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They Have Not Yet Begun to Fight: Women in the United States Navy Submarine Fleet

by

Joshua A. Meyer, Major, USA

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Advisor: Dr. Ryan D. Wadle

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Abstract

In 2010, the United States Navy allowed the first women to serve on submarines. Since then, officer and enlisted female Sailors have slowly been integrated into the submarine fleet under the watchful eye of Navy leadership. While success and failure have characterized the last six years of their advancement, important lessons can be learned from U.S. Navy history, recent U.S. Army integration techniques, and other nation's integration of women into traditional all-male submarine forces. The inclusion of women throughout U.S. Naval history has seen challenge but never failure, and the same will apply as the 'Silent Service' adapts to include women in all submariner roles.



On October 25, 1994 during a routine mission, Lieutenant Kara Hultgreen's F-14 Tomcat suffered a compressor stall and lost power while attempting to conduct a carrier deck landing on the USS *Abraham Lincoln*. While responding to the emergency, the aircraft entered an unrecoverable stall forcing Lieutenant Hultgreen and her radar officer to eject during the crash sequence. Kara died during the ejection, becoming the first female combat pilot to die in the line of duty.¹ 22 years later, the debate still rages within political, military, and social circles regarding the place of women in the military and combat. Most recently in December 2015, Secretary of Defense Ashton Carter ordered the military to open all combat jobs to women with no exceptions.² The U.S. Navy, arguably the most traditional of military services, was working toward the successful implementation of women into the submarine service five years before Carter's order. Traditionally an all male organization, the submarine force has taken steps forward, as well as backward, to include female officer and enlisted Sailors in their crews. The way women are viewed by men is a key component to successful integration. The inclusion of women throughout U.S. Naval history has seen challenge but never failure, and the same will apply as the 'Silent Service' adapts to include women in all submariner roles.

The first female Sailors to officially enter the U.S. Navy were the officers of the Navy Nurse Corps in 1908. The Nurse Corps was highly educated for the time and maintained high professional standards.³ Regardless, the struggle to gain permanence and recognition within the male dominated Navy culture persisted for decades. The Women Accepted for Volunteer Emergency Service (WAVES) in 1942 were the next key group of Navy female professionals that helped pave the way for future service. The WAVES relieved men from desk jobs allowing the men to fight. This caused resentment due to women's intrusion in to the male military world.⁴ The WAVES performed excellently in their role during WWII, continued their service

in two more conflicts and were finally disestablished in 1973 to allow the full integration of women into the U.S. Navy. Although women were integrated, full professional equality was not achieved immediately.⁵ Equal benefits were not obtained until 1978 and the combat exclusion was not lifted until 1993 allowing women to serve on combat ships and fly combat aircraft.⁶

By 1995, 374 officers and 2,332 enlisted women were serving on 40 combat ships; 82 combat aviators were in the skies and some had flown sorties over Iraq and Bosnia in 1994-95.⁷ However, women remained barred from submarine service until 2010 when Secretary of Defense Robert Gates notified Congress that the U.S. Navy would allow women to serve on nuclear submarines.⁸ The discussions surrounding female military service in traditional all male units, such as submarines, continue today. The wars in Iraq and Afghanistan saw the integration of women into historically all male combat organizations and can provide key lessons learned as the U.S. Navy continues to integrate women into the submarine fleet.

Army infantry platoons are well disciplined, cohesive, and highly effective combat units consisting of 30-40 male Soldiers. The 10th Mountain Division's platoons were no exception while conducting combat operations in the eastern mountains of Afghanistan in 2006. The platoon assigned to "The Ranch House," a firebase in the Waygul Valley just north of the infamous Korengal Valley, was a combat proven and very tight organization. The all-male platoon consisted of best friends who viewed one another as true brothers in arms willing to lay down their lives for one another.⁹ The platoon leader, who desires to remain anonymous, speaks with intense pride of the platoon when describing its camaraderie and accomplishments. However, when tasked to conduct a Medical Civic Action Program (MEDCAP) a female medic was placed in the platoon to assist doctors and dentists with female Afghan patients. The platoon leader immediately noticed a change in the platoon due to the presence of the female who now

lived with them in the Ranch House's aid station. Best friends argued over who would spend time with her, discipline issues rose, combat effectiveness was lost when Soldiers on patrol had to carry the female medic's rucksack and aid bag at a much slower pace, and during small skirmishes it was feared that Soldiers would protect her prior to doing their job of returning fire.¹⁰ Rather than believe integrating women into combat units was impossible, leaders realized that special selection and training had to occur prior to placing female Soldiers in more intensive combat roles.

