

A Sailor's Life in the New Steel Navy

Home Page

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At the dawn of the 20th century, the United States Navy was in the midst of a revolutionary technological transformation. The obsolete wooden sailing ships of the post-Civil War Navy, with their underpowered auxiliary steam engines, were swept away, and replaced by steel-hulled warships with powerful steam engines. This New Steel Navy was the first step in the long process that would eventually lead the United States Navy to a position of world dominance.

This website examines the lives of the men who made that transformation possible – the officers and enlisted sailors of the Navy. They lived a life that was rugged and frequently dangerous, a life that was transformed by the new technologies of the ships they served on. They fought battles at sea, and even on land. They existed in a physically claustrophobic, yet socially divided world that adhered to naval traditions both old and new. They endured these hardships, and enjoyed brief moments of fun whenever possible. Pay a visit to an often overlooked moment in time, and get to know the sailors of the New Steel Navy.

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Admiral Dewey Footage: "Admiral Dewey receiving the Washington and New York committees," September 28, 1899. United States: Edison Manufacturing Co., 1899. From Library of Congress, <http://lcweb2.loc.gov/cgi-bin/query/r?ammem/papr:@filreq%28@field%28NUMBER+@band%28sawmp+1449%29%29+@field%28COLLID+spanam%29%29> (Accessed April 27, 2009).

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Drill Footage: "Gun drill by naval cadets at Newport Training School," ca. September to November 1900, United States: Edison Manufacturing Co., 1900. From Library of Congress, <http://lcweb2.loc.gov/cgi-bin/query/r?ammem/papr:@filreq%28@field%28NUMBER+@band%28edmp+0979%29%29+@field%28COLLID+edison%29%29> (Accessed April 27, 2009).

The Story of the New Steel Navy

A Navy in Decline

In the years following the Civil War, the United States Navy fell into decline. That bloody conflict had seen stunning technical advances in naval design, but the nation was too exhausted from war, and too pre-occupied by Reconstruction and Westward expansion, to spend much money on naval technology. While other nations around the world continued to experiment with iron and steel hulled armored ships, and improved steam engine technology, the once powerful U.S. Navy was content with the undemanding mission of showing the flag in foreign ports. Very few new ships were constructed, and the soon antiquated Civil War fleet of gunboats and ironclads was held in reserve. By the 1880's, the United States Navy was outclassed by numerous other navies around the world. This cover cartoon from an 1882 edition of the newspaper "The Judge" mocks the relative size of the United States Navy in comparison to Britain's Royal Navy. On the side of Uncle Sam's raft, multi-million dollar patches can be seen, a statement on corruption in government during the period. Click on the image for additional information, and to see the full newspaper cover.

First Awkward Steps Towards Modernization

It was not until the United States Navy had fallen dangerously behind the other nations of the world that attention turned to modernization. Secretary of the Navy William Hunt wrote in 1881 that:

[t]he condition of the Navy imperatively demands the prompt and earnest attention of Congress. Unless some action be had in its behalf it must soon dwindle into insignificance.¹

In 1883, legislation was at last passed providing for the construction of new steel warships. Known as the "ABCD Ships," they were to be named Atlanta, Boston, Chicago, and Dolphin.² These new ships – the first of which was commissioned in 1886 – were hybrids of old and new technology. They featured hulls constructed of steel, and relatively powerful steam engines, but were also capable of operating under sail. Some officers of this period were skeptical about coal power. They felt it was dirty and unreliable, and more importantly that it was too expensive. They also felt that it diminished the teamwork built through manning a rigged sailing ship. This watercolor painting shows several of the ABCD ships at sea under sail. The masts and sails aboard these cruisers were eventually removed, giving way to their powered steam engines. By the 1890's, the United States Navy had constructed a capable fleet of steel warships. Soon enough, the desire to retain sails on these steel ships was gone, and the Navy fully committed to a future with steam power.

Victory at Sea over Spain

¹ John R. Alden. *The American Steel Navy*. Annapolis, MD: Naval Institute Press, 1989: 0.

² Ibid: 13.

The Navy's modernization program was crucial to another enterprise — the overseas expansion of American territorial possessions. With most of the “new” regions of the world claimed and colonized by this point, world powers were desperately trying to take hold of what remained. Despite the dominant position of the British Empire, and previous hostilities between the nations, the United States found a new enemy — Spain. By 1898, Spanish crackdowns on Cuban revolutionaries had led to sympathetic feelings by Americans. The battleship USS Maine was sent to Havana to secure American interests. On the evening of February 15, 1898, while anchored in Havana's harbor, she exploded. Nearly 260 sailors were killed, and the American media immediately blamed Spanish treachery.³ In late April, war broke out in the Caribbean and the Pacific. Such a far-flung conflict across the seas required a powerful navy, and the new Steel Navy did not disappoint. Two naval battles, at Manila Bay and Santiago de Cuba, produced stunning American victories. Hundreds of Spanish sailors were killed, and all of their ships were sunk, grounded, or captured. The Americans had only one sailor killed between the two battles. This painting of the Battle of Manila Bay depicts the fighting from the deck of the cruiser USS Olympia, flagship of future Admiral of the Navy George Dewey. Dewey became a household name for leading the epic American victory at Manila. His famous quote “[y]ou may fire when you are ready, Gridley” became a symbol of the war.⁴

Roosevelt's Navy

The stunning victory over Spain helped establish a new American overseas Empire. The Navy's role in protecting this empire was assured, as was its place on the front pages of the American media. Naval construction, technology, and achievements were front page news during this period. America was at last taking her place among the great nations of the world, and the Navy was the tangible proof. One man, more than any other, made his imprint on the Navy during this period — Theodore Roosevelt. Early in his life, he published definitive volumes on naval history. While serving as Undersecretary of the Navy, he had authorized — without permission — important preparations for Admiral Dewey's famous battle at Manila, days before war had even been declared. As president, he threw himself into the daily affairs of the Navy. He pushed for aggressive construction programs, and went through six Secretaries of the Navy during his tenure in president. He is seen here addressing the crew of the battleship USS Connecticut, during his final week in office. The occasion — the return of the Great White Fleet from its circumnavigation of the globe.

The Great White Fleet

At the dawn of the 20th century, naval power was the ultimate expression of national pride. Perhaps the single greatest expression of American naval power during this period was the world cruise of the Great White Fleet. Authorized by President Roosevelt, against the wishes of Congress, 16 battleships of the United States Navy, led by their flagship, the USS Connecticut, spent over a year circling the globe. In addition to its massive public relations value, it served the important purpose of allowing the fleet to

³ Ibid: 32.

⁴ Jim Leeke. *Manila and Santiago: The New Steel Navy in the Spanish-American War*. Annapolis, MD: Naval Institute Press, 2009: 65.

train as a cohesive unit on extended operations at sea. As seen in this photo, they departed Hampton Roads on December 16, 1907, past an exuberant Roosevelt on his presidential yacht, the USS Mayflower. As they made their way south around South America, enormous crowds gathered to welcome the visually striking white and buff painted ships of the American fleet. Soon, other port cities were clamoring for a stop. Over the next year, the Great White Fleet made its way through Asia, the Middle East, and the Mediterranean. It arrived home at Hampton Roads on Washington's Birthday 1909, where Roosevelt met them with great fanfare. They had steamed nearly 45,000 miles, and visited 6 continents.⁵ American naval prestige was soaring.

