about them, they began to develop shared traditions, beliefs, and a shared worldview. This folklore became a part of their identity, an identity that was shaped by their occupation. There are four main reasons that submariners during the Second World War developed their own unique culture. All of these reasons relate to Jansen’s instances in which groups develop esoteric folklore and Stewart’s statement that high levels of danger and stress tend to bring groups closer together.

The first reason for the formation of the submariner folk group is the New London Submarine School and the rigors of submariner training. New submariners were required to go to the same school, pass the same tests, and there they would inevitably meet other submariners; thus forming bonds of friendship throughout the submarine force before they even set foot on a submarine. The second was the submarines themselves. The submarines of World War Two provided a unique and difficult way of living for submarine crews. The third reason was the high level of danger faced by American submarine crews. Not only were they faced with extremely

dangerous situations, but it was a different kind of danger, and a different kind of death that they faced in comparison to their surface craft counterparts. The fourth and final reason for the development of a submariner culture was the small size of the submarine force and their isolation from the rest of the fleet. The following sections examine the influence of each of these factors.

Submarine School

Submariners in World War Two shared a common training background that was to serve as the first of many bonding experiences. In fact, World War Two submarine veteran Jack Higgins described the strenuous testing of submarine school as "the glue that stuck us all together" (Jack Higgins 2012, pers. comm.). Before they were even selected for submarine duty, potential submariners had to go through a rigorous application process. After a battery of physical and mental tests, a very small minority of applicants, possibly as low as eight percent, won admittance to submarine school (Smith 1990). It is important to note that this was the first step in separating submariners from the rest of the Navy. Not only does this indicate isolation, the first of Jansen's three categories, but it also counts as submariners having specialized skills. The low number of candidates who passed the initial battery of tests had qualities that most others lacked, and these tests demonstrated this to the rest of the Navy and set submariners apart on yet another level. Potential submarine officers were grouped together as well. Most of them received training at the Naval Academy in Annapolis, Maryland, and then graduated to the Naval Submarine Base's Submarine School in New London, Connecticut (Calvert 1995:1). Enlisted men also went to the New London Submarine School after receiving basic training and qualifying for submarine service (Russell 1995:21).

After being admitted to submarine school, however, potential submariners had to endure another round of physical and mental testing. One of the most infamous of these tests was the pressure chamber. The pressure chamber at the New London Submarine School was a way to weed out candidates that could not equalize properly under pressure. Jack Higgins (Higgins 2012: pers. comm.) described his experience in the pressure chamber as a "bit uncomfortable." The temperature in the pressure chamber rose to as high as 132 degrees as the pressure built up. The chamber was crowded. Men were packed in shoulder to shoulder. Voices change as pressure increases, and some men could not handle these conditions. Some burst eardrums and some did not have the mental toughness necessary to cope with the heat and the claustrophobic conditions.

Another test that potential submariners had to endure was the water tower. The water tower was a 100 ft. deep water tank. Submariners were required to make an ascent from different depths of the tank using a Momsen Lung. The Momsen Lung was developed by Swede Momsen as a way for submariners to escape sunken submarines. The Lung recycled exhaled air by scrubbing away harmful carbon dioxide (Figure 1). Note the strap at the top of the device. This strap was to be worn around the user's neck. The strap on the middle of the device was used to secure the device around the wearer's waist, or torso. The mouthpiece is at the top of the device. One tube coming from the mouthpiece is for inhaling oxygen, and the other for exhaling carbon dioxide (Office of Naval Research N.D.).

FIGURE 1. Photograph of a Momsen Lung. From the artifact collection of the Maritime Park Association in San Francisco, CA. Used with the permission of the Maritime Park Association (Photo by the author 2013).

Although the Momsen Lung was supposed to make ascents from any depth easier, the ascent from the bottom of the water tower was still dangerous, and intimidating. In fact, in his memoir, USS *Cobia* crewman C.M. Stewart (1992:9) writes that his ascent was "the longest 50 feet of water." Stewart was "pretty shaky" when it was his turn to ascend with the Momsen Lung because two men had died during their ascents earlier in the day. According to Stewart, one man drowned and the other ascended too fast and burst his lungs.

The potential submariners that passed the rigorous tests of submarine school were then thrown into training, and into something called "Spritz's Navy." Chief Torpedoman Charles Spritz "ruled" the New London Submarine School with an "iron hand" (Skurat 2004, pers.

comm.). A former New York City police officer and a veteran Navy Master Diver, Spritz enforced an almost impossibly high level of discipline. He was feared by everyone and even initially detested by many. According to legend, Spritz did not drink, smoke, or go on liberty. This is perhaps one of the first pieces of submariner folklore from the Second World War. According to Jansen's (1959) conditions for the development of esoteric folklore, and Stewart's (2011:17) assertion that stress causes groups to bond more closely, because Spritz made submarine school incredibly difficult for potential submariners, they may have developed folklore about Spritz himself as a result. Above all, however, Spritz made sure that everyone leaving his school for submarine duty was ready and adequately prepared to do so. One of Spritz's most repeated sayings was "There is room for anything on a submarine except a mistake." As a testament to the impact of Charles Spritz on his students, submarine veterans of World War Two often wear a Spritz's Navy patch on their vests (Skurat 2004, pers. comm.).

Because of this common background, submariners already had friends and acquaintances in the submarine service before they even set foot on a submarine. When a graduating class from Submarine School was split up among the submarines of the United States Navy, it brought the submarine service together. It is because of this common background that a submariner on the *Flying Fish* and a submariner on the *Flasher* could both know a different submariner serving on the *Wahoo*. Skurat (2004, pers. comm.) wrote that "many friendships were formed in sub school," and that "it was the rare boat that did not have personnel whom you knew." The common background provided by graduating from the same school also gave submariners something in common and something to talk about (Galantin 1987:75-6).

The Submarine

Possibly no other force has played a greater role in shaping submariner culture than the submarine itself. During World War Two, the submarine was the entire world for each submariner on board for up to 75 days at a time. Because of this, the similarities in submarine design, and the unique living conditions that these submarines provided, submarines are possibly the most important defining factors for submariner culture. Because submariners were isolated on their submarines with little or no news from the outside world for such long periods of time, the submarine also conforms to the first of Jansen's criteria for the development of esoteric folklore.

Wartime Designs

The United States Navy designed three classes of submarines during the Second World War. These were the *Gato*, *Balao*, and *Tench* classes. It is important to note that these submarines were not complete redesigns, but rather improvements on the *Tambor* and P classes (Fontenoy 2007:25). The first of the three was the *Gato* class. *Gato* class submarines were the first mass-produced submarines in the United States. In fact, the Navy had *Gato* class boats under construction at five different shipyards (Alden 1979:101). Seventy-seven *Gato* class submarines were constructed from 1941 to 1943. These boats measured approximately 311 ft. 9 in. in length and 27 ft. 3 in. in beam, had an operating depth of 300 ft., a crew of 60-81 men and officers, and a patrol endurance of 75 days. One major improvement found in *Gato* class boats over previous designs was a division of the engine room into two smaller components via a watertight

bulkhead. Although the engine room was split in two, it stayed in the same location as in *Tambor* and P class submarines.

The second class of submarine developed during the Second World War was the *Balao* class. The *Balao* class could carry the same amount of torpedoes, had the same surface cruising speed, the same patrol endurance time, the same interior layout, and the exact same length and breadth measurements as the *Gato* class. The main difference between the two classes of boats was operating depth. The *Balao* class submarines achieved an operating depth of 400 ft. The Navy accomplished this by increasing the thickness of the *Balao* class' pressure hull plating and switching from mild steel construction material to high tensile steel. Between 1942 and 1945, the Navy ordered 256 of these submarines to be constructed, but only 119 were ever completed (Alden 1979:105).

The third and final class of submarine to be designed in the United States during the Second World War was the *Tench* class. On the outside, the *Tench* class was almost identical to the *Balao* class. Both classes had an identical number of crew, maximum speed, cruising range, patrol endurance, submerged endurance, number of torpedo tubes, and interior layout. The *Tench* class, however, was outfitted with state of the art technology, including updated and more reliable engines. The torpedo rooms in the *Tench* class submarines were also slightly rearranged and could carry 4 additional torpedoes for a total of 28. The major difference between these two classes, however, was that the fuel and ballast tanks on *Tench* class submarines were completely rearranged in order to reinforce a potential weak point in the torpedo rooms (Alden 1979:108).

Similarities in Submarine Design

The vast majority of United States submarines that completed war patrols during the Second World War were of one of the five classes discussed above. It is worth emphasizing that each class is fundamentally similar, because they were improvements on a single, mass-produced design rather than completely new designs. Because of this fact, it is likely that submariners living on board any of these classes of submarines would have an almost identical living environment to that of a different submariner living on one of the other classes. Their surroundings would be more or less the same, as the major equipment necessary for the successful operation of a submarine did not change drastically from 1934, when the P-class was designed, to 1943, when the *Tench* class was designed. And most importantly, the interior layout of all fleet boats was practically identical.

From the *Porpoise* class all the way up to the *Tench* class, World War II era submarines had almost identical interior arrangements. The major difference between the interiors of these five classes of submarines is the division of the engine room into two separate compartments, starting with the *Gato* class. The division of the engine rooms is a small difference, however, because the location of the engine room relative to the rest of the submarine was not changed.

The sizes of these classes of submarines were also remarkably similar. Besides the P-class submarines, each submarine from any other class measured 27 ft. 3 in. in beam, and the largest variation in length between them was 4 ft. 6 in. The P-class boats ranged more widely in size, even within the class, as there are subclasses within the P-class. Even so, the shortest variant of the P-class submarine was the *Shark* class, which measured 298 ft. 1in. in length. The *Shark* class was designed in 1934, however, and only 2 submarines of the *Shark* class were ever

produced. The sizes of some of these P-class submarines were outliers, an exception to the rule that the majority of Second World War-era submarines measured approximately 311 ft. in length. The first class within the P-class, the *Porpoise* class, measured the smallest in beam at 24 ft. 11 in. Although the P-class boats are consistently smaller than the other classes of submarines used in World War Two, it is only a small difference (Alden 1979:60).

These similarities in submarine design led to similar living experiences for submariners and these similarities in everyday life helped contribute to the formation of a unique and distinct submariner culture. Possibly one of the best examples of submarine design shaping submariner culture is with slang terms. Slang terms are used by a culture to describe things prevalent in their everyday lives. On a submarine during the Second World War, the hydraulic manifold indicator had red and green lights that were used to indicate whether valves were open or closed. Because of this, it was almost exclusively called the "Christmas tree" (Casey 1945:224; Fluckey 1992:14; Galantin 1987:203; Grider 1958:38). And possibly because submariners lived and worked in such close proximity to the torpedoes they were carrying, torpedoes were almost always referred to as "fish" (Beach 1952:17; Casey 1945:380; Fluckey 1992:14; Galantin 1987:5; Grider 1958:54). Slang terms such as these were not limited to one or two boats but spread throughout the entirety of the submarine force.

Another way to see the effect of submarine design on submariner culture is to examine the places in which submariners spent their free time. Most often, the crew of a Second World War-era submarine would gather in either the galley or the forward torpedo room. This was true on most submarines because in all of the designs, the largest available spaces were the galley and the forward torpedo room (Schultz, Shell 2009:30; Galantin 1987:72-3).

Living Conditions on a World War Two Submarine

Life on a submarine was difficult. For up to 75 days, 81 men would be stuck together, underwater, in a metal tube that measured approximately 300 ft. long, without any real personal space to speak of. Each submariner was given one locker, measuring approximately 12 in. high, 18 in. wide and about 18 in. deep; this was the extent of his personal space (Skurat 2004:9). Some submariners were forced to share bunks; they ate their meals together and spent any time off duty together. Temperatures could soar past 100 degrees Fahrenheit during a depth charging and yet submariners did not have enough fresh water to allow showering with any regularity. They were rarely allowed fresh air, or even a glimpse of the outside world. These 81 men endured depth charges and surface gun actions together. Their combined efforts ran the submarine and they learned to depend on each other for survival. Because they were thrust into these difficult living conditions, submariners bonded. The stresses of living under these conditions, and the dangers of fighting a war in a submarine, surely caused submariners to bond more than the average group.

Size of the Submarine Force and Isolation From the Fleet

The incredible successes of the submarine force were achieved by a very small group. Amounting to less than two percent of the Navy's manpower, the United States Submarine Service was minuscule (Chief of Naval Operations, Submarine Warfare Division 2000). This is one reason that submariners became close to one another. The Submarine Service was small enough that submariners had the ability to become acquainted with a large portion of their fellow

submariners. Beginning with the interaction at the New London Submarine School, many submariners already knew each other before they were given actual assignments. And the Navy's practice of transferring up to one-third of the existing personnel off of one submarine to new submarines after each war patrol also fostered this interconnectedness (Fluckey 1992:63; Grider 1958:146; Russell 1995:192). When men were transferred to make room for new recruits and to be assigned to a newly constructed submarine, a common occurrence, they met more submariners (Galantin 1987:90; Grider 1958:10; McDonald 2008:84, 98-9, 120, 142-3, 166-7, 226-7). Interacting with other submariners on shore leave also helped to develop a camaraderie within the submarine service (Galantin 1987:6).

Only submariners understood what other submariners had to go through on a day to day basis (Ruhe 1994:288). And because many elements of the Submarine Service were highly classified, this situation would not change. Submariners were not at liberty to discuss anything related to submarine warfare with anyone outside of the submarine service (Ruhe 1994:288). Because of the secrets they had to keep, submariners did not converse much with other sailors and were even intentionally isolated from them by the Navy. For example, when a submarine docked at Pearl Harbor, submariners would stay at the Royal Hawaiian Resort, run by the Navy for the duration of the war and used exclusively to house submariners (Finch 2010:28; Fluckey 1992:63). Submariners would therefore mostly interact with other submariners whose shore leave overlapped with theirs.

Submariners were not only isolated from the rest of the Navy when they were on shore. When a submarine left port for a war patrol, the submariners were completely alone. They would have little to no contact with friendly forces for the entirety of their patrol. If they did have

contact with friendly forces, it was likely to be either a friendly fire incident or with another submarine. Submarines operated independently of the surface fleet for the vast majority of their war patrols. Because of this, submariners did not experience working together with the surface fleet, and were never given a chance to bond with their counterparts in the rest of the Navy. Later in the war, however, the United States adopted the German "wolf pack" system to counter the heavily escorted convoys that the Japanese were using. Now, instead of operating entirely alone, multiple submarine crews were put together in teams, and relied on one another. This fostered even more of an interconnectedness in the submarine force, as it reinforced the idea that submariners could only depend on other submariners. This kind of isolation greatly contributed to the formation of a close-knit submariner culture.

Possibly the most important point, however, is the small size of not only the submarine service, but of each individual submarine crew. An average American submarine crew during the Second World War was somewhere around 81 men (Alden 1979:101-108). These 81 men were stuck underwater, in a metal tube that was slightly over 300 ft. long, for up to two and a half months. They ate together, played cards together, and fought together. They had no one to talk to besides other submariners; and on a submarine, it was possible to get to know every man on board. This is an extremely different situation from a battleship or an aircraft carrier. In fact, Charles Tate, reflecting on his time aboard USS *Gato*, told the author that the crew of the *Gato* was "one big family," and that he not only knew the name of every other submariner on board, but also the names of every "member of every man on the submarine's family" (Charles Tate 2012, pers. comm). The ability to get to know each man on board fostered a closeness and a camaraderie aboard submarines that larger vessels simply could not match.

Because of the reasons mentioned above, submariners felt they shared a common bond. This self-perception is easily one of the best arguments for the existence of submariner culture. A veteran of three different submarines, and the commanding officer of the USS *Halibut* during the Second World War, I.J. Galantin wrote: "the smaller individual ships, the smaller total force, and the interdependence of every man in the crew, officer and enlisted man alike, have, since the navy's acceptance of its first submarine in 1900, led to a force with a special *espirit de corps*" (Galantin 1987:7). Another veteran of three different submarines, and the eventual commanding officer of the USS *Flasher,* George Grider wrote that "the very nature of the Submarine Service produced an intimacy, an *espirit de corps,* and a spirit of romantic adventure unmatched by the other branches" (Grider 1958:9-10). Grider then went on to echo Galantin's statement about the interconnectedness of the Submarine Service: "We were small, so small in the basic unit that every man aboard a submarine knew every other man by his first name, so small as a service that transfers, joint shore leaves, and overlapping friendships tied us all together" (Grider 1958:10).

The Unique Dangers of Submarine Service

The catalyst for the development of submariner culture was the danger that all submariners faced (Charles Tate 2012, pers. comm.). In fact, the motto of the United States submarine veterans of World War II is *Ex communi periculo, fraternitas.* Which, translated, means "from common peril, brotherhood" (DeRose 2000:vii). There are two important factors here. The first is that submariners faced a different kind of danger than their surface craft counterparts. The second is that they faced this danger more often than the surface navy did. To

illustrate this point, one needs to look no further than the casualty statistics provided by the United States Government. During World War Two, an estimated 87% of the Navy was deployed overseas and, "in all probability were exposed to combat" (Bureau of Naval Personnel and Marine Corps Headquarters 1964). During the war, the Navy suffered 62,614 KIA, and 36,950 other deaths (Leland, Oboroceanu 2010:2). The best way to assess these numbers, however, is by looking at casualty rates rather than simple counts. Converting casualty counts to rates eliminates the inaccurate perception given by raw numbers, which do not take into account the size of the forces involved. Using this methodology, the death rate for naval personnel that served overseas, and likely saw combat, was 2,736 deaths per 100,000 people. In comparison, approximately 16,000 submariners completed war patrols during the Second World War, and likely saw combat (Gruner 2010:11). Out of this small force of 16,000, a total of 3,506 submariners were killed in the sinkings of 52 submarines (Naval History Division 1963:1). The death rate for submariners during World War Two was therefore 21,913 deaths per 100,000 submariners: a substantially higher casualty rate than that of the Navy as a whole. To put this number in perspective, the 8th Army Air Force, often assumed to have suffered the worst casualty rates out of the entirety of the United States Armed Forces, suffered approximately 26,000 deaths out of roughly 225,000 airmen who flew bombing missions (Miller 2006:7,128). This amounts to a death rate of approximately 11,556 deaths per 100,000 airmen, little more than half of the rate suffered by submariners.