Therefore, in 2010, the 4th Brigade Combat Team of the 101st Airborne Division created a Tactical Female Engagement Team (TAC-FET) at the direction of International Security Assistance Force Headquarters (ISAF-HQ) in preparation for its upcoming deployment to the mountains of Afghanistan.¹¹ The female Soldiers selected received additional training in weapons, communication, and medical skills from civilian and active duty subject matter experts.¹² Also, the female Soldiers were properly vetted for physical capability.¹³ This training and well planned preparation allowed a successful integration with combat units while conducting operations in Afghanistan. The TAC-FET was highly successful, received numerous awards, and was eventually viewed by many male infantrymen as fellow Soldiers, not females.¹⁴

Further history for women in the military was made when the first two female Soldiers graduated from the U.S. Army Ranger School in 2015.¹⁵ Two Army officers completed the grueling leadership school that historically was open only to men. Distinctions between sex quickly disappeared throughout the course and Staff Sergeant Michael Calderon noted in an interview "at the end of the day, everyone was a Ranger."¹⁶ The U.S. Navy can learn from the U.S. Army's ability to adapt to change as female Sailors begin to serve onboard nuclear

submarines. However, popular arguments as to why women should not serve on submarines continue to resonate in civilian and military culture.

Cost to modify submarines, fear of disciplinary issues, and potential health concerns and readiness due to pregnancy are historic arguments against females serving on submarines. These issues have been debated since the mid-1990s and although women Sailors have begun limited service in the submarine fleet, these arguments continue today.

The first 24 female naval officers joined the *Ohio*-class submarine fleet in 2011.¹⁷ *Ohio*-class submarines are huge; 560 feet long and roughly the size of a *Ticonderoga*-class cruiser. They carry Trident nuclear missiles in 24 tubes and are one-third of the United States' nuclear triad.¹⁸ Due to their size, *Ohio*-class submarines were ideal for the initial implementation of female submariners. The *Ohio*-class has a compliment of 163 Sailors split into two crews.¹⁹ While larger than attack submarines, modifications were still required to accommodate female crewmembers. Critics argued that the cost of these modifications (\$3-5 million) was too expensive and the removal of operational equipment may jeopardize mission readiness.²⁰ While \$3-5 million is expensive, it is important to note that future replacements for the *Ohio*-class submarines are estimated to cost approximately \$7 billion each.²¹ Smaller vessels such as the *Virginia*-class attack submarines with only 113 bunks for 134 crew create further concerns for privacy and discipline since hot-bunking is required.

Perhaps one of the most popular arguments, not just against females on submarines but for females in military service in general, is the opinion that their presence will lead to a breakdown in discipline among men. The small environment, continuous close contact, and potential for months at sea could lead to fraternization. In 1999 Vice Admiral H.G. Chiles, the commander of submarines forces in the Atlantic Fleet said that the “inherent loneliness during

submarine duty could lead to sexual problems aboard ship and marital problems at home.”²²

Some argue that wives do not trust women at sea with their husbands and continued interaction in confined spaces would degrade morale and readiness. A commander and his female second-in-command were both relieved in 2010 from the minesweeper USS *Chief* when it was determined that both officers had violated the Navy’s fraternization policy by engaging in an “unduly familiar relationship.”²³ Earlier in 2009, the commanding officer and senior enlisted sailor aboard the destroyer USS *James E. Williams* were relieved following a massive fraternization scandal involving the ship’s crew during a recent deployment to the Mediterranean.²⁴ The events received national attention the same time the Navy announced the future service of women in the submarine fleet, stirring the coals yet again regarding the impact female Sailors are perceived to have on good order and discipline amongst crews.

