

Mahan Goes to War: Effects of World War I on the U.S. Navy's Force Structure and Operational Planning

**A Monograph
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Abstract

MAHAN GOES TO WAR: EFFECTS OF WORLD WAR I ON THE U.S. NAVY'S FORCE STRUCTURE AND OPERATIONAL PLANNING by LCDR Brandon E. Todd, USN, 46 pages.

A.T. Mahan's 1890 book *The Influence of Sea Power on History* presented a theory of sea power that proclaimed the capital ship-centered battle fleet essential to any great maritime nation's long-term prosperity. Mahan also formulated a beguilingly simple operational concept based on the teachings of Jomini. His ideas quickly became dogma in the world's navies, including the U.S. Navy. In the decades before World War I, the U.S. Navy's force structure and operational plans reflected Mahan's emphasis on the battleship and fighting as a concentrated fleet.

The naval conflict between Germany and Great Britain in World War I did not resemble Mahan's vision for what war at sea between two great powers should look like. Rather than consisting of decisive battles between fleets of capital ships, the War involved distant blockade, raids, mining, and especially commerce raiding by German submarines. Mahan's rival theorist, Sir Julian Corbett, better described the character of World War I.

Despite the advantage of almost three years of observing the European conflict, the U.S. Navy did little to prepare for this new kind of war. It entered the War in April, 1917 with a "top-heavy" force of battleships, and operational plans completely unsuited to the antisubmarine conflict it would undertake.

This monograph attempts to determine the effects of World War I, a decidedly non-Mahanian war, on the U.S. Navy's force structure and operational planning. These variables manifest the Navy's ends, ways, and means, and thus shed light on the theoretical underpinnings of the Navy's policy.

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Introduction

The United States Navy's brief involvement in World War I did not play out according to the predictions of the naval establishment. Instead of the expected Mahanian clash of battle fleets, the war at sea was one of raids, patrols, blockades, and especially convoys. In the years leading up to the U.S. involvement in the war, President Wilson expected neutrality "in thought as well as in deed" from the American people.¹ Secretary of the Navy Josephus A. Daniels, a kindred progressive spirit to the President, mostly complied with the president's wishes, resulting in a Navy that arguably met the nation's long-term strategic needs, but was not tailored to fight an antisubmarine campaign against Germany in European waters.² Despite a somewhat flat-footed start, the U.S. Navy significantly contributed to Allied victory at sea and on land, transporting almost one million soldiers to Europe without losing one to submarine attack, providing more than 70 destroyers and 120 submarine chasers for patrol and convoy duty, and constructing a 230-nautical mile mined "barrage" across the North Sea to intercept transiting U-boats.³ Although it may be difficult to directly link the arrival of the U.S. Navy to the defeat of Germany's unrestricted submarine warfare campaign, the all-important statistic of allied merchant tonnage sunk per month, after peaking at 881,027 tons in April 1917⁴, dropped significantly after the arrival of the U.S. Navy and the beginning of merchant convoy.⁵

The unprecedented character of the War at sea might have resulted in a fundamental change in direction for the Navy during the interwar years. Great changes were indeed in store for

¹ Harvey A. DeWeerd, *President Wilson Fights His War: World War I and the American Intervention* (New York: Collier-MacMillan, 1968), 7.

² Nevertheless, many naval officers watched European events with interest. The Proceedings of the United States Naval Institute, the Navy's most prominent professional journal, featured extensive and detailed reporting on the war in Europe each issue.

³ Thomas Frothingham, *The Naval History of the World War* (Cambridge: Harvard, 1926), 161, 285.

⁴ Frothingham, *Naval History*, 21.

⁵ John Terraine, *The U-Boat Wars 1916-1945* (New York: Putnam, 1989), 766.

the Navy between the World Wars, driven in part by the Washington Naval Treaty of 1922 and continuing revolutions in military affairs such as the naval aviation and submarine warfare. But what lasting changes resulted from the Navy's experience in World War I and the subsequent Naval Hearings? The experiences of World War I and the 1920 Naval Hearings challenged the Navy's Mahanian foundations, particularly in the areas of force structure and operational planning. Despite these challenges, the U.S. Navy mostly dismissed World War I as an aberrant experience, failing to make substantial changes in the interwar years.

This investigation will examine the Navy's force structure and operational planning before and after World War I. It will discuss the rise of Mahan's ideas as the theoretical basis for the Navy, show how the Mahanian Navy fared in the war, and relate the relevant issues discussed in the hearings. Finally, it will show how, despite the experience of the war and the results of the hearings, the Navy remained top-heavy with battleships and wedded to Mahan's ideals of fleet concentration and decisive battle.

Literature Review and Methodology

In order to test the thesis that the experience of World War I had little effect on the U.S. Navy's force structure and operational planning, this investigation will use a serial case study methodology. It will follow an OXO format, in which the dependent variables are described before and after the war (see Figure 1 below).



Figure 1: Case Study Design

Force structure, meaning the number and type of vessels in commission and under construction in the Navy, was chosen as a variable for two reasons. First, the Navy's ships are the means by which naval missions are accomplished. As such, they bound the possible ways, or tactics and operations, available to the Navy. Therefore, force structure determines the ways and means available to naval planners and commanders. The relationship between ways and means and force structure is also a reciprocal one. Theory and doctrine advocate ideas or tactics, such as the importance of destroying an enemy's battle fleet or the futility of commerce raiding, and these suggest ways and means that influence building programs put forth by the Navy and approved by Congress, thus affecting force structure. Force structure also serves as a useful variable due to its ease of measurement, as building programs and ships commissioned are unambiguous and easily available.

The Navy's policies and debates about force structure are well documented in a variety of primary and secondary sources. The hearings and proceedings of the General Board of the Navy provide excellent insight into the decision-making process of the Navy, and are available on microfilm at the Combined Arms Library at Fort Leavenworth, Kansas. Formed in 1900, the General Board of the Navy served as the advisory body to the Secretary of the Navy on technical, personnel, operational, and administrative matters until its dissolution in 1950. All naval building programs implemented during this time began as General Board recommendations, and the minutes of the Board's meetings reveal the thought processes, theoretical justifications, and debates that informed the Navy's force structure. Similarly, the Secretary of the Navy's annual reports incorporate much valuable information related to the Navy's intentions with respect to force structure. These reports show what changes the Secretary made to the General Board's recommendations, which were classified at the time, before forwarding them to Congress, as well as containing policy letters from the General Board and other organizations in the Navy.

William Williams' 1996 *Journal of Military History* article, "Josephus Daniels and the U.S. Navy's Shipbuilding Program During World War I," relates how the U.S. Navy, over

eighteen months, halted construction on battleships and cruisers and shifted the military and civilian shipyards towards destroyers, small antisubmarine craft, and merchant ships. In Williams' view, history has treated Secretary Daniels unfairly, and his leadership and foresight helped the Navy redirect its shipbuilding efforts in a reasonably rapid manner. Harold and Margaret Sprout, in their excellent book *Toward a New Order of Sea Power*, describe, among other things, the evolution of the Navy's construction programs from 1918-1922. Besides containing the details of the programs proposed, modified, and approved, they vividly explain the departmental, domestic, and international political contexts influencing the Navy.

Operational planning, the second variable studied, shows how the Navy thought its fleet ought to be employed in war and points toward the theoretical bases used by Navy leadership. During the war and the 1920 hearings, Sims and his supporters strongly criticized the Navy's lack of war plans suitable for the European antisubmarine campaign. During the time studied, War Plans Black and Orange, the plans concerning Germany and Japan respectively, received the most attention from the Navy's planning establishment. Although the actual plans were unavailable for this study, primary and secondary sources refer to the plans and give an adequate description of their structure and content. Edward S. Miller's *War Plan Orange* is a masterful account of the Navy's evolving war plan to defeat a hypothetical Japanese attack. Orange generally received the most attention and effort of all the Navy's war plans, and its fifty-year history provides a long period to examine changes in doctrine and operational design. Black, the other war plan studied, is well described by secondary literature as it existed before and during the War, but little has been written about the evolution of the plan in the interwar period. Donald Yerxa's *Military Affairs* article "The United States Navy in Caribbean Waters during World War I" describes War Plan Black, the Navy's plan to defeat a German attack on U.S. interests in the Caribbean. This plan, implicitly criticized by Sims in the 1920 Naval Hearings, affords further insight into the Navy's operational thinking as it entered World War I. George Baer also presents his analysis of Black in his book *One Hundred Years of Sea Power: The U.S. Navy, 1890-1990*, focusing on

how poorly the plan prepared the U.S. Navy for the war, owing largely to the Navy's lack of policy guidance from the State Department and the rest of the government.

The format presented by Stephen Van Evera provides a useful method for testing the thesis. Van Evera recommends three steps: "(1) state the theory; (2) state expectations about what we should observe in the case if the theory is valid, and what we should observe if it is false; and (3) explore the case (or cases) looking for congruence or incongruity between expectation and observation." Using this method, both dependent variables will be examined before and after World War I. If the thesis is false, the dependent variables should change in a way attributable to the Navy's experience in the War. If the thesis is valid, force structure and operational planning should return to something resembling their pre-war, or at least if they do change, the changes should be attributable to something other than the War and the hearings.

The complex, interdependent nature of the U.S. Navy as a system can cause difficulty in attributing causes to even narrowly defined variables such as the ones used here. Any number of factors could influence the variables, and undoubtedly did. Several revolutions in military affairs (RMAs) occurred during the period studied, including the worldwide adoption of Mahan's ideas on naval strategy and tactics, Admiral Lord Fisher's transformation of the Royal Navy, the advent of submarine warfare, and the rise of carrier aviation. Furthermore, the Washington Naval Treaty of 1922 greatly altered the allowable force structure for the Navy, which in turn affected operational planning. Finally, any number of personal biases, experiences, and predispositions of influential people would have their effects of force structure and operational planning, irrespective of the War and the Naval Hearings.

Rise of the Mahanian Navy

The quarter-century between 1890 and World War I was one of profound transformation for the U.S. Navy, as it was for the navies of all the world's great powers. During this time, the

U.S. Navy evolved from the world's 12th largest to second and was well on its way to overtaking Great Britain. The impetus for much of this transformation, in the U.S. Navy as well as in the navies of other great powers, came from the ideas of Alfred Thayer Mahan.

A.T. Mahan, the son of influential author and West Point professor Dennis Hart Mahan, was born in 1840 in West Point, New York. He enjoyed a steady and successful, if unremarkable, career before his sudden rise to fame in the 1890s. During the Civil War, he participated in blockade duty in the South Atlantic Blockading Squadron and in the attack on Port Royal, South Carolina. Other assignments included instruction at the Naval Academy and Newport, Rhode Island, duty aboard various ships, and command of the USS WASP and USS WACHUSETT. In 1884, Commodore Stephen B. Luce, the creator and first president of the Naval War College, invited Mahan to join the faculty as a lecturer on naval tactics and history.⁶ As War College President, Luce created an intellectual environment very much conducive to the development of Mahan's ideas. Luce, in his speeches and writings, continually called for the creation of a more scientific concept of naval warfare. In an 1886 *United States Naval Proceedings* article, Luce indicated his belief that naval matters were ripe for articulation in a scientific way:

... there is no question that the naval battles of the past furnish a mass of facts amply sufficient for the formulation of laws or principles which, once established, would raise maritime war to the level of a science... let us confidently look for that master mind who will lay the foundations of that science, and do for it what Jomini has done for military science.⁷

Commodore Luce may not have been the man to formulate this science of naval warfare, but as it turned out, Mahan was.⁸ In 1885, Mahan reported for duty at the War College, and in

⁶ Azar Gat, *A History of Military Thought: From the Enlightenment to the Cold War* (Oxford: Oxford University Press, 2001), 444.

