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The Anglo-German Naval Race: Its Origins and Influences on the First World War, 1897-1914

The Anglo-German Naval Race:

Its Origins and Influences on The First World War, 1897-1914

by

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The Anglo-German Naval Race: Its Origins and Influence on the First World War, 1897-1914

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Once more now in the march of centuries Old England was to stand forth in battle against the mightiest thrones and dominations. Once more in defence of the liberties of Europe and the common right must she enter upon a voyage of great toil and hazard across waters uncharted, towards coasts unknown, guided only by the stars. Once more "the far-off line of storm-beaten ships" was to stand between the Continental Tyrant and the dominion of the world.

-- Winston Churchill

Here, of course, was a problem any European nations expanding overseas faced: British interests, holdings, and ambitions were now so vast that wherever on the globe one moved, the British would feel threatened and prepare to do battle. The territorial extent of the British Empire and its lifelines was a credit to British daring, enterprise, and ingenuity. It also was an irritant to others, and a source of international friction.

-- Joachim Remak

England is like Nero, who always imagined that whenever any two people laughed, spoke, or did anything together, it was about, against, or because of, him.

-- Wilhelm II

What shall we do to be saved in this world? There is no other answer but this, Look to your moat. The first article of an Englishman's political creed must be that he believeth in the sea.

-- Marquess of Halifax, 1694

If we alone, among the Great Powers, gave up the competition and sank into a position of inferiority, what good should we do? None whatever, no good to ourselves because we cannot realize great ideals of social reforms at home when we are holding our existence at the mercy, at the caprice if you like, of another nation.

-- Sir Edward Grey

The participation of Britain in the World War, viewed in its longest perspective, was the inevitable consequence of her world-wide supremacy, both economic and naval, during the mid-Victorian era: For that supremacy was something she was losing, but which she would not be likely to bring herself to accept as lost without a struggle to retain it. That is where the naval challenge of Germany became so important.

-- David Thompson

I. Introduction

"Commence hostilities against Germany." With these four words, sent out by wireless from Whitehall to all British warships at home and overseas stations at 2300 hours on August 4, 1914, the British Empire embarked on a war that was to be called, quite aptly, "the Great War." It ended the reigns of three great royal houses of Europe, killed eight and a half million young men and wounded a further twenty-one million, and left the dispirited people of Europe with an equally broken land and economy, devastated by four years of warfare, unequalled in history in its ferocity and appalling casualty rates. It was a rude awakening for the people of Europe, who, after a century of economic growth, heady nationalism and imperial expansion, found themselves staring into the uncertainty of the new century, while the old familiar institutions of the nineteenth century crumbled down around them.

It was a war fought mainly on land, in and out of the never-ending trenches of the Western Front, on the frozen plains of Eastern Europe, on the barren Turkish beaches, and over the blue skies of Flanders, where brave young knights of the air duelled with each other in an anachronistic revival of medieval chivalry. But while battles and sieges swayed to and fro (with little gain and great losses) on land, another type of war was being fought on the high seas, in the foggy, cold waters of the North Sea, and in the vast expanses of oceans

throughout which the imperial trade routes spanned. It was no less deadly nor earnest than its land counterpart, although it received less front-page attention. It was a war of nerve and patience, of great expectations and bitter disappointments, so characteristic of the Great War.

No one can deny the influence of the sea power on history; it is too full of repetitive examples for that. But to what extent did it contribute to the outbreak of the Great War? Just how influential was the Anglo-German Naval Race on the pre-war politics and diplomacy of the Great Powers?[1] How did this Anglo-German rivalry influence the policies of the other Great Powers, before and during the war? How was the naval policy shaped by the popular opinion and how was the popular opinion, in turn, influenced by the navy?

By 1914, many leaders of Europe had come to regard a general war as inevitable. Some even desired it. This attitude was supported and fueled by popular opinion; the unbridled forces of nationalism, fed by the energies of the urban and industrial revolutions, were eager and enthusiastic for a demonstration of their patriotic fervor. One reason for this was that the people did not know what would happen in a total war. The popular image of war was a repetition of the Franco-Prussian War of 1870-71[2], with the same speed and

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[1] The term "Great Power" denotes a pre-World War I European nation, as opposed to today's "Super Power." Typically, Great Britain, France, Russia, Germany, and Austria-Hungary were referred as the Great Powers.

[2] As the final step in Bismarck's plan to unify the German states into one nation, he diplomatically maneuvered France into a position from where only a declaration of war would be an honorable exit. In July, a war was declared, and the Prussians, utilizing its extensive network of railroads, quickly gained upper hand. A large French army was surrounded at Metz, and in September, the Prussian army forced the surrender of the main French army at Sedan, as well as Napoleon III. Paris capitulated in January of 1871. Subsequently, King Wilhelm I was declared German emperor at Versailles. France lost Alsace-Lorraine and incurred heavy

decisiveness. The rigors of war were associated with the Napoleonic heroism and dash and were romanticized by the public, who marvelled at the deeds of the Light Brigade at Balaclava, of Pickett's Charge at Gettysburg, and of the defenders of the Rorke's Drift.[3] These heroic exceptions masked the true horrors of war, the losses and sufferings of soldiers and civilians, and general futility of violence.

Although the political map of Europe of late-nineteenth and early-twentieth centuries seemed little changed from the dispositions made at the Congress of Vienna following the Napoleonic Wars, the Victorian Age saw great changes, not only in England, but all over the continent, in political, social, economic, religious, and nationalistic beliefs and practices. And nowhere was this more apparent than in northern Europe, where the German Empire had finally come into being under the Prussian leadership. Its birth was the culmination of the long process of nationalist sentiments, first kindled during the Napoleonic Wars following the catastrophic defeats of 1806 and consequent occupation by the French[4]. Although the Congress of Vienna had denied the hopes of German nationalists, the vision of a unified Germany was nurtured throughout the first half of the century. Finally, in the 1860s, Prussia rose to weld, under the House of Hohenzollern, the myriad of smaller kingdoms and duchies of Germany into a power to be reckoned with--not so much for the nationalist sentiments as

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indemnities.

[3] For a brief description of these events, see Appendix C.

[4] In October, 1806, King Friedrich Wilhelm III of Prussia, goaded by his queen and warlike faction of his court, declared war on the French Empire, using its violation of the Prussian territory as a pretext. A lightening campaign followed, in which Napoleon inflicted two severe defeats on the Prussian Army (the Battles of Jena-Auerstädt), and occupied most of Prussia. The war ended in July, 1807, with the Treaty of Tilsit, by which Prussia became an ally of France.

to exert greater influence in Europe. And in Otto von Bismarck, Wilhelm I, the King of Prussia, found the man to give birth to this empire and nurture it to a world power status.