The reasons for the high casualty rates among submariners can be attributed to the different kinds of dangers that they faced. Submariners had to face the traditional dangers of being fired upon by enemy ships and aircraft when on the surface, and they had an entirely new

set of dangers as soon as they initiated a dive. Not only did submariners have to face enemy anti-submarine measures, but they often had to face off against their own faulty machinery and torpedoes, as well as over-eager friendly aviators and surface craft. Submariners had all of this to contend with, all the while knowing that, if something went wrong, their submarine could dive uncontrollably until it was crushed under the pressure of the ocean. During an interview with a World War Two submarine veteran, the veteran asked the author, "How deep can a submarine go?" The author responded with the operating depth of a *Balao* class submarine: approximately 300 ft. The veteran laughed and said, "Nope. They go all the way to the bottom" (Owen Williams 2012, pers. comm.).

Possibly the biggest threat to submariners was the depth charge. Depth charges are explosive devices designed to detonate after reaching a preset depth. These anti-submarine weapons could be fired from almost any manner of surface craft, or even dropped by aircraft. They were responsible for sinking more American submarines than any other enemy weapon (Naval History Division 1963). Being depth charged was something that only submariners experienced during the war. Enduring a depth charging was a terrible experience, but because submariners alone understood what it was like to be depth charged, the experience brought submariners closer. In fact, being depth charged was even sometimes seen by submarine veterans as an initiation, or a rite of passage for new submariners (Russell 1995:10,140; Grider 1958:37).

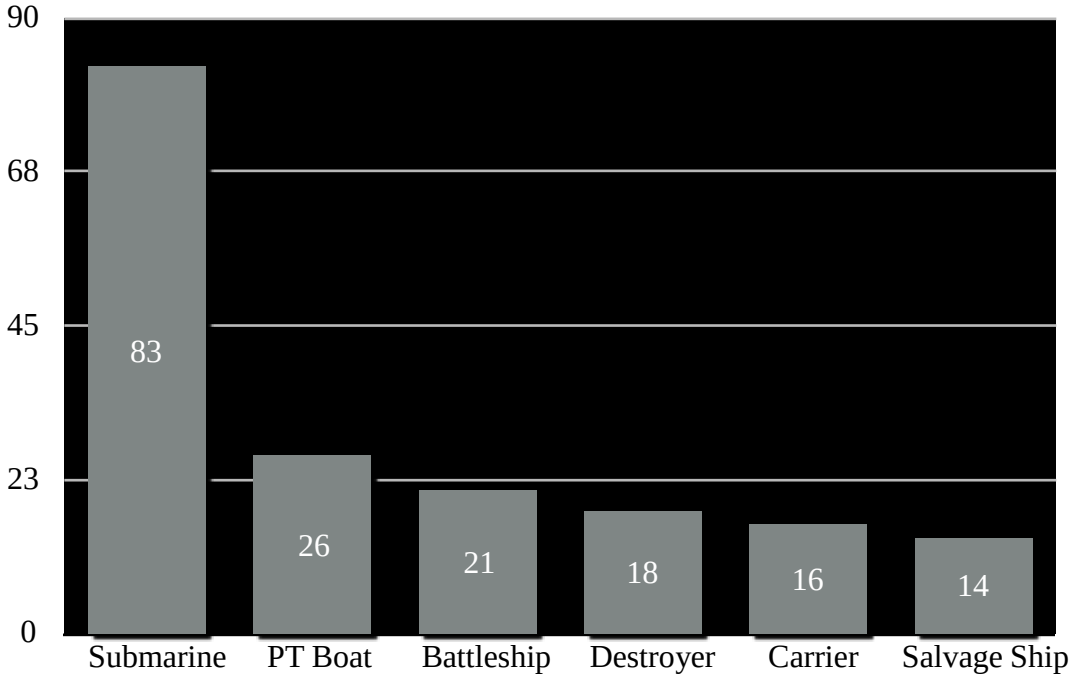
This high level and unique nature of constant danger brought submariners on a submarine closer together (Charles Tate 2012, pers. comm.). In doing so, it brought submariners on other submarines closer together, too. When describing the effects of near-constant depth charging, and near-misses from aircraft attacks, I.J. Galantin wrote that "the events of the past two days had

fused all hands into an even closer bond" (Galantin 1987:73). Submariners were all in the same boat, literally, and had to go through the same ordeals. The bonds of empathy were strong in the Submarine Service of World War Two.

It seems probable that facing this unique form of danger not only brought submariners together, but also pushed them away from aviators and surface craft sailors. Depth charges served to separate the Navy into two groups: those who dropped depth charges and those who had depth charges dropped on them. This happened because surface craft sailors and aviators lacked the experience of being depth charged, and because it was their job to destroy submarines. As a result, submariners were almost forced to develop an outsider mentality. A good reflection of this reactionary mentality can be found in the World War Two era phrase, "there are only two kinds of ships: submarines, and targets" (Owen Williams 2012, pers. comm.)

This mentality was reinforced by the increased danger that friendly fire posed to submarines and the men who crewed them. The following chart shows the six types of ships that had the highest number of fatalities due to friendly fire incidents in the United States Navy during World War Two (Bureau of Naval Personnel and Marine Corps Headquarters 1964).

TABLE 1
FRIENDLY FIRE DEATHS IN THE U.S. NAVY BY SHIP TYPE DURING WORLD WAR II (By author, 2014)

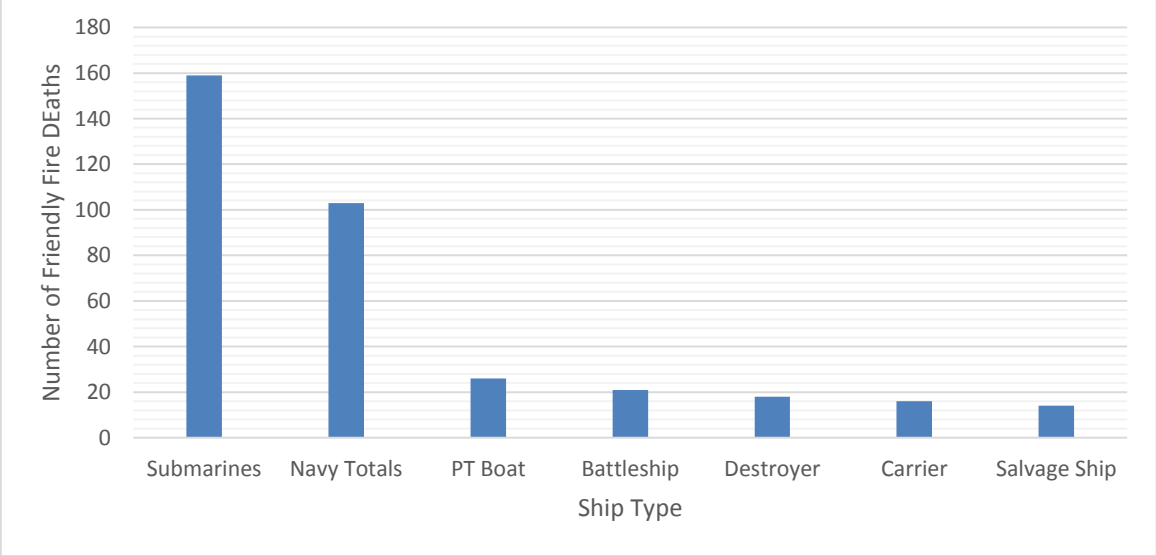


This chart (Table 1) clearly demonstrates that submarines suffered more deaths due to friendly fire than any other type of ship in the US Navy. It is misleading, however, because it includes only one friendly fire incident involving a submarine in 1944. The submarine that it is referring to is USS *Seawolf*, which was sunk with all hands on October 3, 1944, likely by the combination of the destroyer USS *Rowell* and an unidentified friendly aircraft (Naval History Division 1963:109). In this single friendly fire incident, 83 men were killed. This is the highest amount of deaths by friendly fire on any kind of ship in the United States Navy from 1942-1945.

This chart, however, fails to mention the sinking of USS *Dorado* in 1943. Although there was never enough evidence to officially classify *Dorado* as a definite friendly fire loss, friendly fire holds the highest probability for the sinking (Naval History Division 1963:8). On October

12, 1943, USS *Dorado* was making passage through friendly waters and was likely sunk by a friendly patrol plane. The plane had been given faulty directions and was patrolling too close to *Dorado*'s position when it dropped multiple depth charges on what the pilot claimed to be an unidentified submarine. There was only one German U-boat operating in the area, and the U-boat's log makes no mention of being bombed. *Dorado* was lost with all 76 crewmen (Naval History Division 1963:63). If *Dorado* was sunk by friendly forces, this would mean that the number of submariners lost to friendly fire would be 159. Thus, the submarine force accounted for less than 2% of the entire Navy, and yet the number of submariners lost to friendly fire may really be more than the rest of the Navy put together. The updated friendly fire chart would look like this:

TABLE 2
FRIENDLY FIRE DEATHS IN THE U.S. NAVY BY SHIP TYPE DURING WORLD WAR II (By author, 2014)



Although the two instances of friendly fire mentioned above may not seem like much, it is important to keep in mind that one submarine was lost in each incident, out of a total of 52

submarines lost during the entirety of the war. And this statistic only includes friendly fire incidents that actually caused deaths on submarines. Unsuccessful "friendly" attacks on submarines were quite common, and are not included on this chart.

In fact, submariners had to constantly worry about the reality of friendly fire. They were often rammed, and sometimes even destroyer escorts, appointed to escort submarines back to shore safely at the conclusion of a war patrol, would attack the submarine they were supposed to be escorting (Russell 1995:70-4). In one incident, USS *Gato* was preparing to be sent out on war patrol and was under destroyer escort in San Francisco Bay when she was depth charged by a US naval blimp. The blimp did enough damage to *Gato* that the boat had to be sent in for repairs before heading out for its scheduled war patrol (Charles Tate 2012, pers. comm.; Howard 2013:5). Submarines were not even safe in United States waters. In fact, USS *Thresher* was bombed by friendly aircraft and depth charged by friendly destroyers while attempting to return to the submarine base at Pearl Harbor in 1941 (Blair 1975:101-2; Howard 2013).

Charles Lockwood, Commander, US Submarine Force, Pacific Fleet, recounted two friendly fire incidents in his book, *Sink 'em All* (1951). In both incidents, submarines were attacked on the surface by friendly surface craft task forces. Also in both incidents, the task force had been reminded of the friendly submarines' locations ahead of time. The first incident involved USS *Gabilan* and occurred on July 18, 1945. While *Gabilan* was on lifeguard duty, two United States destroyers opened fire until the submarine could dive. The second incident happened on July 24, 1945, and involved USS *Toro*. *Toro* was also on lifeguard duty when she was attacked on the surface by a United States destroyer. *Toro* managed to dive in time to avoid suffering any damages (Lockwood 1951:320-1).

Incidences of friendly fire against submarines were common during the Second World War. In fact, there were at least 48 recorded instances of submarines being attacked by friendly forces (Howard 2013). John Starkey served on submarines from 1942 until 1946 and summed up a submariner's attitude on the issue of friendly fire in one concise statement: "Submariners around the world have one common bond, everyone else was trying to kill them, even their own armed forces" (John Starkey 2012, pers. comm.). Charles Tate, another World War Two submarine veteran who made eight war patrols aboard USS *Gato*, echoed the same sentiment: "When that submarine left port you were on your own. You didn't have a friend in the ocean. Everyone was trying to sink you, even your own people" (Charles Tate 2012, pers. comm.). Possibly because Japanese submarines and especially German U-boats were seen as such a threat, aviators and surface craft were often quick to engage submarines, sometimes even before attempting to identify if they were friendly or not. This zeal for pursuing and destroying submarines led to the formation of some level of animosity between submariners, aviators, and surface craft sailors (John Starkey 2012, pers. comm.; Leo Carter 2012, pers. comm.).

The exact level of animosity between submariners and the rest of the Navy is debatable. While some veterans maintain that the majority of submariners got along well with everyone, others argue the exact opposite. There are a plethora of stories of submarines rescuing downed aviators, and of the aviators becoming honorary members of the boat's crew, but there are also instances of fights between these groups as well. It would not be correct to make a broad generalization in this case and argue that submariners hated the rest of the Navy, or even that all submariners liked the rest of the Navy. However, a submarine veteran, interviewed by the author, who maintained that submariners generally respected the rest of the Navy, still admitted that

fights between the two groups did take place, that each group had derogatory names for each other, and that when given a choice, submariners did not like to associate with other groups (Charles Tate 2012, pers. comm.). Owen Williams, who served on USS *Barb* during WWII, called naval aviators "flyboys," he called surface craft sailors "skimmers," and summed up what seems to be a relatively apt description of how submariners saw their Navy counterparts when he said: "We had no time for them" (Owen Williams 2012, pers. comm.).

Not only did submariners have serious problems with other friendly ships, but they had problems on their own boats to deal with, too. The most major and widespread of these problems was likely the faulty torpedoes. The Mark XIV torpedo and the Mark VI magnetic exploder, the standard torpedo armament for United States submarines during World War II, were top secret projects of the United States Navy. The Mark VI magnetic exploder was designed to detect the magnetic field of a ship and detonate the torpedo directly beneath the target. This was supposed to destroy the keel of the ship that the torpedo was fired at. These weapons were so secret, in fact, that they were never live tested before the war, and no maintenance manuals were ever given out to the submarines, for fear that the torpedo design might be leaked to the enemy (Blair 1975:61-2).

Because this weapon was never actually tested, the Navy did not know how poorly it would perform. In fact, the Mark XIV torpedoes repeatedly failed to detonate, especially on direct hits; detonated early, often alerting the intended target to the submarine's presence; and even made circular runs, wherein the torpedo would take a circular path back to the submarine, instead of heading towards the target (Galantin 1987:6, 35-8; Grider 1958:54,126; O'Kane 1977:456-7). Two submarines were lost during the Second World War due to their own circular

running torpedoes: USS *Tang*, and USS *Tullibee* (Naval History Division 1963:86, 117). These submarines were not the only ones to experience circular runs of their torpedoes, either. There are at least 27 documented cases of circular running torpedoes fired from United States submarines during World War Two (Howard 2013).

Submariners not only faced different kinds of danger, but a different kind of death than their surface craft counterparts. Many submariners volunteered for submarine service because, in their words, "you come back in one piece, or not at all (Charles Gibbs 2012, pers. comm.)." The vast majority of casualties on a submarine were deaths: not many submariners came back wounded. Dying in a submarine was different than dying on a surface craft. The major difference was that, in all likelihood, no one knew that you were dead for a considerable period of time. Because submarines essentially operated independently from the rest of the fleet and often times could not radio in without giving away their position, it was often difficult for the Navy to ascertain whether or not a submarine had been sunk or not. The best that the Navy could do in most cases was to pronounce that a submarine was "overdue and presumed lost." So effectively, when a submarine was lost, which, in the vast majority of cases, meant that everyone on board was killed, the submariners were simply considered lost at sea. Because fatal damage to a submarine did not always kill the crew instantly, it is a distinct possibility that doomed submarine crews fought to survive as their boat descended out of control or was stuck on the ocean floor. Because of the nature of submarine warfare, however, the vast majority of these stories can never be told. This was a fate possibly worse than death, as families and loved ones were kept wondering and wanting closure (Stewart 2011:133).

Conclusions

This chapter has clearly demonstrated that submariners met the criteria for being considered a folk group. They developed a shared body of tradition, esoteric folklore, exoteric folklore. They easily satisfy Toelken's criteria and they match every piece of Jansen's criteria with almost no deviation. This chapter has also identified four major reasons for the development of the submariner folk group. Submarine school served as an introduction to submariner culture, the submarines that the men served on provided a living environment with unique challenges that only other submariners could relate to, the high level of danger forced submariners closer together and served as a catalyst for the development of the culture, and the small size of the submarine force coupled with its isolation from the rest of the fleet ensured that submariners would only get to know other submariners very well. Submariners were unique. No one else lived like them, no one else died like them, and they were all but forced into isolation from all other outside groups.

Chapter 3

The Experience of Combat

Introduction

The experience of combat formed an extremely important tenet of the submariner folk group. Combat was the catalyst for the development of submariner culture, and the wartime submarine the crucible in which the folk group was formed. When a submariner endured a depth charging, when he participated in the sinking of an enemy vessel, he faced an unparalleled degree of danger; a type of danger that was unknown to anyone but another submariner. This danger is what brought submariners together, possibly more than anything else, and is why the experience of combat was so important to the submariner folk group. In fact, when new submariners were subjected to their first depth charging, it was often called “initiation,” or “indoctrination.” Depending on how he handled himself, this rite of passage also served to make the new submariner more of a part of the crew (Grider 1958:37; Russell 1995:10, 140). The experience of combat as a value of the submariner folk group can be seen in submariner graffiti, battle flags and pennants, the taking of souvenirs, the inclusion of torpedoes in submarine memorials, and even in submariner insignias.

Type and Prevalence of Graffiti

The main type of graffiti found on submarines during the Second World War was a kill count. This record of the ships sunk by the submarine was most often painted on the side of the conning tower. Sometimes, along with the kill count, was some sort of mural. Often it was a picture of the boat's namesake, painted by an artistic member of the crew. An excellent example of this kind of graffiti exists in the archives of the Submarine Force Museum (Figure 2).

FIGURE 2. Photograph of USS *Whale*'s conning tower. This picture was found in the archives of and used with the permission of the United States Submarine Force Museum in Groton, CT (2013).

There are many other examples and variations of this kind of graffiti . For example, instead of just painting Japanese flags, some crews went so far as to paint silhouettes of the ships that they had sunk. Other crews, like the crew of S-44, painted their flags on the front of the conning tower, and even on their deck gun (Hinkle, et. al. 2002:124).

