Introduction

U.S. naval expansion is considered to be inevitable. When it is discussed at all, especially in recent scholarly works, it merits at most a few paragraphs briefly mentioning that in the late nineteenth century the United States constructed a modern navy. It is portrayed as if U.S. leaders mostly favored greatly expanding the nation's naval power and that little to no serious opposition existed among government leaders. Naval expansion, however, fundamentally altered U.S. foreign policy. It represented one of the most significant shifts in the Gilded Age, an era often thought of as a forgettable period in U.S. politics with no major political events taking place. If anything, naval expansion should be the single most discussed political decision to come out of this period and President Benjamin Harrison should be remembered for his role in this development. After all, there are few presidential actions from this period that continue to greatly affect U.S. policy today, and Harrison and his fellow naval expansionists deserve more than a footnote in history.

While Harrison deserves more credit, it is important to explore other reasons why popular support of naval expansion developed in the United States. One of the least discussed is the addition of new jobs. Naval expansionists could point to the thousands of new jobs that would be created, both in the navy itself and in naval construction yards. This was a popular argument in favor of naval expansion and is vital to understanding why the United States went through such a fundamental shift in its domestic and foreign policy. Another primary motivation was the feeling that the United States was inadequately equipped to defend itself against powerful potential adversaries such as Great Britain or Germany. These reasons helped overcome traditional reticence on the

part of politicians to create a powerful and expensive military force that would need to be maintained and increased in order to fulfil its primary goal.

Anti-naval expansionists remained unsuccessful in preventing the creation of a new navy, but their arguments were forcefully reasoned. Understanding their reasons is key to understanding this period of American history. While there was certainly ideological opposition to military expenditures, there were also concerns of a more practical nature. Shipyard managers who did not want to have to match government pay rates and farmers who bemoaned the loss of field hands to the new navy yards during harvest season. Other opponents believed that the United States only needed to construct static defenses such as forts to adequately defend the coastline. All of these motives provide a brief representation of anti-naval arguments presented in the Gilded Age.

U.S. naval expansion also displayed the rapid change in technology that had occurred since the first ironclad ship, France's *La Gloire*, put to sea in 1859. Guns had developed into faster firing, harder hitting, breach loaders and new developments in electricity, armor plating, and range-finding technology were all incorporated into new navy battleships. An exploration of these changes exposes how truly essential technological innovation was to naval expansion. Building a new navy required more than just money. It required technical expertise as well as an overhaul of the navy's curriculum taught to its aspiring officers. Naval officers visited other nations that had superior navies in order to learn both the technology pursued by them and how to bring that technology home. It required trial and error to discover what ideas worked and what ideas did not and this had to be accomplished quickly, so successive battleships and cruisers were designed for the new navy. Unlike other naval powers of the period, such

as Great Britain, the United States did not have a seemingly unlimited naval budget or the time to make the same mistakes that had taught the European powers so much about naval warfare during their own arms race between the 1870s and 1890s.

Despite its continued importance in national power and prestige, the U.S. Navy is no longer as much a part of our national consciousness as it once was and this change is reflected in the historiography. Early works discussing the importance of U.S. naval dominance abound. Of course there is Alfred Thayer Mahan's seminal work *The Influence of Sea Power upon History: 1660-1783* without which no discussion of U.S. naval expansion could be complete. Mahan, while a mediocre historian, was an excellent political strategist and his book reflects this trait. By discussing the history of naval warfare in the seventeenth and eighteenth century, he weighted his arguments to show how having the largest and best equipped fleet was vital to maintaining a nation's power. He discussed how Great Britain marshalled its resources to successfully create the world's most powerful navy and argues that a nation's land power is irrelevant if it does not have a large enough navy to prevent itself from being blockaded.[1] As is well known, his arguments, were incredibly influential, both in the United States and the world, and it has been argued that Mahan was a major factor in kicking off the naval arms race that was to grip the world leading all the way into the First World War.

The Influence of Sea Power upon History: 1660-1783 inspired world naval expansion and strengthened pro-naval expansion sentiment in the United States. But the historiography lacks a discussion of the early political arguments both for and against naval expansion. Only two works explore this subject in any kind of depth. Robert

[1] Alfred T. Mahan, *The Influence of Sea Power upon History: 1660-1783* (Boston: Little Brown and Company, 1894), iii.

Seager II's article, "Ten Years before Mahan: The Unofficial Case for the New Navy," discussed the foreign policy embarrassments that created a rising tide of discontent that led to the creation of a new navy. He focused on the question of why naval expansionists overcame a traditional mindset against increasing military power in the United States and he partially answers the question. According to Seager, foreign policy embarrassments suffered by the United States exemplified by the nation's inability to intervene militarily in conflicts it deemed important to national security, such as the Peruvian-Chilean conflict known as the War of the Pacific. Both navies, despite being from much younger and poorer nations, were stronger than the U.S. Navy. The United States had been eclipsed by Chile which, due to severe U.S. naval weakness, was the principal naval power in the Southeast Pacific.[2] This was especially humiliating because Chile was, at this time, a frequent diplomatic adversary of the United States.[3] It had gotten so bad that U.S. naval observers of the conflict informed the administration that three brand new Chilean ships outclassed everything the United States currently had available.[4] This was a huge turnaround from just fifteen years previously when the United States, on account of to the Civil War, had the region's most powerful navy. To be outclassed by a smaller rival like Chile seriously handicapped U.S. foreign policy. Such embarrassments became powerful inducements to the pro-naval expansion factions in the U.S. military and federal government and Seager acknowledged the importance of this event. His arguments are

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[2] Lawrence Sondhaus, *Naval Warfare: 1815-1914* (New York: Routledge, 2001), 128.
[3] Robert Seager II, "Ten Years Before Mahan: The Unofficial Case for the New Navy, 1880-1890," *The Mississippi Valley Historical Review* 40 (1953), 491. http://www.jstor.org.proxy.ulib.uits.iu.edu/stable/1891874.
[4] Walter R. Herrick, Jr., *The American Naval Revolution* (Baton Rouge: Louisiana State University Press, 1966), 19.

one of only two in-depth studies of U.S. naval expansion in the political arena that are readily available.

Benjamin Franklin Cooling's work is the other. His book, *Benjamin Franklin Tracy, Father of the American Fighting Navy*, explored the importance of Benjamin Harrison's secretary of the navy to unify and to motivate pro-naval sentiments in Congress. He showed how Secretary Tracy's energy and political acumen transformed Harrison's campaign promise to increase the size and power of the U.S. Navy into a physical reality. Since the book is a biography it does not focus exclusively on the navy, but Cooling's book is the most complete study on the creation of the modern American Navy that is in the historiography.[5] His argument about the importance of a relatively unknown figure in today's literature (single term naval secretaries do not frequently attract historical discussion) helped formulate a better understanding of U.S. naval expansion. Like Seager's article, the book is not a recent work. Published in 1973, it nevertheless represents the most recent discussion of this important subject. In addition, while Cooling does a masterful job of showing how Tracy actually created the modern navy, he spends little time discussing how naval expansionists from the previous decade had influenced Tracy or Harrison or the strength of the opposition to their policies. Cooling treats expansion as almost an inevitability once Tracy took charge of the Naval Department. This is an area that is lacking in the discussion of the political aspects of expansion.

Even more surprisingly, there is almost no mention of the political achievement of creating a first class navy in the historiography surrounding Benjamin Harrison. Even a

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[5] Benjamin Franklin Cooling, *Benjamin Franklin Tracy: Father of the Modern American Fighting Navy* (Hamden Conn.: The Shoe String Press, Inc., 1973), ix-xi.

recent biography published in 2005, *Benjamin Harrison* by Charles Calhoun, barely mentions the expansion of the U.S. Navy. It is a thorough book, and does a good job tracking Harrison's life, but naval expansion, the one policy decision he made that is still in force today, is given only two quick paragraphs before Calhoun moves the discussion on to other topics, mostly domestic political decisions and especially the rise of segregation.[6] While he does a much better job of showing Harrison's impact on economic issues, including the creation of the Sherman Anti-Trust Act as well as his presidential campaigns and Civil War career, by omitting a discussion of naval expansion Calhoun fails to explore one of Harrison's most significant accomplishments. This is odd and it is one of the reasons this thesis explores the issue.

Other Harrison biographies also fail to go much into naval matters. Anne Moor's and Hester Hale's book *Benjamin Harrison: Centennial President* goes a little deeper into Harrison's involvement with increasing the size of the navy, linking it to the outcome of the Samoa Crisis, but they also are more focused on his domestic and foreign policy achievements than in discussing naval matters.[7] Bruce Adelson also barely mentions the creation of the navy, explaining Harrison's desire to create a stronger navy and briefly going into the difficulty in convincing Congress to support this idea but, once again, he spends little time exploring the importance of this change and he focuses more on the Harrison and his life history.[8]

Calhoun, and the other biographers, are far from the only historian to barely mention Harrison's powerful support of naval expansion and his relative success in

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[6] Charles W. Calhoun, *Benjamin Harrison* (New York: Henry Holt and Company, 2005), 1-5.
[7] Anne Moor and Hester Hale, *Benjamin Harrison: Centennial President* (New York: Nova Science Publishers, 2006), 116-17.
[8] Bruce Adelson, *Benjamin Harrison* (Minneapolis: Twenty First Century Books, 2007), 83 and 86.

bringing it to pass. Walter Herrick, Jr.'s., *The American Naval Revolution* did explain how the use of new technology and tactics revolutionized the physical power of the U.S. Navy as well as the conflicts in the secretary of the navy's department. But he spends little to no time discussing how naval expansionists convinced a country traditionally bound by George Washington's advice to avoid entangling foreign alliances to fund a modern navy. Herrick discusses the technological achievements of expansion, including its progression from its dismal post-Civil War days to its much more powerful modern condition, but his lack of political discussion mars his analysis.[9] Peter Karsten's "The Nature of Influence: Roosevelt, Mahan and the Concept of Sea Power," which connected Theodore Roosevelt and Mahan's ideas on sea power and discussed the impact of this change on Roosevelt's future administration, said little about the political fight to actually expand the navy.[10] This point is not meant to criticize these historians or their work, but to show the necessity of a more thorough examination of the primary sources available in order to explain the importance of naval expansion in American history.

While the political aspects of U.S. naval expansion are lacking in the historiography, there is no shortage of discussion surrounding the results of that expansion. It would take too long to list all of the secondary works that explore U.S. naval history; but there are several that do a good job of summarizing the primary arguments in the field. One of the best is Lisle Rose's *Power at Sea: The Age of Navalism: 1890-1918*. His work, which was part of a larger history about the impact on the twentieth century of naval expansion, focused on the histories of several naval powers especially Great Britain, Imperial Germany, Imperial Japan, and the United States. Rose

[9] Herrick, Jr., *American Naval Revolution*, 10-12.
[10] Peter Karsten, "The Nature of Influence: Roosevelt, Mahan and the Concept of Sea Power," *American Quarterly* 23 (1971), 585. http://www.jstor.org.proxy.ulib.uits.iu.edu/stable/2711707

presented the argument that it was naval power that determined international power and prestige throughout the twentieth century and he defended his arguments with a description of the major military events that occurred in the history of these navies.[11] His was more of an overview of events than a deep exploration of reasons, but Rose presented a convincing argument as to the efficacy of sea power during this period and he accomplished his goal of defending Mahan's thesis.

Paul Kennedy's discussion of the economic and military factors behind Great Power status also deserve some mention. His highly influential work *The Rise and Fall of the Great Powers*, deals with the acquisition of power by modern nations, a period he describes as "Post Renaissance".[12] Starting in the sixteenth century, Kennedy traces the reasons behind the long term rise and fall of Great Powers. He explains how economic growth is tied to the effectiveness of a nation's military power, and that this power is always relative to the power and economic growth of the nations around it.[13] The United States features prominently in his work as he shows how its booming economy in the late nineteenth century eventually lead to military predominance and traces the potential decline from a previous position of world power due to the lack of economic growth combined with an increase in defense spending. While Kennedy discusses the range of a great powers' life instead of just focusing on the beginning, it helps place the growth of U.S. naval might in a historical paradigm.

Another part of the history of naval expansion that is covered in the historiography is the discussion of the actual design specifications of the warships.

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[11] Lisle A. Rose, *Power at Sea: The Age of Navalism, 1890-1918* (Columbia: University of Missouri Press, 2007), xi-xv.
[12] Paul Kennedy, *The Rise and Fall of the Great Powers* (New York: Random House, 1987), xv.
[13] Ibid, xxvi.

Norman Friedman's *U.S. Battleships: An Illustrated Design History* traces U.S battleship design and construction from the 1890s to the 1940s. He helps chart how U.S. Navy ships utilized new construction and technology in their designs. Not only does Friedman explain their successes, he also discusses their design flaws, showing how much effort went into constructing warships. Shiny new ships did not just sail out of their docks, according to Friedman. New ideas were tested and those found wanting in new ships were improved in subsequent models.[14] While his work was weighted more to the twentieth century, after all that is when the most growth in U.S. naval power occurred, Friedman's discussion of the design successes and limitations of early U.S. battleships is vital to understanding the technological portions of naval expansion.

David K. Brown presents similar discussion in his work on the Royal Navy in the late nineteenth and early twentieth century in *Warrior to Dreadnought*. He traces the evolution of ironclad battleship design from the first British foray into this field, H.M.S. *Warrior*, to the groundbreaking construction of the, at the time, world's largest and most powerful battleship, the H.M.S. *Dreadnought*. Not only does Brown discuss the specifications for these ships and many other ships in his work, he strives to give his readers an understanding of the trial and error that are a major part of ship design in the late nineteenth century. Brown shows how everything from gun development to the physical design of these new warships constantly changed throughout this period, in some cases improving iron ship design and in other cases making it worse.[15] Brown's work shows the great effort the world's largest navy at the time went to guarantee its naval superiority, but he indirectly demonstrates how much naval information had

[14] Norman Friedman, *U.S. Battleships: An Illustrated Design History* (Annapolis: United States Naval Institute, 1985), 1-15.
[15] David K. Brown, *Warrior to Dreadnought* (London: Chatham Publishing, 1997), 9-11.

already been accumulated by the time the United States got involved in naval expansion. Along with Friedman, Brown's exhaustive research into naval design shores up this thesis's discussion of the improvements in naval technology during this period.

Lawrence Sondhaus adds to the discussion of naval improvements during this period with his work *Naval Warfare 1815-1914.* In addition to discussing technological improvements during this period as Brown and Friedman do, Sondhaus adds to the literature on the subject with his discussion of the transition from wooden to iron and then steel naval warships. His discussion of the growing efficacy of armor plating and the attempts, both legitimate in the case of larger, more powerful guns and the ridiculous, armored rams, demonstrate the rapid pace of technological change in the mid to late nineteenth century.[16] In addition, Sondhaus' discussion of the naval arms race that consumed many powerful nations around the world during this period provides one explanation as to the United States desire to construct a powerful navy in the 1880s and 1890s.

All of these works show a current trend among naval historians to explore the way technology affected naval warfare and how it continues to do so today. While there are certainly other works that could be used to discuss the historiography of naval technology, these three books provide a good sample of current discussion in this field and their argument strengthen the exploration of these matters. What is a little harder to find in these technical discussions is the beginning of the use of everyday technologies that we tend to take for granted, such as electricity. While certainly not the most combat oriented technological achievement, the installation of electrical power onboard warships occurred decades before it was available to most of the citizens of the United States and it

[16] Sondhaus, *Naval Warfare 1815-1914*, vii.

is surprising to find a lack of acknowledgment of the U.S.S. *Trenton*, the first electrified warship in the navy, in most of the available literature. Generally, however, the historiography is much fuller in regards to the technological achievements of the new navy.

Also of some interest is the fact that the number of jobs created by U.S. naval expansion are never discussed. While some works do this tangentially, John Gillig's article "The Predreadnought Battleship USS Kentucky," mentions the crew requirements of the battleship discussed and Lisle Rose's *Power at Sea* talks about crew training in various nations including the United States, no historians discuss the number and types of jobs created in naval construction yards or the impact of higher federal wages on the conditions for skilled workingmen in the ship building industry.[17] This was such a significant piece of pro-expansionist arguments that it should be discussed and explored more thoroughly than it has been.

Most historians who discuss U.S. naval expansion approach it as a positive change in foreign policy. *Power at Sea, The American Naval Revolution, Manila and Santiago* all look at the power and prestige gained by the United States through naval expansion and argue that it was one of the best decisions made by the United States, even if Harrison and Tracy's involvement in it is not discussed. *Manila and Santiago* by Jim Leeke is a history of the Spanish American War with a focus on the U.S. and Spanish navies. Throughout his work Leeke argues that it was American naval superiority that allowed the United States to easily defeat Spain.[18] One of his principal arguments is that

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[17] John S. Gillig, "The Predreadnought Battleship USS Kentucky," *The Register of the Kentucky Historical Society* 88 (1990), 45. http://www.jstor.org.proxy.ulib.uits.iu.edu/stable/23381829.
[18] Jim Leeke, *Manila and Santiago: The New Steel Navy in the Spanish American War* (Annapolis: Naval Institute Press, 2009), 155-56.

U.S. naval expansion created a world class navy and Spain's failure to significantly upgrade its own forces created an unequal situation before the first shots were fired.

Robert L. O'Connel's *Sacred Vessels* is the only work that was critical of naval expansion in any way. O'Connel's argument is that the United States, and every other major naval power from the end of the nineteenth to the middle of the twentieth century, wasted hundreds of millions of dollars constructing battleships which would be rarely used. His contention is that rather than pursuing what he calls other, more practical naval improvements, naval officials were hypnotized by the potential of battleships without acknowledging their disadvantages.[19] While his is the only book that made this argument, and every other work talked about the disadvantages of battleships while discussing their contribution to naval power, O'Connel does bring up some interesting points about the difficulty of the U.S. Navy competing with the British Navy. He points out that due to the long tradition of superior sea power, Great Britain was more willing and more able to spend resources testing new technologies to find the best combination of naval weaponry than a country without this tradition such as the United States.