A World Naval Arms Race

The Great White Fleet was a magnificent public relations coup, but it also marked the end of an era. The proud white American battleships, only a few years old, were already obsolete. The world naval arms race shifted into high gear with the launch of Britain's HMS Dreadnought in 1906. This new warship was a stunning advance in naval technology. Her main feature was the implementation of main guns of a single caliber, as opposed to the mixed caliber used on previous classes of warships. This "all big gun" concept allowed for gunnery that was both more efficient at longer ranges, and more powerful. HMS Dreadnought also featured new steam turbine propulsion, making her exceptionally fast. Going forward, new battleships were referred to as "dreadnoughts." But while Britain was the first to launch a dreadnought, other nations were already hard at work on their own versions. The United States Navy launched the first of its South Carolina class dreadnoughts, the USS Michigan (seen here) in 1908. Nations across the world — Britain, Germany, France, Japan, America — continued to build new dreadnoughts at a terrifying pace for the next few years. Arms limitation talks tried to mitigate the situation, but they could not prevent the outbreak of war in 1914.

Onwards to the World Wars

The foundation laid by Teddy Roosevelt and the forward thinking naval leaders of the United States Navy paid great dividends in what came to be known as "The American Century." The Navy played an important role during World War I, and rose to world dominance during World War II. In this photo taken during that war, a seemingly endless Navy fleet, featuring aircraft carriers and battleships, fades off into the horizon. Well into the 21st century, the United States Navy has maintained its position as the dominant world power.

⁵ James R. Reckner. *Teddy Roosevelt's Great White Fleet*. Annapolis, MD: Naval Institute Press, 1988: 162.

Two Worlds at Sea: The Daily Lives of Officers and Enlisted Sailors

The crew of a warship must function as a team, with a precision gained through training and intense drills. This photo of the crew of the battleship USS Oregon in 1905 shows just one of the many groups of men that manned Navy warships during this period. Though this photograph portrays what is seemingly a single, unified crew, subtle hints of division can be seen. For example, the officers are seated on benches in the front row, while the enlisted sailors stand crowded around on deck, with one even standing on the shoulders of another, hanging on to a pole.

Life at sea was constructed around a series of complex hierarchies. The integration of a crew aboard ship went only so far as duty required. Military hierarchy created a huge gulf between officers and enlisted men, establishing two distinct worlds aboard a ship. Officers and enlisted sailors worked together closely, but they ate and slept separately, avoided fraternization, and even had different levels of hygiene available to them. Even within these two worlds, further divisions occurred. Chief Petty Officers — the senior enlisted men, a rating established in 1893 — were generally afforded separate living and eating spaces, and distinctly different uniforms. And while all officers enjoyed better living conditions than enlisted sailors, senior officers enjoyed a superior level of comfort and privacy to junior officers.

This section of the site will explore the differences between the two worlds of men aboard Navy warships. Photographs are presented as visual evidence of the differences in the lives of officers and enlisted sailors. Clicking on photographs will open a high resolution version of the image. Clicking on captions below the photograph will open up an informational page with key facts about the image.

Berthing: Officer vs. Enlisted

Life at sea is a cramped existence, mostly devoid of privacy or personal space. In some cases, life aboard warships of the New Steel Navy was worse than it had been in the time of wooden ships. New engine technology put off tremendous heat, and ventilation equipment had not yet been perfected. Additionally, ship designers struggled to fit all of this new equipment aboard warships which needed to achieve high speeds, carry tremendous firepower, and still retain seagoing agility. In this battle for space, sailors were often on the losing end. On this page, the stark contrast between officer and enlisted sleeping areas will be presented.

The two photos above give a general sense of the living area inhabited by sailors of the New Steel Navy. At left is "Officers' Country" aboard the cruiser USS Olympia, photographed in 1898. This private space — off limits to enlisted sailors — features comfortable lounge chairs, and cushioned seating surrounding a turret support. Lining the wood paneled walls are private compartments for each officer. The entryway to one of these compartments can be seen open at right. At the far end, light can be seen streaming in from an elaborate wooden skylight. The photo on the right, in contrast to the comfortable setting in Officers' Country, is the berth deck of the cruiser USS Boston, photographed in 1888. It is a cluttered, multi-purpose space. Racks for storage line the walls. At the far end, a table is set for a meal. Sailors in this space would sling hammocks from hooks, which can be seen on the overhead beam. Note how narrowly spaced these hooks are.

Within berthing spaces, officers and enlisted sailors had entirely different types of bedding. The photo at left shows the high end of the spectrum — the Admiral's stateroom aboard the USS Olympia. This spacious room features a fixed bed with a mattress. The smaller officer compartments aboard the ship also had beds with mattresses. In contrast, enlisted sailors primarily slept in hammocks slung from hooks. An example of this can be seen in the photo on the right, aboard the cruiser USS Brooklyn. Crowded conditions on the berth deck, combined with inadequate ventilation, often rendered the air hot, humid, and foul-smelling.

While the officers and enlisted sailors of the New Steel Navy slept in entirely different worlds, they endured one shared misery — heat. The new warships of the era, constructed of steel, and often with inadequate ventilation, could get oppressively hot, and the air uncomfortably fouled. This problem was exacerbated on ships stationed in the tropics, as the American overseas empire expanded. At times, the entire ship's company would flee their berthing spaces, and sleep out on deck. This photo of sailors on deck of the cruiser USS Brooklyn, taken in the late 1890's, gives a sense of these temporary arrangements. They have slung hammocks from any spot they can. In addition to the sailors lounging in the center of the photo, note that one sailor swings from a higher perch, at left.

Mess: Officer vs. Enlisted

As with berthing, officers and enlisted sailors took their meals separately. Officers put up money for their food, which was purchased and prepared by stewards. Enlisted fare aboard ship during this period was an inconsistent affair. The Navy provided a portion of the sailor's diet, but it was generally not terribly appetizing. Sailor Frederick Wilson wrote in his diary in 1899:

The spuds were black as tar when broken open, and the coffee was no coffee at all as far as taste went. But the meat!! Salt horse of Revolutionary birth, and the vintage 1776. It made its presence known by its aroma. Thought I was in a soap factory or fertilizer place. It looked dubious last evening. I saw several cooks taking theirs to the galley on strings. Looked for all the world as if they were going to feed an alligator or lion, or bait a shark hook. It was green in places. Yes, this is the modern navy with its old 1812 ration.⁶

Chief Petty Officers had better food than recruits, who often went hungry. During this transformative period, the Navy eventually upgraded ships with refrigerators, and improved its logistics infrastructure to provide fresh food to sailors at sea.

Officers and enlisted sailors took their meals in separate spaces. Officers enjoyed the privacy of the wardroom, an area off-limits to enlisted sailors. At left is the wardroom of the cruiser USS Brooklyn. Officers sit around a table complete with tablecloth and nice dishware. Stewards — usually African-Americans or foreigners — stand at the ready. Enlisted sailors ate their meals on the berth deck where they slept, or on tables on the main deck. They used portable tables and benches that could be stowed when not in use. At right, enlisted sailors aboard the gunboat USS Elcano eat a meal. They are crowded onto benches, eating at a small table wedged between equipment on deck.

The two groups of men aboard ship used separate dishes and silverware for their meals. At right, sailors aboard the cruiser USS Olympia sit for a meal, with worn dishes and bowls on the table before them. Note that their table is suspended from ropes, and that one sailor on the left is sitting on the deck for his meal. Officers, on the other hand, had fine silver and china available for their meals. At left, Marines guard the wardroom silver service of the battleship USS Kansas, which had been donated by the ship's namesake state.