It is likely, however, that this graffiti would have been temporary. Most likely it would have been painted over once the submarine headed back out on war patrol. Submarines were camouflaged and could not afford to have brightly colored murals on them while in hostile waters. That is likely why some submariners developed an alternative to the painted on type of graffiti: emblems. USS *Tirante*, and USS *Flying Fish* are two excellent examples of this.

In the case of *Flying Fish*, the crew designed an emblem of a flying fish on a circular piece of what looks to be wood or metal, and then fastened it to the conning tower. This way, on return from war patrol, the crew could put out their emblem. Then, when going back out on war patrol, they could simply remove and stow it until the time came to bring it back out. The crew of *Flying Fish* created an emblem but decided to keep the painted on Japanese flags (NavSource Photo Archives N.D.). The crew of *Tirante*, however, not only designed an emblem but a removable kill count as well. They seem to have fabricated metal brackets to hold their emblem and kill count in place on the side of their conning tower (Hinkle, et. al. 2002:148).

Another possible reason for the development of these removable emblems and kill counts is that, by being able to remove the graffiti from the submarine, submariners effectively protected it from being damaged. The outside of a submarine was constantly exposed to the weather, was scraped against any number of different surfaces, was shot at and depth charged. Bringing the graffiti inside the submarine when on war patrol may have actually been a

conscious effort on the part of the submariners to protect something that was important to them from being damaged.

Because of the secret nature of submarine warfare, submariners were not allowed to speak of their accomplishments to anyone else. However, because the experience of combat was such an integral part of their folk group identity, they were not content to not receive credit for their combat actions. Painting a kill count on the side of their submarine was a way for submariners to, at least in their own eyes, receive some form of recognition for their achievements. This could also be seen as an informal form of education as well. By painting the number of enemy ships sunk on the submarine's conning tower, veteran submariners were showing newcomers to the group, on that submarine or in port, that the experience of combat was an important submariner value.

Battle Flags

American submariners during the Second World War used battle flags in a very similar way to the kill counts on their conning towers. The battle flag was another way for submariners to display their various accomplishments and to teach others about the values of the folk group. The advantage of a battle flag over the conning tower kill record is that the battle flag did not have to be re-painted after every war patrol.

Development

It is difficult to pinpoint the origin of American submarine battle flags of World War Two. In all likelihood, they developed from the German custom of pennants. During the early stages of

the Second World War, when U-boat successes were at their high point, German U-boats would fly pennants from their conning towers showing the amount of tonnage sunk during their war patrol (Delize 2007:49, 66). These pennants were flown for the same reasons as American battle flags, and could be considered forerunners of the American battle flags. German U-boat crews also used to paint emblems, a mascot, a lucky symbol, or something that had importance to the captain, on their conning towers as well (Delize 2007:46, 66; Hogel 1999). It cannot be said for certain whether the American submariners adopted this tradition from the Germans or developed it on their own, but there are a variety of recorded cases of American submarine crews decorating their conning towers with their boat's namesake or even the number of vessels they had sunk (Hinkle, et. al. 2002: 124; Submarine Force Museum N.D.:NM93.103.31, NM93.103.84).

However, the British custom of submarines flying the Jolly Roger originated in 1914, and could be considered an earlier influence on American battle flag design. According to legend, in 1901, Admiral Sir Arthur Wilson, the Controller of the Royal Navy, was reported to have said that submarines were "damned un-English," and that all wartime submariners were to be hanged as pirates. It is important to note that this may be an apocryphal statement, however, as there is no hard evidence to support that Wilson actually said this. Either in response to Wilson, or to the general feeling of dislike towards submariners and their unconventional warfare, Max Horton, Captain of HMS E9, became the first submarine Captain to fly the Jolly Roger on return to port after sinking SMS *Hela* in 1914 (Malta At War Museum N.D.). The flying of the Jolly Roger on return to port became a British submarine tradition, and continued throughout the Second World War into the present day. Proof of the British influence on American battle flags is easy to find, as a number of American submarines during the Second World War adopted the Jolly Roger as

their battle flags. Most notably among these submarines are USS *Sturgeon,* USS *Growler,* and USS *Finback* (Submarine Force Museum N.D.:70.073.01, 92.056.01, 87.023.01).

Before the first true American submarine battle flag was flown, however, came the broom. In George Grider's memoir, he writes that while aboard USS *Wahoo*, on return from war patrol in 1943, they flew a broom from the masthead to signify that *Wahoo* had swept the seas clean of enemy ships (Grider 1958:115). This may be the earliest recorded example of a submarine using a broom in this manner, but it was not the last. In fact, USS *Pampanito* currently flies a broom from the masthead. This tradition is interesting because it is another forerunner of the American submarine battle flag, and because it dates back to the Dutch Admiral Maarten Tromp in the 1650s during the First Anglo-Dutch War (Naval History and Heritage Command 2001). According to legend, Tromp, after defeating the British admiral Robert Blake at the battle of Dungeness in 1652, flew a broom from the mainmast of his ship to signal that he had swept the seas clean of British ships.

In addition to brooms, American submarines during the Second World War also began to fly pennants just like their German counterparts. These pennants evolved slightly differently than the German ones, however. Instead of just writing the tonnage sunk on the pennants, American submarine crews seemed to prefer making a separate Japanese flag for each ship they sank, and hanging all of these flags all at once (Hinkle, et. al. 2002:94, 119).

Unlike their German counterparts, however, the United States submarines were all named after fish and other sea animals. This gave each submarine in the United States Navy a symbol with which to identify. In fact, Walt Disney even began to design emblems for some of these submarines. The majority of these emblems were cartoon character fish, either riding a

submarine, holding a torpedo, or similar motifs. American submarine crews that did not have an emblem designed by Disney still had a specific kind of fish to work with, and so could quickly and easily design an emblem for their submarine. Because of this, United States submarines each developed their own identity, and eventually their own unique battle flags.

Significance of Graffiti and Battle Flags

A battle flag was always at the forefront of group photos and was usually flown on the return from war patrols, sometimes along with pennants to demonstrate the number of ships sunk on that particular war patrol (Finch 2010:33; Galantin 1987:199; McDonald 2008:163, 217, 274-275; Schulz, Shell 2009:3). The kill count or battle record of the submarine, included on most battle flags, was most commonly demonstrated by the incorporation of a flag for each vessel that was sunk or damaged. The type of flag changed according to the nationality and type of each vessel. Typically, a rising sun flag denoted a Japanese military vessel and the more plain white flag with a red circle represented a Japanese merchant vessel. Each submarine battle flag also contained some form of artwork. Usually, the center of the flag was decorated with a cartoon version of the boat's namesake (Figure 3). Sometimes, however, the artwork could be more recognizable. The battle flag of USS *Apogon* featured Bugs Bunny riding a torpedo and eating a carrot, while the battle flag of USS *Plaice* featured Jiminiy Cricket riding a plaice, which is a type of fish. Other, more obscure symbols were sometimes added to battle flags as well. For example, the battle flag of USS *Barb*, (Figure 3) has quite possibly the most varied symbols of any flag in the fleet. In fact, there are symbols for firing rockets, participating in surface bombardments, and at the bottom of the flag there is a symbol of a train. This locomotive symbol

represents the train that was destroyed by the crew of the *Barb* in the only allied landing of troops on the Japanese mainland during the Second World War (Fluckey 1992:368-269, 371-385). Strangely enough, however, *Barb* was not the only submarine that could claim to have destroyed a train. On 2 June, 1945, USS *Torsk* fired two torpedoes at a Japanese tanker, missed, and hit a train trestle behind the tanker. At that exact moment, a train filled with ammunition was crossing the trestle. The train exploded, the trestle was destroyed, and USS *Torsk* can claim to have sunk a train.

FIGURE 3. Photograph of a post-war reproduction of the USS *Barb* battle flag. This photograph was taken with the permission of the USS *Nautilus* Museum in Groton, CT. (Photo by the author. 2013).

The author interviewed a submariner who was only able to make one war patrol near the end of the Second World War, and saw no combat. This particular submariner, when asked about the battle flags of other submarines, seemed excited by them, and somewhat envious of

submariners who were able to fly them. When the author asked if his submarine had one, the submariner responded in the negative, pointed to a picture of a Jolly Roger type battle flag, and then said: “Can you imagine? Coming in to port flying a flag like that…” (Bentley 2012: Pers. Comm.). The submarine battle flag held an important place in submariner culture, as a folk object, and not only did it represent the accomplishments of the crew, but the hardships they had to endure as well.

Interpretation

The ritual of adding to a battle flag could be interpreted in many ways. It is possible that submariners, eager to fight, but not allowed to talk about their accomplishments, were simply looking for some sort of recognition for their work. It can also be interpreted as a physical manifestation of the experience of combat. Each new symbol added to a submarine’s battle flag represented another triumph of the crew, and was proof that the crew were full members of the folk group. In the cases of at least two battle flags, that of USS *Sunfish* and USS *Thresher,* adding to the battle flag was a direct representation of the experience of combat, and doing damage to the Japanese. On both of these flags, there is a large, red, rising sun design being eaten by the submarine’s namesake. On the flag of USS *Sunfish,* it seems as though the material for each new Japanese flag was taken out of the rising sun design. As the submarine sank more and more ships, the collection of Japanese flags would grow larger, and the rising sun would get smaller, representing the idea that subs such as *Sunfish* were defeating the Japanese slowly but steadily, piece by piece.

The types of graffiti found on submarines, and the iconography found on battle flags, although indicative of submariner culture, can be seen in other branches of the military during the Second World War as well. Without a doubt, the best example of this is found in the United States bombers that flew during World War Two. No other military unit in recent history has achieved the fame that the 8th Army Air Force has. In charge of the United States' bombing campaign in Germany, the 8th Army Air Force was stationed in England, and suffered some of the worst casualties of the Second World War (Miller 2006:6-7). Because of the conditions that they lived, fought, and died in, these men serve as excellent parallels to submariners.

Men serving on bombers were in similar positions to submariners. One of the main goals of the 8th Army Air Force, for example, was to bomb targets that were not military. Bombers destroyed infrastructure and other civilian targets to break the will of the German people and the supply lines of the German state. Because of this, bomber crews were often looked down upon as if they were fighting dirty. This is similar to the public opinion of submarines and submariners. Because submarines were used to hunt merchant and cargo vessels, and because German submarine atrocities of the First World War were still fresh in the minds of the public, people often looked at submariners as not fighting fair as well.

Bomber crews were also tight-knit units, and because of their small size, approximately 10 men, they may have even been closer than submarine crews. Men who served on bomber crews, having to face overwhelming odds every day, developed into a group much the same way that submariners did. Facing down a unique form of danger, a danger that no one other than another aviator could imagine, men on bomber crews must have bonded and developed a culture of their own.

One of the greatest similarities between aviators and submariners during the Second World War can be found in the graffiti produced by each group. As already stated, the most common types of graffiti found on submarines are murals and kill counts. This seems to be true for bomber crews as well. The only major difference between the murals on bombers and the murals on submarines is that the art on the bombers tends to be of highly sexualized women, whereas the art on a submarine was usually some form of fish. It is important to note, however, that murals on bombers, like murals on submarines, were usually related to their namesake in some form as well. For example, the famous *Memphis Belle* has a mural of a woman, who, most likely, is *the* Memphis Belle.

There are exceptions to this rule, however. Some bombers developed murals that are almost identical to something that would be found on a submarine. For example, the bomber *Lone Wolf* was adorned with a painting of a cartoon wolf, riding a bomb, wearing goggles and a hat. The bombers *Old Crow Express, Better Duck II,* and *Let's Make a Deal,* all featured cartoon characters wielding bombs. *Better Duck II* and *Let's Make a Deal* featured what could be the popular Disney Character Donald Duck, whereas *Old Crow Express* featured a crow, possibly from the Disney movie Dumbo. An important distinction to be made here is that the majority of cartoon characters used by bomber crews to represent their bomber were birds. Although this seems to be common sense, it is important that bombers chose birds and submariners chose fish, because neither group seems to have favored animals that spent most of their time on land (USAF.com N.D.).

It is also worthwhile to note that the cartoon character theme may be indicative of the larger youth culture that submariners and aviators would have been a part of. Both groups were

extremely young, and cartoons and comics were something that these young men all had in common. Conway (Hix 2012) suggests that Looney Tunes and Walt Disney cartoons were popular motifs with young pilots because American pop culture was smaller and "more homogenous" than it is today. Conway (Hix 2012) argues that because of this, nose art imagery often originated from comics, cartoons, and other nationally circulated newspapers and magazines that served as a "common language for young Americans." And another parallel between submariner and aviator iconography is that the Disney corporation, who designed characters to represent specific submarines, also designed patches and insignias for bombers as well.

Bomber crews, as well as other aviators, also kept kill counts on the sides of their aircraft. This is a direct parallel with submariners. Although it is impossible to tell whether submariners or aviators first kept records of their kills in this manner, the fact that they both have this ritual in common shows the similarity of these two folk groups. Both groups suffered heavy casualties and both groups were forced to accept combat as a part of their daily lives. Even the way in which the kills were recorded is similar. Submariners most often used flags to mark kills on their conning towers, and aviators also used flags to mark kills on their noses. In fact, the nose of the late World War Two era bomber *Executive Sweet* is still adorned with Japanese flags. Interestingly enough, *Executive Sweet* also has three trains painted in white on its nose as well. Although it was a more common occurrence for a bomber to destroy a train than for a submarine to destroy a train, this is a nice parallel to USS *Barb*'s battle flag (Figure 3), which, described above, also includes a train.

Also related to bomber nose art are bomber patches and bomber jacket art. The standard issue flight jacket throughout most of the Second World War was the A-2 leather jacket. This jacket was warm, durable, and after it was discontinued, became a status symbol because it designated its wearer as a veteran aviator. This jacket was highly modified by its wearers. In fact, the bomber jacket became a folk object, very similar to the submarine battle flag. Bomber jackets often contained pictures on the back, painted by crew members themselves, which sometimes even tallied the number of missions that its wearer had successfully flown. The art on these jackets conformed to the two trends already mentioned. The first trend is scantily clad, highly sexualized women, and the second is cartoon characters. Interestingly enough, there is some evidence of submariners painting their foul weather jackets in a similar fashion. For example, there is a rectangular cutout of a foul weather jacket from a submariner who served on USS *Whale* in the collections of the USS *Nautilus*/Submarine Force Museum in Groton, CT (Figure 4). Notice that the whale is carrying a torpedo with hashmarks on it. These hashmarks likely represent the number of ships sunk. This painting on the back of the submariner's jacket functioned like a portable battle flag.

FIGURE 4. Photograph of a cutout of a submariner's foul weather jacket. This photograph was taken with the permission of the United States Submarine Force/USS *Nautilus* Museum. (Photo by the author, 2013).

Aviators did not limit the decoration of their jackets to paintings on the back, however. A popular theme among aviators was adorning the jackets with patches. In fact, different bomb groups created different insignias for themselves, and members would wear these insignias on their jackets as patches. The most notable insignia has to be that of the 90th bombardment group of the 5th Army Air Force. The 90th bomb group, or the "Jolly Rogers," designed their insignia to be a slight variation on a typical Jolly Roger. The group's insignia was a death's head, or skull, and two bombs crossed underneath it in place of the crossbones. This is interesting, as many submarines also adopted the Jolly Roger as their battle flag. This possibly signifies that both groups felt that they were outcasts.

Hix (2012) argues that different insignias, whether they were on the nose of the bomber, a patch, or on the back of the A-2 jacket, were chosen for three main reasons. The first was comfort and familiarity. Images that Hix (2012) associates with this reason are cartoon characters and pin-up girls. The next theme is anything that could be described as menacing. In this category, Hix (2012) places pirate flags, ferocious animals, and grim reapers. Hix (2012) asserts that this category of iconography gave aviators a sense of power and protection. Possibly the most iconic piece of bomber graffiti, the shark's teeth, falls into this category. The final trend that Hix (2012) details is lucky charms. Pictures of dice, rabbit's feet, horseshoes and playing cards were used to assuage the fears of the superstitious members of the group (Hix 2012).

Hix's (2012) reasons for why bomber crews painted emblems on their bombers can and should be applied to submariners as well. In fact, the crews of submarines and the crews of bombers were very similar. They were both tight-knit groups of extremely young men, doing some of the most dangerous jobs in the world. They both faced down not only the enemy, but a hostile world that most people could only imagine. Submariners, although they adopted the underwater world as their home in their folklore, were often killed by the depths of the ocean. Aviators, forced to fight at extreme altitude, often died from complications arising from combat at extreme heights. These young men also shared similar cultures before joining the armed forces. Many were from the same states or cities; they listened to the same music, read the same comics, liked the same radio shows, and drove the same cars. It is only logical to assume that these young men, coming from the same youth culture, would respond in similar fashions when confronted with death on a daily basis. Therefore, Hix's (2012) three reasons that bomber crews used graffiti can and should be applied to submariners because, at their core, they are all just

ways for these young men to deal with danger. Graffiti, for submariners and aviators, was a coping mechanism that they used to survive.

Kill Counts

It is difficult to determine a definitive reason for the creation of kill counts. However, if Hix's (2012) three main reasons for the use of different types of iconography are applied to kill counts, some possibilities become apparent. Hix (2012) asserts that the graffiti painted on the noses of bombers was painted because it made the aviators feel a certain way or because it triggered certain memories. The collecting of kill markers for kill counts no doubt triggered memories for the collector. The kill counts may have provided the collector with a sense of power or invulnerability. They most definitely reminded him of his past triumphs, and possibly even reassured him that he would have many more. This is most likely a major reason why aviators, and submariners, kept kill tallies.

It is also certainly probable that, as already suggested, submariners and aviators were anxious to be recognized for their exploits. It is also possible that the kill counts served as a form of teaching mechanism, letting new members of the group know that the experience of combat was an important group value. Another plausible interpretation is that they were bored. Wallace (O'Connell 2012) suggests that graffiti is most often the work of common soldiers during a boring moment when nothing was happening. It is certainly possible that submariners and aviators could have developed their graffiti because they were bored during their downtime, but kill counts are extraordinary examples of graffiti, and clearly took some planning. Therefore it is

more likely that the kill count graffiti was done not solely out of boredom, but in conjunction with other reasons as well.