Still, the most scientific argument against women in the submarine fleet may be the immediate health concerns resulting from pregnancy. Current Navy policy states that female Sailors must notify their chain of command within two weeks of receiving confirmation of pregnancy. Servicewomen are then allowed to remain on board while the ship is in port or during short underway periods until the 20th week of the pregnancy. If the ship is underway or deployed the servicewoman must be transferred off the ship as soon as possible. Furthermore, if in port or during short underway, the servicewoman must be able to be evacuated in the event of a medical emergency to a capable treatment facility within six hours.²⁵ Service on submarines presents a unique complication given current Navy policy. Rear Admiral Hugh Scott (Medical Corps) sent a detailed letter to Navy and government officials in 2010 outlining specific medical concerns for females onboard submarines. Specifically, he noted potential medical complications such as rupturing or hemorrhaging that submarine medical facilities are ill

equipped to handle, and that the nature of submarine missions does not allow for timely emergency mid-ocean evacuations. Also, the enclosed submarine environment prolongs exposure to chemical contaminants in the constantly recirculated air posing significant risks to the normal development of an unborn child.²⁶ A 1998 study found that 4 in 10 pregnancies among enlisted Sailors afloat ended in miscarriage or abortion.²⁷ These numbers could be much higher amongst female submariners given the described conditions aboard a nuclear submarine. Although medical concerns remain highly relevant, the overall concern of pregnancy across the armed forces as a whole is the impact on mission readiness.

Serving on a submarine in any capacity requires a large amount of technical skill and training that is not easily replaced with short notice. Therefore, if a female crewmember is removed due to an unexpected pregnancy she is lost to the command for up to 20 months creating a void in expertise and a reduction in the capability of the crew.²⁸ Unintended pregnancies remain a concern for commanders. In 2009, a *Navy Times* article noted that there was a 50% increase in operational deferments due to pregnancy from June 2006 to August 2008.²⁹ These deferments can have a significant impact on the combat capability of any ship and the Navy continues to educate its Sailors on the prevention of unintended pregnancies. The deferment of highly technically proficient Sailors due to pregnancy and the resulting time required to provide replacement Sailors is a continuous concern of senior Navy officials.

The arguments against females in the submarine service are scientific in nature, or focused on good order and discipline – concerns as old as the Navy itself. Despite opinions or even the relevant medical concerns, the U.S. Navy is proceeding with the integration of women into the entire submarine fleet. The Navy must now positively integrate women into its highly

professional global force. Historical context, lessons learned from other navies, and the quality of today's Navy present compelling arguments for the success of women in submarines.

History may be repeating itself. When female Sailors were first authorized to serve on ships and conduct aviation duties in 1978 many similar arguments arose. Senior naval officers, to include a former WAVES commander, predicted a loss to combat effectiveness, rise in sexual misconduct, increase in pregnancy rates, and overall lack of acceptance by male shipmates.³⁰ When a quality all volunteer force was required to project a 600-ship navy, the U.S. Navy doubled its women in service from 29,981 to 57,849 in 1980. These women offset the decline in eligible men for naval service while maintaining higher standards than their male equivalents. Almost all female Sailors had high school diplomas and many scored in the upper range of the mental examinations.³¹ As Navy women struggled for permanence through the 1980s, they were still excluded from combat ships or aircraft. It was determined by the Department of Defense in 1988 that female Sailors would remain barred from jobs carrying "risks of exposure to direct combat, hostile fire, or capture."³² Service on submarines was still not authorized for Navy women.

Good order and discipline among the Navy's men did become a problem in the 1980s. Particularly, harassment and fraternization were of great concern. By 1988, 73 percent of Navy women had experienced some form of unwanted or uninvited sexual talk or behavior.³³ The Defense Advisory Committee on Women in the Services (DACOWITS) conducted inspections, issued reports, and triggered congressional hearings in regards to harassment but the issues remained unsolved. Fraternization was a major concern to good order and discipline but the Navy did not have a formal, written policy, prohibiting the practice.³⁴ Harassment and fraternization persisted in the Navy well into the 1990s. However, roughly 3,700 Navy women

participated in the 1991 Gulf War; proving their capability under fire and receiving specific praise for their contributions from Secretary of Defense Richard Cheney. Following the Gulf War, DACOWITS fought for the end of restrictions to Navy women in combat. Subsequently in 1992 and 1993 combat ships and combat aircraft were made open to women and previous Navy policies restricting women from combat were repealed.³⁵ Still, despite great struggles and success, women Sailors were not permitted to serve on board submarines.