Preparation of food was handled separately for officers and enlisted sailors. Officers relied on the service of stewards, who cooked meals, served them, and cleaned up afterward. The photo at left shows the wardroom pantry aboard the cruiser USS Brooklyn. A young African-American boy in formal attire serves as a steward. The pantry is lined with fine dishware. Fresh fruit, jarred foods, and even champagne are at the ready. Enlisted sailors ate meals prepared by men selected from their ranks to serve as berth deck cooks. The enlisted sailors would be split into a number of separate messes aboard ship, each with its own cooks. These cooks went ashore with ration money (the Navy allocated most of

⁶ James R. Reckner, ed. *A Sailor's Log: Water-Tender Frederick T. Wilson, USN, on Asiatic Station, 1899-1901*. Kent, OH: The Kent State University Press, 2004: 46.

the money for this) while in port to purchase food. Sometimes — being ashore so rarely — they would succumb to temptation, and lose the money in a drunken romp, leaving the men to subsist solely on unpleasant preserved goods until the next port call. At right, berth deck cooks aboard the USS Ossipee pose for a photo. This photo gives a good indication of Navy fare when this photo was taken, in 1887. Canned meats can be seen, along with bread, potatoes, and grilled sausage. Specific food items were held aside for officers, as a complaint from Frederick Wilson in 1900 attests to. “The caterer asked about some pickles for the mess, but was told they were reserved for the officers. Everything is reserved for the officers, especially if it happens to be a prime article.” ⁷

www.steelnavy.org

⁷ Ibid: 168.

Hygiene: Officer vs. Enlisted

Life at sea was hard, and sailors worked up a sweat, and became covered with filth. A persistent problem with cleanliness during this period was the fine layer of coal dust that seemed to spread throughout the ship. Despite doing all of the physical labor, enlisted sailors were denied the use of modern hygiene facilities provided for officers. Sailor Frederick Wilson wrote in 1900 that:

Here on this ship they won't allow us enough water to wash in. We have to get water to wash in any old place we can, from the feed pump while at sea, and from reserve tanks and boilers whilst in port. Of course, that is stealing and subjects you to punishment if caught, but we have got to get water, and will get it by hook or crook.⁸

Simple acts such as washing and shaving in the New Steel Navy were accomplished in separate parts of the ships by officers and enlisted sailors. At left is a private washroom aboard the cruiser USS Olympia, available only to officers. It features a sink with hot and cold faucets, electric lighting, and a wooden cabinet. Aboard the same ship, at right, an enlisted sailor shaves on deck, using a bucket (likely full of seawater) and a hand mirror.

Full washings were essential to cleanliness aboard these coal-powered, sometimes sweltering ships. Aboard many ships, hot and cold running water meant hot showers for officers. At left, a shower aboard the cruiser USS Olympia, available only to officers. This shower facility has a built in medicine cabinet with a mirror. Enlisted sailors had no such luxury. At right, sailors aboard an unknown ship in 1913 wash on deck, using buckets of water, likely full of seawater. To get an idea of the wide variety of uses for buckets aboard ship, [click here](#).

Divisions between the men aboard ship carried through to all levels of hygiene. Private bathrooms were available to officers, but not to enlisted sailors. At left, an officer's head aboard the USS Olympia features a flushing toilet, sink with hot and cold water, and a claw-foot bathtub. At right, the enlisted head aboard the Olympia has crowded bench seating, devoid even of dividers for the men.

The last major component of hygiene aboard ship was laundry. Enlisted sailors handled their own laundry, scrubbing clothing and hammocks on deck, then hanging them from lines to dry. The colored postcard at right shows sailors with uniforms spread on deck, being hand scrubbed with brushes. Officers once again relied on the services of their stewards for laundry. At left, Japanese stewards aboard the cruiser USS Brooklyn pose for a photo in the 1890's.

⁸ Ibid: 65.

Off Duty: Officer vs. Enlisted

Sailors lived their existence in “watches,” alternating 4 hours on duty, and 4 hours off. When off-duty, officers and enlisted sailors kept to their two separate worlds. There were few sources of enjoyment when passing idle hours. Reading, writing letters, or chatting with friends were common activities. Even when in port, sailors were mostly confined aboard ship, and made do with simple forms of entertainment.

Officers existed in a hierarchy, and had different levels of comfort available to them for relaxing. All officers shared the private space of the wardroom, as well as their private berthing spaces. Senior officers — captains, and admirals — were afforded what amounted to large suites aboard ship, for entertaining or relaxing. At left is an entertaining space in the captain's cabin aboard the cruiser USS Olympia. Note the extensive bar, leather arm chairs, bookcase, plants, and throw rugs. At the far end of the photo, the door to a private head stands open. Enlisted sailors had nothing close to this type of luxury aboard ship. At right, sailors aboard the battleship USS Rhode Island lounge around on deck, reading and napping.

The solace of the wardroom was once again a haven for officers. At left, in a colorized postcard, officers aboard the gunboat Don Juan de Austria — captured during the Spanish-American War — relax in their wardroom with a good book. They enjoy bottled beverages while reading, and are surrounded by niceties such as elaborate tablecloths and cut flowers. The enlisted sailors at right, aboard the cruiser USS Brooklyn, crowd below decks for some relaxation. Note the band in the middle, which is composed of both white and African-American members. Other sailors behind the band are playing cards. This photo is an excellent example of integration in the Navy during this period — African-American sailors can be seen throughout the photograph.

Most off-duty time was spent sleeping, “spinning a yarn” (telling sea stories), reading, eating, or perhaps gambling. Occasionally, while in port, there might be a social event aboard ship. Even in this social realm, enlisted sailors were often slighted. At left, officers aboard the cruiser USS Olympia dance with women aboard ship. These may have been wives (who sometimes lived ashore in the port a ship was stationed in) or women of local society. The enlisted sailors were kept isolated from these social affairs, unable to mingle with the women above their station. Instead, they were often left to merely dance with each other, as seen in the photo aboard the Olympia at right.

A Hard Life: The Impact of New Technology, and the Expansion of the American Empire

Life at sea has always been hard. Sailors throughout the ages have struggled against the hardships of weather and the ocean, cramped quarters aboard ship, accidents resulting from complex shipboard equipment, and of course, war. Men of the New Steel Navy endured new dangers and hardships, resulting from rapid advances in technology, and American overseas expansion. The photo above shows bandsmen aboard the battleship USS Kansas, after coaling ship. Their filthy appearance and stern gazes convey a sense of the hardship of the period.

Naval warships underwent an astounding modernization during this era, including the full adoption of coal power, marked improvements in gunnery, and the construction of steel ships. While this new technology revolutionized naval warfare, it had some negative effects on the lives of sailors. Coal was dirty, and labor intensive. Advances in machinery and weapons happened so quickly, that horrific accidents were not uncommon.

As members of a military force, sailors of the New Steel Navy lived with the constant possibility of war. Combat at sea was rare, but combat ashore was no stranger to the bluejackets of the Steel Navy. American expansion in the Pacific, and political posturing in the Americas, led to frequent skirmishes for the Navy of the period.

While life in the period was often difficult, reforms led to improvements in pay, discipline, food, and promotion. These sweeping changes were in many ways just as impressive as the technological transformations of the period.