Many works focus on the results of U.S. naval expansion and how it affected U.S. foreign policy. Fareed Zakaria's *From Wealth to Power* shows how wealthy nations, such as the United States, become world powers. While he focuses on numerous factors that caused this transformation, he argues that naval expansion is a primary reason the United States transformed into a world power. He does this through a discussion of events where the United States began acting as a world power, such as the Venezuela crisis, and exploring both the results and the reasons why the United States started

[19] Robert L. O'Connel, *Sacred Vessels* (Oxford: Oxford University Press, 1991), 1-7.

inserting itself more forcefully into foreign problems.[20] While he also does not go into the details of how the United States was able to gain the political will to make this change, his discussion of the results is certainly effective.

James Reckner agrees with Zakaria. In his work, *Teddy Roosevelt's Great White Fleet*. While he takes a slightly different approach than Zakaria (he discusses one big event and its effect on U.S. foreign policy rather than several) but his argument is similar. Naval expansion placed the United States in the list of world powers for the first time in its history. He follows the Great White Fleet on its long voyage around the globe and discusses its impact on perceptions of U.S. power abroad.[21] His work is especially insightful as it explains how military force can be used for strictly prestige rather than military purposes. The Great White Fleet's only purpose was diplomatic, an attempt to show the nations of the world that the United States was now a force to reckon with and Reckner showed how it was successful in this goal.

As can be seen, the historiography of U.S. naval power is fairly extensive in discussing the results of naval expansion and the subsequent history of the U.S. Navy. What is surprising, and what this thesis should begin to ameliorate, is the lack of discussion about how and why the navy was expanded. While there are a few works, including most notably *Benjamin Franklin Tracy*, that discuss it to some extent the historiography is incomplete on this subject. This theses should correct this situation and give historians a look into the complexity surrounding the political debate in the 1880s and 1890s that led to naval expansion and to explore reasons why the United States was

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[20] Fareed Zakaria, *From Wealth to Power: The Unusual Origins of America's World War* (Princeton: Princeton University Press, 1998), 1-8.
[21] James R. Reckner, *Teddy Roosevelt's Great White Fleet* (Annapolis: Naval Institute Press, 1988), ix-xii.

willing to embark on such an expensive venture. It will also discuss the technological advancements necessary to the completion of such a large and impressive force and show the advancements incorporated into U.S. ships in order to guarantee their effectiveness against potential adversaries. Finally, it will summarize some significant events in U.S. history following the creation of the new navy that demonstrate the fundamental shift in U.S. foreign policy that occurred following its expansion. This subject is too significant to allow it to remain in relative obscurity.

Chapter 1: The political fight for naval expansion

The significance of the efforts to modernize and expand the United States Navy that began in the 1880s and radically changed American foreign policy deserves far more recognition in current historiography. Current arguments either skip over this fascinating part of American history, or they discount the impact of major players like President Benjamin Harrison or Secretary of the Navy Benjamin Tracy. The effort to overcome opposition to naval expansion was, at times, intense. This involved the passage of laws which had to be approved by a hostile Congress, the convincing of an initially apathetic American public, and the manufacture of a powerful military force from scratch. Opposition, while disorganized, was significant, with some opposed to this expansion due to sectionalism, an isolationist ideology, or a misapprehension of the era's rapid pace of technological growth.

Despite its supporters' efforts, beginning as early as 1879, genuine progress in naval development was not made until the inauguration of Benjamin Harrison in 1889.[1] He had made naval expansion a party plank during his campaigns in 1888 and would again do so in 1892. His secretary of the navy, Benjamin Franklin Tracy, played a central role in creating the Navy dreamed up by President Harrison. Not only did Tracy help rally support in Congress for the President's policy, he also dealt with the day-to-day problems of this expansion such as labor disputes, the search for sites to create Naval Construction yards, and convincing prominent industrialists such as Andrew Carnegie to manufacture the steel for the new ships.

Pro-Navy supporters framed their arguments by demonstrating the United States' naval weakness compared to other nations during this period. These included established

[1] Rose, *Power at Sea*, 18.

powers such as Great Britain, France, and Germany; Americans were haunted by the idea of foreign navies attacking their vulnerable, coastal cities and being unable to either defend them or threaten foreign soil in return. Whether or not America was in imminent danger of invasion during this period is answered by hindsight as no one had successfully attacked the United States since the War of 1812, but at the time some of these nations seemed to present very real threats to the United States. Great Britain is a primary example of a nation that the United States felt threatened by at this time. Bellicose statements made by its own media regularly threatened war with others because of Great Britain's confidence in its military power. Secretary Tracy demonstrated the vulnerability of the United States by discussing how woefully underequipped the U.S. Navy had become. He stated that,

> Until the United States has a fleet of twenty battle-ships with coast defenders, cruisers, and torpedo boats in suitable proportions for efficient defense, and an establishment in such working order, as to administrative machinery, officers, men, reserves, and vessels, that it can be brought without delay into effective action, the country cannot consider that it possesses a Navy; and a Navy it can never afford to be without.[2]

Tracy argued that in order to pursue a strong, assertive foreign policy, the United States needed the military muscle of a powerful Navy. Without this force, Tracy believed that other nations would not respect the United States' position in disputes and they would attempt to bully the U.S. without fear of retaliation.

Tracy used this point in his arguments to Congress, because in regards to the United States "such a nation cannot be indifferent to events taking place in close proximity to its own coasts, threatening the freedom of its commerce and the security of

[2] Quoted in Cooling, *Benjamin Franklin Tracy*, 77.

its seaports."[3] These statements illustrate two primary motivations behind supporters of naval expansion. First, the United States has a large coast and has always had a large merchant marine that had become vulnerable to commerce raiders. The lack of a modern navy meant that the United States was at the mercy of foreign powers that could, in the event of war, strangle trade and bombard coastal cities with impunity. A second argument, presented here by Fareed Zakaria, "was to add military muscle to American foreign policy."[4] It is hard to create an effective global foreign policy without the military might to back it up and strengthening U.S. diplomatic strength interested naval expansionists. It's easier to get other nations to agree with you if you have guns backing up your arguments. These arguments led to the first major push for a permanent increase in United States naval power in the mid-1880s.

Arguments representing the growing support for a powerful navy were made in the U.S. Congress beginning in 1885-1886. These arguments were made in Congress since President Grover Cleveland, who nominally supported the idea of a strong navy in order to protect the coast and strengthen diplomatic efforts, was nevertheless no ardent supporter of large scale naval expansion during his first term.[5] Like many others who opposed increased naval expenditures, Cleveland, at least in his first term, did not want to appear aggressive and believed that all the United States needed to do in order to attain its diplomatic goals was to indicate its disapproval of foreign aggression.[6] This is somewhat

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[3] Quoted in Benjamin Franklin Tracy, "U.S. Navy Department Annual report to President Benjamin Harrison, 1889," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport Rhode Island US Navy Department. As a side note the folders were not numbered in this collection so I am unable to provide a folder number. I neglected to write down the specific box number for each piece of evidence but all of them came from Boxes 5-15 in the collection.
[4] Zakaria, *From Wealth to Power*, 86.
[5] Richard E. Welch, Jr., *The Presidencies of Grover Cleveland* (Lawrence: University Press of Kansas, 1988), 178.
[6] Ibid.

amusing, especially since during his second term his "belligerent diplomacy" and posturing towards Great Britain during the Venezuelan crisis almost led to war. During his first term Cleveland focused mostly on domestic issues and tried to avoid foreign adventures.[7] Some of his domestic achievements include passing the Presidential Succession Act; the Hatch Act, which established agricultural experiment stations; an act promoting voluntary arbitration in railroad disputes; an act raising the Bureau of Agriculture to departmental cabinet rank; the Indian Emancipation Act; and the Interstate Commerce Act.[8] With President Cleveland focusing on solving domestic problems, Congress took the lead on supporting the idea of a large offensive as well as defensive modern navy.

While initial votes to increase naval expenditures were frequently struck down by the U.S. House of Representatives during Cleveland's presidency, as demonstrated by the defeat of House Bill HR 6664 on July 22, 1886, support for naval expansion stretched beyond party lines.[9] Supporters of this policy included prominent members of both parties. One of the most prominent Democratic supporters was Alabama Representative Hilary Herbert, who would go on to become secretary of the navy during Grover Cleveland's second term in office.[10] Following the defeat of HR 6664, Herbert gave an impassioned defense of increasing naval expenditures in order to persuade reluctant representatives to change their minds. He focused on, as he saw it, the mistaken belief that merely building and improving a few coastal forts would be enough to protect the United States. He argued, "We all remember the bombardment of Alexandria by the

[7] Ibid, 160.
[8] Ibid, 90.
[9] *Cong. Rec.*, 49th Cong., 1st sess., 1886, :7336.
[10] Richard E. Welch, Jr., *The Presidencies of Grover Cleveland*, 115.

British fleet in 1882. Stone forts like ours at Boston and New York afforded no protection. Before modern artillery they were as if made of cardboard."[11] The quick increase of technology had rendered traditional defenses obsolete. He also pointed out that the French Navy destroyed a Chinese fleet similar in composition to the U.S. fleet during this same period and that a single modern Brazilian warship, "the *Richauelo*, would be enough to destroy much of the current strength of the US Navy."[12] This demonstrates a vital example of pro-naval arguments. An obsolete fleet is worthless in protecting the United States just as the Chinese Navy failed to stop the French. Moreover, these Congressman considered national prestige a very real issue. If a minor power such as Brazil had a better navy than the United States, other powers would refuse to take the U.S. and its positions seriously. It would not do to have our Navy mocked abroad.

Herbert made these arguments because of the apparent lackadaisical attitude held by many of his colleagues towards protecting the U.S. coastline in the event of war. He did this quite effectively by showing that Congress's naval budget for 1885, around $13,000,000, was less than that given to the navy in 1856, which was $14,074,000.[13] The United States' inability to keep and maintain a powerful naval force would make it unable to protect American interests abroad or defend its shoreline at home. Matthew Butler, a Democratic senator from Maine, agreed with Herbert's assessment. Arguing before the U.S. Senate in 1887, Butler opposed a massive increase in appropriations for coastal defenses by asking "what would be thought of a general charged with the conduct of military operations who would fortify himself, without any preparation, to mobilize his

[11] *Cong. Rec.*, 49th Cong., 1st sess., 1886, :7475.
[12] Ibid.
[13] Ibid, 7476.

forces to meet an enemy in the field?"[14] He went on to argue "if a fleet were present off the coast of New York, or Delaware, or South Carolina, we have not a vessel to go 10 miles from the shore to meet him."[15] (In this case he refers to an enemy fleet.) Butler's argument, in agreement with Herbert's, was that in that day and age, with the range and power of naval gunfire increasing exponentially, it was impossible to properly defend the United States without a navy capable of going out to meet the enemy fleet. Even the most powerful forts are useless if they can be destroyed by ships outside of the range of their guns. Only a strong, mobile force would be able to adequately defend U.S. waters by taking the fight to the enemy and preventing them from getting into bombardment range of coastal cities.

This fear of potential invasion was not only held by Congress, but by the press as well. This took longer than the initial pro-navy arguments in Congress and it was not until after the inauguration of President Harrison that newspapers around the country truly began to support naval expansion. The *New York Times* reported in 1891 that

> with the government free to provide several training ships for the naval reserves that may be organized at Buffalo, Cleveland, Detroit, Chicago, Milwaukee, and Duluth, and with all new steel ships constructed with a view to conversion, in a few days, into cruisers that would certainly be equal in powers and fighting qualities to any vessels that Canada could command the services of in a similar time, the northern border would be safe for a time from invasion.[16]

Whether or not the threat from Canada was credible, this article demonstrates the perception of the relative helplessness of the United States prior to naval expansion. The

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[14] *Cong. Rec.*, 49th Cong., 1st sess., 1887, :1807.
[15] Ibid.
[16] "Our Lake Naval Defenses," *New York Times*, October 7, 1891 accessed October 29, 2014, http://query.nytimes.com/mem/archive-free/pdf?res=9E02E3DF123AE533A25754C0A9669D94609ED7CF

paper mentioned six major cities, and these just in the Great Lakes area, deemed completely vulnerable to a foreign attack. The *Times* finished its argument asserting

> at the same time, the increase of the force of armed vessels by the construction of one or two warships for each of the lakes would serve to prevent any outbreak that might occur while the United States is exposed to attack where a suddenly secured submission might subject a city to a ransom that no ancient or modern prince would be able to pay.[17]

The argument consisted of a pay now by building new ships or pay later under the guns of the British Navy. While this did not happen, it represents how fear proved to be a successful tactic used by naval expansionists to strengthen their arguments in favor of a larger navy. No one wants to lose a war. Imagining your town helpless before the might of the British navy was effective imagery. This article demonstrates one way pro-naval arguments were presented in the press and shows that it was problem discussed all over the nation, not just in Congress.

The radical change advocated by the Harrison administration led to further debates in Congress. While the Navy's few, namely three, previous new ships had been cruisers, President Harrison and other advocates of naval expansion wanted more than a few modern commerce raiders. According to a report prepared by Secretary Tracy in 1892,

> the policy then advocated (1889); which was a radical departure from any view previously presented in this country, consisted in the production of three principal types; First, the armored battle ship of 10,000 or more tons; second, the armored cruiser of from 8,000 to 9,000 tons, and third, the commerce protecting and destroying cruiser, of extreme speed, of 7,500 tons.[18]

To quote Tracy again, who supported this policy

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[17] Ibid.

[18] Benjamin Franklin Tracy, "Report from the Secretary of the Navy to President Benjamin Harrison, December 10, 1892," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport

> to regain the relative position among these navies (for example, Great Britain and France) we occupied prior to our civil war is certainly not too much to attempt, especially as we know now that we have no such efficient coast defense as we then believed ourselves to possess. To reach this point it is not disputed that we need more first class battle ships. We have now only three authorized. Eight or nine more of these, in addition to our authorized fleet, would give us a respectable navy, sufficient, perhaps, for our purposes.[19]

What these quotes demonstrate is that naval expansion entailed more than building a few new ships. The country required a new battle fleet, including the construction of new, expensive battleships. They wanted to change the navy into an offensive force capable of defeating a major naval power in the event of war. These battleships, as will be shown in a later chapter, were necessary to defend against the potential incursion of a major naval power. Their significant advantage in both weight of gun power as well as armor over the quicker, but much more fragile cruisers, made their inclusion in any modern battle fleet an absolute necessity.

As mentioned earlier, naval expansionists did not gain strong support for naval expansion until the inauguration of President Harrison. In 1891, William McAdoo, a Democratic Congressman from New Jersey, became a strident voice in favor of naval expansion. Chosen later as the assistant secretary of the navy in Grover Cleveland's second administration, he argued that states needed to think of the welfare of the nation before their own individual welfare. In Congress, he said "the local, narrow, and superficial issue may be made by contending that they have no benefit from the expenditures for the Navy in the way of building ships and making guns and that they are not directly at the mercy of a foreign fleet."[20] McAdoo then went on to explain why this sectionalist opposition to naval expansion could be seen as foolish or even traitorous. He

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[19] Ibid.
[20] *Cong. Rec.*, 51st Cong., 1st sess., 1891, :1799.

argued, "This in truth is a specious and untenable statement of the case. If the people in the central basin of the United States want to keep the political power that is now theirs they must hold it by acting wisely and with statesmanship and with such broad, catholic views as will protect the rights of all the people of the Republic."[21] Congressman McAdoo presented an interesting, unifying pro naval argument. He openly acknowledged that there are some parts of the nation that would not be directly benefited by an increase in naval spending. However, he argued that they indirectly benefited because a foreign fleet menacing one part of the nation menaced all parts of the nation. In other words, if Virginia got burned to the ground it would affect the United States even if it did not directly affect Iowa. As citizens of a republic made up of all the states, sectionalists needed to set aside their own narrow concerns and think of the nation as a whole and not only of their constituents at home. This is one reason why support for naval expansion was bi-partisan as supporters presented the idea as patriotic. Here, patriotism is defined as supportive of the country's international image. While it was the arguments of a Republican president, Harrison, which would finally gain enough support nationally for a larger navy, the arguments of prominent members of both parties moved bills on naval expansion forward through Congress.

Benjamin Harrison, a former Union army general from Indianapolis, made Naval expansion a central part of his presidential election campaigns. From his first term, Harrison supported the construction of a powerful Navy, which fit with his ideas to support American trade by subsidizing steamship lines.[22] As early as his inaugural address, Harrison presented his arguments in favor of a stronger navy:

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[21] Ibid.
[22] Calhoun, *Benjamin Harrison*, 66.

> The construction of a sufficient number of modern war ships and of their necessary armament should progress as rapidly as is consistent with care and perfection in plans and workmanship. The spirit, courage, and skill of our naval officers and seamen have many times in our history given to weak ships and inefficient guns a rating greatly beyond that of the naval list. That they will again do so upon occasion I do not doubt; but they ought not, by premeditation or neglect, to be left to the risks and exigencies of an unequal combat. We should encourage the establishment of American steamship lines. The exchanges of commerce demand stated, reliable, and rapid means of communication, and until these are provided the development of our trade with the States lying south of us is impossible.[23]

Harrison, convinced that U.S. power directly tied to the size and strength of the navy and the merchant marine, lent presidential authority to expansion. In another address to Seattle in May of 1891, he discussed his dreams of a massive American merchant fleet "I do most sincerely believe that we are entering now upon a new development that will put the American flag upon the seas and bring to our ports in American bottoms a largely increased share of the commerce of the world."[24] Harrison wanted to increase revenues for American businessmen by greatly increasing the number of U.S. ships on the oceans, leading into his support of naval expansion. That many new ships would require greater protection. He argued that it was time for the men and officers of the U.S. Navy to face combat on equal terms, rather than having to make do with inferior ships. Harrison demonstrated his support for this idea in his inaugural address in 1889 where he stated that the United States should begin "construction of a sufficient number of modern warships and of their necessary armament should progress

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[23] "Benjamin Harrison Inaugural Address," Inaugural Addresses of the Presidents of the United States: from George Washington to Barack Obama, accessed May 9, 2015, http://www.bartleby.com/124/pres38.html.

