U.S. BATTLESHIP OPERATIONS IN WORLD WAR I, 1917-1918

DISSERTATION

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Jerry W. Jones, B.A., M.S.
Denton, Texas
October, 1995
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This dissertation is an examination of the operations of U.S. battleships in World War I. The study examines tactical cooperation between units of the U.S. Atlantic Fleet and the British Grand Fleet and relations between the two navies; the efficiency of U.S. battleships in terms of both personnel and material; and the strategic ideas of U.S. naval leaders governing the use of capital ships.

The manuscript is based primarily on records of the Department of the Navy in the National Archives and Admiralty records at the Public Record Office. Also important are the private papers of principal naval leaders, located at the Library of Congress and the National Maritime Museum in Greenwich, U.K. The published memoirs of several of the participants are also utilized.

The first chapter examines Anglo-American naval relations and traces diplomatic events leading to the U.S. Navy Department’s decision to dispatch dreadnought battleships to European waters. The following two chapters discuss the amalgamation of Battleship Division Nine into the British Grand Fleet. Chapter IV examines the gunnery
efficiency of U.S. battleships serving with the Grand Fleet. Chapter V reviews Anglo-American planning for a possible German battle cruiser raid against the Atlantic convoys. Chapter VI deals with the movement of Battleship Division Six to Berehaven, Ireland. Chapter VII discusses the use of pre-dreadnought battleships as training ships, convoy escorts, and troop transports.

The study concludes that U.S. battleships made a subsidiary, but important contribution toward victory at sea. The addition of U.S. battleships allowed the Allies to protect Scandinavian commerce and the supply lines from the United States from German surface raiders while also maintaining superiority in the North Sea.
INTRODUCTION

During World War I, the U.S. Navy assumed a subsidiary, but significant role in the Allied naval effort. Germany and Great Britain were the major contenders of the naval war, fought mainly in the North Sea and the approaches to the channel ports. The contribution of the U.S. Navy was twofold: it ensured the continued supremacy of the Royal Navy and it helped protect the lines of communication to France, the decisive theater of the land war.

The submarine, and its adversary the destroyer, took on increased importance during the war. Nevertheless, the role of the opposing battle fleets remained vital. The supremacy of the Grand Fleet was the essential element of the blockade of Germany. Likewise, the High Seas Fleet was the power behind the U-boat blockade. Therefore, the rival fleets exerted an indirect, but crucial influence on the outcome of the submarine campaign.

The crucible of the naval war was unrestricted submarine warfare. Most naval histories of the war naturally focus on the struggle against the U-boats and the only major fleet engagement of the war, the battle of Jutland. Other campaigns, however, are also important and are worthy of study. The treatment accorded the U.S. Navy during World War I is especially narrow, usually focusing on
the operations of U.S. destroyers in European waters. The operations of other classes of warships are often ignored or treated as anecdotes. There is a need for monographic studies of the operations of U.S. submarines, cruisers, and battleships during the war.

The purpose of this study is to chronicle and evaluate the operations of U.S. battleships during World War I. Twelve of America’s sixteen dreadnought battleships and six of the pre-dreadnought battleships operated in the war zone. The addition of U.S. battleships gave the Allies an unqualified superiority in battleships over the German fleet. This luxury allowed the Allies to divert to other duties their surplus battleships, which had been guarding against a sortie of the High Seas Fleet. Besides helping to maintain the naval blockade, U.S. battleships protected numerous troop and mercantile convoys in the North Sea and the Atlantic from German raiders.

Besides providing a detailed account of the operations of U.S. battleships, this study answers the following questions: How efficient were U.S. battleships compared to their British counterparts in terms of both personnel and material? How successful was tactical cooperation between the two navies? What were the strategic ideas of U.S. naval leaders governing the use of capital ships, and how did wartime events change those ideas? Finally, how did the operations of U.S. battleships contribute to the Allied war effort and victory at sea?
The first chapter traces diplomatic events leading to the U.S. Navy Department’s decision to dispatch dreadnought battleships to European waters. The next two chapters discuss the amalgamation of Battleship Division Nine of the Atlantic Fleet into the British Grand Fleet. Chapter IV examines the gunnery efficiency of the U.S. battleships with the Grand Fleet in comparison with that of British battleships. The following two chapters deal with Anglo-American planning for a possible German battle cruiser raid against Atlantic convoys and the movement of Battleship Division Six to Berehaven, Ireland. Chapter VII discusses the use of pre-dreadnought battleships as training ships, convoy escorts, and troop transports.
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GLOSSARY

Armored cruiser. Until the advent of the battle cruiser, which made it obsolete, the armored cruiser was the largest and heaviest of the cruisers. Armored cruisers were less heavily armored and gunned than battleships, but were several knots faster.

Battle cruiser. A lightly armored, high-speed cruiser with the offensive power of a battleship, developed by the British before World War I.

Battleship. Derived from "line of battle ship," the battleship was the largest and most powerful man-of-war that could be built.

Boatswain. Pronounced "BO-sun." A warrant officer whose major duties are related to deck and boat seamanship.

Caliber. The length of a gun barrel, measured in multiples of the diameter of the gun's bore.

Cruiser. In the early steel navy, those classes of warship that were larger than destroyers, but smaller than battleships.

Destroyer. Originally torpedo boat destroyer. A small, high-speed, lightly armed and unarmored ship.

Dreadnought. A class of battleship with all-big-guns, or a single caliber main battery, which took its name from the first of the type, HMS Dreadnought.

Freeboard. Distance from the weather deck to the waterline.

Paravane. Torpedo-shaped device towed on either side of a ship's bow to deflect and cut adrift moored mines.

Paid off. Placed in reserve or no longer used as a command.

Pre-dreadnought. Those battleships built before HMS Dreadnought. They mounted several calibers of big guns

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CHAPTER I


When the United States entered World War I, the cause of the Entente hung in the balance. Unless Great Britain could counter the submarine menace, defeat seemed imminent. Shipping losses depleted Britain's grain supplies and oil reserves. Deprived of food, the island nation would starve. Deprived of oil, the British war machine would grind to a halt. The crisis demanded immediate and concerted action, but British attempts to deal with the U-boats were ineffectual, and the United States was militarily unprepared when she joined the Entente coalition. President Woodrow Wilson's policy of armed neutrality had prevented any Anglo-American planning or cooperation. Moreover, divergent war aims and competing national interests bedeviled Allied efforts toward cooperation. Only after several catastrophic defeats in 1917 was the close Anglo-American partnership formed that made victory possible in 1918.

Anglo-American naval cooperation was especially difficult. Conflicting strategic ideas and a growing rivalry divided the two navies. Furthermore, American naval leaders feared that events would force Britain to accept an
unfavorable peace with Germany, leaving the United States to continue the struggle alone. Even worse than the prospect of the United States having to face Germany, the world's second largest naval power, was the possibility of a two-ocean conflict with both Germany and Japan. The signing of the Lansing-Ishii agreement eased tensions with Japan, but U.S. naval leaders continued to fear a future conflict with Japan over the East Asian question and Japanese naval expansion, despite Japan's alignment against Germany.¹ The United States and Great Britain had to resolve these problems and concerns diplomatically before the U.S. Navy could play a larger role in the naval war.²

Central to the debate over U.S. naval policy was the role that U.S. battleships would play in the war. In keeping with the doctrines of Alfred Thayer Mahan, the Navy Department determined that the U.S. battle fleet would remain concentrated rather than be "disintegrated" into detachments. Naval leaders considered coastal defense as the primary duty of the fleet. Consequently, U.S. battleships did not play an active role in the war zone until nine months after the American declaration of war.

¹The Lansing-Ishii agreement pledged both powers to respect China's territorial integrity, but it acknowledged that Japan had "special interests" in China. The agreement temporarily improved relations between the United States and Japan.

Only after wartime events forced a dramatic reappraisal of U.S. naval policy did the Navy Department detach battleships for service overseas.

I

Efforts to forge the bonds of cooperation began immediately after President Wilson made the decision to ask for a declaration of war. The Navy Department chose Rear Admiral William Sowden Sims to establish communication with the Admiralty because of his Canadian birth and close association with British officers. President Wilson instructed Sims to push the Admiralty to undertake a naval offensive or close-blockade of the German submarine bases. Wilson scorned the British for "hunting hornets all over the farm and leaving the nest alone." The president also wanted the British to adopt the ancient practice of convoy to protect merchant shipping. Before Sims left for London, Secretary of the Navy Josephus Daniels told Sims that he had been chosen in spite of his notorious anglophilism. In 1911, then Commander Sims had received a reprimand from President Taft for rashly promising U.S. support in the

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event of war with Germany to the Lord Mayor of London.\textsuperscript{5} The chief of naval operations, Admiral William Shepherd Benson, allegedly admonished Sims: "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." Benson's stern advice, although probably motivated more by Sims's anglophilia than by dislike of the British, exemplified the attitude of the Navy Department when the war began.\textsuperscript{6}

While Sims traveled to London, a joint Anglo-French mission arrived in Washington. Rear Admiral Maurice Ferdinand Albert de Grasset represented the Ministry of Marine, and Vice Admiral Sir Montague E. Browning represented the Admiralty.\textsuperscript{7} The British made clear that the ability to protect shipping would decide the war. They also stressed the urgency of sending large numbers of U.S. destroyers to Europe.\textsuperscript{8} Both Daniels and Benson expressed

\begin{itemize}
\item \textsuperscript{5}"Excerpt of Speech by Daniels", 11 December 1917, TD File, Subject File 1911-1927, Record Group 45, National Archives.
\item \textsuperscript{6}Mary Klachko with David F. Trask, \textit{Admiral William Shepherd Benson: First Chief of Naval Operations} (Annapolis: Naval Institute Press, 1987), 57-58. Klachko points out that during a congressional investigating committee hearing in 1920, Admiral Benson admitted he had warned Sims against British machinations but wanted to counter the idea that he was anti-British.
\item \textsuperscript{7}Ibid., 63.
\item \textsuperscript{8}"Memorandum by Jellicoe," 9 April 1917, TP File, Subject File 1911-1927, Record Group 45, National Archives.
\end{itemize}
their desire to cooperate in every way possible. The United States could immediately assume responsibility for the protection of shipping in the West Atlantic, the Gulf of Mexico and much of the Caribbean. The U.S. promised to maintain the China squadron and to form a South Atlantic squadron in the near future.\footnote{Memorandum, Browning to Admiralty, 9 April 1917, ADM 137/1436, Public Record Office.}

German submarines were not much of a threat outside the war zone, but surface raiders were. The United States hesitated, however, about sending destroyers to Europe. The Navy Department decided to send only six destroyers for fear of weakening the screening forces of the battle fleet. The naval leadership considered any compromise of the integrity of the battle fleet as a dangerous departure from U.S. naval policy. Moreover, Benson feared that Germany might defeat the Entente powers and that the U.S. battle fleet would have to fight the larger High Seas Fleet alone.\footnote{Klachko, Benson, 65.}

Admiral Benson and most of the navy’s leadership were firm disciples of Admiral Alfred Thayer Mahan. Mahan’s ideas about strategy and the nature of sea power laid the foundations of U.S. naval doctrine. In 1890, Mahan had published a series of lectures on naval history that he had given at the United States Naval War College. Mahan’s book, \textit{The Influence of Sea Power Upon History, 1660 - 1783}, became
one of the most influential ever published in the United States.\textsuperscript{11}

Mahan's purpose was to reawaken the country to the importance of sea power. The United States, preoccupied with westward expansion after the Civil War, allowed the navy to atrophy. Mahan used the example of England's ascent to greatness to show that the United States could never be a world power without a great navy. Mahan's doctrine of sea power was both military and commercial. Sea power and mercantilistic imperialism were synonymous. Mahan expanded the role of the navy from coastal defense to a tool in power politics, an instrument and indication of national greatness.\textsuperscript{12}

By reviewing the wars of trade in the seventeenth and eighteenth centuries, Mahan found support for the dictum that only a concentrated battle fleet could project sea power. Any division of the fleet invited disaster because detached units were easily defeated piecemeal. Mahan was equally emphatic about the primary mission of the battle fleet: to engage the enemy's fleet. He warned that any guerre de course, or commerce raiding strategy, amounted to abandoning any attempt to control the sea. Thus, Mahan not

\textsuperscript{11}Alfred T. Mahan, \textit{The Influence of Sea Power Upon History: 1660-1783} (Boston: Little, Brown and Company, 1890).

only provided justification for the construction of a battle fleet, he laid down the strategic principles that governed how that fleet should be used.\textsuperscript{13}

Naval planners embraced Mahan's doctrine of fleet concentration long after his death. When the United States joined the Entente in 1917, the naval war plan was the same War Plan BLACK that had been developed prior to the Spanish-American War. Based upon Mahan's strategic ideas, War Plan BLACK presumed that the objective of war at sea was to defend the western hemisphere from European aggression. The planners made no provision for changes in technology, strategic situations, and mission that had occurred by the time of the U.S. entry into the First World War. The plan concentrated the battle fleet in the Gulf of Mexico to await the decisive battle with the enemy fleet, even though the British blockade made such a scenario highly unlikely.\textsuperscript{14} Fortunately, the naval leadership eventually compromised their Mahanite dogmatism in response to the military situation in 1917.

Washington did not have any idea how serious the shipping situation was for Britain until the Admiralty took


Admiral Sims into their confidence. Upon arriving in London, Admiral Sims met with First Sea Lord of the Royal Navy, Admiral Sir John Jellicoe.\textsuperscript{15} The two officers had first met in China in 1901. Both men had a common interest in naval gunnery, and they became regular correspondents. Admiral Jellicoe revealed that the Allied shipping losses to U-boats were nearly 600,000 tons per month. Astounded, Sims said, "It looks as though the Germans are winning the war." Jellicoe calmly replied that the merchant marine would reach the level of endurance by November 1917 and England would have to ask terms. When asked about the use of a convoy system, Admiral Jellicoe insisted that it was impossible because of the lack of escorts and the inability of merchant ships to keep station. Jellicoe could foresee no immediate solution to the problem.\textsuperscript{16}

In response to the crisis, Sims fired off several cables to Washington. On April 14 Sims explained the gravity of the situation and appealed for more merchant ships and destroyers. Sims believed that U.S. battleships were not needed in the war zone unless two divisions were based at Brest, France, to guard the channel against German

\textsuperscript{15}The First Sea Lord is the equivalent of the Chief of Naval Operations in the U.S. Navy.

raiders that slipped past the Grand Fleet. On 18 April, Sims cabled Daniels to repeat the plea for more destroyers. Sims went on to transgress Mahan's "first commandment." He suggested that since it was impractical for the battle fleet to take part in the war, they did not need destroyer protection. Therefore, the Navy Department could release all destroyers for duty in the war zone. Sims then maintained that the president's plan for a close-blockade of German submarine bases was "wholly impractical." The Admiralty had studied the question and found that the danger to blockading forces from mines and torpedoes was too great. The next day, Sims cabled Daniels to reinforce his earlier cables with a cry of, "More ships! More ships! More ships!" Sims also declared that he had managed to talk the prime minister out of the notion of a close-blockade (hardly calculated to please President Wilson!), and he forwarded the Admiralty's suggestion that U.S. base dreadnoughts at Brest. U.S. dreadnoughts at Brest would be well placed to support allied naval forces in the English Channel, such as the Dover Patrol.

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17 Sims to Navy Department, 14 April 1917, series 2 (microfilm), Papers of President Woodrow Wilson, Manuscript Division, Library of Congress.

18 Sims to Daniels, 18 April 1917, Series 2 (microfilm), Papers of President Woodrow Wilson, Manuscript Division, LC.

19 Senate Executive Documents to Daniels, 19 April 1917, Senate Committee on Naval Affairs, Hearings before the Subcommittee of the Committee on Naval Affairs, 66th Cong., 2nd sess., 7 April 1920.
During May 1917, a high level mission composed of British Foreign Secretary Arthur Balfour and his naval advisor, Rear Admiral Dudley De Chair, visited Washington. Balfour hoped to convince the Americans to postpone their 1916 dreadnought building program in favor of building small craft for escort work. The United States could not countenance abandoning its capital ship program, however, because of fear of a possible future two-ocean war with Germany and Japan. Nevertheless, the Navy Department released twelve more destroyers for service overseas and promised another eighteen.\(^{20}\)

The American destroyers were a great help, but much more would have to be done. A change of tactics was needed to defeat the submarine. Sims began working to bring the British Admiralty around to adopting the convoy system. Sims found Prime Minister David Lloyd George sympathetic to the convoy idea. During a war Cabinet meeting on 25 April, Sims urged the adoption of the convoy system as the only way to defeat the U-boats. Lloyd George seconded Sims and criticized the Admiralty for their reluctance.\(^{21}\) As a result of the continuing losses, and David Lloyd George's

\(^{20}\)De Chair to Admiralty, "General Report on the Progress of Negotiations with the United States Navy Department, etc., in Connection with Mr. Balfour's Mission", 15 May 1917, ADM 137/1436, PRO.

personal intervention, the Admiralty finally began to implement the convoy in early May 1917. The Admiralty made it clear, however, that the convoy system would strain British resources and that more U.S. assistance would become necessary.  

Sims had an easier time bringing the British Admiralty around to his views than he did the U.S. Navy Department. On 21 June 1917 Sims made another appeal to Daniels for more escorts. He had the temerity to add, "I consider it my duty to report that if we cannot offer more immediate actual assistance, even to the extent of sending the majority of the vessels patrolling our own coastlines which cannot materially affect the general situation, we will fail to render the service to the Allied cause which future history will show to have been necessary." Daniels responded by assuring Sims of the department's willingness to cooperate and that every destroyer that could be spared from home waters, would be.

Still not appeased, Sims, gave Daniels a lecture on the merits of the convoy system. Warships would no longer have to scour the oceans in search of submarines. The use of

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22Cable, Sims to Daniels, 1 May 1917, TP File, Subject File 1911-1927, RG 45, NA.

23Cable, Sims to Daniels, 21 June 1917, TP file, Subject File 1911-1927, RG 45, NA.

24Cable, Daniels to Sims, 24 June 1917, TP File, Subject File 1911-1927, RG 45, NA.
convoys would turn the tables and force the submarines to scatter in search of convoys, which would force them to run the risk of being sunk by escort ships. Sims stressed that the Admiralty would more enthusiastically embrace the convoy idea if sufficient anti-submarine craft were available. He again appealed for a change in strategy. Operations in home waters should no longer take precedence over operations in the war zone. Sims also suggested the need for cruiser and battleship escorts to provide against German surface raiders.  

Daniels replied by religiously quoting the doctrine of Alfred T. Mahan, "The future position of the United States must in no way be jeopardized by any disintegration of our main fighting fleet." Daniels vigorously opposed any separation of a battle squadron or even a weakening of the battle fleet's destroyer screen. At this point, the United States had already sent 28 of its 51 available destroyers to European waters.

II

During July 1917 relations between the Navy Department and the Admiralty grew more strained. Both naval leaders

25Cable, Sims to Daniels, 29 June 1917, TP File, Subject File 1911-1927, RG 45, NA.

26Memo, Daniels to Sims, July 16 1917, in Sims, Victory at Sea, 391-392.

27This includes destroyers in commission at that time; see, Paul Halpern, A Naval History of World War I (Annapolis: Naval Institute Press, 1994), 359.
and civilian observers grew more critical of the Royal Navy. The Admiralty seemed to lack a coherent strategy and refused to consider offensive operations. To Americans, the British policy of blockade evinced total lack of elan. The British viewed American ideas for a naval assault on submarine bases in the face of mines, torpedoes, and coastal artillery as nothing short of foolhardiness, bordering on insanity.\textsuperscript{28}

President Wilson's frustration with the Admiralty began to harden after receiving a report by U.S. journalist and progressive Republican politician Winston Churchill (not the future British prime minister of that name). The president seemed to value Churchill's opinion on naval matters more than that of his own naval officers. Churchill was a 1894 Annapolis graduate who resigned his commission to pursue a writing career. He earned Wilson's respect with a critical but constructive report on the Navy Department in the summer of 1917. Churchill then traveled to Britain to report on the Admiralty.\textsuperscript{29} Churchill harshly condemned the Lords of the Admiralty as unequal to the task. He contended that the Admiralty "continued to ignore the main principle of naval strategy as laid down by Admiral Mahan and others, that it is the main business of a navy to fight, to be aggressive, to meet new problems as they arise." The solution,


\textsuperscript{29}Simpson, \textit{Documents}, 61n.
according to Churchill, was to "make American genius count." \textsuperscript{30}

President Wilson decided to prod the British into aggressive action. On 2 July, he wrote to Daniels: "As you and I agreed the other day, the British Admiralty had done nothing constructive in the use of their navy and I think it is time we were making and insisting upon plans of our own, even if we render some of the more conservative of our own naval advisors uncomfortable." \textsuperscript{31} beginning his campaign by writing directly to Sims in London, Wilson castigated the Admiralty for its lack of action. He expressed surprise that the Admiralty had failed to use Great Britain's naval superiority effectively. Wilson said, "In the presence of the present submarine emergency they are helpless to the point of panic." Wilson went on to state that boldness was in order, even at the cost of great losses. He desired that Sims tell him what, if anything, the Admiralty had accomplished. Implicit in the president's letter was the impression that Sims had become the mouthpiece of the Admiralty, rather than having an independent opinion. \textsuperscript{32}

\textsuperscript{30}Churchill (US) to Wilson, July 1917, Papers of Admiral William S. Sims, Manuscript Division, LC.

\textsuperscript{31}Wilson to Daniels, 2 July 1917, TD File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{32}Wilson to Sims, 4 July 1917, TD File, Subject File 1911-1927, RG 45, NA.
Sims, although shaken by the president's strongly worded letter and thinly veiled rebuke, defended the Admiralty's actions. Sims maintained that the British Grand Fleet made the anti-submarine campaign possible by keeping the High Seas Fleet bottled up in harbor. If not for the Grand Fleet, the German fleet could drive all anti-submarine craft from the seas. Sims repeated his earlier views that a close-blockade was impracticable, that priority allocation of warships should be to the waters surrounding the United Kingdom, and that the United States should postpone construction of capital ships in favor of destroyers. To allay fears about future developments if the United States were to postpone its capital ship program, Sims said, "We can always count on the Royal Navy." Rather than displaying an independent mind, Sims probably strengthened the president's view that he was a pawn of the Admiralty.

The rumblings from Washington did not take long to reach London. On 5 July, Alfred Lord Northcliffe, head of a British mission to the United States, reported to the War Cabinet that the alleged inactivity of the Royal Navy in dealing with submarines hampered diplomacy with the United States. He also mentioned that Benson maintained his support of the capital ship program because of his continued fear of a two-ocean war if Germany defeated the Allies and

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33Sims to Wilson, 12 July 1917, Papers of President Woodrow Wilson, Series 2 (microfilm), Manuscript Division, LC.
Japan took the opportunity to attack U.S. interests in the Pacific. Lord Northcliffe suggested that the Admiralty could offer the latest type of battleships and battle cruisers, ton for ton, in exchange for destroyers.\textsuperscript{34} Admiral Jellicoe defended the navy by telling Lord Northcliffe, "the alleged inactivity of the navy in dealing with the submarine exists only in the imagination of those not acquainted with the facts." Concerning trading battleships for destroyers, Jellicoe insisted that Britain needed all of her battleships as long as the German fleet remained intact.\textsuperscript{35}

On 9 July, Daniels reaffirmed U.S. naval policy to Secretary of State Lansing. Daniels stressed two points dogmatically. First, the U.S. would not jeopardize future security with any "disintegration" of the main battle fleet. Second, the offensive must always be the dominant note in any general plans or strategy. Consequently, the U.S. was willing to send any destroyers or cruisers not needed at home, but was unwilling to separate any division from the main fleet. Although Daniels was unwilling to detach any

\textsuperscript{34}Northcliffe to War Cabinet, 5 July 1917, TT File, Subject File 1911-1927, RG 45, NA

\textsuperscript{35}Jellicoe to Northcliffe, 10 July 1917, TT File, Subject File 1911-1927, RG 45, NA.
part of the main fleet, he would send the entire U.S. fleet abroad if conditions warranted.\textsuperscript{36}

After receiving a copy of Daniels's statement of policy, Sims wrote a lengthy letter explaining his views to the secretary. In his letter, Sims displayed uncharacteristic tact. The letter also reveals the conflicting perspectives that often hamper cooperation between a theater commander and the leadership at home. Sims stated that he was operating under the assumption that the mission was to promote cooperation with the Allies to defeat the common enemy. He could not comprehend why questions of postwar U.S. security should take precedence over the immediate war effort. Unlike more nationalistic officers such as Benson, Sims did not burden himself with questions of long-range policy and national self-interest; rather he viewed America's fortunes as inextricably linked with those of the Allies. He believed that a victorious Entente coalition would automatically guarantee future security.\textsuperscript{37}

Sims argued that the U.S. fleet was an auxiliary, or reserve, of the British Grand Fleet. Sims acknowledged that such a view could be seen as a "disintegration of the fleet" and that caution was only natural. Nevertheless, he argued

\textsuperscript{36}Daniels to Lansing, 9 July 1917, Papers of Admiral William S. Sims, Manuscript Division, LC.

\textsuperscript{37}Letter, Sims to Daniels, 16 July 1917, TP File, Subject file 1911-1927, RG 45, NA.
that the U.S. Navy could give maximum support to the Allies without the dreaded disintegration of the fleet. Sims explained that the nature of the Allied lines of communication, coupled with the enemy's lack of available submarines, restricted the enemy's main effort to European waters. Occasional U-boat attacks outside the war zone were only meant to scatter the limited anti-submarine craft. Therefore, the war would be won or lost in European waters.\footnote{Ibid.}

Sims pointed out that it would not be practical to send the U.S. battle fleet to the war zone because there were not enough small craft to provide the fleet with an adequate screen while also serving as escorts for merchant ship convoys. Further, the British could not supply the U.S. fleet with oil because of the acute shortage in England. Sims maintained that since the United States could not use its battle fleet in the war zone, the Navy Department could release all screening vessels for anti-submarine work. Considering that the stronger Grand Fleet kept the High Seas Fleet contained, moving all of the U.S. destroyers into the war zone would not constitute a disintegration of the main fleet because the destroyers would remain between the enemy and the battle fleet. Sims extended his argument to include sending battleship units to serve with the Grand Fleet. He maintained that they would merely form advanced units, which
would always remain in a position to fall back to the main battle fleet.\textsuperscript{39} Clearly, Sims's interpretation flew in the face of Mahanite dogma and the Navy Department remained unconvinced.

After visiting the Grand Fleet with Sims on 19 July 1917, Jellicoe requested that the U.S. send a division of four coal-burning dreadnoughts, along with a screen of six destroyers, to serve with the Grand Fleet.\textsuperscript{40} This would allow the Admiralty to detach five King Edward Class pre-dreadnoughts from the Grand Fleet. Not only would the replacement of obsolete pre-dreadnoughts with newer U.S. battleships materially strengthen the Grand Fleet, the scheme would also aid the struggle against the U-boat. The King Edward Class ships would replace older pre-dreadnought battleships which would be paid off. The Admiralty could then use the crews of the decommissioned ships to man new anti-submarine craft. Like the U.S. Navy, the Royal Navy suffered from a chronic shortage of experienced officers and seamen.\textsuperscript{41}

The Navy Department rejected the request despite Sims's endorsement. With the support of the commander-in-chief of the Atlantic Fleet, Admiral Henry T. Mayo, Benson determined

\textsuperscript{39}Ibid.

\textsuperscript{40}Jellicoe requested coal-burners because of the serious oil shortage in Britain.

\textsuperscript{41}Cable, Sims to Daniels, 21 July 1917, TT File, Subject File 1911-1927, RG 45, NA.
that the U.S. fleet should remain fully manned and ready for battle as a unit. In keeping with the doctrine of Mahan the fleet would remain concentrated. Furthermore, Benson told Sims that the Navy Department would send no U.S. battleships until the British developed an aggressive plan of action. In effect, the battleships were diplomatic bargaining chips, used to spur the Royal Navy into offensive action.\(^{42}\)

By the end of July, the Admiralty and the Navy Department were at an impasse over the offensive action issue. The Navy Department sent Mayo to Europe to improve relations with the Entente navies. A secondary purpose for the mission was to check on Admiral Sims, who President Wilson believed no longer represented U.S. interests. Wilson hoped that the Mayo mission would spur the Allies to action and make the United States the senior partner in an aggressive naval campaign. Daniels favored the mission because he was, "getting tired of playing second fiddle to the British by meeting all their demands."\(^{43}\) The initiative for a naval mission developed into the Inter-Allied Naval Conference of 4 and 5 September, at which Mayo was the United States representative.\(^{44}\)

\(^{42}\)Gerald Wheeler, Admiral William Veazie Pratt, U.S. Navy (Washington: Department of the Navy, 1974), 103; Security concerns remained the primary reason for retaining the battleships in U.S. waters.

\(^{43}\)Klachko, Benson, 81.

\(^{44}\)Ibid.
The Mayo mission and naval conference put the Allies on the path toward compromise and cooperation. Mayo began preliminary discussions with the Admiralty on 29 August 1917. He frankly told the First Lord of the Admiralty, Sir Eric Geddes, that the U.S. wanted a larger role in the naval war. He made it clear that Wilson wanted a more aggressive policy by quoting the president's admonition: "you can't make omelettes without breaking eggs, war is made up of taking risks." Mayo also told the First Lord that Wilson had expressed a desire to "... get more cooperation from them (the Admiralty) both now and in the future."45

Stung by President Wilson's implied charge that they lacked both the will to undertake determined action and the spirit of cooperation, the Admiralty vigorously defended their naval policy to the Mayo mission. The British illustrated the futility of a naval offensive against German U-boat bases. The British showed Mayo confidential charts that marked the locations of shore batteries and mine fields surrounding the German coast. The Admiralty also presented figures to show that the margin of superiority of the British fleet over the German fleet was much less than commonly presumed. In terms of destroyers, in fact, the

45Memorandum, Geddes to Lloyd George, 29 August 1917, ADM 116/1804, PRO.
German fleet was clearly superior. Also, Jellicoe again broached the idea of sending U.S. battleships to serve with the Grand Fleet. Mayo forwarded the request to Daniels, and he reported that Sims was doing a good job in London.

During the Inter-Allied Naval Conference, the British responded to U.S. criticism with a plan for a close offensive in German waters. The plan consisted of sinking old warships to block German channels. The British asked that the U.S. contribute twelve of her oldest battleships and eight of her oldest cruisers. When Mayo submitted the request to Benson, he added his belief that nothing would ever come of it and that it had little chance of success. Faced with the cost of the scheme, the Navy Department apparently lost enthusiasm for a close-blockade and

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48 Daniels Diary, 18 September 1917, in Paul Cronan, The Cabinet Diaries of Josephus Daniels (Lincoln: University of Nebraska Press, 1963), 203.

49 Memorandum, Mayo to Daniels, "Report of the International Conference Held in London, 4-5 September, and Kindred Matters", 8 September 1917, Papers of Admiral William S. Benson, Manuscript Division, LC.

50 Cable, Mayo to Benson, 5 September 1917, TT File, Subject File 1911-1927, RG 45, NA.
concurred with Mayo about its impracticability. Consequently, the Admiralty happily let the matter drop.\textsuperscript{51}

As an alternative to the close-blockade, the British suggested the laying of a mine barrage in the North Sea between Norway and Scotland to deny German submarines access to the Atlantic. The North Sea mine barrage was understood to be primarily an American effort. This satisfied Wilson that the "hornets would be shut up in their nests." Therefore, the Admiralty's willingness to meet the Americans half way on the idea of an offensive removed a major stumbling-block to Anglo-American naval cooperation.\textsuperscript{52}

After the naval conference, the Admiralty gave Mayo a paper explaining their naval policy. Their first objective was to use a naval blockade to bring pressure on the enemy. The second was to protect the sea communications of the Allies and Allied trade. The Grand Fleet was the basis of Allied naval power and hinge of their strategy. By denying the German Fleet access to the sea, the Grand Fleet provided the security of all the smaller warships protecting trade and hunting submarines. The British pointed out that although the Grand Fleet "adopts a waiting attitude" its destroyer screen was used in anti-submarine work as much as

\textsuperscript{51} Extract from Admiralty Operations Committee Minutes, 20 September 1917, ADM 137/1420, PRO.

possible. Mayo did not consider the paper evidence of a comprehensive policy; it was, instead, a summary of past activities. The defensive nature of the Admiralty paper struck Mayo as overly passive. He also recognized that the role of trade protection (defense) consumed most of the Royal Navy other than the Grand Fleet. Nevertheless, Mayo was pleased to report that the Admiralty indicated a growing appreciation of the necessity for more energetic offensive measures.

Before leaving London, Admiral Mayo asked the Admiralty for a statement of contemplated changes in naval policy and future assistance desired from the United States. The Admiralty replied with their intention to increase offensive operations against submarines. The British would require minelayers and numerous mines from the United States. In addition, the British needed more destroyers and merchant ships. Further, the Admiralty still hoped for the addition of U.S. dreadnoughts to the Grand Fleet. The scope of the anti-submarine campaign meant paying off more capital ships.

53 "Statement of Admiralty Policy Prepared for Admiral Mayo", 17 November 1917, TT File, Subject File 1911-1927, RG 45, NA.

54 Memorandum, "Admiral Mayo's General Impressions Regarding Conditions in the Admiralty," September 1917, TP File, Subject File 1911-1927, RG 45, NA.

to provide officers and crews for the 119 destroyers then under construction in Britain. The Admiralty suggested that should the U.S. government decide to send the battleships, they would work together as a division or a battle squadron.\textsuperscript{56}

In the wake of the Mayo mission, relations between the Navy Department and their theater commander, Admiral Sims, improved significantly.\textsuperscript{57} The Mayo mission encouraged Sims because he was certain that his views would be vindicated. To his confidant in the Navy Department, Assistant Chief of Naval Operations Captain William Veizie Pratt, Sims wrote: "I am sure that when Admiral Mayo returns and you people have had time to go over his reports . . . you will have a much clearer idea of the situation over here then you have had up to the present time."\textsuperscript{58}

Sims took the opportunity to improve his relations with Benson. Pratt had warned Sims that his constant criticism had irritated the Chief of Naval Operations. Sims attempted to make amends by expressing his appreciation for the difficulty of the C.N.O.'s position. He explained that his

\textsuperscript{56}Admiralty Memorandum, "Assistance Desired form the United States", 2 October 1917, War Cabinet, G.T.-2164, CAB 24, Public Record Office; this document is also contained in ADM 137/2710, PRO.

\textsuperscript{57}Sims became the commander of U.S. Naval Forces in Europe shortly after his arrival in London.

\textsuperscript{58}Letter, Sims to Pratt, 24 September 1917, TD File, Subject File 1911-1927, RG 45, NA.
criticism was the result of impatience, not ill feeling. Sims was so concerned about his standing in the Navy Department that he pointed out the damage to relations with the Admiralty that would result if the Department should replace him.59

Benson responded to Sims’ overture with a candid and heartfelt letter. He admitted that he had asked Pratt to stop showing him Sims’s letters because, “I was afraid that the constant spirit of criticism and complaint that pervaded them . . . would gradually produce a state of mind that was undesirable, to say the least.” Benson admitted his surprise that Sims would direct his complaints to a subordinate rather than to Benson himself. Sims’s habit of going behind Benson’s back accounted for the poor relations between himself and Benson. Benson also mentioned his disappointment that neither Sims nor the Admiralty had put forward a plan of operations. The Admiralty treated the Navy Department as nothing more than a source of materiel. Benson stated that the reason for the department’s unwillingness to send a portion of the battleship force to serve with the Grand Fleet was lack of an operational plan. Benson ended his letter by appealing for better cooperation and understanding.60

59Klachko, Benson, 82.

60Letter, Benson to Sims, 24 September 1917, TD File, Subject File 1911-1927, RG 45, NA.
Benson's appeal resulted in detente between the Chief of Naval Operations and the theater commander. Sims refrained from expressing too many criticisms of the Navy department for the duration of the war. After the war, however, the veneer of good relations between Sims and Benson ended. In 1920 Sims brought allegations of wartime incompetence against the Navy Department before the Senate Committee on Naval Affairs. The hearings made national headlines and divided the navy into factions. Sims's charges lacked substance, and the Senate report absolved the Navy Department. It was fortunate for the U.S. war effort that the dissension between Sims and the Navy Department did not break out into open hostilities until after the armistice.\textsuperscript{61}

The Mayo mission significantly improved the relationship between the Navy Department and the Admiralty. Personal communications were established and there was a general clearing of the air. The First Lord, Sir Eric Geddes, got into contact with Secretary Daniels to express appreciation for the Mayo visit and the greater understanding and communication the visit fostered. Geddes encouraged the secretary to express his views directly to the Admiralty in an effort to bring about better cooperation. The First Lord suggested that there was no substitute for closer communication between the Navy

\textsuperscript{61}Klachko, Benson, 169-180.
Department and the Admiralty. Further, he requested that as a supplement to the Mayo mission, Admiral Benson travel to London for talks with his opposite number Admiral Jellicoe.  