⁷ Stephen B. Luce, "On the Study of Naval Warfare as a Science," *United States Naval Proceedings* (1886), 527-46; reprinted in *The Writings of Stephen B. Luce*, ed. John D. Hayes and John B. Hattendorff (Newport, RI, 1975), 50, 74-75, quoted in Gat, *History of Military Thought*, 445-6.

⁸ Gat, *History of Military Thought*, 446.

1886 he was appointed President.⁹ Compiling the lectures he had presented during his time at Newport, in 1890 Mahan published the book that brought him such great renown, *The Influence of Sea Power on History, 1660-1783*. His main premise, novel at the time, was that any great nation necessarily relies on seagoing commerce for its strength and prosperity and must therefore have a Navy capable of protecting its maritime interests. Mahan supported this assertion with a historical analysis of thirteen cases from European military events ranging from the second Anglo-Dutch war of 1665 to the British Maritime War of 1778, showing that a nation's sea power could decisively influence the outcome of a war and greatly affect a nation's long-term prospects. *The Influence of Sea Power on History* quickly found a wide readership, and Mahan's central premise, along with his other ideas on naval strategy and the factors that influence maritime strength profoundly influenced naval professionals and policymakers in the U.S. and internationally. Mahan overtly admired Swiss military theorist Antoine-Henri Jomini, taking his principle of concentrating overwhelming force at the decisive point and applying it wholesale to naval matters. More fundamentally, Mahan followed Jomini's positivist approach that warfare could be reduced to a few timeless principles, from which a "correct" way of war should be waged. Mahan's interpretation of Jomini gave rise to his notion of sea command, the idea of employing the Navy to protect the nation's maritime interests by operating a concentrated, offensive-minded fleet of battleships whose sole proper purpose was to destroy the enemy's fleet.¹⁰ On the other hand, Mahan thought little of *guerre de course*, the attack of enemy commerce by dispersed raiders. Mahan believed that while an enemy's merchant marine could be a fruitful objective in a naval war, this was best achieved by blockade enforced by a concentrated

⁹ Naval History & Heritage Command, "Biographies in Naval History: Rear Admiral Alfred Thayer Mahan, US Navy," www.history.navy.mil/bios/mahan_alfred.htm (accessed 14 Feb 2012).

¹⁰ George W. Baer, *One Hundred Years of Sea Power: The U.S. Navy, 1890-1990* (Stanford, CA: Stanford University Press, 1994), 14. Baer continues, "For Mahan, concentration meant massed naval fire, and that meant a fleet. Fleet concentration was the byword; never divide the fleet its corollary."

battle fleet.¹¹ These ideas became all but dogma and powerfully influenced how the world's great powers thought about building and employing their navies. Although one could question how much the spread of these concepts was directly due to Mahan himself, the ideas undoubtedly took hold of the world's navies and for convenience, this paper will refer to them as "Mahanian."¹²

Mahan, however, was not the only, or arguably even the ablest, naval theorist writing around the turn of the twentieth century. Sir Julian Corbett developed a competing maritime theory around the same time that provided a compelling alternative to the Mahanian view. Corbett, an English historian, wrote five well-received and meticulously researched books on British naval history before publishing his best-known work in 1911, the modestly named *Some Principles of Maritime Strategy*.¹³ Early in his career, Corbett, like Mahan, held "as self-evident that command of the sea is the proper aim of a naval war."¹⁴ However, as his views and scholarship matured, he came to present a more nuanced and complete view of the Navy as an instrument of national power. The turning point for his views seemed to occur as he wrote *The Successors of Drake*, his 1900 history of British naval operations from 1596-1603. Corbett concluded that the British plans during this period failed "principally because the navy had not carried sufficient troops on board its ships to support its actions."¹⁵ Expanding on this idea, he

¹¹ Jon Sumida, "New Insights from Old Books: The Case of Alfred Thayer Mahan," *Naval War College Review* LIV, no. 3 (Summer 2001): 103. Sumida continues, "'Blockade of the enemy's main ports-implemented by a fleet of battleships capable of defeating any force that was sent against it - was the only way to accomplish the complete or near complete stoppage of overseas commerce required to achieve a significant strategic effect against a great maritime power.'"

¹² Norman Friedman, "Transformation a Century Ago," *Naval History* 19, iss. 2 (April 2005): 34. Friedman contended that the Navy's transformation between 1885 and 1915 was due more to a general shift towards a more outward-focused foreign policy than the efforts of Mahan per se. According to Friedman, "Mahan's insights did raise some consciousness of the significance of sea power, but he did not articulate any program, and he was not placed to have any direct influence on events."

¹³ Ian C.D. Moffat, "Corbett: A Man Before His Time," *Journal of Military and Strategic Studies* (Winter 2000- Spring 2001): 12.

¹⁴ Gat, *History of Military Thought*, 483.

¹⁵ Ibid.

posited “the real importance of maritime power is its influence on military operations.”¹⁶ Over the next decade, Corbett further developed his maritime theory, which featured several themes. One theme, as mentioned before, was that sea power did not exist in a vacuum. The Navy is but one branch of the military, and often not the decisive one. According to Corbett, naval power by itself works slowly, applying pressure over time to the enemy. To obtain conclusive results, the army is necessary:

For a firm decision a quicker and more drastic form of pressure is required. Since men live upon the land and not upon the sea, great issues between nations at war have always been decided - except in the rarest cases - either by what your army can do against your enemy's territory and national life, or else by the fear of what the fleet makes it possible for your army to do.¹⁷

Corbett also described naval warfare itself in broader terms than Mahan did. Defeat of the enemy fleet and gaining command of the sea was an important aim for the Navy, but not the only one.¹⁸ Command of the sea was rarely absolute, but rather contested to a greater or lesser extent by enemy forces. Often, the Navy would have to settle for local control of specific areas at specific times. Finally, Corbett differed from Mahan in that he considered *guerre de course* to be an effective tactic, especially when employed by the weaker belligerent.¹⁹

While Mahan took his inspiration from Jomini, Corbett drew upon Clausewitz. Like Clausewitz, Corbett's theories did not distill easily into short maxims about how to defeat the enemy. Mahan provided his audience an easily digestible formula for naval success from the strategic to the tactical level, but Corbett's more complicated synthesis failed to grasp the imaginations of as many Admirals and policy makers at the time.²⁰ Perhaps most importantly,

¹⁶ Moffat, “Corbett: A Man Before His Time,” 14.

¹⁷ Julian Corbett, *Some Principles of Maritime Strategy* (London: Longmans, Green and Co., 1918), 12.

¹⁸ Gat, *History of Military Thought*, 484.

¹⁹ Moffat, “Corbett: A Man Before His Time,” 15.

²⁰ Corbett did, however, have some powerful supporters in the British Navy, including Winston Churchill and Admiral Jackie Fisher.

Mahan wrote his major work years before Corbett wrote his. As the first theoretician to provide a comprehensive treatment of naval and maritime strategy, his ideas found their enthusiastic audience and were well entrenched by the time Corbett published *Some Principles of Maritime Strategy*.

Operational planning experienced many changes in the decades before World War I, both in the Navy's structure for producing war plans, and in how the Navy operated and planned for the employment of its forces. The Spanish-American War of 1898 proved to be an important event in the evolution of the Navy's operational planning. The war not only validated Mahan's ideas in the eyes of many, but also led to structural changes in the Navy's planning apparatus. Planning before the 1898 conflict involved "individual officers and special committees" preparing rudimentary plans.²¹ Longer-term strategic planning and operational wargaming took place at the Naval War College in Newport, Rhode Island. Navy planning in general reflected the fragmentary nature of the Navy itself, with its largely independent bureaus and lack of a general staff. One step towards consolidating formal strategic and operational planning functions in the Navy came with the formation of the General Board on March 30, 1900. Driven by "uneven operational readiness and performance" during the 1898 War, along with Navy Secretary John D. Long's high opinion of a temporary war strategy board, Secretary Long issued general order No. 544, establishing the General Board.²² The order established membership of the board as:

The Admiral of the Navy [Admiral George Dewey, who headed the General Board until his death in January, 1917], the Chief of the Bureau of Navigation, the Chief Intelligence Officer and his principal assistant, the president of the Naval War College

²¹ Edward S. Miller, *War Plan Orange: the U.S. strategy to defeat Japan* (Annapolis, MD: Naval Institute Press, 1991), 14

²² John T. Kuehn, *Agents of Innovation: The General Board and the Design of the Fleet That Defeated the Japanese Navy* (Annapolis, MD: Naval Institute Press, 2008), 10-11.

and his principal assistant, and three other officers or above the grade of lieutenant commander.²³

The purpose specified by the order for the General board was “to insure efficient preparation of the fleet in case of war and for the naval defense of the coast.”²⁴ The General Board had no authority over operational units or the various bureaus, but was to advise the Secretary of the Navy on a broad range of topics.²⁵ The Board did, however, explicitly receive a planning role, in conjunction with the Naval War College and the Navy’s Intelligence staff:

The Chief of the Bureau of Navigation will be the custodian of the plans of campaign and war preparations. He will indicate to the War College and Intelligence Officer the information required from them by the General Board...²⁶

This planning structure created the war plans that carried the Navy through World War I. Two plans, in particular, absorbed much of the Navy’s planning efforts and reflect the prevailing notions of how the fleet ought to be employed. These plans were War Plan Orange, which dealt with possible Japanese aggression in the Pacific, and War Plan Black, which directed action against a possible German incursion into the Caribbean. Both of these plans evolved significantly over their lifetimes, but this case study concentrates on the plans as they existed from their inception until World War I.

War Plan Orange originated from U.S.-Japanese tensions arising from massive Japanese immigration to the U.S. West Coast and racist local policies aimed at restricting basic rights of the immigrants. Driven by war scares in 1907 and 1913, the Naval War College and the Second Committee of the General Board began planning responses to possible Japanese aggression in the

²³ The Navy Department Library, Department of the Navy - Naval History and Heritage Command, “Establishment of General Board, General Order No. 544, Navy Department, Washington, March 13, 1900,” http://www.history.navy.mil/library/online/gen_order_544.htm (accessed 17 Feb 2012).

²⁴ Ibid.

²⁵ Kuehn, *Agents*, 11.

²⁶ Naval History and Heritage Command, “Establishment of General Board, General Order No. 544, Navy Department, Washington, March 13, 1900.”