This section of the website will examine the unique hardships endured by men of the New Steel Navy, using photographs and original documents. It will look at the opposite extremes of daily hardships, and the terrible dangers of war. Clicking on photographs will open a high resolution version of the image. Clicking on captions below the photograph will open up an informational page with key facts about the image.

Routines and Duties

Join the Navy!

The navy offered men the promise of stable pay, food, clothing, and housing. In the age of industrialization, but before the rise of labor unions and their work to protect laborers, this offer of stability was tempting to many men. Unfortunately, in the 19th century, many new recruits had a rude awakening, finding themselves deeply in debt for uniform purchases, and often eating poorly. Naval reforms in the early 20th century improved these problematic conditions. The 1908 Navy recruiting poster shown here promises good pay, promotions, free uniforms, lodging, and medical attention.

Standing Watch

Life in the New Steel Navy was structured around watches. Sailors were divided into different sections, for example, Starboard Watch and Port Watch. These watch sections alternated 4 hour shifts on duty at their station. “Dog Watches” of 2 hours each helped to keep watch sections on alternating schedules each day. While on watch, a sailor was responsible for performing his duties in his particular part of the ship. In this photo, sailors stand watch on the cruiser USS Olympia. A lookout scans the horizon with a telescope. The man standing at left is Quartermaster R.C. Mehrtens, who steered the Olympia during the triumphant Battle of Manila Bay.

Cleaning

Steel Navy warships were full of complex machinery, and crowded with sailors. The filth from these men and machines, as well as the corrosive action of the ocean, necessitated frequent cleaning to keep a warship looking presentable. Here, sailors polish railings on the deck of the cruiser USS Olympia in 1898. Sailors were also responsible for paintwork, cleaning the hull, and washing down the entire ship after refueling with filthy coal. The fight against dirt was a constant battle for sailors of the New Steel Navy.

Holystoning

One of the most arduous activities in the upkeep of a ship was “holystoning” the deck. Pieces of sandstone were used to scour the wooden deck of warships. The name holystoning was derived from the fact that it was once done by hand, with sailors on their knees. In this photo, sailors on the battleship USS Oklahoma holystone the deck of their ship. Rather than scrubbing on their knees, the scrubbing stones are attached to handles, like a mop.

Inspection

In addition to maintaining the ship, sailors were required to carefully maintain their personal appearance and possessions. Frequent inspections ensured that they did so properly. Sundays were generally reserved for full inspection, with much of Saturday used to prepare. Alternate Wednesdays were used for hammock and bag inspections.⁹ Additionally, sailors heading ashore for liberty would be

⁹ Alden: 284-285.

inspected to ensure that they were properly attired for leave. This photo shows a pre-liberty inspection aboard the battleship USS Rhode Island.

Sewing

Sailors of the Steel Navy had a constant need for someone to sew. Men with a sewing machine and skill could make money creating fancy variations of standard uniforms, proudly worn by sailors on liberty. These custom made uniforms adhered to Navy regulations, but featured higher quality material and embroidering. Sewing was also an essential skill in the maintenance of the ship. Repair work on hammocks, canvas awnings, and even the sails of early steel ships required a nimble hand.

Repair

Warships are complex machines, and endure great punishment at sea. As a natural course of events, things break, and must be repaired at sea. As the ships of the New Steel Navy grew ever more complex, skilled workmen were required to craft replacement parts, and perform repairs at sea. Here, sailors of the repair ship USS Prometheus pose in a machine shop aboard their ship.

Drills

Regular drills enhanced training and camaraderie aboard ship. These drills anticipated all possibilities of life at sea, from repelling boarders, to rescuing a man overboard. This colorized postcard shows sailors in the midst of a gunnery drill. Gunnery was of great importance during this period. Despite overwhelming victory in the Spanish-American War, it was determined that less than 3% of rounds hit their targets during the battles of Manila and Santiago.¹⁰ Gunnery was a controversial topic, and one man, Admiral William Sims, had a profound impact on revolutionizing American gunnery. He aggressively pushed for changes in gunnery, even bypassing the chain of command to directly contact President Roosevelt. In 2010, Sims was honored for his achievements by a United States Post Office commemorative stamp.

Old Traditions

Despite the dramatic technological transformations of the New Steel Navy, many holdover technologies remained in use. Fencing practice continued, as seen in this 1886 photo aboard the protected cruiser USS Atlanta. Eventually, swords were discontinued as a shipboard weapon, replaced by guns, and became a purely ceremonial instrument.

Guidelines for Life at Sea

The intricacies of life at sea could be confusing for new sailors. They received some instruction as recruits, and learned many of their duties on the fly. Guidebooks such as this 1908 Recruit's Handy Book provided valuable instruction. The entire 106 page manual can be read as a PDF by clicking on the image at right.

¹⁰ Leeke: 153.

www.steelnavy.org

Working with Coal

“Coaling Ship”

One of the most significant advances of the New Steel Navy was the move to coal power. While coal had been in use for decades, it was only at the end of the 19th century that the Navy fully committed to this new source of fuel. One of the most grueling tasks for men of the New Steel Navy was refueling, otherwise known as coaling ship. It was a dirty, backbreaking job, accomplished by hand.

Mountains of Coal

The concept of coaling ship was simple: move enormous piles of coal from heaps on a dock, into coal bunkers below deck on a warship. The challenge was the sheer volume of coal to be moved. The battleship USS Massachusetts burned 8-12 tons of coal per hour at full power.¹¹ In order to fully stock for a deployment at sea, a warship would load thousands of tons of coal aboard ship, all of it moved by hand. All hands participated in this brutal marathon of hauling. The photo at right is a good example of coaling ship. Sailors at left swarm over a hill of coal, loading it into canvas bags. These bags are then swung up and over, onto the deck of the cruiser USS Tennessee. The last step was to pour the coal through holes on deck, down into bunkers, where it was kept until needed. A good crew could move perhaps 100 tons of coal per hour.¹²

Coal Passers

A new rating was established to accommodate the ranks of men assigned the rugged task of shoveling coal aboard ship: the coal passer. Sailor Frederick Wilson, a former coal passer, commented on their lot in life in his diary:

that most humble, but necessary, evil, the lowest rating in the service, an object that isn't supposed to be human at all, but has to delve wherever dirt and grime is thickest, in back connection, in bilge, in mucky feed tank, in boiler, and in [coal] bunker. Poor coal passer! Cursed and damned by all parts of the ship, whose very foot prints are watched as he crosses spotless deck[s], who is blamed for every spot of dirt on deck and paint work as a matter of course. He is even looked askance by landsmen and marine, poor non-combatant that he is. Like many others of humble rating, his necessity and worth goes unrecognized.¹³

At right, a group of sailors shovel coal aboard the USS Isla de Luzon, a Spanish gunboat captured during the 1898 war. Shoveling coal and maintaining steam was a constant chore at sea.

A Filthy Crew

¹¹ Alden: 223.

¹² Ibid: 229.

¹³ Reckner, *A Sailor's Log*: vii.

Coaling ship continued night and day until finished. If the ship had a band, it would often play music to accompany the brutal work. When finished coaling, sailors and ship alike were covered with a thick layer of coal dust. Shown here are grimy sailors aboard the battleship USS Rhode Island, who have just finished coaling ship. Note that several of them are enjoying slices of watermelon.