Jellicoe also took the opportunity of Mayo's visit to establish direct correspondence with Benson. In a conciliatory letter, he expressed appreciation for U.S. support, and he discussed the accomplishments of the Mayo mission. He addressed Benson's concern over lack of action by pointing out that the Royal Navy took offensive action against any enemy vessels they could find. He defended British policy by arguing that "it takes two to make a fight, and our difficulty throughout the war has been that, except in one or two exceedingly rare occasions, the second party to the fight has not been there." In his reply to Jellicoe, Benson said, "For many years, I have hoped for the day when our countries would be more closely united in the common cause for the good of mankind."

Another outcome of Admiral Mayo's mission was the increase in support for sending a division of U.S. dreadnoughts to Britain. Sims wrote to Benson to express

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62 Telegram, First Lord of the Admiralty to Secretary of the Navy, 13 October 1917, ADM 116/1805, PRO.

63 Letter, Jellicoe to Benson, 22 September 1917, File 677, Subject File 1911-1927, RG 45, NA.

64 Letter, Benson to Jellicoe, 22 October 1917, TT File, Subject File 1911-1927, RG 45, NA.
his anxiety over the Navy Department's hesitation in granting the Admiralty's request to send battleships to serve with the Grand Fleet. He admitted that he did not really understand what disintegration of the fleet meant, and did not see a way for the battle fleet to participate in the war as a unit. Sims repeated his argument that a U.S. battleship division serving in European waters would merely be an advanced force between the U.S. battle fleet and the enemy. Someone, presumably Benson, wrote in the margin: "But this is a division of the main force which is always faulty if not fatal." Mahan's dogma was still the pure faith in the Navy Department.\(^6^5\) In a letter to Pratt, Sims pointed out that German battle cruisers under construction were nearing completion. In Sims' opinion, this was another good reason to reinforce the Grand Fleet with U.S. battleships. Sims was so convinced of the urgency of granting the Admiralty's request to send the ships that he said, "I cannot bring myself to believe that any other decision could be made by our government."\(^6^6\)

In October 1917 the General Board of the Navy held hearings on the British request that a squadron of dreadnoughts join the Grand Fleet. The testimony of the Board's witnesses revealed that concern over Japanese

\(^6^5\)Sims to Benson, 1 September 1917, Papers of Admiral William S. Benson, Manuscript Division, LC.

\(^6^6\)Letter, Sims to Pratt, 27 September 1917, TD File, Subject File 1911-1927, RG 45, NA.
intentions was a major reason to retain the battleships on the east coast. Captain Pratt, who testified before the Board, urged that the Navy Department honor the British request. Reassured by the results of the Lansing-Ishii agreement, Pratt hoped that the Japanese would follow the U.S. example and send their own reinforcements to Europe. Another General Board witness and Navy Department staff officer, Captain Frank H. Schofield, also supported the dispatch of U.S. battleships to Europe. He suggested that to grant the British request would indicate American good will and also place Great Britain in America's debt. Consequently, the U.S. could persuade the British not to transfer any warships to the Japanese that could eventually endanger American interests in the Pacific. Admiral Benson, however, did not yet agree with the position of Pratt and Schofield.\textsuperscript{67}

In late October 1917, Wilson received a letter from the American journalist Winston Churchill. Churchill had visited London during the naval conference as an independent observer, and sent his assessment of the results. Among other points, Churchill suggested that the U.S. should comply with the British request for four coal-burning dreadnoughts. He accepted the Admiralty's concern about the slim superiority in the preponderance of British

\textsuperscript{67}Allard, "Naval Differences," 77-78.
dreadnoughts to German dreadnoughts, especially in light of Germany’s vast superiority in the number of destroyers.

Churchill also suggested using older U.S. battleships to protect convoys against German surface raiders. 68 This was a radical departure from Mahan’s doctrine of fleet concentration. The war at sea was evolving in ways that Mahan had not foreseen. With naval orthodoxy seeming unequal to the task, radical new ideas gained credence. Suggesting the use of battleships to escort convoys would have been considered blasphemous earlier in the war, but not so strange in the conditions of 1917. Although no action was taken on the journalist’s suggestion at the time, a year later U.S. pre-dreadnought battleships escorted American troop convoys. 69

IV

In September, while Admiral Mayo was still in London, the British suggested holding a general conference to promote cooperation among the allies. The success of the German U-boats and the failure of French and British offensives on the western front pointed to the need for greater coordination. 70 At first, Wilson was unenthusiastic

68 Letter, Churchill (US) to Wilson, 22 October 1917, in Simpson, Documents, 126.

69 A complete discussion of the use of U.S. battleships as convoy escorts appears later in this study.

70 Klachko, Benson, 86.
about U.S. representation at the conference because of his fear of diplomatic entanglements that could compromise his plan for an enlightened peace settlement. It became increasingly apparent, however, that there would be no enlightened peace if the war was not won. Wilson acquiesced after his closest advisor, Colonel Edward M. House, assured him that only military measures, and not war aims, would be discussed at the conference. The president asked Colonel Edward House to head the delegation, and Admiral Benson was the naval representative.\footnote{Trask, \textit{Captains and Cabinets}, 174-76.}

On 7 November 1917, the House mission arrived in Britain. It could not have come at a more critical time. The Austrians had just defeated the Italian army at Caporetto, and the Bolsheviks had seized power in Russia. The situation looked very dark for the Allies, and the gravity of the situation gave added impetus for closer cooperation. Benson immediately began discussions with the Admiralty, communicating the intentions of the United States to make a greater naval contribution, but according to well-defined plans. Benson was considerate, but frankly reported his dissatisfaction with the defensive policies of the Admiralty. Nevertheless, Benson was willing to consider Admiralty views with an open mind.\footnote{Ibid.}
After a few days in London and having become more familiar with conditions in the war zone, Benson moved closer to the views of the British Admiralty and Sims. On 10 November, after three days of discussions with the British, Benson cabled Daniels to recommend that the Navy Department promptly dispatch four coal-burning dreadnoughts for service with the Grand Fleet.\(^73\)

Benson wrote a lengthy memorandum explaining his decision to reverse his earlier policy. First of all, he became convinced that the British really needed reinforcements to provide the Grand Fleet with a safe margin of superiority. Benson said, "If, in any encounter, it should be indicated that the outcome would have been more favorable or more decisive had more Allied forces been available, it would be difficult to explain the absence of our ships."\(^74\)

Benson was always primarily interested in the long-range interests of his country. Regarding the possible impact on domestic policy if U.S. battleships did not participate in the war, Benson said:

Whatever may be the present situation, the future of the United States will depend in large measure upon the strength, the training, and the prestige of the Navy. A decision now averse to sending any

\(^73\)Cronan, ed., Daniels Diary, 10 November 1917, 234.

\(^74\)"Memorandum by Admiral Benson", 10 November 1917, Papers of Admiral William S. Benson, Manuscript Division, LC.
of our battleships to the front will be invoked in the future against the building of large vessels.

Benson was also concerned about the foreign policy implications if the ships were not sent:

The major consideration is prestige . . . There should be no possibility of an impression, at home or abroad, among the hostile, Allied or neutral, that we are performing an auxiliary or secondary part in the military prosecution of the war.

Benson ended his memorandum by modifying his earlier interpretation of Mahan's commandment of fleet concentration:

The principle not to divide the fleet does not apply to this matter in my opinion. It would apply to the portion of the fleet necessarily kept in American waters by logistical considerations, rather than to a division to join the Grand Fleet.75

The opinion of his trusted naval advisor finally convinced Secretary Daniels to send the dreadnoughts. The Navy Department chose to send Battleship Division Nine of the Atlantic Fleet, composed of the New York, Florida, Delaware, and Wyoming. These ships, the best coal-burners in the fleet, were under the flag of Admiral Hugh Rodman.76

After five months of debate the Navy Department finally granted the British request and the U.S. dreadnoughts began their journey across the North Atlantic.

75Ibid.
76Cable, Daniels to Benson, 13 November 1917, TD File, Subject File 1911-1927, RG 45, NA.
With Mahanite dogma compromised, the Admiralty hoped to persuade the Navy Department to send the remaining ten American coal-burning dreadnoughts to serve with the Grand Fleet. Except for the two squadrons on the flanks of the battle line, which were comprised of four ships, a British battle squadron was comprised of eight ships. Ten U.S. dreadnoughts would form a complete squadron, and would allow for the continual refit and docking of two of the American ships. The addition of another battle squadron to the Grand Fleet would allow the British to station a battle squadron further south to guard against any German battle cruiser raids on the East coast of England. It was for this reason that the British battle cruiser fleet was based at Rosyth, 200 miles south of the main fleet-anchorage at Scapa Flow. The danger in this disposition was that the Germans could decide to use their fast battleships in conjunction with their battle cruisers to raid the East Coast. The British battle cruiser fleet would not be strong enough to deal with such a powerful raiding force.\(^7\)

Another reason for the Admiralty requesting additional American dreadnoughts was the desire to take advantage of a Norwegian base, should Norway enter the war. The Admiralty planners suggested that with the British battle fleet based

\(^{77}\)Admiralty Memorandum by Director of Plans Admiral Roger Keyes, "Co-operation of the British and American Battle Fleets and Suggested Re-distribution of Force," 19 November 1917, ADM 137/2704, PRO.
at Stavenger, they would be closer to the Skagerrack and Heligoland than if based at either Rosyth or Scapa Flow, making it easier to intercept any sortie of the High Seas Fleet. The Grand Fleet would also be better placed to support the North Sea mine barrage, making it a much more effective obstacle to German submarines. This plan required additional battleships to maintain a battle squadron on the East Coast of England. A strong force on the East Coast, probably on the Humber, would prevent the Germans from drawing the Grand Fleet south by the threat of a diversionary raid. According to the Admiralty, the addition of more U.S. battleships would just make the difference between sufficient and insufficient forces to make the plan work.\textsuperscript{78}

To gain American acceptance of the plan, the Admiralty attempted to answer any possible objections that could arise to the use of additional U.S. battleships in the North Sea. Although supplying oil to the latest U.S. battleships, which burned oil, would be a problem, there was no shortage of coal in the British Isles. The Admiralty recognized the U.S. fear of attack from Japan that could necessitate retention of the battle fleet in American waters. They proposed that the dispatch of Japanese battle cruisers to European waters would lessen the naval threat to the United States and would remove that objection to moving more U.S.

\textsuperscript{78}Ibid.
battleships to Europe. The Admiralty hoped to persuade the Japanese government to send their ships to Europe with the promise to replace any losses from enemy action.  

To the Navy Department, the remote possibility of acquiring a Norwegian base or the British desire to guard against German raids on England's East Coast did not justify the dispatch of additional battleships to Europe. The threat of German battle cruisers escaping into the Atlantic to ravage U.S. troop convoys did, however, prompt the Navy Department to dispatch three ships of Battleship Division Six of the Atlantic Fleet to Berehaven, Ireland. Besides Division Nine serving with the Grand Fleet and Division Six based in Ireland, no other U.S. battleships were permanently stationed in European waters during the war.  

Along with the decision to send some U.S. battleships to Europe, the Navy Department made other decisions that improved cooperation with the Admiralty. Daniels approved Benson's recommendation for an Allied Naval Council and a joint naval planning section in Sims' office. The Allied Naval Council was intended as an organ to coordinate naval policy and advise the Supreme War Council. Although formed to help prosecute the war, the main contribution of the Allied Naval Council was in drawing up the terms of the

Ibid.  

Simpson, Documents, 328; the story of Battleship Division Six based in Ireland is discussed in Chapter 6.
naval armistice, which provided for the internment of the defeated High Seas Fleet at Scapa Flow. More successful in developing wartime naval policy was the Joint Naval Planning Section in London. Joint planning helped to ensure that Allied naval policy better reflected the interests of the United States and made the U.S. Navy a more equal partner in the naval war.\footnote{Klachko, \textit{Benson}, 95-99.}

The Navy Department also softened its demand for an offensive strategy, removing much of the dissension between the Americans and the British. In a statement of naval policy, Benson made a major concession to the British by recognizing the usefulness of the Admiralty's blockade policy. He recognized that a more effective blockade, which included a North Sea mine barrage, would force the enemy either to confine his submarines or to support the submarines with the surface fleet. The latter action would, the naval leaders hoped, result in the long awaited decisive fleet action.\footnote{Memorandum by Benson, "Naval Policy of the United States", November 1917, Papers of Admiral William S. Benson, Manuscript Division, LC.} The British offered several major concessions. They agreed to make another attempt to close the straits of Dover and they agreed to undertake a joint naval offensive with the Americans.\footnote{Trask, \textit{Captains and Cabinets}, 179-180; the Armistice came before a joint naval offensive was accomplished.} The Benson mission
finally accomplished what had been lacking in Anglo-American naval relations -- communication and compromise.

V

In retrospect, it is easy to criticize Chief of Naval Operations Benson for his stubborn refusal to grant the British request for battleship reinforcements. It must be remembered, however, that most of the naval leadership was imbued with the same rigid Mahanism. Moreover, Benson owed his position to his support for civilian control of the Navy. In 1915 there had been a movement to create a naval general staff. Such a general staff would have effectively removed civilian control from naval operations. After the refusal of the Wilson administration to create such a staff, Republicans introduced legislation to create the Office of Naval Operations in the Navy Department. Daniels managed to have the law amended to limit the jurisdiction of the chief of naval operations to fleet operations only. The General Board of the Navy and the various bureau chiefs remained subject only to the secretary of the navy. Daniels also passed over all of the admirals and appointed a loyal captain, William Benson, as the first chief of naval operations. Benson did not have very much latitude, and Daniels made the final decisions.84

84Klachko, Benson, 27-40.
It is to Benson's credit that he was able to reverse his earlier views after becoming convinced that it was in the national interest to do so. It required courage to detach a unit from the battle fleet because Mahan's concept of fleet concentration was widely regarded as sacred and immutable. Benson's more liberal interpretation of fleet concentration broke precedent and had the long term effect of making U.S. naval policy more flexible. Although many of Mahan's ideas are timeless and govern naval strategy to this day, the Navy Department never again interpreted Mahan's ideas as rigidly as in 1917. Furthermore, Benson's fear of Japanese intentions was legitimate and his concerns about postwar U.S. security were sound and prescient.

Admiral Sims must share some of the blame for the haggling and delay. Sims refused to be sensitive to concerns for national security and national interest. Sims had better relations with the British than with his own country's Navy Department. Doubts about his independence of mind caused the Navy Department to view him as an alarmist. Sims managed to alienate himself from his superiors through his constant criticism. Had he been more forthright with his chief, rather than dealing through Benson's assistant, Captain Pratt, Sims might have won the Navy Department over to his views much earlier.

85As of February, 1941, the U.S. Navy became a two-ocean navy; with battle fleets in the Atlantic and the Pacific.
The main reason questions of naval strategy took so long to iron out does not involve the actions of a particular individual. The United States and Great Britain were former adversaries and had never before cooperated as allies. The two nations had to compromise national interest to some extent for the benefit of the naval war effort. Moreover, the two navies had different traditions and strategic priorities that often conflicted.

The debate over whether to send a division of U.S. battleships to Europe illustrates the conflict over naval strategy among the Allies. Battleships, and how they should be used, were at the heart of the controversy. Before U.S. battleships could play an active role in the naval war, both the U.S. and the Royal Navies had to modify their naval policies in the interest of cooperation.

Coalition warfare cannot be effectively waged without consensus over strategy. The arrival of the U.S. dreadnoughts in Britain is significant because it signaled that consensus had been reached among the naval and civilian leaders of the United States and Great Britain. The arrival of the American ships also gave the coalition a superiority in capital ship strength that could meet any German threat, real or potential. Consequently, the concerted naval efforts of the Allies paid off in 1918. German submarines remained a problem but the U-boat blockade no longer threatened to defeat Britain. Furthermore, the German High
Seas Fleet remained confined and never threatened the superiority of the Allies at sea.
CHAPTER 2

LEARNING THE ROPES: U.S. BATTLESHIPS
WITH THE GRAND FLEET, DECEMBER
1917 TO JUNE 1918

Some historians have portrayed the dreadnoughts of the Grand Fleet as idly swinging at their anchors while the submarine war raged around them.¹ This view implies that the battle fleet was superfluous. Actually, the Grand Fleet was the real power behind the anti-submarine campaign. Had the German High Seas Fleet eliminated the primacy of the Grand Fleet at Jutland, the Germans would have been free to drive all of the antisubmarine craft from the seas. Consequently, the Allies would have lost the submarine campaign and eventually the war. Furthermore, the naval blockade was a major factor in Germany’s defeat, and the Grand Fleet was the ultimate power behind the little warships that enforced the blockade. The ships of the Grand Fleet were far from idle. Constant readiness was required to keep the High Seas Fleet in confinement.

In evaluating the role of the American squadron with the Grand Fleet, Sir Frederick Maurice stated, "There is

little to be gained from studying the problems of tactical cooperation of Allied fleets in battle, because they were never tested in battle." Sir Frederick completely ignored the crucial role that the naval blockade played in bringing about the final defeat of Germany. Because a decisive fleet engagement was not necessary for victory, it was sufficient for the Grand Fleet to remain superior.

Although the American battleships with the Grand Fleet never met the German High Seas Fleet in battle, they were active in North Sea military operations. The American squadron not only helped enforce the blockade, it also escorted important Scandinavian convoys through some of the most hazardous water in the war zone and provided protection for the mine-laying forces in the North Sea. The superiority of the Grand Fleet allowed the protection of North Sea commerce and offensive mining operations while also maintaining the blockade of the German fleet. The addition of the U.S. battleships removed any doubt about the superiority of the Grand Fleet.

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When the U.S. battleships arrived in European waters, a cloud still hung over the British Grand Fleet as a result of the battle of Jutland. The only major fleet action of the war had been disappointingly inconclusive and had revealed serious materiel deficiencies in the British fleet. Jutland revealed the structural weakness of British battle cruisers and the inferiority of British shells. In addition to these handicaps, the war against commerce imposed considerable demands upon Grand Fleet resources. Marder lists three duties that necessitated the detachment of numerous light forces from the Grand Fleet: the use of Grand Fleet destroyers for convoy escort and antisubmarine patrol; the need for destroyers and light cruisers to protect mine-laying operations in Heligoland Bight; and the use of heavy ships to protect Scandinavian convoys from German surface raiders. Because the Germans could choose the most advantageous moment to sortie, most of the Grand Fleet's dispersed units would not have time to rejoin the main fleet before battle.  

The above considerations prompted Sir David Beatty, commander in chief of the Grand Fleet, to draft a memorandum to the Admiralty outlining the limitations imposed on the fleet and his proposed future Grand Fleet policy. Beatty

"Memorandum, Beatty to Admiralty, "Situation in the North Sea," 9 January 1918, ADM 137/1459, Public Record Office; Marder, Dreadnought, 5:133-138."
pointed out that the paper strength of the Grand Fleet was considerably more than its real strength. Some of the deficiencies revealed at Jutland remained. Armor-piercing shells for the main armament capable of penetrating German armor would not be available until the summer of 1918. Furthermore, even though the British possessed nine battle cruisers opposed to the enemy's six, Beatty considered that only the Lion, Princess Royal, and Tiger were fit to be in the line against the German battle cruisers. There was the possibility of another indecisive engagement, or even a defeat, if the Grand Fleet accepted battle on the enemy's terms.5

Beatty also detailed the effect of convoy duty on Grand Fleet strength. The Grand Fleet would go into battle with a screening force that was inferior. Unlike British destroyers and light cruisers, the German light forces had no duties to perform other than fleet operations. The Germans, then, could keep their light forces concentrated and in a high state of readiness. Beatty considered the Grand Fleet superior in battleships, though he believed that some attrition before battle would be inevitable. Because the enemy had the advantage of choosing the time and place to offer battle, he could position numerous submarines and mines on the lines of approach of the British fleet. In

5Memorandum, Beatty to Admiralty, "Situation in the North Sea," 9 January 1918, ADM 137/1459, PRO.
addition, battleships covering the Scandinavian convoy would most likely be unable to join the main fleet in time for battle. Beatty considered them as permanent deductions from the battle line.⁶

Beatty identified two missions for the Grand Fleet: to defeat the enemy fleet and to control communications in the North Sea. With the resources then available to the Grand Fleet, he argued, these two missions were incompatible. The Grand Fleet could only accomplish one at the expense of the other. He concluded:

accepting the principle that trade must be protected, the deduction to be drawn is that the correct strategy of the Grand Fleet is no longer to endeavor to bring the enemy to action at any cost, but rather to contain him in his bases until the general situation becomes more favorable to us. This does not mean that action should be avoided if conditions favor us, or that our role should be passive and purely defensive.⁷

Sir Rosslyn Wemyss, the First Sea Lord, and Sir Eric Geddes, the First Lord of the Admiralty, endorsed Beatty’s policy. Wemyss said that Beatty’s paper “entirely confirms the opinion that I have formed since my advent to the Admiralty.”⁸ The board of the Admiralty drew up a statement of future naval policy that closely followed Beatty’s proposals, which the First Lord submitted to the War

⁶Ibid.
⁷Ibid.
⁸Admiralty Memorandum, Wemyss, 11 January 1918, ADM 137/1459, PRO.
Cabinet. On 18 January 1918, the War Cabinet formally approved the Admiralty policy.\footnote{Minutes, War Cabinet, 18 January 1918, Cab. 23/5, PRO.} Beatty's new strategy was not really new, but in effect was the same prudent strategy he had followed during 1917. What was new about Grand Fleet policy was that Beatty had spelled out the reasons for his strategy, and he had obtained formal approval from the Admiralty and the War Cabinet.\footnote{Marder, \textit{Dreadnought}, 5:134-135.}

Considering the demands on Grand Fleet resources, the addition of a division of U.S. battleships was important and needed. The arrival of the U.S. division reduced the deficiencies in the Grand Fleet in several ways. Having a shortage of trained personnel, the Royal Navy, with the arrival of the U.S. ships, was able to pay off older battleships to release those crews for duty on destroyers. In addition, the arrival of the U.S. battleships gave the British enough capital ship strength to protect the Scandinavian convoys with a heavy covering force. The Admiralty probably would not have done so without the added measure of battleship superiority.

II

Rear Admiral Hugh Rodman, known in the Navy Department as "Uncle Hughey," assumed command of Battleship Division Nine of the Atlantic Fleet at 0940 on 13 November, 1917.
Rodman was a Kentuckian known for his story-telling and his seamanship. Secretary Daniels probably chose Rodman to command the American squadron with the Grand Fleet because of his reputation for expert seamanship, but his engaging wit and talent for spinning a good yarn proved equally important in achieving the smooth integration of his squadron into the British Grand Fleet. Rodman proved an excellent choice for such an important and sensitive post. The commanders of Rodman's battleships were also respected senior officers. Captain Charles F. Hughes, who became chief of naval operations in 1927, commanded Rodman's flagship the New York. Captain Archibald Scales commanded the Delaware, Captain Thomas Washington commanded the Florida, and Captain Henry A. Wiley, future commander in chief of the Atlantic Fleet, commanded the Wyoming.11

Once Secretary Daniels had made the decision to Send Division Nine to European waters, he took very little interest in its operations. Daniels delegated all responsibility for determining the details and conditions of the division's deployment to Benson, the chief of naval

operations. Benson’s deployment orders to Rodman were brief. After joining the British fleet, Division Nine would be under the operational control of the commander in chief of the Grand Fleet. In all other matters the division remained subject to the Navy Department and U.S. Navy organization and chain of command. Rodman’s superior was Admiral William S. Sims, commander in chief of U.S. Navy Forces in European Waters. The Navy Department issued all further instructions to Rodman through Sims’s office in London.

Battleship Division Nine left Lynn Haven Roads at 1500 on 25 November. With the New York in the lead, followed by the Wyoming, Florida, Delaware, and with the U.S. destroyer Manley as escort, Division Nine stood out of the Virginia Capes and set a course for Scapa Flow in the Orkney Islands. The ships sailed in line ahead at night, line abreast during the day. The weather was bad from the

12Daniels’s papers contain very few references to U.S. battleship operations; see, Papers of Secretary of the Navy Josephus Daniels, Manuscript Division, Library of Congress; also, Papers of President Woodrow Wilson, Manuscript Division, Library of Congress.

13Sims originally went to London as only a liaison with the Admiralty, but he soon became the commander in chief of U.S. Forces.

14Rodman explained his wartime orders and the chain of command in testimony before a Senate subcommittee; see, Senate Committee on Naval Affairs, Hearings before the Subcommittee of the Committee on Naval Affairs, 66th Cong., 2nd sess., 7 April 1920, 857.

15See Fig. 1.
beginning of the voyage, and it continued to grow worse. On 26 November, a northwester hit the ships. The storm included sleet, hail, and snow, but it blew itself out.

Three days later, on Thanksgiving Day, the division ran into a severe gale off the Grand Banks. Captain Wiley recalled, "At the height of the gale, it blew as hard as I have ever seen it, and the seas were the worst I could recollect."  

During the gale, on the night of 30 November, the Delaware, Florida, and Manley could no longer keep station, and they lost contact with the division. There was no radio communication because the topmasts of all four battleships were carried away in the storm, putting the radios out of commission. Station keeping was difficult and dangerous. Search lights and navigation lights only worked at intervals because light casings and electrical boxes lost their watertight integrity. To make matters worse, the New York strayed from course because her gyro compass malfunctioned. The malfunctioning compass required constant course corrections from the Wyoming.  

After the storm, the Florida managed to rejoin the division, but Delaware sailed alone until meeting the British light cruiser Constance at the appointed rendezvous.

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off Cape Wrath (aptly named), at the northwest tip of Scotland at 0215, 6 December. At 0200 the following day, the other battleships reached the rendezvous point. The destroyer Manley could not rejoin the division because she ran short on fuel and had to sail directly to her ultimate destination, the U.S. destroyer base at Queenstown, Ireland.¹⁸

At 1200 on 7 December 1917, Battleship Division Nine of the U.S. Navy steamed into the British Grand Fleet base at Scapa Flow in the Orkney Islands. The sound of band music greeted the Americans as they berthed near the British men-of-war. The camouflaged American ships looked strangely out of place among the gray hulls of the British ships. The newcomers also showed the scars of their stormy passage across the North Atlantic. On the upper deck of the Wyoming was the wreckage of her two fifty-foot motor launches. Empty davits revealed where the life boats had been. The other ships of the division were in similar condition.¹⁹

Admiral Rodman promptly paid a call on Admiral Beatty. The treacherous waters of Scapa Flow forced the American admiral to employ a British trawler instead of a ship’s boat to reach Beatty’s flagship, the Queen Elizabeth. Rodman offered Beatty the services of himself, his ships, and his

¹⁸Historical Narrative, Navy Department Historical Section, "History of U.S.S. Delaware During the World War," 2 July 1919, OS File, Subject File 1911-1927, RG 45, NA.

¹⁹Wiley, Admiral from Texas, 185-187.
men. Beatty replied, "Today marks an epoch in the history of England and America!" In stark contrast to the rigid discipline and protocol of most British officers, Rodman reportedly remarked to Beatty, "I don’t believe much in paper work. Whenever you have anything to bring to my attention, come and see me." Bemused, Beatty replied, "I’ll do just that, Admiral." Then the American dreadnoughts officially became the Sixth Battle Squadron of the Grand Fleet.

The U.S. dreadnoughts significantly added to the Grand Fleet’s strength. As mentioned earlier, wartime oil shortages in England necessitated that the U.S. Navy send coal-burning dreadnoughts instead of newer, oil-fueled battleships. The coal-burners were, however, far from obsolete. With the exception of the new Queen Elizabeth and Revenge classes, Britain’s battleships were also coal-burners. Also with the exception of the Queen Elizabeth and

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21 A. A. Hoehling, The Great War at Sea: A History of Naval Action, 1914-1918 (New York: Galahad Books, 1965), 247n. This story may be spurious, but it is in keeping with Rodman’s character. The admiral disliked paper work and he left behind few personal papers.

22 War Diary, Division Nine USS Atlantic Fleet, 14 December 1917, OB File, Subject File 1911-1927, RG 45, NA. In U.S. Naval correspondence, these ships continued to be called Division Nine. In the Grand Fleet they were officially Division Eight and the Sixth Squadron. Informally, they were called "the American squadron," and "the United States squadron."
Revenge class battleships, which were capable of 23 knots and mounted 15-inch/42 caliber Mark I guns, the American battleships were comparable to their British counterparts in terms of speed and armament. Furthermore, the American squadron constituted 12 percent of the British Grand Fleet and one-fourth of America’s modern battleships.

The oldest ship in the American squadron, Delaware, was laid down in 1907 and carried ten 12-inch/45 caliber guns. She was a very successful ship. Capable of 21 knots, Delaware was slightly faster than the newer, oil-fueled Nevada class battleships. Delaware was also the first U.S. battleship capable of steaming at full speed for twenty-four hours without needing repairs. The Delaware design did have some flaws, however. Steam lines passed around the magazine of no. 3 turret, making it impossible to keep the magazine cool enough to ensure that its powder did not become unstable. Another problem was the placement of the secondary battery of 5-inch/50 caliber guns. Their purpose was to defend against massed torpedo boat and destroyer attacks. The secondary batteries of most U.S. battleships were mounted in casemates in the hull at gun deck level.

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25See Fig. 2.
Fig. 2. Delaware Class. Reprinted, by permission, from Siegfried Breyer, Battleships and Battle Cruisers, 1905-1970 (Garden City: Doubleday and Company, Inc., 1978), 197.
During the world cruise in 1907-1909, the fleet learned that the secondary batteries became too wet to use effectively in rough seas. Nevertheless, U.S. battleship design retained secondary batteries at gun deck level until the New Mexico class, laid down in 1915.26

Authorized in 1908 and completed in 1911, the Florida class was essentially a replica of the Delaware class, but with larger machinery spaces to accommodate 4-shaft Parsons turbines. These were the same turbines used in British dreadnoughts. The Wyoming class ships were considerably larger than the Floridas, with over 4,000 tons greater displacement.27 The Wyomings carried twelve newly developed 12-inch/50 caliber guns. In 1908, the Navy Department had examined three alternative designs in response to reports that Britain was developing a 13.5-inch gun: a design with eight 14 inch guns, one with ten 14-inch guns, and another with twelve 12-inch guns. The department chose the 12-inch alternative for the Wyoming class because it was the largest ship that could be docked at most existing docking facilities. Only Pearl Harbor and Puget Sound could have accommodated a ship large enough to carry ten 14-inch guns. The Navy department accepted the Wyoming design as an interim measure and began building the 14-inch gun and


27See Fig. 3.
Fig. 4. Texas Class. Reprinted, by permission, from Siegfried Breyer, Battleships and Battle Cruisers, 1905-1970 (Garden City: Doubleday and Company, Inc., 1978), 206.
enlarging docking facilities so that a better ship could be built later.\textsuperscript{28}

The \textit{New York} class was the ten 14-inch gun design originally developed in 1908-1909.\textsuperscript{29} Authorized in 1910 and completed in the spring of 1914, they carried the new 14-inch/45 caliber guns. The \textit{New York} class reverted to the use of reciprocating engines because turbines did not provide sufficient range to steam from the West Coast to the Philippines. Turbines would have given the ship a range of 5,605 nautical miles as opposed to 7,060 nautical miles with reciprocating engines.\textsuperscript{30} The \textit{New York} class ships were the last coal-burning dreadnoughts built for the U.S. Navy.

III

The Sixth Battle Squadron immediately began the difficult task of integrating itself into the British fleet. Admiral Rodman's willingness to adopt British methods and to take battle orders directly from Admiral Beatty was largely responsible for the ease with which the American squadron was assimilated into the British fleet. Rodman understood that two independent commands and one force simply would not work. Rodman also acknowledged that the British had actual war experience, which the Americans did not. He realized

\textsuperscript{28}Gray, ed., \textit{Conway's}, 114.

\textsuperscript{29}See Fig. 4.

\textsuperscript{30}Gray, ed., \textit{Conway's}, 115.
that, tactically, there was a great deal to learn from the British.\textsuperscript{31}

British signals, radio codes, maneuvering orders, fire control methods, and battle instructions were all entirely new. The Americans had studied the general British signal code while crossing the Atlantic, but could not yet use it proficiently. When Division Nine first arrived in European waters, signals between British and American ships were in U.S. naval code. The Admiralty had provided a few copies of the United States General Signal Book to the Grand Fleet prior to the arrival of the Americans.\textsuperscript{32} The American ships did not receive complete British signal books until after their arrival at Scapa Flow. The signal books included much information the Americans needed to learn, including the use of new ciphers, instructions for distribution of naval intelligence, instructions for entry into defended ports, and information on swept channels.\textsuperscript{33}

The Grand Fleet operated according to an elaborate set of battle orders. Until January 1918, these orders were in two sections: "Grand Fleet Battle Instructions," which laid

\textsuperscript{31}Hugh Rodman, \textit{Yarns of a Kentucky Admiral} (Indianapolis: The Bobbs-Merrill Company, 1928), 268-269.

\textsuperscript{32}Memorandum, Admiralty to Beatty, 22 November 1917, Admiralty Papers, Historical Section: War Histories, ADM 137/1896, PRO.

\textsuperscript{33}Memorandum, Admiralty to Beatty, 6 December 1917, ADM 137/1896, PRO; this memorandum includes instructions on supplying the Americans with signal books, ciphers, and navigation information.
down tactical principles and guidelines; and "Grand Fleet Battle Orders," which were detailed instructions that amplified the Battle Instructions. On 1 January 1918 the battle orders became two separate series: "Grand Fleet Battle Instructions," which dealt with battle only; and "Grand Fleet Maneuvering Orders," dealing with cruising formations and changes of disposition.34

Beatty assigned the Sixth Battle Squadron as one of the fast divisions on the wing, or flank, of the battle line.35 The Fifth Battle Squadron, the other fast division, was stationed in the van, and the Sixth Battle Squadron at the rear of the main battle line. In the event the fleet had to reorient itself quickly in the opposite direction, the Sixth Battle Squadron would become the van and the Fifth Squadron the rear of the battle line. The duty of the van division, besides engaging the enemy van, was to deny enemy light craft a favorable position from which to attack the main fleet with torpedoes and to engage enemy battle cruisers if British battle cruisers were absent. The duty of the rear division was to engage the rear squadron of the enemy line.36

34"Grand Fleet Battle Instructions," 1 January 1918, ADM 116/1342, PRO; Marder, Dreadnought, 4:30-31.

35See Fig. 5.

36"Grand Fleet Battle Instructions," Instructions for the Fifth and Sixth Battle Squadrons, 1 January 1918, ADM 116/1342, PRO.
Fig. 5. Diagram showing the order of the Grand Fleet after deployment. Reproduced from, "Grand Fleet Battle Instructions," 1 January 1918, ADM 116/1342.
In the event the enemy turned away under the cover of smoke and torpedo attack, as at Jutland, Beatty intended to accept the torpedo menace if necessary to keep the enemy from escaping. After the signal "Engage the enemy more closely," the fleet would concentrate on the rear of the enemy battle line. In this situation, Beatty instructed the rear squadron to press the enemy rear while the van squadron contained the enemy van. Beatty warned that the rear squadron would "necessarily come within torpedo range of the enemy and should therefore be in open order, ships being on a line at right angles to the enemy rear." This would allow the rear squadron to present a smaller target to torpedoes than if they maintained line ahead, which presented a broadside target. The rear squadron would use their secondary armament to break up the enemy destroyer flotillas retiring from their attack on the main British line.\(^{37}\)

The Americans were proud of their position in the British battle line, but Beatty did not assign their position because of any great faith in the American ships. Their position only had special importance if they became the van and led the British fleet into battle, which was a remote possibility. Neither did Beatty assign them that position because the rear squadron could come within torpedo range in battle, and he did not wish to place British ships there. The rear squadron would not encounter any greater

\(^{37}\text{Ibid.}\)
danger from torpedoes than the van squadron faced.³⁸ The real reason for their position in the line is more mundane. The Third Battle Squadron of King Edward VIIIs, which the U.S. battleships replaced, had occupied the rear position in the battle line. Besides, Beatty wanted the newcomers in a position where they would not hinder the movements of the main fleet.³⁹

The Sixth Battle Squadron had scarcely finished coaling when the entire fleet put to sea for maneuvers. Coaling the American ships, and cleaning up the mess, took nearly three days. The voyage across the Atlantic had nearly exhausted their coal supplies, and the small size of the British colliers made the coaling process especially slow. The American squadron's first cruise into the North Sea with the Grand fleet was a learning experience. The American lookouts had to learn to distinguish between flotsam and submarine periscopes. Captain Wiley, commander of Wyoming, recalled that "new ships arriving in the war zone usually did a good deal of shooting at submarines which were not submarines. With experience, they saw fewer."⁴⁰ Despite having had little time to learn, the Sixth Battle Squadron

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³⁸Ibid.