Pacific.²⁷ War Plan Orange, while not Mahan's creation, had many elements very much in keeping with Mahan's ideas. For one, the dictum of fleet concentration was firmly fixed in the plan. Even during the war scares early in the century, the General Board refused to divide the fleet and maintained the fleet concentrated in the Atlantic Ocean. Orange plans of the time required the Army to hold out on Corregidor Island in Manila Bay while the Navy assembled in Hawaii and then made their way as one fleet to the Philippines.²⁸ The idea of a decisive battle fought by a concentrated fleet permeated the plan, as Orange planners assumed that at some point in the three-phase plan, a great naval encounter would occur, of course with the U.S. victorious.²⁹ According to historian Edward S. Miller, the largest point of contention amongst Orange planners was how to best accomplish phase II, the advance of the U.S. fleet across the Pacific towards Japan. Those favoring the "island-hopping" approach eventually carried the day, but early in Orange's development, two operational approaches vied for acceptance. The first was the construction of a large naval and industrial base in the Far East from which a concentrated Asiatic fleet would defend U.S. interests and defeat any Japanese aggression.³⁰ This approach clearly bore the stamp of Mahanian thinking, who preached both fleet concentration and the importance of foreign bases. The second approach, not directly contradictory to the first, was that in the absence of a permanent base or fleet in the Far East, the U.S. fleet should quickly steam to an improvised base in the western Pacific. Mahan himself advocated this "Through Ticket" approach, later discarded as recklessly dangerous.³¹ Although War Plan Orange ultimately contained some non-Mahanian elements, such as a *guerre de course* against Japanese merchant shipping by dispersed submarines and small raiders, these were added later in the interwar period,

²⁷ Miller, *War Plan Orange*, 20-22.

²⁸ Baer, *One Hundred Years*, 44-45.

²⁹ Miller, *War Plan Orange*, 36-37.

³⁰ *Ibid.*, 35.

³¹ *Ibid.*, 35.

and the overall plan very much reflected Mahan's thinking. It ambitiously called for the "defeat of land power by sea power," and had its roots in the Naval planners' faith in Mahan's grand role for the nation's Navy.

The other dominant war plan in the years before World War I was War Plan Black, the Navy's plan to counter German aggression in the Western hemisphere. It began as a detailed study by the General Board in 1910, emerging as a full war plan in 1913-1914.³² Black owed much to Mahan, assuming "that commercial competition was the main cause of conflict, that sea power obtained and protected commercial advantage, and that the state with the strongest navy would get what it wanted."³³ Consonant with Mahanian doctrine, the plan aimed towards a decisive battle in which a concentrated U.S. fleet would engage with and destroy a German fleet weakened by a long journey from its home ports.³⁴ Black's role as the "fundamental strategic design for the U.S. Navy"³⁵ manifested itself in the Fleet's activities in the half-decade before the U.S. involvement in World War I. Major annual fleet exercises and several minor ones in 1915 and 1916 were driven by War Plan Black, and the fleet concentrated in the lower Chesapeake in 1914 and 1917 in response to deteriorating relations with Germany.³⁶ War Plan Black clearly failed to predict the actual course of events in World War I, and was the subject of much criticism during the 1920 Naval Hearings. The Navy's reliance on War Plan Black as its operational framework left it ill-prepared for the antisubmarine warfare campaign against Germany, but does serve as an instructive example of the Navy's adoption of Mahan's sea power thinking.

³² Donald A. Yerxa, "The United States Navy in Caribbean Waters During World War I," *Military Affairs* 51, no. 4 (October 1987): 182.

³³ Baer, *One Hundred Years*, 49.

³⁴ *Ibid.*, 50.

³⁵ Yerxa, "Caribbean Waters," 183.

³⁶ Peter M. Swartz, *Sea Changes: Transforming U.S. Navy Deployment Strategy: 1775-2002* (Alexandria, VA: Center for Strategic Studies, CNA Corporation, 2002), 33. Yerxa, "Caribbean Waters," 182-18.

Mahan's sway over the Navy establishment showed itself in more concrete terms by its impact on the Navy's force structure, the number and type of combatant ships in the fleet. During the early part of the twentieth century, the General Board consistently recommended a capital ship-heavy Navy, justifying its choices in Mahanian terms.³⁷ The U.S. Navy's transformation from a small, obsolescent force focused on coastal defense to a modern, battle-ship heavy force began in earnest in 1889 with the convening of a Policy Board by Secretary of the Navy Benjamin F. Tracy. Mahan advised this board, and although his was not the dominant voice on the board, the report submitted at the end of 1889 recommended changes very much along Mahanian lines.³⁸ Among the changes argued for by the board was the creation of two battleship-focused fleets, one for coastal defense and one to be forward deployed for offensive action. Cruisers and commerce-raiding were to be de-emphasized.³⁹

The next major milestone in the development of the pre-World War I Navy with the General Board's creation of the 1903 "General Naval Scheme." Secretary of the Navy William Moody directed the General Board to formulate a long-term building program, instructing the Board, given its understanding of the needs and policies of the nation, to determine the types and numbers of vessels required by the nation.⁴⁰ The General Board proposed a program calling for a 48-battleship fleet, using the German Navy as its basis of comparison. The General Board's justification of its proposed fleet reflected the Board's belief in a strong Navy and in sea power in general: "The policy was to provide and maintain at all times a fleet equal to or superior to that of any nation likely to challenge our policies... Germany is the one great nation possessed of such a

³⁷ Joseph W. Hirschbaum, "The 1916 Naval Expansion Act: Planning for a Navy Second to None"(PhD diss., The George Washington University, 2008), 42.

³⁸ Friedman, "Transformation," 34.

³⁹ Ibid., 34.

⁴⁰ Moody to the General Board, September 21, 1903, Records of the General Board (Letterpress), II, 401, Department of the Navy, Office of the Chief of Naval Operations, quoted in Albert Stillson, "Military Policy Without Political Guidance: Theodore Roosevelt's Navy." *Military Affairs*, 25, no. 1 (Spring, 1961), 23.

fixed and definite policy...”⁴¹ In a subsequent letter to the Secretary of the Navy, the General Board stated its interpretation of national policy which also influenced the program: “...create a fleet strong enough to support the following well established policies of the United States: No entangling alliances, The Monroe Doctrine, The Open Door in the Far East, Asiatic exclusion, Exclusive control of the Panama Canal and its contiguous waters.”⁴² For the next decade, the General Board maintained this theme, consistently recommending a Navy centered on the battleship and in competition with the German Navy. However, the actual ships authorized and constructed never came close to fulfilling the Board’s wishes. Successive Secretaries of the Navy and Congresses whittled down the Board’s numbers drastically for a variety of reasons, including cost, differing views on policy and the importance of sea power, and influential progressive and pacifist sentiments.⁴³ Table I below summarizes the ships requested by the General Board, recommended by the Secretary of the Navy, and authorized by Congress from 1903 to 1914.

⁴¹ General Board to the Secretary of the Navy, November 17, 1914, COSN, File 8557/146:11, quoted in Stillson, "Theodore Roosevelt's Navy," 24.

⁴² General Board to the Secretary of the Navy, September 26, 1912, File 8557/116, quoted in *ibid.*, 24.

⁴³ Hirschbaum, "Naval Expansion Act," 19.

	Recommended by General Board	Recommended by the Secretary of the Navy	Authorized by Congress (next year's Act)
1903	2 battleships 4 cruisers 4 scout cruisers 3 destroyers	1 battleship 4 cruisers 2-4 scout cruisers 2 submarines (Secretary Moody)	1 battleship 2 cruisers 3 scout cruisers 4 submarines
1904	3 battleships 5 scout cruisers 6 destroyers \$850k for submarines	3 battleships 6 destroyers (if practicable) (Secretary Mahan)	2 battleships
1905	3 battleships 3 scout cruisers 4 destroyers 4 submarines	2 battleships 2 scout cruisers 4 destroyers 4 submarines (Secretary Bonaparte)	1 battleship 3 destroyers 8 submarines
1906	2 battleships 2 scout cruisers 4 destroyers	"1 battleship, and with hesitation, 2" 4 destroyers (Secretary Bonaparte)	1 battleship 2 destroyers
1907	4 battleships 4 scout cruisers 10 destroyers 4 submarines	4 battleships 4 scout cruisers 10 destroyers 4 submarines (Secretary Melcali)	2 battleships 10 destroyers 8 submarines
1908	4 battleships 4 scout cruisers 10 destroyers 4 submarines	4 battleships 4 scout cruisers 10 destroyers 4 submarines (Secretary Melcali)	2 battleships 5 destroyers 4 submarines
1909	4 battleships 4 scout cruisers 10 destroyers 2 fuel ships	2 battleships (Secretary Meyer)	2 battleships 6 destroyers 4 submarines
1910	4 battleships 4 scout cruisers 16 destroyers	2 battleships 2 submarines (Secretary Meyer)	2 battleships 8 destroyers 4 submarines
1911	4 battleships 2 battle cruisers 16 destroyers 6 submarines	2 battleships (Secretary Meyer)	1 battleship 6 destroyers 8 submarines
1912	4 battleships 2 battle cruisers 16 destroyers 6 submarines	3 battleships 2 battle cruisers 16 destroyers 6 submarines (Secretary Meyer)	1 battleship 6 destroyers 4 submarines
1913	4 battleships 16 destroyers 8 submarines	3 battleships 8 destroyers 3 submarines (Secretary Daniels)	3 battleships 6 destroyers 8 or more submarines

Table I: Ships Recommended and Authorized, 1903-1913⁴⁴

By 1913, the Navy, though significantly smaller than what the General Board envisioned, especially in cruisers and destroyers, consisted of 39 capital ships either under construction or in service, and arguably possessed the ability to defeat an enemy battle fleet in U.S. waters.⁴⁵

⁴⁴ U.S. Department of the Navy, Annual Report of the Secretary of the Navy, 64th Cong., 1st sess., House Documents Vol. 32 (Washington, DC: Government Printing Office, 1916), 85-87.

⁴⁵ Baer, *One Hundred Years*, 48.

The U.S. Navy During World War I

By the time the United States joined the War in April 1917, Great Britain had spent almost three years in a frustrating stalemate with the German High Seas Fleet on one hand, and attempting to counter an increasingly effective *guerre de course* by German submarines on the other. Contrary to the predictions of pre-war planners, the naval war in the North Atlantic did not feature large fleet actions. Both England and Germany wished to protect their navies and neither would commit to battle unless they saw themselves at a distinct advantage, which neither was likely to think at the same time.⁴⁶ Only one major battle, Jutland, occurred during the war, and no clear victor emerged from it. Geography caused the stalemate to favor the British, as the Grand Fleet confined the German High Seas Fleet to the North Sea, enabling Great Britain to continue her blockade of German commerce. This blockade evolved during the early part of the war from a close blockade of German ports to an observational blockade along a line between Norway and the English Channel and finally to a distant blockade using the Grand Fleet to block the exits from the North Sea.⁴⁷

Unwilling to risk annihilation of her High Seas Fleet in a decisive battle, Germany began the war by conducting a *kleinkrieg*, or little war, of mine laying, raids, and submarine attacks against warships. When this approach failed to produce satisfactory results for the Germans after a few months, the German commander of submarines recommended to the Commander of the High Seas Fleet that he employ submarines to raid British commerce.⁴⁸ The German Navy quickly implemented the recommendation, and on 20 October, U.17 intercepted and sunk the steamer *Glitra* off the Norwegian coast.⁴⁹ During the first few months of Germany's commerce

⁴⁶ Paul Halpern, *A Naval History of World War I* (Annapolis, MD: Naval Institute Press: 1994), 27.