[24] President Benjamin Harrison, "Campaign Speech Given in Seattle, May 6, 1891," Benjamin Harrison Collection election box 1 folder 13, Indiana State Library, Indianapolis.

as rapidly as is consistent with care and perfection."[25] In pamphlets and leaflets produced during his run for the Presidency in both 1888 and 1892, as well as speeches given during his presidency, Harrison argued that it was time for the United States to have a navy worthy of its national prestige. In one speech, given by the President in Galveston, Texas in 1891 while touring the west, he declared "I do much want that the time shall come when our citizens living in temporary exile in foreign ports shall now and then see steaming into these brave distant ports a fine modern man-of-war, flying the United States flag with the best modern guns on her deck, and a brave American crew in her forecastle."[26] President Harrison wanted to protect U.S. interests abroad in a way that would be impossible without the presence of a large and powerful navy.

The president also wanted to defend the coasts of the United States from future threats. In Los Angeles, California, also in 1891, Harrison said:

> we are a peace loving nation, yet we cannot be sure that everybody else will be peaceful, and therefore I am glad that by the general consent of our people and by the liberal appropriations from Congress, we are putting on the sea some of the best vessels of their class afloat, and that we are now prepared to put upon their decks as good guns as are made in the world; and when we have completed our program ship by ship, we will put in their forecastles as brave Jack Tars as serve under any flag. The provident care of our government should be given to your sea-coast defenses until all these great ports of the Atlantic and Pacific are made safe.[27]

The president, concerned about how the United States would defend itself in the event of war, felt that thanks to his strong policy of naval expansion, the country would be able to protect itself from foreign powers. In addition to defense, Harrison was

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[25] Quoted in Homer Socolofsky and Allan Spetter, *The Presidency of Benjamin Harrison*, (Lawrence: University Press of Kansas, 1987), 97.
[26] President Benjamin Harrison, "Campaign Speech Given in Galveston, April 18, 1891," Benjamin Harrison Collection election box 1 folder 13, Indiana State Library, Indianapolis.
[27] President Benjamin Harrison, "Campaign Speech Given in Los Angeles, April 22, 1891," Benjamin Harrison Collection election box 1 folder 13, Indiana State Library, Indianapolis.

pleased at the number of jobs created by his naval policy. Speaking before a crowd of workers in San Francisco in 1891, he stated:

> we are making fine progress in the construction of the navy. The best English constructors have testified to the completeness and perfection of some of our latest ships. It is a source of great gratification to me that here in San Francisco the energy, enterprise, and courage of some of your citizens have constructed a plant capable of building the best modern ships. I saw with great delight the magnificent launch of one of these new vessels. I hope that you may so enlarge your capacities for construction that it will not be necessary to send any naval vessels around the horn.[28]

Harrison, speaking here to supporters of his policy of naval expansion, attempted to maintain the support he had gained in coastal areas for the upcoming election by reminding them of his policies that protected them by strengthening the navy and provided them with jobs.

Harrison also defended his policies to Congress. In his third annual message to the Senate and the House of Representatives, the president echoed some of the arguments he presented out west:

> The report of the Secretary of the Navy shows a gratifying increase of new naval vessels in commission. The Newark, Concord, Bennington, and Miantonomoh have been added during the year, with an aggregate of something more than 11,000 tons. Twenty-four warships of all classes are now under construction in the navy-yards and private shops; but while the work upon them is going forward satisfactorily, the completion of the more important vessels will yet require about a year' s time. Some of the vessels now under construction, it is believed, will be triumphs of naval engineering. When it is recollected that the work of building a modern navy was only initiated in the year 1883, that our naval constructors and shipbuilders were practically without experience in the construction of large iron or steel ships, that our engine shops were unfamiliar with great marine engines, and that the manufacture of steel forgings for guns and plates was almost wholly a foreign industry, the progress that has been made is not only highly satisfactory, but furnishes the assurance that the United States will before long attain in the construction of such vessels,

[28] President Benjamin Harrison, "Campaign Speech Given in San Francisco, May 1, 1891," Benjamin Harrison Collection election box 1 folder 13, Indiana State Library, Indianapolis.

> with their engines and armaments, the same preeminence which it attained when the best instrument of ocean commerce was the clipper ship and the most impressive exhibit of naval power the old wooden three-decker man-of-war.[29]

President Harrison hoped to protect United States interests abroad, while also stimulating the economy by providing new kinds of jobs for the American people.

One of the primary points demonstrated by these examples is that Harrison, unlike many other pro navy supporters, was not hoping to expand the navy in order to promote an imperialistic foreign policy. Harrison was more interested in economic development, as evidenced by his support of protecting and expanding U.S. shipping. Defense was always on Harrison's mind while working to increase the size of the U.S. Navy. He said "We have always had a navy personnel to be proud of, and now we have a navy to be proud of-not a finished navy but one on the way."[30] He goes on to say "It is not our purpose to match the great navies of Europe. We may safely keep our register of vessels well within theirs; but we do not intend again to leave the sea."[31] Harrison wanted to protect U.S. commerce and interests abroad, but throughout his writings and his speeches, he never develops a bombastic or threatening tone. It's clear that he is uninterested in expanding U.S. power abroad. He is no Teddy Roosevelt. His interests rest solely in defense and economic development which he saw as two sides of the same coin.

These examples demonstrate the importance of naval expansion to Harrison's entire administration. While he pursued numerous other agendas, some more successful than others, President Harrison increased the size of the United States Navy and it is

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[29] "Benjamin Harrison Third Annual Message, December 9, 1891," The American Presidency Project, accessed May 9, 2015, http://www.presidency.ucsb.edu/ws/?pid=29532.
[30] Benjamin Harrison, *This Country of Ours* (New York: Charles Scribner's Sons, 1903), 254.
[31] Ibid, 255.

primarily because of him and others in his administration that the U.S. Navy was finally modernized.

President Harrison chose to implement this policy of naval expansion by appointing a powerful advocate for a strong, modern navy: Benjamin Franklin Tracy. As Tracy later reported concerning his beliefs,

> The defense of the United States required the creation of a fighting force. I felt that we must be able to divert an enemy's force from our own coast by threating his own, for a war, though defensive in principal, may be conducted most effectively by being offensive in its operation. So I advocated right from the start a fighting plan that meant taking the offensive.[32]

It was Tracy's energy and enthusiasm for improving the U.S. Navy that allowed him to convince a not-always-friendly Congress to give him their support.

One of Tracy's first successes as secretary was convincing Andrew Carnegie to accept a government contract to manufacture the vast quantities of steel necessary to construct the ships in the new navy. Carnegie was initially reluctant to sign on. Benjamin Franklin Cooling, Tracy's biographer, explains "Even Secretary Whitney (Secretary of the Navy under President Grover Cleveland during his first term) searched almost a year for a contractor after Congress appropriated funds for ship construction. Prospects of the high navy rejection rate frightened away such men as Andrew Carnegie."[33] The government needed to attract large business owners, especially the King of Steel, but the highly technical nature of the new navy meant that the great potential for profit came with the possibility of massive losses. Tracy did bring Carnegie on board after intense negotiations, and the Navy Department, under his leadership, convinced Carnegie and his steel company to provide 6,000 tons of armor for the creation

[32] Quoted in Cooling, *Benjamin Franklin Tracy*, ix.
[33] Ibid, 89.

of the new navy.[34] While some things still needed to be agreed upon before he signed a contract, Carnegie, concerned with starting on the order, allowed his subordinates to resolve minor details while he purchased necessary tools.[35] Carnegie and his company had the experience and the techniques to create the newest and strongest forms of steel, which had to be of the highest quality to provide the greatest amount of protection to modern warships.

Carnegie's support for the project was essential for its success. Previous manufacturing errors, especially at Bethlehem Steel, the original manufacturer hired to produce armor plate, necessitated Carnegie's involvement.[36] Because of the company's lack of experience and proper equipment to create armor, Bethlehem Steel had not yet begun its construction order by the end of 1889. When Bethlehem Steel began deliveries neither the quantity nor the quality of the armor satisfied the secretary of the navy.[37] These delays and problems infuriated Tracy who "did not wish to hear of any 15 month delay at this point."[38] Tracy went to Carnegie who had both the means and the experience to produce the highest quality battle steel.[39] Difficulties in producing these ships might have strengthened arguments against naval expansion.[40] By purchasing Carnegie's experience in steel manufacturing, Tracy sidestepped potential spiraling costs that could have hampered his arguments in Congress in favor of naval expansion.

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[34] Ibid, 94.
[35] Ibid.
[36] Ibid.
[37] Homer Socolofsky and Allan Spetter, *The Presidency of Benjamin Harrison*, 99.
[38] Cooling, *Benjamin Franklin Tracy*, 94.
[39] He had this experience through his adoption of the Bessemer Process of steel production, a cheaper and more efficient method of producing high quality steel. For more information on Carnegie's steel making experience see
Thomas J. Misa, *A Nation of Steel: The Making of Modern America 1865-1925*, (Baltimore: John Hopkins University Press, 1995), 21-45.
[40] I will go into detail about the groundbreaking technological development represented by the new steel navy later on in this work

Carnegie and his company became essential to the production of the first class capital ships required by the U.S. Navy. But Tracy dealt with more than production difficulties while creating the fleet.

As mentioned previously, the opposition to naval expansion frequently centered on both the actual expenditure of funds and an unfamiliarity with how changes in technology had rendered some ships obsolete. One of Secretary Tracy's biggest opponents in the Senate, William E. Chandler, opposed any ship that could be used offensively in a war, personally arguing that instead of battleships "monitors could provide equally adequate and far more economical protection for the seaboard."[41] This argument demonstrated both an unwillingness to create an offensive force that would be used in foreign adventures and complete ignorance as to what actually composed an effective fighting force. The monitor design, by this point twenty-five years old, was not used by any other modern navy, especially in the more advanced navies in Europe and of Japan.

Tracy also dealt with overeager subordinates who did not understand that because of isolationist diplomatic and fiscal policies, the United States needed to be introduced to the idea of a larger navy a little bit at a time. In fact, the Naval Policy Board, which consisted of naval officers led by Commodore W.P. Mcann, released a report, without Tracy's authorization, in January 1890, recommending immediately creating a fleet of ten modern battleships which had a maximum cruising range of 15,000 miles as well as twenty-five defensive battleships with a maximum cruising range of 3,000 miles. In addition to these new battleships the board recommended building twenty-four armored cruisers, fifteen light cruisers, five smaller ships for service in China, ten ships designed

[41] Cooling, *Benjamin Franklin Tracy*, 80.

to ram enemy ships, three depot ships, and one hundred small torpedo boats built to quickly attack and destroy capital ships.[42] While this was certainly in line with what the administration eventually envisioned for the Navy, this report was supposed to have been confidential.[43] Instead, someone on the board leaked their report to the public before it could be reviewed by Tracy, causing an instant backlash in Congress. Even pro-navy congressmen balked at the $281,555,000 price tag, up from $14,000,000.[44] Not only that, if this program were implemented per the report, the United States Navy would become "second only to Great Britain in tonnage and well ahead of France."[45] Even Senator Eugene Hale of Maine, a prominent navy supporter since the early 1880s, had to tell Tracy that "it would be difficult to find a senator who in the least degree endorsed the report."[46] While this may have been an acceptable long-term goal, Tracy knew it would never be allowed to occur all at once. Forced to denounce the recommendations of his own board in order to save his plans for naval expansion, it took all of Tracy's skills to push naval expansion forward in a country that had no desire to join in the ever-escalating naval competition between the world's major naval powers.

Despite this monumental error, naval expansionists continued to gain favor in Congress and approved many appropriations designed to expand the size of the navy. Initial naval expansion bills approved by Congress led Massachusetts Congressman

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[42] Battleships were produced with a combination of heavy steel armor and large guns and were designed to fight and destroy enemy battleships in order to gain naval supremacy. Armored Cruisers were smaller with lighter armor and guns, but were still considered to be of use in fleet actions. Light Cruisers were fast ships with little armor and light guns designed to both scout out enemy positions and hunt down enemy shipping. Rams were a failed experiment with heavy armor in the bow in the thought that they could sink ships by running into them. Depot ships were unarmed vessels that carried naval supplies. Torpedo boats were unarmored, small, fast ships that carried torpedoes in hopes that their great speed would allow them to attack and sink capital ships before they were destroyed.

[43] Ibid, 82.

[44] Ibid.

[45] Ibid.

[46] Ibid.

Henry Cabot Lodge, a close friend of fellow navy supporter Theodore Roosevelt, to declare, referring to the War of 1812,

> We met with disaster simply because we were totally unprepared. The first victories we gained were those won by the few ships we then had afloat; and today if we want to make our diplomacy and negotiations successful, if we want to have them worthy of the American name and of American honor, we must see to it that we have the means of defense to back it up.[47]

Congressman Lodge's comments are one example of why Congress passed naval legislation during this period. This consisted of funding new ships, but the construction of naval yards and the hiring of skilled workers were other aspects of naval expansion that often get overlooked; understanding these issues demonstrates one of the political legacies of naval expansion.

Another facet of pro-navy arguments was the dangerous and humiliating position in which the United States' decrepit and worthless navy placed the country. Congressman William McAdoo of New Jersey mentioned in his argument that the *London Times*, the most prominent newspaper in England, had published the following statement, "We have a navy which is in being; the Yankees have a navy which is on paper. If the Yankees want to fight with us, we will be charitable to them and send over the old ferryboats of the Thames River to meet such of the Yankee navy as has really been built."[48] Statements like these alarmed the U.S. government to say the least. Naval advocates used statements like this one to demonstrate both the danger of not upgrading the Navy and the humiliation the United States faced by showing a potential enemy jokingly offering to attack the U.S. with old ferries in order to give them a fighting chance. While a facetious argument of course, it was not too far from the truth. England,

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[47] *Cong. Rec.*, 51st Cong., 1st sess., 1891,:1804.
[48] Ibid, 1800.

a potential enemy rather than the close ally it would be after World War I, showed the U.S. Navy nothing but contempt in these years. McAdoo used this example to strengthen his argument that not supporting naval expansion put the nation in danger. Without a stronger navy, the U.S. set itself up for a potential significant defeat by a major world power.

McAdoo also addressed the complaint that a new navy would cost too much money to implement. He did this by attacking the apparent hypocrisy of the opposition. While these congressmen frequently complained about the overall cost of naval expansion, they had no problem throwing hundreds of millions of dollars at other massive government projects. McAdoo described this in his arguments, which are unsurprising due to Democratic opposition to Civil War solder's pensions, "Why the pension appropriations in this session of Congress will be $160,000,000, I am told; and yet there are gentleman on this floor who claim to be consistent who berate the expenditure of 50 cents for the navy who would vote for $160,000,000 for pensions!"[49] Lingering attachment to pet projects, such as these pensions, provided a major stumbling block to passage of naval bills, but this argument was mostly hypocritical according to McAdoo. It is one thing to argue for pensions instead of a shiny, new navy; after all, this may seem to an honest legislator a better expenditure of resources. But it is quite another to pretend you are against any increase in spending at all and then throw your support behind another expensive bill. It was this supposed hypocrisy and lack of genuine commitment to an ideology that McAdoo pointed out in order to strengthen support for the navy.

Understanding the opposition's position requires a study of their arguments in addition to their opponents. While McAdoo certainly called out what he saw as

[49] Ibid, 1799.

hypocrisy in his opponents, many genuinely opposed naval expansion for what they regarded as valid reasons. Some opposed naval expansion because of cost, others because of an outmoded understanding of defense, some because they just did not care what happened to the coastal states in the event of war, and some due to isolationism.

The expense of this massive increase in the size of the navy led to significant opposition. Most of the arguments against expansion related to its cost and the opposition made some persuasive arguments against getting the United States involved in an arms race. These led to passionate debates in Congress. Despite the opposition's underestimation of the danger posed by foreign navies to the United States, they still cared about protecting the country. However, they opposed any increase in naval size and they succeeded at stopping expansion until the Harrison administration came to office.

One of the most persuasive arguments against increasing the size of the navy was the old one against getting involved in European affairs. Senator Matthew Butler, a Democrat from South Carolina, was an early voice opposed to both the vast increase in spending and the danger of getting involved in a naval arms race with European nations. For example, he said on February 16, 1887, "The history of the building and the trial and the use of these great enormous naval ships is a most interesting history to read; it is a history of experiment; it is a history of lavish expenditure."[50] He went on to argue "the United States has waited and watched these experiments and saved its money."[51] In these few sentences, Senator Butler expressed one of the primary arguments against naval expansion at this time. It would be too expensive. The United States, according to the

[50] *Cong. Rec.*, 49th Cong., 1st sess., 1887, :1807.
[51] Ibid.

opposition, had far more pressing areas to spend its money than on some chest thumping exercise to keep it abreast of nations already far ahead of it in actual naval power. He was also concerned about getting the United States involved in an arms race with Europe. All this would do, he stated, was drag the country into conflicts it would do better to avoid. In Butler's mind strong forts, floating batteries, and rams would be more than adequate to defend the coastal cities of the United States from a concerted foreign attack.[52] While Maine's long-time Republican Senator Eugene Hale called him out on this outmoded belief, saying, "experience heretofore is that a floating battery cannot go outside the harbor,"[53]Butler's argument is representative of one of the arguments against increasing the size of the U.S. Navy.