³⁹Memorandum, Beatty to Admiralty, "Notes on Conference with the Deputy Chief of the Naval Staff on 25 February 1918," 7 March 1918, ADM 137/1646, PRO.

⁴⁰Wiley, Admiral from Texas, 190-191.
did manage to use the British code and was able to conform to maneuvers.41

On 17 December the Sixth Battle Squadron accompanied the Queen Elizabeth and Iron Duke to Rosyth, Britain's newest dockyard and base of the battle cruiser fleet, near Edinburgh on the Firth of Forth. Beatty's flagship needed an overhaul, and the Iron Duke acted as standby flagship. The American squadron used the opportunity to exercise in British maneuvers and British signaling. Royal Navy signalmen and telegraphists were lent to the ships of the Sixth Battle Squadron to teach British methods. The British sailors did not appreciate the spirit of democracy on the American ships. Royal Navy Yeomen of Signals and Petty Officer Telegraphists resented being ranked with U.S. Navy Petty Officers 1st Class, who were younger and who messed with the enlisted men. Beatty reported to the Admiralty that this system caused the British seamen "Great dissatisfaction and discomfort." In the interest of avoiding disciplinary problems, Beatty requested that the Admiralty grant the signalmen and telegraphists the temporary rank of Chief Petty Officer, which would allow them to take their meals in the Chief Petty Officers mess on

41Rodman, Kentucky Admiral, 268-269.
the American ships. The Admiralty granted Beatty's request, and harmony returned.\textsuperscript{42}

At Rosyth it was not all work and no play, however. The Americans were fortunate to enjoy liberty during the holiday season at Edinburgh rather than in the dreary Orkneys. The enlisted men of the \textit{New York} hosted one hundred and twenty-five poor or orphaned children on board for dinner and festivities. The people of Edinburgh greatly appreciated this act of good will. Many British officers invited their American counterparts to social gatherings and the local people were very hospitable. Besides allowing time to gain knowledge of British methods, the Sixth Battle Squadron’s stay at Rosyth allowed the Americans and British to become acquainted and to build camaraderie.\textsuperscript{43} Along with the \textit{Queen Elizabeth} and \textit{Iron Duke}, the Sixth Battle Squadron left Rosyth on 14 January for Scapa Flow and arrived the next morning.\textsuperscript{44}

On 14 January 1918, the Sixth Battle Squadron engaged in full-caliber individual ship target practice in Pentland Firth. The practice was at long range (almost 12,000 yards) and was intended to simulate North Sea conditions. The

\textsuperscript{42}Cable, Beatty to Admiralty, 6 January 1918, ADM 137/1964, PRO; Cable, Admiralty to Beatty, 7 January 1918, ADM 137/1964, PRO.

\textsuperscript{43}Rodman, \textit{Kentucky Admiral}, 274-275.

\textsuperscript{44}Ship's history, "Historical Sketch of the U.S.S. Florida," Navy Department, Historical Section, OS File, Subject File 1911-1927, RG 45, NA.
results of this first practice firing came as a shock and a
disappointment to the Americans and caused the British to
doubt the proficiency of the American squadron. Only the
New York managed the same rate of fire and spread, or
pattern, of shot that the British ships consistently
accomplished. The New York had average patterns of 464
yards and an average interval between salvos of 48 seconds.
During full-caliber practices of the First, Second, and
Fourth Battle Squadrons of the Grand Fleet in December 1917,
the average rate of fire per salvo was forty seconds or
less, and the average spread was 300 to 500 yards.45

The Delaware had an acceptable average spread of 475
yards, but her rate of fire was a very slow 1 minute, 48
seconds. The most serious deficiency the practice revealed
was the excessive salvo patterns of the Wyoming and the
Florida. The Wyoming's average spread per salvo was 956
yards; the Florida's average spread was a startling 1,131
yards! These excessive spreads were a serious handicap
because dispersion of shot translates into fewer hits on the
target.46

45Report, Rodman to Secretary of the Navy (Operations),
"Report of Battle Practices of Division Nine and Battle
Squadrons of the Grand Fleet," 25 February 1918, OB File,
Subject File 1911-1927, RG 45, NA.

46Ibid.
IV

Admiral Beatty's assessment of the capability of the American squadron after the first six weeks was mixed. In a letter to King George V, Beatty reported that the Americans had worked very hard to become acquainted with British methods, but they were handicapped by their signaling and wireless equipment, which he considered very "primitive." Regarding their first gunnery practice, he stated that two ships did well and two badly. Beatty expressed concern over the excessive spread of broadsides and less than satisfactory rate of fire. He did note, however, that the Americans were working to correct the deficiencies.47

The King wrote to Admiral Beatty and expressed his pleasure that the United States squadron was fitting in. The King seemed to be defending the Americans when he wrote: "I expect they have a great deal to learn, but they will be a useful addition to your fleet."48 The King may have minimized Beatty's concerns about the efficiency of the American ships or was anxious to avoid any political problems if Beatty failed to make the American squadron an integral part of the fleet.


In late January 1918, Sir Rosslyn Wemyss, who had replaced Admiral Jellicoe as First Sea Lord, asked Admiral Beatty if he could detach three dreadnoughts to serve with the Dover Patrol, which protected a mine and net barrage across the Straits of Dover. The Dover Patrol consisted of a force of trawlers and drifters tending the mine barrage, with a monitor and a few destroyers in support. German destroyers had attacked this force the previous spring, and future German raids were probable. Wemyss noted that detaching units from the battle line would depend upon whether the American squadron was proficient enough to take their place. Admiral Beatty replied that the American ships were coming along, but they were not the equivalent of British ships.

The Grand Fleet, including the Sixth Battle Squadron, went to sea on 30 January for maneuvers in the North Sea. The Grand Fleet divided into two opposing forces. "Blue Fleet" comprised the three ships of the Fifth Battle Squadron representing the First, Third, and Fourth Squadrons

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49 Wemyss’s concern for the Dover patrol was justified; on 14 February German destroyers severely mauled the drifters of the Dover Patrol; see Henry Newbolt, Naval Operations, 5 vols. (New York: Longman, Green and Co., 1931), 5:209-220.

50 Letter, Wemyss to Beatty, 28 January 1918, Wemyss Papers, Special Collections, University of California, Irvine, (Microfilm).

51 Letter, Beatty to Wemyss, 31 January 1918, Wemyss Papers, University of California (Microfilm).
of the High Seas Fleet, with the Second Battle Cruiser Squadron in the van and several squadrons of light cruisers, two submarine flotillas, and destroyers in support. "Red Fleet" comprised the remainder of the battle fleet, with the First Battle Cruiser squadron, four cruisers, four light cruisers, and destroyers in support.

As prearranged, the opposing fleets converged upon a point in the North Sea, roughly on the same latitude as Pentland Firth and midway between Scapa Flow and Norway. Once the opposing fleets made contact, the commander in chief directed the exercises by signal. These maneuvers were for practicing cruiser reports and deployments for battle. Rodman reported to the Navy Department that his squadron experienced "Not the slightest difficulty" in communications or conforming to deployments. Rodman did mention that a German U-boat had upset one particular exercise. Two ships of the Fifth Battle Squadron, ahead of the New York, sighted the hostile submarine and one of them attempted to ram it while its conning tower was awash. Destroyers rushed to drop depth-charges, but the submarine apparently escaped. After completing the maneuvers, the fleet returned to Scapa Flow on 2 February.

52 Memorandum, Beatty to Grand Fleet, "Operation EC 1," 28 January 1918, ADM 137/2025, PRO.

53 General Report, Rodman to Secretary of the Navy (Operations), 2 February 1918, OB File, Subject File 1911-1927, RG 45, NA.
In his weekly general report to Secretary Daniels, Rodman made a number of observations about the maneuvers. Regarding the responsibility of force commanders, Rodman reported, "Much more latitude is given these commanders than with us. They are made acquainted with the policy of the commander in chief, and conduct their commands with more freedom of action, and are entrusted with more responsibility." Rodman also noted that station keeping in the battle line was not as strict as in the U.S. fleet. This allowed individual ships the freedom to alter course one point on either side of the base course in order to confuse enemy range-taking during battle. In addition, he commented on the difficulty of operations in North Sea conditions. In particular, hazy weather conditions reduced visibility to the point that judging distances or taking accurate ranges with a range-finder was extremely difficult.54

During the maneuvers, the American squadron evidently performed well enough to suit the commander in chief. The Americans did not, however, inspire Beatty's admiration and respect. Beatty expressed his opinion of the American squadron in a letter to his wife on 5 February:

The American squadron enjoyed themselves greatly while we were out, and did well, and will do better next time. I am sending old Rodman out on an operation of his own, which pleases him and

54General Report, Rodman to Daniels, 9 February 1918, OB File, Subject File 1911-1927, RG 45, NA.
gives them an idea that they are really taking part in the war. I trust they will come to no harm.  

The independent operation that Beatty gave Rodman's squadron was to protect one of the Norwegian convoys from attack by German surface raiders. These convoys were important in ensuring continued Allied trade with Norway, Sweden, and Denmark. Without this trade, the Allies would lose important sources of iron ore, nitrates, and other chemicals. In April 1917, the British began providing an escort of destroyers and armed trawlers. The escort gave adequate protection against U-boats, but in October 1917 a new threat emerged.

German Headquarters decided to assist the U-boat campaign with a surface attack on the Scandinavian trade. The Germans reasoned that such an attack would force the Admiralty to provide better protection for the Scandinavian convoys, thus removing units from anti-submarine patrols. The Germans chose the light cruisers Brummer and Bremse for the task because of their excellent speed (28 knots) and range. Both ships were designed as minelayers, and so

55Letter, Beatty to his wife, 5 February 1918, in, Ranft ed., Beatty Papers, 508.

56Admiralty historical narrative, "The North Sea," postwar undated, ADM 116/3399, PRO; during these months, 6,475 vessels were convoyed with a loss of 1.15 percent.

carried only four 5.9-inch guns instead of the usual eight of other German light cruisers.\textsuperscript{58}

At 0600 on 17 October, \textit{Strongbow}, one of the escorting destroyers for the westbound Scandinavian convoy, sighted two strange ships approaching. Before the British destroyer could even come to action-stations, 5.9-inch shell fire from \textit{Bremmer} and \textit{Bremse} reduced it to a sinking hulk. The German cruisers then proceeded to fire on \textit{Strongbow}'s helpless survivors. The convoy's remaining destroyer, \textit{Mary Rose}, was cruising ahead of the convoy and heard firing astern. Rushing to the scene, \textit{Mary Rose} engaged the German cruisers in a desperate but futile attempt to save the convoy. \textit{Mary Rose} suffered the same fate as \textit{Strongbow}, and nine of the twelve freighters in the convoy were sunk.\textsuperscript{59}

On 12 December, the Germans repeated their success with another raid. The German light cruiser \textit{Emden} accompanied two half flotillas of Germany's newest destroyers to the Dogger Bank. \textit{Emden} remained behind and the two half flotillas separated to hunt independently. At 0930, the Third Half Flotilla, consisting of four destroyers, sighted the eastbound Scandinavian convoy and engaged the two escorting destroyers, \textit{Partridge} and \textit{Pelley}. The British destroyers attempted to draw the enemy away from the convoy,

\textsuperscript{58}Newbolt, \textit{Naval Operations}, 5:153; Newbolt erroneously reports a speed of 34 knots for \textit{Bremmer} and \textit{Bremse}; see, Gray, ed., \textit{Conway's}, 162.

leaving the four armed trawlers to defend them. Three German destroyers followed and one remained to attack the convoy. Early in the action, the Germans sank Partridge. Pellew escaped in a rain squall, the only ship in the convoy to survive. The trawlers never stood a chance against the modern German destroyers. The Germans sank all five, plus the six freighters in the convoy.\[^{60}\]

The two disasters to the Scandinavian convoy had serious repercussions in Britain. The Admiralty’s failure to protect the Scandinavian convoys had precipitated Sir John Jellicoe’s downfall as First Sea Lord and a reappraisal of Grand Fleet Policy.\[^{61}\] In November, after the first big raid on the Scandinavian Convoy, the First Lord told the House of Commons that it was the responsibility of the commander in chief of the Grand Fleet to safeguard the convoy. Consequently, Beatty felt obliged to detach a battleship division on a regular basis to cover the Scandinavian convoys.\[^{62}\]

Beginning in January 1918, the battleships of the Grand Fleet engaged in the business of convoy escort. The submarine crisis had forced the U.S. Navy to abandon its


\[^{62}\] Notes, Beatty to Admiralty, "Notes on conference with D.C.N.S. on 25 February 1918," 7 March 1918, ADM 137/1646, PRO.
policy of fleet concentration. Now the threat of surface raiders forced the Grand fleet also to depart from the doctrine of fleet concentration. Paul Halpern points out that detaching a division of the battle fleet to cover the convoys was a calculated risk because it presented the Germans with the possibility of what they had long hoped to accomplish: to concentrate overwhelming force against a portion of the Grand Fleet. To guard against this threat, the Admiralty became even more dependent on the ability of naval intelligence to detect German moves.  

At around 2100 on Wednesday, 6 February, the Sixth Battle Squadron stood out from the east channel of Scapa Flow and set a course for the North Sea rendezvous with the eastbound Scandinavian convoy. The American battleships were in company with their screening destroyers and the Third Light Cruiser Squadron with their screening destroyers. The light cruisers and their screen constituted "Force A," and the battleships with their screen was "Force B." This force provided cover, or support for the convoy and its light escort. Operational doctrine consisted of always remaining to the south or between the convoy and the German naval bases. The covering force would sight the convoy at daybreak, at dusk, and at some prearranged time.

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63 Newbolt, Naval Operations, 5:194; Newbolt comments that this radical departure from doctrine shows the extent that the war on commerce engaged naval resources; Halpern quotes Newbolt in his discussion of the Scandinavian convoy, see, A Naval History, 379.
during the day. Upon arrival near Norway, the covering force would cruise to the southward until a returning convoy was ready for the voyage to the British Isles. The entire covering force for operation "Z6" was under the command of Admiral Rodman. This was the first time that British men-of-war had ever served under an American admiral.  

Early the next morning, Rodman's force picked up convoy "OZ6." There were around thirty ships in the convoy, and its light escort consisted of the armed auxiliary Duke of Clarence and eight or ten armed trawlers. The voyage to Norway was pleasant and uneventful. The convoy enjoyed excellent weather and good visibility, which is quite unusual for the North Sea in that season. The only excitement that day was the sighting of a smoke shell descending in the southwest, presumably dropped from an aircraft to attract their attention, though the purpose may have been to indicate the position of other forces.  

Friday, 8 February, was a very eventful day. At daylight, as the ships neared Norwegian territorial waters, men on the battleships could hear firing from the northeast;
at least four shots from a 4 or 5-inch gun. One of the light cruisers also heard the firing. The battleships steamed in the direction of the firing, but failed to find anything. The source of the firing remains a mystery.  

The covering force parted company with the eastbound convoy and remained outside of Norwegian territorial waters to wait for the return convoy ("HZ7"), which was sailing from Selbiorns Fiord. While maneuvering to the south of Stavenger, the battleships were sailing in line abreast, in open order. At 1322 the New York hoisted the green submarine warning flag, then annulled it at 1323 when one of the screening destroyers, Valorous, reported porpoises. Less than five-minutes later the Wyoming also gave the signal and reported a submarine in sight. At about 1327 the Florida spotted a large wake, assumed to be a submerged submarine, crossing the bow from port to starboard about 500 yards ahead. The Florida veered out of the line and crossed this wake in an unsuccessful attempt to ram this submarine. A destroyer followed in the Florida's wake and dropped a depth-charge.

A few minutes later, after straightening out her course, the Florida's bridge and foretop spotters reported the turbulence of a torpedo that passed 100 yards abeam. At

General Report, Rodman to Secretary of the Navy (Operations), 9 February 1918, OB File, Subject File 1911-1927, RG 45, NA; memorandum, Rodman to Beatty, "Report Regarding Convoy Duty," 10 February 1918, ADM 137/877, PRO.
1353 the officer in the spotting top of the Delaware reported a torpedo on the starboard bow crossing the ship's track. The Delaware turned hard-to-starboard and avoided the torpedo, which passed ahead of the ship by several hundred yards. The spotter then reported the wake of a torpedo or periscope coming from the same direction as the first torpedo. With the disturbance steadied on the her port-quarter, the Delaware fired a 3-inch round that went over the mark by 200 yards at a range of 2,000 yards. About this time, one of the destroyers fired a depth charge at the wake.

The Florida and the Delaware had just regained position with the New York and the Wyoming when the Florida spotted another torpedo wake passing between the Florida and the Wyoming. This wake passed ahead of the ships. At 1408 the Florida's maintop spotter sighted twin-periscopes at a distance of 500 yards on the starboard beam, but they submerged before the Florida's guns could bear. A few moments later, the foretop spotter sighted another torpedo passing astern from the general direction of the periscope sighting. Meanwhile, the Delaware's lookout spotted a torpedo wake dead ahead. The Delaware turned hard-to-port and passed just inside of the wake. The Delaware then rejoined the squadron. En route, the Delaware sighted suspicious objects floating 800 yards off the port-beam and
directed the destroyers to investigate. The destroyers investigated and reported finding fishermen's floats.\(^{67}\)

The remainder of the voyage was without mishap. The covering force left the westbound convoy at 1730 on 9 February and proceeded to Scapa Flow, arriving at around 0400 on Sunday.\(^{68}\)

Rodman was convinced that U-boats had attacked his ships that day. He wrote Captain A.H. Scales and Captain Thomas Washington letters of commendation for the skillful handling of their ships during the torpedo attack. In his weekly report, Rodman reported his conviction that two torpedoes were fired at the Florida and two at the Delaware. He further stated that "These vessels owe their safety to their vigilance, prompt and skillful maneuvering." In his report to Beatty, Rodman also praised the skillful and efficient handling of the destroyers. Neither Rodman, nor

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\(^{67}\)Report, H.A. Scales (Delaware) to Rodman, "Submarine attack on Delaware, February 8th, 1918," undated, OS File, Subject File 1911-1927, RG 45, NA; Thomas Washington (Florida) to Rodman, "Submarine attack on February 8, 1918," 10 February 1918, OS File, Subject File 1911-1927, RG 45, NA.

\(^{68}\)Historical Narrative, "Historical sketch of the U.S.S. Florida, undated, OS File, Subject File 1911-1927, RG 45, NA; report, Rodman to Secretary of the Navy (Operations), 9 February 1918, OB File, Subject File 1911-1927, RG 45, NA; report, Rodman to Beatty, "Report Regarding Convoy Duty," 10 February 1918, ADM 137/877, PRO.
Beatty, nor the Navy Department appear to have questioned the validity of the submarine sightings.⁶⁹

Captain Wiley of the Wyoming, however, was never convinced that any submarines really existed that day. His lookouts never saw the torpedoes that the Florida and the Delaware reported. In his memoir, Wiley recalled, "I think probably the first alarm was caused by a porpoise, which, bobbing up and down, might easily look to a newcomer like the conning tower of a submarine. However that may be, and serious as it was at the time, when we got settled down I thought I would split with laughing."⁷⁰ Wiley was correct in believing that frolicking porpoises were the cause of the alarm. Two German submarines, U-80 and U-82, were in the vicinity, but neither sighted any warships nor made any attacks that day.⁷¹

The day after the Americans returned from convoy duty, the Texas, sister ship of the New York, joined the Sixth Battle Squadron. The Texas was under the command of Captain

⁶⁹Report, Rodman to Secretary of the Navy (Operations), 9 February 1918, OB File, Subject File 1911-1927, RG 45, NA; report, Rodman to Beatty, "Report Regarding Convoy Duty," 10 February 1918, ADM 137/877, PRO.

⁷⁰Wiley, Admiral from Texas, 201.

⁷¹War Journals, U-80 and U-82, 8 February 1918, Microfilm Publication T-1022, Records of the German Navy, RG 242, College Park Branch, NA; also, the official German history of naval operations in the North Sea, which includes detailed accounts of individual U-boat operations and even unsuccessful attacks on warships, does not mention any encounter; see Walther Gladisch and Otto Groos, Der Krieg in der Nordsee, 1918, Vol. 7 (Berlin: E.S. Mittler, 1930).
Victor Blue, formerly the chief of the Bureau of Navigation. Not long after joining the Grand Fleet, Rodman had requested that the Navy Department send an additional battleship to join the Sixth Battle Squadron. Rodman had explained that this would allow the American ships to conform to British organization. The Grand Fleet always maintained a high state of readiness. All ships continually remained on four hours notice to put to sea, and frequently at one and one-half hours notice. Without regular refits, the ships could not maintain this state of readiness. The British kept an extra ship in each squadron to use as a substitute when any ship in the squadron required repairs. In this way, each squadron retained its strength even when one ship was absent for an overhaul.\textsuperscript{72}

After Rodman made the request for the addition of the Texas, both Benson and Sims conferred with the Admiralty about relieving the entire division sometime during the summer of 1918 to return to the United States for overhaul, and replacing it with another division. The Admiralty agreed, pointing out the lack of labor and repair facilities in Britain. Furthermore, the British expressed their belief that more than one U.S. battleship division could eventually

\begin{footnotesize}
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\item \textsuperscript{72}Memorandum, Rodman to Commander-in-Chief, Atlantic Fleet (Mayo), "Division Nine: Synopsis of events since departure from the United States," 19 December 1917, OB File, Subject File 1911-1927, RG 45, NA; also, Cable, Sims to Benson, 20 December 1917, OB File, Subject File 1911-1927, RG 45, NA.
\end{itemize}
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operate in European waters. The Admiralty seemed confident that Norway would eventually enter the war and hoped that a major fleet base in Norway would become available to the allies. The addition of a Norwegian base would provide the facilities to support a larger part of the U.S. fleet.\textsuperscript{73}

In early January, Sims apparently resubmitted Rodman's request that the Texas join the Sixth Battle Squadron. Benson informed Sims that the Department did not consider the need for a five-ship division as valid because it was counter to U.S. battleship organization. The Department could send another battleship, but only if a real need existed. Benson stated that the Department would prefer to send another complete division to the Grand Fleet, if the supply situation were adequate, rather than break its organization.\textsuperscript{74}

Sims responded by pointing out the need for another ship with 14-inch guns at the American end of the battle line. Otherwise, if the New York required repairs, there would be no ship with 14-inch guns in the squadron. Therefore, until the New York returned, the Sixth Battle Squadron would be under-gunned. Sims explained that there

\textsuperscript{73}Memorandum, Sims to Rodman, 20 December 1917, TD File, Subject File 1911-1927, RG 45, NA; the Admiralty Plans Division and American Planning Section in London drafted several proposals that included basing U.S. battleships in Norway, but U.S. planning never went any further than that.

\textsuperscript{74}Cable, Benson to Sims, 5 January 1918, OB File, Subject File 1911-1927, RG 45, NA.
was no need for the Navy Department to send an entire additional U.S. battleship division. The presence of an additional U.S. battleship division would place too great a strain on supply and repair facilities.

Sims also reported that the Admiralty had reversed their earlier position about relieving Rodman's division to return to the United States for overhaul. After consulting with Beatty, the Admiralty agreed that it was better for Division Nine to remain with the fleet, rather than having another division replace it. The Admiralty considered the time needed to train another division in British methods was not worth the benefit of not having the burden of refitting the American ships.\footnote{Cable, Sims to Benson, 8 January 1918, OB File, Subject File 1911-1927, GR 45, NA.} Sims's arguments apparently convinced the Navy Department. The Texas began preparations for service overseas on 19 January, and sailed for Scapa Flow on 30 January.\footnote{Navy Department Historical narrative, "Historical sketch of the U.S.S. Texas during the World War," 4 September 1923, OS File, Subject File 1911-1927, RG 45, NA.}

At the end of February, Rodman requested another change in the composition of the Sixth Battle Squadron. Rodman admitted that his division had enough ships to carry out their mission, but the American battleships still could not conform to Grand Fleet policy. The practice of the Grand Fleet was to concentrate the fire of two or more ships on
one of the enemy’s ships.\textsuperscript{77} Concentrated fire had to be of the same caliber for spotting purposes. He considered that the position of the Sixth Battle Squadron at the rear or van of the battle line made it especially important to follow the British method of fire concentration.\textsuperscript{78}

Rodman suggested that if possible, all of his ships should be of the same caliber and muzzle velocity. The ideal squadron would comprise the \textit{New York}, \textit{Texas}, \textit{Oklahoma}, and \textit{Nevada}; all of the same size and gun-caliber, with the \textit{Wyoming} as a spare. Rodman did recognize that the oil shortage would probably preclude the participation of the \textit{Oklahoma} and the \textit{Nevada}. In that case the \textit{Arkansas}, sister ship of the \textit{Wyoming}, should replace the \textit{Delaware}, leaving the \textit{Florida} as a spare. This disposition would give the squadron two-pairs of ships with the same caliber and range. Grand Fleet policy discouraged a fighting range of less than 16,000 yards because of the danger of torpedoes. Neither the \textit{Delaware} nor the \textit{Florida} had a range of over 19,000 yards after the ballistic correction for colder temperatures was taken into account. Therefore, the two ships could not engage at the extreme ranges of the other ships.

Rodman admitted he was "in the dark" about intentions to increase the battleship force serving in European waters.

\textsuperscript{77}See Fig. 6.

\textsuperscript{78}"Grand Fleet Battle Instructions," Distribution of Fire, 1 January 1918, ADM 116/1342, PRO.
Fig. 6. Diagram of the normal distribution of fire for the Grand Fleet. Reproduced from, "Grand Fleet Battle Instructions," 1 January 1918, ADM 116/1342.
with another division. He urged that if the Navy Department contemplated such a move, "then the sooner the better," because it would take a month to six-weeks to break in another ship. In conclusion, Rodman asked that the Department not send either the North Dakota or the Utah because in his opinion they had unreliable engines.79

A British liaison officer to the Sixth Battle Squadron, Captain H.E.F. Aylmer, forwarded a copy of Rodman’s memorandum to Beatty via the captain of the fleet. Aylmer reported the rumor that more ships could join the American squadron. He spoke in favor of the Arkansas’s replacement of the Delaware and noted that the Florida, although armed with the same caliber of guns, had greater elevation, and therefore greater range than Delaware. Aylmer also mentioned that the principal factor governing the time required to train new ships was the training of wireless/telegraph operators. He stated that all other departments of the American ships learned British methods rapidly, but even the best wireless operators needed at least two months experience before gaining sufficient competence.80

79 Memorandum, Rodman to Secretary of the Navy, 28 September 1918, OB File, Subject File 1911-1927, RG 45, NA. Rodman sent a summary of the above to Sims in a memorandum of the same date, also in the OB File.

80 Memorandum, Captain Aylmer, R.N. to Captain of the Fleet, 2 March 1918, ADM 137/1898, PRO.
In a cable to Benson, Sims supported Rodman's request for the addition of the Arkansas to the Sixth Battle Squadron. He did not, however, support the idea of sending any oil-burners, because of the short supply of oil in Britain. Sims reiterated Rodman's arguments and suggested that the Arkansas be fitted with paravanes that had heavier underwater castings and fittings before her departure. Paravanes were devices invented during World War I as a defense against mines. The bow wave of a ship would push the mine aside and the mooring wire was deflected onto the tow-wire of the paravane and into a wire-cutter. The detached mine would then float to the surface where it could be destroyed by rifle-fire. Heavier paravane fittings were needed because the fittings the Navy Department had earlier provided to the Sixth Battle Squadron had proven to be inadequate in North Sea conditions.\textsuperscript{81}

Sims followed up the next day with a memorandum to Secretary Daniels. He maintained that the Grand Fleet policy of concentrating fire by pairs was very practical. Recent experimental firing with Marlborough and Iron Duke had proven its efficacy. Sims explained that concentrated fire from pairs of ships with the same gun-caliber, range, and muzzle velocity greatly facilitated the exchange and

\textsuperscript{81}Cable, Sims to Benson, 10 March 1918, OB File, Subject File 1911-1927, RG 45, NA.
combination of fire control data.\textsuperscript{82} Despite the advice of Sims and Rodman, the Navy Department did not decide to dispatch Arkansas for service with the American squadron until mid-July.\textsuperscript{83}

On 16 February at 0100, the Grand Fleet, including the Sixth Battle Squadron, sailed to reenforce the Fourth Battle Squadron, which was supporting a Scandinavian convoy. Naval intelligence indicated that the German battle cruisers had sortied, and Beatty hoped to intercept them. The operation took place during a severe gale. Because of the importance of the mission, all ships held their course despite the heavy weather, and were thus prevented from maneuvering to lessen the effects of the storm.\textsuperscript{84} Sometime after 0330, heavy seas damaged the Delaware's steamer, a sailer, and two whaleboats. The starboard gangway ladder and gratings were destroyed and there was considerable damage to the ventilators. Later, the Delaware had more serious problems. Without warning the dynamos stopped, cutting off all electrical power. Engine room blowers stopped, forcing the ship to reduce speed to 12 knots. Most of the ship was in

\footnotesize{\textsuperscript{82}Memorandum, Sims to Daniels, 11 March 1918, OB File, Subject File 1911-1927, RG 45, NA.}

\footnotesize{\textsuperscript{83}Navy Department Historical Narrative, "Historical sketch of the U.S.S. Florida," undated, OS File, Subject File 1911-1927, RG 45, NA.}

\footnotesize{\textsuperscript{84}Memorandum, Rodman to Sims, "Statement of Naval accomplishments for publicity purposes," 23 May 1918, OB File, Subject File 1911-1927, RG 45, NA.}
darkness and communications limited to voice tubes. After a half-hour the dynamos were repaired and normal conditions resumed. The cause of the power failure had been a small amount of water that leaked through a voice tube into the dynamos. The power failure was a great inconvenience, but in battle it could have been fatal.85

During the operation, the fleet suffered more than just material loss. Heavy seas washed an enlisted man overboard from New York, and he was lost. In addition, the British ships lost a sublieutenant and ten or twelve men to the sea.86 Admiral Rodman recalled the difficulty of making no attempt to save a man washed overboard: "This is in the balance against stopping, losing time and position, whereby the main force might lose strength in case of an engagement, or when slowing down might cause the loss of the ship by an attack of a hostile submarine."87 The operation must have been frustrating for all concerned. The fleet failed to find the German battle cruisers, and so turned back for Scapa Flow at 1400. High winds and heavy seas continued until the fleet reached the shelter of land. At midnight

85Report, Scales (Delaware) to Rodman, 19 February 1918, OS File, Subject File 1911-1927, RG 45, NA.

86General report, Rodman to Secretary of the Navy (Operations), 23 February 1918, OB File, Subject File 1911-1927, RG 45, NA.

87Rodman, Kentucky Admiral, 286.
the American squadron proceeded through Hoxa Sound to its anchorage.\footnote{Report, Scales (Delaware) to Rodman, 16 February 1918, OS File, Subject File 1911-1927, RG 45, NA.}

During late February the Sixth Battle Squadron carried out several target practices, which had disappointing results. The squadron, less the \textit{New York} which was refitting, exercised at torpedo defense practice on 19 February. This involved the secondary battery of 5-inch guns. Also on the same day, the \textit{Texas} carried out individual full-caliber firings with reduced charges. Rodman reported that their shooting was "... not up to the standard of excellence that would be expected from ships which had made such fine records during the past year." He listed reasons for the unsatisfactory performance as the large turnover in personnel and the fact that the exercises were carried out in actual war conditions. Practices with the Atlantic Fleet were held in favorable conditions and on a course with a previously determined range.\footnote{General Report, Rodman to Secretary of the Navy (Operations), 23 February 1918, OB File, Subject File 1911-1927, RG 45, NA.} Rodman later commented on the performance of the \textit{Texas}: "In spite of her four years commission, that she has now the gunnery trophy, and was flying the efficiency pennant, \textit{she was not ready to fire under war conditions.}" Rodman felt that the poor performance of the \textit{Texas} and the other ships in his division.
was a commentary on the U.S. system of gunnery practices, which emphasized a good score over actual war readiness.\textsuperscript{90}

The efficacy of the American battleships came up during a conference between Beatty and Rear Admiral Fremantle, the deputy chief of naval staff. The Admiralty was concerned about the possibility of a German naval offensive in the English channel in conjunction with protecting the German right flank when the western land offensive resumed. The Admiralty hoped that Beatty could release three Superb class battleships from the Grand Fleet to reinforce the Third Battle Squadron, which then consisted of Dreadnought, a King Edward VII class, and an old light cruiser.

Beatty argued against detaching any capital ships from the fleet. He pointed out that having to protect the Norwegian convoys required continually keeping a division, and sometimes an entire squadron, at sea. Additionally, a battleship division was continually refitting. Furthermore, Beatty considered that the Grand Fleet must begin any battle with a large superiority of forces because losses, presumably to destroyer and submarine ambushes, had to be expected. He added that if the danger of a German offensive was great, then the Admiralty should bring the entire Grand Fleet further south to Rosyth and possibly station an advanced force on the Humber. Nevertheless, Beatty pointed

\textsuperscript{90}General Report, Rodman to Secretary of the Navy (Operations), 2 March 1918, OB File, Subject File 1911-1927, RG 45, NA.
out the added problems to fleet concentration if the Grand
Fleet moved from Scapa Flow.

When the D.C.N.S. inquired about the efficiency of the
American battleships, Beatty replied that the Admiralty
could not consider them as the equivalent of a British
Battle Squadron. He felt that their tactical efficiency was
fine and that they learned rapidly, but their gunnery was
"distinctly poor and disappointing." Beatty expressed faith
that they would improve. Besides, he mentioned, the
Americans were stationed in a position of the battle line
where they were unlikely to interfere with the movements of
the fleet.91

In late March 1918, the First Sea Lord again pressured
Admiral Beatty to release three dreadnoughts from the Grand
Fleet. He was concerned about the possibility of a raid on
the East Coast of England and the need to reinforce the
Dover Patrol. Beatty still contended that the U.S.
dreadnoughts did not have enough wartime experience to
replace fighting units, even after four months in the war
zone. Wemyss replied, "I would not think of pressing you to
reduce your force to anything smaller than you think is
absolutely necessary. It is, of course, a great

91Memorandum, Beatty to Admiralty, "Notes on Conference
with the Deputy Chief of the Naval Staff on 25 February
1918," 7 March 1918, ADM 137/1646, PRO.
disappointment that the Americans are not coming along quickly enough."  

Beatty was always careful to conceal these thoughts from the Americans. He evidently did not want to harm the morale of the Sixth Battle Squadron or jeopardize his working relationship with Admiral Rodman. Nevertheless, many American officers felt inferior in the company of their British counterparts. Captain Wiley, commander of the Wyoming, said "We were all green, in new and swift company. I wanted everything to go well. We were under scrutiny." Admiral Rodman was especially heavy-handed in his efforts to live up to the British standard. On one occasion during maneuvers, the Texas was attempting to take in her paravanes when they got snarled up and she had to drop out of formation. Admiral Rodman ordered the other ships to close up and then reverse order of formation. In the process, the Wyoming overran its position and ran up on the New York. Admiral Rodman was so furious that he used the signals to curse Captain Wiley and the Wyoming in plain view of the rest of the fleet. Upon returning to Scapa Flow, Wiley went aboard the flagship and told the admiral that if such humiliation was necessary, then Rodman should replace him.

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92 War Cabinet 377, 29 March 1918, CAB 23/2, PRO.

93 Both Halpern and Marder comment on the fine working relationship between Beatty and Rodman despite Beatty’s poor appraisal of the American’s gunnery.

94 Wiley, Admiral from Texas, 192.
with another captain. Rodman softened and said that he was so filled with ambition that it made him harsher than he realized. He explained that he was not ambitious for his own benefit, but he did not want to have a squadron that was inferior to any British squadron.  