⁴⁷ Ibid., 22.

⁴⁸ Ibid., 291.

⁴⁹ Ibid., 292.

raiding, her submarines followed international law and gave warning to merchant ships before sinking them, allowing the crew to take to lifeboats. The British quickly adapted by outfitting merchant ships with concealed deck guns. These “Q” ships allowed the attacking submarine to draw close, then uncovered their guns to attack the submarine. Germany soon countered by using torpedoes to sink merchant ships without warning, sinking the first merchant in this fashion on 26 October, 1914.⁵⁰ On February 15, 1915, Germany formalized this first unrestricted submarine warfare campaign, declaring the waters around Great Britain to be a war zone, and further warning that neutral ships were also at risk due to “misuse of neutral flags ordered by the British Government, and incidents unavoidable in sea warfare...”⁵¹

On 7 May 1915, a German submarine sank the Cunard liner *Lusitania*, resulting in the death of more than 1,000 passengers, including approximately 125 Americans. Germany further provoked U.S. outrage on 24 March 1916, when a German submarine torpedoed the British ship *Sussex*, resulting in more American lives lost.⁵² These and other events led to an ultimatum from President Wilson and shortly thereafter a suspension of the unrestricted campaign by Germany. Formal cessation of the unrestricted campaign did not entirely stop the unwarned sinkings, which rose to 29% of total merchants sunk by submarines in 1916,⁵³ largely due to instructions issued to German submarine commanders from the Kaiser himself that “the U-boat’s safety was the captain’s primary responsibility and took precedence over all other considerations.”⁵⁴

For the next several months, German military and civilian leaders debated the future of the submarine campaign. Some feared that unrestricted submarine warfare would bring America

⁵⁰Terraine, *U-Boat Wars*, 8.

⁵¹Lloyd N. Scott, *Naval Consulting Board of the United States* (Washington, DC: Government Printing Office, 1920), 7.

⁵²*Ibid.*, 11.

⁵³*Ibid.*, 15.

⁵⁴Dwight Messimer, *Find and Destroy: Antisubmarine Warfare in World War I* (Annapolis: Naval Institute Press: 2001), 65.

into the war and result in German defeat, while others scoffed at America's ability to affect the outcome of the war and saw a path to victory in targeting British commerce. A strong voice in favor of resuming unrestricted submarine warfare was Admiral Henning von Holtzendorff, head of the German Navy General Staff. His 22 December 1916 memorandum claimed that a monthly sinking rate of 600,000 tons would bring defeat to Britain in less than 9 months.⁵⁵ By the end of 1916, most of the German leadership favored a return to unfettered commerce raiding, and on February 1, 1917 Germany again declared unrestricted submarine warfare. In response to this and other provocations including the infamous Zimmerman telegram, the U.S. declared war on Germany on 6 April.

During these three years, Great Britain attempted many disparate countermeasures to protect its merchants and defeat Germany's submarines. As historian John Terraine observed, antisubmarine warfare, being even newer than submarine warfare, lacked a weapon, and therefore Britain's efforts were much like a "manual without a car to go with it."⁵⁶ Finding dreadnoughts and cruisers unsuited to combat with the stealthy, quick-diving submarine, Admiral Fisher set about conscripting all the trawlers, fishing boats, and other small craft he could obtain in order to patrol as much sea area as possible.⁵⁷ As far as warships were concerned, Britain found that the destroyer was best suited as an antisubmarine platform. They were relatively numerous and quick to build, fast, and large enough to keep station in the open ocean and carry some offensive armament.⁵⁸ Other expedients employed by the increasingly desperate Admiralty included bombing raids on submarine bases, mining approaches German submarine ports (hampered by German shore defenses and ineffective British mines), using aircraft and dirigibles for

⁵⁵Terraine, *U-Boat Wars*, 15.

⁵⁶ Ibid., 25.

⁵⁷ Ibid. By the end of the war, this "auxiliary force" numbered more than 3,000 vessels.

⁵⁸ Ibid., 26-27.

reconnaissance and attack, and planting nets across harbors and the Dover channel. None of these methods, individually or collectively, yielded the results hoped for by the Admiralty. Fortunately for Great Britain, the Royal Navy's productive signals intelligence capability proved exceedingly useful. By intercepting and decrypting German radio traffic and employing the new technology of radio direction finding, the Admiralty often knew when submarines put to sea and could track their movements with some degree of precision. Despite all these efforts, the submarine remained an elusive quarry. By March 1917, only forty-six German submarines had been sunk due to all causes, including accidents.⁵⁹ Meanwhile, the British government grew increasingly desperate as merchant tonnage sunk continued to grow, far outstripping British shipyards' capacity to replace it.

A reasonable observation to make thus far was that concentrated battle fleets would not be likely to settle matters in the North Atlantic. This war involved submarines, destroyers, and just about any kind of vessel other than battleships. Nonetheless, the U.S. Navy, intently monitoring events since the war began, drew its own conclusions.⁶⁰ While this different kind of war unfolded in European waters, the U.S. Navy continued to design war plans and build ships much as before, making minor adjustments, but continuing along the same Mahanian path. The Navy's fleet operations and operational planning between the outbreak of hostilities and April, 1917 reveal an institution wary of the war in Europe and committed to protecting U.S. interests on the western side of the Atlantic. The mindset of neutrality pervaded all levels of government, and the idea of the U.S. Navy joining the fracas in Northern Europe, while on the minds of some naval leaders, could not overtly manifest itself in the prevailing atmosphere of "neutrality in

⁵⁹ Ibid., 33.

⁶⁰ The United States Naval Institute's *Proceedings* featured a lengthy section at the end of each issue describing unfolding events amongst the belligerents.

thought and deed.”⁶¹ Instead, in accordance with Mahan’s aversion to dividing the fleet and in keeping with War Plan Black, the Navy tended to bring its battleships together in protected waters during tense times. The war in Europe apparently qualified as such a situation, as Admiral Bradley Fiske, the Secretary’s Aid for Operations, petitioned the General Board in August, 1914 to “get the battleships of the fleet assembled in home waters.”⁶² The Board concurred with Fiske’s recommendation, stating that “the present critical situation in Europe accentuates the importance of having our battleships assembled in home waters,” and drafting a letter to the Secretary to this effect.⁶³ Continuing along these lines, on October, 1914, the General Board recommended “that the entire fleet be held in the Atlantic until the war is over.”⁶⁴ Fleet exercises during the years of U.S. neutrality also showed the Navy’s preoccupation with fleet concentration and defense of U.S. interests in the Eastern Atlantic and the Caribbean. The Navy was not above exploiting these exercises for the political purpose of raising popular support for readiness. Prior to the May 1915 fleet exercise, which focused on War Plan Black, Navy Undersecretary Franklin Delano Roosevelt suggested adding a second phase in which ships “originally in the Blue Fleet, could represent a Black force pushing home its attack on our coast” in order to “serve as an object lesson to the country.”⁶⁵

During this period, War Plan Black remained the Navy’s foremost operational plan, driving fleet training and planning efforts at the General Board and War College. Rather than receiving inspiration from the novel conflict overseas, the General Board instead made minor adjustments to Black during this time. On January 19, 1915, the General Board voted on a

⁶¹ Dennis Conrad, "Were They So Unprepared? Josephus Daniels and the United States Navy's Entry into World War I" (unpublished 2009 conference paper provided to author 3 January 2011).

⁶² *Proceedings and Hearings of the General Board of the U.S. Navy 1900-1950* (Archives Microfilm Publications, Microfilm Publication M1493) 1 Aug 1914, 147.

⁶³ *General Board Proceedings*, 1 Aug 1914, 147.

⁶⁴ *General Board Proceedings*, 13 October 1914, 208.

⁶⁵ *General Board Proceedings*, 16 March 1915, 76.

supplement to Black, “in which present conditions in Europe are taken into consideration”. The extent of the changes to the plan seemed to be “to immediately seize all enemy merchant vessels in United States ports at the outbreak of war,” although the Board did acknowledge that more work on the plan was required.⁶⁶ Soon after, the Board discussed the Navy’s war planning process during its January 26, 1915 meeting. It proposed the following procedure: “1. General Board to prepare war plans; 2. Then to War College for study, test on game board, and comment; 3. Return to the general Board, for revision if necessary, or for final adoption; 4. To always be kept up to date in the General Board.”⁶⁷ Almost three years later, in November 1917, the General Board directed its second section (responsible for operational planning) to “take up consideration of the Orange and Black Plans with a view to revising them to meet conditions as they exist at the present time.”⁶⁸ By this time, of course, U.S. efforts were well underway, guided by expedience and the judgment of commanders rather than any formal war plan. This is not to suggest that the General Board neglected operational planning between 1914 and 1917. Discussions of War Plans Black and Orange, as well as the planning process itself appeared frequently in the General Board records during this time. Rather, the Board remained focused on the notion of maintaining a strong fleet ready to defend U.S. interests after the war, as expressed by a July 1915 memorandum:

At the close of the present war, it is not improbable that the defeated belligerents, with the connivance and perhaps the participation of the victors, may seek to recoup their war losses and to expand at the expense of the new world. On the other hand, perhaps soon, the victor may challenge the United States.⁶⁹

⁶⁶ *General Board Proceedings*, 19 January 1915, 10.

⁶⁷ *General Board Proceedings*, 26 January 1915, 22.

⁶⁸ *General Board Proceedings*, 3 November 1914, 226

⁶⁹ General Board executive committee memorandum, 6 Aug. 1915, based on General Board No. 420-2, 30 July 1915, Box 518, Daniels Papers, Manuscript Division, Library of Congress,” quoted in Yerxa, “Caribbean Waters,” 183.

Much like its operational planning, the Navy continued its shipbuilding program as it did before the war, looking beyond the presumably aberrant situation in Europe. In the two years before U.S. involvement in the war, the Navy's ambitions for its force structure grew beyond the 48-battleship plan of 1903-1913 to the goal of a Navy "second to none." By 1915, a consensus gained momentum in the Navy department that the fleet lagged behind Great Britain and Germany in important technical areas.⁷⁰ Furthermore, "preparedness" became a popular term in the department, as naval leaders felt the fleet ill-prepared for war in general and implementation of War Plan Black in particular. Most importantly, President Wilson's attitudes towards preparedness changed around this time. Spurred by the loss of American life on the *Lusitania* in May 1915, President Wilson softened his stance on neutrality to the extent that he was willing to allow the military to take steps to ready itself for war. In this more permissive political environment, the Navy prepared an ambitious shipbuilding plan in 1915, resulting in the 1916 Naval Act, also known as the "Big Navy Act." General Board deliberations in the summer of 1915 reveal the beginning of the program. On July 23, 1915, the General Board instructed its third section to draft a policy statement calling for, among other things "A navy second to none. One to prevent the occupation of our coasts and possessions and able to protect our commerce, deep sea and coastwise."⁷¹ Continuing on 27 July, the Board approved a policy governing the 1916 building program:

The Navy of the United States should ultimately be equal to the most powerful maintained by any other nation in the world. It should be gradually increased to this point by such a rate of development, year by year, as may be permitted by the facilities of the country, but the limit above defined should in any event be attained not later than 1925.⁷²

⁷⁰ Kirschbaum, "Naval Expansion Act," 130.