Dirty Sailors

Cleanup was essential after coaling ship. The ship itself was hosed down and scrubbed clean. At right, sailors aboard an unidentified warship hose down the deck after coaling. Their uniforms are still filthy from coaling. Enlisted sailors washed as best they could, but they did not have the luxury of showers or bathtubs. They scrubbed off with buckets of water, or perhaps enjoyed swim call when permitted.

Warships Powered with Shovels

Even with coal safely stowed, and the ship underway, coal passers continued the thankless job of shoveling. Steel Navy warships look impressive from the outside, but the reality is that their speed and power was derived from hand shoveled coal. This photo of the fire room of the cruiser USS Brooklyn shows sailors at work stoking boilers with coal.

Danger Ashore

Protecting a New Empire

With land running out in the American West, expansionists began to eye overseas territories. Much of the known world had been colonized, and the great powers were scrambling to conquer the last remaining scraps of available territory around the world. The United States began to compete with other nations, particularly in the Pacific. Competition for new markets to sell manufactured goods was heated. On the far-flung islands of the Pacific, the Navy was best positioned to respond. Both Marines and sailors frequently went ashore to pacify local populations, and often engaged in open battle with a variety of adversaries. At right, armed sailors scale a wall in Hawaii during a riot drill in the 1890's, while onlookers observe from the other side of the street. The United States concluded a trade agreement with Hawaii in 1875, and annexed the island chain in 1898.¹⁴ In between, there were a number of uprisings. A strong Navy presence was crucial.

Armed Shore Party

Sailors of the New Steel Navy regularly trained for armed incursions ashore. Ships carried both rifles and heavy weaponry to be used during these landings. In fact, sailors of this era were more likely to engage in land combat, than fighting at sea. The only significant naval engagements of the era were during the Spanish-American War, while land action was a regular occurrence. This photo shows an armed shore party from the cruiser USS Philadelphia posing at the United States consulate on Samoa, in 1899.

Boxer Rebellion

Perhaps the most well known land incursion of the period is the 1899-1901 Boxer Rebellion in China. Frustration over the meddling of Western imperialists in China led to a mass uprising against Western nations. In this photo, British and American sailors take cover while under Chinese artillery fire. Sailors were involved in numerous land engagements during the rebellion. 22 sailors were awarded the Medal of Honor for actions ashore during the Boxer Rebellion.¹⁵ George Rose was one of these sailors, click [here](#) to see a photo of him.

Attacked in the Philippines

The United States took control of the Philippines as a condition of peace with Spain after the war of 1898. This vast island chain proved particularly difficult to govern. A full-blown insurrection erupted in 1899, and over the course of the next 14 years, perhaps a million Filipinos died, along with several thousand American servicemen.¹⁶ Sailors of the New Steel Navy frequently went ashore, and often found themselves under fire. This 1903 report by Midshipman Earl Finney details an attack by a "party of natives," leading to a withdrawal by the Navy shore party.

¹⁴ "History of Hawaii," http://en.wikipedia.org/wiki/History_of_Hawaii (Accessed April 27, 2010).

¹⁵ "Medals of Honor Earned During China Relief Expedition (Boxer Rebellion)," <http://www.history.army.mil/html/moh/chinare.html> (Accessed April 27, 2010).

¹⁶ "Philippine-American War," http://en.wikipedia.org/wiki/Philippine-American_War (Accessed April 27, 2010).

Fighting in the Streets of Veracruz

One of the most dramatic land battles fought by sailors during this era was the invasion and occupation of Veracruz, Mexico, in 1914. In the midst of the Mexican Revolution, a diplomatic snafu led to deteriorating relations with the United States, and the Navy was sent to blockade and invade Veracruz. Sailors and Marines went ashore, and a fierce urban battle ensued. At right, sailors can be seen manning heavy machine guns and rifles in the middle of Avenue Independencia.

Wounded Sailors

Casualties in the invasion of Veracruz were relatively light, with only 22 Americans killed and 70 wounded.¹⁷ Here, sailors from the battleship USS Arkansas carry a wounded comrade, the victim of sniper fire.

Heavy Weapons Team

These heavily armed sailors from the battleship USS Michigan demonstrate the fighting power of a Navy shore party during the occupation of Veracruz. In addition to individual rifles, a landing party could bring heavy, portable machine guns to bear on an enemy. The white uniforms of these sailors have been dyed gray, a common practice in these circumstances.

Relieved by the Army

Veracruz was captured easily by the Navy and Marine landing force. After just a few days, Army units arrived to relieve the victorious sailors. This colorized photograph shows sailors being relieved on Veracruz. The large number of armed sailors shows what an important fighting force they were ashore.

¹⁷ "United States occupation of Veracruz," http://en.wikipedia.org/wiki/United_States_occupation_of_Veracruz (Accessed April 27, 2010).

Accidents

Natural Disaster and Inadequate Propulsion

The transformation of the Navy began in 1883, but it did not happen overnight. Older ships continued to form the backbone of the fleet. The advantage of new technology became apparent when natural disaster struck Samoa in March 1889 in the form of a typhoon. German and American warships were anchored off the island, as a result of a political dispute that was embroiled with local interests. The storm proved to be far more powerful than predicted, and the anchored ships were soon in a precarious situation. Only one ship — a modern British corvette, with powerful engines — was able to escape the storm's wrath. The remaining ships were run aground and wrecked by the storm, as seen in this photo. More than 50 Americans, and 90 Germans, were killed.¹⁸ The tragedy was in many ways the end of the old Navy.

Increasing Firepower, Increasing Danger

One of the ongoing areas of improvement in the New Steel Navy was naval firepower. Gun calibers increased, and new forms of gunpowder were developed, all leading to increased range and destructive power. New techniques and technology for aiming and correcting naval gunfire were developed, particularly under the guidance of Admiral William Sims. But these rapid advances sometimes led to tragedy. One of the worst accidents of the period was the fire aboard the battleship USS Missouri in 1904. Escaping gas from a gun led to a fire in a propellant bag, which spread below deck. 36 men were killed.¹⁹ This colorized photograph shows the bodies of the victims being brought ashore.

The Quest for Speed

Another key area of technological innovation was speed. The first steel ships featured both sails and steam power, but this hybrid approach was quickly abandoned. Boiler and engine technology were continuously studied and upgraded throughout the period. But much like with gunfire technology, experimental propulsion systems were dangerous. Heat produced by these new engines and boilers caused temperatures aboard ship to soared well above 100 degrees Fahrenheit, and in isolated instances in fire rooms, even above 200 degrees.²⁰ One of the worst naval disasters related to this engine technology was the explosion aboard the gunboat USS Bennington on July 21, 1905. The complex machinery controlling the ship's boilers was not configured properly, leading to a buildup and eventual explosion of steam while the ship was at anchor. The wrecked hulk of the ship is show here.

Last Respects

¹⁸ "Hurricane at Apia, Samoa, 15-16 March 1889," <http://www.history.navy.mil/photos/events/ev-1880s/ev-1889/sam-hur.htm> (Accessed April 27, 2010).

¹⁹ "USS Missouri (BB-11) Turret Fire, 13 April 1904," <http://www.history.navy.mil/photos/sh-usn/usnsh-m/bb11-k.htm> (Accessed April 27, 2010).

²⁰ Alden: 56, 94.