The Sixth Battle Squadron, with a screen of eight destroyers, put to sea again at 2330 on 8 March providing cover for another Scandinavian convoy. At 0715 the next morning, the battleships rendezvoused with convoy "0Z15," again with the auxiliary steamer Duke of Clarence and two destroyers as an escort. The Second Light Cruiser Squadron from Rosyth, consisting of the Sydney, Dublin, Southampton, Melbourn, Birmingham, and four destroyers of the 13th Flotilla that also joined the covering force at that time. Unlike the American's first convoy duty, the weather was very heavy, and progress was slow. The next evening, six hours behind schedule, the convoy proceeded alone for the final thirty-five miles to Stavenger. Rodman received word that the return convoy would meet them at 0900 the next morning. Because there was heavy fog that night, Rodman assigned courses and speeds for the night and a rendezvous scheduled for 0600.  

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95 Ibid., 198-199.
96 Orders, Beatty to Rodman, "Operation 'Z.15'," 6 March 1918, ADM 137/877, PRO.
97 Report, Rodman to Beatty, 13 March 1918, OB File, Subject File 1911-1927, RG 45, NA; also, General Report,
About half an hour before reaching the morning rendezvous, the New York hoisted a signal flag ordering a change of course to avoid a thick fog bank that lay ahead. The result was very nearly a catastrophe. The fog closed in before all of the other ships could receive and acknowledge the change of course. In the following confusion, ships of the Sixth Battle Squadron and the light cruiser squadron narrowly escaped collision. Rodman credited the quick and efficient handling of the individual ships with saving the day. The day was not over, however, nor had the fog lifted. A radio signal went out to order the entire force to steer west, but the Texas, Florida, and Wyoming, along with four destroyers, failed to receive it and became separated from the rest of the force. Later, the weather cleared somewhat and the light cruiser squadron scouted for, and found, the convoy. The visibility continued to be poor, and so the missing battleships could not rejoin the force until the next morning. Fog was not the only hazard, however. Both the Florida and the Delaware reported periscope sightings, and the force received two radio reports that warned of U-boats in the area that direction-finding stations had detected. In addition, a floating mine was destroyed by

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Rodman to Secretary of the Navy (Operations), 16 March 1918, OB File, Subject File 1911-1927, RG 45, NA.
gunfire. The Sixth Battle Squadron finally returned to Scapa Flow at 1730 on Tuesday, 13 March.98

Two days after the American battleships returned from convoy duty, Benson cabled Sims to express concern over the Admiralty’s policy of using modern battleships to escort the Norwegian convoys. Benson emphasized that he did not want to spare the American squadron any of the risks that other ships in the Grand Fleet faced, but he could not understand how and why the British would utilize battleships in a way that was "... so contrary to our present conception of the general strategy of the Grand Fleet and reason for its being." Benson noted that the practice also departed from the "fleet-in-being" doctrine that guided U.S. naval strategy -- to engage the enemy battle fleet. He asked if the risk was actually worth the gain and if the Allied superiority in dreadnoughts warranted the risk. Would it not be wiser to use obsolete battleships for the task? Benson ventured that perhaps the greater speed and better compartmentalization of dreadnoughts was the reason for using them. He stated that if a shortage of ships was the reason for using dreadnoughts, then the Department would rather send less valuable predreadnoughts into the war zone.

98Report, Rodman to Beatty, 13 March 1918, OB File, Subject File 1911-1927, RG 45, NA; General Report, Rodman to Secretary of the Navy (Operations), 16 March 1918, OB File, Subject File 1911-1927, RG 45, NA.
for that duty. Benson was correct in observing the radical departure from both U.S. and British naval doctrine that the use of dreadnoughts as escorts entailed, and his concern for the safety of battleships operating so far from the support of the fleet was certainly justified.

Sims replied by defending the Admiralty’s position. He explained that the use of dreadnoughts was the only way to safeguard the Norwegian convoys against surface-attack and said the convoys were important enough to incur some risks to the capital ships. Sims seemed to have great faith in British naval intelligence. He calmed Benson by assuring him that the fleet always reenforced the battleship escort when there was knowledge of enemy forces operating in Heligoland Bight. Sims recommended that the department not send predreadnoughts for the duty because they were more vulnerable than modern ships and the additional shipping needed for their supply would be prohibitive. Sims’s reply evidently satisfied Benson because the Navy Department did not take the matter any further.100

On Wednesday, 17 April, the Sixth Battle Squadron sailed on what would prove to be their last mission to protect the Scandinavian convoys. The Grand Fleet, including the American squadron, had just moved to their new

99 Cable, Benson to Sims, 15 March 1918, CB File, Subject File 1911-1927, RG 45, NA.

100 Cable, Sims to Benson, 17 March 1918, CB File, Subject File 1911-1927, RG 45, NA.
fleet anchorage at Rosyth four days previously. The move
south put the Grand Fleet in a more favorable position
strategically. At 0900 the battleships proceeded out of the
Firth of Forth in company with their screen, which included
the flotilla leader Parker and five "R" class destroyers.
The Delaware was in drydock for repairs and installation of
paravane gear, and so did not join the squadron for the
mission. The Fourth Light Cruiser Squadron, including the
Calliope, Cambrian, and Caroline, had already joined convoy
"OZ25" when the battleships left Rosyth.101

Not long after leaving Rosyth, the Texas reported
sighting a periscope and opened fire. Two of the destroyers
quickly dropped several depth-charges, but without any
apparent results. The destroyers could not have hit the
submarine because it did not exist. The Texas had been
shooting at a phantom.102 Before long, however, a more
tangible enemy, the sea, rose against the squadron and their
small escorts. During the first night at sea, a gale hit
with such strong seas that the force had to slow for the
safety of the destroyers. The gale continued during

101Orders, Beatty to Rodman, "Operation 'Z.25'," 15
April 1918, ADM 137/1990, PRO; and, Historical Narrative,
"Historical Sketch of U.S.S. Florida," undated, OS File,
Subject File 1911-1927, RG 45, NA.

102U-boat War Journals, 17 April 1918, Microfilm
Publication T-1022, Records of the German Navy, 1850-1945,
RG 242, College Park Branch, NA; none of the U-boats
operating in the area reported sighting any warships.
Thursday, 18 April, and so progress was very slow. Progress was also slow for the convoy.

When the battleship force finally sighted the first stragglers at daylight on Friday, the convoy stretched sixty miles in length and was twenty-four hours behind schedule. The battleships also first sighted the light cruisers on Friday morning. The return convoy sailed at noon on Friday, 19 April, just as the gale was beginning to blow itself out. The Sixth Battle Squadron accompanied the convoy until 2000, when the commander-in-chief ordered them by signal to return to Rosyth. The Americans arrived at Rosyth at 1625 on Saturday, 20 April.\textsuperscript{105}

v

The Scandinavian convoy, and its covering force of first-rate battleships, was too attractive a target for the German Staff to pass up. The commander in chief of the High Seas Fleet, Admiral Reinhard Scheer, explained the advantages of using the entire battle fleet against the Scandinavian convoy: "A successful attack on such a convoy would not only result in the sinking of much tonnage, but would be a great military success, and would bring welcome relief to the U-boats operating in the Channel and round England." At 0600 on 23 April, Scheer's battle squadrons

\textsuperscript{105}Report, Rodman to Beatty, 20 April 1918, ADM 137/877, PRO; General Report, Rodman to Secretary of the Navy (Operations), 20 April 1918, OB File, Subject File 1911-1927, RG 45, NA.
sailed on what would be the last sortie of the High Seas Fleet.\textsuperscript{104}

A classical fleet action was not to be. Both sides suffered from faulty intelligence. The Germans took elaborate measures and observed strict radio silence to avoid detection. A British submarine, J.6, sighted the German fleet as it proceeded out of Heligoland Bight, but failed to make a report because her commander believed he had sighted British cruisers, which he expected to be in the area supporting a British mine-laying operation. On the morning of Wednesday, 24 April, the High Seas Fleet approached the Norwegian coast unreported. The failure of British naval intelligence would have ensured the success of the German raid, but inaccurate German intelligence doomed the operation from the beginning. U-boat reports led Scheer to believe that the convoys sailed every three days, but the Admiralty had recently changed the schedule of sailings to every four days. The next convoy was not due to leave port until the 24th. In the words of Henry Newbolt: "... Admiral Scheer and his battle squadrons were steaming into a no-man's sea, abandoned alike by merchantmen and men-of-war."\textsuperscript{105}

As German battle cruisers began searching for the convoy, the Admiralty received their first intimation that


the High Seas Fleet was loose in the North Sea. The battle cruiser Moltke lost a screw, which caused the turbine to race and a wheel to explode. Fragments pierced the discharge pipe of a condenser, and the central engine room flooded. Moltke took on 2,000 tons of water, putting the center and starboard engines out of commission. The German battle cruisers continued the hunt while Moltke attempted to close with the main fleet. Moltke's condition deteriorated, however, and she was forced to break radio silence to ask assistance from the fleet. Consequently, the British finally learned that German capital ships were at sea.  

The Grand Fleet, including the Sixth Battle Squadron less Wyoming, sailed to intercept the High Seas Fleet at 1500 on 24 April. Meanwhile, the German fleet had turned for home with Moltke in tow. The German fleet remained in company with the crippled Moltke, and so had to reduce speed to 10-11 knots. Nevertheless, Scheer managed to evade the Grand Fleet. At 1000 on the 25th, vessels of the Grand Fleet's advanced screen made contact with the enemy fleet, but no action followed. The High Seas Fleet returned to the

\[\text{\textsuperscript{106}}\text{Ibid., 5:417-420.}\]

\[\text{\textsuperscript{107}}\text{Historical Narrative, "Historical sketch of U.S.S. Florida," undated, OS File, Subject File 1911-1927, RG 45, NA.}\]

\[\text{\textsuperscript{108}}\text{Halpern, A Naval History, 419.}\]
safety of its defenses, and so ended the last opportunity to bring the German fleet to battle.\textsuperscript{109}

At one point during the Grand Fleet's chase of the High Seas Fleet, the Germans reversed course. This required the Grand Fleet to turn about, putting the Sixth Battle Squadron in the van. Had the Grand Fleet overhauled the Germans, the American ships would have led the British fleet into what might have turned out to be the decisive naval battle of the war. After returning to port, several British admirals referred to the American position in the line and expressed their confidence and congratulations for what might have been.\textsuperscript{110}

It is interesting to speculate about what could have happened as a result of the last sortie of the High Seas Fleet. Beatty narrowly missed intercepting Scheer, which could have resulted in a decisive victory against the German fleet. Marder points out that Scheer took a serious risk in visiting northern waters because he was unaware that the Grand Fleet had moved south to Rosyth, on his flank.\textsuperscript{111}

The last sortie could as easily have ended in disaster to the Scandinavian convoy and its covering force. Beatty had warned the Admiralty of the grave risks to the Scandinavian

\textsuperscript{109}Historical Section narrative, "Narrative of the record of the U.S.S. Delaware during the war, 16 July 1919, OS File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{110}Rodman, Kentucky Admiral, 270-271

\textsuperscript{111}Marder, Dreadnought to Scapa Flow, 5:148-149.
convoy's covering force should the German fleet escape into the North Sea undetected.\textsuperscript{112} The last sortie of the German fleet justified Beatty's concerns and highlighted the vulnerability of the covering force and limitations of British naval intelligence.

The American squadron had been the covering force for the Scandinavian convoy during 17-19 April, and therefore had missed Scheer's sortie by less than a week. Commenting on this fact, Paul Halpern contemplates how easily they could have met with disaster:

> The service of the American battleships with the Grand Fleet has traditionally been treated as a rather ho-hum affair, dull but necessary. One wonders about the effect on American public opinion had those battleships fallen in with the High Sea Fleet with a loss of three or four ships and a few thousand lives.\textsuperscript{113}

The American battleships certainly were in harm's way, and their service in the war zone deserves more than the footnote of recognition they have received.

The sortie of the High Seas Fleet against the Norwegian convoy caused Admiral Rodman to doubt the wisdom of using valuable capital ships as a covering force. In his general report of 27 April, Rodman called attention to the plan of operations requiring the supporting force of battleships to remain at a dangerous distance from the Grand Fleet's base for a few days at a time, inviting an enemy attack in force.

\textsuperscript{112}Newbolt, \textit{Naval Operations}, 5:230.

\textsuperscript{113}Halpern, \textit{A Naval History}, 420.
Rodman perceived that the safety of the covering force depended entirely upon the naval intelligence of the opposing forces -- Beatty's knowledge of German fleet movement and the German ability to predict the movements of the convoys. Furthermore, he announced that he was not the only one with misgivings: "I am of the opinion, which is shared by most, if not all of the flag officers of the Grand Fleet, that there are possibilities of a grave disaster to the supporting force, and that it is a matter for deep consideration."\textsuperscript{114}

Rodman's report first passed through the hands of the force commander, Admiral Sims. Sims became alarmed that Rodman's criticism would become known and damage relations with the commander-in-chief and the Admiralty. He returned it, suggesting that he remove all the critical references. In a personal letter, Sims sternly rebuked Rodman and completely dismissed his concerns:

The criticism in question is far from slight. It amounts to an expression of practically complete lack of confidence in the ability of the Commander-in-Chief and the Admiralty to handle the fleet with safety to its detachments -- an opinion, moreover, that is necessarily based upon a portion only of the information wholly necessary to form a correct opinion. It is not necessary for me to supply this information or to discuss the matter beyond assuring you that the dispositions which you criticize were thoroughly considered by the Admiralty in connection with

\textsuperscript{114}General Report, Rodman to Secretary of the Navy (Operations), 27 April 1918; quoted in a memorandum, Sims to Benson, 2 May 1918, TD File, Subject File 1911-1927, RG 45, NA.
continuous information from scouting forces not belonging to the Grand Fleet, and information from other sources, and that the danger which you have assumed has not at any time existed.\textsuperscript{115}

Sims sent a copy of his letter to Benson and explained that "Rodman has been doing excellent work with the fleet but he is rather impulsive and liable to 'slop over' at times." Sims added that Rodman probably did not consider how detrimental his criticisms would be, and that there would probably not be any more trouble out of him.\textsuperscript{116} As Sims predicted, Rodman was careful to hold his peace after the rebuke from the force commander.\textsuperscript{117} Besides, Rodman's concern soon became moot when the British reduced the covering force to only a light cruiser squadron in June 1918, and to a pair of armored cruisers later.\textsuperscript{118}

The Sixth Battle Squadron's involvement in protecting the Scandinavian convoys made an issue of Rodman's rank and caused another of the many disagreements between Sims and the Navy Department. In early February, Beatty requested that the Admiralty arrange for Rodman's advancement from rear admiral to vice admiral. During escort duty, Rodman's squadron worked with a light cruiser squadron. Beatty

\textsuperscript{115}Letter, Sims to Rodman, 2 May 1918, Papers of Admiral William S. Sims, Manuscript Division, Library of Congress.

\textsuperscript{116}Letter, Sims to Benson, 2 May 1918, TD File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{117}Rodman's available correspondence and reports do not record him ever pursuing the matter again.

\textsuperscript{118}Halpern, A Naval History, 379.
wanted the flag officer in charge of the battle squadron to command the force. Because British practice in granting rank differed from the rank structure in the U.S. Navy, Rodman was junior to all of the other flag officers commanding battle squadrons and some commanding light cruiser squadrons. Beatty made it clear that Rodman was "... an officer of high attainments and is eminently suitable for the rank." He did not want Rodman replaced with an American vice admiral, but wanted Rodman advanced.\textsuperscript{119}

Sims supported the proposal to advance Rodman in rank. In a letter of congratulation, he expressed his gratification that Rodman had made such a fine impression on the British. Interestingly, Sims told Rodman that he had taken pains to ensure Benson that the idea had originated with the British, lest the Navy Department suspect that Sims championed Rodman's advancement as a way to advance his own.\textsuperscript{120} Sims's congratulation was premature. In late April, when the Navy Department finally acted on the request, Sims had to write Rodman a letter of condolence. Sims said: "I am very sorry that the Department has not seen fit to favor this proposition, as it seemed to me that it should be done out of consideration of not only the conditions that pertain

\textsuperscript{119} Memorandum, Beatty to the Admiralty, 3 February 1918, Papers of Admiral William S. Sims, Manuscript Division, Library of Congress.

\textsuperscript{120} Letter, Sims to Rodman, 18 February 1918, Papers of Admiral William S. Sims, Manuscript Division, Library of Congress.
in the Grand Fleet, but out of all consideration for the request of our principal ally."\textsuperscript{121}

Refusal to grant Rodman's advancement evidently came from President Wilson, who was very jealous of U.S. independence and who resented Admiralty interference in U.S. practices.\textsuperscript{122} The president did not want U.S. officers to become too associated with British organization and methods. For this reason the president, with Secretary Daniels's concurrence, had denied the British request that Sims become an honorary member of the board of the Admiralty in November 1917.\textsuperscript{123} Sims enlisted the support of Walter Page, the U.S. ambassador to Great Britain, in an attempt to pressure Washington into reconsidering the appointment, but to no avail. Wilson explained to Page that, "The English persist in thinking of the United States as an English people, but of course they are not and I am afraid that our people would resent and misunderstand what they would interpret as a digestion of Sims into the British official organization."\textsuperscript{124} Sims finally dropped the matter, but he apparently never

\textsuperscript{121}Letter, Sims to Rodman, 23 April 1918, Papers of Admiral William S. Sims, Manuscript Division, Library of Congress.

\textsuperscript{122}Ibid.

\textsuperscript{123}Trask, Captains and Cabinets, 193-194.

\textsuperscript{124}Klachko, Benson, 96.
forgave Daniels for opposing the appointment. No record exists of Rodman's reaction to the department's refusal to promote him. He must have been disappointed, but he did not make any formal protest.

VI

The hard work of the American battleships since joining the Grand Fleet began to pay off. The American ships were becoming an integral part of the British fleet, and the level of tactical cooperation they achieved had gained notice. Delegates to the Allied Naval Council paid a fine tribute to the unprecedented level of cooperation among the two navies of the Grand Fleet during a conference in April 1918. In the wake of the peace of Brest-Litovsk, the Entente powers were concerned that the Russian Black Sea Fleet was in danger of falling into German hands, thus endangering the British Aegean squadron. The simple solution was to redistribute the naval forces in the Mediterranean.

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125 Daniels later revealed that an unidentified naval officer told him he had earned the "everlasting enmity" of Admiral Sims for blocking the appointment; Josephus Daniels, Wilson Years: Years of War and After, 1917-1923 (Chapel Hill: University of North Carolina Press, 1946), 495; mentioned in Trask, Captains and Cabinets, 195-196.


127 Admiralty Memorandum, "Redistribution of Naval Forces in the Mediterranean", 29 April 1918, G.T. - 4393, CAB 24/49, PRO.
The French were willing to send six battleships if they could be replaced by four Italian battleships. The Italians were willing to make their battleships available in an emergency, but they were recalcitrant about having their battleships integrated into the French fleet. They refused to serve under anyone other than an Italian commander in chief. The French would not place their larger fleet under an Italian commander. The British attempted to resolve the impasse by suggesting Jellicoe as Mediterranean "admiralissimo," but without success. Neither the French nor the Italians were interested in having a British commander in chief.\footnote{War Cabinet 401, 30 April 1918, CAB 23/6, Public Records Office. Also, War Cabinet 405, 6 May 1918, CAB 23/6, PRO.}

The British and American delegates to the Allied Naval Council attempted to inspire Franco-Italian naval cooperation by pointing to the example of the American Sixth Battle Squadron. The First Sea Lord instructed the British Naval delegate to "Point out to them the very great success which has accrued from the American battleships being incorporated into the Grand Fleet, how they work, on what excellent terms are the admirals, officers, and men with each other; and how, far from any friction arising, the elements have mingled together and produced nothing but good

\footnote{Halpern, A Naval History, 400-401.}
results." The Italians never did agree to strengthen the French fleet. They were too proud to impose restrictions on their battle squadron or to place their ships under a French Admiral. No fleet can be effective without unified command. Because of national pride, the French and Italians were incapable of the level of cooperation and effectiveness that the American squadron with the Grand Fleet achieved.  

Concerns that the disposition of the Russian fleet would strengthen German naval power again raised the question of dispatching more U.S. dreadnoughts to European waters. Rodman suggested that if additional U.S. battleships were going to reenforce the Grand Fleet and Mediterranean Fleet, then the Navy Department should send them at once. He explained that new forces would require at least a couple of months to adapt to new conditions. Rodman made it clear he was not suggesting that U.S. battleships were inferior to their British counterparts, but assimilating new methods, especially in communications, would take time.  

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130Marder, Dreadnought, 4:25.

131Fortunately for the Allies, the Treaty of Brest-Litovsk provided that the Russian Black Sea fleet would remain Russian, and so re-distribution of naval forces in the Mediterranean became a moot point.

132General Report, Rodman to Secretary of the Navy (Operations), 19 May 1918, OB File, Subject File 1911-1927, RG 45, NA.
In early June, the Plans Division urged the Admiralty to request that the U.S. Navy send its remaining dreadnoughts, including all five oil-burners and three of the five coal-burners, the two others being too slow to operate with a modern fleet. The planners stressed that if events made additional U.S. battleships necessary, then they should come over to Britain as soon as possible and not wait for an emergency. They noted that the experience of the Sixth Battle Squadron indicated that they needed at least four months of work before they were efficient. Among the situations that could necessitate the need for more battleships was the possibility of enemy possession of the French channel coast (the German spring offensive was still threatening Allied positions) and German acquisition of the Russian Baltic and Black Sea Fleets. To justify their argument, the planners stressed that "... we cannot be too strong in the decisive area." They proposed that more U.S. battleships would make it possible to form a southern battle squadron. Furthermore, they produced figures to prove that problems of supply and shortage of destroyers were not insurmountable.

Admiral Sidney Freemantle, the deputy chief of the naval staff, pointed out to the Plans Division that Beatty had not considered the American ships as equivalent to British ships. Therefore, the addition of eight more U.S. dreadnoughts would intensify the difficulties of integration.
and would not compensate the Grand Fleet for the loss of a squadron to the south. Probably because of Freemantle’s dissenting opinion, the Admiralty considered that the difficulties of assimilating more U.S. battleships outweighed the benefits, and took no action on the proposal of the Plans Division.\textsuperscript{133}

The poor gunnery of the American squadron was the primary reason for the Admiralty’s low opinion, but the gunnery was steadily improving. On 20 March the Sixth Battle Squadron held full-caliber firings with reduced charges and concentrated in pairs. According to Rodman, "It was a decided success, most encouraging, and shows a most gratifying improvement over last performances."\textsuperscript{134} In the quarterly battle efficiency inspection held on 29 April, the ships showed marked improvement in battery and fire control exercises. Rodman reported that their efficiency was "... not only steadily improving, but has reached such a high standard that inspires confidence in their ability to render good accounts of themselves when the time comes."\textsuperscript{135}

During the full-caliber firing on Thursday, 27 June, the

\textsuperscript{133}Memorandum, Plans Division to Admiralty, "Concentration of the U.S.A. Battle Fleet in the North Sea," 5 June 1918, ADM 137/2709, PRO.

\textsuperscript{134}General Report, Rodman to Secretary of the Navy (Operations), 23 March 1918, OB File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{135}General Report, Rodman to Secretary of the Navy (Operations), 4 May 1918, OB File, Subject File 1911-1927, RG 45, NA.
Sixth Battle Squadron performed better still. Like other practices, this one simulated war conditions, and the firing took place without knowledge of the opening range. The distance to target was 16,000 to 17,500 yards. Rodman proudly reported that "... the firing was exceptionally fine, most encouraging and much better than we have ever done previously." Months of determined effort to improve their gunnery was finally bearing fruit.

The American battleships were benefitting from their time in the war zone. Rodman was eager to learn from the British. He understood the value of adapting British methods and experience, learned in four years of warfare. Nothing can prepare ships and men like actual service in war conditions. In six months of service with the Grand Fleet, the U.S. battleships gained valuable experience in military operations carried out in the battleground of the North Sea. Their experience would eventually benefit the rest of the U.S. battle fleet. The service of the U.S. battleships in the war zone revealed deficiencies that might never have come to light during exercises with the Atlantic Fleet.

Integration into the Grand Fleet was a monumental task. Besides having to learn new procedures, tactics, and policies, the Americans had to become an integral part of a foreign fleet while maintaining their own organization and

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136General Report, Rodman to Secretary of the Navy (Operations), 29 June 1918, OB File, Subject File 1911-1927, RG 45, NA.
traditions. During their first six months, the American dreadnoughts serving with the Grand Fleet achieved an unprecedented level of tactical cooperation. They were "learning the ropes" and had become an integral part of the British Grand Fleet.
CHAPTER 3

U.S. BATTLESHPIS WITH THE GRAND FLEET, JULY 1918 TO THE SURRENDER OF THE HIGH SEAS FLEET

During the summer and fall of 1918, the Grand Fleet remained watchful, hoping to force a decision with the High Sea Fleet. The British fleet was now a stronger force than at Jutland. British battle cruisers were still inferior to their German counterparts, but the fleet had new armor piecing shells that promised to be capable of penetrating German armor. While the morale of the inactive High Sea Fleet eroded, the morale of the Grand Fleet remained high. Constant gunnery drills and frequent fleet maneuvers increased the efficiency of the British and American ships with each passing day. The vigilance of the Grand Fleet finally paid off, but in a way that few had foreseen. A decisive fleet engagement along classical lines did not happen, but the dramatic surrender of the German fleet represented a victory that was greater than Trafalgar, and U.S. battleships had a share in that victory. The officers and men of the American squadron achieved more than just operational cooperation with the Grand Fleet, they took their place in the British battle line as comrades.
The Sixth Battle Squadron, its destroyer screen, and the Sixth Light Cruiser Squadron, sailed at 0800 on Sunday, 30 June, in support of the first American mine-laying expedition in the North Sea. The minelayers for the expedition were the old converted cruiser San Francisco, and the converted liners Canonicus, Canandaigua, and Housatonic. They belonged to Mine Squadron One of the Atlantic Fleet, under the command of Captain Reginald Belknap, based at Inverness and Cromarty. The Northern barrage would eventually stretch 250 miles between the Orkney Islands and Scandinavian territorial waters. A 130-mile sector was completely an American operation. The remainder of the barrage was a joint undertaking with the British. The barrage became one of the major U.S. naval efforts of the war. By the time of the armistice, the U.S. Mine Force, under Rear Admiral Joseph Strauss, had laid 56,611 of the 70,263 mines in the barrage. The total cost was a staggering $40 million dollars. The Navy Department had high hopes that the North Sea barrage would greatly hamper

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1General Report, Rodman to Secretary of the Navy (Operations), 6 July 1918, OB File, Subject File 1911-1927, Records of the Department of the Navy, Record Group 45, National Archives.


3See Fig. 7.
Fig. 7. The Northern Barrage. Reprinted, by permission, from Paul Halpern, *A Naval History of World War I* (Annapolis: Naval Institute Press, 1994), 476. Zone A is the American sector of the barrage.
U-boat operations, but the return on their investment was only six submarines confirmed sunk.4

Because the mine-laying forces would necessarily have to operate within the range of German surface raiders, just as the Scandinavian convoys did, they needed a heavy covering force. The danger to the covering force protecting the minelayers was essentially the same as to the force protecting the Scandinavian convoy. Interestingly, the Navy Department never seemed to question the need for battleships to protect the U.S. Mine Force the way they did the use of a battleship escort for the Scandinavian convoy. Perhaps they had less concern about a raid against the mine-laying force because its operations were more sporadic than convoy sailings.

After making contact with the mining force in the early afternoon of June 30, the battleships took station twenty miles southeast of the minelayers. Because the mine-laying force could only steam at 13 knots, the battleships zigzagged at 17 knots to keep position. The light cruisers took station to the southeast of the battleships. At 1625, as the squadron steamed in line abreast, the Wyoming and the U.S. destroyer Parker sighted a periscope. The Delaware, Florida, and Wyoming opened fire at a range of 1400 yards and the destroyers dropped six depth-charges. The squadron

maneuvered to avoid a possible torpedo attack and then continued on course. An hour later, the Florida reported a submarine and opened fire. The Delaware and Texas opened fire in the same direction but did not sight anything. This time the destroyers dropped ten depth-charges but without apparent results.\(^5\)

Rodman believed that both sightings were false alarms. He noted that before each sighting, the squadron had just made a turn, and in conjunction with the wind direction, the disturbance in the water resembled a submarine wake. The battleships may have been firing at their own wakes rather than the wake of a U-boat. After returning to port and having interviewed the high ranking officers involved, Rodman decided that the submarine sighting was genuine. The officers who sighted the U-boat insisted that they saw it distinctly. The commander of the destroyer leader also believed he saw the submarine before making his depth-charge attack. The Admiralty reported having located an enemy submarine in the same vicinity.\(^6\) This could have been U-70, which was passing through the eastern side of the American sector of the Northern Barrage, but U-70 did not sight any

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\(^5\)War Diary, Ninth Division, U.S. Atlantic Fleet, 30 June 1918, OS File, Subject File 1911-1927, RG 45, NA.

\(^6\)Report, Rodman to Beatty, 2 July 1918, ADM 137/1963, PRO; General Report, Rodman to Secretary of the Navy (Operations), 13 July 1918, OB File, Subject File 1911-1927, RG 45, NA.
warships that day. Therefore, this particular sighting was probably a false alarm.⁷

Upon reaching the Scandinavian coast in the early morning hours of the next day, the minelayers began sowing their mines and the covering force maintained its position to the south. In just two and one-half hours they laid a double line of 2,200 mines. Between 0900 and 0930, the battleships and their screen sighted as many as five floating mines. Captain Wiley of the Wyoming recalled that he feared mines more than any other threat in the North Sea. Both sides sowed an enormous number of mines during the war, many of which broke free of their moorings because of the rough seas.⁸ The covering force did double duty on the return voyage. They linked up with the westbound Scandinavian convoy, "HZ.40," on the afternoon of July 1, and supported it until 2200. The Sixth Battle Squadron arrived at Scapa Flow on 2 July at 0300.⁹

⁷See Fig. 7; War Journal, U-70, 30 June 1918, Microfilm Publication T-1022, Records of the German Navy, RG 242, College Park Branch, NA.


⁹Addendum to Orders, Beatty to Rodman, "Operation M.4.," 29 June 1918, ADM 137/1963, PRO; General Report, Rodman to Secretary of the Navy (Operations), 6 July 1918, OB File, Subject File 1911-1927, RG 45, NA.
II

The officers and men of the Sixth Battle Squadron enjoyed a couple of days respite from all drills and exercises to celebrate the Fourth of July. The squadron transferred its anchorage to the north shore of Scapa Flow to be as near as possible to Kirkwall, the principal town. Four hours of liberty were granted to 200 men from each ship twice a day. Rodman reported that both officers and men appreciated having a holiday after a strenuous seven months in the war zone. He was also pleased to report that the conduct of the men while in Kirkwall was excellent. Some of the local dignitaries reported to him that they had never seen such exemplary conduct. Beatty sent a cordial message of greetings on "... this greatest of Liberty Days" to Rodman and the Sixth Battle Squadron. In addition, a representative body of flag officers from the Grand Fleet paid an official visit to the New York. In response to the expressions of British good will, Rodman reported "It is gratifying to state that no more cordial relations could exist than those which obtain between the American and British divisions of this Force."¹⁰

The men of the American squadron enjoyed ten days of leave when their ships docked at Newcastle for a refit. The

¹⁰General Report, Rodman to Secretary of the Navy (Operations), 6 July 1918, OB File, Subject File 1911-1927, RG 45, NA; General Report, Rodman to Secretary of the Navy (Operations), 13 July 1918, OB File, Subject File 1911-1927, RG 45, NA.
Delaware, for example, docked at Newcastle in April. Overall, the Delaware's crew made a good impression on the locals. The commanding officer reported only one infraction "due to overtime or rum," and he stated that he received many compliments from the shore authorities on the fine behavior of the men. Some of the men availed themselves of the wrong attractions, however. Rodman reported that all of the ships experienced an unusually high percentage of venereal cases after visiting Newcastle. He suggested that the Navy do a better job of warning the men against the dangers of seaports.

One of the reasons for the high morale of the Grand Fleet, as opposed to the High Sea Fleet, was that the officers took an interest in providing amusements to relieve the tedium of remaining at base on short notice. Sporting events were the principal entertainment, with some events including the entire fleet in competition. The fleet track meet was a big event, at which the Sixth Battle Squadron took second place. The big event of the year was the Grand Fleet boxing championship, held at Rosyth dockyard on 28 and 29 July. There was only seating available for 7,000 spectators, so signal flags sent the results to the ships.

11General Report, Rodman to Secretary of the Navy (Operations), 27 April 1918, OB File, Subject File 1911-1927, RG 45, NA.

12General Report, Rodman to Secretary of the Navy (Operations), 15 June 1918, OB File, Subject File 1911-1927, RG 45, NA.
The Sixth Battle Squadron gave a fine account of itself. An engineman from the Florida won the light weight title, a chief carpenter's mate from the New York won the middle weight title, and a fireman, also from the New York, reached the heavy weight finals.¹³

Besides sporting events, all of the ships in the squadron produced amateur theatricals, including vaudeville acts and minstrel shows. In addition, motion picture shows were available on almost a daily basis. When at Rosyth and not on short notice, officers could avail themselves of liberty whenever it did not interfere with their duties and the men had an afternoon of liberty once every sixteen days. The vicinity of Rosyth offered small dances, music performances, tennis, and excellent golf links.¹⁴

The Sixth Battle Squadron imported some American sports for its recreation. The British allotted sports fields at Rosyth for the American squadron, which soon became a football field and baseball diamond. The squadron had a baseball league that played seventeen games during the summer. The Texas won the squadron championship but lost to the visiting team from the London headquarters. Organized football games began in the fall. Some of the Americans

¹³Memorandum, Beatty to Grand Fleet, "Grand Fleet Boxing Championship, 1918," 25 July 1918, ADM 137/2026, PRO; Excerpt from War Diary of New York, undated, OB File, Subject File 1911-1927, RG 45, NA.

¹⁴Excerpt from War Diary of New York, undated, OB File, Subject File 1911-1927, RG 45, NA.
even attempted European football (soccer) with the British, although there is no record of their ability in the game.\textsuperscript{15}

The Grand Fleet received two royal visits in July. The fleet had again moved from Scapa Flow to Rosyth, carrying out maneuvers and fire-concentration exercises during the journey south. On Monday, 8 July, the King and Queen of the Belgians reviewed the fleet from a destroyer. The next day the sovereigns inspected several ships in the fleet, including the \textit{New York}. The King and Queen spent an hour touring the \textit{New York} and received an appropriate welcome from their hosts.\textsuperscript{16}

On Monday, 22 July, King George V visited his fleet. The King embarked in the destroyer \textit{Oak} and inspected the fleet. As he passed each ship, the bands would play the national anthem while the crews gave three cheers for His Majesty. At 1215 there was an investiture ceremony on board \textit{Queen Elizabeth}. When His Majesty came on deck, the honor guard presented arms, the band played the national anthem, and all officers saluted the sovereign. The King presented decorations from a platform erected aft of the assembled host. The first recipient was Rodman. The King invested

\textsuperscript{15}Excerpts from War Diary of \textit{New York}, undated, OB File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{16}General Report, Rodman to Secretary of the Navy, 13 July 1918, OB File, Subject File 1911-1927, RG 45, NA.
him as a Knight Commander of the Order of the Bath, the highest decoration awarded that day.\textsuperscript{17}

After having lunch aboard \textit{Queen Elizabeth}, the King visited \textit{New York} for an hour. The King inspected \textit{New York}'s engine and fire-rooms and was impressed, remarking to Rodman, "Admiral, your fire-room is as clean as a dining room." As a former officer in the Royal Navy, the King was well qualified to make such a judgment. Upon Rodman's request, the King condescended to shovel coal into \textit{New York}'s furnace as he had done as the Duke of York on one of the battle cruisers. Amid the cheers of the stokers, the King of England graciously shoveled coal into the furnace of an American battleship. After the official inspection, the King and his party adjourned to Rodman's cabin for coffee and a smoke, while yarns were swapped. Rodman recalled in his memoir that the King seemed to enjoy especially this session of casual conversation.\textsuperscript{18}

Following his departure after his fourth visit to the fleet since hostilities began, the King sent a message of encouragement to the officers and men of the Grand Fleet. He began his message with reference to the American squadron:

\textsuperscript{17}Memorandum, Beatty to Grand Fleet, "Visit of His Majesty the King," 19 July 1918, ADM 137/2026, PRO.