⁷¹ *General Board Proceedings*, 23 July 1915, 194.

⁷² *General Board Proceedings*, 27 July 1915, 199.

The motion passed by a 7 to 1 vote, with the sole dissenter objecting to the word “equal.” The Board went on to put figures to their ambitious statement, proposing the authorization of 6 battle cruisers, 4 dreadnoughts, 37 submarines, 28 destroyers, and other smaller craft in 1916, at an estimated cost of almost 300 million dollars. By the time the program advanced through the Secretary, Congress, and the President, it remained anchored on the capital ship, with support craft such as destroyers and submarines built in proportion to battleships and battle cruisers to maintain a “balanced” fleet:

Type of vessel	Three-Year Program Total	To start construction in 1917 (as soon as practicable)
Battleship	10	4
Battlecruiser	6	4
Destroyer	50	20
Scout Cruiser	10	4
Fleet Submarine	9	-
Coastal Submarine	58	27
Other vessels (repair ships, fuel ships, tenders, etc.)	14	6

Table 2: 1916 Naval Act⁷³

Although Secretary Daniels endured much criticism during and after the war for his perceived failure to prepare the Navy for its participation in World War I, he did seem to grasp early in the conflict that the battleship-centric Navy pursued by the General Board might not suit

⁷³ Kirschbaum, “Naval Expansion Act,” 185.

the conditions in Europe. After a letter detailing the Board regarding shipbuilding was read during an October 1, 1914 meeting of the General Board, Secretary Daniels voiced his concerns:

The Secretary of the Navy asked if the General Board, in view of the successes so far achieved in the present war by the smaller vessels, cruisers and submarines, still considered that our policy should be to continue our exertions to build up our battleship fleet. It was the consensus of opinion that we should continue to build the large dreadnoughts.⁷⁴

Nevertheless, the General Board's selectively picked observations from the War and dedication to Mahanian theory prevailed, resulting in the 1916 Naval Act.

Soon after the Navy's vision of a grand battle fleet took concrete shape in the 1916 Act, its assumptions would be tested in the arena of war. If observing the experience of the European belligerents did not suffice to change the Navy's views on the proper shape and role of the fleet, actual participation in the war would force the Navy to see that the new conditions required a new approach. By the armistice in November 1918, the U.S. Navy had fought a decidedly non-Mahanian war and drastically altered the 1916 building program.

The U.S. Navy's involvement in the World War I began shortly before the 6 April declaration. Six days after President Wilson had decided upon war in a 20 March 1917 cabinet meeting, Secretary Daniels ordered Admiral Sims, then serving as president of the Naval War College, to sail to England under an assumed name to establish a liaison with the Royal Navy.⁷⁵ Sims quickly learned that the German submarine campaign was wreaking far more havoc on British shipping than the British had let on. The British were at a loss for how to effectively defend against the Germans at sea and were becoming pessimistic about their overall prospects in the war. The following exchange Between Sims and First Sea Lord Admiral John Jellicoe illustrates the mood of at least some of the British Admiralty at the time:

What are you doing about it?

⁷⁴ *General Board Proceedings*, October 1, 1914, 198.

⁷⁵ William Still, *Crisis at Sea* (Gainesville, FL: University of Florida Press, 2006), 1.

Everything we can. We are increasing our anti-submarine forces in every possible way. We are using every possible craft we can find with which to fight submarines. We are building destroyers, trawlers, and other like craft as fast as we can. But the situation is very serious and we shall need all the assistance we can get.

It looks as though the Germans were winning the war.

They will win, unless we can stop these losses - and stop them soon.⁷⁶

Alarmed by the dire situation, Sims quickly cabled Secretary Daniels, informing him of the seriousness of the situation and requesting all available antisubmarine forces as quickly as possible.⁷⁷ Walter Page, U.S. ambassador to England, agreed with Sims, sending a similarly urgent message to the Secretary of State:

There is reason for the greatest alarm about the issue of the war caused by the increasing success of the German submarines... I can not refrain from most strongly recommending the immediate sending over of every destroyer and all other craft that can be of antisubmarine use. This seems to me the sharpest crisis of the war and the most dangerous situation for the Allies that has arisen or could arise.⁷⁸

The continual requests of antisubmarine craft by Sims and others in the European theater and the slowness of the Navy department to send such forces was to be an enduring tension throughout the war and figured prominently in the 1920 hearings.

Sims quickly perceived the character of the naval situation in Europe. His view of the situation on 14 April 1917, just a few days after arriving in England, that the German unrestricted submarine war campaign posed the greatest danger to the Allied cause, and that "our battleships can serve no useful purpose in this area" stood up well in light of subsequent events. Indeed, for the U.S. Navy, the war was in its essence an antisubmarine campaign, using destroyers, small

⁷⁶ William S. Sims and Burton Hendrick, *The Victory at Sea* (London: Doubleday, Page, and Co., 1920), 6-7.

⁷⁷ Senate, *Naval Investigation: Hearings Before the Subcommittee of the Committee on Naval Affairs Vol. II*, 66th Cong., 2nd sess., 1920, 29. This early dispatch from Sims warns: "The submarine issue is very much more serious than people realize in America. The recent success of submarine operations and the rapidity of construction constitute the real crisis of the war." He goes on to request "maximum number of destroyers to be sent accompanied by small antisubmarine craft."

⁷⁸ *Naval Investigation*, 41.

craft, and the nascent arms of submarines and naval aviation as means, and convoy escort, patrol, and mining as ways.

The first U.S. destroyer division arrived in Queenstown (now Cobh), Ireland on 4 May, 1917. During the first few weeks of the war, their mission consisted mainly of antisubmarine patrols in open ocean areas, with the goal of forcing enemy submarines to remain submerged and thus unable to attack merchant shipping. The large areas, small number of ships, and primitive submarine detection technology involved made this approach an unsuccessful one.⁷⁹ Admiral Sims was quick to appreciate that the best approach to the problem would be to form merchant ships into convoys escorted by antisubmarine craft. However, the British admiralty resisted this tactic, owing to concerns from the shipping industry, who believed their crews were insufficiently skilled to maintain a tight convoy formation and that British ports would be overwhelmed by the convoys arriving en masse.⁸⁰ Sims dismissed these concerns, drawing upon his experience teaching “navigation and merchant seamanship”⁸¹ to new midshipmen decades earlier to conclude, “with a little experience merchant vessels could safely and sufficiently well steam in open formation.”⁸² Likewise, senior leaders in the U.S. Navy hesitated to use convoys. Initially, President Wilson favored the concept, while Secretary Daniels, Admiral Mayo, commander in chief of the Atlantic Fleet, and Chief of Naval Operations Benson opposed it.⁸³ Daniels, expressing the prevailing opinion of those in the department opposed to the convoy, wrote Sims on 20 June, stating “In regard to convoy I consider that American vessels having armed guards

⁷⁹ CAPT Dudley W. Knox, “American Naval Participation in the Great War (With Special Reference to the European Theater of Operations),” Department of the Navy - Naval Historical Center, http://www.history.navy.mil/library/special/american_naval_part_great_war.htm (accessed 2 Feb 2012).

⁸⁰ Josephus Daniels, *Our Navy at War* (New York: George Doran, 1922), 42.

⁸¹ *Naval Investigation*, 32.

⁸² *Ibid.*

⁸³ Still, *Crisis*, 345.

are safer when sailing independently.”⁸⁴ Sims, instead of viewing the convoy as a defensive measure, considered them the only way of “taking the offensive against the German submarines.”⁸⁵ Sims, like most naval officers of his generation, saw sea power in Mahanian terms, internalizing concepts like concentration of force and offensiveness. His understanding of Mahan, however, showed more sophistication than many of his fellow admirals. To Sims, concentration and offense meant putting the Navy’s most effective weapons in contact with the enemy in the decisive theater of the war. Sims recognized that in this case, the true enemy was the German submarine, the destroyer the most effective weapon against it, and the sea approaches to Great Britain the decisive theater. Since submarines had proved they could easily evade open-ocean patrols, the only way to bring the two together was by putting the best antisubmarine weapon with the submarine’s quarry, forcing the submarine to choose between facing its hunter and abandoning its prey. Thus, convoy escort was the best mechanism to fulfill Mahan’s principles of concentration and offensiveness. Sims invoked Mahan directly in his war memoir, recalling the appearance of German submarines off the U.S. East coast in 1918. He anticipated earlier in the war that the Germans would employ this tactic to arouse public demand for the redeployment of antisubmarine forces from Europe to U.S. home waters. Sims explained how such a division of the fleet violated Mahan’s theories and would benefit the Germans, further revealing that he considered the destroyers in European waters to be decisive force in the decisive theater:

For many years Admiral Mahan had been instructing American naval officers that the first rule in warfare is not to divide your fighting forces, but always to keep them together... Undoubtedly, the best method which Germany could use to keep our destroyers in our own waters would be to make the American people believe that their lives and property were in danger...⁸⁶

⁸⁴ *Naval Investigation*, 46.

⁸⁵ Sims, *Victory at Sea*, 91.

⁸⁶ *Ibid.*, 269.

Historians differ on how instrumental Sims' advocacy was in the adoption of the convoy, but soon after Sims' arrival, the Admiralty endorsed the concept. On 27 April, Admiral Jellicoe approved a memo recommending merchant convoys, and soon thereafter conducted a successful test of the concept.⁸⁷ U.S. merchant convoys commenced the next month, with the first departing Hampton Roads, Virginia, on 24 May and arriving safely in Britain in early June.⁸⁸ By the end of the war, the convoy system had proven itself the single most effective tactic against the German submarine. Survival rates of merchants sailing in convoy were vastly higher than those of lone merchants,⁸⁹ and finally reduced the hemorrhaging of merchant tonnage to bearable levels. Since a group of merchant ships was approximately as easy or difficult for a submarine to detect as a single ship, arranging merchants in convoys presented fewer effective targets to the enemy. Furthermore, placing the submarine's quarry together with warships forces allowed antisubmarine forces a much better chance of finding targets than the mostly fruitless open-ocean patrolling. Of course, the Germans adapted by, among other things, operating closer to the coast, but never again did merchant tonnage sunk approach its April 1917 peak after convoys were introduced. During the eighteen months of their involvement in the war, U.S. destroyers escorted almost 19,000 ships through contested waters, endured 183 attacks by enemy submarines, destroying 2 U-boats and damaging 24.⁹⁰

Differing views on the proper conduct of the naval war remained a source of tension throughout the conflict. Benson, Daniels, and Wilson were unsatisfied with what they saw as Britain's inept and overly defensive conduct of the antisubmarine campaign and wished for a more offensive, "American" war at sea. Despite acquiescing to the adoption of convoys escorted

⁸⁷ Still, *Crisis*, 344.

⁸⁸ *Ibid.*, 346.