For twenty-eight years, from 1862 when he became the Prussian Prime Minister, until 1890 when he was forced to resign, Bismarck shaped and influenced continental politics with a mastery and ruthlessness befitting his dictum of "iron and blood." Although he was passionately dedicated to his monarch and proud of his Junker (traditional Prussian landowning aristocracy) heritage, he was nonetheless a realist when it came to politics. His "unerring instinct"[5] for the true pivots of power, coupled with his masterly handling of the various classes of the German society enabled him first to unify the Germanic states into a nation, and then build it up to a great power. Above all, he sought to consolidate the position of Germany within the existing power structure of Europe. With an effective combination of force, coercion, persuasion, bluff, and sometimes bonhomie (he knew when to give in), Bismarck maintained a balance of power in Europe as favorable to Germany as possible. Above all, he was anxious to have good relations with the other great powers, especially England; he recognized her wealth, prestige, and her navy for what they were--a force so great that to weaken it would be to destroy the existing order of the Great Powers. He epitomized the secret diplomacy of the Victorian Age, whose selective caste gave it an even more discreet outlook. As with everything else, he was a unscrupulous realist when it came to diplomacy. "Bismarck believed that Austria and Prussia were states too great to be bound by the texts of treaties. No agreement could be expected to last forever."[6]

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[5] Albert S. Lindemann, quoted from a seminar meeting in November, 1990.

[6] James Joll, *The Origins of the First World War* (Longman, 1984), p. 35.

Although all the Great Powers of Europe during this period had an imperialistic policy of one sort or another, there were no general wars in Europe in the century following 1815, despite the numerous and great changes. The Franco-Prussian War of 1870-71, by far the most serious conflict of the period, was contained from escalating into a continental war. The minor disputes and struggles were localized and their impact on the international diplomacy largely neutralized. This was possible because a balance of power was maintained throughout the various crises. And this, in turn, was due to Great Britain and her navy.

At the beginning of the twentieth century, Britain possessed the most powerful empire in the world. Having emerged from the Napoleonic Wars relatively unscathed and with her economy on a firm path to industrialization, she grew to be the wealthiest nation in the world under Queen Victoria's reign. The "Grandmother" of Europe, as Victoria was popularly known, provided an imposing figure as the guardian of peace--while her reign lasted. During her time, *pax britannica* reached its zenith, and England grew more powerful and prestigious than ever. Her navy policed the oceans, and the traditions of the Royal Navy, the splendid traditions to which men like Nelson, Collingwood, Barham, Howe, and St. Vincent had contributed, were revered by a proud public. To an ordinary Englishmen, the Royal Navy symbolized everything that was good about England; it was without a peer in quality and efficiency, and had proved itself to be thoroughly trustworthy and steadfast time after time.

It was this navy that gave Britain her unchallenged position as *the* mediator of European politics. As long as she remained immune to hostile land powers (which she was, since her "two-power standard" policy had ensured that her navy would always be stronger than the next two strongest naval powers combined), she could act with relative impunity,

using her vast wealth and imperial influences to balance and counterbalance any continental troubles. Thus she maintained the sovereignty of the Ottoman Empire against the covetous eyes of the other Great Powers, and saw to it that no single hostile power would control any geopolitical "hotspot," be it Constantinople, the Suez Canal, India, Canada, or South Africa. Therefore it was absolutely necessary for Britain to possess an unchallenged supremacy at sea--indeed, her survival as a nation depended on it (as it had in 1588 and 1805, with the Spanish Armada and Napoleon's threat of invasion, respectively[7]). As long as her command of the sea was unchallenged, no single power would be able to dominate Europe, and a general war might be avoided. But just as Britain could not afford to see a single power dominate the continent, some leaders of the Great Powers felt that the supremacy of the Royal Navy at sea was stifling the potential of their imperial expansion and growth. And of these malcontents, none were more vocal than Wilhelm II, Kaiser of the German Empire.

By the closing years of the nineteenth century, Germany had become a Great Power of first rank. Since its birth in 1871, the Empire had grown and developed, with its economy expanding at an astonishing rate. The German people were proud of their power, achievements, and heritage, of the fact that they were changing the course of history, and wanted a way to express that. First and foremost, Germany was a land power. The chief instrument of German foreign policy was its incomparable army. It was a "wholly

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[7] In 1588, Philip II of Spain tried to bring England back under the Catholic influence by force, and accordingly send his *armada* of 130 ships and 23,000 men. Foul weather, and superior English navy foiled his attempt, and only half of the ships returned home.

In 1805, Napoleon had poised his *Grande Armée* of 150,000 men on the Channel coast, intending to invade England. However, his Combined Fleet of France and Spain--so vital for the safe passage of the troops across the Channel--was decisively defeated by Nelson at the Battle of Trafalgar on October 21, 1805, putting an end to that plan.

professional army. Born in the Napoleonic wars, nursed by Gneisenau and Scharnhost, tutored by Roon and the elder Moltke, this had reached maturity at Sedan in 1870."[8] By the careful use of this formidable instrument, Bismarck had been able to consolidate Germany's position and gains on the continent. But Kaiser Wilhelm II, who succeeded his father to the throne in 1888, was of different temperament. While Bismarck had been content to limit Germany's ambitions to the continent and to cultivate friendly relations with Britain, Wilhelm's overriding passion was to express the greatness of the German Empire, even at the cost of those relations. And what better ways to do that than to build a navy of a size befitting its grandeur? But to achieve this dream, he needed money; and although Germany was growing more powerful and wealthy by every year, much of her capital had to be spent on industrialization and investments, so vital in a growing economy. The reluctant *Reichstag* (a body of popularly-elected representatives) had an unpleasant habit of cutting down the various naval budgets, while the preeminence of the army in the society further lessened a chance of a significant naval building program.

But the disconsolate Kaiser did not have to wait long to fulfill his dream. While the army was dominated by the aristocracy and the Prussian Junkers, the navy was more middle class in spirit and composition. And this middle class of industrialists, bankers, and other influential members of the society yearned for a way to express their patriotism and power, and yet not to be overshadowed by the prestige of the traditional aristocratic élites. Armed with this support, the Kaiser sought to further his cause of building a navy. And in Alfred von Tirpitz, an officer of the Imperial Navy, he found the man to fulfil his ambitions.

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[8] Geoffrey Bennett, *Naval Battles of the First World War* (Pan Books, 1983), p. 10.