\textsuperscript{18}Hugh Rodman, \textit{Yarns of a Kentucky Admiral} (Indianapolis: The Bobbs-Merrill Co., 1928), 275-277.
I am happy to have found myself once more with the Grand Fleet, and this pleasure has been increased by the opportunity I have had of seeing the splendid ships of the United States in line with our own, and of meeting Admiral Rodman together with the officers and men under him. We value their comradeship and are proud of their achievements.

Beatty thanked the King for his message and he replied: "We are glad that Your Majesty should have been able personally to observe our complete accord with the United States Squadron and the firm friendship which binds their officers and men to Your own."19 These expressions reflected, and reinforced, the good will that truly did exist between the Americans and British serving in the Grand Fleet.

III

On 29 July a new member joined the Sixth Battle Squadron. The Arkansas, under the command of Captain W. H. G. Bullard, arrived from the United States to relieve the Delaware. The Arkansas, sister ship of the Wyoming, gave better balance to the fleet in terms of paired calibers for fire-concentration. The Delaware and Florida (12 inch/45 caliber) had constituted a matched pair with the Wyoming (12 inch/50 caliber) as a spare. Now the two Wyoming class ships were a pair with the Florida as a spare. The Arkansas

19Memorandum, Beatty to Grand Fleet, 24 July 1918, ADM 137/2026, PRO.
sailed from Hampton Roads on 14 July with fourteen important passengers, members of the House Naval Committee.20

During their passage from Scapa Flow to Rosyth, the congressmen had an exciting introduction to the war zone. At around 2100 on 28 July, the officer of the deck sounded the submarine alarm. The Arkansas immediately opened fire on an object on the port quarter. Upon reaching the navigation bridge, Captain Bullard ordered "emergency full-ahead" and the ship soon made 21 knots. While turning away from the direction of the sighting, the captain himself saw the wake of a slowly submerging submarine. At that time a lookout reported a torpedo running directly toward the ship. After turning to port, the lookout reported the torpedo running to starboard and clear of the ship.

Bullard later interrogated the lookouts and gun-crews. The gun crews reported distinctly seeing a periscope, and three witnesses verified the torpedo sighting. The escorting British destroyers, however, assumed the incident was just another U-boat scare typical of newcomers to the war zone. In his report to Rodman, Bullard complained of the lack of seriousness on the part of their escort.21 The British escorts should have assumed that the sighting was genuine, but there was no U-boat attack. None of the U-

20Cable, Benson to Sims, 14 July 1918, OS File, Subject File 1911-1927, RG 45 NA.

21Report, Bullard to Rodman, 29 July 1918, OS File, Subject File 1911-1927, RG 45, NA.
boats operating in that area reported sighting any warships.  

The Arkansag safely joined the American squadron at noon on the 29th of July. The next day the Delaware, with the British destroyers Rowena and Restless, left the Grand Fleet and began her return voyage to the United States. The Delaware parted company with her escort on 1 August and arrived at Hampton Roads on 12 August.

On Thursday, 8 August, both the Fifth and Sixth Battle Squadrons acted as escort for a joint British and American mine laying operation in the Northern Barrage. The covering force was under the command of Vice Admiral Evan-Thomas, commander of the Fifth Squadron. The British 1st Minelaying Squadron and seven destroyers and the U.S. 2nd Minelaying Squadron and its screen of twelve destroyers simultaneously left their respective bases in the early morning. The two minelaying squadrons had separate mine fields to lay. The battleships took station near the British minelayers and the 2nd Light Cruiser Squadron and five destroyers from Scapa Flow provided direct support for the American minelayers.

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22U-boat War Journals, 28 July 1918, Microfilm Publication T-1022, Records of the German Navy, RG 242, College Park Branch, NA.

23Memorandum, Rodman to Beatty, 29 July 1918, ADM 137/1935, PRO; Historical Narrative, "History of U.S.S. Delaware During the World War," 2 July 1919, OS File, Subject File 1911-1927, RG 45, NA.

24Orders, Beatty to relevant fleet commanders, "Operation 'M.9'," 6 August 1918, ADM 137/2026, PRO.
On the first night of the mission, at 2212 and low twilight, the navigator of the Florida sighted the wake of a torpedo. He was positive it was a torpedo because the discharged bubbles were distinctly visible in the wake. The torpedo traveled from the port side and passed either ahead of, or just under the ship. A lookout spotted a periscope on the port side nearly at the same time. The battleships had been in line-ahead and steaming at 16.5 knots. Both the New York and Florida reported the attack to their escorts, which investigated but did not sight anything, nor did they drop any depth charges. The remainder of the operation was without incident.25

After returning to Rosyth, the commander of the Fifth Battle Squadron, Evan-Thomas, investigated the incident. He inquired of the commander of the XVth Flotilla about the actions of the destroyer screen.26 The Flotilla commander examined the officers commanding the two destroyers in the vicinity of the incident, Undine and Ulysses, and asked why they had not dropped depth charges. Both officers justified their actions, or lack of action, by explaining that the squadron had already passed out of danger before they began their search. Also, they suspected any submarine would have been on the surface because they considered it too dark to

25Report, Rodman to Beatty, 11 August 1918, ADM 137/1963, PRO.

26Memorandum, Evan-Thomas to Captain (D) XVth Destroyer Flotilla, 14 August 1918, ADM 137/1963, PRO.
use periscopes. Consequently, they reasoned, depth-charges
would have forced the U-boat to submerge, making it more
difficult to locate.\textsuperscript{27}

The Flotilla commander did not accept their explanations. He reported to Evans-Thomas: "I regret I do not concur in the action of either of these officers in not dropping depth charges." He stated that although the battleships may have passed out of danger before they received a signal, the destroyers should have dropped four depth-charges each on the estimated position of the sighting.\textsuperscript{28} After the matter came to Beatty's attention, he instructed Evans-Thomas to "\ldots inform the commanding officers of Undine and Ulysses that depth charges should have been dropped on the occasion of the submarine attack on Sixth Battle Squadron \ldots ."\textsuperscript{29} This rebuke from the commander in chief must have encouraged the destroyer captains to take submarine sightings with more gravity. One suspects that the newcomers to the war had cried wolf too many times, and now their escorts did not take them seriously enough. Again, U-boats almost certainly did not

\textsuperscript{27}Report, Captain (D) XVth Flotilla to Evan-Thomas, 14 August 1918, ADM 137/1963, PRO; reports from the destroyer captains are included.

\textsuperscript{28}Ibid.

\textsuperscript{29}Memorandum, Beatty to Evan-Thomas, 20 August 1918, ADM 137/1963, PRO.
attack the U.S. battleships. No U-boats in the vicinity reported sighting warships that day.\textsuperscript{30}

Throughout the summer, the Sixth Battle Squadron carried out gunnery exercises on a weekly basis. These practices consisted of sub-caliber concentration, spotting, and range finding exercises. Mock destroyer and submarine attacks during sub-caliber firings added realism to the practices. Further, the advent of air power was already adding another dimension to naval tactics. On several occasions, aircraft simulated attacks on the bridges and other exposed positions of the ships. The principal role of aircraft was still spotting and reconnaissance, but naval leaders already recognized the potential for an offensive role against surface ships. U.S. battleships had 3-inch antiaircraft guns mounted after 1916. While with the Grand Fleet, the ships received portable machine guns for additional protection against air attack.\textsuperscript{31}

For long-range spotting, the ships in the Grand Fleet relied upon kite-balloons that they towed. Balloons were installed on ships in the Sixth Battle Squadron in the late spring and U.S. officers attended balloon training at

\textsuperscript{30}U-boat War Journals, 8 August 1918, Microfilm Publication T-1022, Records of the German Navy, RG 242, NA.

\textsuperscript{31}Excerpts from War Diary of New York, undated, OB File, Subject File 1911-1927, RG 45, NA.
The observation balloons greatly facilitated accurate spotting, but Rodman reported a number of limitations on their use. One exercise revealed that an observation balloon could be a handicap as well as an advantage. The exercise involved two forces, a firing squadron and an attacking "enemy" force of one battleship and two destroyer divisions. The attacking force laid heavy smoke screens that obscured it from the firing squadron and its observation balloon. The balloon indicated the location of the firing squadron to the "enemy," but could not see the attacking force through the smoke. Rodman also recognized that observation balloons would be vulnerable to hostile aircraft because they lacked freedom of movement. Another problem with balloons was their flammability. On 9 July, just before the visit of the King and Queen of Belgium, lightening struck the New York's hydrogen-filled kite balloon and sent it plunging in flames into the water from a height of about 1200 feet. Lightning also destroyed the Barham's balloon that same day.

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32 General Report, Rodman to Secretary of the Navy (Operations), 9 March 1918, OB File, Subject File 1911-1927, RG 45, NA.

33 General Report, Rodman to Secretary of the Navy (Operations), 6 April 1918, OB File, Subject File 1911-1927, RG 45, NA.

34 General Report, Rodman to Secretary of the Navy (Operations), 13 July 1918, OB File, Subject File 1911-1927, RG 45, NA.
Despite these limitations, kite balloons remained the principal means of spotting. Aircraft had their own limitations. Several ships in the Grand Fleet, including the Texas, were fitted with flying-off platforms on turret roofs. The aircraft serving with the Grand Fleet, however, were fighters, intended to destroy German reconnaissance seaplanes and zeppelins rather than provide reconnaissance and spotting. Launching was possible but retrieval was not. Aviators had to ditch their planes unless within range of a land base. This necessarily restricted the use of shipborne aircraft. HMS Argus, commissioned in September 1918, was the first carrier that could reliably launch and recover its planes, but carrier operations were still in their infancy when the war ended.\(^3^5\)

The Sixth Battle Squadron engaged in several operations in the North Sea between August and the armistice. The Grand Fleet carried out maneuvers in the North Sea on 22-23 August, and again on 24 September. During the September exercise, the "RED" fleet from Rosyth, including the Sixth Battle Squadron, engaged the "BLUE" fleet from Scapa Flow, consisting of the Fourth Battle Squadron and Second Battle Cruiser Squadron and representing the High Sea Fleet. An interesting aspect of the operation was the use of aircraft. At 0950, aircraft from the carrier Furious reported the

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"enemy" fleet. The "RED" fleet did not alter course, however, until light cruisers had confirmed the location of the "BLUE" fleet ten minutes later, because the air-reconnaissance was not considered completely reliable. At 1020, the opposing battle cruiser forces engaged at a range of 23,000 yards down to 15,000 yards, followed by torpedo attacks on the "enemy" battle cruisers. At noon the main fleets spotted each other out of the mist at 21,000 yards and engaged each other down to a range of 14,000 yards, whereupon destroyers and cruisers in the van attacked the "BLUE" battle line.36

In his remarks on the exercise, Beatty observed that the distribution of fire was better than in earlier maneuvers, but some individual ships in the center of the "RED" battle line still made "serious mistakes" by concentrating their fire on the wrong target. The exercise shows the great reliance that the British placed on rapidly concentrating the most fire possible to inflict maximum damage to any visible portion of the enemy fleet. The fire-concentration rules of the Grand Fleet were designed to bring about a decisive action while favorable conditions existed and before smoke could obscure the view of the enemy or communications had a chance to break down. At the next

36 Memorandum, Beatty to Grand Fleet, "Remarks on Tactical Exercise Carried Out on 24 September, 1918," 28 October 1918, ADM 137/2026, PRO; Memorandum, Beatty to Grand Fleet, "Distribution of Fire Exercise," 27 September 1918, ADM 137/2026, PRO.
Jutland, Beatty did not want poor visibility and confusion to rob him of victory.\textsuperscript{37}

After receiving a report that three large enemy vessels were loose on the North Sea on Saturday evening, 12 October, the Sixth Battle Squadron, Second Battle Cruiser Squadron, and Third Light Cruiser Squadron sortied from Scapa Flow "...with the hopes of intercepting and engaging the enemy." The ships scouted the passage between the Orkneys and Shetlands all night.\textsuperscript{38} Storm warnings were flying and the weather continued to worsen. By noon the next day, the weather was so rough that the force had to reduce speed to 12 knots for the safety of the destroyers. The force never did sight any raiders, and so set a course for Scapa Flow.\textsuperscript{39} The report that German raiders had escaped into the North Sea was false.\textsuperscript{40}

\textsuperscript{37}Memorandum, Beatty to Grand Fleet, "Remarks on Tactical Exercise Carried Out on 24 September 1918," 28 October 1918, ADM 137/2026, PRO; Memorandum, Beatty to Grand Fleet, "Distribution of Fire Exercise," 27 September 1918, ADM 137/2026.

\textsuperscript{38}Robert Love recounts this example, but he erroneously states that Beatty sent the U.S. battleships to Berehaven, Ireland during this alarm; see his History of the U.S. Navy, 1775-1941, 2 Vols. (Harrisburg: Stockpole Books, 1992), 2:505.

\textsuperscript{39}General Report, Rodman to Secretary of the Navy (Operations), 19 October 1918, OB File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{40}The German official history of naval operations in the North Sea makes no mention of any raider sortie into the North Sea at this time; see, Otto Groos and Walther Gladisch, Der Krieg in der Nordsee, Vol. 7 (Berlin: E.S. Mittler, 1920).
As New York led the squadron into Pentland Firth on Monday, 14 October, at 1742, she experienced a terrific underwater blow on the starboard quarter, followed by another to the stern. The latter blow broke off two propeller blades, forcing New York to run on one engine at no more than 12 knots. It was immediately clear that the ship had struck a submerged object, but the squadron was steaming in mid-channel in 33 fathoms of water, which precluded the possibility of striking a wreck. Therefore, the New York must have collided with a submerged U-boat.

How could a battleship run over a submarine? Rodman's report explains how it happened. First of all, the strong current in Pentland Firth made handling of a U-boat very difficult. Vertical movement was especially dangerous, and so submarines would not submerge to a great depth while in Pentland Firth. Second, it was getting dark, which would allow the U-boat to take bearings with little chance of being detected. In addition, the battleships were in the process of steering southwest around Old Head and approaching Hoxa Sound, the entrance to Scapa Flow. Consequently, a U-boat standing to the westward at that locality would not have seen the approaching battleships until they were well on to her. The speed of the squadron at the time was 18 knots, double the speed of a submarine. The sudden appearance of warships would have compelled the U-boat to submerge, but it would probably have maintained
its former course because of the danger in maneuvering underwater in the strong current. Just before the collision, the New York had changed to a northwestward course, which probably crossed the track of the submarine. Rodman reported that in his opinion, and Beatty’s opinion as well, the submarine had rammed its bow into the New York’s side, then drifted aft and been struck with the propeller. The collision must have inflicted such damage to the U-boat that she became unmanageable and sank.41 The Germans used UB class coastal submarines for operations along the Scottish coast, including Pentland Firth and the Firth of Forth. During the middle of October, they lost two coastal submarines, UB 113 and UB 123, to unknown causes. One of these could be the submarine that collided with the New York.42

The next day, Tuesday the 15th, Rodman transferred his flag to the Wyoming, and the New York departed for Rosyth and repairs. The New York, still running on one engine and with additional escort owing to her reduced speed, left Scapa Flow at 1300. At 0100, Wednesday, while en route to Rosyth, the New York had yet another encounter with a U-

41 General Report, Rodman to Secretary of the Navy (Operations), 19 October 1918, OB File, Subject File 1911-1927, RG 45, NA.

boat. A submarine fired three torpedoes at the wounded ship, which all passed ahead of her. Normally, the ship would have been cruising at 16 knots rather than 12, and so the U-boat probably misjudged the battleship's speed. The captain and gunnery officer, among others, clearly saw the wakes in the bright moonlight. Also, a patrol spotted a submarine in the vicinity at about the same time as the attack.\footnote{German records make no mention of an attack, but it is possible that one of the UB-boats lost around this time could have been responsible for the attack.} When the New York went into drydock at Rosyth later on Wednesday morning, a large dent was found in the bottom of the hull that corresponded with the damage that the bows of a submarine would make. The New York was fortunate to have such minor damage after two close calls.\footnote{General Report, Rodman to Secretary of the Navy (Operations), 19 October 1918, OB File, Subject File 1911-1927, RG 45, NA; also see a series of cables between the commander of the Second Battle Cruiser Squadron and Beatty, 14 and 15 October 1918, ADM 127/1973, PRO.}

During the New York's absence, the remainder of the squadron carried out their scheduled full-caliber practice in Pentland Firth. The firing was at 11,000 yards with reduced charges and concentrated in pairs. Each ship was allotted eight salvos. The Texas's shooting was excellent and the Wyoming's was very good. The Arkansas, however, made a poor showing at her first full-caliber shoot. She suffered from all of the deficiencies that had plagued the American squadron when it first arrived in the war zone.
The poor handling of the Arkansas interfered with the Florida's shooting as well.

The Arkansas suffered from a communication breakdown between the conning tower and engine room. The number of revolutions the captain ordered was confused with the base-course during transmission to the engine-room, which resulted in the ship slowing suddenly and blanketing the Florida's fire. The plotting room should have detected the discrepancy between real and assumed speed, but did not. Rodman reported to the Navy Department: "I can see no possible excuse for such a discrepancy in the initial range except sheer carelessness or inefficiency." Moreover, there was every opportunity for range finder corrections, but the spotters also failed. Apparently, one of the spotters had poor eyesight. Rodman could not understand how a man with poor vision could have become the Arkansas's spotter. The Arkansas was clearly not at a high state of battle efficiency. Neither did the Florida completely escape criticism. Rodman determined that the Florida should have been able to cope with a sharp decrease of speed without warning, because such an emergency would possibly happen in battle. Nevertheless, the practice was not a failure. Not only did the Texas and Wyoming perform well, the average pattern of shot for the whole squadron was down

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45Report, Rodman to Secretary of the Navy (Director of Gunnery and Engineering), 20 October 1918, OS File, Subject File 1911-1927, RG 45, NA.
to 600 yards, a significant reduction from earlier practices, although still not as good as the British average. The New York and the Arkansas completed a full-caliber practice on 7 November, the last time the American battleships fired their main batteries while with the Grand Fleet. The New York's shooting was very good, but the Arkansas's shooting "left much to be desired." As the Great War was nearing its end, one of the war's effects killed additional millions. The influenza epidemic of the fall and winter of 1918 was a worldwide outbreak that did not spare the Grand Fleet. Strict quarantine measures successfully limited the scope of the epidemic, however. The Grand Fleet averaged seven deaths per day due to influenza, and the ships of the American squadron were not immune. In early November, all but the Florida was in quarantine. The epidemic was especially acute aboard the Arkansas. The disease spread to the Arkansas in late October when a draft of men from the transport Leviathan, a badly infected ship, temporarily quartered on her while awaiting passage on another vessel. By 9 November, the Arkansas had 259 influenza cases and eleven deaths. Conditions were considerably better on the other ships. The

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46Ibid.

47General Report, Rodman to Secretary of the Navy (Operations), 9 November 1918, OB File, Subject File 1911-1927, RG 45, NA.
New York, for example, had forty-eight cases and one death by 9 November.\textsuperscript{48}

IV

While the naval war continued much as it had all year, with the Grand Fleet standing guard over the German High Sea fleet and the convoys proceeding relentlessly across the Atlantic, events on the Western Front rapidly came to a decision. Allied troops had stopped the last German offensive in late summer. The infusion of American blood helped the Allies. The Meuse-Argonne offensive in late September made steady progress. As German resistance began to crumble, Bulgaria concluded an armistice. On 3 October Prince Max von Baden became chancellor of Germany and asked President Wilson to arrange an armistice. Wilson demanded that German armies evacuate occupied territory and that submarine attacks on passenger vessels must end before any armistice. On 20 October Prince Max agreed to end unrestricted submarine warfare.\textsuperscript{49}

Germany's naval leaders, however, did not feel the need for an armistice; they remained undefeated. They were determined that the war must not end before their final

\textsuperscript{48}General Reports, Rodman to Sims, 26 October, 2 November, and 9 November 1918, OB File, Subject File 1911-1927, RG 45, NA.

"naval Armageddon" with the Grand Fleet. When the end of the submarine campaign released the U-boats for service with the fleet, Admiral Rheinhard Scheer, chief of the Admiralty, considered the time ripe for the High Seas Fleet to do battle with the British fleet. On 21 October the German Admiralty informed Admiral Franz von Hipper, chief of the High Sea Fleet, that he should prepare to sortie against the Grand Fleet. Hipper determined that "an honorable fleet engagement, even if it should become a death struggle" was preferable to an inglorious end to the German fleet. Scheer did not bother to inform the kaiser or the chancellor of his momentous decision.  

On 24 October, German naval leaders formally adopted Hipper's plans for the last sortie, contained in "Operations Plan 19." The plan called for one destroyer group to attack the Flanders coast while another attacked the Thames estuary at daylight on the second day of the operation. Elements of the fleet would support both attacks. The destroyer attacks would bait the Grand Fleet into the North Sea, into an ambush of twenty-five U-Boats in six lines. The retiring German fleet would then draw the Grand Fleet toward Terschelling, a Dutch island in the North Sea, where the great battle would occur under conditions of German choosing.

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In the end, it was not Allied shells that defeated the German fleet, but the corrosive effects of the blockade. The long months of inactivity had undermined the morale of the High Sea Fleet to the extent that the crews of the capital ships were unreliable. By this point, even a victory against the Grand Fleet would not have altered the course of the war. The Grand Fleet would certainly have suffered losses, but just as certainly would have remained an effective and probably a superior battle fleet. Few expected that a final battle would change the ultimate course of events. When news of a "suicide sortie" leaked out to the German crewmen, a mutiny broke out that effectively removed the High Sea Fleet as a fighting force. The German sailors simply were not willing to die for nothing more than the honor of the Imperial German Navy. 51

The mutiny forced Hipper to cancel Operation 19 and he dispersed the fleet to the Elbe, Kiel, and Wilhelmshaven. Instead of isolating the disloyal elements, this only served to spread the infection to the port cities. Rebellious sailors with red flags gained control of such important cities as Hanover, Hamburg, and Bremen by 7 November. On 9 November Scheer told the kaiser he could no longer rely on the navy. The kaiser bitterly replied "I no longer have a Navy." Later that day, the last Hohenzollern boarded his imperial train for exile in the Netherlands. His navy

51Ibid.
became a double-edged sword. The kaiser had supported the navy to the point of war with Britain. In defeat, that navy turned against its patron.\textsuperscript{52}

The debate in the Allied Naval Council over the naval terms of the armistice reopened old antagonisms between U.S. and British naval leaders. Sir Rosslyn Wemyss, the First Sea Lord, supported Beatty’s proposal that the Germans surrender most of their surface fleet to the Allies. Since U.S. naval leaders feared that the British would acquire most of the surrendered ships, they supported the internment of German ships in neutral ports rather than their surrender. The peace conference would decide their ultimate fate. Although the Allied Naval Council maintained its view that Germany should surrender its ships, political leaders recognized the wisdom of internment.

With the support of Prime Minister David Lloyd George and Marshal Foch, internment gained favor in the Supreme War Council and became the basis of the naval terms of the armistice. The terms, which were stiff, stipulated that the flower of the High Sea Fleet, ten German dreadnoughts, all battle cruisers, eight light cruisers, and fifty of the most modern destroyers, would be interned at a designated port. All submarines would be surrendered. Representatives of the

\textsuperscript{52}Herwig, \textit{Luxury Fleet}, 249-254.
German government signed the armistice on 11 November 1918.\textsuperscript{53}

Because no neutral nation accepted the mutinous German Fleet, the Allies chose Scapa Flow as the location of the fleet’s internment. On 15 and 16 November, Beatty met Hipper’s representative, Rear-Admiral Hugo Meurer, to arrange for the surrender of Germany’s fleet. Beatty was courteous during the negotiations, but all business. The German admiral looked as if he were ill. The Germans agreed to surrender to Beatty in the Firth of Forth, prior to their transfer to Scapa for internment until the peace conference decided their ultimate fate.\textsuperscript{54}

V

On Wednesday, 20 November, the king, queen, and Prince of Wales joined the Grand Fleet during their hour of triumph. After reviewing the fleet from the destroyer Oak, the royal family had lunch aboard the Queen Elizabeth. In the afternoon, the King and Prince visited the New York for a half hour.\textsuperscript{55} Admiral Sims and members of his staff also


\textsuperscript{55}Memorandum, Beatty to Grand Fleet, "Visit of Their Majesties the King and Queen and His Royal Highness the Prince of Wales," 19 November 1918, ADM 137/2026, PRO.
visited the Sixth Battle Squadron. Sims remained aboard the New York to witness the big event on the next day: "Operation ZZ" -- the surrender of the German High Sea Fleet.56

At 0830, the Grand Fleet arrived at the appointed rendezvous 40 miles east of May Island. The fleet formed two great parallel columns, 6 miles apart. The vast armada, which included the forces from Harwich, Dover, and the Channel, included 370 ships and 90,000 men. Marder states that "such a force had never been collected before." The ships hoisted every battle flag they had. It must have been an inspiring sight. The American battleships occupied the center of the northern line, between the Fifth and the Second Battle Squadrons.57

At 0930 the British light cruiser Cardiff met the once proud German battle fleet and led them between the two victorious columns. The ships of the Grand Fleet remained at battle-stations with the great guns empty, but with powder and shell resting in the loading trays, ready to be rammed home. The Germans were to have removed their breech blocks and fire control equipment, and to have discharged

56 General Report, Rodman to Secretary of the Navy (Operations), 23 November 1918, OB File, Subject File 1911-1927, RG 45, NA; Memorandum, Beatty to Grand Fleet, "Operation ZZ," 20 November 1918, ADM 137/2026, PRO.

57 General Report, Rodman to Secretary of the Navy (Operations), 23 November 1918, OB File, Subject File 1911-1927, RG 45, NA; Marder, Dreadnought, 5:190.
all ammunition. Nevertheless, Beatty did not trust them. Who could believe the flower of the Imperial German Navy would meekly surrender without a battle? In Rodman's words: "It was hard to realize that the ships which we had expected and hoped to engage, would all be given up without a struggle or fleet action, and surrender without a fight."

But there was no last act of defiance. The vast funeral procession turned and proceeded into the Firth of Forth. Beatty then made the signal to the Germans, "The German flag will be hauled down at sunset today, Thursday, and will not be hoisted again without permission."  

When the German ensigns came down at sunset, all hands aboard Queen Elizabeth cheered the Commander-in-Chief. Beatty smiled and said "I always told you they would have to come out."  

At a thanksgiving service that evening, Beatty issued a message of congratulations to the officers and men of the Grand Fleet:

The greatness of this achievement is in no way lessened by the fact that the final episode did not take the form of a fleet action. Although deprived of this opportunity, which we had so long and eagerly awaited, and of striking the final blow for the freedom of the world, we may derive satisfaction from the singular tribute which the enemy has accorded to the Grand Fleet. His surrender without joining us in action is a testimony to the prestige and efficiency of the fleet without parallel in history, and it is to be

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58 General Report, Rodman to Secretary of the Navy (Operations), 23 November 1918, OB File, Subject File 1911-1927, RG 45, NA.

59 Marder, Dreadnought, 5:191.
remembered that this testimony has been accorded by those who were in the best position to judge.\footnote{Memorandum, Beatty to Grand Fleet, 21 November 1918, ADM 137/2026, PRO.}

One would think the ignominious surrender of the High Sea Fleet would have caused nothing but jubilation in the Grand Fleet, but the feelings were mixed. On the occasion of the armistice, Beatty declared, "The Fleet, my Fleet, is brokenhearted." After witnessing the surrender of the German fleet, Joubert McCrea, a member of one of the Florida's 5-inch gun crews, wrote in his diary: "I never hoped to meet them this way, I wanted to fight them."\footnote{Diary, Joubert McCrea, 21 November 1918, U.S. Army Military Institute, Carlisle Barracks, PA.}

Wemyss explained in his memoir why there was no joy in the victory:

They had looked for a Trafalgar -- for a defeat of the German Fleet in which they would have played a prominent and proud part. What they got was a victory far more crushing than any Trafalgar and with none of its attendant losses on our part -- but also without any of the personal glory which would have been attached to the survivors.\footnote{Wemyss, unpublished memoirs, quoted in Marder, Dreadnought, 5:165.}

The fact remains that the Grand Fleet, the American squadron among them, achieved an unparalleled naval victory. Victory without glory, after all, is victory nonetheless.

On 1 December 1918, it was time for the American squadron to leave the Grand Fleet. The commander in chief came aboard New York to thank the officers and men of the
Sixth Battle Squadron for their service and to give them a heartfelt farewell:

I know quite well that you, as well as all of your comrades, were bitterly disappointed at not being able to give effect to that efficiency that you have so well maintained. It was a most disappointing day. It was a pitiful day to see those great ships coming in like sheep being herded by dogs to their fold, without an effort on anybody's part; but it was a day that everybody could be proud of... I had always certain misgivings, and when the Sixth Battle Squadron became part of the Grand Fleet those misgivings were doubly strengthened, and I knew then they would throw up their hands. Apparently, the Sixth Battle Squadron was the straw that broke the camel's back... you will return to your own shores; and I hope in the sunshine, which Admiral Rodman tells me always shines there, you won't forget your comrades of the mist and your pleasant associations of the North Sea.63

Rodman wrote a farewell to Beatty expressing his appreciation and esteem:

Your constant thoughtfulness and your numberless courtesies have made our path clear, and I deeply appreciate your valuable assistance in all matters affecting the amalgamation of this force into the Grand Fleet from the very first day of our arrival. We leave with the pleasantest memories of a happy and instructive year under your able guidance and I go with the feeling that I am parting from tried and true friends in you, and my other brother officers of the Grand Fleet.64

As the U.S. battleships steamed out from Rosyth for the last time, the British and American ships exchanged last minute

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63Farewell address, Beatty to Sixth Battle Squadron, in "General Bulletin No. 24," 10 December 1918, Papers of Admiral William S. Benson, Manuscript Division, Library of Congress.

64Letter, Rodman to Beatty, 30 November 1918, Papers of Admiral of the Fleet Earl David Beatty, National Maritime Museum, Greenwich, U.K.
farewells. On behalf of the officers and men in the British fleet, Beatty signaled: "Your comrades in the Grand Fleet regret your departure. We trust it is only temporary and that the interchange of squadrons from the two great fleets of the Anglo Saxon Race may be repeated." Rodman answered with a signal on behalf of the Sixth Battle Squadron: "We will never forget the hospitality which has made us feel as a part of one big family and we intend to maintain that relation for all time." 

Remarkable harmony existed between the Americans and their comrades in the Grand Fleet. As Rodman expressed it: "As time wore on, our friendship ripened into a fellowship and comradeship, which, in turn, became a brotherhood . . . ." The above testimonials of mutual regard were apparently quite sincere. The two admirals, Beatty and Rodman, not only worked well together, they became friends. This spirit of comradeship became the dominant feature of the amalgamation of the U.S. battleships into the Grand Fleet, and it explains why their operational cooperation was such an unprecedented success. Rodman deserves much credit for the harmony because of his efforts to prevent any rivalries, misunderstandings, or jealousy. His willingness

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65 Naval Signal, Beatty to Sixth Battle Squadron, 1 December 1918, ADM 137/1964, PRO.

66 Naval Signal, Sixth Battle Squadron to Beatty, 1 December 1918, ADM 137/1964, PRO.

67 Rodman, Kentucky Admiral, 267.
to take orders from the British commander in chief and benefit from British war experience greatly facilitated the integration of the U.S. battleships into the Grand Fleet. Had Rodman been a contentious or proud person, the American squadron would never have become an integral part of the Grand Fleet.

Beatty also deserves credit for the successful cooperation of the American battleships with the British fleet. Beatty was a very capable leader of men who understood the importance of morale. He was willing to make the American squadron an integral part of Grand Fleet operations even while he had concerns about its efficiency. He was careful to keep his criticisms private and he was quick to lend encouragement and praise. In remarking upon the service of the American squadron with the Grand Fleet, Alfred Lord Chatfield remarked that "nothing would have been easier than a clash of ideas, of principles of fighting, of routine methods between two Services which had never been at sea together and had been trained in completely different environments." Because both Beatty and Rodman worked to ensure that no clash occurred, harmony was the dominant note in the operational cooperation of the American squadron with the Grand Fleet.

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68Chatfield is quoted in Marder, Dreadnought, 5:125.
CHAPTER 4

MIXED SIGNALS: THE GUNNERY EFFICIENCY
OF THE U.S. SQUADRON WITH
THE GRAND FLEET

In his biography of Admiral William S. Sims, Elting Morison contended that when Sims left the office of Inspector of Target Practice in 1909, "American gunnery was probably the best in the world."¹ If Morison's contention is true, then in less than a decade either U.S. gunnery efficiency dramatically declined or British gunnery greatly improved. Upon joining the Grand Fleet, the gunnery of the U.S. battleships was poor. Their poor performance was an unpleasant surprise on both sides of the Atlantic. Admiral Sir David Beatty could not consider the American ships as the equivalent of British ships and had to make his plans accordingly. Admiral Hugh Rodman promised the Navy Department that his ships would soon improve and adapt to conditions in the North Sea. Only after months of training with the Grand Fleet did the gunnery of the American battleships improve to the point that they were comparable to British battleships. Various factors contributed to the poor gunnery of the U.S. battleships when they joined the

Grand Fleet and to the dramatic improvement of their gunnery during their service in the war zone.

I

In his studies of U.S. battleship design, Norman Friedman has recognized that U.S. cooperation with the Grand Fleet revealed deficiencies in U.S. gunnery, noting that the most serious problem was excessive dispersion of fire compared with British firings. He also recognizes that practice with the Grand Fleet greatly improved the gunnery of the U.S. battleships. Friedman’s findings are mostly based on hearings of the General Board. My research, which is largely based on Rodman’s general reports and Admiralty papers relating to the Grand Fleet, supports and amplifies Friedman’s conclusions. Friedman also provides an excellent comparison of U.S. and British fire control systems, which will be paraphrased below to lay the necessary foundation for any understanding of the reasons for the gunnery deficiencies of the U.S. squadron with the Grand Fleet.

The U.S. fire control system in World War I included four general positions: the spotting tops, fire control tower aloft, the central plotting station below decks, and

Rodman’s general reports are found in Subject File 1911-1927, Record Group 45, National Archives; Admiralty papers relating to the Grand Fleet, including correspondence of the commander in chief, are found in ADM 137, Public Record Office.
the guns themselves. The function of the spotting tops was the same as it had been since the age of sail. Trained spotters would observe the fall of shot and would call corrections. Modern technology in the form of visual number transmitters and telephones, however, made the transmission of information more efficient. In the fire control tower was the directorscope, or simply director. This device was a centralized means of compensating for the roll of the ship. The director was a telescope laid to cross the target at the top or bottom of the roll, and used to gauge an elevation correction for the guns, which was transmitted to the central station. Also in the fire control tower was one of several optical rangefinders. The rangefinder used triangulation to find the distance to the target. The aloft positions, therefore, collected and fed range and spotting data, bearing (the angle of the firing ship’s course to the line of sight to the target), and elevation correction to the central station.

The central station, or plotting room, was the brain of the fire control system. The central station was deep in the ship and well protected so that it could survive considerable damage. Gunnery officers in the central station used their instruments to process the information and estimate proper bearing and range. They also plotted the trend of the data so they could spot errors. For example, readings from two or more rangefinders could be
averaged, or an obviously faulty reading disregarded. The central station then transmitted azimuth and elevation commands to the guns. Finally, an officer in the central station sounded a buzzer in the turrets, giving them the order to fire.

Most navies before World War I had developed three standard instruments that could predict range. The first was the 'plotting board', used to graph current positions of enemy and own-ship positions. The basic data input was successive rangefinder readings at specific intervals. The second was the 'rate of change of range projector', which could convert enemy course and speed into the rate the range was changing, so enemy range could be predicted for the immediate future. This instrument was, in effect, a mechanical computer, which set up a mechanical model of a two-ship engagement. The third instrument was the 'range clock', on which the rate of change of range could be set, and the changing range read. The base rate of change could be altered according to spotting information while the clock ran.\(^3\)

Jon Sumida, in his studies of British naval technology, has shown that most fire control systems during World War I failed to calculate accurately the rate of range change.