⁸⁹ Robert Massie, *Castles of Steel: Britain, Germany, and the Winning of the Great War at Sea* (New York: Random House, 2003), 728-733. In one example, the change of British-Scandinavian trade to the convoy system cut losses more than a hundred-fold, from 25 percent to 0.24 percent.

⁹⁰ Knox, "Naval Participation."

by U.S. destroyers, the three leaders wanted to take the fight to the enemy in a more obviously direct manner, to include attacking German controlled submarine ports and emplacing a barrage across the North Sea between Scotland and Norway. President Wilson made his views clear in a speech aboard the USS Pennsylvania on 11 August 1917, stating, “We are hunting hornets all over the farm and leaving the nest alone. I am willing to sacrifice half the navy Great Britain and we together have to crush that nest, because if we crush it, the war is won.”⁹¹ In addition to the President, Secretary Daniels, and Admirals Benson and Mayo, many British leaders also pressed for direct action against submarine bases, including Winston Churchill and Admiral Jackie Fisher.⁹² Responding to these pressures, the Admiralty drew up a plan for using sunken merchant ships to block the exits to submarine ports on the Heligoland Bight. At a joint British and American conference in September, both sides rejected the plan as unfeasible due to a number of technical reasons. However, the British did agree to the American plan to build a mined barrage across the North Sea, somewhat satisfying American desires for an approach they considered more offensive-minded than the convoys.⁹³ Admiral Sims initially saw the barrages as an ineffective waste of resources, though he later gave limited support to the idea. This grand engineering project involved the emplacement of nets and mines over an area 230 miles long by 30 miles wide in an attempt to seal the northern exit of the North Sea between Scotland and Norway.⁹⁴ By the end of the war, over 70,000 U.S.-produced mines had been laid in support of the barrage, mostly by American vessels, and at least four U-boats were destroyed.⁹⁵

⁹¹ Josephus Daniels, *Our Navy at War* (New York: George Doran, 1922), 146.

⁹² Still, *Crisis*, 408.

⁹³ *Ibid.*, 410.

⁹⁴ Massie, *Castles*, 761.

⁹⁵ *Ibid.* Official records differ as to the exact numbers of German submarines destroyed and damaged by the barrage. Admiral Sims believed at least four more submarines were destroyed and six damaged by the barrage.

In addition to the all-important merchant convoy mission, U.S. naval forces continued to patrol open-ocean and littoral waters for German submarines. Even though the low density of antisubmarine craft made detection and contact with enemy submarines difficult, the patrols served a useful purpose by restricting submarine freedom of action. Since submarines of the time travelled much slower and possessed little endurance while submerged, they normally transited on the surface to search for their prey and position themselves for a submerged approach. The addition of patrolling U.S. destroyers to the U-boat hunting grounds made this tactic more dangerous, forcing them to remain submerged more often and making it more difficult to obtain the close range necessary for a torpedo attack.⁹⁶

Driven by the requirements of the war in Europe, the U.S. Navy's force structure saw drastic changes during the war. By the end of the war, the 1916 building program had been suspended as the Navy's shipbuilding effort changed its emphasis to supporting the urgent needs of the antisubmarine campaign. Instead of being eighteen months closer to realizing its 1925 goal of a battleship-focused navy second to none, naval and private shipyards halted construction on the large ships and shifted production to destroyers, sub chasers, and merchant tonnage.

Throughout American involvement on the War, the predominant tension informing shipbuilding decisions was between positioning the U.S. fleet favorably for post-war possibilities and supporting Great Britain's struggle against the German submarine menace and. The General Board and Chief of Naval Operations Benson held the former view, Admiral Sims and his supporters the latter, while Secretary Daniels weighed his options for as long as possible. The General Board made its position clear in April 1917, shortly after a British mission headed by Foreign Secretary Arthur James Balfour met with Secretary Daniels and Admiral Benson. The mission urged the U.S. to "suspend battleship building and divert those shipyards to the

⁹⁶ Sims, *Victory at Sea*, 102.

construction of escorts.”⁹⁷ The chairman of the general Board disagreed with this approach, citing concerns that post-war alignments between major naval powers might leave the U.S. unprepared if it were to divest itself of capital ship construction.⁹⁸ Benson agreed with the Board, believing “that such a proposal ignored America’s long-term security interests.”⁹⁹

The loudest voice favoring a complete shift of the U.S. Navy’s efforts towards defeating the German unrestricted submarine campaign belonged to Admiral Sims , who continually advocated, demanded, and cajoled to have all U.S. antisubmarine forces sent to Europe. In Sims’ first cable from London on 14 April, 1917, he assessed that capital ships had little part to play in the conflict:

At present our battleships can serve no useful purpose in this area except that two divisions of dreadnoughts might be based on Brest for moral effect against anticipated raids by heavy enemy ships in the channel out of reach of British main fleet.¹⁰⁰

Unfortunately for Sims, his credibility with men such as Daniels and Admiral Benson suffered from his reputation of being unduly pro-British. Much of this stemmed from a well-known 1910 speech given by Sims at the Guildhall in London, while he commanded *USS Minnesota*. Apparently carried away by the spirit of the moment, Sims concluded his speech by saying “If the time ever comes when the British Empire is seriously menaced by an external enemy, it is my opinion that you may count on every man, every dollar, every drop of blood, of your kindred across the sea.”¹⁰¹ Sims earned a reprimand from President Taft for his would-be policy making, and gained his reputation as an Anglophile. Benson especially doubted Sims

⁹⁷ Robert W. Love, Jr., *History of the U.S. Navy Volume One: 1775-1941* (Harrisburg, PA: Stackpole, 1992), 493.

⁹⁸ *Ibid.*, 494.

⁹⁹ William J. Williams, “Josephus Daniels and the U.S. Navy’s Shipbuilding Program During World War I,” *The Journal of Military History* 60, No. 1 (Jan. 1996), 19.

¹⁰⁰ *Naval Investigation*, 29.

¹⁰¹ Elting E. Morison, *Admiral Sims and the Modern American Navy* (Boston: Houghton Mifflin, 1942), 281.

loyalties, thinking “that Admiral Sims and our officers abroad were in danger of becoming obsessed with all things British to the detriment of clear judgment.”¹⁰² Later, as Sims set out on his March, 1917 journey to London, Benson voiced his mistrust, warning Sims to ““Don't let the British pull the wool over your eyes. It is none of our business pulling their chestnuts out of the fire. We would as soon fight the British as the Germans.”¹⁰³

Sims, however, had what turned out to be a most effective ally in Washington, his former subordinate Captain William V. Pratt.¹⁰⁴ Pratt served on Admiral Benson's staff early in the war, and continued to keep in touch with Sims. Sims vented his frustrations to Pratt, and Pratt became convinced that the Navy should shift its focus from building battleships to building destroyers.¹⁰⁵ Acting on his concern, Pratt wrote a memorandum on 7 June 1917 to Admiral Benson, recommending the Navy to release shipbuilding space taken up by battle cruisers for merchant construction, and to focus naval construction to “emphasize destroyers, submarine chasers, and submarines.”¹⁰⁶ The thrust of his argument was that if the Allies won the war, current levels of commissioned dreadnoughts would meet the Navy's needs. If Germany won, the U.S. fleet as it existed would be more than a match for the German High Seas Fleet.¹⁰⁷ Pratt's arguments convinced Benson, and impressed Secretary Daniels as well. Once Daniels finally decided which side of the shipbuilding debate he supported, the Navy rather quickly shifted its resources to building as much merchant tonnage and as many antisubmarine vessels as possible.

¹⁰² Ibid., 394.

¹⁰³ *Naval Investigation*, 1.

¹⁰⁴ Captain Pratt later rose to Assistant Chief of Naval Operations in 1918, and served as the fifth Chief of Naval Operations from 1930 to 1933.

¹⁰⁵ Williams, “Shipbuilding Program”, 22.

¹⁰⁶ Ibid.

¹⁰⁷ Ibid.

The U.S. Navy's experience fell almost entirely outside the Mahanian vision of naval warfare between modern navies. Mahan could have easily been referring to the Allied conduct of the War when he criticized French naval policy in the late eighteenth century, which he claimed:

...subordinated control of the sea by the destruction of the enemy's fleets, of his organized naval forces, to the success of particular operations, the retention of particular points, the carrying out of particular ulterior strategic ends.¹⁰⁸

World War I at sea was exactly this kind of war. Allied success relied not on destruction of Germany's High Seas Fleet or even its submarine force, but on the "particular operation" of antisubmarine warfare, the "retention of particular points" in the North Sea and English Channel, and the "ulterior strategic end" of reducing merchant losses to manageable levels. In these respects, the war fit much more closely with Corbett's theory of naval war than Mahan's.

The U.S. Navy's response to the unprecedented situation showed both innovation and inertia. Admiral Sims, despite possessing the same faith in Mahan's theories as most naval officers, immediately saw that this new kind of war required a new approach. Other leaders, notably Chief of Naval Operations Benson and Admiral Mayo, maintained that the U.S. fleet should remain concentrated, either in home waters, or abroad. Secretary Daniels, caught between the two camps, gradually came to support Sims' vision, and by November, 1918, had implemented most of Sims' recommendations.

The U.S. Navy after World I until the 1922 Washington Naval Treaty

When the armistice ending the war was signed in November, 1918, the Navy's grand design for a "navy second to none" and its operational plans for employing that Navy had taken a drastic detour. Construction halted on capital ships, and shipyards shifted their efforts towards destroyers, merchant tonnage, and antisubmarine craft. Likewise, standing operational plans such

¹⁰⁸ A. T. Mahan, *The Influence of Sea Power on History, 1660-1783*, (Boston: Little, Brown, and Co., 1918), 339.

as Black and Orange sat unused during the conflict. Admiral Sims, supporting Britain's existing campaign and often acting unilaterally, was mostly responsible for crafting the U.S. Navy's operational approach. Standing at a crossroads, the Navy establishment had the opportunity to revert to pre-war form and continue to build and plan for a battleship fleet consistent with Mahan's sea power doctrine, or change course by fully embracing new technologies and dispersed operations.

The 1920 report from the General Board to the Secretary of the Navy serves as a representative example of the Board's thinking immediately after the war. The report shows that despite any contrary evidence from the previous conflict, Mahan still provided the theoretical basis for the Navy's thinking. If anything, Germany's unrestricted submarine warfare campaign reinforced the validity of the essential relationship between the Navy, the merchant marine, and the nation's prosperity:

The Navy second to none recommended by the General Board in 1915 is still required to-day. But in addition the Great War has shown the importance of unimpeded ocean transportation for commerce.... Our Navy and merchant service are inextricably associated in the economic progress and prosperity of the people. A combatant Navy supporting and protecting a great merchant fleet...appears to the General Board as an essential condition of national progress and economic prosperity.¹⁰⁹

The Board continues, "Nothing that occurred during the World War has served to change the opinion of the General Board as to the vital importance in war of the battleship." They conclude by warning against changing the fleet based on the successes of aircraft and submarines, and stating that all "lesser vessels" must base their operations upon the power of the battleship.¹¹⁰ The board did acknowledge that the recent war showed the "enormous value" of the submarine and the promise of naval aviation, recommending further development of both arms, but that the

¹⁰⁹ U.S. Navy Department, *Annual Reports of the Navy Department for the Fiscal Year (Including Operations and Recommendations to December 1, 1920)* (Washington, DC: Government Printing Office, 1921.), 211.