Within a year of becoming the State Secretary of the Imperial Naval Office (1897), he passed through the Reichstag the Naval Law of 1898, which began the building of an ocean-going battle fleet. And when the Anglo-German relations worsened over the Kaiser's encouragement of the Boers and Britain's search of German ships suspected of carrying contraband items to the Boers, Tirpitz responded by persuading an angry Reichstag to pass the second Naval Law. It not only increased the size of the battle fleet, but made clear the purpose for which it was being built: "Germany must have a battle fleet so strong that, even for the strongest sea power, war against it would invite such dangers as to imperil its position in the world."[9]

Thus the personal ambitions of the Kaiser, fueled by the popular support and directed by the genius of Tirpitz, gave the birth to the High Seas Fleet, and at the same time sowed a seed of rivalry that was eventually to topple the Empire. Would a general war have broken out without the naval race? Could Germany have built a navy befitting her grandeur without having provoked England? How did the naval race influence the anti-German feelings in England and anti-British feelings in Germany? Above all, how influential was this rivalry on the outbreak of the Great War? These are some of the questions that will be discussed in this paper.

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[9] Bennett, Naval Battles of the First World War, p. 10.

II. The Anglo-German Naval Race

A. Kaiser Wilhelm II and Tirpitz

People have often blamed the sufferings of the Great War on Kaiser Wilhelm II of Germany. This sentiment was especially strong in Britain and France in the immediate postwar years, where he was seen as the cause of the war and all the consequent evils. The cry "Hang the Kaiser!" became the slogan of many bitter people and unscrupulous politicians, and the governments of the Allied powers availed themselves of the handy figure of the hapless ex-emperor, then exiled in Holland, to heap on blame for the sufferings of the war. The truth, unfortunately, is less simple. Certainly the Kaiser, as the supreme military commander of Imperial Germany, was responsible for many of the decisions leading up to the outbreak of the war. But just as it is useless to try to understand any historical event by focusing on a single factor, it is equally futile to blame Wilhelm solely for the Great War. His impulsive and flamboyant character made him a more visible scapegoat for the war, but in truth he is perhaps no more guilty than any other leader of the Great Powers. "It is... useless to seek historical scapegoats. The individuals who made the decisions belonged to their age and nation and their acts can only be understood in that context."[10]

Often described as impulsive, intelligent, vainglorious, and bombastic, Kaiser Wilhelm II was a key figure in the international political scene in the quarter-century between 1888 and 1914. His sometimes outrageous speeches gained him much notoriety and made him

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[10] Jonathan Steinberg, *Yesterday's Deterrent: Tirpitz and the Birth of the German Battle Fleet* (MacMillan, 1966), p.25.

seem much more important and influential than he actually was. He had an obsessive interest on military matters; he delighted in military displays and pomp, fancying himself a great soldier. These tendencies are understandable when one considers his background. The Hohenzollerns of Prussia did boast many "soldier-kings," while the social structure of Prussia, and, to a lesser degree, of the Empire, centered around the military. Wilhelm's grandfather, father, and uncles had all been successful soldiers. The restless atmosphere of the newly-created empire, forged by the might of arms, reinforced his attitude. He identified closely with his grandfather, Kaiser Wilhelm I, who defied the Reichstag and later humbled it with his victory over Austria and France (with Bismarck's masterly guidance, to be sure). He was fond of everything military, and surrounded himself with soldiers of all sorts, whom he used in various different roles, some in which professionally trained civil servants would have served him better.

Wilhelm's character is baffling. He was not a cruel man, nor a stupid one. He was moody and impulsive, the combination of which frequently led him to do tactless things. He was sentimental and boastful, typically representative of the jubilant, self-confident attitude of the empire. He fancied himself a brilliant soldier, a masterful statesman, and a great emperor, when in actuality he was an amateur soldier, an inopportune statesman, and a bad emperor. All this is not to say, however, that he was an abnormality of the time. Europe of his time, when imperialism, national pride, and militarism combined to form a volatile group of armed nations, was headed, led, and served by people of similar dispositions, such as Franz Josef of Austria-Hungary and Nicholas of Russia. Indeed, many people (not necessarily all German) admired and revered Wilhelm and his image of a super warrior-king.

Germany at the turn of the century was a growing nation of some fifty-six million proud people--proud of their unification and of their martial invincibility. This pride was matched by a spectacular economic boom and an increase in foreign trade, whose growth rate surpassed even that of Great Britain. By 1900, its industrial potential was only second to Great Britain in the continent, and by 1913 it had surpassed Britain.[11] The segment of the society most influenced by this expansion was the middle class. The German middle class, traditionally of merchants and intellectuals, was customarily overawed by the Church and the military Junkers. But with the coming of the Empire, it found a new source of influence: the consequent economic boom. Now this class of wealthy bankers and merchants vied for more representation in the imperial decision-making process. It already dominated the *Reichstag*, and sought new ways to show its potential. In an empire created by a feat of arms and where the military was held in high esteem, it was only natural that the middle class turned its attention to the armed services. The army it found difficult and unfriendly; dominated by the Prussian Junkers, its officer corp was an highly selective fraternity of aristocrats. But the navy was a different story. The Imperial German Navy in 1871 was a collection of a few inefficient coastal vessels, with dubious fighting potential. It offered an unattractive career to the nobles, who saw no future in it. Perhaps this was why it attracted the middle class. While the history of the German army went back a long way to the days of Frederick the Great and the Napoleonic Wars, the navy shared its birth with that of the empire. It was open to talent, and did not insist on noble birth as a prerequisite for its

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[11] Paul Kennedy, *The Rise and Fall of the Great Powers* (Random House, 1987), p. 201.

officer corps.

It is often difficult to understand why Wilhelm, who revered the memories of his Hohenzollern forefathers and their victories, became so enamored with the navy, which had then no tradition and fighting value. Wilhelm himself once offered an explanation:

> When as a little boy I was allowed to visit Plymouth and Portsmouth [principal bases of the Royal Navy]... I admired the proud English ships in those two superb harbours. Then there awoke in me the wish to build ships of my own like those some day, and when I was grown up to possess a Navy as fine as the English.[12]

Although one can dismiss this as a whim, it offers an insight to Wilhelm's character, and to the political inclinations of the time. It was natural for the kings and emperors to take an active interest in national policies, and to take upon themselves the command of the armed forces. The theory of divine right was still around, and people remembered vividly how Wilhelm I led his army to victory over Austria and France, how Vittorio Emmanuele had liberated Italy from Austria-Hungarian rule and unified it. It was not unreasonable for Wilhelm to desire and demand a strong navy, and people in general supported him, reasoning that Germany's growth and its status as a great power required it.