The British Dreyer system, for example, used what amounted to a geometric, or straight-line, approximation to find the solution to what was actually a differential equation. A private inventor in Britain, Arthur Pollen, invented a differential analyzer that he marketed as the Argo clock. Pollen's system produced excellent results, but the Admiralty rejected it in favor of the cheaper Dreyer system.4

In 1916 the U.S. Navy ordered a device similar to Pollen's, called the Ford Rangekeeper, an analog computer that could also solve differential equations. This instrument could generate predicted ranges, but not predicted bearings. During World War I the U.S. also acquired the patents for the Pollen fire control system and installed at least one aboard a U.S. battleship with the Grand Fleet. It is likely that the Ford Rangekeeper was modified to incorporate Pollen's concepts. The Pollen device added bearing data into the range estimator, giving the Ford device the ability to predict both enemy range and bearing. The Ford computers were the basis of the rapid development of U.S. naval gunnery following World War I.5


5Freidman, Naval Weapon Systems, 31-33.
The principal difference between the U.S. and British fire control systems was that the former emphasized the importance of the plotting room while the latter system emphasized the director tower. In the British system, the fire control computer, housed in the plotting room, would simply process information and transmit it to the director. The British director combined multiple functions in a single instrument: it automatically added in the change in elevation of the directorscope, could apply spotting information, and transmitted bearing and elevation data directly to the guns. In addition, a single key in the director fired all of the main guns simultaneously.

Another important difference was the method of transmitting train and elevation commands to the guns. The British used the "follow the pointer system," in which the director drove indicators at the guns. The gun crews simply matched their dials to those of the transmitters. In U.S. battleships, electric counters in the turrets gave the elevation only. In 1917, the U.S. Navy began installing a "follow the pointer" system to indicate train, but did not provide that system for elevation until late 1918.⁶

The benefit of the British fire control system was that it was more automated and required fewer personnel. Nevertheless, U.S. observers preferred the U.S. system, which relied more on human skill and judgment. The U.S.

⁶Ibid., 31-33.
system placed great responsibility on spotters and officers in the plotting room. Consequently, the U.S. system was more subtle and flexible. For example, it could better divide the fire of one ship between two targets. In theory at least, the U.S. system was also less subject to errors that would have greater impact on a more automated system. The U.S. system, with its emphasis on plotting, was more likely to detect range and deflection errors than the British system. For the U.S. system to pay off, however, it demanded highly trained personnel.7

II

One of the reasons for the poor gunnery of U.S. battleships when they joined the Grand Fleet was the shortage of experienced officers and men. Following the practice in other American wars, the United States did not mobilize its manpower until after the declaration of war. The total strength of the U.S. Navy was 67,000 officers and men when the war began. By the end of the war the navy's ranks swelled to nearly a half-million. Training programs could not keep pace with such a rapid expansion.8 To make matters worse, the decision to remove experienced gunners from battleships to man guns on merchant ships further depleted the cadre of trained men. Rodman recalled that he

7Ibid., 31-33.

had only enough crews for half of the secondary batteries when the war began. In battle, he would have had to shift all of the gun crews to the engaged side only. The Navy Department brought Rodman's battleships up to strength just prior to their departure for Europe, but according to Rodman, "They gave us a lot of recruits that were not trained."  

Rodman listed changes in, and inexperience of, personnel as one of the major reason for the poor showing his ships made at their first full-caliber firing in European waters. Rodman had suggested at the time that he could eliminate the deficiencies if the department would not make any further changes in personnel.  

Several months later, Rodman made the same point, but more forcefully:

All Officers we have at present have been assigned important battle stations and our increasing efficiency is largely due to our permanency in personnel. It is not desired that officers trained elsewhere be sent to replace those already in the division, for no matter how efficient they may be, any appreciable change of personnel is bound to disrupt a ships' organization. It is most earnestly recommended that no more reserve officers be sent to this division for training and

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9 Senate Committee on Naval Affairs, Hearings before the Subcommittee of the Committee on Naval Affairs, 66th Cong., 2nd sess., 7 April 1920, 858-863.

that we no longer be considered available for training purposes. 

Rodman also complained about the loss of his divisional gunnery officer, Commander Husband E. Kimmel, who would later become commander in chief of the Pacific Fleet and was forced into retirement after the debacle at Pearl Harbor. The Navy Department had ordered Kimmel home on 30 January 1918, but sent him back in July. Kimmel’s absence was a hardship because no other officer could spare the time from regular work to take over the duties of a full-time divisional gunnery officer, which included not only improving divisional gunnery but also studying and assimilating the good points of British methods and policy. 

The commander in chief of the Atlantic Fleet, Admiral Henry T. Mayo, and his staff inspected the U.S. squadron with the Grand Fleet for four days in early September 1918. Mayo concluded that the gunnery efficiency of the force had suffered because of the rapid expansion of the Navy and consequent reduction of officers and transfers of large numbers of the crews. He also stated that the lack of a

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11 General Report, Rodman to Secretary of the Navy (Operations), 4 May 1918, OB File, Subject File 1911-1927, RG 45, NA.

12 General Report, Rodman to Secretary of the Navy (Operations), 2 February 1918, OB File, Subject File 1911-1927, RG 45, NA; letter, Sims to Rodman, 11 July 1918, Papers of William S. Sims, Manuscript Division, Library of Congress.
permanent divisional gunnery officer had retarded the development of gunnery efficiency.\textsuperscript{13} In addition, Mayo reported that officers of the Sixth Battle Squadron had expressed their belief that detaching officers and men not only hurt efficiency but also morale. They called attention to the fact that reliefs were often not available to fill their places and that the leadership should make provisions to avoid such a situation in the future.\textsuperscript{14}

III

Another cause of poor gunnery Rodman mentioned in his reports on practice firings was the "newness of conditions under which the practice was fired."\textsuperscript{15} The British worked hard to hold target practices under actual war conditions. Based on experience in battle, the Grand Fleet added difficulties and limitations to their practices that would

\textsuperscript{13}\textit{Report, Mayo to Secretary of the Navy (Operations), "Inspection of Battleship Division Nine," 1 November 1918, OB File, Subject File 1911-1927, RG 45, NA.}

\textsuperscript{14}\textit{Report, Mayo to Secretary of the Navy (Operations), "Gunnery -- Methods and appliances," 18 June 1919. This study was based on inspections, conferences, and interviews of both U.S. and British officers between September and December 1918. Benson forwarded a copy to the General Board. See, GB File 436, Subject File 1911-1927, Records of the General Board of the Navy, RG 80, NA.}

simulate problems they would likely encounter in battle.\textsuperscript{16} By contrast, the Atlantic Fleet held their target practices only in favorable weather conditions and on a previously determined range. Furthermore, U.S. practice allowed rehearsals and practice runs before firing for a score, but the British system did not allow second chances. U-boats and mines infested the area where the Grand Fleet practiced. Just prior to each practice, minesweepers cleared the range and lanes of approach. Time and the limited protected space negated any practice approach. Besides, the conditions of the practice simply mirrored reality -- second chances are few in actual combat.\textsuperscript{17}

The first full-caliber practice in the war zone of the Texas, holder of the gunnery trophy, provoked Rodman to criticize the system of gunnery training in the U.S. Navy. He stated that practice in the Grand Fleet was based on a "war and not necessarily on a \textit{competitive} basis . . . ."

Rodman stated that the recent practices of the Texas and the other ships of the squadron illustrated their unpreparedness. He asserted that their poor shooting was "a commentary on our system wherein rehearsals, special grooming, and a cut and dried program seems to be expected

\textsuperscript{16}General Report, Rodman to Secretary of the Navy (Operations), 23 February 1918, OB File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{17}General Report, Rodman to Secretary of the Navy (Operations), "Training under war Conditions in War Zone," 15 June 1918, OB File, Subject File 1911-1927, RG 45, NA.
before a ship can make hits and make them rapidly." Rodman emphasized that the Texas was not the exception, "but rather a glaring generality, and if all our vessels are as poorly prepared as these were, to actually go into action on short notice, some change should be made in our system."18

During his testimony before the Senate Subcommittee on Naval Affairs in 1920, which was investigating the Navy Department's conduct of the war, Rodman minimized his earlier criticism of U.S. gunnery training by referring to it as "trifling." He related that he had perceived that the Texas was "still focused on winning the pennant," and that he told the officers "to get over that competition business . . . ." Rodman testified that his criticism only referred to the Texas and no other battleships. He went so far as to state that "The rest of the ships were excellent, but the Texas was rotten when she arrived." Rodman's testimony contradicts what he said in his general reports to the Navy Department. His testimony shows that he was very anxious to defend the Navy Department against Sims and other critics. Admitting that U.S. gunnery was inefficient when hostilities began would have given critics a powerful weapon.19

18 General Report, Rodman to Secretary of the Navy (Operations), 2 March 1918, OB File, Subject File 1911-1927, RG 45, NA.

19 Senate Committee, Naval Affairs, 858-860.
IV

Operations in the North Sea revealed design problems that affected the gunnery of U.S. battleships. Several officers noticed that U.S. battleships had much more motion than the British battleships, and consequently were poorer gun platforms. Rodman recommended that the Navy Department consider improving the stability of U.S. battleships, noting that the New York and Texas had the most motion, the Wyoming and Arkansas somewhat less, and the Florida had still less motion. The exact cause of the motion was never determined.20

Another problem was the location of the range finders. Severe weather in the North sea rendered range finders on the forward turrets all but useless. Spray clouded the optics and the observers had no weather protection. High winds could possibly blow an observer off the turret. In February 1918, Rodman recommended that the forward range finder be moved above the fire control tower.21 In August, he reported that during recent operations in the North Sea, so much water came aboard that none of the range finders in the ship could operate for a time. Rodman recommended that

20General Report, Rodman to Secretary of the Navy (Operations), 24 August 1918, OB File, Subject File 1911-1927, RG 45, NA; excerpts of Rodman’s reports and recommendations are contained in an Office of Naval Intelligence document, undated, also in the OB File.

21General Report, Rodman to Secretary of the Navy (Operations), 9 February 1918, OB File, Subject File 1911-1927, RG 45, NA.
the department follow the British practice of moving range finders above the foretops.\textsuperscript{22}

Design problems also affected the torpedo defense guns. The secondary batteries in the lower decks had proven to be wet even before the war, but conditions in the North Sea made them inoperable. Rodman reported that aboard the \textit{New York} during a four-day cruise, the weather was calm enough to man the lower deck guns on only one day. On the other three days, only two 5-inch guns in open mounts could operate.\textsuperscript{23} Likewise, the captain of the \textit{Texas} recalled that during his entire wartime service he could rarely use the lower-deck guns and he only manned two of the open 5-inch guns while at sea. The Navy Department began removing hull-mounted secondary guns from battleships during the war, but the U.S. battleships with the Grand Fleet did not remove any of theirs until after the war.\textsuperscript{24}

\section{V}

The most common British complaint against American gunnery was the excessive spread of the patterns of their main battery broadsides. The Royal Navy was more concerned

\textsuperscript{22}General Report, Rodman to Secretary of the Navy (Operations), 24 August 1918, OB File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{23}General Report, Rodman to Secretary of the Navy (Operations), 16 March 1918, OB File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{24}Friedman, \textit{U.S. Battleships}, 176.
about large salvo patterns than the U.S. Navy was; in fact, the Americans considered British spreads too small. Nevertheless, the U.S. Navy wanted to reduce its salvo patterns. In a report to the Admiralty following his visit to the Atlantic Fleet, Commander Richard Down, R.N., noted that the American battleships averaged spreads of over 800 yards. He proposed three reasons for these excessive spreads: weak turret mountings, excessive muzzle pressures owing to high muzzle velocity, and the American practice of firing double-barreled salvoes with turrets that have gun muzzles too close together. The British fired half salvoes to avoid blast interference between the guns in a turret.\(^{25}\) The American battleships with the Grand Fleet continued to fire double salvoes and did not modify turret mountings. They nevertheless managed to reduce their spreads somewhat, possibly by reducing muzzle velocity.\(^{26}\)

The Sixth Squadron’s first full-caliber firing achieved an average pattern for the squadron of 757 yards -- average for U.S. battleships but poor according to British standards.\(^{27}\) At its 15 October practice, the U.S. squadron


\(^{26}\)Friedman states that the British solution to pattern reduction was probably reduced muzzle velocity; see his Naval Weapon Systems, 32.

\(^{27}\)Report, Rodman to Secretary of the Navy (Operations), "Report of the Battle Practices of Division Nine and Battle Squadrons of the Grand Fleet," 25 February 1918, OB File,
reduced their average spread to 600 yards.\textsuperscript{28} A little over two weeks previously, at a full caliber practice of the Second Battle Squadron, the \textit{Erin}, \textit{Agincourt}, \textit{Orion}, and \textit{Conqueror} had patterns that averaged 572 yards. This was a larger than average pattern for the British, but they did not consider it excessive. One can conclude that the Americans had reduced their pattern spreads to near the accepted British standard. The Americans never did consistently achieve patterns that were as small as the British ones.\textsuperscript{29} Nevertheless, it should also be pointed out that at this same practice of the Second Battle Squadron, there were range finding errors, communication failures, and numerous other deficiencies. The British evidently had bad days too.\textsuperscript{30}

By all accounts, the gunnery of the American squadron improved significantly while serving with the Grand Fleet. One indication of its efficiency is a comment by the British commander of the towing ship that towed the target for all

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Subject File 1911-1927, RG 45, NA.
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\textsuperscript{28}General Report, Rodman to Secretary of the Navy (Operations), 19 October 1918, OB File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{29}In the 1920s, the U.S. Navy continued to have trouble with their 14-inch guns firing excessive patterns; see Friedman, \textit{Naval Weapon Systems}, 32.

\textsuperscript{30}Memorandum, Mayo to Secretary of the Navy (Bureau of Ordinance, Construction and Repair, Steam and Engineering), "Remarks on Full Caliber Practice [Second Battle Squadron], 28 September 1918," undated, GB 436, Subject File 1911-1927, RG 80, NA.
Grand Fleet practices. Following a full-caliber practice of the Sixth Squadron in July, he told Rodman that he had never witnessed better firing than that of the American squadron. Rodman recorded this praise in his general report and added, "This is not only gratifying but shows that our methods of training, our installations, and fire control and personnel, are at least equal if not superior to the British . . . ." Rodman was overly exuberant about the praise of one British officer, but the fact remains that the Americans's shooting had improved to the point that it gained notice and praise.

Captain Henry Wiley of the Wyoming thought, "we excelled the British in shooting." Wiley declared that "Our shooting was just as accurate in target practice," as the British. He also considered the U.S. system of turret firing as superior, and felt the U.S. ships could deliver heavier broadsides in a given time. Wiley did admit that the British ships were more heavily constructed and that their fire control system could likely withstand more damage. Understandably, the American officers preferred their own systems and methods to those of the British, and vice versa. Consequently, those preferences colored their estimates of one another's efficiency. For example, the

31 General Report, Rodman to Secretary of the Navy (Operations), 6 July 1918, OB File, Subject File 1911-1927, RG 45, NA.

British emphasized very small salvo patterns. Because the Americans preferred full-salvo firing, their patterns would not be as small as the British ones were. The British practice of firing half-salvoes may have helped them achieve small spreads, but at the expense of the weight of individual broadsides. The American practice of full-salvo firing may have facilitated heavier broadsides in a given time, but at the expense of greater dispersion. Which has greater effect on an enemy: a heavier individual broadside or half of a broadside delivered more accurately? The relative merit of the two systems was a matter of preference and opinion.

This chapter has outlined a number of factors that account for the poor gunnery of the U.S. battleships when they joined the Grand Fleet. Among these, excessive salvo patterns and the state of gunnery training are the most significant. Only after months of intensive training in war conditions did the gunnery of the American battleships approach the British standard. By the end of the war, the overall gunnery efficiency of the American battleships was almost equivalent to that of the British. On the whole, they showed great improvement and managed to reduce their average salvo spreads. There is no evidence, however, to suggest they surpassed British gunnery efficiency.
CHAPTER 5

PLANNING FOR A POSSIBLE BATTLE CRUISER RAID AND THE PROBLEMS OF ANGLO-AMERICAN NAVAL COOPERATION, MAY TO OCTOBER 1918

The most important contribution of the U.S. Navy during World War I was to transport over two million American troops to Europe, the decisive theater. Ludendorff's spring offensive, which coincided with the American troop buildup, was a race against time to defeat the war-weary Allied armies before the United States could throw its sword into the balance. American naval leaders never lost sight that the war would be won or lost on the western front. Chief of Naval Operations William Benson placed priority on protecting U.S. troop convoys, rather than on guarding the U.S. coast or supplying escort for mercantile convoys.1 Benson realized that the American troop convoys presented the Imperial German Navy with an opportunity to affect the outcome of the war. Submarines were the principal danger to the convoys, but there was also the possibility that one or more German battle cruisers would escape into the Atlantic.

The only way to guard the troop convoys against such powerful raiders was to protect them with battleships.

Agreement on a joint Anglo-American plan to counter the threat of a possible German battle cruiser raid against the troop convoys took as long to negotiate as the later Treaty of Versailles. Six months passed before the two allies could agree on a joint plan of operations. Both the Admiralty and the Navy Department agreed on the vulnerability of the convoys if the Germans were to use their battle cruisers against them and on the importance of protecting the troop convoys. Nevertheless, the leadership of the two navies had differing priorities and methods. Cooperation between them was not possible without accommodation. Neither the Navy Department nor the Admiralty was able to produce a mutually acceptable plan until they were willing to adjust their differences.

I

Admiralty planners began worrying about the use of German battle cruisers as raiders as early as November 1917. The success of the three German raiders, Moewe, Wolf, and Seeadler, in late 1916 and early 1917 and the decreasing effectiveness of the U-boats made the increased use of raiders more likely. These raiders sank only about 268,000 tons in 1917, but because of the shortage of shipping and the diversion of cruisers to bring the raiders to bay, their cruises were an operational success; see Halpern, A Naval History, 375.
been auxiliary warships that followed the coast of Norway to escape from the North Sea. It was improbable that auxiliary warships would attempt the southern exit from the North Sea, but the Admiralty recognized the possibility that enemy battle cruisers might force the Dover Straits and attack the convoy approach routes to the English Channel. The Plans Division proposed that the Admiralty should base a number of capital ships on the Channel to intercept raiders before they escaped into the open Atlantic. They proposed that either the French or the Japanese could spare ships for this purpose, but the Admiralty took no action on their proposal. The Dover mine barrage would have to suffice.

On 17 December 1917, the Admiralty got into contact with the chief of naval operations, Admiral William S. Benson, to say their anxiety about providing "more effective protection for troop convoys from Halifax against possible enemy surface raiders." The Admiralty proposed to use two large cruisers for this purpose, the Leviathan and the King Alfred, both launched in 1901. They contended that they had no more resources to offer, but because U.S. troops were involved, they suggested that the U.S. Navy Department might

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3Battle cruisers evolved from armored cruisers; they carried the same caliber of main battery as battleships but were more lightly armored and were faster, serving as the scouting force of the battle fleet.

4Admiralty Plans Division Memorandum, "Appreciation of the situation as regards German raiders," 19 November 1917, ADM 137/2704, Public Record Office.
detail four pre-dreadnoughts for escort duty.\(^5\) The next day, Admiral William S. Sims cabled Benson to explain that the Admiralty's suggestion was in response to his earlier suggestion that because of the presence of U.S. troops, only the largest cruisers should escort the Halifax convoys. Moreover, because of the harsh winter weather and speed of the convoys, the Department should wait until spring before considering the use of the pre-dreadnoughts.\(^6\) Benson answered that the department had decided to order two armored cruisers to Halifax to work with the British cruisers. The cruisers could fend off the average commerce raider, but would be no match for a battle cruiser. Nevertheless, there were no immediate plans to use any of the pre-dreadnoughts to escort convoys.\(^7\)

It was not until the American troop convoys began crossing the Atlantic in large numbers that naval planners decided that additional steps were necessary. They developed a series of plans to protect the troop convoys, and those plans continued to evolve until the end of the

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\(^5\)Cable, Admiralty to Commodore Gaunt, "For Chief of Naval Operations," 17 December 1917, TP File, Subject File 1911-1927, RG 45, National Archives; a pre-dreadnought is any battleship armed with mixed calibers, rather than an all-big-gun ship; Dreadnought, with a single caliber main battery, made all battleships with mixed batteries obsolete by eliminating intermediate calibers.

\(^6\)Cable, Sims to Benson, 18 December 1917, TP File, Subject File 1911-1927, RG 45, NA.

\(^7\)Cable, Benson to Sims, 20 December 1917, TP File, Subject File 1911-1927, RG 45 NA.
war. Producing a plan that was acceptable to both the Admiralty Plans Division and the American planning section, one that both the Admiralty and Navy Department would approve, was an arduous process. Sometime in May 1918, the Admiralty Plans Division drew up a proposed plan of action to counter battle cruiser raids. Their plan included the use of U.S. battleships to escort the troop transports and convoys sailing from Halifax and New York. The Grand Fleet would intercept the raiders on their return journey. British battle cruisers, however, would not hunt for any raiders in the open Atlantic unless very good intelligence became available.

The American planning section, which worked in conjunction with the Admiralty Plans Division, submitted their own plan for consideration. The Americans stressed that the accelerated delivery of U.S. troops would have an important impact on the military situation on the Western Front. They pointed out that "this fact cannot but be known to the enemy and may therefore cause him to take extraordinary measures to interrupt the supply of men from America." Unlike the Plans Division memorandum of November

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8The Plans Division was a formal department of the Admiralty; the American planning section was a temporary, less formal staff of U.S. Navy officers who worked with the Plans Division to formulate joint planning.

9Admiralty Plans Division Memorandum, "Proposed measures to be taken if enemy battle cruisers enter Atlantic," P.D. 80, undated, ADM 137/2710, PRO.
1917, the planning section considered the northern route as the most likely course of enemy battle cruisers because fuel ships and scouting submarines could accompany them. To protect the convoys, they suggested that one modern U.S. battleship escort each important troop convoy. A battle cruiser could outrange a pre-dreadnought, but the planning section considered that two pre-dreadnoughts were sufficient if a modern battleship was unavailable. The planning section also suggested that additional battle cruisers be conveniently stationed to intercept any enemy battle cruiser. They recommended that a Japanese battle cruiser division could transfer to European waters for that purpose.10

In early July, Benson’s anxiety about the safety of the troop convoys prompted him to remind Sims of the danger and to remind him that the Navy Department depended upon him for prompt information so they could take action if any German battle cruisers escaped into the Atlantic.11 Sims answered that the Grand Fleet was ready to act against any German raiders, but that it was impossible to guarantee that enemy battle cruisers would not gain the open ocean. Referring to the planning section memorandum, Sims stated that only the


11Cable, Benson to Sims, 2 July 1918, Admiral Sims’s Personal File, TD File, Subject File 1911–1927, Records of the Department of the Navy, RG 45, National Archive.
provision of battleships for escorts could ensure the safety of the troop convoys.\textsuperscript{12}

II

In late July the Navy Department proposed their own plan for protecting the troop convoys. This plan was similar to the planning section's proposal in several respects: The Navy Department plan also assumed that enemy battle cruisers would use the northern exit, endorsed the use of Japanese battle cruisers for pursuit, and would provide two pre-dreadnoughts to escort each important troop convoy. The Navy Department plan went into greater detail than previous plans. The department would station Division Six of the Atlantic Fleet, consisting of the coal-burner Utah and the oil-burners Nevada and Oklahoma, at Queenstown or Brest. Division Eight, consisting of the newest battleships, Arizona, New Mexico, and Pennsylvania, would remain with the Atlantic Fleet, but could cover the Western Atlantic.\textsuperscript{13}

The department would divide the North Atlantic into three zones: The Western Atlantic from longitude 45° west to the United States coast, the Mid-Atlantic from longitude 20°

\textsuperscript{12}Cable, Sims to Benson, 2 July 1918, TD File, Subject File 1911-1927, RG 45, NA.

west to longitude 45° west, and the Eastern Atlantic from
the European destination to longitude 20° west. In the
event an enemy battle cruiser were to escape into the
Atlantic, all eastbound convoys in the western zone would
return to U.S. or Canadian ports, those in the middle zone
would divert to the Azores, and convoys in the eastern zone
would proceed to their destination or the nearest port. In
the case of the westbound convoys, those between longitude
15° west and Europe would either return to port or divert to
the Azores, those between longitude 15° west and longitude
45° west would divert to the Azores or proceed to the
nearest U.S. or Canadian port, while convoys in the western
zone would proceed to their destination. Division Six would
steam at top speed to the Azores to protect the shipping
there, while Division Eight would be ready to proceed where
needed. 14 Meanwhile, the Japanese battle cruisers would
begin their hunt. The plan would not go into operation
until the department gained information that a raider had
escaped. 15

Neither Sims nor the Admiralty was satisfied with the
Navy Department's plan. Sims strongly objected to the
plan's reliance on naval intelligence: "I believe that it is
extremely dangerous to base a plan on assumption that

14 Division Six of the Atlantic Fleet should not be
confused with the American squadron (the Sixth Battle
Squadron) serving with the Grand Fleet.

15 Ibid.
information of enemy's escape will be otherwise than through news of an attack." In his view, the department should assume the worst -- that one or more enemy battle cruisers would gain the open Atlantic with ample fuel before the Allies detected them. Sims stressed that the only way to protect the convoys was regular battleship escort before danger arose. He also objected to the assembly of so much shipping in the Azores during an alarm. He pointed out the danger to them of submarine attack and the inevitable refueling difficulties. Sims proposed that a better use of battleships at Queenstown or Brest would be to meet important troop convoys at sea and escort them to safety rather than having these convoys proceed unescorted to the Azores. Sims concluded by reminding Benson that any final plan should be a joint undertaking with the British.  

The Admiralty Plans Division objected to the division of the Atlantic into three zones and the "hard-and-fast" nature of the Navy Department's instructions. They argued that these instructions would not leave enough discretion to the officers of convoys, who would be better placed to make judgments concerning the convoy's safety. In addition, the plan would unnecessarily dislocate the whole convoy system in the North Atlantic. The interruption in troop and cargo

16 Cable, Sims to Benson, 3 August 1918, TP File, Subject File 1911-1927, RG 45, NA; cable, Sims to Benson, 10 August 1918, TD File, Subject File 1911-1927, RG 45, NA.
movements would be serious.\textsuperscript{17} The Admiralty also objected to basing a plan on the assumption that British naval intelligence could give advance warning that an enemy battle cruiser had escaped from the North Sea. Like Sims, the Admiralty was of the opinion that battleships should escort the troop convoys on a regular basis.\textsuperscript{18}

The Plans Division drafted another, more detailed, set of plans as a counterproposal to the Navy Department’s plan. Neither the Admiralty nor the Navy Department would direct traffic during a battle cruiser raid. Convoy officers could choose from a series of rendezvous at friendly ports; could proceed to their destination, relying on dodging the raider or scattering the convoy as a last resort; or they could alter course or speed to avoid the danger area until the raider had withdrawn. The plan listed three basic principles to guide which course to take: because of the poor odds that the patrolling forces would find the raider on the open sea, convoy vessels would have to rely on their own efforts; a raiding battle cruiser would probably cooperate with U-boats; and since any delay in the arrival of the

\textsuperscript{17}Memorandum, Director of Plans to Deputy First Sea Lord, 13 August 1918, ADM 137/2710, PRO.

\textsuperscript{18}Sims reported the Admiralty’s views on this matter in a cable, Sims to Benson, 17 August 1918, CB File, Subject File 1911-1927, RG 45, NA.
convoy was a serious disadvantage, convoy officers should accept reasonable risks.\textsuperscript{19}

A beneficial feature of the Plans Division paper is an appendix predicting probable movements of a raiding battle cruiser. This included a diagram showing the limits of the Derfflinger's endurance based on estimated fuel consumption.\textsuperscript{20} The Derfflinger was one of Germany's newest battle cruisers, and a third of the Derfflinger's boilers could burn oil. Consequently, she could extend her range if she captured an oiler. Because fueling at sea at that time was dangerous and required good weather, the planners concluded that it would not be an essential feature of the German plan, and so was more likely to extend the duration rather than the field of the raider's operations. On the diagram, the line XYZ is the extreme limit of the Derfflinger's range if the vessel took the direct route at economical speed. The battle cruiser could operate at line GHK for two days, DEF for four days, and ABC for six days. The purpose of this diagram was to assist in selecting a route for the convoy which would be safe if the enemy battle cruiser did not refuel.\textsuperscript{21}

\textsuperscript{19}Admiralty Plans Division Memorandum, "Instructions for guidance in the event of an enemy battle cruiser making a raid in the Atlantic," P.D. 100, 5 August 1918, ADM 137/2710, PRO.

\textsuperscript{20}See Fig. 8.

\textsuperscript{21}Ibid.
Fig. 8. "Chart illustrating possible movements of enemy battle cruiser raiding the Atlantic," ADM 137/2710, PRO.
On 12 August, the Nevada and Oklahoma, of Division Six, under the command of Rear Admiral Thomas S. Rodgers, left Hampton Roads for Berehaven, Ireland. The Utah would join the division at the end of the month, following an overhaul at the Norfolk Navy Yard. Upon learning that Rodgers had sailed for European waters, Sims sent him a personal letter of welcome along with the Navy Department’s instructions. Sims gave his low opinion of the Navy Department’s plan, indicating that he was working to have those plans changed. In particular, he expressed his belief that basing the plan on the presumption that there would be advanced warning of a battle cruiser’s escape was "a dangerous assumption." On 31 August 1918, the Navy Department implemented its plan as far as the diversion of routes was concerned. Benson also announced that the department would begin providing battleship escort for the HX and HC convoys, which were mixed mercantile and troop convoys from New York and Halifax, and also for the U.S. Navy’s own troop convoys. U.S. pre-dreadnoughts would perform this service, beginning on 9 September. The department would put the entire plan into operation if there was information of the escape of a battle cruiser.

22Historical narrative, U.S. Navy Historical Section, "United States battleships in European waters including United States battleships attached to the British Grand Fleet," 22 September 1918, OB File, Subject File 1911-1927, RG 45, NA.

23Letter, Sims to Rodgers, 20 August 1918, TD File, Subject File 1911-1927, RG 45, NA.
raider.\textsuperscript{24} Sims answered that the Admiralty did not wish to divert the HX and HC convoys, from New York and Halifax respectively, to the Azores. One or more of the battleships at Berehaven could escort those convoys. Sims stated that he had instructed Rodgers that the diversion plan would remain in effect for the U.S. and HB convoys from New York.\textsuperscript{25} The HB convoy supplied U.S. troops in France and had French armored cruisers as part of its escort.\textsuperscript{26}

Benson complained that the Admiralty's "disinclination" to divert the HX and HC convoys according to the Navy Department's plan weakened it because the U.S. Navy would have to strengthen the escort for those convoys, since they also carried U.S. troops. Benson approved Sims's suggestion that battleships from Division Six escort the HX and HC convoys in the event of a raider warning, but on the condition that at least one of them protect the troop convoys diverted to the Azores. He stated that because no joint agreement had been reached, only U.S. ships would receive the Navy Department's plan. The U.S. pre-dreadnoughts escorting the HX and HC convoys would have a copy of the plan, but would not use it unless the Admiralty desired to use it. Benson recognized that the Navy

\textsuperscript{24}Cable, Benson to Sims, 31 August 1918, CB File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{25}Cable, Sims to Benson, 31 August 1918, CB File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{26}Halpern, A Naval History, 363.
Department's plan was only a temporary expedient. Although troop convoys were protected, cargo convoys were vulnerable. Furthermore, there were no provisions for a pursuit division. Even the most modern dreadnoughts were too slow to catch a battle cruiser, and neither the British nor the Japanese were willing to detach any of their battle cruisers for a pursuit division.27

III

The next attempt to achieve an acceptable plan was a proposal that the Admiralty Plans Division and the American planning section prepared jointly. Although a joint undertaking, this plan heavily favored British priorities. The plan followed the premise that to make the best use of the available forces, the protection of all Allied convoys, not just the troop convoys, should constitute a single problem. Although the plan advocated the troop convoys taking precedence, this plan would have extended battleship protection to mercantile cargos as well, which was never the Navy Department's intention. In addition, any plan should also involve similar instructions from both the Admiralty and the Navy Department.

27Cable, Benson to Sims, 3 September 1918, TP File, Subject File 1911-1927, RG 45, NA. Sims finally issued instructions based on Benson's cable to Division Six in a letter, Sims to Rodgers, 18 September 1918, CB File, Subject File 1911-1927, RG 45, NA.
The joint plan repeated the British criticism of issuing "hard-and-fast" instructions. Instead of diverting convoys out of the danger zone during a raid, this plan emphasized that "every effort must be made as soon as possible to provide with adequate escorts all convoys likely to pass through dangerous areas." This plan also suggested the awkward expedient of dividing operational control of the convoys between the Admiralty and the Navy Department. The former would control the convoys east of longitude 45° west, while the latter would control the convoys to the west.

In the event of a raider warning, the unescorted eastbound convoys would rendezvous with battleships from Berehaven before proceeding, while convoys with battleship escorts from Halifax would continue. Convoys to the east of the probable position of the raider would continue unescorted. Westbound convoys to the east of a raider would return to the nearest port. Those convoys to the west of the raider would continue. If the raider was in the Western Atlantic, battleships from Hampton Roads or Halifax would meet the westbound convoys. The purpose of this routing was to keep the maximum amount of shipping moving toward their destinations, rather than diverting shipping and losing valuable time. This plan assumed that if the HC, HX, and U.S. troop convoys already had their own battleship escorts, three battleships at Berehaven and from one to three at Halifax would suffice for the other convoys. If the troop
convoys were not already provided with regular battleship escorts, then the United States would have to provide an additional three battleships for Berehaven and five at Halifax.  

IV

The Admiralty and the Navy Department finally reached an agreement on a joint plan to protect the convoys from a battle cruiser raid as the result of conferences at the Navy Department on 9 and 10 October, during a visit of First Lord Sir Eric Geddes. At the conferences, Captain C.T.M. Fuller of the Plans Division represented the Admiralty and Captain William Veazie Pratt represented the Navy Department. This final plan, known as "Plan BCR," closely resembled the Admiralty Plans Division and American planning section joint plan. Ultimately, the Navy Department made significant concessions to the British in order to achieve a joint agreement.

Plan BCR contained no provisions for diverting convoys to the Azores or anywhere else. Avoiding shipping delays was one of the guiding principles of Plan BCR. In addition,

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28 Memorandum, Admiralty Plans Division, U.S. planning section, and Admiralty Director of Mercantile Movements, "Proposals for dealing with convoys during a battle cruiser raid in the Atlantic," 4 September 1918, ADM 137/2710, PRO. Sims recommended the adoption of this plan in a cable, Sims to Benson, 10 September 1918, CB File, Subject File 1911-1927, RG 45, NA; another copy of this is in a memo from F.H. Schofield of the American planning section to C.T.M. Fuller of the Admiralty Plans Division, ADM 137/2710, PRO.
this plan provided protection for both troop convoys and purely mercantile ones. The plan entailed committing a substantial number of heavy ships for escorts. Plan BCR estimated the need for thirty-five pre-dreadnoughts or armored cruisers. The United States would provide twenty-four of these, including fourteen pre-dreadnoughts and ten armored cruisers. Britain would supply seven pre-dreadnoughts and four armored cruisers. The U.S. Navy would man the British pre-dreadnoughts, but not the British armored cruisers. In terms of dreadnoughts, the Navy Department would increase the number of battleships at Berehaven to four, and would station three dreadnoughts at Halifax. Following a raider warning, the battleships at Berehaven would meet the troop convoys that were east of longitude 40° west. The battleships at Halifax would proceed where needed. The Navy Department would most likely recall any troop convoys west of longitude 40° west and use the Halifax dreadnoughts to support the cargo convoys.

Like the earlier joint plan, Plan BCR divided control of the Atlantic convoys between the Admiralty and the Navy Department. Plan BCR, however, divided spheres of action by time instead of convoy position, because it would often be impossible to know whether or not a convoy had crossed a particular longitude at a particular time. According to the final plan, before each convoy sailed, an estimated time of crossing longitude 40° west, called "time A," was assigned
to that convoy. In the event of a raider warning, all convoys with a "time A" that was later than the time given in the warning would come under the control of the Navy Department; those with an earlier "time A" would come under the control of the Admiralty. Plan BCR differed from previous plans in that it included no special provisions for westbound convoys. The above instructions applied to eastbound convoys only. Westbound shipping would proceed independently after dispersal from the outward convoys, which only provided antisubmarine escorts in the U-boat danger zone.29

After six months of negotiations, the Admiralty and the Navy Department had finally agreed on a joint plan of operations to protect the convoys from a battle cruiser raid, but the war ended before they could fully implement Plan BCR. No German battle cruisers sortied against the troop convoys, and the preparations to counter a raid were not needed. The fact remains, however, that the Germans could have used their powerful battle cruisers against the troop convoys. They had shown their ability to sortie their

29Minutes, "Conference held at Navy Department, Washington, on 10th October, to discuss question of protection to be given to convoys in the event of a Battle Cruiser raid in the Atlantic," and "Plan of action to be taken in the event of a Battle Cruiser Raid in the Atlantic: To be known as Plan BCR," 10 October 1918, ADM 137/2710, PRO. Copies of Plan BCR are in a memorandum, Benson to Sims, 16 October 1918, TP File 1911-1927, RG 45, NA; also in an Admiralty memorandum, 4 November 1918, ADM 137/2710, PRO.
entire battle fleet undetected. The German battle cruisers almost certainly could have escaped into the Atlantic. Even the logistical problems of a raid were not insurmountable. Most of the Allied naval leadership agreed that a battle cruiser raid was a real possibility. Perhaps some of them doubted the Germans would attack the convoys, but they all understood the prudence of prevention. In spite of their agreement that they must provide better protection for the valuable and vulnerable troop convoys, the Admiralty and the Navy Department took many months to agree on a joint plan of action. Only after the Navy department was willing to accommodate British views and priorities was a joint effort possible. This example is yet another illustration of the difficulty of naval cooperation between the two allies during World War I.
Because of the possibility that one or more German battle cruisers might slip out to sea and assail Allied convoys in the Atlantic, the Navy Department decided to send Battleship Division Six of the Atlantic Fleet to Berehaven, Ireland. Berehaven, on Bantry Bay, was situated close to the shipping lanes to France and Britain’s southern ports. It was also close to Queenstown, where most of America’s destroyers were stationed, making it an ideal location for a base from which the battleships could guard the convoys. The German raiders never came out to attack the convoys, but there was always that possibility. Without the presence of Division Six, the safety of the convoys would always have been in doubt.