Reed (O'Connell 2012) asserts that there are three main reasons that soldiers created graffiti. The first is that it marked soldiers' presence in unfamiliar territory. This reason is especially applicable to submariners and aviators who were almost always in enemy territory. Although they were marking their own vessel, their own territory, the graffiti still ended up in unfamiliar territory. The second reason is that it gave soldiers an opportunity to connect with others. This reason actually supports the assertion that kill count graffiti functioned as an informal teaching device for newcomers to the group. By painting kill counts on the side of their vessels, submariners not only showed newcomers one of the most important tenets of submariner culture, but were able to boast of their accomplishments and even compete with the crews of other boats. The third and final reason was that the graffiti was an invasive act that functioned as the soldier staking a claim to a piece of territory. This reason also makes sense when applied to submariners and aviators. Submariners, as will be discussed shortly, relied on their submarine for survival, as did bomber crews. This is possibly the most important similarity between these two groups. Usually, if a submarine was destroyed, the vast majority of the submariners on board were killed. This same principle applies to bomber crews as well. If a bomber was shot down, the men aboard were most likely not getting home any time soon, if they even survived. Because these groups relied so heavily on their vessels for their own survival, it makes sense that they would use graffiti to develop an attachment with their vessel. In fact, the development of this graffiti may be a reflection of the relationship between bomber crews and their bombers, and submariners and their submarines. As will be discussed in the following chapter, the

development of kill count graffiti may actually have been a way for the members of bomber and submarine crews to chart the development of their attachment to their vessels. Every kill tallied on their vessel represented another experience that strengthened the emotional attachment to the vessel they relied upon for their very survival.

At this juncture it is necessary to note that one of the reasons that submariners shared so many similarities with aviators is because both groups belonged to not only the same youth culture, but to some form of a military culture as well. Although they shared an incredible amount of similarities, most of which clearly manifested in their imagery, submariners and aviators did not often associate with each other, and sometimes even fought with each other. This piece of information is interesting, and may actually be more proof that both of these groups belonged to the same military culture. Fighting with other branches of the military seems to have been common, and almost expected. It is this military culture that submariners and aviators were representing when they painted kill counts on the sides of their vessels. Although a rare expression of this particular sentiment, Dick O'Kane (1977:63), skipper of USS *Tang,* after seeing a group of United States bombers overhead, wrote in his memoir: "I felt my teeth clench and my eyes mist up as I wished those men Godspeed." Although this quote is an exception rather than the rule, it does seem to hint that at least some submariners may have recognized that they had more in common with the average aviator than one might think.

That being said, a major military cultural tradition that may help shed some light on why submariners and aviators kept kill counts is the taking of war souvenirs. Taking souvenirs, or war trophies, is a longstanding military tradition. Soldiers often took objects from fallen foes as symbols of their victory, or held on to certain objects to remind them of an important experience.

Submariners were no different. And although they did not have many opportunities to take German Lugers or other high profile items, many of the souvenirs taken by submariners can be related to the experience of combat. The collections of the Maritime Park Association, the USS *Nautilus* Museum, and the Wisconsin Maritime Museum contain Submarine Combat Insignia cards, cards to certify that the holder was at the official Japanese surrender, a shell casing, a Japanese accounting book, and various forms of currency. This evidence supports the assertion that submariners desired the ability to take souvenirs. And thus it stands to reason that, as a part of their shared mentality, they wanted to be able to take something from the ships that they sunk. But when a submarine torpedoed a ship, there was no way for the submariner to get any kind of trophy off of it. The ship would sink and the submarine would usually be forced to leave the immediate area or be depth charged by enemy destroyers. The same principle applied to aviators as well. When an aviator shot down another plane, it was destroyed and completely out of reach. Without the opportunity to take something from their vanquished enemies, submariners and aviators collected kills and displayed them through kill count graffiti. In this way, every flag painted on the conning tower or stitched onto the submarine's battle flag can and should be considered a submariner's equivalent of taking a Luger from a German Officer.

In fact, it can be said that creating kill counts by painting enemy flags on the side of their vessel or on a battle flag of their own was a way for submariners and aviators to collect souvenirs from their vanquished enemies. The subject of collecting has somewhat recently become a popular subject for scholarly discussion. Recent theories view collecting as a way of establishing an individual's self-image through objects that they possess (Belk 1988). In fact, Tuan (1980:472) argues that people collect things because "Our fragile sense of self needs support, and

this we get by having and possessing things because, to a large degree, we are what we have and possess." This can easily and effectively be applied to submariners collecting kill count markers. These markers are clear representations of submariners conforming to the group value of the experience of combat. Because these markers represent combat and these men are using them to enforce their own self-concept, this is a perfect example of submariners defining themselves as submariners. As obvious and as strange as it may sound, it is extremely important that submariners began to define themselves as submariners because it demonstrates that submariner culture and the submariner folk group not only existed, but was evident to the members and the outsiders of the group.

This idea can be taken one step further, however. According to Troilo (1999), the sense of self derived from collected objects also gives the collector a social and cultural identity. Troilo (1999) writes: "Collecting provides self-gratification and self-worth on one side, and on the other, social acceptance and legitimacy for highly cultural aspects." This definition fits nicely with the key tenets of the submariner folk group. If submariners were truly collecting souvenirs as pieces of their vanquished foes whenever they added to a kill count, they were most likely doing it, likely subconsciously, as a way to not only define themselves, but to fit into submariner culture. This explanation fits perfectly with the value of the experience of combat. The purpose of a submariner was to sink enemy ships. By participating in combat and sinking ships, he fulfilled his purpose and gained self-worth as well as acceptance to the group from the rest of the more established members. Collecting kill markers and establishing kill counts was a way for submariners to show this acceptance to everyone. By painting enemy flags on the sides of their boats, submariners showed other submariners, and anyone who was looking, that they had

experienced combat, they had accomplished their purpose, and that they were full members of the submariner folk group. The self-gratification aspect of collecting kill counts is doubly important for submariners, who were unable to openly speak of their accomplishments and wartime exploits due to secrecy concerns. This may have been one of the only ways for submariners to receive any kind of recognition for their efforts and sacrifices.

At this point, it is important to mention another interesting parallel to the kill counts developed by submariners. In the headhunting practices of the native tribes of Siberut, headhunting prizes were often taken for similar reasons that submariners tallied kills. In fact, headhunters took prizes to display to others for reasons of pride, and to gain the favor of certain spirits. The headhunters wished to gain the favor of these spirits to, among other reasons, ensure their success on future headhunting raids. These two main reasons for headhunting are extremely similar to a few of the reasons already mentioned for submariners tallying their kills. The first reason, pride, is relatively self-explanatory. As already mentioned, submariners desired to be recognized for their exploits, and they desired to be recognized for them because they were proud of what they had accomplished. The second reason for headhunting, to gain the favor of certain spirits, is a bit more difficult to apply to submariners, but is just as applicable. As already mentioned, it is probable that the kill counts tallied by submariners invoked a sense of power, invulnerability, or even security. So although the submariners were not intending to curry favor with spirits, the end result, a sense of security during future war patrols, was practically the same as it was for the Siberut headhunters (Schefold 2007:486).

Another interesting parallel between submariners and Siberut headhunters relates to how the kill counts, or headhunting trophies, were displayed. The headhunters would proudly display

their trophies in their homes immediately after returning home after a raid. Headhunting trophies were often the impetus for artistic expression within the tribes. This parallels submariners returning home from war patrol, proudly displaying their own battle flags and kill counts, which in themselves are artistic representations of their own trophies. After a few days of ritual celebration, however, the headhunters would remove their trophies to the surrounding forest. In fact, the headhunters then went out of their way to avoid their trophies until directly before the next headhunting raid. This could also be a parallel to submariners and the development of their removable kill counts. Submariners entered port proudly displaying their trophies in a sort of ritual celebration. Submariners then went on leave, avoiding their submarine and their kill counts until the beginning of their next war patrol. In all likelihood, the removable kill counts were probably even taken down and stowed aboard the submarine, while the submarine underwent a refit (Schefold 2007:486).

Torpedoes

Submariners were warriors, and their weapons were torpedoes. Torpedoes are extremely important to the submariner folk group, because they are a physical manifestation of how submariners define themselves. The torpedo is the instrument through which a submariner achieves his purpose, sinking enemy shipping. Torpedoes were used by submariners on a daily basis. If they were not being fired, they were being written on, used to make contraband alcoholic drinks, and even slept on. Because torpedoes were so integral to what it meant to be a submariner, they are widely used as major parts of submarine memorials and submarine battle flags. USS *Sturgeon*'s battle flag uses torpedoes to mark kills, USS *Blackfin's* battle flag features

a mermaid riding a torpedo, and the flags of USS *Apogon,* USS *Pampanito* and USS *Sea Wolf* all contain torpedoes. The focal point of the USS *Pampanito* memorial is a torpedo, both National Submarine Memorials, East and West, include torpedoes, and the memorial at the US Naval Academy contains a torpedo as well. The USS *Wahoo* memorial also uses a torpedo as a focal point, the USS *Trigger* memorial contains a torpedo, and the USS *Cod* memorial has a torpedo (United States Submarine Veterans, Inc. N.D.). It is important to state that torpedoes used in submarine memorials are almost always torpedoes that were taken from submarines that served during the Second World War. And it is safe to say that the most common object included in a submarine memorial is a torpedo.

The inclusion of torpedoes in all of these memorials is telling. These museums were designed by World War Two submarine veterans, members of the submariner folk group. These members of the folk group consciously decided to use actual torpedoes from World War Two submarines to create memorials for their lost comrades. It seems likely that the submariners who designed these memorials used torpedoes because they felt that torpedoes symbolized the experience of combat on a submarine, and even the submariner himself. The torpedo existed solely to destroy enemy shipping, as did the submariner.

Submarine Combat Insignia

The World War Two Submarine Veterans organization, the same one that designed the memorials mentioned above, adopted the Submarine Combat Insignia as the symbol of their organization. In fact, the U.S. Submarine Veterans of World War II insignia is the Submarine Combat Insignia mounted on a background of yellow/gold and with the words “U.S. Submarine

Veterans of World War II" written around it (Figure 5). This is important because, for it to be chosen to represent all World War Two submarine veterans, the Submarine Combat Insignia had to have represented a key value of the folk group. The Submarine Combat Insignia is important to World War Two submarine veterans because at its most basic level, it represents the experience of combat, and the danger that came with it. By choosing this insignia, the United States Submarine Veterans of World War Two actively asserted that the experience of combat was an extremely important, if not the most important, tenet of submariner culture.

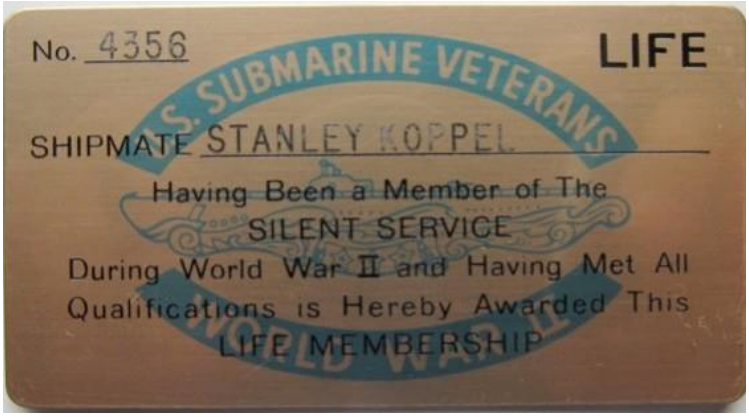


FIGURE 5. Photograph of a lifetime membership of the U.S. Submarine Veterans of World War II. Photograph taken with the permission of the San Francisco Maritime National Park Association. (Photo by the author, 2013).

Conclusions

American submariners in the Second World War highly valued the experience of combat. They viewed combat as a necessary step to be fully accepted into the folk group. Danger forged submariners into a closer bond, and anyone that had yet to experience the unique dangers of a wartime submarine simply could not be trusted with entry into the group. Perhaps the most

effective way to summarize the importance of combat to submariners is with a quote from Admiral Charles A. Lockwood. During a speech he gave in Cleveland, on Navy Day in 1945, Lockwood said:

> To those whose contribution meant the loss of sons, brothers or husbands in this war, I pay my most humble respect and extend my deepest sympathy. As to the 374 officers and 3,131 men of the Submarine Force who gave their lives in the winning of this war, I can assure you that they went down fighting and that their brothers who survived them took a grim toll of our savage enemy to avenge their deaths. May God rest their gallant souls (Division of the Navy, United States of America 1963:*i*).

Lockwood, a veteran submariner himself, was a long time member of the submariner folk group. He knew that the group placed a tremendous amount of value in the experience of combat, and decided to highlight it in his speech. According to this quotation, the most important thing about the deaths of the submariners mentioned was that they "went down fighting." Most likely, this is a reflection of how Lockwood, a submariner himself, would want to be remembered if he was killed in action. The experience of combat was so important to submariners that it was emphasized even in death.

Chapter 4

Emotional Attachment to Submarines

Introduction

Because submariner culture was so combat-oriented, submariners came to view their submarines as more than just boats: they grew extremely attached to them, and even began anthropomorphizing them. Attributing human qualities to the submarine may have given the submariners some sort of comfort during times of stress. Dale Russell (Russell 1995:102), a submariner on USS *Flying Fish*, voiced the feelings that the men had for their submarine when he wrote: "The *Flying Fish* was our home. She was our lady…A proud vessel, with a proud crew." Russell even continued on to say that the men aboard *Flying Fish* had great confidence in the Skipper, and even in the rest of the men serving on the boat, but that if they performed to the best of their ability and still could not elude the enemy themselves, their submarine, *Flying Fish*, would not let them down. Russell (Russell 1995:140) wrote that "she had proven many times that she was a tough old girl."

Anthropomorphizing the Submarine

This sentiment is echoed in other memoirs as well. The process of anthropomorphizing the submarine, however, seems to have been a gradual one. As the submarine proved itself worthy of the crew's trust, and not before then, the submarine would start to be referred to as more than just a boat. William Ruhe wrote in his memoir that "it was as though our submarine,

which had once seemed an inanimate structure of welded steel, had become a living entity with a character of feminine sensitivity and with female idiosyncrasies" (Ruhe 1994:143). Famed submarine Skipper Dick O'Kane wrote of this process in his memoir as well. "I found that we were speaking in positive terms, more frequently using the name of our ship. It was a natural change that accompanied our increased confidence and the attendant respect we held for *Tang*" (O'Kane 1977:134). This poem, found in the archives of the Submarine Force Museum in Groton, CT, and written by an anonymous sailor on USS *Bowfin*, sums up the feelings of *Bowfin*'s crew towards their submarine.

U.S.S. *Bowfin*
(U.S.S. 287)

I am just a Gob, who sails the sea
In the grandest sub afloat, To
me she's like a sweetheart
She is more than just a boat.

We call her U.S.S. *Bowfin*,
She's very young in years,
Her motors sound of girlish laughter,
They tremble with girlish fears.

She's filled with sweet emotions
That only a sailor can see, She's
proud, my little sweetheart As
she sails beneath the sea.

She wears a cloak of midnight black
Just as slick as a girl can be;
She is life itself to the skipper
And to the buddies who sail with me.

She rests below the surface
As the sun shines on the deep,

At night she rises topside
For the stars to take a peep.

We know that God is with her,
That she enjoys heaven's bliss
We know as we watch each the moonbeams
Reach down to give a kiss.

There's folks back home awaiting
Our job; we'll do it quick,
We are going to take the Japs apart
To find what makes them tick.

For every Jap who sails the sea
His life will be but mirth,
For he shall say, "So solly please"
He ever left the earth.

And when the final day has come
And the Jap is in his heaven,
The ticket will be by the gunfire
of the U.S.S. two Eighty Seven.

Possibly the best example in print of a submarine crew's emotional attachment to their submarine can be found in George Grider's (1958:129) memoir. He detailed the attitude of his men, himself, and likely the majority of other submariners towards their own submarines when he wrote:

> A fighting craft becomes more than a place to live and work for the men who serve on her. She has a personality of her own, and especially in wartime her men develop attitudes toward her which are grounded far more deeply in emotion than in logic. To those of us who had made three patrols on her, the *Wahoo* had become part warrior comrade, part glorious Amazon, and part bawd - a burly, confident, reckless

wench with a touch of coarseness and an overwhelming and often exhausting claim on our emotions.

Grider's explanation of the personality and character of his submarine is incredible. This passage ascribes more than just basic human traits to the submarine. Grider describes the personality of this particular submarine so well, in fact, that his statement seems to suggest that submariners developed an extraordinary emotional bond with their submarines, and were likely as close to the submarine they served on as they were to the other submariners on board.

In fact, when explaining the World War Two submariner in his memoir, Captain Edward Beach wrote: "In analyzing the submariner you are invariably struck by these two traits: the sense of loyalty to his ship, and an indefinable oneness with and deep understanding of, the sea" (Beach 1952:5). Submariners lived on submarines, fought on submarines, and died on submarines. It makes sense that they would grow attached to the boats that they had survived countless harrowing experiences on. Danger bound not only the crew together with each other, but also with the boat itself.

How Attachment Develops

It is important to note at this juncture that this attachment is caused by a deeper force. In their article on emotional attachment to inanimate objects, Kogut and Kogut (2010) suggest that meanings attached to specific objects can cause people to form emotional attachments to those objects. The meanings that people attach to objects can vary widely. Grayson and Shulman (2000) provide a few different examples. The first is a retiree who treasures a specific book given

to him by his wife on his wedding day. Not only does this book carry memories of the owner's wife, but also, more specifically, of his wedding day. Therefore, this retiree would most likely not trade in this book, even for an exact replica. A second example given by Grayson and Shulman (2000) is of a business owner who framed the first dollar that his business ever earned. This dollar bill is worth the same amount of money as any other, and yet the businessman would most likely not trade his for another one. This is because he has attached more value to it because of its role in an important event in his life. These two examples are evidence of what Ball and Tasaki (1992:159) deem "emotional significance." According to Ball and Tasaki (1992:159), emotional significance is directly related to attachment; and, according to Grayson and Shulman (2000), emotional significance can actually increase the value of an object to its owner.