Authorizing women to serve on combat ships and aircraft opened many of the jobs remaining in the Navy. Harassment was still of great concern and further sexual harassment training was ordered after scandals such as Tailhook in 1991, admirals being relieved for inappropriate relationships, and instructors harassing trainees. In a survey from 1988 to 1995 sexual harassment reportedly fell from 66 percent to 53 percent of women in the Navy.³⁶ Recently, the Fiscal Year 2013 Department of Defense Report on Substantiated Incidents of Sexual Harassment in the Armed Forces cited 180 formal complaints by Navy personnel of which 103 were substantiated, and 49 informal complaints of which 24 were substantiated.³⁷ According to a 2013 demographics report, 55,983 women were in naval service. This is approximately 17 percent of the naval force.³⁸ 90.5 percent of the complainants were female resulting in a reported harassment rate of less than 1 percent. Investigatory measures have improved across the Navy and armed forces as well as the education of service members and the chain of command. These positive gains have been consolidated by the Navy and are key to the plan to integrate female submariners into the submarine fleet. Also, lessons can be learned from other nation's navies who integrated women into their submarine fleets ahead of the U.S. Navy.

Norway, Sweden, Australian, and Great Britain all authorize women to serve in their submarine forces. While these nations have much smaller navies than the United States, their

abilities to successfully include women in the historically male submarine service is a positive indicator for future success in the U.S. Navy.

Nations such as Norway and Sweden have been incorporating females into their submarines since the mid-1980s.³⁹ Sweden has had female sailors serving on their submarines for more than 25 years, and The Royal Norwegian Navy has already had a female, Solveig Krey, command a submarine. Also, Germany and Canada allowed women on their submarines in 2001.⁴⁰ The primary difference between the United States and these other countries is the duration of submarine patrols. While these smaller countries conduct patrols less than 60 days, the United States was the first to incorporate female Sailors onto their nuclear submarines which can remain at sea for up to six months. The duration of these deployments add to the arguments previously mentioned, but it is believed that due to the professionalism of today's U.S. Navy and the successful integration of female submariners to date, that these concerns are nullified.

An underlying explanation for the early integration of female submariners in Norwegian and Swedish submarines may be the significant difference in rules and regulations governing harassment and adultery. As of 1999 adultery was not considered an offense in European militaries and there was no definition for harassment. Furthermore, there was no restriction on sexual activity outside one's chain of command.⁴¹ Norwegian and Swedish militaries simply did not view the inclusion of women and the resulting relationships, or actions, as a threat to good order and discipline. Infractions were dealt with individually or administratively, rather than by court-martial.⁴² Sexual differences are not as taboo in European countries as they are in the United States. This dissimilarity between cultures may be a key factor for the earlier integration of women by Norway and Sweden.

In 1998, the Australian Navy allowed 10 women sailors and one officer to begin training on their *Collins*-class submarine.⁴³ *Collins*-class submarines are diesel-electric and designed specifically for coastal patrol. Six were built between 1996 and 2001 and they carry a crew of 40 submariners.⁴⁴ Petty Officer Tracey Smalls of the Royal Australian Navy Submarine Force offers a personal account of her service aboard *Collins*-class submarines. She describes her experiences with much joy and satisfaction. She notes in 1999 that of the 40 crew, six are female with dedicated bunking alleviating any requirement to hot-bunk like U.S. attack submarines, but limited the number of women onboard to only six. The mess and wardroom are integrated and showers are limited. Not once does she mention issues with male crewmembers but rather writes of her experiences on watch and of her daily interactions with shipmates.⁴⁵ In June 2011, Australian Minister for Defense, Science, and Personnel William Snowden announced that male and female accommodations would be shared onboard the submarines to allow for more women to serve in navy submarines.⁴⁶ This step forward proves the Australian Navy is beginning to no longer see male or female, but rather submariner or shipmate.