But for a nation whose growing economy demanded yet greater reciprocal investment, it was hard to persuade the *Reichstag* to see the need for a bigger navy. This was further made more difficult by the unchallenged supremacy of the German army on the continent,

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[12] Steinberg, *Yesterday's Deterrent*, p. 163.

and the Bismarckian alliance system,[13] which lessened the prospect of war. The initial attempts by Wilhelm and his naval ministers to win concessions from the *Reichstag* to build more ships were frustrated time after time. But as time passed, and as the imperialist movements gained momentum within and outside the Empire, the German people began to cast their eyes outside Continental Europe. Imperialism in the late-nineteenth and early twentieth-century was a crucial factor in motivating people and politicians, and a nation's greatness was deemed directly proportional to how many overseas possessions it had. This was especially prevalent view in Germany, whose people were eager to show off their newly-acquired Great Power status. The notion of *Weltmacht* and *Weltpolitik*[14] demanded an ocean-going navy. And to link in the public's mind the prestige of overseas colonies to the necessity of a navy strong enough to defend them in case of war, Wilhelm found his Bismarck in Alfred Tirpitz, then (in 1897) a rear-admiral in the Imperial Navy.

Tirpitz was an extraordinary man. Born in a solid middle class family, he had entered the navy in 1865 at the age of sixteen. He was very energetic and ambitious, and sure of his ability. He rose through the ranks of the navy, at first as a torpedo specialist. While there were many outstanding young officers in the navy, in one aspect he was exceptional: He had both practical experience in the navy, and political wisdom to understand the future of the

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[13] Bismarck, in a never-ending search for the stability and consolidation of Germany, implemented many alliance system with other Great Powers. In 1871, he signed the Three Emperor's League (*Dreikaiserbund*) with Russia and Austria-Hungary, and the subsequent Reinsurance Treaty (1887-90). In 1879, he signed the Dual Alliance with Austria-Hungary, which became the Triple Alliance when Italy joined it in 1882. He also cooperated with the British. In all of these maneuvers, he sought to isolate France diplomatically.

[14] "World Power" and "World Politic"

navy and how it should be employed. Once described by a Russian princess as being "*trop de grand homme*", he was a cultivated, polished man of the world, equally at home in Berlin social gatherings as at sea. Above all, Tirpitz was a consummate politician. Unlike Wilhelm, who thought he knew what he wanted but didn't know how to go about getting it, Tirpitz knew his goals and how to achieve them under the existing circumstances. This political instinct, coupled with his solid experience in the navy, made him a formidable proponent of the "big navy" idea.

Tirpitz became the Secretary of the State of the Imperial Naval Office in June, 1897. He had his first official audience with the Kaiser immediately, in which he presented his plan for building a battle fleet, and the strategy for which it was to be employed. He was aware that the Kaiser had come to accept the view that henceforth England would be Germany's chief competitor, and therefore the power against which the navy would have to fight. Whether he agreed with the emperor's opinion or not, he was realistic enough to realize that for the time being, he would have to go along with the idea. He proposed to concentrate the fleet in the North Sea, "between Heligoland and the Thames."[15] There, it could operate with or against the navies of France, England, and Russia, the three most influential Great Powers of Europe and Germany's most-likely friends or foes in case of war. The Mediterranean was too remote and dominated by the French and the Royal navies, to matter significantly. Unlike his predecessors, he did not plan to build a defensive or a coastal fleet; his fleet was to be a battle fleet, capable of carrying out both combat operations against

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[15] Alfred von Tirpitz, *Erinnerungen* (Leipzig, 1920), p. 20, as quoted in Steinberg, *Yesterday's Deterrent*, p.209.

hostile warships and commerce protection. This he summed up in these words:

> A state which has oceanic...interests must be able to uphold them and make its power felt beyond its own territorial waters... National world commerce, world industry...are impossible without a fleet capable of taking offensive... The conflict of interest between nations, the lack of confidence felt by capital and the business world will either destroy these expressions of the vitality of a state, or prevent them from taking form, if they are not supported by national power of the seas, and therefore beyond our own waters. Herein lies by far the most important purpose of the fleet.

Tirpitz was not an anti-English xenophobe. If anything, he was an anglophile, reading English books in his leisure and sending his children to English schools.[16] He did not care for a navy created exclusively to battle the Royal Navy. While he did see the necessity for a strong navy to protect overseas possessions and commerce, he did not get carried away, as the press and public did, by the threat posed to Germany by the supremacy of the Royal Navy in limiting Germany's overseas expansion, which he believed was not necessarily more dangerous than that posed by any other foreign powers. He wanted and worked towards a big, ocean-going battle fleet, *because he was a navy officer*. He wanted it because his career and future lay with it, and he used the then-prevalent attitude of the German press and populace (not to mention the whim of Wilhelm II) to achieve his goal. While some may brand him as an opportunist, devoid of loyalty, in actuality he was a supreme realist, typifying the *Realpolitik* of the era. The Kaiser, the public, and he wanted a

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[16] Steinberg, *Yesterday's Deterrent*, p. 163.

big navy, all for different reasons: The Kaiser for his personal dreams, the public to express Germany's greatness, Tirpitz to further his career. England just happened to be the convenient target against which the different classes of the German society could be united. What did it matter, as long as all were satisfied in the end?

At the same time that he was defining the role of the navy, he was formulating the political reasoning and maneuver by which he planned to win the support of the public, and more importantly, the *Reichstag*. This was the famous "risk theory." In short, it proposed that if Germany did possess a strong battle fleet, a hostile power (i.e. England) would not dare attack it, since even a victory over it would weaken the victor so much as to render it vulnerable to the combined attacks of the other powers. While it was an ingenious assumption at that time, it did have some critical flaws. It assumed that the hostile power (i.e. England) would always be isolated diplomatically ("Splendid Isolation"), and did not take into account that with passage of time, international diplomatic arrangements might change, making the theory obsolete. More seriously, it assumed that England would sit by idly while Germany built up her fleet. Tirpitz did not take into account the reaction of the English. For, in order to pass through the "danger zone" (the period in which the German navy was weak enough that it could be destroyed without any significant repercussion to England), Germany would have to build a great number of warships as quickly as possible, and this in turn would bring about foreign (i.e., English) retaliation in form of increased shipbuilding (to match the German increase). Consequently, the increased strength of both navies would effectively nullify the increased strength of the German navy, which would have to build even more ships to escape the "danger zone," and thereby bring about further

escalation of armament.