Kogut and Kogut (2010) assert that the strength of the bond a person feels for an object that they are attached to may vary from person to person, but that an attachment to an inanimate object may actually symbolize a personal meaning that helps the person define themselves. Ball and Tasaki (1992:158) write that attachment to an object is "the extent to which an object…is used by [an] individual to maintain his or her self-concept." If this theory is applied to submariners and submarines, it means that the more attached a submariner is to his submarine, the more he probably defines himself by his submarine and, therefore, the more he is a part of submariner culture (Kogut, Kogut 2010).

Attachment, according to Ball and Tasaki (1992:160), is best explained through example. When someone becomes attached to an object, it is usually more like a house or a car rather than a pair of shoes or a television. Someone who defines himself by his house might be constantly maintaining and improving his home, whereas someone who is less attached may not mind

having his home slip into disrepair. This brings to mind submariners, who were forced to constantly maintain their boats in the interest of their own survival. According to Ball and Tasaki (1992:160), the objects that people usually become attached to are "socially visible; expensive; reflective of the individual's roles, relationships, accomplishments, and experiences." Submarines meet all of these qualifications. Only a select few passed the tests and trials to become a submariner. And submariners did receive special treatment. They were paid more, had better food, and even stayed at the best hotels in between war patrols. Serving on a submarine could be seen as being at an elevated social status within the Navy; and, therefore, the submarine itself could be seen as a status symbol. More importantly, however, submarines were indicative of a submariner's accomplishments, experiences, and relationships. This was especially true directly after returning from war patrol, before any repairs were done to the boat. Skipper Dick O'Kane (1977:130) wrote about the appearance of his submarine, USS Tang, after a war patrol:

> I saw my ship from a distance for the first time in six weeks. Gone was the former glossiness of her black paint. Salt water, wind-driven spray, and the tropic sun had bleached it to a slate gray, somewhat splotched, like the camouflaged freighters of World War I. No longer as if out of the showroom, she looked like she'd been places and done things, and indeed she had. I liked the way she looked and made a mental note that no one was to get loose with fresh paint. Coming up the dock was the ship's company except for the senior petty officers and officers. To a man they were grinning from ear to ear. At the moment I could not say whether the pride I felt was in our ship or these men; both, I guess, for they were inseparable.

The painting of kill counts and the flying battle flags should also be considered another way that submarines reflect the unique accomplishments and experiences of submariners. In fact, Ball and Tasaki (1992:160) state that objects that can be personalized by their owners are more likely to reflect self. Painting murals on the conning tower of a submarine is, without a doubt, personalization. And possibly one of the most important points raised by Ball and Tasaki (1992:160) is that "the extent to which an object is used to maintain identity should vary with the passage of milestones in the relationship between the person and the object." This can be directly related to battle flags and kill counts. The more successful sinkings that a submarine crew tallied on their conning tower or on their battle flag, the more they grew attached to their submarine. The kill counts so often found on the sails of submarines or on submarine battle flags not only tallied the number of ships sunk by that submarine, but also the extent to which the crew were attached to their boat. This is also evidence to support the argument that, the more dangerous situations that a submarine and its crew survived, the more attached the crew became to their submarine.

Interpretation: Reasons for the Development of Attachment

Submariners were, for the majority of the time spent on patrol, in control of their boat. They controlled the diving, surfacing, and firing of torpedoes. When submariners were at their most vulnerable, however, was during a depth charging, when they were not in control of the boat at all. During a depth charging, all non-essential systems were shut down, the boat stopped, and the majority of the men aboard would simply wait and listen for the charges to explode.

During this highly stressful time, submariners were no longer in control of their own fate. The only thing standing in the way of them and the crushing depths of the ocean was the hull of their submarine.

This is a major reason that submariners grew especially fond of their boats. In the often deadly game of hide and seek that submarines played with convoy escorts, submariners counted on their submarine, more than anything else, to see them safely home. And after the submarine earned their trust, submariners began to develop attachment, pride, and even loyalty to their boats. For example, in Dale Russell's memoir, his friend and an experienced submariner, Matt, berates a newcomer to the submarine for voicing some anxiety during a depth charging. Matt told the newcomer: "Shut up! This old girl can take it. She's been through much worse than this" (Russell 1995:6).

It seems likely that submariners became so emotionally attached to their boats because their survival directly hinged on the survival of their submarine. Submariners were almost always operating deeply into enemy territory, often had no other friendly forces in the area to count on for a rescue, and had an extremely low chance of actually escaping the submarine if it was sinking. Dale Russell directly touched on this sentiment when he wrote: "The *Flying Fish* was our home. She was our lady. Whatever fate had in store for her would be the same for us." (Russell 1995:102).

Casualty Statistics

To illustrate this point, one has to look no further than the casualty statistics for submarines during the Second World War. Fifty-two United States submarines were sunk during

this conflict. Out of the 52 submarines lost, 4 were intentionally abandoned and scuttled due to errors in navigation made while not under duress. In the cases of these four submarines, all crew members survived. If these instances are removed from the equation, it becomes even more apparent that the life of a submariner depended on the survival of his submarine. For example, 37 out of a total of 48 United States submarines lost during the Second World War, not including the 4 that were intentionally scuttled, were lost with all hands. This means that 77% of all United States submarines that were lost in the Second World War, due to some form of combat, were lost with all hands. This is without even taking into account submarines like USS *Tullibee* or USS *S-44.* One submariner survived the sinking of *Tullibee* and two survived the sinking of *S-44* (Naval History Division 1963).

In fact, if the list of submarines that sank is examined closely, it becomes apparent that the survival rate of submariners after the sinking of their submarine is shockingly low. Below is a chart of the eight United States submarine losses with surviving crew. It is important to note that this chart includes only submarines that were sunk due to enemy action, or a circular running torpedo. By examining this simple chart below (Table 3), it is apparent that submariners did not often survive sinking submarines. No more than nine submariners survived the sinking of any one submarine, that was not intentionally scuttled, during the war.

TABLE 3.
SURVIVORS OF SUBMARINE SINKINGS IN THE UNITED STATES NAVY DURING THE SECOND WORLD WAR (By author, 2014)

	USS *R-12*	**USS *S-26***	**USS *Flier***	**USS *S-44***	**USS *Tang***	**USS *Tullibee***	**USS *Robalo***
Fate of the Crew	5 Survivors	3 Survivors	9 Survivors	2 Survivors	9 Survivors	1 Survivor	4 Survived the sinking, 0

The sinking of USS *Tang* is an excellent case study into survival rates of submariners in sinking situations. USS *Tang* was hit by a circular running torpedo while on the surface. At the time of the torpedo's impact, there were nine men on the bridge. Three of these men were able to swim until they were rescued. The men on the bridge were lucky. Like a surface craft sailor thrown overboard, these men had a much better chance of survival than the submariners inside the submarine.

As *Tang* sunk to the bottom at 180 ft., the remaining 76 men scrambled to burn important documents and to get ready for their emergency escape. This escape was delayed, however, as they were still being depth charged by a Japanese escort vessel, and a fire broke out in the forward battery. Temperatures skyrocketed, paint melted off of the walls, and only 13 men managed to escape the submarine. Of the 13 men who attempted the emergency ascent from 180 feet, only 8 made it to the surface. Out of the eight men who made it to the surface, only five were able to swim until they were rescued. Examining these percentages is telling. A mere 6.5% of the men aboard USS *Tang* after it sunk were rescued by the Japanese. 33% of the men who were thrown into the water from *Tang*'s bridge were rescued. The difference between the two survival rates is incredible. Submariners depended on their submarines to survive. As shown by

the fate of USS *Tang*'s crew, if the submarine went down, the crew that was not immediately thrown into the water did not stand much of a chance. This becomes especially appalling after viewing the above table, which sets *Tang*'s number of surviving crew higher than all but one other submarine sinking, excluding the cases in which submarines were intentionally scuttled.

Further Evidence of Attachment

It has already been established that the submarine was incredibly important to the identity of the submariner. It defined the way he lived, and oftentimes even the way he died. Submariners counted on their submarines to get them back home safely, and many submariners had a special attachment to their submarines. The submarine was incredibly important to the development of the submariner's identity. Without the submarine, there would be no submariner, and therefore it makes sense that one of the major recurring symbols used by submariners would be a submarine. Attachment to their submarines must have been an important value to the submariner folk group, as there is overwhelming evidence of it in submariner-designed submariner memorials.

There are currently 16 submarine museums in the United States that feature an actual submarine that served in the Second World War, and most of these submarines, including USS *Cobia*, USS *Torsk*, and USS *Pampanito*, three submarines that play a major part in this project, officially double as memorials to the men and the boats of the submarine service on "eternal patrol" (Historic Naval Ships Association 2007).

In the case of the National Memorial East, there is literally a conning tower as the centerpiece of the site. More specifically, this conning tower is that of USS *Flasher* (Figure 6). And it is certainly worth noting that the dedication plaque on the side of USS *Flasher*'s conning

tower states that the World War Two submarine veterans chose *Flasher* to represent them because of *Her* outstanding achievements: not the achievements of her crew or her captain, but the achievements of the submarine itself.

FIGURE 6. Photograph of the conning tower of USS *Flasher* at the National Memorial of the United States Submarine Veterans of World War II, East, in Groton, CT. (Photo by the author, 2013).

In fact, the National Memorial East has just as much, if not more, space dedicated to the lost boats of the submarine service as it does to the lost submariners. Figure 7 is a large plaque in the memorial entitled: "U.S. Submarine Memorial." The plaque is dedicated to "U.S. Submarines on Eternal Patrol," and lists the name and loss date of all 52 American submarines lost in the Second World War.

FIGURE 7. A plaque found in the National Submarine Memorial East in Groton, CT. (Photo by the author, 2013).

In addition to this plaque, there are stones around the outside edge of the memorial which feature an engraving of each lost submarine, its name, number, loss date, and the fate of the crew. These smaller, individual memorials are also marked with American flags, supplied by the U.S. Submarine Veterans of World War II (Figure 8).

FIGURE 8. Photograph of memorial stones for the 52 American submarines lost in the Second World War in the National Submarine Memorial East, in Groton, CT. (Photo by the author, 2013)

In addition to memorials, attachment to submarines as a folk group value can be found in submariner iconography. The two most important pieces of submariner iconography are the Submarine Qualification Insignia, and the Submarine Combat Insignia. Although both of these insignia have already been mentioned, they are important enough to be discussed again. The Submarine Qualification Insignia was designed specifically to distinguish submariners from their surface craft counterparts, and so it became an important piece of iconography for submariners: it was a way for them to identify other members of their folk group, and a way for them to define themselves in relation to the rest of the Navy. This insignia, often referred to as "The Dolphins," features a submarine flanked by two dolphins. It is important to reiterate that these dolphins are of the fish variety, and are not mammals. The part of the insignia important in this matter,

however, is the submarine. The inclusion of the submarine on an insignia designed to distinguish submariners may seem to be trivial common sense, but it serves a deeper purpose. Including the submarine as a symbol on an insignia that submariners use to define themselves by is actually a reflection of the folk group value of submariner's being attached to their submarines.

A similar attachment can be found in the Submarine Combat Insignia. This insignia also features a submarine as its focal point. As already mentioned, the Submarine Combat Insignia was also adopted as the insignia of the United States Submarine Veterans of World War II. This makes this insignia doubly important. The insignia was important to submariners during the Second World War, as evidenced by the examples of these insignia kept as souvenirs and found in museum collections, and remained important to submariners after the war, as evidenced by its adoption as the insignia of the United States Submarine Veterans of World War Two. This insignia was used by submariners during the war to prove that they had experienced combat and thus satisfied a major requirement of being accepted into the submariner folk group. It was, and is currently being used, by submariners as a symbol of the submariner folk group. Therefore it can even be considered a status symbol among submariners. This is another example of a reflection of a submariner folk group value. The inclusion of the submarine on all of these insignia is evidence that submariners were attached to their submarines, and that this value was another important tenet of submariner culture.

In fact, these insignia could also be classified as an informal teaching process. The Submarine Qualification Insignia and the Submarine Combat Insignia are two of the most used pieces of submariner iconography. They were worn on uniforms, put on certification cards to be carried around when not in uniform, and even put on submarine memorials. Although the

Submarine Qualification Insignia seems to be more commonly found on submarine memorials, the Submarine Combat Insignia is still found on a large number of them. Some examples of memorials in which the Submarine Combat Insignia or the United States Submarine Veterans of World War Two Insignia can be found are the National Memorial, East, in Groton, CT, the USS *Wahoo* memorial in Nebraska, the USS *Cisco* memorial in West Virginia, and the USS *Sea Wolf* memorial in Texas, among others. The Submarine Qualification Insignia is rarely missing from any submarine-related memorial and is present on all of the memorials previously mentioned and more. In fact, the memorial directly outside of USS *Pampanito* in San Francisco, CA, very prominently features the Submarine Qualification Insignia yet leaves out the Submarine Combat Insignia altogether.

The inclusion of these insignia on submariner memorials is what qualifies them as being used as a part of an informal teaching process. Stewart (2011:70) writes that memorials display group values and help guide the actions of group members by "providing standards of behavior for members to follow." These insignias say more than words ever could. Firstly, they emphasize the importance of the submarine to the submariner. This is obvious from the inclusion of a submarine as a focal point in both symbols. The Submarine Combat Insignia also emphasizes the importance of the experience of combat, because it was designed to represent that the wearer had completed at least one successful war patrol. The Submarine Qualification Insignia represents the trust that submariner social hierarchy was built on. All new submariners were required to work towards qualifying in submarines so that they could be relied upon in a time of crisis. This insignia is meant to be seen as a status symbol, and is the most important token of membership in

the submariner folk group. The dolphinfish on the insignia represent, as will be discussed in chapter six, a deeper connection to the underwater world, and a certain liminality.

Conclusions

Submariners were especially attached to their submarines for a few reasons. The first was that they depended on them for survival. Submariners during a depth charging were at their most vulnerable. If the submarine did not hold together, more than likely, the entirety of the crew would perish. A shocking 77% of all submarine sinkings, not including beachings in which the submarine was consequently scuttled, resulted in a loss of all hands. The cases in which submariners did survive the sinking of a submarine were rare. In these cases, the submarines were usually on the surface when they received some form of catastrophic damage. The majority of survivors from these incidents were also usually on the bridge at the time of the sinking and were somehow thrown into the water before the submarine went down.

Submariners who survived a sinking submarine were faced with incredible dangers. They were in enemy territory, often at night, and if they managed to swim until they were rescued, they would most likely be sent to a Japanese prison camp. The vast majority of the time, a submariner's fate was directly linked with that of his submarine. Submariners relied on their submarines and grew attached to their submarines. They even began to define themselves by their submarines. This folk group value can still be seen today in submarine memorials and on certain insignias

Chapter 5

A Rejection of the Surface World

Introduction

Submariners during the Second World War were an isolated fringe group within the United States Navy. This group, because of their isolation, developed an esoteric body of folklore. In fact, key tenets of submariner folklore include a rejection of the surface world and embracing the underwater world as their home. As outsiders in the surface world, submariners did not fit in with surface dwellers. In fact, in the mind of the submariner, everyone on the surface was trying to kill them. This belief was reinforced by the fact that submarines were at their most vulnerable on the surface as well. It is not a surprise then, that submariners rejected the surface world, and specifically chose the underwater world as their homes. In submariner folklore, submariners belonged underwater. They were denizens of the deep, subjects of King Neptune, even part fish. Submariners had finally found somewhere they belonged. Unfortunately, World War Two era submarines were not capable of staying underwater indefinitely. With a limit of two days of submergence time, submariners were forced to exist in both the surface and underwater worlds. Submariners lived in the hostile surface world and the comforting depths of the ocean as liminal beings, trapped between two very different planes of existence.

The Ocean

The Submarine Force in the United States Navy during the Second World War was a Navy within a Navy. Submariners were men apart from their surface craft counterparts. They were different. They were different because submariners fought and died underneath the water, whereas surface craft sailors fought on top of the water. Submariners hunted and destroyed surface craft, and surface craft sailors hunted and destroyed submarines. Although there are many similarities between the two, submariners and surface craft sailors were two separate groups. Unlike surface craft sailors, submariners consciously chose the ocean, and the deep, dark, depths of the ocean, as their home and their preferred environment. The submariner folk group shows this in their iconography, their cartoons, and their poetry.

One of the best poetry examples of the submariner embracing the depths of the ocean as his home comes from a poem written for the shipboard newspaper of USS *Canopus* in 1939. This anonymously written poem made its way to the personal papers of LCDR. Sahaj, Skipper of USS *Sea Lion,* and then into the collection of the Submarine Force Museum. It is titled: "The Sub Man."

The Sub Man

Now, a strange and fearful denizen
of the briny deep is he,
with pressure-ruptured veins, and
gills where his ears should be.

A quite a bit more than man,
and he's never seen the sun,

And, just to prove that he's different than most,
he thinks the duty's fun.

Down, down into the bilges he goes,
and scrambles around like a rat,
Flounders in pools of fuel oil,
and grins for all o' that,

Beats his head on projecting valves,
hammers his shins on a bunk,
And loudly proclaims for the world to hear
that his boat is a pile of junk.

His lungs are pitted with chlorine gas,
and he walks with a permanent stoop
He's lived so long under pressure
that even his eyelids droop.

Yes, and when he comes up in the morning sun,
he gasps and hurries below
For the atmospheric pressure is much,
oh much, too low.

He spends his life in another world,
down in the fish's land,
Passing the time with a porpoise,
or holding a mermaid's hand.

Setting him down on the very base
of old King Neptune's throne,
Penning his notes with octopus ink,
and feeding the dogfish a bone.

And if he gets married,
and moves ashore,
he sleeps in an iron lung. And
when he calls his children,
"Prepare for dive" is rung.

Then he takes 'em all to a bathtub,
and they make their annual dive,
with clothespins on their noses,
that the race may be kept alive.

For a strange and fearful denizen
of the briny deep is he,
And it's a strange and fearful life he leads,
down in under the sea.

And he more or less is born to it,
and trained from his youngest days,
For no normal mortal could stand the strain
of aping the sub-man's ways.