Likewise, Great Britain's Royal Navy just recently opened the submarine service to female naval officers resulting in great success. Great Britain's Defense Secretary Philip Hammond lifted the ban preventing women from serving on submarines in 2011. Three years later, three female officers completed specialized training and testing on board the HMS *Vigilant*, a *Vanguard*-class ballistic missile submarine, earning their Dolphins – the coveted uniform devise signifying submarine qualification.⁴⁷ *Vanguard*-class submarines are slightly smaller than the U.S. Navy *Ohio*-class and carry a compliment of 135 submariners organized into two crews.⁴⁸ These submarines also carry Trident missiles and are key to the United States/Great Britain nuclear alliance. The three officers completed training with extremely high marks and

praise from the commander. Furthermore, they integrated seamlessly with the traditional all male crew becoming integral members of this ship's team.

When the U.S. Navy changed the policy prohibiting women to serve on submarines in April of 2010, the *Ohio*-class submarine was the obvious choice to facilitate the initial integration. The size and limited number of modifications required allowed for a more rapid implementation of policy and by October 2013, 43 women were serving on board the *Ohios*. A year earlier saw the first female officers fully qualified in submarine duties after the three officers completed a full strategic deterrent patrol and successfully qualified as Officer of the Deck and Engineering Officer of the Watch, performed damage control functions, and demonstrated satisfactory qualities of leadership. Lieutenants Junior Grade Marquette Leveque, Amber Cowan, and Jennifer Noonan qualified on board the USS *Maine* and USS *Wyoming* and become the first female unrestricted line officers to earn the Dolphin. They are three of 24 women; 17 line officers and seven supply officers who are assigned to four different *Ohio*-class submarines.⁴⁹ Lieutenant Rebecca Dremann, a female submarine officer interviewed in a 2012 *Stars and Stripes* article noted that there was not much difference between submarine service and serving on an amphibious transport ship with just five female officers, 300 male Sailors, and at times up to 1,200 Marines. The small quarters were of no concern and she noted that the initial awkwardness went away very quickly.⁵⁰ These early successes set the conditions for the Navy to announce in 2013 that women would be integrated into the crews of the *Virginia*-class attack submarines during Fiscal Year 2016.⁵¹

In January 2016, the first female officer reported to the *Virginia*-class submarine, USS *Minnesota*. The USS *Minnesota* has smaller quarters than *Ohio*-class submarines, carries cruise missiles, and is designed to conduct surveillance, seek out and destroy other submarines, and

carry special operations forces.⁵² The Navy plans to incorporate additional officers into *Virginia*-class submarines as well as enlisted Sailors by 2020 and plans for women to make up 20 percent of enlisted crews on *Ohio*-class submarines by 2020. The integration and success of women on submarines was on course until November 2014 when the Navy initiated an investigation into the filming of female officers while showering on board the USS *Wyoming*.⁵³

The female officers were some of the first to enter the submarine fleet and were secretly recorded while undressing and showering. The videos were then passed around for a period of 10 months, ending in November 2014. Of the 11 suspects, seven have been charged and six have faced court-martial. All four female officers testified at the trial and all of them expressed their loss of faith in their crewmembers. However, the Navy recognizes the significance of this incident. As a result, several of the Sailors responsible for videotaping and distributing the footage were sentenced to months in the brig, received reduction in pay, as well as a bad conduct discharges.⁵⁴ The seriousness in which the Navy addressed this incident is a complete reversal from the overlooked incidents or dismissed charges during the 1990s when women were undergoing similar harassment onboard ships. While still a major incident that revitalizes previous discussions about women's future service in the submarine fleet, the U.S. Navy responded swiftly and appropriately during the course of the investigation. The significance placed on training both officers and enlisted in the submarine fleet will hopefully limit the likelihood of similar events in the future and create the professional submarine service that the U.S. Navy strives to uphold.