The German Naval Laws of 1898 and 1900 were the culmination of Tirpitz's effort to win the people over to the idea of a strong navy. With the Naval Law of 1898, he proposed a building program for a fleet of some nineteen first-class battleships, complemented by eight coastal armored ships and some forty-two cruisers.[17] As this was a drastic increase over the then-current strength of seven battleships and two cruisers, the bill ran into a strong opposition in the *Reichstag*, which was dominated by the middle-class liberals, and to a lesser degree, the socialists. But with careful phrasing and by passing the proposed navy as one of defensive nature, Tirpitz was able to overcome resistance and pass the bill. When, two years later, the German public opinion was enraged by Britain's seizure and search of German ships suspected of carrying contraband goods to the Boers, Tirpitz saw another chance to prove the dire necessity of a strong battle fleet. Pointing out that with a strong navy, Germany did not have to kneel before greedy Britain, he waged an even more effective campaign to pass his Second Naval Law of 1900, which was to double the planned size of the Imperial Navy. "Security of economic development and foreign trade" and "utmost possible protection to the mercantile ships" were the prevalent themes throughout the text of the Navy Bill. But it included a clause which offers an insight to the real purpose of the navy and explains the "risk theory":

> Germany must have a battle fleet so strong that even for the adversary with the greatest sea-power [i.e. England] a war against it would involve such dangers as to imperil his position in the world.

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[17] For an explanation of these terms, as well as some others, see Appendix C.

> For this purpose it is not absolutely necessary that the German Battle Fleet should be as strong as that of the greatest naval Power, for a great naval Power will not, as a rule, be in a position to concentrate all its striking forces against us. But even if it should succeed in meeting us with considerable superiority of strength, the defeat of a strong German Fleet would so substantially weaken the enemy that, in spite of the victory he might have obtained, his own position in the world would no longer be secured by an adequate fleet.[18]

The Second Naval Law was passed by the *Reichstag* on June 12, 1900.

It should be noted here that Germany was not a traditional maritime power. Its central location in Europe, its close proximity to the great merchant states of the Low Countries, and its former existence as a loose collection of different petty states, had prevented its rise as a great mercantile power. But with the formation of the empire, Germany began to play a direct and influential role in world commerce. Its ships imported foodstuff and raw materials from all over the world, and in turn exported the manufactured goods of the growing industry. This increasing importance of foreign trade helped to clarify and justify to the public the growing importance of an ocean-going navy, capable of defending Germany's commerce routes. As Germany's colonial empire grew and the corresponding overseas trade grew, the people's interest in the maritime affairs became deeper.

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[18] Archibald Hurd and Henry Castle, *German Sea-Power: Its Rise, Progress, and Economic Basis* (Greenwood Press, 1971), p. 348.

The Imperial Navy of 1898 was composed of seven battleships and two large cruisers. It dated to the Frankfurt Parliament of 1848, which had decreed the formation of a Prussian navy. Since the Junkers were so firmly attached to the army and its traditions, and since career at sea offered no future for any aspiring young aristocrat, the navy suffered from a lack of any real talent and of prestige. Its senior posts were filled by career army men, who did not understand the sea nor the need for a stronger navy. But with the rise of socio-economic boom of the empire during the 1880s and the 1890s, more and more young men from the middle class began to consider a career in the navy as an acceptable alternative from such traditional occupations as business, banking, or the professions. These young, intelligent men found that the navy did not insist on noble birth as a qualification for its officer corp, and that compared to the army, it offered fairer opportunity, based on talent. Thus when the Naval Law of 1898 was passed, it found the navy in an ideal situation: It was officered by able, energetic men who were willing to go to great lengths to make the navy as formidable as the army.

The most exceptional features of the new Imperial Navy were its officer corp and its technical and material excellence. The competence and enthusiasm of the officers were notable, and on occasions the English themselves were first to acknowledge the formidableness of the new German Navy. Having started from a virtual scratch in 1898, the Imperial Navy had, in fifteen years time, caught up in experience to challenge the greatest naval power of the world. It was no mean achievement, and one that was to have far-reaching consequences in fermenting the seeds of Anglo-German antagonism.

The technical and material aspects of the German shipbuilding program were flawless.

Here, the purpose for which the ships were being built were thoroughly understood and used to the fullest advantage. Because the fleet was designed to operate against England, mainly in the North Sea, the battleships of Imperial Navy did not require so much fuel capacity as those of the Royal Navy, which sailed to and from bases all over the world in protection of Britain's far-flung empire and trade routes. Furthermore, the Germans opted for lighter main armament than the British (eleven-inch guns versus twelve-inch and later thirteen-and-a-half-inch guns); while this lessened the damage inflicted by it and accuracy at longer range, it again saved weight. The weight saved by the reduction in fuel capacity and armament was directed to better protection, with the result that for a ship to ship, German ships were more sturdily built than their Royal Navy counterparts. This proved to be invaluable during the war, when the German warships were able to sustain more damage in battle and yet remain in action.

Even though it was unclear at the time, the German Fleet was not built to protect Germany's colonies overseas or its foreign commerce. Although it did control a rather extensive network of colonies and territories abroad (Germany's overseas territory was 4.5 times bigger than Germany itself, while the population of Germany was 4.7 times greater than its colonial subjects[19]), the fleet was built with the concept that the North Sea would be its main theatre of service. To be sure, it did maintain a cruiser squadron in Chinese waters, and a few small cruisers here and there for a commerce-raiding role in case of war (and which caused great havoc among the allied shipping in the first months of war), but no main units of the Imperial Navy ever ventured outside the European waters. It is ironic to note

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[19] Hurd and Castle, *German Sea-Power*, Appendix VIII.

that the fleet whose declared *raison d'être* was "to secure Germany's place in sun," was instrumental in bringing about the war that was to be its downfall.

B. FISHER IN THE ADMIRALTY

On October 21, 1904--Trafalgar Day--Admiral Sir John Fisher became the First Sea Lord of the Admiralty. This "veritable volcano"[21], as he was known throughout the service and to the press, had been the Commander-in-Chief of the Mediterranean Fleet, where his dynamic zeal for progress and reform had made him famous both inside and outside of the Navy. Now he brought these same energies and enthusiasms to the Admiralty, where, for the next six years, he was to shape the naval policy and restructure the Navy.

"Jackie" Fisher, as he was popularly known, owed none of his success in his profession to birth, influence, or favors. His father was a poor colonial army officer, unable to offer his son any financial support. But he was fortunate in possessing some influential connection in the Navy to obtain for Jackie a recommendation from a ranking flag officer, necessary in those days to enter the Navy as an officer cadet. Jackie entered the Royal Navy on July 12th, 1854, at the age of 13. He was assigned to the *Victory*, Nelson's flagship at Trafalgar, at Portsmouth.