This poem is an excellent example of submariners accepting the depths of the ocean as their home. In fact, one of the most important parts of this poem is the notion that submariners have even evolved to survive underwater and have trouble surviving on the surface. There are many examples of this in the poem. The first mention of this is found in the very first stanza. The author asserts that the "sub man" has pressure ruptured veins from the increased water pressure, and has even developed gills. The next few stanzas are dedicated to the idea that the sub man actually likes his submarine and his life underwater, even though there are definitely some problems and inconveniences inherent in life on a submarine.

Stanza six introduces a new theme in the poem. This theme is how the sub man reacts to the surface world. According to stanza six, the sub man may not even be able to tolerate the lower atmospheric pressure of the surface. In fact, it seems as if the surface world is naturally hostile to the sub man. This theme seems to be representative of the larger submariner folk group and their feelings about the surface as well. Stanzas seven and eight stand in contrast of stanza six. Whereas stanza six showed the sub man reacting to a strange and dangerous surface world, stanzas seven and eight show him underwater, which is his home. Underwater, it seems, the sub man is most comfortable. He feeds his dogfish, courts mermaids, lives under the authority of

King Neptune, and even befriends porpoises. Stanza nine, however, returns to the surface world theme presented in stanza six. According to the poem, the sub man compensates for the low atmospheric pressure on the surface by sleeping in an iron lung. Possibly the most important part of the poem, however, is that, from stanza nine until the end of the poem, the sub man is shown introducing his children to his way of life so that "the race may be kept alive." It is important to note that the author believes that submariners are not only different from surface craft sailors, but the entirety of the human race.

This poem clearly is meant to depict, in a comical way, that submariners were not comfortable on land, and that they embraced the ocean as their true home. They felt that they did not belong in the surface world, and that they were more comfortable under water. Not only was the surface world inherently hostile to the sub man, but he retained all of his old traditions and even attempted to pass them down to his children. This poem highlights the liminality of submariners and clearly demonstrates their feelings of not belonging fully to one world or another. It is important that, even though the sub man clearly feels at home under water, he is eventually forced to leave the underwater world and venture to the hostile surface in order to start a family. Therefore, he must not have been a full member of the underwater world either.

Mermaids

A major part of the Sub Man poem is that, at least until he was married, he spent his time with mermaids. Mermaids, possibly because they could be drawn practically naked at all times, were a favorite character of submariners. They are a recurring theme in comics drawn to entertain the rest of the crew, and represent the sexuality inherent in much of submariner humor.

The front page of an issue of USS *Seal*'s newspaper, *Scuttlebutt*, (Figure 9) is another excellent example of this.

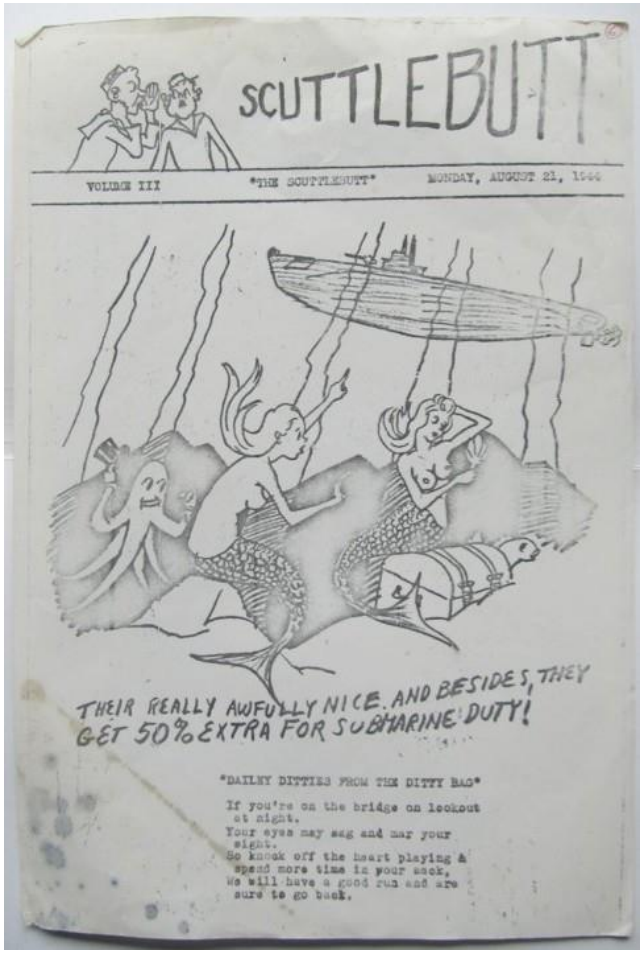


FIGURE 9. Photograph of an issue of *Scuttlebutt.* This photograph was taken with the consent of the San Francisco Maritime National Park Association. (Photo by the author 2013).

In their cartoons, submariners are often lusting after mermaids. This makes a statement. Submariners "dated" mermaids because they were both creatures of the underwater world, they were both half fish, both liminal beings in some sense. Submariners were also most often shown with mermaids because human women were part of the surface world, and so did not fit with submariners as well as mermaids did. In Figure 10, another cartoon found in the shipboard

newspaper of USS *Seal*, a submariner brings home his mermaid wife to meet his parents. The comical part of this cartoon is that the submariner and the mermaid do not find their relationship to be odd, whereas the parents of the submariner look extremely surprised, and even angry. It is likely that they are surprised even at the existence of mermaids. This would be funny to submariners because, at least in their own mythology, mermaids were their natural counterparts (Figure 9; Figure 10; Figure 13.). This cartoon may also be viewed as a submariner's version of a "war bride." Men who went off to war often times came back married to women they met while they were abroad. It seems fitting then that a submariner would not come back with a human woman, but a mermaid, instead.

FIGURE 10. Photograph of a cartoon from the shipboard newspaper of USS *Seal.* Used with the consent of the San Francisco Maritime National Park Association. (Photo by the author, 2013).

Since the beginning of their indoctrination into submariner culture, submariners have been shown that mermaids were an important part of who they were. For example, at the New London Submarine School, there was a mural of a mermaid inside the free ascent tower. Submariners even named the mermaid "Minnie" (Casey 1945:377-378; Wisconsin Maritime Museum N.D.). This is important, as the free ascent tower was one of the first big tests that prospective submariners would have to face in order to become a submariner. In fact, this test served as a formal separation of new submariners from the rest of the Navy. Therefore, it seems fitting that a mermaid, such an important character in submariner folklore, would be involved in some fashion.

According to van Gennep's (1960:545) three stages of rites of passage, the first or preliminal stage serves as a separation of the old world that the initiate belonged to and the new world that the initiate was entering. The free ascent tower definitely fits this description. Because it served to separate those who would go on to become submariners from those who would fail to become submariners; and, because of the symbolism inherent in this test, the free ascent tower can and should be viewed as a preliminal rite of passage.

In his study of ritual symbols of the Ndembu, Turner (1967:212-223) describes a Ndembu ritual that can be viewed as a parallel for the submariner's free ascent tower test. Interestingly enough, the ritual in question is actually a circumcision ritual. Circumcision is viewed as a rite of passage for young Ndembu novices, and it marks their departure from the world of Ndembu children. One of the most important parts of this ritual is that, to begin the process, the novices are stripped of their childhood clothes. These clothes are then placed on a wooden entranceway that is shaped like a soccer goal. The novices then move towards the place of their circumcision

by passing through the soccer goal threshold, symbolizing that they are moving past their childhood. Another important element of this ritual is that the place where the novices are circumcised is referred to as the place of their killing. In this ritual, the novices are symbolically "killed" and "reborn." The children "die" and are reborn as men.

This Ndembu rite of passage is strangely similar to the free ascent tower. Also stripped of their clothes, submariners attempted the free ascent tower in swimming trunks and were given a standard Momsen Lung. Interestingly enough, the whole situation of escaping a submarine is a direct parallel to the Ndembu initiates being symbolically killed and reborn. If the free ascent tower test is viewed as a ritual, it could be argued that the potential submariners were acting out the part of actual submariners attempting to escape from a sinking submarine. It is important to keep in mind that submariners did not have a high rate of survival when their submarine was sunk. Therefore, it is not unreasonable to suggest that the implied sinking of the potential submariners' submarine could be considered a kind of ritual death. The success of these potential submariners in completing their free ascent from the tower, at 50 feet or below, then signifies a kind of rebirth. From their death as candidates for submarine service, deep below the water, they reemerged from the depths as future submariners.

The inclusion of "Minnie the Mermaid" in this clearly important rite of passage is telling. In fact, because of Minnie's presence in the free ascent tower, this mermaid can be considered a "condensation" symbol. A condensation symbol is, according to Turner (1967:28) a single symbol that represents many things and actions. Condensation symbols can represent meanings that are not readily apparent to the conscious mind of observers, and can even manifest meanings in the unconscious mind that seem to be far removed from the symbol's original meaning (Sapir

1934:492-493; Turner 1967:29). Minnie the mermaid is such a symbol. Submariners who saw the mural of Minnie in the free ascent tower likely did not understand the many meanings that she represented. The mermaid, half fish and half human, represented the liminality of the submariner in its most literal form. The mermaid also represents the rejection of the surface world, and the embracing of the underwater world. It is likely that submariners would not realize the full meaning of this symbol for some time.

The Dolphins

Similar to the submariner symbol of the mermaid, the submarine qualification badge is also an excellent example of not only a submariner's attachment to the depths of the ocean, but a reminder of their constant liminality. Developed specifically to distinguish and therefore separate submariners from surface craft sailors, this badge has even more meaning than is readily apparent. This insignia (Figure 11) consists of two dolphins flanking a submarine. It is important to again mention the appearance of the dolphins on this insignia. The dolphins in this badge are not mammalian dolphins. In fact, they are dolphinfish. There are two types of dolphinfish, the common dolphinfish and the pompano dolphin. Both of these types of dolphinfish are often referred to as "mahi-mahi." It is interesting to note that one of the 52 submarines lost during the Second World War, USS *Pampano,* was even named after the pompano dolphin. This fact is evidence that, although the air breathing mammalian dolphin may have originally been chosen to represent the submarine force, a different kind of dolphin was ultimately chosen to link the submariner with the underwater world: a fish. This decision, although likely made to further a

bond between the submariner and the deep, also served to separate submariners from their surface craft counterparts and the surface world.

FIGURE 11. Photograph of the submarine qualification insignia. Found on the National Submarine Memorial East in Groton, CT. (Photo by the author, 2013).

The two dolphinfish on this insignia are most often referred to as “Castor” and “Pollux.” Castor and Pollux are figures from Greek mythology. They were twins, and half brothers, who accompanied Jason and the Argonauts on the quest to find the golden fleece. Castor and Pollux are famous for being patrons of sailors and adventurers, and even had a hand in causing the Trojan war. The most important part of their story, however, is that Pollux was the son of Zeus, and therefore immortal, and Castor was not. According to mythology, Castor is eventually killed. Pollux, distraught, prays for his father, Zeus, to allow him to share his immortality with his brother. Zeus obliges Pollux’s request, but because the two brothers are sharing Pollux’s immortality, they are only allowed to spend half of their time on Mount Olympus and are forced to spend the other half of their time in Hades. Therefore, it is exceptionally appropriate that the

dolphins on the qualification insignia are named Castor and Pollux. Just like the twins were forced to spend half of their time in Hell, and half in Heaven, submariners were forced to spend half of their time on the surface and half underwater, as liminal beings.

The Submariner as a Liminal Being

American World War Two era submarines were not submarines in the most literal sense, but submersibles. These vessels were only capable of operating underwater at a reduced capacity, and for a maximum duration of around two days. The reason for this is that diesel engines could not be reliably or effectively operated while a submarine was submerged. Because of this limitation, submarines were forced to operate on battery power. These batteries were then charged by the operation of the diesel engines when the submarine was on the surface. This caused the submarine, and the submariners operating the submarine, to spend time both on the surface and under the water. Because they were forced to divide their time between two very different worlds, submariners can be viewed as liminal beings, living in two worlds, but not truly belonging to either. The word "liminal"comes from the latin *limen*, meaning "threshold," and according to the New Oxford American Dictionary, is defined as "occupying a position at, or on both sides of, a boundary or threshold."

According to van Gennep (1960:439) there are three main stages of rites of passage. These stages are key to understanding the submariner's state of constant liminality. The first are preliminal rites, the second are liminal rites, and the third are postliminal rites. Van Gennep (1960:545) describes preliminal rites of passage as rites of separation from one world, liminal rites as rites of transition (1960:439), and postliminal rites as rites of incorporation (1960:439).

van Gennep's stages of rites of passage can be easily and effectively applied to submariners.

The first stage of rites of passage are preliminal rites. As already mentioned, preliminal rites serve to separate a group from one world. For submariners, this happened during their application to submarine school, and in submarine school itself. The tests that potential submariners faced in order to even make it into submarine school served to directly separate future submariners from the rest of the surface world by disqualifying the majority of applicants as candidates for submarine school. These tests ensured that only the candidates most suited for submarine duty were passed on to training. This is an extremely important point. Because submarine service was so dangerous, and because each man on a submarine had a direct effect on the survival of the entire crew, it was imperative that submariners were able to trust that other submariners were just as qualified as they were. Trust is a large part of folk groups that deal with danger on a regular basis and is inherent in any closely bonded group. The battery of tests that submariners passed and the information they learned at submarine school not only served to set them apart from their friends, family, and even others in the surface fleet, but also acted as the first of many bonding experiences with other submariners.

It is also important to emphasize that the information submariners learned about submarines while attending submarine school was top secret and extremely technical. Because of its secret nature, it alienated them from the surface world. As previously mentioned, Jansen's (1959:209-211) criteria for the development of group folklore include the isolation of a group and the possession of specialized knowledge or skill sets. Both of these conditions are easily found within the pre-liminal rites of passage in submariner culture. The most obvious point about submarine school contributing to a submariner's separation from the surface world, however, is

that submariners all lived at school. From this point until the end of the war, submariners had only other potential submariners to spend the majority of their time with. Even the instructors were submariners.

Once a prospective submariner passed all the tests to become a submariner, he exited the preliminal state of being and entered the liminal, where he then existed until death or leaving submarine service. The second, or liminal rites that submariners received served to further distance them from the surface world, while drawing them closer to the underwater one. It is in this liminal stage of existence that the submariner was forced to live during the war. This is important because, in the liminal state of being, one is constantly torn between two worlds. In the case of the submariner, he would be forced to divide his time between the surface and underwater worlds. The surface world was hostile and dangerous for the submariner, and yet submariners, due to technological and physiological limitations, could not stay under water for more than approximately two days at a time before their submarine could no longer sustain human life. Submariners were thus forced to alternate between two worlds in order to survive.

The liminal rites of a submariner included participating in successful war patrols, earning the Submarine Combat Insignia, Submarine Qualification Insignia, and especially enduring a depth charge attack. The most important aspects of van Gennep's rites of passage, with respect to the submariner, are these liminal rites, because it is in this stage of existence that submariners operated during their war patrols. Participating in a war patrol, possibly the first liminal rite that a submariner received, served to separate submariners from the surface world because participating in submariner warfare is something that surface dwellers could only imagine. It also qualifies as a liminal rite because it served to bring submariners further towards the underwater

world. The unique dangers of operating a submarine during a war patrol likely instilled the new submariner with a healthy fear of the surface and the knowledge that a submarine is safest under water. As a submariner participated in more war patrols, these attitudes likely developed into stronger beliefs. These beliefs are even reflected in submariner iconography. The best example of this is in the submarine qualification insignia. This insignia consists of a submarine, flanked by two dolphins as its centerpiece. As already mentioned, the dolphinfish in the submarine qualification insignia symbolize a deeper connection to the ocean and the underwater world. Because of its symbolism, the earning of this insignia definitely qualifies as a liminal rite of passage.

As all of the preliminal rites served to separate the submariner from the surface world, all of these liminal rites served to transition him towards accepting the underwater world as his home. As soon as a submariner became a submariner, then, he began living in a liminal state. He was neither a full resident of the surface world, nor did he fully belong underwater either. Thus it is extremely important to note that the submariner only fully completed his transition by entering the postliminal state of being, which in the case of the submariner, was death. This concept will be elaborated upon in greater detail in the following chapter, but it is important to understand at this juncture that, when a submariner died, most of the time he never came to the surface again. Through death, submariners became a permanent part of the underwater world. Therefore, during the entirety of his existence, the submariner was constantly in a transitory state.

Conclusion

Submariners embraced the underwater world in the majority of their folklore. Poems about being a different breed of man, cartoons of submariners chasing after mermaids, and even the most prominent piece of submariner iconography, the submarine qualification insignia, is evidence of this fact. Submarines were vulnerable when on the surface, and submariners felt as if they did not belong. It is important to emphasize that submariners existed in a state of liminality between these two worlds, because the way that submariners dealt with death not only reflects their acceptance of the underwater world but also a transition from a state of liminality into a postliminal existence and a unique submariner afterlife.

Chapter 6

Death and Memorialization

Introduction

Because of the extremely high casualty rates of the United States Submarine Force during the Second World War, submariners were forced to accept death as an inevitable and ever present force in their lives. As already established, most submariners knew others on different submarines. Every time a submarine was declared overdue and presumed lost, submariners on other submarines knew that it was likely that they could be destined to share the same uncertain fate. Because being a submariner was so dangerous, submariners developed coping mechanisms to deal with the inevitability of death. And the way that submariners dealt with death reflects their unique worldview.

Motifs in Submarine Memorials

Because there are very few recorded casualties on submarines that were not sunk outright, possibly the best way to gain an understanding of just how submariners dealt with death is to inspect memorials erected for submariners by submariners. These memorials not only show how submariners dealt with death, but they reflect some core aspects of submariner culture, possibly aspects that the group desired to pass on to the next generation.

There are four major motifs found in submariner memorials. The first and most important of these is found in the language used on the memorials themselves. Submariners who died in the Second World War are almost always referred to as being on "eternal patrol," or as "still on patrol." The second motif is the inclusion of the place and cause of a submarine's sinking. The third and fourth motifs have already been discussed in previous chapters and will only be mentioned briefly here. The third motif is that submariners almost always use the design for their submarine qualification badge as a part of the memorial. The fourth motif concerns the objects found at the memorial sites. Often when erecting memorials to submariners, other submariners thought it appropriate to use submarines and torpedoes as major parts of the memorial.