Further arguments against naval expenditure tended to revolve around regional concerns. Senator William Allison, a Republican from Iowa, argued that the government had, in 1887, a budget surplus of between 50 and 60 million dollars, proof that it taxed its people too much.[54] George Vest, a Democratic senator from Missouri, agreed with Allison arguing that United States citizens complained, "We are now making hot haste to spend in every conceivable form the surplus in the treasury and not taking one dollar of taxation off the people of the United States."[55] While these senators probably were concerned about taxation (promising to lower taxes has been a perennially popular platform since the beginning of democracy) it is interesting that these gentlemen came from landlocked states. They may not have seen the value in spending large sums of money on stronger coastal defenses or a navy as none of that money would ever benefit

[52] Ibid, 1808.
[53] Ibid.
[54] Ibid, 1812.
[55] Ibid, 1812.

their constituents. This combination of arguments had been successful, prior to Benjamin Harrison's administration, in keeping the size of the U.S. Navy to just three modern cruisers the U.S.S. *Dolphin*, the U.S.S. *Atlanta,* and the U.S.S *Boston*.[56] It was not until naval expansionists put a man in the White House that significant work on increasing the size of the Navy took place.

The debates only became fiercer as the new administration under President Harrison took control of the White House, and began to strongly push for an increase in the size of the navy. Pushback from the opposition temporarily increased, especially following the disastrous report by the Naval Policy Board near the beginning of the Harrison administration. The cost of expansion caused the most contention in Congress. Kansas Senator Preston Plumb argued against this expenditure when he asked Senator Hale, a pro-navy supporter, "Can the Senator state what will probably be the maximum appropriation to be called for during the next four or five years by reason of the ships formerly authorized to be built?"[57] The large cost was daunting to the opposition and the country at large and this report almost ended the support needed to increase the size of the navy.

Other voices complained that all the United States really needed was stronger coastal defenses in the forms of forts and floating batteries. Senator John McPherson of New Jersey argued for this point quite passionately stating "it would seem, instead of building battleships and cruisers that some provision should be made for our coastline defenses, and I regret that the committee have not made some recommendation in the bill

[56] Benjamin Franklin Tracy, "Report from the Secretary of the Navy to President Benjamin Harrison, December 10, 1892," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport Rhode Island.
[57] *Cong. Rec.*, 51st Cong., 1st sess., 1891, :2428.

looking to that object and purpose."[58] This argument rejects the idea that a strong, mobile navy is the only adequate coastal defense for the nation, an argument frequently made by pro-naval expansionists. In fact, this is Alabaman Congressman Hillary Herbert's principal argument in the House during this same time period in which he argued "Our purpose in maintaining a navy is that which lies at the foundation of this Union, to promote the common defense and general welfare."[59] Supporters of naval expansion viewed it not as an excuse to launch the United States into an international conflict, but to protect the nation from the inevitable commencement of hostilities at some future date. They followed the old motto that the best way to have peace is to prepare for war.

These speeches demonstrate the principal arguments in favor of U.S. naval expansion in the 1880s as well as the primary arguments against expansion. A powerful navy, that could challenge enemy ships in open waters with a high degree of success, was necessary in order to adequately protect U.S. interests. It was embarrassing to have foreign navies laughing at the pathetic grouping of wooden ships and rusting monitors that made up the principle power of the U.S. Navy during this period. Those opposed seemed almost exclusively motivated either by fears of the massive cost of a modern navy, or by outmoded ideas of how to defend the coastline. But expansionists, concerned about more than just national pride, also thought of the economy. Pro-expansionists also promised new jobs both in the navy and in the yards that would construct the new ships. These jobs, both in the new, expanded navy and in the construction yards that would be built to handle the increase in orders and the increasing size of the new ships, were an

[58] Ibid.
[59] Ibid.

important part of pro naval arguments. These arguments, just as powerful as the fear of foreign invasion, were integral parts of the pro-naval argument.

Debates concerning naval expansion also included discussion about where new naval yards would be built. While the United States had plenty of private shipyards, not all of them could build naval warships. According to Tracy "So far as I am informed we have but two private yards, possibly three, that would undertake the construction of ships of this size."[60] Political thinking greatly influenced the search for places to locate and build these government shipping yards. Several senators and congressman wanted to make sure that their states reaped the most benefits from the new yards. Even anti-expansion members pushed for naval yards to either be built in their own states or not to be built in the states of their rivals. Senator William E. Chandler of New Hampshire, a former secretary of the navy under President Chester Arthur, ironically opposed expansion. He argued, "I regret to learn that Acting Rear Admiral Walker's squadron draws so much water that the Atlantic Ocean is too shallow for the vessels to visit the Argentine Republic. This shows very clearly the necessity of building no more large ships."[61] Nevertheless, he was concerned that too many ships were being built in Maine. "I enclose a letter showing that Maine is gaining the largest share of Portsmouth Navy Yard work," he said. "No doubt the statements in the letter are correct, and that in some appropriate way business should be equalized."[62] Demonstrating some contradictions in his opposition to naval expansion, Chandler, who argued against the waste involved in building too many large warships, also seemed inordinately concerned that coastal states,

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[60] Benjamin Franklin Tracy, "Letter from Benjamin Franklin Tracy to Eugene Hale, 1889," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport.
[61] William E. Chandler, "Letter from William E. Chandler to Benjamin Franklin Tracy June 25, 1890," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport Rhode Island.
[62] Ibid.

such as his home state New Hampshire, receive an equal share of the new construction projects.

Of course, pro naval expansion senators were just as, if not more so, interested in where and when these new naval yards would be built. Thomas Collier Platt, at the time a former U.S. Senator from New York, was trying to get back into political favor after a disastrous resignation from the Senate in protest over political appointments not received during the Garfield Administration.[63] By 1890, Platt in an attempt to regain his former political prestige had joined with the pro-expansion movement. Even as early as May 1890, he attempted to be appointed to the committee that would determine where to build badly needed naval construction yards. In a letter to Tracy he asked "has the selection yet been made of the location for the Navy Yard in the Northwest? If not, I would like to talk with you about it before a decision is reached."[64] Despite being from New York, Platt wanted to help choose a place in the Northwest for a new naval yard. Fortunately for Platt, Tracy, also a Republican from New York, named Platt to a commission looking for a good spot for a naval yard in Puget Sound. This example shows the intense interest shown by both sides of the debate as to the placement of these particularly lucrative new construction sites. They cannot be blamed for having such an intense interest in this placement. Construction yards meant jobs for potential voters and an effort to secure them would add to their political capital.

The nation's newspapers provided significant support for the popularity of these new construction yards. The *Norfolk Virginian* reported on the positive impact of the

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[63] "Progress and Fall of Platt, Easy Boss," *New York Times*, March 7, 1910, Accessed October 29, 2014,file:///C:/Users/paladin0913/AppData/Local/Microsoft/Windows/Temporary%20Internet%20Files/Content.IE5/BJ2HS4PB/104923823.pdf

[64] T.C. Platt, "Letter from T.C. Platt to Benjamin Franklin Tracy May 23, 1890," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport Rhode Island.

Portsmouth Virginia Navy Yard saying "Portsmouth is especially noted for the United States Navy Yard and Naval Hospital, which gives employment to about 1,500 civilians."[65] The *New York Times* also reported favorably on job growth created by navy yards in 1891 writing, "The Lake Erie Engineering Works is now employing 260 men. When the engineering shops are fully underway, this force will be considerably increased."[66] *The Red Cloud Chief,* from Red Cloud Nebraska, presented arguments about the quality of certain laborers employed saying "that boys be carefully selected for apprenticeship, physically examined and then carried through the proper course of construction at the navy yards."[67] All of these papers demonstrate the popularity of promised work and its beneficial effect for pro-naval expansionists. Jobs have always been a popular political subject and this article represents one way this issue was used to argue in favor of naval expansion. But there was a certain pride in building these ships entirely within the United States. The article pointed out that "except at the very outset nearly all money appropriated has been used in the development of domestic plants, until today the United States is independent of Europe not only in shipyards, but in possession of nearly all plants necessary to the production of war material." Patriotism played just as large a factor in influencing the minds of the voters at home as it did in Congress. There was something special about the United States ridding itself of foreign dependence in naval matters and at the same time providing jobs to employ its underemployed working class.

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[65] "Reportorial Resume" *The Norfolk Virginian* September 12, 1897, accessed March 7, 2015http://chroniclingamerica.loc.gov/lccn/sn85025715/1897-09-12.
[66] "Plants for Naval Work," *New York Times*, December 21, 1891, Accessed October 29, 2014, http://query.nytimes.com/mem/archive-free/pdf?res=9404E3D7133AE533A25752C2A9649D94609ED7CF
[67] "From the Navy's Designer," *The Red Cloud Chief*, November 4, 1898, Accessed March 7, 2015, http://chroniclingamerica.loc.gov/lccn/sn84022835/1898-11-04.

Many skilled workers sought after jobs in the new yards. They paid far better than jobs available in nearby private shipyards. This can be seen in a report from the commandant of the New York Navy Yard to Tracy, which recommended that wages at these yards be reduced. He opined that:

> in compliance with depts letter #9 of the 10th inst, relative to the reduction made in the wages of pile drivers at this Yard, the Board on Wages reports that Pile Drivers were paid for the QTR ending March 31, 1890, 3.52, 3.28, and 3.04 per day for the 1st, 2nd, and 3rd classes respectively, and the Board recommended that these rates of wages be reduced for the QTR ending June 30, 1890, to 3.04, 2.80, and 2.48 per day to conform to the wages paid by two of the largest firms in this vicinity employing that class of workman, which firms and wages are as follows: Messrs. Richard Cronin and Sons, office 138 Luquer Street, Brooklyn, wages of pile drivers 1.75-3.00 per day. Messrs. Henry DuBois and Sons, office 119 South Street, New York, wages of pile drivers 2.50-3.00 per day.[68]

What is interesting about this communication between Tracy and his subordinate is how well government construction jobs paid. In the previous example, before the government reduced wages, the New York Navy Yard paid even their least skilled pile drivers more than they could receive at the two largest private yards nearby. While in this instance the government reduced the drivers wages, the workers still tended to make more money at their different grades than they would elsewhere which made these jobs highly sought-after.[69] In fact, the government jobs were so popular that local shipyard owners complained vociferously to the government.

C.A. Moore, Esq., a local shipyard owner complained that:

> we are from time to time very much annoyed by our most skillful men leaving us, finding some more profitable employment in the Brooklyn Navy Yard, where the hours of labor are much shorter, and, as we are informed, the rate paid is much higher. There is also a very strong

[68] Commandant of the New York Navy Yard, "Letter from the Commandant of the New York Navy Yard to Benjamin Franklin Tracy April 14, 1890," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport Rhode Island.
[69] Ibid.

> movement on foot looking to the establishment of eight hours as a day's labor, based upon the time constituting a day in the Brooklyn and other Government Navy Yards. Of course this movement very much interferes with contemplated contracts as no manufacturer can afford to pay for labor based upon such prices, unless there is a general change throughout the whole country.[70]

An interesting point brought up by Moore is that he wanted the government yards to start treating its workers worse in order to reduce his own problems with labor. Not only did he lose workers to the better paying jobs available at the Brooklyn Navy Yard, but it forced him to consider allowing his own men to work eight hour days, something which business owners saw as radically dangerous.

Moore was far from the only person who complained to Tracy about this problem. According to W.P. Clyde, another shipyard owner in the New York area, the government's enhanced treatment of its workers caused labor disputes. He wrote, "I have been ill, else I should have come to Washington to speak with you regarding labor troubles which are being developed by the probably unintentional action of the parties managing the construction work in Brooklyn Navy Yard. It is affecting and has caused strikes among the riveters and boiler makers in the yards here."[71] A final example from the U.S. Chief of Bureau:

> I have respectfully to call to your attention to the rates of pay of apprentices in the Steam Engineering Department of the Navy Yards, which I consider altogether too high for the services which the boys in the several grades can usually render, and is generally set so much above that paid by outside establishments as to set a premium upon securing an apprenticeship in a navy yard shop, rather than in an outside establishment , although the probabilities of being pushed to efficiency in a trade are vastly greater in a private establishment than that of a government shop…

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[70] C. A. Moore, "Letter from C. A. Moore, Esq. to Benjamin Franklin Tracy May 23, 1890," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport Rhode Island.
[71] W. P. Clyde, "Letter from W. P. Clyde to Benjamin Franklin Tracy April 24, 1890," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport Rhode Island.

The Chief of Bureau then reported that Clyde recommended reducing wages for the apprentices.[72] All of these discussions demonstrate the shipyard owner's self-interest. As long as these private yards received government contracts they did not complain, but when workers began to be treated considerably better in the new naval yards, the yard bosses felt the squeeze when their workers moved on to greener pastures. These examples show how many workers thought these government jobs would pay them better and, while there is not time to explore labor relations fully in this work, the great, albeit temporary, effect on laborers and employers alike show a side of naval expansion that is rarely explored.

When workers at these yards saw the better treatment received by their friends and former co-workers who now worked for the government, they went on strike and demanded the same treatment from their employers. As seen in their letters, this caused the latter no end of headaches and they wanted the government to bring their yards more into line with practices in the private yards. This is unsurprising, considering the large amount of trouble between labor and management during this period, but in regards to naval expansion, these activities would certainly have congressmen who favored expansion easier to elect, as happy voters tend to stay with the incumbent. Overall, labor disputes added another layer to the arguments in Congress concerning naval expansion.

Others were upset by these new government jobs as well; additional opposition came from local farmers who had relied on cheap, unskilled labor to bring in their crops. In 1890, one such man from Maryland wrote Tracy,

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[72] Engineer in Chief U.S.N. Chief of Bureau, "Engineer in Chief U.S.N. Chief of Bureau to Benjamin Franklin Tracy June 7, 1890," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport Rhode Island.

> the Government of the US is making extensive improvement at Indian Head and are absorbing all the labor. We are now ready to put wheat in the ground and to gather in the corn crop: if the government takes up all our labor we are simply a ruined people. I hope you will at once discharge all our country hands so that we can go on with our seeding wheat and gathering in of the corn crop. You can get all the hands you want from the streets of Washington and Baltimore. I do hope you will spare us the misfortune of losing our wheat and corn crop.[73]

Usually the impact on local agriculture is not something thought of in regards to naval expansion, but as this example demonstrates an increasingly interconnected economy and, most importantly, the ability to quickly travel to other areas of the country meant that new construction could draw labor from farther afield and new naval yards could affect even non-coastal parts of the country.

Expansion created more than just civilian jobs as is evidenced by a new naval militia program passed by Congress. While of course a larger navy meant more jobs in the navy itself, Congress created a naval militia to ensure a steady supply of skilled seamen. While these would be part time jobs, the militia was cheap and provided a little extra money to thousands of Americans. The *Burlington Weekly Free Press* in Vermont quoted Secretary Tracy in its report on the subject "One great lack of our navy is men." He went on "The naval militia form a reserve of citizen sailors who are engaged in civil occupations and put Congress to only a slight expense for arming and equipping them. The example of Pennsylvania and Vermont should be followed. We ought to have a naval militia in at least twenty states." As can be inferred from Tracy's comments, the militia was a popular idea in Vermont. In fact, the writer of the article said "The expense of naval militia would be very small as compared with the benefits of such an organization and there is no good reason to urge against it." This particular benefit of

[73] Oliver P. Boylan, "Letter from Oliver P. Boylan to Benjamin Franklin Tracy Sept. 16, 1890," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport Rhode Island.

increasing naval spending did not raise controversy. It was cheap, and a militia provided part-time work for citizens. Also, traditional American attitudes against a standing army, a phenomenon which would not be entirely erased until the end of World War II, did not apply to militias. Far more controversial than instituting the naval militia was the creation of construction jobs at the new naval yards.

These arguments demonstrate the vast improvement made to the United States Navy in a short period; but they also show the potential impact in expected and not so expected areas. The United States was not a major world power before it built a navy. Following the actions of pro-naval expansionists, especially once energized by the Harrison administration, the United States was well on its way to becoming a major force in the world militarily and economically. The change was dramatic. This is shown in Tracy's last report as secretary of the navy to Benjamin Harrison following Harrison's electoral defeat in 1892. According to Tracy,

> On the 4th of March, 1889, the fleet of the United States Navy, apart from a few old ships long since obsolete and fast going to decay, consisted of three modern steel vessels of an aggregate tonnage of 7863 tons, and mounting 13 6-inch and 4 8 inch guns, the forgings for which last had been purchased from abroad, as they could not be made in this country. These vessels were the following: Dolphin, Atlanta, and Boston.[74]

Before the largest pro-naval push since the Civil War, other nations saw the U.S. Navy as a joke. We had three modern ships with modern weapons, and a whole bunch of worthless wooden ships or rusting monitors, dozens of years old, with cannons that would have had trouble scratching the paint of newer ships. The United States only had three light ships to defend not just a gigantic coastline, but also one of the largest

[74] Benjamin Franklin Tracy, "Report from the Secretary of the Navy to President Benjamin Harrison, December 10, 1892," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport Rhode Island.

merchant marines in the world. This was an untenable situation and meant that the United States could potentially be in severe danger from a powerful foreign enemy in a way that it had not been since the War of 1812. Following the pro-naval push under the Harrison administration, the situation changed entirely.