Sixty Sailors were killed in the Bennington disaster. This photo shows the funeral and mass grave for the victims, in San Diego. Eleven sailors were awarded the Medal of Honor for their bravery during the awful aftermath of the explosion.²¹

Danger Under the Seas

One of the more experimental technologies of the period was the submarine. Underwater craft had been used sparingly in the past, including the Revolutionary War and Civil War. But it was not until the invention of steel hulls and internal combustion engines that this technology became truly practical. Yet it remained highly dangerous. In the early 1900's, numerous accidents aboard submarines — usually the result of inadequate ventilation or on board explosions — led to the deaths of many sailors. This photo shows the submarine USS Plunger underway in 1909, off the Brooklyn Navy Yard. Despite the danger faced by submariners, they were not given the equal consideration to other sailors, until President Roosevelt himself intervened. He was angered with “the absurd and worse than absurd ruling that the officers and men engaged in the very hazardous, delicate, difficult and responsible work of experimenting with these submarines are not to be considered as on sea duty.”²² Thanks to the President's advocacy, submariners received hazard pay and opportunities for advancement.

The Ultimate Accident?

There is no more mysterious or controversial incident during the era of the New Steel Navy than the explosion and sinking of the battleship USS Maine in Havana Harbor on February 15, 1898. Yellow journalists immediately blamed Spanish treachery, and American public sentiment was quickly enraged. The rallying cry “Remember the Maine!” was on the lips of every American soldier and sailor in the Spanish-American War. Yet, subsequent investigations have found no indications of Spanish involvement, and in fact tend to conclude that this terrible tragedy, which killed over 250 sailors, was an accident.²³ A commission sponsored by Admiral Hyman Rickover in the 1970's used modern technology to examine photographs, surveys, and court testimony on the sinking. One of these reports (click here to view) concludes that “the Maine magazine explosion most likely was caused by heat from a fire in the coal bunker adjacent to the 6-inch reserve magazine.”²⁴ While no definitive answer to the sinking of the Maine has ever been found, it is likely that the incident that spawned the Spanish-American War was in fact an accident caused by new technology.

²¹ “Boiler Explosion on USS Bennington, 21 July 1905,” <http://www.history.navy.mil/photos/events/ev-1900s/ev-1905/bengtn.htm> (Accessed April 27, 2010).

²² Henry J. Hendrix. *Theodore Roosevelt's Naval Diplomacy: The U.S. Navy and the Birth of the American Century*. Annapolis, MD: Naval Institute Press, 2009: 152.

²³ Alden: 32.

²⁴ Ib S. Hansen and Robert S. Price. *Untitled Report on the Explosion of the USS Maine*. April 30, 1975. Naval History and Heritage Command, Photographic Section (from John Reilly): 24-25.

Making the Best of it: Moments of Levity in a Difficult Life

The sailors of the New Steel Navy lived a rugged life. They spent their days in cramped quarters, eating generally simple meals. They faced danger at sea, and ashore. Their lives were a series of routines, scheduled daily like clockwork. In this hard life, they had few moments for fun and entertainment, but they made the most of those brief interludes.

This section of the website will explore sailors at play. From informal gatherings aboard ship, to elaborate holiday celebrations, these colorful sailors found ways to have fun while living a mostly rugged existence. They toured scenic locales on liberty, and competed with each other in boisterous games. They kept menageries of animals aboard ship to keep them company.

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Recreation

Gambling

One of the simplest ways to pass some time was a game of cards. While simple games of cards were allowed, gambling for money was not. Sailor Frederick Wilson commented on the disparity in enforcement of this rule, when a junior officer aboard his ship, the battleship USS Oregon, was caught gambling. "So you can see that an officer and gentleman can gamble just the same as any ordinary soldier or sailor, but if caught, even shooting an ordinary game of craps, the Jackies get a couple of months' pay taken away and a term in the 'cooler.'"²⁵ In this photo, sailors play a hand on deck of the cruiser USS Olympia.

Fishing

Fishing was a way to have a bit of fun, while simultaneously improving rations at sea. In particular, ships on remote stations might fish out of necessity, being too far from home or a major city to resupply. Here, sailors aboard the cruiser USS Maryland haul a large shark aboard ship.

Swim Call

Another way to take advantage of life at sea was swim call. It was not only a way to have some fun, but in the absence of extensive bathing facilities, it was a quick and easy way to get clean. For ships in the tropics, it also provided a welcome break from the heat. Sailors in this photo plunge over the side of the battleship USS Rhode Island, after coaling ship.

²⁵ Reckner, *A Sailor's Log*: 184.

Liberty

Trapped Aboard Ship

Brief trips ashore were the ultimate reward for sailors of the New Steel Navy. But despite the fact that ships of the period spent most of their time anchored in port, liberty was rarely granted. It was generally accepted that liberty was to be tightly controlled, and used as an incentive for discipline. Regulations mandated at least one liberty every three months per sailor, and the worst behaved sailors were allowed only this minimum.²⁶ Thus, the most common form of interaction with locals was aboard ship, when small craft loaded with vendors selling goods — known as bumboats — came alongside. A typical vendor is seen here aboard the cruiser USS Baltimore, while visiting Morocco in 1904.

Local Spectacles

When sailors did get the chance to go ashore, they made the most of it. The cliché of drunken, rowdy sailors in a foreign port is not a creation of myth. With time ashore being so rare, and life at sea so grueling, sailors used liberty to vent their frustrations. Sailor Frederick Wilson, granted leave in Japan in 1900, wrote:

Oh, how we longed for liberty, which was so slow in coming. You who can put on your coat and hat and go where you please, where fancy pleases, don't know what freedom means. I resolved this time, being so long aboard, to get a good jag on when I got ashore, not knowing when liberty would come again.²⁷

Sailors on liberty ate enormous meals, drank large quantities of alcohol, and paid visits to brothels. They also played the role of sightseers. In this photo, sailors of the Great White Fleet line the stands and roof of a bullfighting arena in Lima, Peru, during a stop in their worldwide cruise.

Ancient Wonders

One of the age-old appeals of life as a sailor is the chance to see the world. As the United States assured its place on the world stage during this era, the reach of the Navy was expanded. This afforded its sailors the chance to visit the natural and man-made wonders of locales across the world. Shown here are sailors of the Great White Fleet posing astride camels, in front of the Great Pyramids of Egypt.

On Asiatic Station

With the growth of Western colonialism in the Pacific, there was a strong Navy presence on what was known as Asiatic Station. Sailors had the chance to visit ports in Japan, China, and the Pacific islands, interacting with people from cultures dramatically different than their own. In this photo, sailors on leave in China in 1908 pose in a rickshaw with a local man who does not seem pleased to be having his picture taken.

²⁶ Alden: 280.

²⁷ Reckner, *A Sailor's Log*: 133.

Holidays

Thanksgiving Feast

Aside from liberty, holidays generally provided the most enjoyment to sailors of the New Steel Navy. Celebrations aboard ship were festive, elaborate affairs. Ships were decorated, sumptuous feasts prepared, and musical performances and games were held. At right, the Thanksgiving feast aboard the cruiser USS Charleston can be seen, in 1893.

Christmas Dinner

Traditional holidays were celebrated with great fanfare: New Year's Eve, Washington's Birthday, the Fourth of July, and Thanksgiving. Christmas was of course one of the most festive occasions. This 1904 photo of engineers aboard the cruiser USS Baltimore, stationed off China, gives a sense of what Christmas was like. The sailors have decorated the ship with sprigs of evergreen, and other hanging ornaments. A fine meal is spread out before them.