The first major motif in submarine memorials, the specific language used, suggests that submariners embraced the idea of eternal life after death. Submariners that died in the Second World War are most often referred to as still being on patrol. In fact, they are referred to as being on "eternal patrol." In the submariner mythos, members of the folk group do not die, but stay on patrol for eternity, serving and protecting their country forever. There are a few major reasons for the development of this coping mechanism. The first is that, because of the nature of submarine warfare, when submarines were sunk, most often no one who was not directly involved in the incident knew about it. Therefore, a submarine could not usually be declared destroyed and the submariners declared Killed in Action. To the outside observer, the submarine would simply fail to report in, and only assumptions could be made. The official designation for submarines that failed to report in was "overdue and presumed lost." To those on land, or to their friends and counterparts on other submarines, the dead submariners would simply be lost at sea.

Possibly because of the lack of closure inherent in such a designation, submariners preferred to create their own designation: “On Eternal Patrol.” And although submariners most likely did not believe that their comrades were still actually on patrol, they embraced the idea as if it is what they wanted to believe. This type of coping mechanism seems natural for submariners. They felt as if they were carrying the brunt of the war against the Japanese in the Pacific. They suffered a worse casualty rate than the rest of the Navy and sunk more shipping than the rest of the Navy. The submariners felt that they were the ones protecting the United States from foreign enemies. It seems that, as far as submariners were concerned, they would continue in their duty even after death. An excellent example of this mentality is found in the anonymous poem from the archives of the Submarine Force Museum, “Diesel Boats Forever.”

Diesel Boats Forever

Dead men don’t snorkel
and diesel boats don’t die,
And if you hear they do,
Then you hear a lie.
Ask those who know,
Plank owners of long ago,
Ask these proud sailors,
Watch as the pride shows…
Just like a diesel boat,
in her early days;
Her men don’t die I tell you,
They just sail away…
The proud sailing Lady
and all her men.
DIESEL BOATS FOREVER
FOREVER MY FRIEND.

According to submariner folklore, death was considered a transition. Because death was such a large part of the submariner's culture, it makes sense that submariners viewed death as another transition. Stewart (2011:115) states that burial at sea, as with most funerary practices, functions as a rite of passage, which supports this interpretation. According to van Gennep (1960:439), the final type of rites of passage is postliminal rites. Therefore, it stands to reason that the major postliminal rite of passage for a submariner was being declared on eternal patrol. Through death, submariners progressed from their liminal state into a postliminal one. They were no longer in a transitory phase between being a member of the surface world and the underwater world. They were finally fully incorporated, and became permanent residents of the deep. In fact, referring to their shipmates as being "on eternal patrol" is a direct statement mentioning the unique submariner afterlife. Just as many religions today hold eternal life after death as one of their key tenets, submariners also developed this belief as part of their shared folklore.

This tradition of referring to deceased submariners as being on eternal patrol is found in the vast majority of submarine memorials. For example, at the San Francisco Maritime National Park, there is a small memorial adjacent to USS *Pampanito*. As the basis of the memorial, there is a large plaque that lists the 52 submarines lost during the Second World War. It reads: "To the crews of the 52 submarines who sacrificed their lives in World War II. 'Lest we forget these boats on eternal patrol.'" Figure 12 is a photograph of this memorial.

FIGURE 12. Photograph of a memorial for American submariners who died during the Second World War. Located in San Francisco, CA (Photo by the author, 2013).

This sentiment is also found on a plaque titled "Still on Patrol" at the National Memorial of the United States Submarine Veterans of World War II, West, in Seal Beach, CA, and on the dedication plaque at the National Memorial of the United States Submarine Veterans of World War II, East, in Groton, CT. The plaque in the National Memorial West reads: "U.S. Navy submarines paid heavily for their success in World War II. A total of 374 officers and 3131 men are on board these 52 U.S. submarines still on 'patrol'" (Historical Marker Database 2010). The plaque for the National Memorial East reads: "This is the conning tower from the submarine USS *Flasher* (SS249), built by the Electric Boat Company, Groton, Connecticut and commissioned September 25, 1943… In recognition of her outstanding achievements World War II submariners chose *Flasher* to represent and honor their 3,505 shipmates 'still on patrol.'" This quote is extremely important, as the entire memorial was designed by the United States Submarine

Veterans of World War II, and can therefore be used as a way to better understand aspects of the culture. It is important to note that the surviving submariners chose to refer to their lost shipmates as "still on patrol." This reinforces the previously stated argument about how submariners dealt with death in their folk group. As a side note, another interesting piece of information found in this memorial inscription is that it does not distinguish between officers and enlisted men. In fact, this bit of evidence supports the assertion that the social hierarchy on a submarine was much more relaxed than it was on other vessels.

The second motif found in submariner memorials, the inclusion of the location and cause of a submarine's sinking, is important for a few different reasons. In fact, Stewart (2011:155) writes that including the place of a person's death on the memorial creates a "symbolic link between the location of the memorial and the place where the deceased's body lies." This is extremely important because, according to Stewart (2011:147), a direct result of the Romantic movement in the mid-eighteenth century was a growing belief that the memory, as well as the physical body of each individual was important and worth preserving. Stewart (2011:147) argues that the spread of individualism during the Romantic movement caused many people to want to continue a relationship with their family members or loved ones even after their deaths. To this day, it is still the common prevailing belief in the United States that each individual deserves to have his or her own grave; a burial place that will remain undisturbed forever. Because there is such an emphasis on the importance of one's physical remains, however they try, submariner memorials could never be as satisfying to the families and loved ones of submariners as actual graves.

Another reason for the inclusion of the location of the deceased's body, according to Stewart (2011:155), is that it functions as a mnemonic device. Stewart (2011:155) asserts that, by including the place of the deceased's body, not only does the memorial provide some form of comfort to family and loved ones, but it also stimulates the memories of folk group members. For example, by including the place that a submarine was lost, another submariner would remember a time when he was on war patrol in that exact area. Or, by including how the submarine was lost, other submariners would remember the close calls they had of the same type; terrible depth chargings, sudden appearances of enemy aircraft, navigation of minefields, surface gun actions, and enemy submarine sightings.

Although not exactly a motif, many submarine memorials also include the names of all submariners lost on the submarine that is being memorialized. Stewart (2011:154) interprets this theme on memorials as well. He writes that the inclusion of the name on a memorial functions as a sort of substitute, albeit a poor one, for a body. The name dedicates the ground surrounding the memorial to the deceased, and provides yet another symbolic link between the memorial and the site where the actual body rests.

It is important to note that, in addition to the physical memorial sites already mentioned, there are now many memorials that exist only online. These memorials, also constructed by submariners for submariners, should be considered as valid as their physical counterparts. They should also be evaluated the same way. The most notable of these memorial sites is titled "On Eternal Patrol." This site lists almost every submarine casualty from the Second World War. It has photographs of approximately 80% of the deceased, includes a short bio of each, and the

approximate date, location, and cause of their death. This site contains the Submarine Combat Insignia, uses the phrase "On Eternal Patrol," and functions exactly like the physical memorials.

Death Aboard the Submarine

At this point, it is important to acknowledge that, although a rarity, there were cases of submariners dying on board submarines without the submarine itself being destroyed. In fact, out of approximately 3,630 submariner deaths during the war, only around 117-123 submariners were lost while serving on vessels that were not sunk (Hinman N.D.). This only amounts to just over 3% of all submariner deaths during the war; and this number is still somewhat misleading as it includes submariners who died in accidents while on land as well. Possibly because of the rarity of these incidents, there is a relative dearth of information on how the bodies of the submariners were dealt with. Two notable cases of these types of casualties were the deaths of Ralph Clark Huston, Jr. and Lawrence Elmer Kidwell.

Lawrence Kidwell died on 31 December 1943. Kidwell was on lookout duty during a bad storm aboard USS *Tullibee* when a particularly strong wave knocked him into a guardrail. Unfortunately, Kidwell was holding his binoculars by his stomach, and the guardrail smashed them into his diaphragm, killing him (Galantin 1987:142; Hinman N.D.). In the memoirs of I.J. Galantin, this incident is mentioned only briefly. Galantin states that, after the lookout was killed, he was "given a sailor's burial." This description is less than vivid, but it does seem to tie submariners to the larger maritime culture. A sailor's burial, traditionally, would mean that Kidwell's body, in all probability, was committed to the deep. Although not much can be deduced from Kidwell's death and subsequent burial at sea, Ralph Clark Huston Jr.'s death and burial

were very well documented, and therefore can help fill in some of the omitted information in Galantin's description of Kidwell's burial.

Ralph Clark Huston, Jr., Seaman First Class aboard USS *Cobia*, died on February 27, 1945 after being mortally wounded during a surface gun action. Chief Pharmacist Mate Herbert L. Starmer recounted the events in a taped interview at the Wisconsin Maritime Museum. Huston, the loader on USS *Cobia*'s deck gun, had been hit by a .50-caliber bullet. The bullet hit Huston in the arm, almost severing it somewhere between the elbow and the shoulder. The bullet had gone in through Huston's arm, through his rib cage, and exited out his back. Luckily it had missed all vital internal organs. Starmer amputated Huston's ruined arm, stopped the bleeding, and even managed to stabilize Huston's condition.

The *Cobia* headed straight for Lombok, in an attempt to get Huston to a hospital. During this race against time, *Cobia* made contact with the enemy and was forced to dive. *Cobia* had been damaged in the surface gun action that Houston was wounded in, however, and the Captain was forced to divert all power to pumping water out of the submarine. As a result, the climate control was inactive, there was no air circulation, and temperatures inside the submarine rose to intolerable levels. It is Starmer's opinion that, because of his wounds, Huston could not survive the inhospitable conditions of the submarine. Huston died approximately one hour after the initiation of the dive.

Later that evening, *Cobia* surfaced and a funeral ceremony was held for Huston. According to Starmer, fire bricks from the galley were lashed to Huston's legs, to make sure his body sank. Mattress covers were used to cover the body, the door from the crew's head was used to hold the body, and Huston was covered with an American flag during the ceremony. The

Captain of the *Cobia* recited a prayer, a four-man squad fired a salute, and a recording of taps was played. This ceremony is interesting for two main reasons. The first is that the submarine was clearly not equipped for funerary proceedings. The crew had to improvise by using fire bricks, mattress covers, and the door to the head. This seems to suggest that submariners were not expected to die on board a submarine. They were expected to come back in one piece or not at all.

The second reason this ceremony is important is because it clearly demonstrates folk group values. According to Starmer, the *Cobia* was four miles from Lombok; meaning, Huston could have been buried on land, but was instead committed to the deep. Because *Cobia* had been damaged, the boat would also have to be repaired before going back out on war patrol anyway. In fact, *Cobia'*s next stop was Fremantle, Australia. They were not under pressure to get back out on war patrol right away and could have gone the four miles to bury Huston on land. It is important to note, however, that there was a Japanese presence in the area and on the island. Although getting Huston to a friendly hospital was clearly worth the risk, this may have been too much for the Captain to gamble just to bury Huston on land.

The fact that Huston was buried at sea is still important, however. At this point, it is important to note that Huston died during his first war patrol. Huston was new to the folk group; in fact, he may not have even been a part of it yet. He had been exposed to it, but it is impossible to say if, by the time of his death, he had been fully accepted into the group. Huston had been on board *Cobia* for only a few days at the time of his death. That is why his burial at sea is so important.

When submariners, members of the folk group, died, they were almost always entombed inside their submarine, underwater. They died and were buried in their element, in the world that they had chosen, and this had become an important part of their culture, their traditions. In fact, referring to their dead as "on eternal patrol" is just a reflection of the fact that submariners who died in combat never went back to land. They completed their final rite of passage from liminal being to postliminal denizen of the deep. Therefore, by choosing to commit Huston's remains to the deep, the crew of USS *Cobia* were either confirming Huston's membership to the submariner folk group, or at least conferring it on him posthumously. And why not? Huston had performed, by all accounts, admirably during the gun action that took his life. As combat, and performance during combat, was such a key part of a submariner's identity, it seems fitting that Huston was given a submariner's burial.

Even the last words of Ralph Clark Huston, Jr., were indicative of submariner culture. Directly before the gun action that took Huston's life began, the weather began to take a turn for the worst. All members of the gun crews were ordered to get their foul weather gear. Starmer, the Chief Pharmacist Mate, gave his jacket to Huston, so that Huston would not have to go below decks to get his. Later, after Huston was wounded and brought to Starmer, he turned to the Chief Pharmacist Mate and said: "Look at what those bastards did to your jacket, Doc" (Starmer 2010:56, 58). During the earlier discussion of submariner humor, it was established that submariners often used dark humor to belittle death. It is therefore likely that Huston was making one final, irreverent joke, exemplifying the traditions of the submariner folk group. Even though Huston may not have been a full member of the group before his death, he died like a

submariner, was buried like a submariner, and therefore there is no doubt that he was ultimately accepted as a member of the folk group.

Chapter 7

Key Submariner Cultural Ideas

Introduction

Although the main aspects of submariner culture have already been discussed, there are other cultural ideas within the submariner folk group that have not yet been mentioned and still merit some discussion. Although these ideas may be found in other cultures as well, they still played a large role in the overall makeup of the submariner folk group. In fact, it is important to again state that, because every single member of the submariner folk group was, at least at one point, a member of at least one other culture, outside ideas certainly managed to make their way into submariner culture. The following chapter attempts to explain the cultural ideas of the submariner folk group that have not already been examined in earlier chapters. These key cultural ideas include a more relaxed social structure and a unique sense of humor.

Social Structure

Because death was an inevitable and ever-present part of the submariner's daily life, submariners developed a relaxed social structure. Social structure on a submarine was not as rigid as it was on other military vessels. Although the traditional hierarchy based on rank still existed, the social structure on a submarine was largely based on trust. It is necessary to mention that this kind of relaxed, informal social structure is an important part of the submariner folk group but is in no way unique to submariners. In fact, this type of social structure seems to be

present in other groups that face a high level of danger on a daily basis. Aviators, especially bomber crews, serve as excellent parallels in this regard. In fact, less than strict adherence to a rank based social structure and informal uniform are traits common among both submariners and aviators. Although it was officially against Army Air Force regulations, officers and men, especially those flying on the same bomber, often socialized when off duty (Mrazek 2011:65). In fact, it has even been proven that bomber crews who spent more time with each other were more successful than crews who spent less time together (Mills 1967:83). And the irregularities of the uniforms of bomber crews are astounding. The best example of this is found in the modification of the standard issue A-2 flight jacket.

As already discussed, the A-2 leather flight jacket was heavily modified by its wearers. In fact, aviators would paint, or have someone else paint, murals on the back of their jackets. oftentimes these murals were of cartoon characters, aircraft, or even highly sexualized women. Aviators also used to put patches on their jackets to signify their squadron and/or bomb group. These patches usually contained similar motifs to the aforementioned murals. These types of modifications, however, were completely against regulation. One theory of why this was allowed is that airmen were dealing with death on a different level than most (Hix 2012). The high rate of casualties among aviators allowed them some leeway with a few of the more unimportant regulations. Another example of this is that bomber crews were not supposed to drink alcohol within 24 hours of a scheduled mission. This regulation was more or less forgotten during the Second World War, as many aviators felt the need to "self-medicate" after especially difficult missions (Mrazek 2011:36).

Possibly the most important point about the social structure of submariners, and others in equally dangerous occupations, is that, although still recognized, rank was much less important than on a surface craft (Grider 1958:10-11). In fact, the hierarchy aboard submarines was relaxed enough that it was commonplace for submariners to not wear any denotations of rank for the majority of war patrols, regardless of their position on board. For example, I. J. Galantin, the Skipper of USS *Halibut* from 1943 until the end of the Second World War, wrote that "with the first change of shirt on war patrol, even the collar marks of rank are dispensed with," and that "in a submarine there is no need for the trappings of rank or seniority" (Galantin 1987:53). Galantin had served on multiple submarines during the course of his career and so was speaking from a wide range of experience that can be said was representative of the submarine fleet as a whole.

The attitude of submariners towards a traditional, rank-based social hierarchy was put into words when new recruit Bob Hunt saluted the chief of his boat for the first time. The chief, "Pig" Kelley, told Bob: "I don't know what your rate is, but you can leave it on the gangplank! You are now a member of the *crew* and we all work together, no matter what we are" (Schulz, Shell 2009:23). Eugene Fluckey, captain of the USS *Barb*, described an almost identical situation to the one described by Bob Hunt, using almost identical language. Fluckey was speaking with a submariner who was going to become chief of the boat and he told him that "in submarines we hang our rates on the gangway when we come aboard. It's what you can do that counts with me" (Fluckey 1992:71). And in yet another war memoir, George Grider wrote that, on submarines "there was little formality and a great feeling that we were all on the same team" (Grider 1958:10-11). This statement seems to echo the general attitude of submariners at

the time: everyone played an equally important role in the survival of the crew and everyone on board would do his share of work, no matter what rank he held.

Because of the less than total acceptance of a traditional social hierarchy based on rank, it should not be surprising that submariners did not adhere to traditional dress codes either. In fact, submariners often walked around their submarines shirtless (Galantin 1987:200; McDonald 2008:287; Russell 1995:100; Schulz, Shell 2009:148). Even Dudley "Mush" Morton, the famed submarine skipper of USS *Wahoo,* was reported to habitually walk around the boat in his "skivvies" (Grider 1958:69). In his wartime memoir, George Grider amusingly wrote of his crew aboard the *Pollack* during a special occasion: "they looked rather smart for a submarine crew during the war, which is to say they were all wearing shirts and hats" (Grider 1958:173). This departure from normal regulations may have seemed like a departure from discipline; but in reality, submarine crews were extremely disciplined; they had to be in order to survive. Tasks needed to be accomplished correctly, quickly, efficiently, and there was no room for error on a submarine. In reality, the relaxed dress code was a symptom of the uniform acceptance of a more relaxed style of leadership.