From then on, his career was unbroken string of success. He held various sea commands and staff duties all over the empire, and became Captain at the age of thirty-three, while the average age of the commanders, in the Royal Navy was forty-two. In September 1899, Vice-Admiral Sir John Fisher hoisted his flag as the Commander-in-Chief of the Mediterranean Fleet--then the most important fleet of the Empire--at the relatively early age of fifty-eight.

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[21] Bennett, *Naval Battles of the First World War*, p.7

Fisher's years in the Mediterranean (1899-1902) were crucial in contributing to the reforms he later initiated in the Royal Navy. The first-hand experience he gained in handling a large number of ships, fleet tactics, gunnery, and management of subordinates gained him valuable insight to the Navy from the top, distinguished from the practical experience of the seamanship he had gained while he climbed up in the ranks. Already some features of his personality that were to make him famous later were emerging: His endless energy, zeal for reform and progress, and his practice of rewarding his subordinates on merit, rather than on social status or outside influence. Thus, when he became the First Sea Lord, the stage was set for the most radical and complete reorganization in the history of Royal Navy.

The Board of Admiralty was the "supreme naval authority, wielding the powers of the King and His Majesty's government."[22] Situated in the Admiralty building near the Prime Minister's residence in Whitehall in the heart of London, the Board controlled from here the warships flying the White Ensign all over the Empire's outposts. It consisted of a civilian head of the Board, the First Lord, who was a cabinet member and who was ultimately responsible "for all the actions and decisions of the Board or its individual members."[23] In addition, there were four sea lords, all active naval officers, who were responsible for the actual functioning of the navy. When Fisher became the First Sea Lord in 1904, the First Lord was the able second Earl of Selborne, whose progressive mind and confidence in Fisher's abilities gave Fisher a large degree of the freedom of action.

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[22] Arthur J. Marder, *From the Dreadnought to the Scapa Flow: The Royal Navy in the Fisher Era, 1904-1919* (Oxford University Press, 1961), vol. 1, p. 19.

[23] Marder, *From the Dreadnought to the Scapa Flow*, p. 19.

It should be noted here that the First Lords of the "Fisher Era," at least the first ones (notably the Earl of Selborne, 1900-1905, and Lord Tweedmouth, 1905-1908), were men of absolute faith in Fisher, or with little knowledge or experience in naval matters. They were happy to let Fisher run things his own way. It was only with such support and cooperation from his civilian boss that Fisher was able to institute his radical reforms. Later, with such a strong-willed First Lord as Winston Churchill, Fisher was less successful at getting things his own way.

In 1904, the British Empire had the biggest and the most powerful navy in the world. Its command of the seas was absolute, and its proud maritime traditions were revered. In the European waters, the Navy's Mediterranean and the Channel Fleets were superior in numbers and fighting efficiency to the combined fleets of France and Russia, consistent with the policy of "Splendid Isolation" and "Two-Power Standard" (which decreed that the British Navy should be stronger than the combined naval might of the next two strongest naval powers). The table below provides a summary of the relative naval powers in March, 1904:

The Comparative Strength of the Greater Naval Powers[24]

	1st class*	2nd class*	building/ projected**
Great Britain	40	0	12
France	12	5	6
Russia	13	3	8
Germany	14	0	8
Italy	5	0	6
United States	11	1	13
Japan	6	0	2

* - First- and second-class battleships not more than fifteen years old from date of launch.
** - First-class battleships under construction or projected.

Her fleet was divided into six distinct commands, those of the Channel, Mediterranean (the most powerful and prestigious), Atlantic, China Station, South American, Indies and North American stations. Even with the fleet thus divided, its superiority in number of ships gave it a comfortable margin in event of war against any two combined European powers (a three-power continental coalition against Britain was deemed impossible, as France hated Germany, Germany distrusted France, and Russia felt menaced by Germany). The most powerful and newest units were stationed in the Channel and Mediterranean stations, to be employed against any hostile powers trying to wrest the trident away from Britannia.

The Royal Navy of 1904 was an organization of mixed qualities. On one hand, it

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[24] E. L. Woodward, *Great Britain and the German Navy* (Archon Books, 1964), Appendix I.

could claim a glorious tradition and an officer corps made up of dedicated, skillful men. On the other hand, however, its fighting efficiency and tactics were in serious doubt, there having been, within the past fifty years, no large-scale naval battle involving it. Furthermore, since the evolution of the ironclads, naval tactics which had remained static for the past two centuries, were no longer applicable. Ship design and construction suffered, since the designers did not know, due to a lack of the practical experience of war, how the ships would fare in battle. Most damaging of all, perhaps, the admirals and captains were raised on sail. That is, they still thought and commanded in terms of wind factors and rigging in an age of steam propulsion and wireless telegraphy.

All this was to change, however, under Fisher. He had already encouraged the enhancement of gunnery practice in the Mediterranean. There, a captain (later Admiral Sir) Percy Scott had advocated a new system of loading, rangefinding and spotting of fire control. By this method, Scott achieved both a greater rate of fire and increased accuracy: He scored an astonishing 80 per cent of hits, when the Fleet average was about 30 per cent. Also, the range of gunnery practices was increased from the point-blank 1,500-2,000 yards of Nelson's days to a realistic 6,000 and beyond, while retaining the increased percentage of hits. In 1903 Scott was appointed to command the gunnery school of the navy, with a resulting rise in the overall gunnery efficiency.

Fisher's greatest contributions as the First Sea Lord were in five major areas. He introduced a new plan of education for young officers, scrapping of the obsolete ships, the nucleus crew system, the redistribution of the fleets, and introduction of the "all big-gun" ships. The first of these, the new education scheme, was announced in 1902 when Fisher

was the Second Sea Lord. Traditionally, there existed within the Navy two different categories of officers, the executive (or commanding) and the engineer officers. This distinction became more pronounced, as the Navy made the transition from wind-based sailing ships to ironclads. Even though the importance of the engineers had increased, they were ill-treated by their executive counterparts, who often came from aristocratic families (while the engineers were predominantly middle class). Executive officers were paid more and given preference over the engineers of the same rank, and an engineer could never hope to have his own command, no matter how exceptional his abilities. This unfair treatment bred discontentment and resentment, to which Fisher was sensitive, given his not-so-distinguished background. His new plan stressed an equal education for both the executive and engineer officers, to make them capable of assuming each other's posts. He also advocated the promotion and commissioning of the officers from the ranks, rather than selecting them exclusively from the cadet corp. Not surprisingly, his plans met stiff opposition from the senior admirals and captains. It was not until after the War that Fisher's plan was effectively in operation.