A Rowdy Wardroom Toast

Like every other part of life at sea, holiday celebrations were mostly segregated. Officers and enlisted sailors enjoyed their meals separately, as seen in this sketch of a Christmas toast in the wardroom of the battleship USS Kansas during the cruise of the Great White Fleet. The officers wear formal attire, and are standing on their chairs, around an elaborately set table.

Christmas Menu

Food at sea was of varying quantity and quality. Holidays were a chance to feast on delicious, long desired foods. This Christmas menu from the USS Oregon features such delicacies as oyster soup, ham, turkey, candied sweet potatoes, and fruit salad.

Games

Obstacle Course

Games and contests were a popular way for sailors of the New Steel Navy to have fun, and release tension. Competition was spirited, whether it was between divisions aboard ship, or ships of a squadron or fleet. Here, sailors aboard the cruiser USS Charleston run through an obstacle course, on Thanksgiving Day, 1893. Note that the competition includes both white and African-American sailors.

Boxing Match: A “Smoker”

Boxing was perhaps the king of all sports during this era. It was also a sanctioned method to settle heated disputes between sailors. Boxing matches, known as “smokers,” were a hotly anticipated affair. A typical smoker can be seen in this photo aboard the battleship USS Oregon. A temporary ring has been constructed, and sailors crowd around in every available space for a view of the fight. The shirtless boxers are shaking hands prior to starting the match.

Holiday Games

This schedule of events for Thanksgiving 1898 aboard the cruiser USS New York gives a good sense of the wide variety of games held on holidays. There are team events such as boat racing and a wheelbarrow race, and individual events like a pie-eating contest. The day ends with a series of smokers in different weight classes.

Wheelbarrow Race

Another popular event was the wheelbarrow race. Two officers here are shown aboard the battleship USS Connecticut preparing for a try at this unwieldy sport, on July 4th, 1908, during the cruise of the Great White Fleet.

Wheelbarrow Race

A second photo of the wheelbarrow race aboard the USS Connecticut gives a sense of the overall scene. The crew has lined the decks to watch, clearing a path for contestants. Two of the three teams of sailors in this photo have taken a fall on the hard deck.

Baseball Champions

Modern day sports were also popular with sailors of the New Steel Navy. Baseball teams from warships competed against each other, competing for trophies, and bragging rights. Sailors here from the team of the cruiser USS Tennessee pose with two championship pennants. Note that they have custom designed uniforms.

Football

Football was also a popular sport, and provided a much more aggressive outlet for frustrations than baseball. In this photo, another group of sailors from the USS Tennessee lines up for a snap while ashore at Rio de Janeiro, in 1910.

Pie-Eating Contest

One of the more comical competitions between sailors was the pie-eating contest. The contest in this photo, taken in 1922 aboard the battleship USS Maryland, occurred somewhat later than what is considered the Steel Navy period, but it gives a sense of what a pie-eating contest would have been like aboard ship.

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Mascots

Four-Legged Friends

Ships of the New Steel Navy were teeming with wildlife. In earlier days, animals had been kept aboard ships not only for companionship, but for food. By the late 19th century, animals were kept merely as pets and mascots. All types of creatures could be found roaming the decks of these technological marvels, from the mundane to the bizarre. In this photo, sailors aboard the cruiser Olympia tease two cats by shining light from a mirror at them.

Feeding a Bear

Some of the animals kept aboard warships may seem rather surprising. Here, a sailor feeds a bear aboard the battleship USS Connecticut, during the cruise of the Great White Fleet. The town of Aberdeen, WA, presented the ships of the fleet with 16 bears during a stop there.²⁸ Animals were a common gift to visiting warships by local officials.

Exotic Creatures

Other more bizarre and exotic creatures made their homes on Navy warships, particularly after stops abroad. In this photo, Lieutenant John Lewis poses with a kangaroo aboard the battleship USS Connecticut in 1908. This animal was also acquired during the cruise of the Great White Fleet. Sometimes, exotic animals were more of a nuisance than a companion. Sailor Frederick Wilson, serving aboard the cruiser USS New Orleans in 1899, wrote about a number of monkeys acquired by sailors during a stop in the Middle East. The monkeys had escaped captivity, and had taken up residence high in the smokestacks of the ship, biting anyone who tried to recapture them. A ship's officer, upset about the biting, put a bounty on the heads of the monkeys.²⁹

Wounded in Action

It seems unlikely that exotic animals lived long and happy lives aboard crowded steel warships. And these animals shared a common threat with their owners - combat. The parrot shown here lost a leg in the Battle of Manila Bay, aboard the cruiser USS Olympia.

²⁸ Alden: 342.

²⁹ Reckner, *A Sailor's Log*: 36.

Great Ships of the Steel Navy

The ABCD Ships

The rebirth of the United States Navy began with the 1883 authorization of the ABCD ships — USS Atlanta, USS Boston, USS Chicago, and USS Dolphin. The first three were protected cruisers. They featured hulls made of steel, but without full armor protection. Instead, coal bunkers were expected to provide some protection to vital interior machinery. These ships also featured a mix of propulsion systems, able to travel under sail power, or steam. The Dolphin was a smaller vessel intended to rapidly carry messages in the age before wireless communication. This watercolor painting depicts several of the ABCD ships at sea, under sail.³⁰

USS Texas

The first American battleship was the USS Texas, a 2nd class battleship. She was authorized in 1886, but not completed until 1895, rendering her somewhat obsolete. Her main armament featured a mix of 12 inch and 6 inch guns. Her two main 12 inch gun turrets were mounted along the side of the ship, staggered forward and aft.³¹

USS Olympia

Perhaps the most famous ship of the New Steel Navy was the protected cruiser USS Olympia. Commissioned in 1895, she was a significant upgrade over the cruisers of the ABCD ships. She served as the flagship of Commodore Dewey's squadron in the Battle of Manila Bay. She was modernized several times, and participated in convoy duty during World War I. In 1921, the Olympia had the honor of transporting the Unknown Soldier home from France. In 1922, the Olympia was decommissioned, and languished for many years. She was opened to the public in the 1950's, and remains the oldest steel warship afloat in the world. In 2010, the Independence Seaport Museum in Philadelphia, caretaker of the Olympia, informed the Navy that they no longer have the funds to properly care for the ship. The ship is in dire need of repairs, and her future is uncertain.³²

USS Maine

Much like the Texas, the Maine was a 2nd class battleship featuring staggered, side-mounted main guns. She was commissioned in 1895, and originally classified as an armored cruiser.³³ In 1898, the Maine was dispatched to Havana to protect American interests in the midst of Cuban unrest over Spanish rule. On

³⁰ Alden: 370.

³¹ Ibid: 361.

³² Susan Schept. "Olympia needs \$30m in repairs, new caretaker," February 26, 2010.

http://www.navytimes.com/news/2010/02/navy_olympia_022610w/ (Accessed April 27, 2010).

³³ Alden: 361.

February 15, she exploded, resulting in the death of about 260 of her crew.³⁴ American newspapers immediately blamed Spanish treachery, and “Remember the Maine” became the rallying cry for the Spanish-American War. Later investigations concluded that the tragedy was most likely an accident caused by a fire on board the ship. To read a report from a 1975 investigation into the explosion click [here](#). A painting of the wrecked ship can be seen [here](#).