I

On 12 August 1918, Nevada and Oklahoma of Battleship Division Six of the Atlantic Fleet sailed from the fleet anchorage at Hampton Roads for Berehaven, Ireland. Rear

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1See Chapter 5, p. 171.

2See Fig. 9.
Fig. 9. The British Isles. Reprinted, by permission, from Paul Halpern, *A Naval History of World War I* (Annapolis: Naval Institute Press, 1994), 452.
Admiral Thomas S. Rodgers flew his flag on Nevada until his flagship, Utah, could finish her overhaul and rejoin the division. Captain A.T. Long commanded Nevada and Captain Mark L. Bristol commanded Oklahoma. The division enjoyed a calm and uneventful passage, arriving at Berehaven at 1840 on 23 August. The next day, the U.S. oiler Frank S. Buck fueled the ships to capacity, and the division was ready for duty.³

The Nevada and Oklahoma were the first of a new generation of U.S. battleships.⁴ These two sister ships introduced a revolutionary design: the "all or nothing" protection. Since armor piercing shells did not burst when penetrating thin, splinter armor, there was nothing to gain from using thin armor. The designers chose to provide either the thickest armor on the vital areas of the ship, armor which shells could not penetrate, or no armor at all. This arrangement, reflecting the demands of increasing gunnery ranges, allowed the use of heavier deck armor to protect against plunging fire. This class also introduced the triple turret, which saved weight by concentrating ten 14-inch/45 caliber guns into two-triple turrets and two

³Historical Narrative, Navy Department Historical Section, "United States Battleships in European Waters including United States Battleships attached to the British Grand Fleet," 22 September 1921, OS File, Subject File 1911-1927, RG 45, National Archives; memorandum, Rodgers to Sims, 25 August 1918, OS File, Subject File 1911-1927, RG 45, NA.

⁴See Fig. 10.
Fig. 10. *Nevada*, Class. Reprinted, by permission, from Randal Gray, ed., *Conway’s All the World’s Fighting Ships, 1906-1921* (Annapolis: Naval Institute Press, 1985), 115.
double turrets, rather than in five double turrets as the New York class. In addition, the Nevada class introduced the use of oil for fuel in U.S. battleships.⁵

Unlike Division Nine serving with the Grand Fleet as the Sixth Battle Squadron, Division Six was not under British operational control. Rodgers could not exercise command over any British naval forces, nor could any British officer exercise command over any part of his force. Nevertheless, the Navy Department instructed Rodgers to keep the British commander in chief of the coast of Ireland, Admiral Sir Lewis Bayly, informed of his movements and plans.⁶ Likewise, the Admiralty instructed Bayly to keep Rodgers informed of the situation in his command.⁷ Bayly was notorious in the Royal Navy for being a singularly difficult man to deal with. Contrary to all expectations, he became a close friend of Sims and developed a warm relationship with the officers of the U.S. destroyer

⁵Randal Gray, Conway’s All the World’s Fighting Ships, 1906-1921 (Annapolis: Naval Institute Press, 1985), 115-116. Utah was the sister ship of Florida and was a coal-burner launched in 1909.

⁶Letter, Sims to Rodgers, 10 August 1918, quoted in, Memorandum, Sims to Secretary of the Admiralty, 19 August 1918, OB File, Subject File 1911-1927, RG 45, NA.

⁷Memorandum, Admiralty to Bayly, 21 August 1918, ADM 137/1899, PRO.
divisions serving at Queenstown, whom he referred to as "my Americans."  

Just prior to the arrival of Division Six, Sims wrote to Bayly and included a copy of his instructions to Rodgers. He apologetically explained that they were based on the Navy Department's plan and that he hoped to have that plan amended. Until the Navy Department and the Admiralty agreed on a joint plan, Division Six operated according to the Navy Department's plan. Upon receipt of a raider warning, Division Six, which was prepared to steam at four hours notice, would proceed to the Azores to protect shipping there, and would escort eastbound convoys en route. Two divisions of U.S. destroyers from Queenstown would join the battleships to furnish their screen. Withdrawing two divisions of destroyers from Queenstown, however, would disrupt the convoy system. Bayly explained to Rodgers that it was unlikely that more than six destroyers could join the battleships. He would have to withdraw even those six destroyers from convoys that were west of St. George's

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9Letter, Sims to Bayly, 20 August 1918, OB File, Subject File 1911-1927, RG 45, NA; the instructions included parts of the Navy Department's plan against German raiders and instructions regarding the chain of command.

10Memorandum, Rodgers to Division Six, 1 September 1918, IA File, Subject File 1911-1927, RG 45, NA.
Channel or the Scillies. He could not reduce the escort of the troop convoys, nor reduce the whole escort of a cargo convoy, if the escort consisted entirely of U.S. destroyers. Nevertheless, Bayly promised to make every endeavor to send six destroyers as soon after a raider warning as possible.\textsuperscript{11}

Rodgers decided to visit Bayly at Queenstown to discuss the matter of Division Six's destroyer screen. The British admiral held firm to his conviction that he could not release two full destroyer divisions as called for in the Navy Department's plan. Rodgers reported that Bayly would have to withdraw the six destroyers from sea duty and these would have to refuel before joining Division Six. Refueling could cause a delay of up to twelve hours, but both admirals agreed that the battleships could not go to sea without them. Although Bayly refused to reduce further the destroyer escorts of the convoys, he was conciliatory about other issues. He agreed to petition the Admiralty for a gate in the eastern submarine net at Bantry Bay and he offered to provide all of the local transportation for the upcoming visit of Admiral Mayo and his staff.\textsuperscript{12} At 1805 on 10 September, Mayo and seven officers of his staff arrived at Berehaven after a very stormy crossing as passengers

\textsuperscript{11} Memorandum, Bayly to Rodgers, 2 September 1918, ADM 137/1622, Public Record Office.

\textsuperscript{12} General Report, Rodgers to Sims, 5 September 1918, CB File, Subject File 1911-1927, RG 45, NA; the purpose of Mayo's visit was to inspect all U.S. Navy operations and facilities in Europe.
aboard the Utah, under the command of Captain F.B. Bassett. Rodgers transferred his flag back to the Utah a few days later. 13

Rogers sympathized with Bayly's reluctance to reduce the already hard-pressed destroyer escort for the cargo convoys. He wrote to Sims and suggested that in the new plan of operations, during a battle cruiser raid the destroyers should only escort the battleship division through the submarine zone and then resume their regular duties. When the battleships returned from the open Atlantic, they could radio the destroyers to escort them back to base. Rodgers revealed his opinion of the Navy Department's plan: "It appears to me that the destroyers would thus be better employed than in chasing around the ocean and running out of fuel." 14 Sims replied that in using his destroyer escort, "you may exercise your discretion, adjusting your decision to circumstances as they present themselves at the time." 15 Sims was giving Rodgers permission to release his destroyer escort if he saw fit.

13 Historical Narrative, Navy Department Historical Section, "United States Battleships in European Waters including United States Battleships attached to the British Grand Fleet," 22 September 1921, OS File, Subject File 1911-1927, RG 45, NA; cable, Benson to Sims, 27 August 1918, OS File, Subject File 1911-1927, RG 45, NA.

14 Memorandum, Rodgers to Sims, 12 September 1918, CB File, Subject File 1911-1927, RG 45, NA.

15 Memorandum, Sims to Rodgers, 16 September 1918, CB File, Subject File 1911-1927, RG 45, NA.
It is not clear whether Sims had the Navy Department's approval in allowing Rodgers such wide discretion.

The shortage of destroyers also hampered training exercises. In order for the battleship division to hold gunnery exercises, destroyers from Queenstown would have to provide a screen for them while practicing in Bantry Bay. Bayly agreed to detail destroyers for this purpose whenever they were available. Bayly would inform Rodgers two and one-half hours in advance of their arrival. The senior British naval officer at Berehaven would provide a target towing ship. Once the targets were in place, the Division would carry out every drill possible: both independent and concentrated full-caliber firings, torpedo defense firing, range finding and fire control exercises, paravane exercises, and the training of spotters. The division would have to derive the maximum benefit from the limited time the destroyers were available.\(^{16}\)

In a letter to Sims, Rodgers reported that Bayly had recently visited his flagship and that Bayly and his staff "have cordially helped with everything I have asked for." Rodgers did, however, again complain about the lack of a suitable escort for his division. Without the opportunity to venture outside of the anchorage for target practices, the efficiency of his division would suffer. Nevertheless,

\(^{16}\)Memorandum, Rodgers to Division Six, 9 September 1918, OB File, Subject File 1911-1927, RG 45, NA.
Rodgers promised to do his best with whatever he could get. He realized that there simply were not enough destroyers available.\textsuperscript{17} Sims replied that he hoped someday to have enough destroyers based at Queenstown to give Division Six sufficient destroyers for conducting adequate exercises, but the shortage was so acute that any new destroyers from the United States were needed in other areas. The troop transports, for example, did not yet have sufficient escorts. Sims promised, however, to do the best he could for Rogers's division.\textsuperscript{18} In late September, Bayly found it possible to release four destroyers to Division Six for three days of sub-caliber practice. This was the first target practice the division had carried out since coming to Berehaven. The \textit{Utah} and \textit{Oklahoma} had good sub-caliber practices and paravane drill, but the \textit{Nevada} missed that opportunity because the minesweepers had to withdraw prematurely to Queenstown.\textsuperscript{19}

In late September, Division Six began using kite balloons for gunnery spotting.\textsuperscript{20} During the following

\begin{itemize}
\item \textsuperscript{17}Letter, Rodgers to Sims, 20 September 1918, The Papers of Admiral William S. Sims, Manuscript Division, Library of Congress.
\item \textsuperscript{18}Letter, Sims to Rodgers, 25 September 1918, The Papers of Admiral William S. Sims, Manuscript Division, Library of Congress.
\item \textsuperscript{19}General Report, Rodgers to Sims, 27 September 1918, OB File, Subject File 1911-1927, RG 45, NA.
\item \textsuperscript{20}General Report, Rodgers to Sims, 19 September 1918, OB File, Subject File 1911-1927, RG 45, NA.
\end{itemize}
weeks, the new kite balloons suffered several disasters. In the early morning hours of 4 October, Utah's kite balloon caught fire and was destroyed. Heavy rain was falling when the balloon caught fire. No one observed lightning, but it must have been the cause. While at sea during the night of 14 October, lightning struck Utah's replacement balloon, damaging it. That same night, high winds ripped Oklahoma's balloon, and it fell to the sea and was not recovered. Fortunately, no observers died in any of these incidents, but from this point on, Division Six did not use observers in kite balloons during electrical storms.

II

On 10 October, the Admiralty and the Navy Department finally agreed on a joint plan to protect the troop convoys from German raiders, known as Plan BCR. Only days later, they had to put the new plan into operation. On Monday, 14 October, at 0325, Rodgers received word that German cruisers might have escaped into the Atlantic. Two troop convoys, HX 51 and HC 20, were in harm's way. At 0440,

21Report, Captain Bristol (Oklahoma) to Rodgers, "Report of the burning of the kite balloon of the Utah," 7 October 1918, OS File, Subject File 1911-1927, RG 45, NA; General Report, Rodgers to Sims, 9 October 1918, OB File, Subject File 1911-1927, RG 45, NA.

22General Report, Rodgers to Sims, 17 October 1918, OB File, Subject File 1911-1927, RG 45, NA.

23The American squadron with the Grand Fleet also sortied in search of the raiders; see chapter three, p. 132.
Rodgers ordered the division to be ready for sea at one hour's notice. Fifteen minutes later, Bayly sent a dispatch informing Rodgers that the U.S. destroyers, Convyngham, Terry, Stevens, Downs, Samson, Allen, and Beale, would arrive at Berehaven at intervals between 0730 and 1630 to escort Division Six. Rodgers immediately prepared to oil the short-legged destroyers. At 1756, Division Six and its screen finally got underway to rendezvous with the troop convoys. Owing to the heavy seas, the speed of the division was no higher than 15 knots. It was later that night that the storm destroyed first the Utah's and then the Oklahoma's kite balloons.

The next morning, 15 October, the destroyers began scouting for convoy HX 51. At 1030, the Allen reported a contact eight miles ahead. Twenty minutes later, the division sighted the convoy twenty-two degrees on the port bow, eight miles distant. The battleships took station astern of the convoy in line abreast, at a distance of 600 yards. At 1700, the convoy was clear of the danger zone, and Division Six left them in the care of the destroyers and proceeded to meet convoy HC 20. The next morning, 16 October, Division Six had difficulty finding the convoy because visibility was from only one to three miles. The battleships formed a scouting line, three miles apart, and

24The cause of the long response time must be due to the destroyers having to be diverted from other duties before they could join Division Six.
started searching on easterly courses. At 9:55 a.m., Utah
spotted the convoy and reassembled the division without
difficulty. At 1712, U.S. destroyers from Queenstown,
including the Cassin, McCall, Balch, Paulding, and Kimberly,
joined the battleships to escort them back to Berehaven.\textsuperscript{25}
Division Six left their charges at 1800 and anchored at
Berehaven at 2345.\textsuperscript{26} The operation was a success, but the
convoys were never in danger. This was to be the only time
Division Six ever sortied to protect the troop convoys. No
German raiders appeared, then or ever. The German Admiralty
never ordered a battle cruiser raid against the troop
convoys.\textsuperscript{27} Nevertheless, the battleships remained ready for
the possibility.

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At the end of October, Division Six had a new enemy to
guard against. The epidemic of influenza began to spread in

\textsuperscript{25}Report, A. Claude (Cassin) to Sims, 18 October 1918,
CB File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{26}General Report, Rodgers to Sims, 17 October 1918, OB
File, Subject File 1911-1927, RG 45, NA; this report
includes a copy of all dispatches from Sims and Bayly during
this operation.

\textsuperscript{27}See "Kriegsoperationen in der Nordsee" and "Zur
Geschichte des Admiralstaves im Weltkrieg, 1914-1918,"
Admiralstab des Marine, Microfilm Publication T-1022,
Records of the German Navy, RG 242, College Park Branch, NA;
and the official German history by Walther Gladisch and Otto
Groos, Der Krieg in der Nordsee, Vol. 7 (Berlin: E.S.
Mittler, 1930); Reinhard Scheer also makes no mention of any
plans for a battle cruiser raid, see his memoir, Germany's
High Seas Fleet in the World War (New York: Peter Smith,
1934).
the cramped ships at an alarming rate. During the week ending 26 October, seven men from the Nevada died, four from the Utah, and another four from the Oklahoma. The division established a hospital with twenty-five beds at a nearby air station, along with an embalming station. Strict quarantine and liberal admission to the sick list kept the epidemic from spreading out of control. By 10 November, the day before the armistice, Rodgers reported that health conditions had improved dramatically and there were so few new cases of influenza that he considered that the epidemic was over. During that week, only two men from Nevada had died. During the epidemic, Division Six limited its drills to fire control and distribution exercises held at anchor, but on a regular basis.

On 18 November, the Arizona, under Captain John Drayton, left Hampton Roads to join Division Six at Berehaven. That same day, at 1550, the Nevada left Division Six to join Division Nine to replace the Florida, which returned to the United States. Accompanied by the destroyers Stockton, McCall, Davis, and Trippe, the Nevada arrived at Rosyth, the Grand Fleet base, on 23 November 1918, too late to view the dramatic surrender of the German fleet. Meanwhile, the Utah and Oklahoma had moved to

28 General Report, Rodgers to Sims, 26 October 1918, OB File, Subject File 1911-1927, RG 45, NA.

29 General Report, Rodgers to Sims, 10 November 1918, OB File, Subject File 1911-1927, RG 45, NA.
Portsmouth with an escort of four destroyers, the Duncan, Terry, Downes, and Sterett, in order to send the men on leave to London. British authorities arranged rail transport to London for the large leave parties from Division Six.

At sea, the Arizona received a radio message to meet Division Six at Portsmouth rather than Berehaven. The Arizona arrived at Portsmouth at 1258 on 30 November. At 2345 on 4 December, Division Nine and the Nevada joined Division Six at Portsmouth, uniting all of the U.S. battleships in European waters. During the closing months of the war, the Navy Department had promoted several of the battleship captains to the rank of rear admiral. In Division Nine, Captain H.H. Christy was the new commander of the Wyoming, Captain E.L. Beach commanded the New York, Captain L.R. Desteiger commanded the Arkansas, and Captain M.M. Taylor took command of the Florida. The new captains of Division Six were Captain W.C. Cole of the Nevada, and Captain C.B. McVay of the Oklahoma.

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31 Captain E.L. Beach was the father of the famous World War II submariner and author of the same name.

32 General Report, Rodgers to Sims, 23 November 1918, OB File, Subject File 1911-1927, RG 45, NA; General Report,
On Wednesday evening, 11 December, Sims arrived in Portland and assumed command of Division Six and Division Nine, raising his flag on the Wyoming. The battleships fueled and made preparations to leave Portsmouth to serve as President Wilson's escort to Brest, France. The next day, forty officers and 425 men embarked as passengers, along with forty newspaper reporters covering the president's journey. The U.S. battleships stood out from Portland at 1100. At 0730 on 13 December, they sighted the president's transport, George Washington, the battleship Pennsylvania, flagship of Admiral Henry Mayo, commander in chief of the Atlantic Fleet, and five destroyers. With flags flying from their mastheads, each ship of Divisions Six and Nine fired the national salute of twenty-one guns as the George Washington passed their beam. Later that day, the president and his escort arrived at Brest, France. At about 1500, Wilson hauled down his flag from the George Washington. As he left on his historic mission to negotiate peace, the U.S. battleships again rendered the national salute to honor the president. Having accomplished their final mission of the war, the battleships left for the United States.  

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33General Report, Rodgers to Sims, 14 September 1918, OB File, Subject File 1911-1927, RG 45, NA; Historical
Because no German surface raiders sortied against the troop convoys, the work of Battleship Division Six at Berehaven rarely appears as even a footnote in naval histories. There is no drama of battle on the high seas, but their task was significant nonetheless. A German battle cruiser raid against the convoys, if not a probability, was a possibility that the Allies had to take seriously. Acting on the principle that prevention is better than remedy, the naval leadership acted to preempt and deter a German raid. Battleship Division Six never met the Germans in battle, but did help to insure the safety of the valuable convoys. In this way, Division Six made its contribution to victory.

narrative, Navy Department Historical Section, "United States Battleships in European Waters including United States Battleships attached to the British Grand Fleet," 22 September 1921, OS File, Subject File 1911-1927, RG 45, NA.
CHAPTER 7

THE TWILIGHT OF THE GREAT WHITE FLEET: THE
OPERATIONS OF U.S. PRE-DREADNOUGHT
BATTLESHIPS DURING WORLD
WAR I, 1917-1918

In a report on naval matters to President Woodrow Wilson in July 1917, journalist and progressive Republican Winston Churchill first suggested using pre-dreadnought battleships to escort American troop convoys. At that time, the Navy Department considered such a use of capital ships as a heresy against the doctrine of fleet concentration. Only a year later, however, the exigencies of the naval war caused the naval leadership to disregard completely Alfred Thayer Mahan’s warnings against any division of the fleet. The U-boat campaign no longer threatened to force Britain to sue for peace. Consequently, the Navy Department no longer had to consider that the U.S. fleet alone might have to engage the High Sea Fleet. The combined U.S. and British Fleets gave the Allies a large enough capital ship superiority that they could safely detach units for purposes other than a general fleet engagement. The new situation made it not only excusable,

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1See chapter 1, page 31.
but expedient, for the Allies to use some of their surplus battleships to forestall Germany from using her capital ships in a *guerre de course* strategy.

I

It is ironic that America’s newest and most powerful battleships never entered the war zone before the armistice, while several of the obsolete pre-dreadnoughts served in European waters. The two *Pennsylvania* class ships did enter the war zone just after the armistice, but the two existing *New Mexico* class ships remained in U.S. waters. The *Pennsylvania* class was essentially an enlarged *Nevada* class, but with four triple turrets rather than two twin and two triple turrets.\(^2\) The *New Mexico* class duplicated the *Pennsylvania* class, but introduced the 14-inch/50 caliber gun. One ship, *New Mexico*, tested a turbo-electric drive system as an alternative to gearing. This innovation allowed improved compartment, but the navy abandoned it after World War I because of its excessive weight and volume.\(^3\)

The United States had twenty-three pre-dreadnought battleships at the outbreak of World War I. These ships

\(^2\)See Fig. 11.

Fig. 11. Pennsylvania and New Mexico Classes. Reprinted, by permission, from Randal Gray, ed., Conway's All the World's Fighting Ships, 1906-1921 (Annapolis: Naval Institute Press, 1985), 116-117.
were the legacies of the Spanish American War, which gave a
significant boost to naval construction, and later the
support of President Theodore Roosevelt, who saw a strong
navy as the capstone of American commercial expansion and
influence in international affairs. It was the pre-
dreadnoughts of World War I that had comprised the Great
White Fleet on its world cruise during 1907-1909. The
cruise of the Great White Fleet helped the United States to
gain recognition as a world power, but as a battle fleet it
was already obsolete. Britain’s Dreadnought, completed in
December 1906, made all other existing battleships second-
class. By eliminating all intermediate calibers, the all-
big-gun ship had more than twice the fire-power of other
battleships.\(^4\)

The oldest U.S. pre-dreadnoughts were the three ships
of the Indiana class, which were America’s first modern
battleships.\(^5\) Commissioned just prior to the Spanish
American War, the Indiana and Oregon participated in the
Battle of Santiago. They were not very successful because
of the limited displacement and very low freeboard that
characterized U.S. capital ships of the period. Besides the
main armament of four 13 inch/35 caliber guns, they carried
a mixed battery of eight 8-inch/35 caliber, four 6-inch/40

\(^4\)Nathan Miller, The U.S. Navy: An Illustrated History

\(^5\)See Fig. 12.
Fig. 12. Indiana, Iowa, Kearsage, and Illinois Classes. Reprinted, by permission, from Roger Chesneau, ed., Conway's All the World's Fighting Ships, 1860-1905 (Annapolis: Naval Institute Press, 1985), 140-142.
caliber, twenty 6-pounder, and six 1-pounder guns. Their top speed was only 15 knots.

The Iowa was an improvement over the Indiana class because she had hydraulically trained turrets and a top speed of 17.09 knots. The Kearsarge and Kentucky were both completed in 1900. The Kearsarge class introduced 8-inch turrets superimposed on the roofs of the 13-inch turrets, which were trained with them as a unit. This arrangement was unfortunate because fire could not be divided between the 8-inch and 13-inch guns. The fourteen 5-inch/40 caliber, twenty 6-pounder, and eight 1-pounder guns completed the array of calibers. These ships were the first U.S. battleships to extensively use electrical power for auxiliary machinery.

Launched the year of the Spanish American War, the three ships of the Illinois class had the same dimensions as the previous class, but differed greatly. The Illinois class ships were the only U.S. battleships to ever have two funnels abreast. This class did not have superimposed turrets or 8-inch guns, and the 5-inch guns were abandoned in favor of 6-inch/40 caliber guns. The three ships of the Maine class were launched in 1901. These ships introduced the high velocity 12-inch/40 caliber gun and were the first U.S. battleships to achieve 18 knots. An accidental explosion in the Missouri’s after turret in 1904 revealed
deficiencies in U.S. turret design that were corrected in future designs.

During Theodore Roosevelt's presidency, four new battleship classes were laid down: The Virginia, Connecticut, Vermont, and Mississippi classes, totaling thirteen battleships. The Spanish American War had settled the issue of whether the United States would have a coast-defense or a blue water navy. The battleships built after 1898 had higher freeboard and greater displacements than their predecessors and could average 18 knots. The Virginia class reintroduced the superimposed turret for the 8-inch guns and the main battery, which the Kearsarge class had tested earlier, and which proved no more acceptable the second time around. The Virginia class ships were, however, the fastest of the U.S. pre-dreadnoughts.

The Connecticut and Vermont classes, which differed mainly in armoring details, were an improvement over all previous designs. They were good sea boats and introduced a new rapid-fire 7-inch gun. They were the peak of U.S. pre-dreadnought design. The last class of pre-dreadnoughts, the Mississippi class, was a step backward. In an attempt to contain the growth of battleship size and cost, Congress limited them to a displacement of 13,000 tons. The main sacrifice was speed, for both ships of the class could only attain 17 knots. Completed in 1909, the Navy Department

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\(^6\)See Fig. 13.
placed them in reserve as early as 1912, and sold them to Greece two years later. Mississippi and Idaho, renamed Lemnos and Kilkis respectively, ended their long lives when German dive-bombers sank both of them in Salamis harbor in 1941. Unfortunately, all thirteen of the battleships built during Roosevelt's tenure became obsolete within months of their completion because of the advent of the Dreadnought.\(^7\)

At the beginning of the war, all but a few of the Virginia and Connecticut class pre-dreadnoughts were in reserve, but the Navy Department soon reactivated the others. At that time, the Atlantic Fleet was divided into two parts: Force One, which included most of the pre-dreadnoughts; and Force Two, comprising the remainder of the dreadnoughts, along with a slow division consisting of South Carolina and Michigan, America's first all-big-gun ships, and the pre-dreadnoughts Vermont and Connecticut. The South Carolina class was included in the slow division because, like the two pre-dreadnoughts, they were restricted to 16,000 tons and could only achieve 18 knots. Consequently, they were not fast enough to operate tactically with the later dreadnoughts.\(^8\)

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\(^8\)Gray, *Conway's, 1906-1921*, 112-113; historical narrative, Navy Department Historical Section, "Historical sketch of the U.S.S. Michigan," 31 August 1923, OS File, Subject File 1911-1927, RG 45, National Archives.
Throughout the war, the Atlantic Fleet worked to prepare itself for battle. This included constant divisional gunnery drills in Chesapeake Bay and regular fleet maneuvers at sea. The Atlantic Fleet base was at Hampton Roads, although a few times the fleet transferred to Port Jefferson on Long Island Sound for exercises. Force One always accompanied the rest of the Atlantic Fleet for tactical exercises at sea and had the same primary mission — to prepare for war. During most of 1917, however, the pre-dreadnoughts had the secondary role of training personnel for other ships in the fleet, especially men for the engineering force and every rate of petty officer. The shortage of experienced officers and men remained a problem for the Atlantic Fleet for the duration of the war. Training programs could not keep pace with the massive wartime expansion of the navy. Even the dreadnoughts did not have full complements. Aside from training men for the turret and handling crews for the new battleships, New Mexico and Idaho, the battleships of Force Two could only prepare their own green crews for battle. Therefore, the burden of training battleship recruits fell to Force One.9

9Historical narrative, Navy Department Historical Section, "Historical sketch of the U.S.S. Michigan," 31 August 1923, OS File, Subject File 1911-1927, RG 45, NA; Senate Committee on Naval Affairs, Hearings before the Subcommittee of the Committee on Naval Affairs, 66th Cong., 2nd sess., 7 April 1920, 550-551.
The movement of Battleship Division Nine to European waters in November 1917 placed new demands on the supply of trained men and led to the revision of Force One’s standing orders. Giving Division Nine full complements before they joined the Grand Fleet made the shortage of trained men in the Atlantic Fleet even more severe. Consequently, the Navy Department changed Force One’s primary and immediate mission to the training of officers and men for other ships. In effect, the pre-dreadnoughts became training ships with only a nucleus organization of both officers and men. The officer trainees were recent graduates of accelerated training programs at Annapolis and the Naval Districts. Many of the enlisted recruits were from the interior and had never been to sea before.10

Battleship Force One was under the command of Vice Admiral A.W. Grant. Squadron One, comprised of three divisions, was under the command of Rear Admiral Thomas Snowden. Officers of the National Naval Volunteers commanded the ships of Division A, comprised of the oldest pre-dreadnoughts, Iowa (Guy Eaton), Massachusetts (C.W. Kelly), and Indiana (A.F. Nicklett). Rear Admiral J.A. Joogewerff commanded Division One, consisting of Alabama (E.H. Watson), Illinois (P. Symington), Kentucky (J.P. Joogewerff).
Morton), and Kearsarge (G.E. Gelm). Rear Admiral Snowden commanded Division Two, made up of the Missouri (J.J. Raby), Maine (J.M. Reeves), Ohio (R.W. McNeely), and Wisconsin (I.C. Wettengel). Vice Admiral Grant commanded Squadron Two, comprised of two divisions. Rear Admiral J.L. Hayne commanded Division Three, which included the Virginia (H.J. Ziegemeir), Rhode Island (J.L. Latimer), New Jersey (C.B. McVay), Nebraska (G.H. Burrage), and Georgia (S.E.W. Kittelle). Division Four, also commanded by Grant, consisted of his flagship, Minnesota (J.V. Chase), New Hampshire (L.H. Chandler), Louisiana (G.R. Marvell), and Kansas (B.F. Hutchinson).  

Squadron One had the primary duty of training the engineer force. Squadron Two trained the deck force and armed guard crews for merchant ships. The guard crews manned naval guns mounted on merchant ships to protect them from U-boats on the surface. These guns were usually 6-inch and 7-inch, removed from the secondary batteries of the battleships. The gun crews included eight men and a petty officer to a gun, two crews to a ship. After four weeks of practice with Squadron Two, the armed guards would carry out target practice while underway. If successful, they would transfer to the merchant ships. During the summer of 1918,

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11 War Diary of Battleship Force One, Atlantic Fleet, 15 June 1918, OB File, Subject File 1911-1927, RG 45, NA; presumably, the Oregon, Connecticut, and Vermont remained in reserve.
however, the primary mission of Squadron Two was to train midshipmen, usually 175 midshipmen per ship. In addition, the entire force trained officers of the Naval Reserve.\textsuperscript{12}

The practice of assigning extra recruits to the pre-dreadnoughts led to appallingy overcrowded conditions. Following a week's cruise during the summer of 1917, the executive officer of the Georgia, John Wainwright, reported on the deplorable conditions below decks: "When inspecting the gun deck on the night of recent moderately rough weather, the conditions were deplorable; men were packed in; the decks were running with water; and each man who had no swing was coiled down in any available corner." The Georgia was designed to billet 750 men, but had a complement of 1045 men. Therefore, 325 men had no place to sleep, though this may not have been the worst privation. Wainwright reported, "the congestion in the head containing but thirty-six seats for this number of men can be realized; and having to be batten down forward, the unavoidable odor in spite of ample flushing was most obnoxious and sickening." He concluded that "ships are not made to float or fight under such conditions."\textsuperscript{13} While at sea, a bluejacket's life aboard the pre-dreadnoughts was miserable, and possibly no better than during the days of sail.

\textsuperscript{12}Ibid.

\textsuperscript{13}Memorandum, Wainwrights to Kitelle, 14 September 1917, OS File, Subject File 1911-1927, RG 45, NA.
The commander of the Georgia, S.E. Kittelle, reported the concerns of his executive officer, adding that the surgeons were convinced that the overcrowded conditions would become a hazard to the health of the crew if there was extensive cruising in bad weather. In spite of the poor conditions, Kittelle reported that the crew was, on the whole, the most cheerful he had ever commanded. His report also pointed out serious personnel deficiencies that held true for the rest of the force, posing a serious problem. There were so few experienced watch officers that heads of departments had to stand watch, because they were the only officers who were competent enough. Kittelle stated that he understood the need to train officers of the National Volunteer Reserve, "but their progress in ship handling, is with one exception only, discouragingly slow." Furthermore, in his opinion most of the enlisted men of the deck force were too young and immature. Consequently, the number of them who would be capable of eventually becoming petty officers was quite low. Kittelle stated that the recruits would develop more rapidly if scattered over a number of ships with experienced men, instead of being placed in large groups together. He complained that the Navy Department's rapid expansion was resulting in the enlistment of below average recruits.¹⁴

¹⁴Memorandum, Kittelle to Rear Admiral J.L. Jayne, 14 September 1917, OS File, Subject file 1911-1927, RG 45, NA.
In his report to Admiral Henry Mayo, commander in chief of the Atlantic Fleet, Grant observed: "The cruise was most beneficial in demonstrating the inexperience of the personnel. . . ." Gun pointers thought to be ready for target practice needed additional training before they would be ready. Youth and inexperience of the crews detracted from the efficiency of ship drills and engineering performances. Grant reported that aboard the Virginia, 87 percent of the crew had never been to sea before. More serious, most of the officers themselves still needed elementary instruction. Commanders had to rely on these same inexperienced officers to train the inexperienced crews -- a case of the blind leading the blind.15

During 14 to 18 January, Force One exercised at sea with the rest of the Atlantic Fleet. The fleet endured heavy squalls in the morning of 15 January and suffered a series of accidents. At about 10:45 a.m., the Texas and North Dakota each signalled they had men overboard. Each vessel had lost three men. After dropping out of cruising formation, both managed to rescue one of their men. Grant believed that the loss of men overboard was due to their inexperience and lack of respect for heavy seas. A fifth man was killed when a falling hatch hit him in the head. At 1:35 p.m. that afternoon, Michigan lost her entire foremast.