Fisher also initiated the scrapping of obsolete warships, scattered and isolated as they were all over the Empire in various outposts, mostly relics of Palmerston's "Gunboat Diplomacy." Old and useless as combatants, these gunboats, sloops, and second- and third-class cruisers were only useful in "showing the flag." Professor Marder explains that

> The system was a survival of the days before steam, the telegraph, and wireless, when it took a long time to summon naval assistance in any emergency. This arrangement pleased the Foreign Office and the consuls'

daughters, who needed tennis and waltzing partners, and was useful for police duties and relief of distress after an earthquake; but it was useless for war purposes. These ships could fight no modern warships larger than themselves, even when they could fight at all, and their speed was insufficient to enable them to run away. Their officers and crews rusted for lack of training with modern weapons, and rarely could officers gain any experience of fleet evolutions and other combined exercises during the whole of the commission.[24]

The Board of Admiralty and Balfour's Conservative government (July 1902 to December 1905) had long been under attack by the Liberal opposition and by the newspapers who condemned the increase in the annual naval estimates, which rose from £27,522,000 in 1900 to £36,889,000 in 1904,[25] though there had been no corresponding increase on the part of other naval powers. Thus Fisher's plan to scrap old ships was eagerly embraced by the government, if somewhat less enthusiastically. Fisher declared, in the preface of his original memorandum of May, 1904, of his plan:

> The country will acclaim it! The income-tax payer will worship it! The Navy will growl at first ! (they always do growl at first!) *BUT WE SHALL BE THIRTY PER CENT MORE FIT TO FIGHT AND WE SHALL BE READY FOR INSTANT WAR!* And in time when we get rid of our redundancies in useless

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[24] Marder, *From the Dreadnought to Scapa Flow*, vol. 1, p. 39.

[25] Arthur J. Marder, *The Anatomy of British Sea Power: A History of British Naval Policy in the Pre-Dreadnought Era, 1880-1905* (Alfred A. Knopf, 1940), p. 486.

ships and unnecessary men it will probably be 30% cheaper![26]

154 ships in all were decommissioned and sold to be broken up, saving the government untold millions. In their places, squadrons of fast, modern cruisers were substituted, which could be summoned to any emergency by wireless communication.

The scrapping reform was closely connected to the next reform, the nucleus-crew system. Before Fisher, warships were either fully manned and commissioned or placed on reserve. The ships in reserve were divided between the Fleet Reserve and the Dockyard Reserve. The ships in the Fleet Reserve were looked after by a small party of men known as the "care-and-maintenance" party, while the ones in the Dockyard Reserve were looked after by the particular dockyard personnel. In both cases, the ships were in disgraceful condition. There was no proper "care-and-maintenance" of the ships, and in case of emergency, they would be manned by reservists who would be unfamiliar with the ships. Fisher reorganized the entire reserve system. Henceforth, the ships placed on reserve would be manned by the "nucleus-crew," or about two-fifths of the total complement, which would include the specialists and officers essential to the fighting efficiency of the ship. They lived on board the ships, and became thoroughly familiar with their individual characteristics, by means of drills, practices, and quarterly sea-going exercises. In case of mobilization, the crews could be assembled and integrated into the nucleus crew with minimum reduction in ship's fighting efficiency. The personnel necessary for this system was provided by the surplus created by the scrapping reform.

By 1904, battleship design had become fairly standardized among the great naval

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[26] Marder, *The Anatomy of British Sea Power*, p. 487.

powers. Labeled "pre-dreadnoughts" by the historians, these battleships typically displaced between 12,000 and 16,000 tons, were armed with four twelve-inch main guns (German battleship designers, as noted, favored eleven-inch main guns) and twelve six-inch secondary armament, armored with a waterline belt between seven- and ten-inch, and capable of cruising at eighteen knots. It was with this kind of battleship that Britain held her supreme position, and it was this kind of battleships that Tirpitz had in mind in his Naval Laws of 1898 and 1900. But the designers were now advocating an "all big-gun" ship, armed with eight or more main guns of a homogeneous calibre, with better protection, and capable of cruising at twenty-plus knots, taking advantage of all the latest technological improvements. In theory, this ship would be able to fight two of the pre-dreadnoughts on an equal term, and outrun any battleships then in existence.

This idea appealed to Fisher. Immediately after becoming the First Sea Lord, he formed a Committee on Designs, comprising of the "five best brains in the Navy," below admirals. The result was H.M.S. *Dreadnought*, laid down on October 21, 1905, and launched on February 10th, 1906. She was completed in a remarkable secrecy and speed (366 days, as opposed to two to three years for normal battleships), and took the world by surprise. She was armed with ten twelve-inch guns, armored with eight- to eleven-inch belt, and had maximum speed of twenty-one and a half knots, utilizing the latest turbine engines. Displacing 21,845 tons at full load, she was the biggest, fastest, and most heavily-armed and armored battleship then in existence. So revolutionary was she that all the subsequent "all big-gun" battleships were labeled as "dreadnoughts."

To complement the *Dreadnought*, Fisher and the Committee on Designs created a new

type of warship. The battlecruiser, as it was called, was a hybrid design, embodying many qualities of the battleship and the cruiser. It was as big as a battleship and armed in a comparable level, but had cruiser's protection and speed. The *raison d'être* of the battlecruiser was threefold: to provide a scouting screen for the main battle fleet, to hunt down enemy armed- and light cruisers and destroy them, and to reinforce the main battle fleet in a fleet engagement. H.M.S. *Invincible*, completed in 1908, was the first of the type.

The last of Fisher reforms, fleet redistribution, was closely tied to the political and diplomatic situation of the era. Following the Anglo-Boer War of 1899-1902, the British government had suddenly realized its friendless, lonely position in the world, and realized that the policy of "Splendid Isolation," which had served the British Empire for the past half-century, was no longer appropriate. Many Englishmen were beginning to look warily across the North Sea at the German Navy. Following the passage of Tirpitz's Naval Laws of 1898 and 1900, the German Navy was becoming one of the world's foremost and finest fleets, soon surpassing those of Russia and France. Recognizing the danger posed by such a force near home (the "sudden-invasion" war-scare novels were the best-sellers in the prewar years), Britain readjusted the diplomatic and naval dispositions of the Empire. An alliance with Japan in 1902 brought home the ships based in the Far East and the China Station. An *Entente* with France in 1904 brought about similar measures in the Mediterranean. Henceforth the principal battleship strength of the Royal Navy was concentrated in the Atlantic and the Channel Fleets, and later in the Home Fleet stationed in north Scotland.