USS Vesuvius

The dynamite cruiser Vesuvius was a short-lived experiment in weapons technology. She was commissioned in 1890, and featured three fixed gun tubes, through which projectiles were launched with compressed air. Since the guns could not be moved, the entire ship had to be aligned directly towards the target. These almost noiseless guns were used to bombard shore targets during the Spanish-American War. Ultimately, the technology demonstrated by the Vesuvius was a deemed failure, and was abandoned.³⁵

USS Oregon

The battleship Oregon was one of the most successful and celebrated ships of the New Steel Navy. Commissioned in 1896, she was part of a class of battleships that also included the USS Indiana and USS Massachusetts. At the time of her commissioning, her speed, protection, and firepower made her one of the finest ships in the world. Stationed on the West Coast at the outbreak of the Spanish-American War, she was ordered to make a historic dash around South America to reinforce the American squadron operating in the Caribbean. She steamed 14,000 miles around Cape Horn in 66 days, a voyage that was exuberantly celebrated in the media, and with songs and poems.³⁶ When the Battle of Santiago finally erupted on July 3rd, the Oregon performed with distinction, leading the American fleet to an overwhelming victory over its Spanish adversary. She participated in the international expedition to Siberia in 1918, and was decommissioned in 1924. She was designated a historic monument, but was partially scrapped during World War II, briefly used as a barge, and finally scrapped for good in 1956. Only her mast remains, as a monument in Portland, OR. Click [here](#) for more images of the Oregon.³⁷

USS Kearsarge

The battleship USS Kearsarge was another failed experiment in gunnery. Commissioned in 1900, she and her sister ship USS Kentucky featured a superposed turret system. On top of her two main 13 inch turrets were mounted two 8 inch turrets. It was nearly impossible to keep both sets of turrets properly aligned, and the concussion from the 13 inch guns made aiming the 8 inch guns above frustratingly difficult. The Kearsarge was later converted into a giant floating crane ship, and was scrapped in 1955.

³⁴ Ibid: 32.

³⁵ Ibid: 47-48.

³⁶ Ibid: 78.

³⁷ Ibid: 362.

This photo shows the Kearsarge brightly lit on a visit to England in 1903. For a good view of the superposed turrets, click here.³⁸

USS Connecticut

The battleship USS Connecticut, commissioned in 1906, was among the last of the great ships of the New Steel Navy. Her class of battleships featured a total of six ships. Connecticut served as the flagship of the Great White Fleet during the 1907-1909 cruise around the world. With advances in naval technology happening with stunning speed, Connecticut was obsolete almost as soon as she was launched.³⁹

USS Michigan

USS Michigan represented a new era in battleship design. While she was not the first ship of her class to be authorized (this was USS South Carolina) she was the first to be commissioned, in January 1910. She was a dreadnought, with advanced engine technology, and adhered to the “all big gun” concept. This meant that her eight main single caliber 12 inch guns were all housed in center-line turrets, unlike the mixed and matched weaponry of earlier ships. The basic design concepts of the dreadnought would remain in place for the remaining decades of the battleship era.

³⁸ Ibid: 363.

³⁹ Ibid: 365.

About

About Me

I am a graduate student at George Mason University, in Fairfax, Virginia. I expect to complete a Master's degree in Applied History and New Media in the fall of 2010. The photo below was taken during a visit to the cruiser USS Olympia in March, 2010. For questions or comments on this website, please contact me [here](#).

Bibliography and Citations

The information contained in this website has been collected during research of both written material and photographic archives. For a full list of sources, suggested readings, and specific citations, please reference the attached PDF document.

Using this Website

All images on the site are part of a database, and when clicked, will bring you to detail pages. Clicking on the image in these detail pages will bring up a high resolution version of the image. Thus, it is in your best interests to click on images!

About this Project

This project was completed for the History and New Media course at George Mason University. My research into the Steel Navy is ongoing, and this site represents merely a snapshot of my findings. The website was developed using a customization of the Omeka tool, developed by George Mason University's Center for History and New Media. Pages have been validated for HTML and CSS compliance.

Bibliography and Suggested Readings

Books

- Albion, Robert Greenhalgh. *Makers of Naval Policy, 1798 - 1947*. Annapolis, MD: Naval Institute Press, 1980.
- Alden, John R. *The American Steel Navy*. Annapolis, MD: Naval Institute Press, 1989.
- Bemis, Harold. Journal: The Battle Fleets Cruise to the Pacific. File NHF-037-B. Naval Historical Foundation, Washington D.C.
- Cooling, Benjamin Franklin. *USS Olympia: Herald of Empire*. Annapolis, MD: Naval Institute Press, 2000.
- Gardiner, Robert and Randal Gray. *Conway's All the World's Fighting Ships: 1906-1921*. Annapolis, MD: Naval Institute Press, 1985.
- Goodrich, Marcus. *Delilah*. New York, NY: The Lyons Press, 2000.
- Hansen, Ib S., and Robert S. Price. Untitled Report on the Explosion of the USS Maine. April 30, 1975. Naval History and Heritage Command, Photographic Section (from John Reilly).
- Hendrix, Henry J. *Theodore Roosevelt's Naval Diplomacy: The U.S. Navy and the Birth of the American Century*. Annapolis, MD: Naval Institute Press, 2009.
- Lawrence, W.J. *The United States Navy Illustrated*. New York, NY: The Continent Publishing Company, 1898.
- Leeke, Jim. *Manila and Santiago: The New Steel Navy in the Spanish-American War*. Annapolis, MD: Naval Institute Press, 2009.
- Massie, Robert K. *Dreadnought: Britain, Germany, and the Coming of the Great War*. New York, NY: Ballantine Books, 1991.
- Reckner, James R., ed. *A Sailor's Log: Water-Tender Frederick T. Wilson, USN, on Asiatic Station, 1899-1901*. Kent, OH: The Kent State University Press, 2004.
- Reckner, James R. *Teddy Roosevelt's Great White Fleet*. Annapolis, MD: Naval Institute Press, 1988.
- Schept, Susan. "Olympia needs \$30m in repairs, new caretaker," February 26, 2010. http://www.navytimes.com/news/2010/02/navy_olympia_022610w/ (accessed April 27, 2010).

Websites

"Boiler Explosion on USS Bennington, 21 July 1905," <http://www.history.navy.mil/photos/events/ev-1900s/ev-1905/bengttn.htm> (accessed April 27, 2010).

"History of Hawaii," http://en.wikipedia.org/wiki/History_of_Hawaii (accessed April 27, 2010).

"Hurricane at Apia, Samoa, 15-16 March 1889," <http://www.history.navy.mil/photos/events/ev-1880s/ev-1889/sam-hur.htm> (accessed April 27, 2010).

"Medals of Honor Earned During China Relief Expedition (Boxer Rebellion),"
<http://www.history.army.mil/html/moh/chinare.html> (accessed April 27, 2010).

"Philippine–American War," http://en.wikipedia.org/wiki/Philippine-American_War (accessed April 27, 2010).

"The Destruction of USS Maine." <http://www.history.navy.mil/faqs/faq71-1.htm> (accessed April 27, 2010).

"United States occupation of Veracruz,"
http://en.wikipedia.org/wiki/United_States_occupation_of_Veracruz (accessed April 27, 2010).

"USS Missouri (BB-11) Turret Fire, 13 April 1904," <http://www.history.navy.mil/photos/sh-usn/usnsh-m/bb11-k.htm> (accessed April 27, 2010).