¹¹⁰ *Ibid.*, 212.

battleship must continue to be the bedrock of the fleet. Thus, the Navy continued its path towards building the world's most powerful navy. It recognized the promise shown by the submarine and aircraft carrier, but maintained that the fleet must be based on the might of the all big-gun battleship.

Left to its own devices and free from domestic political constraints, the General Board and Navy establishment would have soon succeeded in surpassing Great Britain as the world's largest Navy. In summer of 1918, with the war underway, the General Board prepared an unprecedentedly aggressive building program calling for 1,000 additional war ships, including 12 battleships and 16 battle cruisers. Later in the year, when it was clear the war was close to being decided in the Allies' favor, the Board, of its own accord, pared down the program to match 1916 "Big Navy Act" levels, which still would have resulted in the world's largest fleet in five or six years.¹¹¹ However, the Navy establishment's plans to gain the pre-eminent position among the world's Navies soon ran afoul of competing political aims. The idea of a "Navy second to none" may have had a solid foundation in sea power theory, but it also existed in the context of international politics, specifically the 1919 Paris peace conference and the emerging League of Nations.

Initially, both President Wilson and Navy leadership favored a strong Navy and the 1919 building program, though for different reasons. The Navy justified the program in the usual terms, but President Wilson's paramount concern was establishment of the League of Nations. Initially, the President favored an aggressive building plan because a powerful U.S. Navy as a hedge against Great Britain's naval might should the League fail to come into being. Secretary Daniels, true to his progressive ideals, supported the plan not just out of parochial service interests, but because he believed it would help provide the League the "tremendous police

¹¹¹ Harold and Margaret Sprout, *Toward a New Order of Sea Power: American Naval Policy and the World Scene, 1918-1922* (Princeton, NJ: Princeton University Press, 1943), 54-55.

power” it would require.¹¹² Ultimately, President Wilson sacrificed the 1919 program as a bargaining chip to gain concessions at the Paris conference. On 10 April, 1919, the American delegation agreed to suspend the program and postpone work on ships authorized but not yet built, in exchange for Great Britain’s agreement to support the League of Nations and honor the Monroe Doctrine.¹¹³ Later in 1919, the General Board once again proposed a robust building program for 1920. Responding to a Senate minority blocking passage of the League of Nations, the administration threatened that if the League were held up in the Senate, an “unlimited naval expansion,” with its attendant cost, would be necessary.¹¹⁴ The threat proved to be ineffective, as the Versailles Treaty and U.S. participation in the League of Nations suffered final defeat in the Senate in early 1920.¹¹⁵ Although the demise of the Versailles Treaty would seem to have opened the door for the General Board to reinstate the 1916 program and resume its march towards building the “second to none” fleet, the Navy would soon find itself distracted by a series of contentious congressional hearings.

The 1920 hearings before the Subcommittee of the Committee on Naval Affairs (hereafter “Naval Investigation”) originated from Admiral Sims’ many disagreements with the Navy establishment over the conduct of the War. True to his outspoken nature, Sims wrote a lengthy letter on 7 January, 1920 to Secretary Daniels with the subject “Certain naval lessons of the Great War.” This seventy-six paragraph letter presented Sims’ grievances regarding the conduct of the naval war in great detail, including the lack of staff officers provided to his London headquarters, the Navy’s lack of an explicit policy for the conduct of the war, the absence of mature war plans for the conflict, the Navy’s misplaced emphasis on maintaining the fleet

¹¹² Ibid., 58-59.

¹¹³ Ibid., 71

¹¹⁴ Ibid., 76

¹¹⁵ Love, *History of the U.S. Navy*, 520.

concentrated and protecting the U.S East coast, and many others in addition to those mentioned previously. Though Sims addressed the letter to the Secretary directly and supposedly made only a single copy that he kept with him at all times, public rumors began to surface about the letter's existence and content.¹¹⁶ The letter soon became public record during a January 1920 hearing on Navy awards in which Sims testified. Although it had no direct bearing on the subject of the hearings, Senator Frederick Hale (R-Minn), the chairman of the Subcommittee of the Committee of Naval Affairs, had heard of the letter's existence and asked Sims about it. Sims happened to have his copy with him, and read it for the record. Given the multiplicity of important issues brought up by the letter, the subcommittee directed that separate hearings be convened.

The Naval Investigation commenced on 9 March, 1920, and met daily until 28 May. The committee heard testimony from more than 25 witnesses, resulting in an almost 3,500 page written record. The list of high-ranking Navy officials and officers included Sims, Secretary Daniels, and Admirals Benson, Mayo, Badger (chairman of the General Board of the Navy), and Coontz (Chief of Naval Operations at the time of the hearings). The Naval Hearings divided the Navy into two camps: Sims and his supporters, and the rest of the Navy establishment, including Daniels and Benson. The majority and minority reports of the subcommittee, released a year after the conclusion of the hearings, reflected party loyalties, with the Democratic minority falling in with the Secretary and President and the Republican majority supporting Sims. The conclusion of the majority report called for

a commission appointed by the President to consider the question of the organization of the Navy and the changes recommended by officers of the Navy in the course of this investigation and to recommend to the Congress such changes, if any, in the said organization as it shall deem advisable.”¹¹⁷

¹¹⁶ *Naval Investigation*, 1.

¹¹⁷ Senate Subcommittee of the Committee on Naval Affairs, *Report on the Naval Investigation*, 67th Cong., 1st sess., 1921, 136.

While the naval hearings mostly dealt with matters specific to the circumstances of World War I and with personal grievances, politics, and self-preservation, they also illuminated some issues of lasting importance. Sims' purpose in writing his January, 1920 letter and in the subsequent hearings "was at the bottom the reorganization of the Navy Department."¹¹⁸ Beginning with the 1890 publication of Mahan's *The Influence of Sea Power on History*, the primacy of the battleship and the principles of fleet concentration and decisive battle determined the Navy's force structure and operational planning. Sims' criticism of the Navy's lack of preparedness for the war, particularly the battleship heavy fleet ill-equipped to dispersed operations abroad and unsuitable war plans, was an implicit rebuke of Mahan, or at least the Navy's use of Mahan as its theoretical bedrock.

In the short term, the Naval Investigation seemed to stall the Navy's efforts to build the fleet it had long envisioned. As historian Robert Love Jr. noted, "The weariness evoked by the Sims hearings was illustrated when, after the Senate rejected the Versailles Treaty in 1920, the General Board persuaded Daniels to ask Congress to appropriate funds for an interim program of two battleships and one battlecruiser... American foreign policy and naval policy were completely adrift."¹¹⁹

Rising concerns over the geopolitical situation in the Pacific, specifically with Japan's rising influence, drove the Navy's next attempt to reinstate and build upon the 1916 program. By 1921, Warren Harding had taken office, and Edwin Denby succeeded Daniels as Secretary of the Navy. Concerned over Japan's possession of the Mandate Islands, Denby proposed to resume the 1916 program and complete construction on the hundreds of destroyers authorized during the war.¹²⁰ Unfortunately for Denby and other Big Navy advocates, these efforts took place

¹¹⁸ Morison, *Modern American Navy*, 442.

¹¹⁹ Love, *History of the U.S. Navy*, 523.

¹²⁰ Ibid.

concurrent with a growing naval disarmament movement in the Senate. Led by Idaho Senator William Borah, disarmament advocates in the Senate passed resolutions in 1920 and 1921 requesting the President to begin arms limitations negotiations with Great Britain and Japan.¹²¹ The disarmament movement resonated with the American public, with the *New York Times*, *New York World*, and other newspapers publishing several editorials in favor of disarmament, and luminaries such as General Pershing and Tasker Bliss advocating it.¹²² Anticipating the upcoming negotiations that resulted in the 1922 treaty, Senator Borah introduced a resolution later passed by the Senate that suspended the current building program “to the end that investigation may be had as to what constitutes a modern fighting Navy.”¹²³ On 22 January, 1921, Josephus Daniels directed the General Board to conduct this investigation. His instructions to the General Board specifically focused their efforts towards taking a critical look at whether the battleship should continue to form the basis of the fleet’s combat power.¹²⁴ The Board’s response, dated 21 February 1921, stated that for the previous two years, it had “devoted itself to a study of changes proper to adopt in the composition of the fleet in view of the experience of four years of war.”¹²⁵ In the Board’s view, nothing in previous war, operationally or technologically, sufficed to require significant changes in the U.S. Navy’s force structure. The letter stated unambiguously that Mahan’s theories of sea power applied as much as ever, and the nation’s naval might must remain based on the battleship for the foreseeable future.

¹²¹ Ibid., 528, Sprout and Sprout, *New Order*, 117.

¹²² Sprout and Sprout, *New Order*, 117.

¹²³ Committee on Naval Affairs, *Hearings before Committee on Naval Affairs of the House of Representatives on Sundry Legislation Affecting the Naval Establishment 1920-1921*, 66th Cong., 3rd sess. (Washington: Government Printing Office, 1921) 925.

¹²⁴ Ibid., 925. Daniels wrote in his introductory letter, “On the 22nd of January I addressed a letter to the General Board directing the board to make study and investigation with reference to the type of ship which will form the main strength of the navies of the world in the future. I called their attention to the prediction that the time would come when the battleships will no longer form the backbone of the fleet, but that ships of the air and ships of the submarine type will be the main strength of the navies of the future.”

¹²⁵ Ibid., 926.

The Board began its statement by connecting the capital ship to the well-accepted principle of concentration of force:

Concentration of power in attack is the fundamental basis of all warlike operations, afloat and ashore...Naval concentration of power has been in the main fighting ships of a fleet...and the strength of navies has always been based upon the number and power of its ships of the fighting line; that is, of its battleships.¹²⁶

In the Board's view, navies will always require "ships that can take and keep the sea at all times and in all weathers, that can deliver and receive the heaviest blows..."¹²⁷ The Board then went on to attack in detail the arguments of those opposed to the battleship. In the Board's view, the "less expensive, shorter road to victory" represented by technological innovations such as the submarine and aircraft seduced their proponents into the "old fallacy that war can be cheaply won by hitting, dodging, and running." To illustrate the point, the letter described the history of the torpedo, which caused some to predict "the immediate doom of the battleship" in the early 1880s. But navies soon developed countermeasures to the torpedo, such as underwater armor and the torpedo-boat destroyer. Similarly, the board argued, countermeasures to both the submarine and sea-borne aircraft emerged during the war, and would continue to advance in the years to come. In general, the Board maintained, no new technological development can be kept secret for long, and as a principle, and "means of defense move in parallel lines and at about equal speed with those of offense." The fact that no capital ship was sunk by a submarine or airplane was cited as evidence that these nascent technologies were no match for the capital ship.

The character of the debates over force structure from the end of the war until the Washington Treaty was determined more by domestic and international politics than by fulfillment of specific war plans or strategic designs. The Navy establishment concerned itself primarily with the size of the U.S. fleet compared to Great Britain and Japan, while the Wilson

¹²⁶ Ibid.