Because submariners did not dwell on rank and title, the style of discipline on a submarine could be more relaxed, and it was. In fact, the memoirs of submarine captains echo this very sentiment. I.J. Galantin wrote: "The conditions of operation…and the unique hazards of submarine duty have generated a system of leadership and discipline that is relaxed and informal but effective" (Galantin 1987:54). And in his memoir, George Grider wrote that he also believed in a more relaxed leadership style. His stated leadership style was to use humor as an aid to discipline (Grider 1958:14).

Before he was promoted to commanding officer, Grider wrote of an occasion that exemplified this type of relaxed, humor-inspired leadership style. A submariner, climbing the ladder up to lookout duty, was wearing darkened glasses and could not see very well in the confines of the submarine. On the way up the ladder, he bumped into who he thought was his fellow lookout. He then "reached for the darkened fanny above him and gave it a strong pinch" (Grider 1958:139). Unfortunately, the "fanny" being pinched belonged to the captain of the submarine, and not a fellow lookout. The captain chose to handle this situation by responding with harsh humor instead of any kind of real rebuke. Grider, a veteran of three different submarines, approved of his captain's actions. He wrote: "The lookout who pinches an officer by accident and brings down a walloping wisecrack on his head instead of a stern rebuke will salute his captain with greater speed and respect the next time they are ashore – and, what is more to the point, will follow him more willingly in a crisis" (Grider 1958:14-15). Grider's experience on multiple submarines and his observance of different leadership styles lends credibility to this statement and demonstrates that submariners responded more to this relaxed, humor-infused style of leadership than they did to stern discipline.

Submariner Humor

The humor of a submariner reflected the group's nature. It was often coarse, blatantly sexual, irreverent and somewhat juvenile, but it could also be dark on occasion. Submariners liked to joke about women, sexual escapades, and farts, but would often tease each other and make jokes about their own deaths as well. Submariners needed the humor to survive. Their living situation was extremely stressful, and even tenuous. They used humor, especially the

darker kind, as a coping mechanism, to deal with the fact that they might not live to see a friendly shore again. Skipper George Grider wrote: "The grim truths of war were not the fuel that kept men going. They didn't relieve the tension; they built it up. The funny things did relieve tension…I knew almost no one in subs whose sense of humor wasn't developed just a little better than it was in other people. We had to have it to survive" (Grider 1958:13-4).

Skipper I.J. Galantin wrote in his memoirs after one of the crew made a joke about his testicles that "coarse good humor, a give and take of bawdy taunts, brought relaxation and comfort" (Galantin 1987:73). The number of jokes found in wartime memoirs that pertain to male genitalia alone is telling (Galantin 1987:32,73; Grider 1958:13 Russell 1995:19-20,130). Coarse, sexually oriented jokes like this were common among submariners. During the last days of a war patrol, torpedoman Dale Russell was talking with a few of his shipmates about the more exciting points of the patrol, when Russell's friend Matt boasted that it had been as boring as the last Australian girl he had "shacked up with." To illustrate his point, Matt told the others that "the second time we had sex she laid there and ate peanuts the whole time" (Russell 1995:62). Everyone within earshot laughed and one submariner spoke up to ask if the Australian girl, who had been described as "not very good looking," had any good qualities. Russell wrote in his memoir that Matt looked surprised to hear the question. Matt answered: "Hell yes, two. She was willing and available" (Russell 1995:62).

Many more of these more sexually oriented jokes survive in cartoon form. Again in his memoir, Skipper I.J. Galantin recalled seeing a particular cartoon taped to the front of a locker. He wrote: "a man and a woman in profile seated facing each other in a bathtub. The caption read,

'…and that's how the new torpedo works'" (Galantin 1987:32). Another example can be found in this cartoon drawn by a submariner on USS *Whale* (Figure 13).

FIGURE 13. Photograph of a cartoon drawn by a submariner aboard USS *Whale.* Used with the permission of the United States Submarine Force/USS *Nautilus* Museum, Groton, CT. (Photo by the author. 2013).

In this cartoon, the whale is drawn to resemble a submarine, and so most likely represents the sailors of USS *Whale* or even the boat itself. The whale is seen speaking with a mermaid, who is carrying a small baby whale. It seems to be implied that the submarine whale is the father, and he is not happy about it. This is the kind of humor that submariners would have enjoyed. Note the sexualization of the mermaid. Whereas traditional mermaids are normally drawn with a fish tail from the waist down, Martini drew his mermaid as mostly human, and only altered her

feet. The reason for this should be obvious; there is an inverse relationship between the attractiveness of mermaids and the percentage of their body that is covered in fish scales, and submariners are young men who go months at a time without seeing women at all.

The humor of a submariner could get decidedly darker, however. In response to certain situations, submariners preferred to laugh at death instead of fearing it openly. Possibly the best example of this type of dark humor is found in George Grider's memoir. While aboard USS *Pollack*, a torpedoman accidentally lodged a torpedo halfway out of the torpedo tube and could not remove it. Grider wrote that the crew took to joking about the fact that it could explode at any second, killing them all. According to Grider, after this incident, it was common to hear a submariner say something to the effect of "Well, it doesn't matter. That damned torpedo's going to go off pretty soon anyhow" (Grider 1958:50). The men on board *Pollack* even took to kneeling by the torpedo in false reverence every day, making a joke of a situation that had the potential to kill every man on board (Grider 1958:14).

Another example of submariners using humor to cope with deadly situations can be found in the memoirs of submarine skipper Edward Beach. After being depth charged over 20 times, Beach and his crew were growing somewhat restless. After the 29th depth charge detonated, one of Beach's officers said about the enemy destroyer, "I hope his sonar isn't pinging on seals." Beach then replied: "Could be - or baby whales" (Beach 1952:50). An example of this type of humor coming from the enlisted men can be found as well. On her first war patrol, USS *Puffer* was in trouble. While submerged in Japanese territory, *Puffer* hit a reef. The crew struggled to free the boat for almost two hours. When the boat finally started to move, the crew grabbed knives from the kitchen and every handgun that was on board, in case they had to fight

off a Japanese boarding party. During this tense situation, *Puffer* crewman Russ Tidd commented that he wanted to make sure that he packed his dress blues in case the boat surfaced near a liberty port (McDonald 2008:60).

Some of the best submariner humor, however, comes in the form of submariners making fun of each other. This was a major recurring theme in shipboard newspapers, where crew members would be made fun of for things they had recently said or done (Galantin 1987:227). No one was safe when it came to shipboard newspapers. In fact, skippers and officers were made fun of mercilessly as well (Grider 1958:11, 134; Peto Press N.D.:2). However, this humor seems to have been good natured (Scuttlebutt 1944:14).

In the *Peto Press* on May 20- 21, 1944, there are a few different examples of officers being made fun of by the crew. For example, in a column written by Bruno the "Night Rider," the writer pokes fun at an officer who, in his words, "still gets up twice a night to shake the dew off." The author continues to write that the officer mentioned resolutely refuses to admit that urinating frequently is a sign of old age. This is comical because the officer in question is most likely still a young man. In fact, he was probably only singled out to be made fun of because of the crew's extreme youth.

The second example is found later in the issue. It is written in loose screenplay format, and is most likely a recreation of a real event. The "play" stars the captain and a few other officers. The captain seems to be overbearing and demanding, while the officers are painted as somewhat incompetent. They manage to send the boat into an uncontrolled dive, from which they barely recover, and they even break the head in the process (Peto Press 1944:9).

In USS *Seal*'s shipboard newspaper, *Scuttlebutt*, there are entire sections devoted to making fun of crew members. This kind of humor is not only amusing, but helpful to the historian or anthropologist in another way as well. It offers a glimpse into the everyday lives of the submariner. For example, on August 25, 1944, there was a section in *Scuttlebutt*, making fun of bearded submariners: "Now that we have sunk our first ship, how many of you guys lurking in ambush are going to shave?? If you are not contemplating shaving, why not build a trellis for those whiskers, then no one can say a thing about not being well groomed" (Scuttlebutt 1944:12). Not only does this piece of information support the argument that submariners made fun of each other often, but that many submariners did in fact grow beards when out on war patrol.

In USS *Peto*'s newspaper, the *Peto Press*, there is also a section dedicated to current events on the boat, which usually amounted to making fun of mistakes made by the officers and the crew. In one section, a sonar man could not figure out why his headphones were not picking up any sound, only to be told by another member of the crew that they were not plugged in (Peto Press N.D.:2).

Chapter 8

Discussion and Conclusions

Discussion

This project has argued that submariners during the Second World War formed an occupational folk group and a unique sub culture within the umbrella of maritime culture. This paper asserted that the main reasons for the formation of this folk group were the isolation and small size of the submarine force, the danger they faced, their common living conditions, and their formative experiences at the New London Submarine School.

After discussing the reasons for the formation of submariner culture, this paper raised the argument that there were four key tenets of submariner culture. The first was the importance placed on the experience of combat. Combat was important to submariners, and they showed this value in their battle flags most of all. The second key tenet was an emotional attachment to their submarines. The author argued that the survival of a submariner was most often linked with the fate of his submarine. If the submarine was destroyed, the submariner statistically did not stand much of a chance. This paper then argued that submariners developed their own unique worldview by rejecting the surface world and embracing the underwater world in their folklore. Submariners even developed their own afterlife, as evidenced by this project's investigation into death and memorialization in the submariner folk group.

Submariners definitely form their own folk group; but throughout this project, frequent similarities between submariners and maritime culture in general were discovered. This is because submariners belong to maritime culture as well. They are members of the maritime folk group and yet have developed into a sub-group within the maritime folk group. The most major similarities between the submariner folk group and the larger maritime culture can be found in the way that submariners deal with death.

In both groups, there are often no bodies to bury when disaster strikes. The majority of submariners who died during the Second World War remained at the bottom of the ocean. Mariners throughout time have suffered the same fate. And when submariners died on board a submarine, they were given a "sailor's burial." It makes sense then, that the submariner folk group and the maritime folk group would have similar memorialization practices. Stewart's (2011) work focuses on mariners during the age of sail, but almost everything in his work written about memorialization can be applied to submariners during the Second World War. The lack of a body to bury no doubt caused grief in family members of both groups, both groups used their memorials as mnemonic devices, and both groups used imagery as a way to demonstrate group values.

Submariners, because of the fact that they worked on the water, were a part of the maritime folk group. However, they developed their own distinct group within the umbrella of maritime culture. The submariner folk group clearly developed its own set of values, beliefs, and traditions.

Future Research

The original scope of this project was much larger than just American submariners in the Second World War. This work is only part of the larger picture. Submariner culture may have flourished in the United States during the Second World War, but its roots are most likely to be found in Germany during the First World War. Germany was the first nation to extensively deploy submarines as raiders of commerce. The parallels between Germany's U-boat fleet during the First World War and the United States' submarine force during the Second World War hint that there may be some benefit of continued research. Germany's U-boats were incredibly successful and yet still suffered a high casualty rate. These conditions would most likely produce a similar culture to that of the United States submariners during the Second World War.

The possibility that submariner culture originated in another country hints at the next topic for further research. Although briefly touched on in this project, there are many aspects of the submariner folk group in the United States that can be seen in other countries as well. For example, battle flags are prevalent on British submarines, while sinking pennants and conning tower art are present on German U-boats. It also makes sense that a culture would not necessarily conform to political boundaries. In fact, it seems logical that the submariner culture in the United States would transcend political boundaries. It would be extremely beneficial if this project was used as a starting point for others to research the similarities and differences between submariners in other countries during the Second World War and beyond. It is the author's opinion that submariner culture did in fact transcend political boundaries to Germany, the United Kingdom, Italy, and even the Soviet Union. It is also the author's assertion that submariner

culture, forged in the crucible of the Second World War, spread throughout the entirety of the developed world after the war.

To support this assertion, one has to look no further than the insignias of submarine services around the world. It is overwhelming how many countries have adopted dolphins as focal points of their insignias. It is important to note, however, that a few countries, Australia included, have actually adopted mammalian dolphins instead of the dolphinfish found on the American version of the Submarine Qualification Insignia. And as a slight side note, many submarine memorials, originally dedicated to American submariners lost during the Second World War, stand today in remembrance of all lost submariners of the world (Figure 12).

Conclusions

Throughout this project, the author has referred to submariners as a folk group. One of the most important factors of a folk group, however, is that they exist beyond any one member (Stewart 2011:17). The scope of this paper has only been the folk group and its existence during the Second World War. This is a short period of time. If submariners during this time period were truly a folk group, there should be some evidence of the group's existence even after the end of the war. And there is. In fact, one of the most noticeable continuations of submariner culture is the continuance of the submarine battle flag.

The continuation of the tradition of the submarine battle flag can be seen as a continuation of the tenets of the experience of combat and even emotional attachment to submarines. One of the first examples of post-war submarine battle flags is USS *Blackfin*. USS *Blackfin* served during the very end of the Second World War, and the crew of *Blackfin* did not

actually design their battle flag until well after the end of the war. This is why this specific flag is so important. The crew of *Blackfin* were all submariners, and it is almost a certainty that some of them were veterans of the Second World War. This flag is evidence of cultural values being passed down to the next generation of submariners. The flag proves that the submariners on board USS *Blackfin* in 1948, when the flag was designed, were an active part of the submariner folk group. In fact, just the fact that these submariners designed a battle flag of their own speaks volumes. When these submariners decided to design a battle flag, likely out of pride for their boat, another major tenet of the folk group, they had more time, and access to more resources, than submariners who designed their battle flags during the war. That being said, the crew of USS *Blackfin* were able to design what they thought to be an ideal submarine battle flag.

This battle flag measures approximately 49.5 inches long and 35.75 inches tall. The flag is blue, with the standard Japanese flags marking vessels sunk by the submarine. There are also hashmarks underneath a submarine, designating war patrols, as well as hash marks under a mine, which possibly designates either minelaying missions or successful navigation of minefields. The centerpiece of this flag, however, is a pin-up girl, reminiscent of the Vargas Girls that are so often seen on the nose of a World War Two era bombers (Figure 14).

FIGURE 14. Photograph of USS *Blackfin*'s battle flag. Photograph taken with the permission of the Submarine Force/USS *Nautilus* Museum. (Photo by the author, 2013).

This pin-up girl is slightly different than one that would be found on a bomber, however. She is not only riding a torpedo, the sexual implications of which were no doubt not lost on the submariners who designed this flag, but she is also dressed as a mermaid. This imagery fits perfectly with submariner folklore and values. The pin-up girl, by herself, was not enough for the submariners. She had to be at least dressed as a mermaid because submariner folklore dictates that the main object of desire for any true submariner would be a mermaid, because a true denizen of the deep deserves another. This is a continuation of the wartime submariners' rejection of the surface world. It is also important to note that the pin-up girl's mermaid clothing was made from a surplus marine jacket that the submarine crew took and soaked in diesel fuel (Finnigan pers. comm.). Diesel fuel, sexually suggestive mermaids, and repurposing others' surplus goods are exactly what submariner culture is about.

The addition of a torpedo is also extremely important. The torpedo was the weapon of the submariner. Submariners depended on the success of their torpedoes with their lives. They lived in close proximity to these torpedoes, slept on the torpedoes, drew and wrote on the torpedoes, cleaned and maintained the torpedoes on a regular basis, and even had nicknames for them. They are a major part of most submariner memorials and it makes sense that the importance of the torpedo in submariner culture would be passed down through its inclusion in this battle flag.

More recently, during the Gulf War, USS *Louisville* became the first submarine to fire cruise missiles during a hostile conflict. The crew of USS *Louisville,* in a continuation of folk group values, created their own battle flag. It is important to note that this flag contains the Submarine Qualification Insignia, as well as a cruise missile over an Iraqi flag. This flag not only shows that the experience of combat is still important to submariners half a century after the beginning of the Second World War, but that the same iconography, namely the qualification insignia, still holds an important place in the new submariner culture.

One related piece of submariner culture that has been passed down into the modern age is the flying of the broom. This custom has since been changed, adapted to fit new needs, but the fact that it remains should be seen as a continuation of the wartime submariner culture. Flying a broom on the return from a war patrol once signaled that the submarine had swept the seas clean of enemy shipping. Modern day submarines, however, lack an enemy to sweep from the seas. However, possibly in a desire to carry on this time-honored tradition, submariners have begun flying a broom on the return from their shakedown cruises (Kennedy 2007).

During the transition from diesel to nuclear powered submarines in the late 1960s to the early 1970s, there was a certain amount of conflict between crews of nuclear submarines and

crews of diesel boats. This amounts to submariners being fiercely loyal to their own boats and the fact that some within the folk group, likely older members, were resisting change within the group. In 1969, Leon Figurido, a submariner aboard the diesel powered USS *Barbel*, designed a pin for *Barbel* submariners to wear. This pin featured a diesel submarine flanked by two mermaids and the letters "DBF." These letters stand for "Diesel Boats Forever." Figurido's design was taken to a factory in Japan. The factory produced the pins for the *Barbel* submariners but kept the design and continued making the pins and selling them to other American submariners

as well. The Diesel Boats Forever pin spread throughout the submarine force, and became an emblem of the diesel boat culture. It is important to note that this pin reflects a few key values of the wartime folk group. The first is that it shows a fierce loyalty and pride for the submariner's submarine. The second is that it includes mermaids as a prominent feature. This is clearly a continuation of the submariner worldview (Meagher N.D.).

The change from diesel power to nuclear power is just one of many changes that submariner culture has endured. Submarines are now larger than ever. Outfitted with increased firepower, some are even given names of capital ships. Their value as fast attack weapons of war has been realized, and the number of submariners needed for submarine fleets worldwide has drastically increased. However, due to a lack of manpower, the submarine fleets of the world have not been able to fill out their rosters. Fewer sailors are volunteering for submarine service, in spite of financial motivation in the form of drastic pay increases. It is a possibility that submarine duty is perceived to be too dangerous to volunteer for, even with the increased pay. As an attempt to increase the pool of prospective submariners, women in many countries are now allowed to serve on submarines. It is a distinct possibility that this recent development will

drastically alter the existing male-dominated submariner culture. No matter how the culture of the submariner changes, living and facing danger beneath the waves has created, and will continue to breed, a unique class of mariner.

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