Submarine training is described as one of the most intense programs that the U.S. Navy has to offer. For officers, the training pipeline can take as long as 18 months before an officer reports to their first submarine. Upon graduation from college, officers will attend a 12-week

officer candidate school, followed by a 24-week graduate-level course focused on science and mathematics. Then, hopeful submarine officers will attend Nuclear Power Training Unit (NPTU) for 26 weeks. Following NPTU is the 12-week Submarine Officer Basic Course finally followed by an assignment as a Division Officer onboard a submarine. Division Officers manage highly experienced enlisted personnel and work toward obtaining their official submarine qualification.⁵⁵

Enlisted training spans almost the same timeframe as officer training. Following a 7-9 week recruit training, enlisted Sailors attend “A” schools for Machinist’s Mate, Electrician’s Mate, or Electronics Mate. Following their “A” schooling, enlisted Sailors attend the six month Naval Nuclear Power School followed by an additional six months at the Nuclear Power Training Unit. This intense educational program prepares enlisted Sailors for service in any of the U.S. Navy’s nuclear powered submarines.⁵⁶

The Navy Supply Corps also trains officers and enlisted Sailors for submarine service. Supply officers have been integrated into the *Ohio*-class submarines since 2011. Once selected for the submarine program, the supply Sailors attend basic submarine school in Groton, CT prior to their assignment onto a submarine. Enlisted female supply Sailors recently entered the pipeline for submarine service in 2015 and are expecting to be fully integrated across the submarine fleet by 2020.⁵⁷

With female Sailors now incorporated into these intense training programs, leadership can be confident that the best Sailors will graduate and serve together professionally in the future. Submarine service requires technically skilled Sailors, and women have proven themselves capable of filling those roles. Rear Admiral Barry Bruner noted in 2010 that over the past 40 years the percentage of men in the Navy earning technical degrees has dropped from 70 percent

to 25 percent. Meanwhile, the number of women in the Navy earning technical degrees has risen. Adm. Bruner also mentioned that more women are earning technical degrees than men, and the Navy must open the talent pool to recruit the best for submarine service.⁵⁸ Therefore an increasing opportunity exists for technically skilled female officers and enlisted to join the Navy and pursue a career in the submarine fleet.

Technology has re-defined the battlefield. While the primacy of combat may always reside in bloody hand-to-hand engagements, the battlefields of tomorrow will overwhelmingly be fought with increasing technology. Female Navy officers and enlisted have shown incredible talents and made astonishing strides paralleling the technology-driven changes the U.S. Navy has undergone in the last three decades. In just over the 20 years since the combat ban was removed, women in the Navy have captained combat ships, flown in space, and completed thousands of combat sorties over the skies of Iraq, Afghanistan, and Syria. The intelligence and professionalism displayed by women in the U.S. Navy throughout history further enforces the argument that women are here to stay in submarines. While political and military experts continue to debate the roles of women in submarines and other historically male combat positions, female submariners will continue making greater strides in their overall integration into the submarine fleet.

Arguments against females serving in submarines will continue to focus on cost, discipline concerns, and potential risks to health and readiness. The U.S. Navy's ability to counter these arguments lies in its progressive history, recent successes with women in the submarine fleet, and the ability to reduce and judiciously reprimand any instances of indiscipline. Furthermore, the integration of female officers and enlisted Sailors in the submarine education pipeline provides months of exposure to future male shipmates, allowing potential barriers to be

broken down and bonds based on professionalism and respect to form before conducting duties onboard a submarine. The goal remains that Sailors see one another as shipmates and not as male or female. While this endstate has been challenging based on mentioned history, the Navy continues to make professional advances that further the permanence of female Sailors in their combat forces.

The Navy must continue to walk backward into the future. Remaining mindful of a rich and capable history involving women in the service, the submarine fleet will become one of the last frontiers that women in the Navy must conquer. The U.S. Navy has capitalized on lessons learned from the Army in the Korengal Valley of Afghanistan, its allied navies, and from the history of women in U.S. Navy and recent submarine service. Tomorrow's Navy will face the same challenges, but never failure, as women advance further into the Silent Service.

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