Tracy reported to Harrison:

> During your administration the following vessels will have been added to the Navy: Chicago, Yorktown, Petrel, Charleston, Baltimore, Cushing, Vesuvius, Philadelphia, San Francisco, Newark, Concord, Bennington, Miantonomoh, Bancroft, Machias, Monterey, New York, Detroit, Montgomery. This makes a total of nineteen vessels of the new Navy put in commission during this administration, of an aggregate tonnage of 54,832 tons, mounting altogether two 12 inch, six 10 inch, sixteen 8 inch, and 82 6 inch guns, all of which have been manufactured in this country. Three new steel tugs have also been constructed and put in service during this period.[75]

In the short period of four years, thanks to Harrison, Tracy, and their supporters in Congress, nineteen cruisers had been constructed, most of them equal to or more powerful than the three cruisers that had been in service prior to 1889. Not only had these ships been built, but more importantly:

> There are also under construction the following vessels, on which rapid progress is being made: Oregon, Indiana, Massachusetts, Columbia, Minneapolis, Maine, Texas, Puritan, Olympia, Amphitrite, Monadnock, Terror, Cincinnati, Raleigh, Ram, Marblehead, Castine, Torpedo Boat Number 2. Making eighteen vessels in process of construction and certain to be completed, should their armor be delivered, within the next year, of an aggregate tonnage of 93,497 tons, and mounting altogether twelve 13 inch, six 12 inch, sixteen 10 inch, thirty 8 inch, thirty two 6 inch, thirty eight 5 inch, and thirty four 4 inch guns, all of which have been or are manufactured in this country.[76]

The United States was on the verge of becoming a recognized world power.

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[75] Ibid.
[76] Ibid.

These new ships, especially the battleships (represented by the ships named after states), would guarantee that the United States would not only be able to defend its interests at home and abroad, but that it could begin to take its place among the world powers of the period. This dramatic increase in fighting power in such a short time represented a dramatic shift in the power and prestige of the United States. Prior to Harrison's taking office, the United States had been, at most, a power in the Western Hemisphere and, even then, it could do little to influence world events beyond using economic pressure. By the time Harrison left office, U.S. Navy ships became an increasingly frequent sight in nations around the world. The United States had not yet climbed to the top position in world affairs, which would not happen until the Second World War, but it had begun its ascent to world power and prestige. The new navy helped cement the United States position as a major world power.

In order to truly grasp the importance of U.S. naval expansion, a discussion of the technological power of these new battleships is necessary. By exploring the U.S.S *Indiana* and its sister ships as well as the large ships of competing contemporary powers such as Great Britain, a true understanding of this monumental change is seen. These new ships were as revolutionary during this period as aircraft carriers would be by the mid twentieth century, and by exploring these new ships, naval expansion takes on a much greater importance in U.S. history than it has previously been given.

Chapter 2: Naval expansion and technology

A study of naval expansion in the United States in the late nineteenth century is also a study of military naval progression. Dangerously underpowered before the 1890's, especially since the United States had one of the largest merchant fleets in the world, the U.S. Navy desperately needed modernization. On the Great Lakes alone there were "about 350 steam vessels of more than 1,000 tons burden belonging to American owners."[1] Despite this, the U.S. Navy of the 1870s and 1880s consisted of outdated relics left over from the Civil War and underpowered, lightly armored ships that would have been useless in a stand up fight. As described by Lisle Rose, a prominent naval historian, "as late as 1879, the U.S. fleet was so inferior to that of Chile that Washington could not intervene on the behalf of friendly Peru when the two Latin countries went to war."[2] Theodore Roosevelt, eventual President of the United States and a strong supporter of naval expansion, drew a number of comparisons between the U.S. Navy in the War of 1812 and the navy in 1882.[3] Roosevelt contended "the lesson of 1812 was one of preparedness."[4] He went on to describe the navy of 1882 as being made up of "antiquated hulks and worthless new ones."[5] By studying the post-Civil War composition of the U.S. Navy, a better understanding of the need for naval expansion can be gained.

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[1] "Our Lake Naval Defenses," *New York Times,* October 7, 1891 accessed October 29, 2014, http://query.nytimes.com/mem/archive-free/pdf?res=9E02E3DF123AE533A25754C0A9669D94609ED7CF
[2] Rose, *Power at Sea*, 15.
[3] Peter Karsten, "The Nature of Influence: Roosevelt, Mahan and the Concept of Sea Power," *American Quarterly* 23 (1971):587 http://www.jstor.org.proxy.ulib.uits.iu.edu/stable/2711707
[4] Ibid.
[5] Ibid.

In order to truly protect its interests abroad, the United States needed battleships. During the late 1880s and 1890s three principal types of ships made up a large part of all modern navies and the United States needed to produce them in order to compete with larger foreign navies. These included battleships, armored cruisers, and protected cruisers. Quoting Navy Secretary Benjamin Tracy "First, the armored battle ship of 10,000 or more tons; second, the armored cruiser of from 8,000 to 9,000 tons, and third, the commerce protecting and destroying cruiser, of extreme speed, of 7,500 tons."[6] The two cruiser types had different responsibilities in a modern fleet, with armored cruisers expected to take part in fleet actions by harassing larger ships and engaging enemy lighter forces while protected cruisers were expected to disrupt enemy shipping at sea and provide protection for merchant shipping. The United States built many of these types of ships, but in regards to the its status as a world power, the number of battleships built mattered most. As discussed previously, the construction of battleships was a central pillar of naval expansionists' ideas for a new and powerful navy. Battleships combined the heaviest firepower and the heaviest defense available.[7] Nations engaged in building these ships insisted on the heaviest arms and armor because these ships represented the physical might of the nation. They became a powerful aspect of these nations' diplomatic strength as well, or as Senator Charles W. Jones of Florida put it, "What do the nations of the Earth care about your moral power after you leave your own shores? All that they do respect when the emergency arises is a decent display of public force."[8] In order to be taken seriously as an international power, a nation needed to be able to

[6] Benjamin Franklin Tracy, "Report from the Secretary of the Navy to President Benjamin Harrison, December 10, 1892," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport.
[7] Friedman, *U.S. Battleships*, 1.
[8] Cong. Rec., 48th Cong., 1st sess., 1884: 1421-1422.

back up its diplomatic pressure with naval might. As a result, the United States used only the latest technologies in order to maximize the offensive power of its navy. The improvement in gun and armor technology around the world during the late nineteenth century is testament to this.

By 1880, the most powerful naval guns, even on the smaller ships, were breechloaders.[9] These guns could fire more powerful shells than traditional muzzleloaders, could be loaded far faster and easier especially under stress, and had a much longer range. In addition, they provided little protection to gunners and in many cases had not been kept in good repair. One argument is that "emerging from the doldrums of the 1870s and 1880s, when the wooden ships that had guaranteed the victory of the Union in the Civil War were allowed, literally, to rot away, the nation had begun to recognize the importance of a modern navy built not of wood but of steel."[10] As Representative John R. Thomas, a Republican representative from Illinois, eloquently explained, the U.S. Navy was "worn out, slow in speed, feeble in offensive power, even in the power of running away from danger."[11] Thomas did not exaggerate the problems faced by the Navy. His quote is in response to an incident involving the U.S.S. Tallapoosa, an old Civil War steam ship still in service long after it should have been scrapped, being run down by a British coal barge. As can be imagined, this humiliating experience served as an example of the disgraceful condition of the U.S. Navy during this period.[12] The combination of wooden and iron ships rusting away in their harbors with

[9] David K. Brown, *Warrior to Dreadnought*, 22.
[10] Gillig, "Predreadnought Battleship USS Kentucky,": 45.
[11] Cong. Rec., 48th Cong., 2st sess., 1883: 1410.
[12] Seager II, "Ten Years Before Mahan: The Unofficial Case for the New Navy, 1880-1890," *The Mississippi Valley Historical Review* 40 (1953), 497.

ancient muzzle loading guns meant the combat power of these older vessels, compared to their European counterparts, was non-existent.

The woefully underpowered weapons in use by the U.S. Navy of the late nineteenth century were mostly muzzleloaders. Until the *Chicago* launched in 1885, naval armament consisted of antique Parrott and Dahlgren smoothbores, crudely converted to rifles by the insertion of rifled, iron tubes in their barrels. All shipboard guns, save certain lighter pieces, were muzzleloaders."[13] By the 1880s these types of guns became antiquated. Parrott's and Dahlgren's might have been top of the line during the Civil War twenty years earlier when almost all ships were made of wood, but by the 1880s they would have had trouble scratching the paint on any potential foes much less damaging them. Muzzleloaders had become obsolete thanks to the huge leaps and bounds in the development of modern armor which, for a time, made ramming a viable tactic again as guns struggled to penetrate newer forms of armor. All major powers, including Great Britain, built armored rams in an attempt to offset guns' loss of penetrating power.[14] Breechloaders not only greatly outranged muzzleloaders, but they had much faster reload times as well. In addition, their low level of explosive power meant that in any potential conflict their main contribution to American security would be in causing opposing ships to waste some ammunition before arriving at American shores. As a result, many naval expansionists used muzzleloader shortcomings as an argument in favor of their plans.

Not only the big guns needed modernization, but the smaller guns used by all classes of ships needed to as well. Due to the development of the torpedo, small ships

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[13] Herrick Jr., *The American Naval Revolution*, 29.
[14] Sondhaus, *Naval Warfare 1815-1914*, 88.

suddenly had the potential to destroy large, more heavily armed ships inside the range of their new guns.[15] In order to counter this threat, major world navies developed what are known as quick firer guns. In order to be considered a quick firer, a small gun needed to capable of damaging small torpedo boats and be able to fire at least twelve rounds per minute.[16] This was, of course, only possible with the new breech-loading mechanisms as without this technological improvement these guns would not have existed. The *New York Times* gives a detailed description of one of these new guns describing it in detail saying "it consists of a recoiling and a non-recoiling portion. The gun itself, with the breechblock, is the recoiling portion; a bronze cradle which encloses the rear part of the gun is the non-recoiling portion."[17] The article goes on to describe "When the gun is fired it fully recoils and then starts back to battery under the influence of the powerful spring in the hydraulic buffer."[18]

Interestingly, twelve shots a minute is merely the minimum as the article claims that "the rate of fire depends upon the agility and strength of the loader, and it is claimed that eighty shots can be fired per minute."[19] This technical information demonstrates the rapid pace of technological growth as well as the absolute necessity of including these guns on new U.S. ships. Quick firers, first developed in 1881, by 1889 had become indispensable parts of a modern, powerful navy. In fact, technology progressed at such a rapid pace that the *New York Times* accurately predicted in 1889 that "It is probable that the day is not far distant when all guns of 6 inch caliber and less will be rapid firing, and

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[15] Herrick Jr., *The American Naval Revolution*, 37.
[16] "Fifty Shots per Minute," *New York Times*, October 6, 1889 accessed October 29, 2014, http://query.nytimes.com/mem/archive-free/pdf?res=9D0DEEDC1130E633A25755C0A9669D94689FD7CF.
[17] Ibid.
[18] Ibid.
[19] Ibid.

that these will constitute the whole armament of many unarmored cruisers."[20] This occurred and studying later ship designs shows light cruisers armed with rapid firing 6 inch guns and even battleships and heavy cruisers using guns of this type to enhance their secondary batteries. All of this information demonstrates the rapid increase in power and speed of even small caliber guns.

Naval expansion required more than just stronger guns, however. Gun layout was vital when creating the powerful new battleships so desperately needed by the United States. U.S. battleship design followed the standard layout for battleship weapons during this period. American "designs had emphasized twin-gun main battery turrets located both fore and aft, with secondary turrets positioned on either side of the superstructure."[21] U.S. innovations with regards to its weapons can be seen in the design of its first battleship, the U.S.S *Indiana*. The *Indiana*, as with the remaining U.S. battleships constructed during this period of naval expansion, would be armed with four 13.5 inch guns in two turrets fore and aft as its main armament, and four 8 inch guns in two turrets one located on the starboard side and one located on the port side as its primary secondary armament.[22] As discussed previously, this is significant because the United States built the main guns on the *Indiana* one inch larger than many, though not all, contemporary battleships. Indeed primary armaments on most battleships of this period did not exceed 11 or 12 inches.[23] The U.S. navy's job was not to be the world's largest, but to be able to challenge the best ships then afloat. While some politicians argued that

[20] Ibid.
[21] Gillig, "Predreadnought Battleship USS Kentucky,": 51.
[22] U.S.S *Indiana* log book, National Archives.
[23] David K. Brown, *Warrior to Dreadnought*, 95.

"it seemed manifestly absurd to build a navy second to any in size,"[24]most wanted only a navy that could compete with, not surpass, the other great powers of the day. A one inch difference in gun size may not seem like much, but the slightly longer range and slightly greater explosive power gave U.S. battleships a distinct advantage in any potential conflict with most ships of the late nineteenth century.

Another decision made in regards to American ship design was the use of turrets rather than barbettes to house the main guns. Naval powers disagreed about which design would be superior to use in combat. Turrets are an armored construction protecting the main guns of a battleship that are able to revolve in a circle in order to aim them at enemy combatants on either side.[25] Barbettes served the same purpose but rather than sheathing the guns in armor they were either completely open to the air or protected by very thin shields of armor.[26] Those who argued for the barbette system acknowledged that "protection was less than in a turret, but many gun crews disliked the restricted space and foul air of a turret, and the open position improved sighting and laying."[27] At least at close range, it was believed this would allow gunners to mark the fall of shot personally, allowing to correct their aim. Fortunately for the U.S. Navy, its designers chose to house a battleship's primary and secondary guns in turrets. While barbettes may have been more comfortable for their gun crews, they were completely vulnerable in an actual battle scenario, as demonstrated by the IJS *Fuji* at the battle of Tsushima in 1905, and were easily knocked out of action.[28] Turrets on the other hand were covered in armor. Frequently being the most heavily armored part of any battleship, this allowed them to

[24] Seager II, "Ten Years Before Mahan: 500.
[25] David Ross, *Warships from the Golden Age of Steam* (London: Amber Books Ltd., 2014), 218.
[26] Ibid.
[27] Ibid, 52.
[28] Ibid, 88.

shrug off all but direct hits by the heaviest guns making them the superior design choice. All major U.S. warships constructed during the late 1880s and 1890s used turrets, allowing them to give their guns and gunners the kind of protection that would prove necessary to keep them in action. While turrets appeared before barbettes, as exemplified by the U.S.S. *Monitor* of Civil War fame, they proved to be the superior design and are still used by major units of navies today to house their guns.

The creation of faster firing, more accurate, guns meant that better ways to aim and fire them needed to be developed. Improvements in gun power, accuracy, range, and speed far outpaced advances in targeting technology. This was a problem for all navies as it meant that despite better guns, combat remained relatively short ranged until the twentieth century. Engineers developed rangefinders as a potential solution to this problem. Originally, muzzle loading guns used simple iron sights, as they had limited range and could not accurately hit ships far away. As a result, most naval combat occurred at close range. But as guns became more powerful and gun ranges increased it became nearly impossible to obtain hits beyond about 1500 yards because gunners could no longer see where their shells were falling.[29] Rangefinders, which used a combination of optical glass and mechanical means to estimate the distance of enemy ships in order to aim the guns properly, helped increase accurate gun range.[30] While not a cure all for aiming problems, rangefinders allowed guns to be aimed and fired at much longer distances than traditional sights. The new U.S. Navy wanted its ships to be able to hit distant targets and sent a commission to Europe to study and purchase the best range finding equipment available. According to Bradley A. Fiske, an admiral in the U.S. Navy

[29] Brown, *Warrior to Dreadnought*, 155.
[30] Royal Navy Admiralty, *The Royal Navy Pocket Gunnery Book* (London: The British Government, 1945), 109-12.

and a member of the commission, his job "as representative of the American Range Finder Co., which had secured patents on different forms of my range finder, position finder, gun director, telescope-sight, and range-indicator in the principal foreign countries."[31] By studying range finding equipment produced in nations with superior naval technology such as Great Britain, France, and Italy, the United States procured the ability to aim their large guns.

Fiske, who used these studies to develop his own range finder, was lauded by fellow officers who believed "that my inventions redounded greatly to the credit of the navy, because they were the only things which saved the U.S. Navy from the accusation of being in every way a copy of foreign navies."[32] Of course, the United States needed to create its own versions of these devises that could be produced locally, and Fiske provided these necessary and important pieces of equipment for the navy. While not frequently mentioned, larger guns were useless without rangefinders because they could not be accurately aimed. The vast improvement in destructive power, speed of loading, and range in new guns would be useless without the ability to accurately and reliably hit targets. Despite their necessity, however, rangefinders were far from perfect. In the Spanish American War, at both the Battle of Manila Bay and the Battle of Santiago, American accuracy was atrocious. At Manila, only 2.2% of 5 and 6 inch shells fired and 8.2% of 8 inch shells actually found their mark.[33] Their accuracy at Santiago was even worse, as total hits scored by all calibers of guns was just 1.3%.[34] While necessary, as

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[31] Rear Admiral Bradley A. Fiske, *From Midshipman to Rear Admiral* (New York: The Century Co. 1919), 133.
[32] Ibid, 134.
[33] Spencer C. Tucker, *The Encyclopedia of the Spanish-American and Philippine-American Wars: A Political, Social, and Military History, Volume 1* (Santa Barbara: ABC-CLIO, LLC, 2009), 426.
[34] Ibid.

even fewer hits would have been achieved without them, rangefinders were in their infancy and it was not until much later that reliable naval gunnery became the rule rather than the exception.

Another part of gun improvement that is not often discussed is the advances in a gun's construction and recoil. Previously, when muzzleloaders were fired, they had to be manually pulled back into position as the recoil of the guns knocked it off target. Breechloaders were designed to use the momentum of the gun to put it back into firing position automatically. Discussing gunnery tests being held with the cruisers *Atlanta* and *Boston* the *New York Times* reported "in the various firings the battery fittings proved exceedingly satisfactory. There was an occasional sticking of a breech-plug, and in some instances the guns after recoil did not return at once to battery."[35] Because of this, primary and secondary weapons of the new warships could fire as quickly as their crews reloaded them, allowing them to fire a lot of ordinance in a short amount of time.