15Report, Grant to Mayo, 18 September 1917, OB File, Subject File 1911-1927, RG 45, NA.
The ship had rolled heavily to port and then lurched suddenly to starboard, snapping the cage mast at the narrowest point of its hour-glass shape, near the spot where a fragment of an exploding 12-inch gun had torn through the mast in 1916. The search-lights, directorscope, and the heavy fire-control tops were a mass of debris on the boat deck. The collapse of the mast killed six men and injured thirteen, three of them seriously. Altogether, the fleet lost eleven men during the exercise. Grant commented that the cruise was good experience for the men, and "particularly beneficial in teaching them what to expect of a storm."16

On 1 June 1918, Force One had a serious gunnery accident that shows the state of gunnery training in the force left much to be desired. The New Hampshire and Louisiana were holding daylight torpedo defense practice on Chesapeake Bay. The ships had been at anchor since 0500 waiting for a dense fog to clear. At 0900 the fog lifted enough to begin the practice. The Louisiana was waiting her turn to fire and was about 500 yards ahead of the Ohio, which was acting as the towing vessel. Two submarine chasers positioned themselves off the Ohio's port and starboard bow. The New Hampshire began the second leg of

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16Report, Grant to Mayo, 30 January 1918, OB File, Subject File 1911-1927, RG 45, NA; report, commander of Michigan to commander of Division Five, 15 January 1918, OS File, Subject File 1911-1927, RG 45, NA.
her run, firing the forward starboard battery of three 7-inch guns at a range of between five and six thousand yards. Two of the guns began firing on the port submarine chaser. In an attempt to stop the New Hampshire from firing on the submarine chaser, the towing ship signalled cease fire with the siren, steam whistle, searchlights, signal flags, and by radio, all without success until New Hampshire had fired six to eight salvos. Meanwhile, the submarine chaser zigzagged toward the Louisiana in an attempt to escape the firing. Observing the fall of shot and realizing what was happening, the commander of the Louisiana sounded general quarters to get his men behind armor. Most of the shells landed near the submarine chaser, but as the little craft neared the Louisiana, one of the shells struck the bow of the Louisiana. The projectile passed through the chief petty officers's compartment and the sick bay before passing out the starboard side of the ship. Fragments killed one man and injured several others who were in the sick bay.17

The incompetence did not end with the accident, for after the shell struck the Louisiana, all three battleships were dead in the water. By stopping, the U.S. ships were putting themselves at risk. Earlier in the war, U-9 had

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17Memorandum, fleet gunnery officer to Benson, 3 June 1918, OS File, Subject File 1911-1927, RG 45, NA; Report, McNeely (Ohio) to Grant, 1 June 1918, OS File, Subject File 1911-1927, RG 45, NA; Report, Marvell (Louisiana) to Grant, 2 June 1918, OS File, Subject File 1911-1927, RG 45, NA; War Diary, Battleship Force One, Atlantic Fleet, 1 June 1918, OB File, Subject File 1911-1927, RG 45, NA.
been able to sink the British cruisers **Aboukir**, **Cressy**, and **Hogue** when two of the ships stopped to render aid to the first. At 1100, two observers aboard the **Ohio** spotted a disturbance in the water and what they believed was a periscope 1,200 yards away. Shortly thereafter, two men on the bridge of the **Louisiana** also reported spotting a periscope. The three battleships got underway and the **New Hampshire** and **Ohio** opened fire on the wake, firing around twenty-one 6-inch shells. The submarine chasers investigated but did not discover anything. There was no U-boat attack that day. The only German submarine operating in U.S. waters then was **U-151**. It is possible that this it had been in the vicinity of the battleships, but improbable that it had encountered them. Earlier, this submarine had sunk several coastal ships and taken their crews prisoner. The U-boat commander released these prisoners on 2 July. They later testified that **U-151** did not make any attacks on 1 July.\(^{18}\)

Following the accident to the **Louisiana** and the poor results of a recent battle inspection, Grant decided that the practice of relying heavily upon officers of the naval reserve and naval volunteers was a complete failure. At

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\(^{18}\)Report, Marvell (**Louisiana**) to Grant, 2 June 1918, OS File, Subject File 1911-1927, RG 45, NA; report, McNeely (**Ohio**) to Grant, 1 July 1918, OS File, Subject File 1911-1927, RG 45, NA; historical narrative, Navy Department Historical Section, "Historical sketch of the U.S.S. **Louisiana** during the World War," 18 October 1923, OS File, Subject File 1911-1927, RG 45, NA.
least indirectly, his views were an indictment of the administration's policy of mobilization and rapid expansion after the U.S. entry into the war. Regarding Division A and officers of the naval volunteers Grant said:

In view of the length in commission of these vessels, it is considered that the feature of commissioning vessels entirely with volunteer officers has been a very thorough trial. The results demonstrate its complete failure. The ships are of value neither as training units nor for military operations of any description. In view of this feature, they constitute an element of military weakness and the experiment should not be repeated. The fault lay not with the zeal or with the intelligence of the personnel, but with their lack of experience and a general lack of knowledge both of the military standards and of what must be accomplished with a man-of-war. 19

Grant's criticism of his reserve officers was equally severe:

Even in the case of officers who have been in the service a considerable length of time, having entered as officers without previous experience in the fundamentals of discipline or in the duties which are primarily required of a division officer, they are naturally unable as a class to train the recruits in those matters that fall peculiarly within their province. The practice of commissioning such officers before they have passed through and personally performed the duties which they must as division officers teach others to perform is believed to be faulty, and it is believed that they should be promoted to officers only after passing through a very thorough and strict course as reserve midshipmen. 20

19 Report, Grant, war diary of Battleship Force One, Atlantic Fleet, 7 July 1918, OB File, Subject File 1911-1927, RG 45, NA.

20 Report, Grant, war diary, Battleship Force One, Atlantic Fleet, 14 July 1918, OB File, Subject File 1911-1927, RG 45, NA.
Grant was also critical of the materiel condition of his battleships. In another report following the battle inspection of 30 June, he emphasized the large amount of repair and alteration work the ships needed. It was not developments due to the war, but the strain of operating under war conditions that revealed the poor condition of the ships and their need for alterations. Grant pointed out that the need for many of the alterations had been apparent before the war, but because they were not essential for cruising efficiency the Navy Department did not make the alterations. At least regarding the pre-dreadnought fleet, the Navy had a peace-time standard that was far below the war-time standard of efficiency. Grant suggested that in the future, there should be regular periods during peace when the fleet operated under war conditions to reveal and correct defects before an emergency. Grant ended his report with a warning: "In the present war, we have been fortunate in the ability to make these alterations without molestation by the enemy. Such conditions may not exist in future wars."

The most important alteration, or repair, that the ships needed was to improve the structural integrity of the water-tight bulkheads. Since their construction, most of the bulkheads had been pierced for electrical conduit,

\[^{21}\text{Report, Grant, war diary, Battleships Force One, Atlantic Fleet, 10 July 1918, OB File, Subject File 1911-1927, RG 45, NA.}\]
speaking tubes, and water or steam piping. The naval yards could not undertake major overhauls of the pre-dreadnoughts because of higher-priority work. Therefore, Grant organized work parties from the ship’s crews to plug holes, shore-up bulkheads, and subject every water-tight bulkhead to an air-pressure test. Grant believed that these repairs saved the Minnesota when she struck a mine on 29 September 1918. He doubted that any of the pre-dreadnoughts could have survived an underwater explosion before the bulkheads had been repaired.  

The Minnesota had left Hampton Roads with the destroyer Israel as escort and was headed for the Philadelphia Navy Yard when she hit the mine. The time was 0318 and her position was twenty miles from Fenwick Island. The explosion obliterated the hull structure between frames 5 and 16 and from the keel to the lower edge of the armor-belt. The forward compartments flooded but the bulkheads held. At ten knots, the Minnesota managed to limp into Delaware Bay and arrived at the Philadelphia Navy Yard at 0748. U-117 was probably responsible for laying the mine while cruising southward off the coast of Maryland. Minnesota was fortunate to have survived the mine. The

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22Senate Committee on Naval Affairs, Hearings before the Subcommittee of the Committee on Naval Affairs, 66th Cong., 2nd sess., 7 April 1920, 549, 557.
damage was so extensive that she was out of commission until February 1919.23

III

From September 1918 until the end of the war, the pre-
dreadnoughts and South Carolina class dreadnoughts of Force
One served as escorts for the U.S. troop convoys and the
mixed mercantile and troop convoys from New York. As
mentioned in chapter five, it was not until late July 1918
that the Navy Department made plans to begin using the pre-
dreadnoughts of the Atlantic Fleet as escorts for the U.S.
troop convoys.24 These convoys consisted of the Cruiser and
Transport Force of the Atlantic Fleet, under the command of
Rear Admiral Albert Gleaves. The cruiser force included all
of the U.S. armored cruisers and cruisers, which were an
adequate defense against the average commerce raider, but
would be no match for a battle cruiser. Whenever one of the
ships of Force One escorted a convoy, they were under the

23Historical narrative, Navy Department Historical
Section, "Historical sketch of U.S.S. Minnesota," undated,
OS File, Subject File 1911-1927, RG 45, NA; war diary,
Battleship Force One, Atlantic Fleet, 29 September 1918, OS
File, Subject File 1911-1927, RG 45, NA; report, Chase
(Minnesota) to Grant, "Report of damage sustained by
striking a mine," 3 October 1918, OS File, Subject File
1911-1927, RG 45, NA.

24See chapter 5, page 166.
operational control of the commander of the Cruiser Force, Rear Admiral Albert Gleaves.\textsuperscript{25}

When the Navy Department implemented their plan to protect the troop convoys from German battle cruisers in late August, they extended the use of pre-dreadnought escorts to include the mixed troop and mercantile convoys from New York and Halifax.\textsuperscript{26} The British were willing to provide some of their own pre-dreadnoughts of the King Edward VII class to escort Atlantic convoys, but they did not have enough trained personnel to man them. In October the Navy Department offered to man the British pre-dreadnoughts in order to start them escorting the convoys. The British agreed to this scheme, but first had to overhaul the ships before they would be ready for service. The war ended before the King Edward VII class ships were ready for escort duty, and only U.S. pre-dreadnoughts served as escorts for the transatlantic convoys.\textsuperscript{27}

The South Carolina, New Hampshire, and Kansas became the first battleships to escort a convoy across the Atlantic

\textsuperscript{25}Instructions regarding operational control are in, Movement Orders, Grant to Brotherton (South Carolina), OS File, Subject File 1911-1927, RG 45, NA; Albert Gleaves, A History of the Transport Service: Adventures and Experiences of United States Transport and Cruisers in the World War, New York: George Doran Company, 1921.

\textsuperscript{26}See Chapter 5, page 172.

\textsuperscript{27}Admiralty Memorandum, "State of King Edward VII class battleships in home waters," 15 October 1918, ADM 137/1622, Public Record Office.
on 6 September 1918. This convoy was one of the HX, or fast mercantile and troop convoys from New York. The HX convoys were designated as "fast" because they maintained a speed of thirteen knots, which was faster than that of other merchant convoys. The journey across was uneventful. The battleships parted company with the convoy when their coal bunkers were nearly half empty on 16 September.

The return trip was more difficult than the journey into the war zone. The day after leaving the convoy, the South Carolina lost her starboard propeller and ran on only the port engine at eleven knots. At 1630 on 20 September the port engine suddenly stopped. A throttle valve had malfunctioned. The ship got underway again using an auxiliary throttle, but the new arrangement caused severe vibration. At 2230 the ship stopped again and remained motionless for six hours until the main valve was repaired. The battleships finally reached U.S. waters on 24 September and South Carolina limped on to the Philadelphia naval yard for repairs.  

Nebraska escorted the next convoy across the Atlantic. On 17 September she left New York as the heavy escort for the fast merchant convoy HX 49. Also part of the escort was the armed merchant cruiser Rochester, the destroyer Dent, and the British armed merchant cruiser Arlanza. The Arlanza

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28Report, Gilmes (South Carolina) to Grant, 25 September 1918, OS File, Subject File 1911-1927, RG 45, NA.
was the regular escort for that particular convoy, and her commander was in charge of handling the convoy. The convoy included ten British merchantmen and the tanker Cuyama of the Naval Overseas Transportation Service. Again, the journey across the Atlantic was uneventful. The Nebraska escorted the convoy to an eastern rendezvous with British escorts that would protect the convoy for the remainder of the voyage. The Nebraska returned to Hampton Roads on 3 October. Two days later, Captain D.W. Wurtsbaugh replaced Guy Burrage as commander of the Nebraska because the Navy Department had promoted Burrage to the rank of rear admiral.

The Georgia escorted U.S. convoy number 67, leaving New York on 23 September. The convoy included nine troop transports and besides the Georgia, the armored cruisers North Carolina and Montana, and the destroyer Rathburne as the escort. The weather during the eastward run was very heavy, and the convoy had to slow to ten knots because some of the transports could not maintain their cruising speed.

29 The Naval Overseas Transportation Service was the U.S. Navy’s fleet of merchant vessels that helped supply the logistical needs of the AEF and Navy, including the transport of the mines for the North Sea Mine Barrage; see Lewis Clephane, History of the Naval Overseas Transportation Service in World War I, Washington: Naval History Division, 1969.

30 Movement orders, Cleaves to Burrage (Nebraska), 12 September 1918, OS File, Subject File 1911-1927, RG 45, NA; historical narrative, Navy Department, "U.S.S. Nebraska, undated, OS File, Subject File 1911-1927, RG 45, NA.
As a consequence, the convoy was twelve hours late in arriving at the eastern rendezvous. Because the Georgia had taken on 526 tons of coal more than her bunker capacity, she handled poorly and pitched heavily. The gun deck was even wetter than usual, and because the ship was battened down, it was poorly ventilated as well. Combined with the overcrowding, conditions were ripe for the spread of disease. The Georgia had 120 cases of influenza, fourteen cases of pneumonia, and seven deaths during the trip. In spite of the extra coal, the amount of fuel was not sufficient for the Georgia to accompany the convoy to the rendezvous point. The Georgia had to return to base before delivering the convoy to the eastern escort force. In his report, Captain Kittelle suggested that the installation of a new type of turbo-generator would increase the steaming efficiency enough to extend the range. The North Carolina, however, had enough range to remain with the convoy until the rendezvous with the destroyers from Britain.  

The next important convoy to sail from New York, HX 50, left on 25 September. Convoy HX 50 was a mercantile convoy of eight British ships bound for Liverpool and three more en route to Glasgow. This convoy had a large escort force.

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31 Convoy schedule, Miscellaneous convoy and merchant marine information, number three, Series 20: World War I, Early Records Collection, Operational Archives Branch, Naval Historical Center, Washington Navy Yard; Report, Kittelle (Georgia) to Grant, 10 October 1918, OS File, Subject File 1911-1927, RG 45, NA; Report, executive officer to Kittelle, 9 October 1918, OS File, Subject File 1911-1927, RG 45, NA.
including the Louisiana, the armored cruiser St. Louis, and the British merchant cruiser Otranto. Anti-submarine craft included two destroyers, and six submarine chasers. The convoy also had air cover. Three balloons, Xarifa, Bagley, and Gloucester, one dirigible, and three seaplanes patrolled the skies above the convoy. The voyage was uneventful, and as usual for that time of year, the weather was bad. Near the Grand Banks the fog was so thick that the Louisiana lost sight of the rest of the convoy for sixty hours.

On 4 October the convoy reached the rendezvous and the Louisiana began the trip back to Hampton Roads. Before leaving New York, the crew built additional bunkers for extra coal on the gun deck in the casemates of some of the 7-inch guns. Because the expenditure of coal was greater than expected, by 8 October it appeared that there would not be sufficient coal to reach Hampton Roads with any margin of safety. Therefore, the Louisiana stopped at Halifax for coaling before returning to base on 17 October.32

On 30 September the dreadnought Michigan, the armored cruiser South Dakota, and the destroyers Bell and Fairfax sailed with U.S. Troop Convoy Group 70. The convoy included detachments from New York, Philadelphia, and Newport News.

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32 Lewis Clephane, Naval Overseas Transportation Service, 151; Report, Marvell (Louisiana) to Grant, 20 October 1918; Historical narrative, Navy Department Historical Section, "Historical sketch of the U.S.S. Louisiana during the World War," 18 October 1923, OS File, Subject File 1911-1927, RG 45, NA.
The Navy Department issued a warning that German raiders could have sortied. The U.S. military attaché at Bern, Switzerland had obtained information that two German cruisers had left Kiel on 29 September for a raid against the U.S. troop convoys. The Germans had not sortied. The intelligence from the military attaché was nothing more than a rumor. The convoy arrived in European waters unmolested, but the Michigan had to leave the convoy well before reaching the eastern rendezvous. On 8 October she lost her port propeller and had to return to base at 11 knots. It is curious that both the Michigan and her sister lost propellers within weeks of one another.

The pre-dreadnoughts escorted three convoys during the month of October. The Nebraska left New York on 13 October as escort to mercantile convoy HX 52, which consisted of twelve British ships bound for Liverpool. The armored cruiser Montana and the British armed merchant cruiser

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33 See chapter six, p. 197-198.

34 Ibid; Sailing orders to Michigan, 28 September 1918, OS File, Subject File 1911-1927, RG 45, NA; cable, Laws (Michigan) to Naval Operations, 12 October 1918, OS File, Subject File 1911-1927, RG 45, NA; the cause of the problem is not clear.
Edinburgh Castle also served as escorts. The Kansas, the U.S. armed merchant cruiser Rochester, the British armed merchant cruiser Andes, and the destroyer Dent furnished the escort for the next fast merchant convoy from New York, HX 53. The Louisiana escorted troop convoy group number 78, consisting of ten U.S. troop ships and two cargo ships. The convoy sailed directly to Brest, France.

During November, the last month of the war, the predreadnoughts escorted three more convoys. The Georgia was the principal escort for U.S. Troop Convoy number 80. The convoy included four U.S. transports and the U.S. hospital ship Mercy. The Virginia escorted U.S. Troop Convoy

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35 Historical narrative, Navy Department Historical Section, "U.S.S. Nebraska," undated, OS File, Subject File 1911-1927, RG 45, NA; the Edinburgh Castle was a merchantman that was converted to a warship simply by arming her with 6-inch guns as a cruiser; the Montana was armed with four 10-inch guns.

36 Convoy schedule, Miscellaneous Convoy and Merchant Marine Information Number 3, Series ZO: World War I, Early Records Collection, Operational Archives Branch, Naval Historical Center, Washington Navy Yard.

37 Historical narrative, Navy Department Historical Section, "Historical sketch of the U.S.S. Louisiana during the World War," 18 October 1923, OS File, Subject File 1911-1927, RG 45, NA.

38 Report, Kittelle (Georgia) to Grant, 22 November 1918, OS File, Subject File 1911-1927, RG 45, NA; convoy schedule, Miscellaneous Convoy and Merchant Marine Information Number 3, Series ZO: World War I, Early Records Collection, Operational Archives Branch, Naval Historical Center, Washington Navy Yard; Navy Department, Annual Report of the Secretary of the Navy for the Fiscal Year 1918, Washington: Government Printing Office, 1918.
Number 83, which included five transports. On 13 November the Nebraska, along with the U.S. destroyer Talbot and the British armed merchant cruiser Teutonic, escorted the last convoy from the United States to European Waters. Convoy HX 56 included six British ships bound for Liverpool. The Nebraska returned from convoy duty on 2 December.

The final duty of the pre-dreadnoughts was to provide transport for returning American troops from France. Commander C.S. Freeman, executive officer of the South Carolina, first broached the idea of using battleships as troop transports. In a memorandum to Secretary Daniels on 28 January 1918, he pointed out that the pre-dreadnought battleships were militarily inactive except for training and that they could be making a more direct contribution:

Nearly half a million tons of shipping, built for a military purpose, aging rapidly in a military sense and doomed to early obsolescence, is occupying a passive role in the greatest war of history. I submit simply that this tonnage should be put to some effective military use . . . If our battleships cannot actively engage the enemy and are not needed to contain the enemy, it is essential, in order that their role may be an active one, that they bring pressure to bear upon the enemy by projecting man power within striking distance of the battle front.

39Convoy schedule, Miscellaneous Convoy and Merchant Marine Information number 3, Series ZO: World War I, Early Records Collection, Operational Archives Branch, Naval Historical Center, Washington Navy Yard.

40Memorandum, Freeman to Daniels, "War use for battleships," 28 January 1918, OB File, Subject File 1911-
Freeman maintained that transport duty would actually accelerate the training of officers and men. The ships would have to trim their swollen complements, but the increased amount of time at sea would make up for the smaller crews. He admitted that the number of troops transported would be smaller than aboard properly fitted transports, probably around 1,000 soldiers per battleship. Nevertheless, every battalion transported in a battleship would release an amount of regular transport tonnage.41

Answering Freeman's memorandum on behalf of Daniels, Benson thanked him for his ideas but replied that the Department did not wish to use the pre-dreadnoughts for transports at that time. Benson stated that three conditions would have to arise before it would be prudent to use battleships as troop carriers: no longer any need for offensive action, no necessity for supporting or protecting the lines of supply, and a need for troops and supplies that was so acute that regular transports could not meet the need. In addition, the Department believed that the small troop loads the pre-dreadnoughts could carry did not justify the large amount of fuel they would burn.42

1927, RG 45, NA.

41Ibid. Freeman submitted this memorandum through the proper channels and with the approval of his superiors.

42Memorandum, Benson to Freeman, 1 March 1918, OB File, Subject File 1911-1927, RG 45, NA.
The Navy Department declined to use the pre-dreadnoughts for troop transports during the war, but immediately after the armistice they began planning to use them to return the troops from abroad. Grant, acting commander-in-chief of the Atlantic Fleet while Mayo was abroad, submitted a report detailing the numbers of army officers and men that the individual battleships of the fleet could transport. He recommended that if the Department had to use battleships as transports, then they should only employ the pre-dreadnoughts and not any first-line battleships. He pointed to the unsettled political conditions and the deterioration of efficiency that months of transport work would cause. Grant also advised against using the older pre-dreadnoughts, the Indiana, Ohio, and Kearsarge classes, given their limited range and restricted accommodations. 43

The Navy Department's proposal to use the pre-dreadnoughts as transports sparked a clash between Benson and Mayo. When word of the Department's plan reached Mayo, he voiced his opposition in a cable to Benson in Paris:

I wish to strongly urge and earnestly protest against the use of battleships, cruisers, or destroyers for the transporting of troops. Such use would destroy their military efficiency and put the fleet back a year or two just at a time when every effort should be made to maintain the fleet at the highest point of efficiency.

43 Memorandum, Grant to Daniels, "Employment of battleships for transporting troops from abroad." 14 November 1918, OB File, Subject File 1911-1927, RG 45, NA.
Mayo ended the cable by urging that the Department take no action on the plan until he had a chance to see personally the secretary in December.\(^4\)

Benson replied that while he did not mind Mayo discussing the matter with the secretary, he thought it inappropriate that Mayo wanted to deliver personally his protest to the secretary and not through the chief of naval operations:

> In my opinion it is highly improper for such matters to be presented to the secretary in person before they have been presented to me. In the spirit of fairness I have always made it a point to see that your views were thoroughly understood by the secretary. I think you will agree that it is necessary in a matter of this character for my final decision to hold.\(^5\)

Benson’s decision held. By 3 December the Navy Department had already sent movement orders to Battleship Force One for two pre-dreadnoughts to sail for Brest each week, beginning on 10 December.\(^6\)

The first two pre-dreadnoughts, Georgia and Kansas, arrived at Brest on 22 December after a twelve-day voyage. The time in port was four days. Together, they embarked 2,732 officers and men. The next relay, the Virginia and

\(^4\)Cable, Mayo to Benson, 22 November 1918, OB File, Subject File 1911-1927, RG 45, NA.

\(^5\)Cable, Benson to Mayo, 24 November 1918, OB File, Subject File 1911-1927, RG 45, NA.

\(^6\)Orders, Grant to division commanders, "Transportation of troops on battleships of Battleship Force One," 3 December 1918, OB File, Subject file 1911-1927, RG 45, NA.
the Rhode Island, arrived in Brest on 30 December and took aboard 2,043 officers and men. The time in port was three days. On 5 January 1919 the Louisiana and the New Hampshire arrived at Brest and embarked 2,169 officers and men, including eight civilians. Again, the time in port was only three days. Combined, the pre-dreadnoughts transported 6,944 officers and men during the first month. In addition, the Navy Department operated the armored cruisers, North Carolina, Seattle, Huntington, St. Louis, Montana, South Dakota, and Pueblo as troop transports. During the first month of transport duty, the above listed pre-dreadnoughts and armored cruisers carried 17,272 officers and men home from abroad.\textsuperscript{47}

At least two army officers were impressed with their accommodations on the pre-dreadnoughts and had comfortable voyages. After the first transport trip of the Georgia, the senior army officer among the passengers reported: "I consider this trip a more desirable and satisfactory one than that taken when going to France on a large ocean liner owned by another government." The officer was impressed with the good food, fresh air in the sleeping compartments, and good sanitation.\textsuperscript{48} Major J.F. Dillon, after his journey


\textsuperscript{48}Cable, Naval Operations to Benson in Paris, excerpts from unnamed army officers report, forwarded by U.S. Army
aboard the Nebraska, sent the ship's captain a letter of thanks and commendation. Dillon reported that it was the unanimous opinion of both officers and men that "not a single act was overlooked on the part of the ship's personnel, that might add to our comfort, convenience or enjoyment of the journey." He added that the food was excellent and that relations between the army and navy enlisted men were "cordial and amicable."49

Compared to life in the trenches, the accommodations aboard a battleship must have seemed pleasant. The troops did, however, have to adjust to myriad rules and regulations that they probably were not used to. Troops boarding the Minnesota were issued a pamphlet detailing the rules of behavior aboard ship. The following were prohibited:

- Using obscene or profane language.
- Gambling.
- Leaning on life lines.
- Matches other than safety matches.
- Intoxicating liquor in possession.
- Obstructing passageways or ladders.
- Visiting between Army and Navy enlisted men.
- Sleeping on deck.
- Throwing anything over the side.
- Spitting on deck.
- Permitting water to stand in buckets.
- Clogging urinals and latrine troughs.
- Making noise after taps.
- Injuring government property.
- Opening any port or hatch found closed.
- Turning on or off electric lights or switches.
- Whistling.

49Letter, Dillon (USA) to Wurtsbaugh (Nebraska), 27 January 1919, OS File, Subject File 1911-1927, RG 45, NA.
Going in any boat on boat deck.
Going to head bare-footed and returning to hammock.
Running to mess tables.
Throwing food.
Smoking out of hours.
To sell, give away, or exchange Army or Navy clothing.
Bartering with Navy Personnel.

In addition, there were the usual admonitions against wasting fresh water, showing lights, and allowing litter in the living compartments. To help enforce the regulations was an army police detail of ten non-commissioned officers and 150 enlisted men.50

Transport aboard the pre-dreadnoughts may have been satisfactory for the army personnel, but transport duty did have adverse effects on the morale and efficiency of the navy crews. The commander of the Georgia reported that transport duty had lowered the standard of appearance for the ship and produced a "lack of smartness in the appearance of the crew due to the fact that the men are kept constantly at work out at sea cleaning . . . and in port coaling ship." The commander of the Virginia complained that "Under present operating schedule time for overhaul, cleaning boilers, etc., is not sufficient to keep up with current needs."51

50Information pamphlet, "U.S.S. Minnesota, transportation of troops, interior regulations and general information," 10 April 1919, OS File, Subject File 1911-1927, RG 45, NA.

51Navy Department Memorandum, "Memorandum relative to number of troops carried by troop-transport battleships," 13 March 1919, OB File, Subject File 1911-1927, RG 45, NA.
The Vermont's commander warned that "As far as the fighting efficiency of the personnel is concerned, all efficiency will soon disappear and at the end of about nine months of this duty any knowledge of gunnery or any skill that has been acquired will be nothing beyond a memory."\textsuperscript{52} The pre-dreadnought captains clearly did not appreciate transport duty.

A disagreement over the number of passengers that the battleships could carry caused a conflict between the commander of Force One, Admiral Grant, and the commander of the Cruiser and Transport Force, Admiral Gleaves. Their instructions made it clear that while on transport duty the pre-dreadnoughts were under the command of Gleaves, and between trips they returned to the control of Grant. Grant was to provide recommendations to Gleaves regarding logistics, upkeep measures, and drills. Gleaves was to furnish Grant with recommendations regarding matters affecting the usefulness of the vessels as transports. Therefore, the two admirals had poorly defined jurisdictions over the pre-dreadnoughts because they were to consult each another about their policies.\textsuperscript{53}

\textsuperscript{52}Report, Clark (Vermont) to Mayo, OB File, Subject File 1911-1927, RG 45, NA.

\textsuperscript{53}Memorandum, Mayo to Grant and Gleaves, "Operation of battleships as troop transports," 30 January 1919, OB File, Subject File 1911-1927, RG 45, NA.
The trouble began after the Kansas made two voyages carrying 1,690 and 1,925 troops respectively. This contravened Grant's orders not to exceed 1,200 men, which was the maximum that could be shipped and still maintain water-tight integrity and acceptable sanitary conditions. Grant was angered that the commander of the Kansas, B.F. Hutchinson, had ignored his orders, but Gleaves praised the officer for transporting more troops. Benson sent Grant a cable asking why the Kansas could haul so many troops but the other pre-dreadnoughts could not. He also wanted to know why Grant's battleships remained in U.S. ports for fourteen days between trips while Gleaves's cruisers remained only seven days between trips. Benson ordered that Grant increase the troop carrying capacity of his battleships.54

Grant responded by sending a lengthy memorandum to Benson explaining his policies and condemning the actions of Hutchinson and complaining about Gleaves's lack of support. Grant justified limiting the number of troops by including a report from the commander of the Pueblo, one of Gleaves's cruisers. The Pueblo had carried 2,200 passengers. Her commander reported that sanitary conditions had been very bad, and because of keeping hatches closed, the air between decks was very foul. Pueblo's commander added that had a

54 Cable, Benson to Grant, 18 February 1919, OB File, Subject File 1911-1927, RG 45, NA.
contagious disease appeared, it could have become an epidemic. Grant also mentioned that Kansas had many additional cases of contagious disease because of the overcrowding. He reminded Benson that if an epidemic started among the troops, there would be a scandal.

Grant's criticism of Hutchinson was harsh and direct. In his opinion, the commanding officer of the Kansas had exceeded his instructions and shown poor professional judgment. Grant continued: "The Commander of Battleship Force One is of the opinion that the Commanding Officer of the Kansas is deserving of reprimand rather than of commendation in regard to this matter." Grant bitterly complained about Gleaves's implied criticism of the other pre-dreadnought captains because they did not transport as many troops as Kansas did. Grant pointed out that those commanders were the ones who had obeyed orders and exercised good professional judgement. Grant apparently made his point. The pre-dreadnoughts continued his policy of transporting only 1,200 troops.

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55 Memorandum, Grant to Benson, "Transportation of troops from France to the United States on board ships of Battleship Force One," 17 March 1919, OB File, Subject File 1911-1927, RG 45, NA; Grant sent a copy of this memorandum to Gleaves.

56 During their trips from Brest in June 1919 the Nebraska, Louisiana, and Minnesota transported less than 1,300 troops each; see the historical sketches of those ships, Navy Department Historical Section, undated, OS File, Subject File 1911-1927, RG 45, NA.
After a conference with representatives of the War Department in June, the Navy Department decided that the pre-dreadnoughts would end their transport duty on or before 1 August 1919.\textsuperscript{57} By July all of the U.S. troops had returned from France. The cruiser and transport force carried a total of 1,493,626 troops home from the war in 115 ships, including the pre-dreadnoughts and armored cruisers.\textsuperscript{58} After their transport duty, the pre-dreadnoughts underwent repairs at the Norfolk and Philadelphia Navy Yards. In October 1919, the Nebraska, under the command of Captain P.N. Olmstead, joined the Pacific Fleet, but remained in service only one year. Throughout 1920 the Navy Department decommissioned most of the pre-dreadnoughts, which were either sold for scrap or sunk as targets between 1920 and 1924.\textsuperscript{59}

Some of the old ships lingered on as non-combatant ships. The Minnesota remained in service as the training ship for the summer cruises of the midshipmen from the Naval Academy at Annapolis until 1921 and was sold in 1924.\textsuperscript{60} The Oregon became a floating memorial from 1925 until 1942 when

\begin{itemize}
\item \textsuperscript{57} Memorandum, Benson to Grant and Gleaves, 16 June 1919, OB File, Subject File 1911-1927, RG 45, NA.
\item \textsuperscript{58} Gleaves, \textit{Transport Service}, 31.
\item \textsuperscript{59} Gray, \textit{Conway's}, 108-109.
\item \textsuperscript{60} Historical narrative, Navy Department Historical Section, "Historical sketch of the U.S.S. Minnesota," undated, OS File, Subject File 1911-1927, RG 45, NA.
\end{itemize}
she was sold to the breakers. The navy had the work stopped, however, and used her as an ammunition hulk during the 1944 invasion of Guam. The Oregon remained at Guam until the navy sold her after the war. The Kearsarge became a crane ship until the navy scrapped her in 1955. The Illinois served as an armory and later as an accommodation ship from 1921 until 1955. Sadly, none of the pre-dreadnought battleships have survived as monuments to the period of history when the United States became a naval power.61

Most of the ships of the Great White Fleet lived very short lives. Built in the midst of a revolution of naval technology, they became obsolete soon after, or sometimes before, their launching. Little more than two decades after their construction, most were already on the scrap heap. In spite of their obsolescence, the pre-dreadnoughts of the Atlantic Fleet saw extensive service during World War I. Because the Allies had the luxury of superior numbers of capital ships, they could release their older battleships for duties other than preparing for battle with the High Sea Fleet. The work the pre-dreadnoughts performed, as training ships, escorts, and transports, was not glamorous. They nevertheless played a more active role in the war than the most modern battleships of the fleet.

61Gray, Conway’s, 108-109.
CHAPTER 8

CONCLUSION

The naval war evolved in unexpected ways. The mine and the torpedo restricted the movements of the rival battle fleets. The danger of mine fields and submarine ambushes made a close blockade impossible and turned the North Sea into a kind of "no-man’s-land" for capital ships. The Grand Fleet and the High Seas Fleet only ventured into those waters for specific operations and under favorable conditions.\(^1\) The numerically inferior German fleet would accept battle only under specific circumstances: if they could isolate a part of the British fleet, if they could lead the British into a submarine trap to reduce their numbers, or if the British were foolhardy enough to enter the mine-infested waters of Heligoland Bight. Therefore, the chances of a decisive fleet engagement were slim.

As a result of the stalemate in the North Sea, the use of the blockade dominated the naval strategies of both protagonists. The British fleet isolated Germany from most of the outside world because it controlled both the northern and southern approaches of the North Sea. Germany mounted a counter-blockade with her U-boats, threatening Britain’s

vital seaborne trade. Although the submarine campaign became the critical issue of the naval war, the opposing battle fleets were an integral, if indirect, part of submarine warfare. The High Seas Fleet was the power behind the U-boat campaign. If not for the High Seas Fleet, the Allies could have effectively mined the approaches to the German bases and prevented the egress of the U-boats. Likewise, the strength of the Grand Fleet was the real power behind the blockade of Germany and the war against the U-boats.

The U.S. Navy Department abandoned its traditional strategy of keeping the U.S. fleet concentrated to await the decisive battle with the enemy fleet. Concentrated in U.S. waters, the Atlantic Fleet could not bring its power to bear directly against Germany. The Navy Department recognized this point and sought to engage the battle fleet in the naval war, but it was neither necessary nor expedient for the entire battle fleet to move to European waters. Individual units, however, could and did make important and needed contributions.

The cooperation of Battleship Division Nine with the British Grand Fleet was a significant contribution to the war effort. The addition of the U.S. battleships gave the Grand Fleet an unqualified superiority in battleships over the German fleet. With the added battleship strength, the Grand Fleet could protect North Sea commerce and mining
operations while maintaining the blockade. The U.S. battleships played an active role in North Sea operations and became an integral part of the British Grand Fleet. The experience of joint operations with the British benefited the entire U.S. fleet. Not only did the U.S. Navy benefit from exposure to British methods and experience, service in the war zone was invaluable in revealing deficiencies that may not have otherwise come to light. The operational cooperation of the American squadron with the Grand Fleet was an unprecedented success. The two navies had never cooperated as allies before. Nevertheless, neither national pride nor conflicting strategic ideas or personalities interfered with the amalgamation of the American ships into the Grand Fleet.

Protecting the sea lanes between the United States and France was as important as supporting the blockade of Germany. The primary contribution of the U.S. Navy during the war was the transport of U.S. troops, along with their supplies, to the Western Front. There was the real possibility that Germany would use her capital ships to raid the transatlantic convoys. The only way to ensure the safety of the troop convoys was to protect them with battleships. Again, the large capital ship superiority of the Allies allowed the diversion surplus battleships from their traditional duty, engaging or preparing to engage the enemy fleet, to fulfilling other needs.
The specter of battleships, even obsolete ones, shepherding individual convoys shows the extent that the role of the battleship changed during World War I. The need for battle fleets remained, but the war ended rigid observance of Mahan's doctrine of fleet concentration. In the next war, the United States wielded a two-ocean navy. The non-traditional use of battleships also repeated itself. Throughout World War II, the Royal Navy used its battleships to escort important convoys. The U.S. Navy used battleships as carrier escorts and anti-aircraft gun platforms. Both navies further developed the use of battleships for firesupport for amphibious landings.

The U.S. Navy worked under a serious handicap during World War I. Because the United States did not mobilize until after the declaration of war, training programs could not keep pace with rapid expansion. Most of the deficiencies of the U.S. battleships during the war can be traced to the shortage of trained officers and men. The poor gunnery of the American squadron when it joined the Grand Fleet and the friendly-fire incident between the New Hampshire and the Louisiana exhibit the poor state of training in the U.S. fleet during the war. The U.S. Navy began the next war with eleven times more officers and men than it had when it entered World War I.²

²The U.S. Navy began with 67,000 officers and men and expanded to nearly 500,000 in World War I -- an expansion of 7.5 times; the navy began with nearly 760,000 officers and
U.S. battleship operations in World War I were not as glamorous as a decisive fleet engagement along classical lines. Their service was important nonetheless. It should be remembered that the Allies won the war at sea without a decisive encounter between the rival fleets. The addition of the U.S. battleships allowed the Allies to protect the supply lines from the United States without withdrawing units from the North Sea and weakening the naval blockade of Germany. The influence of the U.S. battle fleet was indirect, but substantial.

men and expanded to over 3,250,000 in World War II — a four-fold expansion. See Chapter 4, p. 151 and Samuel Elliot Morison, The Two Ocean War: The Definitive Short History of the United States Navy in World War II (New York: Ballantine Books, 1963), 496.
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