¹²⁷ Ibid.

and Harding administrations looked at the navy through the lenses of international collective security, balance of power, and finally of general disarmament. Nevertheless, despite all the uncertainty as to how large the fleet would be in the long term, the Navy maintained its vision of the Navy as a Mahanian fleet, with protection of the nation's seaborne commerce as its end, decisive battle as its means, and the battleship as its ways.

Conclusions and Recommendations

Mahan's ideas gripped the imaginations of naval thinkers for more than half a century, and continue to have an influence today.¹²⁸ Evidence of Mahan's continued sway over the Navy establishment was noted in 1948 by former Secretary of War Henry L. Stimson who observed "the peculiar psychology of the Navy Department, which frequently seemed to retire from the realm of logic into a dim religious world in which Neptune was God, Mahan his prophet, and the United States Navy the only true Church."¹²⁹ Mahan's message of sea power presented the Navy as the military's preeminent branch, and essential to any great maritime nation's security and prosperity. Understandably, this message resonated powerfully with the world's Admirals and Captains, but it also won converts amongst non-naval policy makers. Navalism, driven in large part by Mahan's ideas and interstate competition, became ascendant in the early twentieth century as Great Britain, Germany, the United States, and Japan built massive navies. Compliant with Mahan's theories, these navies featured concentrated fleets built around the battleship.

In addition to justifying the growth of the Navy as an institution, Mahan presented a powerfully coherent operational construct, simple to understand and backed by centuries of historical justification, however selectively Mahan might have used history to support his claims.

¹²⁸ Mahan's ideas never did die altogether, and periodically seem to enjoy a revival in Navy professional literature.

¹²⁹ . Henry L Stimson and McGeorge Bundy, *On Active Service* (New York, 1948), 506, quoted in Peter Paret, *Makers of Modern Strategy: from Machiavelli to the nuclear age* (Princeton, NJ: Princeton University Press, 1986), 444.

Furthermore, naval events after 1890, such as the Spanish-American War and the Russo-Japanese War, provided plenty to confirm a Mahanian's worldview, if one were willing to look past contrary evidence. Mahan's combination of a Navy-centric geopolitical theory and logically consistent approach to fleet strategy and tactics guided the Navy's force structure and operational planning up to World War I, experienced an existential crisis during the war, and then resumed as strongly as ever afterward. Around the same time, Sir Julian Corbett presented an alternative maritime theory, but his complex and nuanced vision of the Navy's role as an instrument of national power came after Mahan's views were well entrenched. Corbett's concept of the role of sea power may have better described the events of the War, but his ideas nevertheless did not gain ascendancy with most naval leaders at the time.

The U.S. Navy did not abandon its anti-submarine focused fleet and return to the might of the battleship merely out of habit or an unthinking devotion to Mahan. The naval establishment had valid reasons to believe the fleet should continue to feature the big-gun battleship. Even though the expected decisive sea battle between Britain and Germany never occurred during the War, the Grand Fleet served an important role by keeping the German High Seas mostly confined to their ports, enabling Britain's distant blockade on German commerce. Furthermore, no submarine sunk a modern battleship during the War, despite several attempts. However, notwithstanding its continued emphasis on the battleship, the Navy did not discount the importance of the submarine or naval aviation. The General Board saw the potential of both arms even before the War, and frequently discussed details of their design and employment during their meetings. The building programs proposed by the General Board and the versions approved by Congress contained ever-increasing funding for submarine construction and naval aviation research. Indeed, these two arms constituted legitimate Revolutions in Military Affairs, and would prove their worth in World War II. As that war showed, the capital ship, albeit the aircraft carrier more than the battleship, maintained its decisive role in determining the outcome of engagements.

The U.S. Navy's experiences in World War I also resembled those of other military organizations. Armies on both sides of the conflict struggled during and after the conflict with the myriad of tactical and operational problems exposed during the unprecedented carnage of the War. Each organization transformed itself in the interwar years, resulting in a true Military Revolution.¹³⁰ The U.S. Navy's operational and force structure paradigms were challenged by the events of 1914-1917 as well, but survived the war more or less intact. Instead of transforming its force structure and operational planning to fight a future war resembling World War I, the Navy resumed its "navy second to none" program until the 1922 Washington Treaty curtailed its efforts. Similarly, the Navy's operational plans, particularly War Plan Orange, continued to revolve around decisive action by a concentrated battle fleet in the years immediately after the War.

BIBLIOGRAPHY

- Baer, George W. *One Hundred Years of Sea Power: The U.S. Navy, 1890-1990*. Stanford, CA: Stanford Univ Press, 1994.
- Corbett, Julian. *Some Principles of Maritime Strategy*. London: Longmans, Green and Co., 1918.
- Conrad, Dennis, "Were They So Unprepared? Josephus Daniels and the United States Navy's Entry into World War I," unpublished 2009 conference paper provided to author 3 January 2011.
- Daniels, Josephus. *Our Navy at War*. New York: George Doran, 1922.
- Deweerd, Harvey A. *President Wilson Fights His War: World War I and the American Intervention*. New York: Collier-MacMillan, 1968.
- Friedman, Norman. "Transformation a Century Ago." *Naval History* 19, Iss. 2, April 2005, 32-37
- Frothingham, Thomas. *The Naval History of the World War*. Cambridge: Harvard, 1926.
- Gat, Azar. *A History of Military Thought: From the Enlightenment to the Cold War*. Oxford: Oxford University Press, 2001.
- Guide to the Scholarly Resources Microfilm Edition of the Hearings before the General Board of the Navy, 1917-50. Lists specific topics and provides the year, volume, page number, and microfilm roll number for that topic., Wilmington, DE: Scholarly Resources, 1983.
- Halpern, Paul. *A Naval History of World War I*. Annapolis: Naval Institute, 1994.
- Hearings Before Committee on Naval Affairs of the House of Representatives on Sundry Legislation Affecting the Naval Establishment, 1927-1928. 70th Congress ,1st

¹³⁰ Williamson Murray....

- Session(http://www.history.navy.mil/library/special/american_naval_part_great_war.htm, accessed 2 Mar 2012).
- Hendrix, Henry J. *Theodore Roosevelt's Naval Diplomacy*. Annapolis, MD: Naval Institute Press, 2009.
- Kirschbaum, Joseph W. "The 1916 Naval Expansion Act: Planning for a Navy Second to None." PhD diss., The George Washington University, 2008.
- Kittredge, Tracy B. *Naval Lessons of the Great War: A Review of the Senate Naval Investigation of the Criticisms by Admiral Sims of the Policies and Methods of Josephus Daniels*. Garden City, NY: Doubleday, Page, and Co., 1921.
- Knox, CAPT Dudley W. "American Naval Participation in the Great War (With Special Reference to the European Theater of Operations)." Department of the Navy - Naval Historical Center.
http://www.history.navy.mil/library/special/american_naval_part_great_war.htm (accessed 2 Feb 2012).
- Kuehn, John T. *Agents of Innovation: the General Board and the design of the fleet that defeated the Japanese*. Annapolis, MD: Naval Institute Press, 2008.
- Love Jr., Robert W. *History of the U.S. Navy Volume One: 1775-1941*. Harrisburg, PA: Stackpole, 1992.
- Mahan, A. T. *The Influence of Sea Power on History, 1660-1783*, 12th ed. Boston: Little, Brown, and Co., 1918.
- Massie, Robert. *Castles of Steel: Britain, Germany, and the Winning of the Great War at Sea*. New York: Random House, 2003.
- Messimer, Dwight. *Find and Destroy: Antisubmarine Warfare in World War I*. Annapolis, Maryland: Naval Institute Press: 2001.
- Miller, Edward S. *War Plan Orange: the U.S. strategy to defeat Japan, 1897-1945*. Annapolis, MD: Naval Institute Press, 1991.
- Moffat, Ian C. D. "Corbett: A Man Before His Time." *Journal of Military and Strategic Studies* (Winter 2000- Spring 2001), 11-35.
- Morison, Elting E. *Admiral Sims and the Modern American Navy*. Boston: Houghton Mifflin, 1942.
- Paret, Peter . *Makers of Modern Strategy: from Machiavelli to the nuclear age*. Princeton, NJ: Princeton University Press, 1986)
- Proceedings and Hearings of the General Board of the U.S. Navy 1900-1950*. National Archives Microfilm Publications, Microfilm Publication M1493.
- Scott, Lloyd N. *Naval Consulting Board of the United States*. Washington: U.S. GPO, 1920.
- Sims, William S. and Burton Hendrick. *The Victory at Sea*. London: John Murray, 1920.
- Sprout, Harold and Margaret. *Toward a New Order of Sea Power: American Naval Policy and the World Scene, 1918-1922*. Princeton, NJ: Princeton University Press, 1943.
- Still, William. *Crisis at Sea*. Gainesville, FL: University of Florida Press, 2006.
- Stillson, Albert. "Military Policy Without Political Guidance: Theodore Roosevelt's Navy." *Military Affairs*, 25, No. 1 (Spring, 1961), 18-31.

- Sumida, Jon. "New Insights From Old Books: The Case of Alfred Thayer Mahan." *Naval War College Review* LIV, No. 3 (Summer 2001), 100-111.
- Terraine, John. *The U-Boat Wars 1916-1945*. New York: Putnam, 1989.
- U.S. Congress. House. *Hearings before Committee on Naval Affairs of the House of Representatives on Sundry Legislation Affecting the Naval Establishment 1920-1921*, 66th Cong., 3rd sess., 1921.
- U. S. Congress. Senate. *Naval Investigation: Hearings Before the Subcommittee of the Committee on Naval Affairs Vol. I.*, 66th Cong., 2nd sess., 1920.
- U. S. Congress. Senate. *Naval Investigation: Hearings Before the Subcommittee of the Committee on Naval Affairs Vol. II.* 66th Cong., 2nd sess., 1920.
- U. S. Congress. Senate. *Report on the Naval Investigation: Views of the Minority of the Subcommittee on Naval Affairs*. United States Senate. 67th Cong., 1st sess., 1921.
- U. S. Congress. Senate. *Report on the Naval Investigation*. 67th Cong., 1st sess., 1921.
- U.S. Navy Department. *Annual Report of the Secretary of the Navy*, 63rd Cong., 3d sess., House Documents Vol. 27. Washington, DC: Government Printing Office, 1915.
- U.S. Navy Department. *Annual Report of the Secretary of the Navy*, 64th Cong., 1st sess., House Documents Vol. 32. Washington, DC: Government Printing Office, 1916.
- U.S. Navy Department. *Annual Report of the Secretary of the Navy*, 65th Cong., 2d sess., House Documents Vol. 25. Washington, DC: Government Printing Office, 1918.
- U.S. Navy Department. *Annual Reports of the Navy Department for the Fiscal Year (Including Operations and Recommendations to December 1, 1920)*. Washington, DC: Government Printing Office, 1921.
- Williams, William J. "Josephus Daniels and the U.S. Navy's Shipbuilding Program During World War I." *The Journal of Military History* 60, no. 1 (January 1996): 7-38.
- Yerxa, Donald A. "The United States Navy in Caribbean Waters During World War I." *Military Affairs* 51, no. 4 (Oct., 1987): 182-187.