Improvements in gun design, certainly essential in warships, were complemented by the transition to stronger forms of steel for use in these ships armor. The metal used to protect warships affected both the protective qualities and the endurance of these vessels. As Lisle A. Rose explains "Navies were transformed from wood to steel, from sail to steam, their offensive power increased twentyfold from small smoothbore cannons to large long range guns."[36] The increase in offensive hitting power of modern guns necessitated a change in protection. The first iron ships, French floating batteries involved in the Siege of Sevastopol in 1855, had been covered with "4 inches of wrought,

[35] "Naval Target Practice" *New York Times*, April 23, 1890 accessed October 29, 2014, http://query.nytimes.com/gst/abstract.html?res=9807EED71539E033A25750C2A9629C94619ED7CF.
[36] Rose, *Power at Sea*, 7.

iron plates"[37] armor more than capable of protecting them from Russian cannonballs. But the increase in naval firepower starting in the 1870s made this older form of armor obsolete and extremely susceptible to damage from the new explosive shells. Wrought iron could only do so much and in fact "it became impossible to plate a ship with enough wrought iron armor in sufficient thickness without reducing its speed and seaworthiness to unacceptable levels."[38]

Steel provided the immediate solutions to these problems as its lighter weight and greater strength made it perfect for use as armor. By the 1890s various compounds of steel covered the largest ships. Nickel steel, the most successful steel blend used in creating armor during this period, protected U.S. ships. This new form of armor allowed "increased protection without added weight" and "facilitated a further increase in battleship size."[39] Because U.S naval expansion proceeded rapidly, it needed the best quality of steel. Fortunately for Secretary Tracy, Andrew Carnegie and his steel company were contracted to create the steel for the new ships. Only the best armors allowed the United States to compete with the larger European navies and, since technology advanced in leaps and bounds during this period, the nation needed the best steel available. The new battleships, as exemplified by the U.S.S. *Indiana*, would be completely armored in this new nickel steel.

Carnegie himself gave an idea of the amount of effort that went into filling the government's order. While describing his total business during this period, Carnegie describes the large increase during this period of naval expansion as

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[37] Sondhaus, *Naval Warfare 1815-1914*, 61.
[38] Ibid, 108 and 160.
[39] Ibid.

> The 600,000 tons of pig iron we made per annum in 1888 was trebled; we made nearly 2,000,000. Our product of iron and steel was in 1888, say, 2000 tons per day; it grew to exceed 6,000 tons. Our coke works then embraced about 5000 ovens; they were trebled in number, and our capacity, then 6,000 tons, became 18,000 tons per day.[40]

As Carnegie points out here, naval construction required a significant amount of steel production, a vital aspect of American industrial strength. Not only did it encourage industrial growth which, as mentioned previously, substantially increased job growth in the country, it also represented how the use of advanced technology was a necessary part of creating a powerful navy. By giving some numbers on the increase in steel production, Carnegie also demonstrates the high degree of expertise that was needed to produce the best quality steel. This is one reason why Benjamin Franklin Tracy needed to procure Carnegie's help. Without this technical expertise, America's navy would never have been the equal or better of its foreign counterparts. Steel production played a vital role in shaping both the strength and the technical advantage of the new U.S. Navy.

Improvements in engine design and speed also necessitated a complete overhaul of the U.S. Navy. The new ships needed plenty of coal. Coaling interests became important to the United States as soon as steam engines became popular and even before increasing the size of its navy. As early as 1873, when the U.S. Navy began to rot away, the United States wanted to put a naval base in Hawaii. Unlike sailing ships, which could run indefinitely as long as their sails remained undamaged, these new ships required regular refueling stops in order to replenish their quickly-burned coal supplies. In fact, even in ships produced by the British Empire, "the fuel consumption of simple expansion engines was so high that sails were essential for ocean passages and, even later, when the

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[40] Andrew Carnegie, *Autobiography of Andrew Carnegie* (Boston: Houghton Mifflin, 1920), 226.

compound engine had made sail unnecessary in major ships, coaling stations were so few in distant seas that sail was retained in many cruising ships."[41]

It was not uncommon all the way into the 1880s to see a major warship constructed entirely out of iron and steel that still retained sails. But by the time of the creation of the new steel navy, engines had become reliable enough that sails disappeared from ships and masts became a decoration rather than an essential part of ship operations. Despite these improvements, the amount of coal needed for fuel was enormous. The U.S.S. *Indiana* exemplified this problem. Even in port or at anchor, the U.S.S. *Indiana* tended to burn between ten and twenty tons of coal per day.[42] In rough seas and during long voyages, however, the *Indiana* could easily burn anywhere from fifty to over a hundred tons of coal per day. This meant that having regular access to coal around the world was absolutely vital to any nation with a large and powerful modern navy. The easiest way to guarantee ships from becoming reliant on the prices, availability, and willingness of foreign powers to supply them with coal in distant waters was to construct naval bases around the world. While there are examples of U.S. expansion throughout the latter part of the nineteenth century, an early example of naval base construction is Hawaii. The *Hawaiian Gazette* reported on the subject by explaining how Hawaii can "well afford to give them a harbor for naval purposes which is now to her almost useless, but which to the United States as a naval power would be very valuable."[43] Eventually, Hawaii would be annexed by the United States for a variety of reasons, including U.S.

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[41] Brown, *Warrior to Dreadnought*, 11.
[42] U.S.S. *Indiana* Log Book, National Archives, Washington D.C.
[43] "Address of Mr. H.A.P. Carter" *The Hawaiian Gazette* March 19, 1873, accessed October 29, 2014, http://chroniclingamerica.loc.gov/lccn/sn83025121/1873-03-19/.

expansionist policies, but the U.S. saw its potential use as a forward naval and coaling station as early as the 1870s.[44]

The use of coal also required the use of stokers, men who shoveled coal into the furnaces of these steel behemoths in order to keep them running. This was hot, dirty, unpleasant work as described by this anonymous American naval officer when speaking to some stokers "Well, you must have one consolation in this ship-you have not much to fear in the future, for whatever you do in this life, you can't get into a much hotter place in the next world than what you have got here."[45] While miserable work, these stokers were vital to the function of these new warships as their job was the only feasible way of transferring fuel into the engines at the time. Shoveling coal into the furnace to power the engines was part of naval warship construction up until World War I, when oil fired furnaces became more commonplace and the need for stokers dissapeared.

As the previous example demonstrates, it was vital to have the most up-to-date coal powered engines during the late nineteenth century. These engines would allow U.S naval might to be projected around the globe. An example of these engines can be seen in the U.S.S. *Kentucky*, a battleship designed and built as U.S. naval expansion gained speed in the late 1890s. The *Kentucky*, ordered in 1895 and finished in 1898, had powerful engines that utilized the newest engine technology to vastly increase its range. The battleship contained "five coal fired boilers provided main and auxiliary power, and by carrying its maximum of 1,500 tons, *Kentucky* could steam more than 5,000 nautical miles at ten knots."[46] These engines allowed U.S. warships to patrol most of the Atlantic

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[44] Rose, *Power at Sea*, 98-99.
[45] George Quick, "Remarks on the organization of Naval Engineer Forces," Benjamin Cooling Collection Boxes 5-15, Naval War College, Newport, 35.
[46] Gillig, "Predreadnought Battleship USS Kentucky,":50.

and Pacific oceans, greatly strengthening the United States' ability to protect its borders and enforce its policies.

This new, complex machinery that formed the basis of all new armored ships required the expansion of a neglected branch of the naval officer corps, the engineers. As late as the 1880s engineers were treated as almost second class officers. It was far from uncommon for the captain of a ship to ignore the advice of his chief engineers during the late nineteenth century. This idea represented earlier ideas about a captain's responsibility, when captains were expected to know how to perform every job on a sailing ship. In a speech given before the U.S. Naval Institute in Annapolis, George Quick, a retired Royal Navy fleet engineer, described the problem by saying "not long ago a distinguished naval officer stated that the captain of a man-of-war should not only be able to order the engineer to repair a broken crank-shaft, but that the captain should be able to direct the engineer how to do it."[47] He goes on to describe the absolute ridiculousness of this belief by saying "surely, if it were necessary for a captain to tell the engineer how to mend a broken shaft, it is only to be supposed that it would be necessary for the engineer to tell the captain how to navigate and fight his ship. Such a confusion of duties would, however, be only fit for the inmates of a lunatic asylum."[48] This argument demonstrates the vast technological changes that had occurred between the wooden fleets and the new steel warships. It was not only common but mandatory for sea captains of wooden ships to be expert in all parts of their command from gunnery to sails. This became impossible with the installation and use of incredibly complex machinery. Most captains could not understand how to maintain and repair the

[47] Quick, "Remarks on the Organization of Naval Engineer Forces,", 35.
[48] Ibid.

machinery that was now a working part of their ships. Or as George Quick put it, "the engineer most assuredly should know better than the captain how to mend his broken crankshaft, and the captain should know better than the engineer how to navigate and fight his ship."[49] While it was certainly possible to be expert in all aspects of ship management in earlier times, officers would now need to be split between different specialties and then be trusted to perform their work without direct interference from higher ranks.

> Another technological development that played a role in the new steel navy was electric lighting. While not often thought of as an important aspect of naval technology, electric lighting changed the way ships traveled at sea. As the Bureau of Navigation said 1886 "this method of lighting ships of war, owing to the small amount of heat given off, the absence of disagreeable odors, and the more perfect illumination, adds much to the health and comfort of the officers and men, tends to make them contented and happy during their long absences from home and friends, promotes discipline and prevents crime.[50]

They point out several advantages to using electric light over more traditional forms of lighting including the fact that it tended to make long voyages easier on the men who served aboard these ships. Previously, sailors spent a lot of time in the dark, and these new electric lights, in use decades before they became commonplace on land, helped significantly. They were first used on board the U.S.S *Trenton*, an old ship constructed in 1875, and revolutionized navies all over the world.[51] The *Trenton* sank during the Samoan Crisis, but the use of electric light aboard ship continued and all new

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[49] Ibid.
[50] "Electricity, First Installation on a US Navy Ship, USS Trenton," Naval History and Heritage Command, accessed February 3, 2015 http://www.history.navy.mil/browse-by-topic/exploration-and-innovation/electricity-and-uss-trenton.html.
[51] Ibid.

American warships constructed after the mid-1880s included electric lights and dynamos.[52]

The need for well trained and experienced officers only grew as the Navy finally began to expand, especially as the ships they were stationed on became more and more complex. In 1891 Secretary of the Navy Tracy sent a general order out: "Officers in command of naval forces, whether squadrons or single ships, are directed to provide the utmost economy in the use of coal."[53] It was easy to blow through the predetermined amounts of fuel available and the secretary reminded officers that money for fuel was not limitless. After all, except in the worst of disasters, cloth sails could be repaired at sea by anyone who could use a needle and thread. Coal, a finite resource, required careful use of the engines in order to avoid using too much. This demonstrates the rapid change in technology from sailing ships to steam and this added technological complexity required new training and curriculum to be created in order to help officers transition to the new steel warships.

This rapid pace of technological development applied to the use of ammunition as well as to the use of coal and demonstrates the need of a place of advanced study for officers. As can be seen in this general order from Secretary Tracy, the rapid firing guns mentioned earlier were being used inappropriately just like the amount of coal use. Tracy said "The attention of commanding officers of Naval Stations and of Naval Vessels to the necessity of the exercise of general caution in the loading and handling of fitted

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[52] Ibid.
[53] Benjamin Franklin Tracy, Naval General Order 390, May 22, 1891, National Archives Collection microfilm section, Washington D.C.

ammunition for rapid fire guns and of loaded shell fitted with percussion fuses."[54] The rapid pace of technological growth required the creation of new curriculum to teach officers, both old and new, the strategy and tactics that would be required to lead this new navy in a modern war. Tracy's predecessor William Chandler, ordered "a college is hereby established for an advanced course of professional study for naval officers to be known as the Naval War College."[55] The Naval War College, still in operation today, taught commissioned officers how to utilize their new warships. While they certainly learned fighting and sailing techniques at Annapolis, the Naval War College specialized in teaching how to utilize the new technological improvements effectively in battle, providing officers with advanced tactical training once they had graduated from the Naval Academy. This school also allowed the re-training of old officers along with new ones. Faster and more powerful guns required the development of a whole new range of tactics that required an officer corps trained in their use. This took time, but it was a necessary development caused by rapid technological growth.

All of these innovations needed to be supervised by an additional layer of government oversight. Accordingly, Secretary Tracy created the Bureau of Construction and Repair. The "Duties of the Bureau of Construction and Repair shall comprise all that relates to designing, building, fitting, and repairing the hulls of vessels…; also the turrets and armor plating after the market, quality, and distribution of thickness have been determined by the bureau of ordinance."[56] During the late nineteenth century, state of the

[54] Benjamin Franklin Tracy, Naval General Order 387, January 2, 1891, National Archives Collection microfilm section, Washington D.C.
[55] William E. Chandler, Naval General Order 325, October 6, 1884, National Archives Collection microfilm section, Washington D.C.
[56] Benjamin Franklin Tracy, Naval General Order 387, June 25, 1889, National Archives Collection, Washington D.C.

art ships one year could easily be obsolete the next. The Bureau of Construction and Repair's job was to keep U.S. ships up-to-date, both through upgrades to existing ships and incorporating new developments into those being built. This government program was imperative if the United States wanted to maintain or improve its naval supremacy as part of a long term strengthening of their naval power.

The U.S.S. *Indiana* is an example of the improvements that played a vital part of U.S. naval expansion and helps demonstrate the technological innovations of the time and how the United States integrated them into these new ships. According to Naval Historian Norman Friedman, the *Indiana*, as completed, "made a great impression on foreign observers. Their designers apparently had solved the problem of cramming an enormous weight of ordnance, far more than in contemporary British ships, into a very compact hull."[57] The first U.S. battleship was designed knowing that the country would not be able to build a navy that equaled Great Britain's in size at that time. As a result, the ships were built with as much heavy firepower and heavy armor as possible. As mentioned previously, they mounted four 13 inch guns and four 8 inch guns in turrets, four 6 inch guns located in casemates, two on each side, twenty quick-fire 6 pounder and six quick-fire 1 pounder guns, and four torpedo tubes.[58] In addition it was constructed with a heavy armor belt of 18 inch nickel steel.[59] These heavy guns and armor would allow them to match the best ships the British navy, the United Stares' most powerful potential enemy, could send against them without having to try the impossibly expensive task of either matching or exceeding their number of hulls.

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[57] Friedman, *U.S. Battleships*, 29.
[58] Ibid, 28.
[59] Ibid.

In order to understand the relative strengths and weaknesses of the new U.S. capital ships, a comparison with prominent contemporary foreign battleships is useful in demonstrating both the potential strengths and weaknesses of the new U.S. Navy. This can primarily be seen through comparisons of gun size, number of guns, and armor thickness. Generally the thicker the armor the better, although just like guns, armor went through rapid technological development during the nineteenth centuries. Battleships armored with higher quality nickel or Harveised steel were better protected and lighter than ships armored with thicker but weaker iron. The more punishment a ship could withstand in combat meant the more valuable it would be to contributing towards the nation's national defense.

Another feature of battleships that determined their combat efficacy was the size and number of their guns. Guns tended to be split into primary, secondary, and tertiary armament. Primary armament, the heavy guns of a warship, usually were between 10 and 14 inches in size although the standard size during this period tended to be 12 inches. Secondary armament consisted of smaller but still powerful guns of between 5 and 8 inches which would be used when the battle lines drew closer and allowed the ships to increase their hitting power without overloading their small displacements. Tertiary armament consisted of small caliber guns, sometimes as small as 1 pounder guns. These small guns were not used against other battleships, but were included for protection against small warships such as torpedo boats and destroyers. These ships were too small and quick to be easily targeted by the slower, more cumbersome larger guns, but torpedo boats' lack of armor meant they could be threatened by the much smaller but faster firing tertiary armament. By comparing the relative gun strengths of the different battleships of

competing navies, relative U.S. Naval strength during this period can be gained. All of this information helps explain one of the differences between battleships of different countries.

The three principal naval powers in the late 1880s and 1890s that concerned the United States were the British, German, and French navies. While there were certainly other major naval powers at the time, including the Japanese and Italians, not to mention minor navies such as those of Brazil and Chile, the British, German, and French navies had the world's most powerful ships. While, at least initially, American naval expansion was billed as primarily defensive in nature, its new ships had to be able to fight off the most powerful ships of any potential adversary. In order to best demonstrate the strengths of the new American battle fleet a comparison with the some of the most powerful ships of these nations with the first American battleship class represented by the U.S.S *Indiana* is useful.

The U.S.S. *Indiana* and her sister ships suffered from a low freeboard. Freeboard is a nautical term that describes the distance between a ships waterline and its deck. Having low freeboards meant that these ships decks were too close to the water and thus were in danger of flooding or capsizing in heavy seas. This was undesirable and officers in the navy quickly mentioned these shortcomings to Secretary Tracy. Commander G.H. Davis, discussing the problem with Tracy in a letter, mentioned that

> Both England and France as well as Russia, Germany, Italy and other European countries are now building vessels of high freeboard. France has never built any seagoing vessels of as low freeboard as that of our own battleships, and it has been conclusively proved in recent naval maneuvers that vessels of the Admiral class in the British navy, whose freeboard is the same as that of our first-class battleships, would find it extremely difficult if not impossible to work their guns when steaming at what is,

> according to the modern standard, a moderate rate of speed in a moderate sea.[60]

Davis went on to say that "I am so thoroughly convinced of the importance to this country that every one of her vessels should be of the highest possible efficiency as a unit of combat, in order that it may be possible to meet and engage an enemy in any state of weather however tempestuous."[61] What both of these comments demonstrate is that although American ships could be superior to their foreign counterparts in some aspects, in others they were woefully deficient. Not only were they at greater risk during inclement weather than the navies of any of their possible future combatants, but in heavy seas it would be difficult to use their weapons. Since their principal battlefield in any potential conflict would most likely include the Atlantic Ocean, Commander Davis is pointing out to Tracy the necessity of correcting this design flaw in future ships produced. Without the ability to fight effectively in heavy seas, not only would enemy ships be able to escape to the relative safety of the Atlantic Ocean, but if U.S. battleships decided to pursue their enemies, they would be severely overmatched. Lower freeboards would mean the ships would be unstable in heavy seas, more prone to rocking back and forth which would make it far more difficult to properly aim their guns. In addition, this would submerge their armor belts, meaning that enemy hits would tend to impact the much more lightly armored upper works of the ship, leaving them prone to taking severe damage far easier than their enemies.

These new designs partially succeeded at competing with other nations' primary units but they had drawbacks as well. It is useful to compare the combat power of the

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[60] Commander G.H. Davis, "Chief Intelligence officer to Benjamin Franklin Tracy, July 15, 1892," Benjamin Franklin Cooling Collection Boxes 5-15, Naval War College, Newport.
[61] Ibid.

new U.S. fleet to the contemporary British fleet because at the end of the nineteenth century the British had by far the largest and most powerful navy in the world. In fact, according to Robert O'Connel, the Royal Navy "had its own traditions and history that influenced all sailors, no matter what their origin. And at the core of this nautical heritage was the remarkable success of the British Royal Navy for a period approaching 300 years."[62] For comparison, the statistics of the H.M.S *Majestic* class of British battleship helps demonstrate both the strengths and the weaknesses of the *Indiana* class ships. The *Majestic* had four 12 inch guns in two turrets, twelve 6 inch guns in barbettes, six to each side, sixteen 12 pounder and twelve 3 pounder quick-fire guns, as well as five torpedo tubes.[63] While they had a larger number of lighter weapons to fight off torpedo boat attacks, their primary armament is inferior to the *Indiana* and even though they have a large number of 6 inch guns, the fact that these guns had been located in casemates along the waterline meant that they could be of limited value at best. Even their armor belt was half that of the U.S.S. *Indiana* at only 9 inches of regular rather than nickel plated steel.[64]

Despite these differences, the British ships showed the advantage of a long tradition of naval superiority. Returning to the *Majestic* class ships, they were substantially larger than the *Indiana* with the British ship being around 421 feet long while the American was only 350.[65] What this meant in terms of sea-keeping was that the *Majestic* class was better able to deal with long sea voyages and heavy seas while the *Indiana* struggled in heavy waters outside of the relatively shallow Caribbean Sea. In

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[62] O'Connel, *Sacred Vessels*, 14.
[63] Brown, *Warrior to Dreadnought*, 144-154.
[64] Ibid, 151.
[65]Ibid, 144-147. and Friedman, *U.S. Battleships*, 27-29.

addition the *Indiana*'s sea-keeping, severely affected by its weight, especially fully loaded with coal and ammunition, rested much lower in the water, leaving it even more vulnerable to heavy seas and making it much more dangerous to sail far from land.[66] The differences between these ships demonstrate comparing combat power between these nations. The United States was trying to create a Navy that would be strong enough to both protect the country and strengthen its diplomatic position.

It is hard to compare their actual worth in combat as the *Indiana* never fought another battleship. It sank a Spanish destroyer in the Spanish American War, but that was hardly a significant test of its combat abilities. Meanwhile, the *Majestic* class ships were only used once in combat, bombarding Turkish forts in the Dardanelles Campaign in World War 1.[67] But it is safe to say that the creation of the U.S.S. *Indiana* and later ships of her class as well as newer battleships that would be produced certainly fulfilled the two primary goals of U.S. Navy expansionists. They provided much better protection than the United States had previously enjoyed and they allowed the United States to back up its foreign policy decisions with the threat of force. Both of these conditions improved the United States standing as a world power.

Another of the Royal Navy's most powerful battleship's in the early 1890s were the H.M.S. *Royal Sovereign* and her sister ships.[68] Armed with four 13.5 inch guns, ten 6 inch quick-firer guns, and numerous smaller weapons as well as a thick armored belt, the *Royal Sovereign* was a powerful ship, easily the pride of the Royal Navy during this period.[69] While earlier American ships would not have been able to damage her, the

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[66] Ibid, 29.
[67] R.G. Grant, *Battle at Sea* (New York: D.K. Publishing, 2008), 263.
[68] Brown, *Warrior to Dreadnought*, 128.
[69] Ibid.

U.S.S. *Indiana* had been built to challenge ships such as this. It could be argued that the *Royal Sovereign's* seaworthiness was far superior to the *Indiana's*, but in a potential conflict the *Indiana* would have been able to hold its own against these ships. With the same heavy armament of four 13.5 inch guns, as well as slightly heavier, if slower firing, 8 inch guns in its secondary armament would allow it to fight toe to toe with these powerful ships.[70] In addition, while the overall armor of the *Royal Sovereign's* was thicker than the U.S.S. *Indiana*, she suffered a design flaw corrected in the *Indiana*. The *Royal Sovereign's* primary armament used barbettes instead of turrets.[71] As discussed previously, while these were more comfortable to their crews, it made the guns extremely vulnerable and in the event of a fight there would be a high possibility of its guns being quickly knocked out. This example shows how the new U.S. battleships competed with if not always surpassed the best foreign ships available during this period.

Comparing this new navy to that of Germany is also instructive. Germany, at least in terms of its burgeoning desire for a powerful navy, pursued similar naval policies to the United States. It too tried to build a navy that would increase its worldwide prestige and allow it to compete with the British. Kaiser Wilhelm II even said that "as my grandfather did for the Army so will I for the Navy. Then I shall be enabled to procure for Germany the place among foreign nations which she has not yet obtained."[72] The search for international prestige by constructing a large navy was by no means just an American obsession. But even though the United States focused most of its energy in

[70] Norman Friedman, *U.S. Battleships*, 26.
[71] David K. Brown, *Warrior to Dreadnought*, 127.
[72] Bernard Ireland and Eric Grove, Jane's War at Sea 1897-1997: 100 Years of Jane's Fighting Ships (New York: Harper Collins Publishers, 1997), 32.

creating ships to combat a potentially aggressive Great Britain, Germany, too, was a rival that would clash with the United States on the international stage.

One of these events was the Samoan crisis between 1887 and 1889. Both nations wanted the use of Samoa as a coaling station and thus they eventually sent small naval units to the area to confront each other and represent their nation's interest in the station.[73] While the event would later fizzle due to Mother Nature when a cyclone destroyed both the German and American squadrons in March of 1889, it demonstrated once again the comparative weakness of the American navy.[74] Not only would the Americans have lost any potential confrontation, their ships were armed with antique muzzle-loaders while the Germans had much more powerful breach-loading cannons, but the only ship to survive the storm was the British ship H.M.S. *Calliope*. Secretary Tracy used this event to strengthen his arguments in favor of naval expansion by telling the *New York Herald* in 1889 that the United States had "almost no warships worthy of the name in the Pacific Ocean."[75] As the United States was a burgeoning imperial power in the Pacific, the potential for conflict with the increasingly better armed, if also relatively new, German Navy was one of many factors that required a much more technologically powerful U.S. Navy.

The U.S.S. *Indiana* compared favorably to German warships of the late nineteenth century. The first pre-dreadnoughts constructed during the 1890s for Germany were the *Brandenburg* class and the *Kaiser Friedrich III* class. Both ships had smaller guns than the U.S.S Indiana. The Germans armed the *Brandenburg*'s' with four 11 inch guns as their primary armament along with eight 4.1 inch and eight 3.5 inch cannons as

[73] Herrick, Jr., *The American Naval Revolution*, 57.
[74] Ibid.
[75] Ibid, 58.

secondary armament.[76] They built the *Kaiser Friedrich III*'s with even lighter guns for their primary armament which consisted of four 9.4 inch cannons, eighteen 5.9 inch guns and twelve 3.5 inch guns.[77] While both of these ships had heavier secondary armaments in terms of the numbers of guns carried, many of these were placed in casemates, guns located along the sides of the ship, and thus would be unusable in anything other than light seas. Their armor belt was also weaker. The *Brandenburg's* armor was comparable close to the *Indiana* class ships with an armor belt of 16 inches, but the *Kaiser Friedrich III*'s were only 12 inches at their thickest.[78] The heavier weight of shot and heavier armor available to the *Indiana* class and later classes of U.S. battleships also demonstrates a desire to stay abreast of German fleet development.

U.S. battleships also compared favorably to the major ships constructed by other naval powers at the time. France, a significant naval power in the 1880s and 1890s, also had constructed powerful battleships such as the *Hoche* and the *Marceu*. But unlike the Americans, the French navy had to struggle to obtain both support and funding from its government. While their armor belts tended to be comparable to contemporary American ships, 17.7 inches at its thickest on both the *Hoche* and the *Marceau*,[79] their other design flaws show American superiority of design. The *Hoche* had a lower freeboard than even the U.S.S. *Indiana*, possibly because the French Navy was more concerned with potential conflict in shallower waters such as the Mediterranean Sea and the English Channel. Also, half of its main guns were of a smaller 11 inch caliber with half of them in open

[76] Ireland and Grove, *Jane's War at Sea 1897-1997*, 33.
[77] Ibid.
[78] David Ross, *Warships from the Golden Age of Steam* (London: Amber Books Ltd., 2014), 90.
[79] Ibid, 62 and 66.

barbettes rather than turrets.[80] While the *Marceau* had comparable armament to the U.S.S. *Indiana*, 13.4 inch guns, their placement in barbettes left them vulnerable to destruction in combat.[81] The U.S. did not expect to fight a war with France, but naval planners always use worst case scenarios when designing warships. What all of these examples show is that the new U.S. Navy was constructed in order to challenge the most powerful units of other navies during the late nineteenth century. While this certainly would not remain the case, all of the major world navies would continually compete to have the best warships and it would be many years before the U.S. Navy would take the place of the British navy. This was a huge leap forward in combat power for a Navy that had previously been outclassed by the small Peruvian and Chilean Navies.

Despite its advantages, it would be inappropriate to discuss the success of U.S. Navy expansion without discussing its shortcomings as well. While the armor protection of the *Indiana* was as heavy as or heavier than its potential rivals, a design flaw prevented it from being as well designed as originally hoped. With its large capacity for coal, when fully loaded with fuel and ammunition the armor belt was pushed below the waterline.[82] This meant that during battle, the most heavily protected part of the ship would be less vulnerable than the much more lightly armored deck, meaning the *Indiana* would be in danger of taking more severe damage when fighting other battleships.[83] The worst part is that the designer built the ship knowing that only a two thirds load of coal and ammunition would allow it to meet the specifications provided by the government and

[80] Ibid, 62.
[81] Ibid, 66.
[82] Friedman, *U.S. Battleships*, 27.
[83] Ibid.

they used this rather than the known weight of a full load in order to pass inspection.[84] Of course when the government discovered this, the congressional board in charge of battleship design insisted on accurate measurements of full loads in order to avoid problems with future battleship design, but this issue demonstrates how the first U.S. battleships, despite their advances, suffered from shortcomings as well.[85] While there were no known consequences suffered by the designers, this intentional oversight led to much stricter observation of the entire design process by the board. But the *Indiana* had other problems as well. It had issues with its secondary armament not noticed until much later.

A battleships secondary armament consisted of moderate sized guns, usually between 5 and 8 inches in size, designed to increase the firepower of the ship without having to overload it with the heavier guns of the primary battery. The United States, in order to compete with its potential adversaries, decided to include fewer, larger 8 inch guns on the *Indiana* in order to give a harder punch.[86] While 8 inch guns were more powerful, they were also slower firing than the 6 inch quick firers used by the British Navy.[87] This meant that in a combat situation a contemporary British ship could lay down a heavier amount of fire with its secondary batteries despite the use of smaller guns. In order to compete, the United States had to use a large slower firing gun because they lacked the ability to create the smaller but more advanced 6 inch quick firer.[88] While the U.S. Navy would eventually catch up to the British Navy in terms of

[84] Ibid, 29.
[85] Ibid.
[86] Ibid, 26.
[87] Ibid.
[88] Ibid.

technology, it suffered problems such as these during the teething process of naval design.

All of this information demonstrates several things. First, modernizing the U.S. Navy required more than simply passing a bill through a reluctant Congress. It required the best technology money could buy in order to create a fleet that, while being smaller than some of its principal rivals, could conceivably defeat them in a hypothetical war. This required new types of guns, armor, engine capability, steel production, and rangefinders. Battleships of the late nineteenth century, like aircraft carriers today, showcased the technological developments of the nation. Only by utilizing every technological advantage available to the United States could a Navy be constructed that would stand a chance of defeating potential foes. This meant that naval expansion could not be a one-time policy of the Federal government. Foreign navies, especially Great Britain and Germany, constantly built new and improved warships in order to make use of the latest developments in warship technology. The U.S. would not just be able to build a sizeable number of warships of similar design and leave it at that. In order to compete with foreign navies, new warships were in constant need of replacement and even today the U.S. frequently needs to build new ships and retire old ones as technology improves. In order to remain a major power on the world's oceans, constant development and implementation of new technologies is a vital necessity.

Second, new technology frequently developed as construction went along, whether this was the creation and production of new kinds of steel in order to ensure that the battle fleet had the best protection available, or developing technology by studying foreign abilities abroad, such as the U.S. commission sent to Europe to study rangefinder

technology. These new ships not only represented the pinnacle of technological development in the United States, but it actually pushed the country to reach new heights of technological development. Even the electric lights that illuminated these ships were years ahead of their time as it would still be decades before most people on land enjoyed the same luxuries available on these warships. This new fleet embodied technological change and, as often happens, potential and actual warfare helped develop new and useful technologies. As the United States frequently used its fleet over the next two decades it was absolutely necessary that the latest developments of naval technology be utilized as quickly as possible in order to avoid obsolescence.

Finally, these ships would fundamentally alter the way the United States approached foreign problems. Following the Civil War, while certain foreign problems interested the United States, the majority of its energy turned towards social and economic problems at home. After all, the navy was not a priority as can be seen by the laughable state of the U.S. Navy during the 1870s and much of the 1880s. But this brand new navy would present the United States with the opportunity to be taken seriously by major foreign powers for the first time since the Civil War. Now the U.S. could enforce its diplomatic will abroad. It would quickly establish a penchant for this in the upcoming decades that was significantly more interventionist than it had been prior to the construction of the new steel navy.

Conclusion

Naval expansion irrecoverably changed the United States and how it approached diplomatic problems. The combination of a political will strong enough to overcome internal resistance to military expenditures and the technological marvel of its new fleet led the United States to pursue a far more aggressive foreign policy than it had hitherto considered. There are three specific examples in the late 1890s and early 1900s that demonstrate how the construction of a new navy encouraged the United States' to pursue a more aggressive strategy. First, the Venezuela crisis of 1895. This crisis was a border dispute between Great Britain and Venezuela that the United States felt violated the Monroe Doctrine. Second, the Spanish American War of 1898. In order to liberate Cuba and the Philippines and, at the same time, improve its international position, the United States went to war with Spain. Finally, the sailing of the Great White Fleet from the end of 1907 to the beginning on 1909. This was an effort by the United States to "show the flag" and flex its new naval muscles by demonstrating that American firepower could now be brought to bear anywhere in the world. In addition, it allowed the United States to show potential allies and potential enemies that the nation was now an influential player in world politics and could not safely be ignored anymore. All three of these incidents would not have occurred without the increase in naval strength caused by the expansion effort.

The roots of the Venezuela Crisis of 1895 date as far back as the end of the Napoleonic Wars.[89] After defeating France in 1814, Great Britain received as part of its territorial compensation from the Netherlands, an ally of France, what would become the modern nation of Guyana. Located on the eastern border of Venezuela, this former

[89] Welch, *Presidencies of Grover Cleveland*, 180.

Spanish colony was claimed by Venezuela when it gained its independence from the nation of Gran Columbia in 1830. Gran Columbia was a nation that was composed of what would later become Columbia, Ecudor, Panama, and Venezuela as well as parts of modern day Peru, and Brazil. Both Great Britain and Venezuela had, since 1841, argued that their common border was located in different areas. The British hired Sir Robert Schomburgk to survey the location of the boundary through the thick jungles located in that part of South America.[90] Venezuela was adamant that the boundary was much farther east than where Schomburgk placed his line on the map, locating the boundary at the Essequibo River and refusing to recognize the boundary accepted by Great Britain.[91] As can be seen from the dates involved, this border dispute had continued for some time and, for a while, the United States did not care. The discovery of gold within the disputed area exacerbated the conflict and by the 1880's Venezuela suspended diplomatic relations with Great Britain. But even this escalation received little notice from the United States, which had been for some time more concerned with domestic than foreign issues.[92]

Despite continuing diplomatic pressure from Venezuela to get the United States involved, the U.S. government showed little interest in the conflict. While numerous reasons finally pushed the United States into the middle of the crisis, including a much more activist Grover Cleveland administration, the presence of a strong, new navy encouraged President Cleveland to support Venezuela and stand up to the might of the British nation.[93] While the United States was far from equal to Great Britain as a naval power, in fact the composition of the fleet during this period had just begun to get to a

[90] Ibid.
[91] Ibid.
[92] Zakaria, *From Wealth to Power*, 148.
[93] Welch, *Presidencies of Grover Cleveland*, 178.

point that would allow the United States to successfully assert itself diplomatically, President Cleveland decided that this was the perfect opportunity to flex the new navy's muscles and improve the United States diplomatic standing at the same time. Arguing that the British attempt to greatly increase the size of its own territory at the expense of Venezuela was a violation of the Monroe Doctrine, President Cleveland and his secretary of state, Richard Olney, sought a resumption of diplomatic ties between the two nations with the United States appointed as arbitrator of the dispute.[94]

This was exactly what Great Britain had been trying to avoid. The British had consistently refused to accept Venezuelan demands to allow international arbitration of the dispute because they believed the most likely outcome was a splitting of the difference between both nations' competing territorial claims, and they wanted to receive every piece of territory they believed they owned.[95] As a result Britain summarily dismissed the United States' attempt to mediate the dispute, claiming that Great Britain was an American power that had every right to participate in affairs in the Western Hemisphere.[96] In response, Cleveland went before Congress and gave a fiery speech defending the Monroe Doctrine in which he denounced British incursions and ominously announced that he was aware of the potential consequences of his actions.[97] While there was some initial enthusiasm for fighting the British, cooler heads prevailed.

Both sides backed down. While it was tense for a few weeks, both sides balked at actually going over the edge into open conflict. The United States was aware that Great Britain was the world's most powerful nation at the time, and there was little enthusiasm

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[94] Zakaria, *From Wealth to Power*, 149.
[95] Welch, *Presidencies of Grover Cleveland*, 180-181.
[96] Zakaria, *From Wealth to Power*, 150.
[97] Ibid.

amongst the American public for fighting with them.[98] In turn, Great Britain knew that the United States was a rapidly emerging world power. The British were aware of U.S. attempts to increase the size and power of its navy, and they would have had difficulty defending some of their more vulnerable imperial possessions, especially Canada, which was vulnerable to a potential U.S. invasion.[99] While hotheads on each side wanted the war to happen, the Irish National Alliance offered 100,000 men to help take Canada from Great Britain, both countries ignored them and the Anglo American Agreement of November 12, 1896 ended potential hostilities, with both nations able to save face.[100] This conflict represents a dramatic shift in U.S. foreign policy that can only be explained by the strengthening of its navy. As Henry Cabot Lodge argued "today if we want to make our diplomacy and negotiations successful, if we want to have them worthy of the American name and of American honor, we must see to it that we have the means of defense to back it up."[101] President Grover Cleveland himself had ignored the festering problem in Venezuela during his first term.[102] The only explanation for this increased aggressiveness is that the United States felt more confident of its military might. This cannot be explained by its army. The standing U.S. army in the mid-1890s was minuscule for the size of the nation it was meant to defend and would have to be filled by National Guard and Volunteer units in the event of war, as would happen during the Spanish American War.[103] Only the Navy had increased in strength and, for that reason, must have influenced American politicians to take a more aggressive stance in defense of

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[98] Ibid, 151.
[99] Ibid.
[100] Ibid.
[101] *Cong. Rec.*, 51st Cong., 1st sess., 1891,:1804.
[102] Welch, *Presidencies of Grover Cleveland*, 180.
[103] Michael Lee Lanning, *The Battle 100: The Stories Behind History's Most Influential Battles* (Naperville: Sourcebooks, Inc., 2003), 108.

Venezuelan interests. Nothing else could explain why the United States would suddenly reverse its longstanding disinterest in the subject and go to the brink of war with Great Britain over some distant border. This would not be the last time the United States would flex its muscles in order to influence a diplomatic incident nor would it be the most significant. After all, no shooting occurred and both sides felt satisfied by the results of the negotiations. But it was the first hint that the United States was no longer content to allow European nations to dictate affairs in the Western Hemisphere and that the Monroe Doctrine would be enforced in a way that was never seriously considered before.

No event demonstrates the effects of U.S. naval expansion on U.S. foreign policy greater than the outbreak of the Spanish-American War. While the Venezuela crisis showed the United States willingness to flex its new muscles, the Spanish American War demonstrated to the world that the United States was no longer a third rate former colonial power, but a burgeoning imperial power that would have to be taken seriously in future potential conflicts. It began as a result of Spanish mismanagement of its few remaining imperial territories both in the Western Hemisphere especially in Cuba, and in the Eastern hemisphere in the Philippines. Spain had been slowly declining as a world power since the late seventeenth century and by the 1890s the former imperial giant was a weakened and mostly irrelevant military power that was consumed with internal problems.[104] While attempting to hold on to their few remaining colonial possessions, Spain had begun a brutal suppression of Cuban and Philipino resistance fighters that excited sympathy in the United States, especially as described by an increasingly sensationalist and jingoistic press.[105] Americans as a whole became more sympathetic

[104] Leeke, *Manila and Santiago*, 86.
[105] Rose, *Power at Sea*, 18.

towards the Cubans and Philipinos. It was in this increasingly volatile situation that the U.S.S. *Maine* was destroyed in Havana harbor, an event that caused the United States to declare war on Spain.

But it was Spanish military weakness combined with new naval strength that encouraged U.S. hopes in a potential conflict. One of the leading Spanish admirals, Don Pascual Cervera y Topete admitted that "The relative military positions of Spain has grown worse for us, because we are extenuated, absolutely penniless, and they are very rich, and also because we have increased our naval power only with the (armored cruiser) *Colon* and the torpedo-destroyers, and they have increased theirs much more."[106] This quotation is revealing for several reasons. Cervera describes some of the major Spanish weaknesses going into the war, they were bankrupt and, with their weak navy, seriously overextended. Perhaps most important in regards to this paper is the weakness and overextension of their navy. As Cervera mentions in his comment, while the Spanish navy had expanded slightly in a potential conflict they would be severely disadvantaged when compared with the U.S. Navy. By this point in the 1890s, U.S. naval expansion had developed quickly and they now had numerous modern battleships available for the upcoming conflict.[107] Spain had one battleship that would not be involved in the fighting and, of the best ships actually engaged, a few modern cruisers, most were in poor condition.[108] This partially explains U.S. willingness to get involved in war with Spain. While the destruction of the *Maine* and the subsequent attempt by the media to whip up emotions concerning its destruction certainly caused the war, Spanish naval weakness encouraged U.S. political and military leaders to aggressively pursue conflict with Spain

[106] Leeke, *Manila and Santiago*, 86.
[107] Rose, *Power at Sea*, 19.
[108] Leeke, *Manila and Santiago*, 86.

and the war turned into an excellent chance to showcase the increased power of the U.S. Navy.

This power was shown in two major battles in which the U.S. Navy completely dominated the Spanish Navy. These two battles were the Battle of Manila and the Battle of Santiago both of which justified Tracy's argument that "I felt that we must be able to divert an enemy's force from our own coast by threating his own."[109] While the Spanish American War was as much a ground war as a naval one, for the purposes of this paper the naval one is of greater interest. Despite the numerous advantages held by the U.S. Navy, initial feelings abroad were that the United States did not stand a chance of defeating Spain. Admiral Dewey, paraphrasing British sentiment on his upcoming battle in Manila, stated that "it was not possible to get bets, even at heavy odds, that our expedition would be a success."[110] Dewey also reported that a local British authority had mentioned that the Americans were "A fine set of fellows, but unhappily we shall never see them again."[111] While this could certainly be seen as Dewey attempting to inflate the magnitude of his coming victory, there is evidence that supports his claim of international attitudes being against the United States. First and foremost amongst those is that up until a few years previously, as discussed, they would have been right. While American naval expansion had been progressing at full steam, there had been no major conflict involving the U.S. Navy, and many foreign officers appeared to retain increasingly obsolete ideas about the U.S. Navy's lack of fighting power. Secondly, on paper at least, the Spanish forces in the Philippines held the advantage over the American Asiatic squadron. According to reliable sources at the time "the Spanish squadron in the

[109] Quoted in Cooling, *Benjamin Franklin Tracy*, ix.
[110] Leeke, *Manila and Santiago*, 40.
[111] Ibid.

Philippines, together with guns in the fortifications and minefields at the entrance off Corregidor, made Manila Bay nearly impregnable."[112]

Despite this, the contest in Manila was an astounding success for the U.S. Navy. International interests severely overestimated Spanish strength. While the Spanish squadron was larger than Dewey's it was made up of smaller, mostly obsolete ships including the *Castilla*, whose hull was made of wood.[113] In addition, many of the Spanish ships had their guns located in the traditional, and severely outdated, broadside fashion. This meant that their guns would only be able to fire when potential adversaries were directly across from them, one of many reasons all major navies switched to turret and barbette placed guns, especially for their primary armament.[114] Finally, many of the Spanish ships were at anchor in an attempt by Admiral Montojo, the Spanish commander, to make the best use of his obsolete broadside batteries, and of the shore guns that would supposedly allow him to defeat the superior American squadron.[115] However, by anchoring his ships Montojo merely made it easier for the American gunners to score hits while the vaunted shore batteries fire was so inaccurate that not a single one of their shells hit the American fleet.[116]

The result was, in hindsight, predictable. Dewey's ships steamed around the bay, blasting the Spanish fleet to smithereens while taking only minor hits. No serious damage was caused by Spanish fire and only eight crewmen were slightly injured by a single shell.[117] While one American died, it was as a result of a heart attack and had

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[112] Ibid.
[113] Ibid, 48.
[114] Ibid, 66.
[115] James C. Bradford, ed., *Admirals of the New Steel Navy: Makers of the American Naval Tradition 1880-1930* (Annapolis: United States Naval Institute, 1990), 232.
[116] Leeke, *Manila and Santiago*, 64-65.
[117] Bradford, ed., *Admirals of the New Steel Navy*, 233.

nothing to do with Spanish fire.[118] Meanwhile, Spanish casualties and losses were catastrophic. Not only did they suffer far more casualties than the Americans, 320 men killed and over 300 wounded, but their entire squadron was destroyed.[119] This was an incredibly lopsided victory, caused by U.S. naval preparation and Spanish obsolescence, and would be repeated at the Battle of Santiago.

Santiago would be a somewhat different experience than Manila, although the results would be the same. First, Admiral Cervera was not attempting a do or die defense of the harbor. Instead, he was trying to break through the American blockade of Santiago and get his ships out to sea where he could either retreat to Spain or harass the east coast."[120] Secondly, although the Spanish ships which made up Cervera's squadron were newer and in better condition than Montojo's, they were even more outmatched. The U.S. squadron in Manila had consisted solely of cruisers and gunboats. But the U.S. blockading squadron at Santiago consisted of cruisers and battleships including the *Iowa, Texas, Oregon,* and the *Indiana*.[121] Their heavy armor and large guns meant that Cervera had little chance of destroying any ships and even less chance of escaping. If any of Cervera's ships took a hit from the massive guns located on these ships, they would be quickly knocked out of commission and even minor hits could cause enough damage to slow the Spanish cruisers down, a deadly result for the escaping ships.

Despite the lopsided beginnings to the battle, the Spanish came closer to realizing their goal than anyone would have thought. Charging out of the entrance to Santiago harbor, the Spanish squadron caught the Americans unaware and, while the U.S. ships

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[118] Leeke, *Manila and Santiago*, 71.
[119] Ibid, 72-73.
[120] Bradford, ed., *Admirals of the New Steel Navy*, 86.
[121] Ibid.

opened up with a galling fire as soon as they appeared, for a few minutes it seemed as if they might escape. The *Brooklyn,* a cruiser, and the battleship *Texas* almost collided due to the blinding effects of heavy gun smoke, the lack of a centralized command caused by the chaos of battle, and the lack of modern communications equipment as this was before the invention of radio.[122] But once the American captains got over their initial shock and surprise, the battle ended predictably. The Spanish ships, perhaps fearful that they would be sunk, stayed close to shore in a tight formation rather than splitting off in different directions.[123] As a result, the far heavier guns of the U.S. ships showed their superiority and all six Spanish ships, four cruiser and two destroyers, sank or ran aground in short order. They also suffered large casualties losing 323 dead and 151 severely wounded.[124] American casualties were light as at Manila. While the Spanish ships had managed to score more hits on the U.S. ships than their compatriots in Manila, none seriously damaged any of the U.S. warships and American casualties consisted of only 1 man killed and 1 man severely wounded.[125]

What these battles demonstrate is the power of the newly rebuilt U.S. Navy. While the Spanish were certainly outclassed, they were only outclassed because the United States had spent the last eight years modernizing their navy while the Spanish had not. If the war had happened as little as ten years previously the Spanish would have won handily. Naval superiority proved the most important strategic difference between the United States and Spain and the Spanish American War confirmed the arguments of naval expansionists such as Mahan. Naval power was beginning to become a central

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[122] Leeke, *Manila and Santiago*, 130-33.
[123] Ibid, 134.
[124] Ibid, 142.
[125] Ibid.

issue governments around the world and, as the United States continued to increase the size and strength of its fleet, the new U.S. Navy would become equal to, and finally surpass, the world's leading naval powers. This leads to the final example of how U.S. foreign policy changed after the construction of its enhanced navy, the sailing of the Great White Fleet during the Teddy Roosevelt administration.

The Great White Fleet, unlike the previous two examples, did not involve conflict either diplomatic or military, with any nation. Instead, its sailing was a representation of how the United States could now bring a large amount of firepower to bear anywhere in the world, thus confirming both the nation's new military power and its increased importance in the diplomatic arena. It fulfilled President Harrison's campaign promise where he stated

> I do much want that the time shall come when our citizens living in temporary exile in foreign ports shall now and then see steaming into these brave distant ports a fine modern man-of-war, flying the United States flag with the best modern guns on her deck, and a brave American crew in her forecastle.[126]

The purpose of the Great White Fleet was to sail sixteen U.S. battleships around the world as an organized and cohesive unit.[127] This was an impressive gathering of U.S. naval power. Only twenty years earlier, the fleet had been an unimpressive and worthless collection of rusting monitors and leaking wooden ships. Now it had become a major force by any international standard, and the United States wanted to show its power before the world. It was so impressive that President Teddy Roosevelt, long a supporter of U.S. naval expansion, exclaimed in joy upon seeing the ships fire a twenty-one gun salute to him "Did you ever see such a fleet? Isn't it magnificent? Oughtn't we all feel

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[126] President Benjamin Harrison, "Campaign Speech Given in Galveston, April 18, 1891," Benjamin Harrison Collection, Indiana State Library, Indianapolis.
[127] Reckner, *Teddy Roosevelt's Great White Fleet*, 21.

proud?"[128] This was a far cry from previous years when other nations viewed the U.S. Navy as an object of pity and scorn.

In addition the cruise served another useful, if more mundane, purpose. It allowed the President and his naval commanders to test the capabilities of the new fleet as well as see if any defects needed to be fixed by testing the fleet in the hazardous oceanic conditions that can arise during a worldwide cruise.[129] Many of these ships had only recently been constructed and much of the technology used in constructing them was new and of unproven quality.[130] It was necessary for naval planners and political leaders to see what condition the fleet would be in after a prolonged cruise, including if the units would be ready to fight a large scale battle at the end of its journey. If the fleet was going to perform its constructed role, it would need to be in good shape no matter how far it went. In this aspect, the fleet performed beautifully. While the navy used the cruise to determine and fix minor defects, the entire fleet was in excellent condition to fight after the long voyage, proving that American investment in naval power had paid off.[131]

The goal of showcasing the United States' new presence on the diplomatic stage was accomplished. Interestingly, it strengthened American relations with Australia, as one reason for the initial foray of the fleet into the Pacific was an interest in cowing the expansionist Japanese Empire.[132] Both Australia and New Zealand feared Japanese expansion and, since at this period in time the British Navy had to keep most of its strongest units in home waters to protect against potential threats from the German Navy,

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[128] Ibid, 23.
[129] Ibid, 157.
[130] Ibid.
[131] Ibid.
[132] Ibid, 158.

the knowledge that a powerful American fleet existed and was able to confront the Japanese strengthened ties between these distant parts of the British Empire and the United States.[133] Furthermore, while nations such as Great Britain and Germany were more concerned with each other at this point than over the Americans, U.S. diplomatic relations improved with, ironically enough, the Japanese. A local Japanese paper, the *Asashi Shimbun*, remarked that the Americans impeccable behavior while ashore visiting the Empire greatly enhanced the reputation of the American fleet.[134] While this is somewhat amusing considering that the American fleet had been sent through the Pacific first to overawe the Japanese with potential U.S. naval might, this effect of well-behaved American sailors showing up in countries around the world in their gleaming white ships enhanced the diplomatic reputation of the United States considerably. While there were certainly sailors who got drunk or visited unsavory parts of town wherever they visited, on the whole their discipline was exemplary and the nations in the Pacific and other ports throughout their journey were suitably impressed by the Americans.[135] All in all, the sailing of the Great White Fleet represented America's new strength and power on the diplomatic stage and it represents the new era in United States politics that occurred due to a long period of naval expansion.

Events following the Great White Fleet only strengthen the idea that naval expansion was central to U.S. foreign policy. The U.S. Navy continued to grow in strength, including producing dreadnoughts and, after their invention, aircraft carriers. During the First World War, the U.S. Navy played an important role escorting convoys to

[133] Ibid.
[134] Ibid, 159.
[135] Ibid, 158-59.

France and Great Britain and the U.S. entry into the war all but guaranteed allied victory in the war for the Atlantic. Naval expansion was so intertwined with U.S. foreign policy that even during the 1920s, despite naval disarmament treaties and the vast scale back of the U.S. Army following the end of World War I, the United States maintained its powerful navy, allowing them to enter World War II with at least one part of their military in an advanced state of readiness. The United States has continued this policy since the end of World War II, which is why, for the last seventy years, its navy has been and continues to be the most powerful fighting force on the planet. While this is a discussion for another time, a policy of creating and maintaining a strong two ocean navy has been an undeniably central part of U.S. foreign policy since the late 1880s. Naval expansionists in the late nineteenth century would have been ecstatic to know that their ideas concerning a strong navy would remain important to the United States all the way to the present.

U.S. naval expansion changed the course of American history. The weak, ineffective navy of the post-Civil War United States had been transformed into an up-to-date powerful fleet that was well on its way to becoming the most powerful navy in the world. Because of its importance both as a war winning force and a "big stick" to help strengthen U.S. diplomatic efforts, an in-depth study of U.S. naval expansion is a necessary part of any study of U.S. history.

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