By 1914, Great Britain was still the supreme leader of the naval powers. A series of naval and invasion scares, coupled with vigorous attacks by the Conservatives, who accused the Liberals of creating a welfare state by stripping the Empire of the necessary defense, had maintained a steady pressure on the government to assure the continuation of building program of battleships and battlecruisers. The story was similar across the North Sea. Here, Tirpitz's additional Naval Laws had found sympathetic ears in Germany, while the cry of *"Einkreisung!"*[27] brought home to many Germans the apparent need for a strong battle fleet. In January, 1914, Britain possessed eighteen dreadnoughts, with a further fourteen under construction or projected, while Germany, now Britain's principal continental rival, had thirteen built and six under construction or projected. As to the battlecruisers, Britain had nine in commission with one more coming, while Germany only had four, with three more being constructed. France and Russia had fallen far behind in the battleship race. France had eight dreadnoughts and Russia none.

Thus the outbreak of the War found the Allied nations in firm control of the seas. Despite all the prewar claims of Tirpitz, the German Navy did not dare to venture out of the harbor and offer the Royal Navy a decisive battle. For its part, the Admiralty had agreed upon the policy of "distant blockade," as opposed to the "close blockade"[28] of Nelson's

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[27] *"Einkreisung"* (transl. "Encirclement") was a favorite theme of the German press and politicians to justify their actions and (military) expenditure. It suggested that the Germanic race was threatened from all sides: The Slavic horde to the east, its ally France to the west (ever mindful of 1871), Italy to the south, and England blocking its passage to the Atlantic and beyond. At the time, it was a powerful propaganda theme.

[28] In the days of wooden sailing ships, the blockading fleet sat in anchorage just outside the enemy harbor, in sight from the harbor but outside the range of the forts' cannons. By 1914, the advent of minefields, as well as the need for resupply, had made this impractical.

times, which the advent of minefields had made impractical. For this purpose the fleet was concentrated in northern Scotland, in the Orkiney Islands, in the Bay of Scapa Flow. It was a remote, cold location, so characteristic of the North Sea, that was going to be the home of the newly-named "Grand Fleet." So the morning of August 2, 1914 found the Royal Navy concentrated and ready at Scapa Flow, and the German Navy in Wilhelmshaven. There they were to eye each other across the North Sea for the next four years.

Ever since 1588, when Philip II's attempt to bring England back under the Roman Catholic influence failed with the demise of his Armada, it (and later the British Empire) had never been seriously challenged in its command of the oceans. To be sure, the Dutch Wars of the 17th century, and the wars against the French Republic and the First Empire did at times present formidable challenges to the Royal Navy, but at no time was it seriously threatened. Thanks to its overseas commerce and the rise of mercantilism, England always had a strong pool of experienced and trained seamen who performed better than their continental counterparts. This natural advantage, coupled with the Royal Navy's seemingly-unapproachable superiority (as testified by history) over any foe, gave the people a sense of security and pride, which gradually developed into an idea that the command of the sea belonged to England and England alone, and that that was a natural way to think and act.

The Royal Navy of 1914 lived up to that expectation. Even after a decade of fierce competition with the German Navy, it began the war with a clear-cut superiority over the German Navy, the fact that no one challenged (least of all the German Navy itself). It was

officered and manned by seamen who, to quote the Kaiser, "had the advantage of looking back over a hundred years of proud tradition which must have given every man a sense of superiority based on the great deeds of the past."[29] They were confident that they would win, and believed themselves to be ready for the struggle. That was the way the things had happened in the past, and there was no reason to believe that it would be different now.

The British public echoed, and magnified, this confidence. To quote Professor Marder:

> The great Jubilee naval review of 1897 had instilled in Englishmen a spirit of bursting pride and confidence in their Navy, and a year later the Fashoda crisis confirmed the English in their belief that theirs was just about the finest fleet that had ever sailed the seas. Pride in the Navy, the saviour of peace with honour, overflowed into unlimited confidence.[30]

To the public, it was the Navy which had saved England from invasions--as in the Spanish Armada and the First Empire--and had enabled the growth of the vast overseas, worldwide empire. Singing *Rule Britannia* was as patriotic as singing *God Save the Queen*, and it was no exaggeration to say that the Navy represented everything that was good about the English. And the command of the seas (or at least the naval supremacy) was something that was won by hard toil and blood by their ancestors, and something that they had inherited. It was from

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[29] Bennett, Naval Battles of the First World War, p. 128.

[30] Marder, *From the Dreadnought to Scapa Flow*, p. 6.

The Fashoda crisis was a confrontation between the British and French (September 18, 1898), at the town of Fashoda in Sudan, as a result of both nations' policy of imperialism in Africa. The French were forced to relinquish their claim to the region.

this perspective that the rise of the Imperial German Navy was viewed; at first, with minor interest; but after the passage of the Naval Laws of 1898 and 1900--especially with the anti-Teutonic feelings running high immediately after the Anglo-Boer War--it was viewed with an increasingly suspicious eye--while the politicians and statesmen thought of the German threat as a single problem, with the naval race being just one aspect of it.

C. Britain, Germany, and Europe

The Royal Navy and the High Seas Fleet entered the war with different strategies. While armies clashed on land and advanced to and fro, the navies--"the powers behind the scene"--prepared for their own parts in the war, confident that they were to play no less role than the armies on land.

The Royal Navy had essentially the same goal as its ancestors a century earlier: Maintenance of the imperial trade routes and the destruction of the enemy fleet. It was the same principle as the one Nelson had followed, and reflected England's key geographic location. However, it did differ in one important area from its predecessors; the rise of the German Navy as the principle threat, as well as the growing cost of warships, forced the Royal Navy to concentrate its forces in home waters, while the protection of trade routes was relegated to the squadrons of fast cruisers that were the brainchild of Fisher's reforms. In this it was helped by the fact that no hostile power existed outside of Europe, and that the major non-European naval powers were either officially allied to the British Empire (as in the case of Japan), or had strong cultural ties, therefore friendly, to it (as with the United States).

The High Seas Fleet, however, had a rather different role. No matter how much Tirpitz had boasted that the fleet was created to wrest the supreme position from Britain, he, as the Secretary of the Navy, had no authority in the matters of naval operation, which was under the control of the *Admiralstab*, responsible solely to the Kaiser. And Wilhelm did not want to risk his precious fleet unnecessarily, when the war on land seemed winnable. Until the matters on land had been decided, the fleet was to be used as a political factor, not a

military one. This largely limited the High Seas Fleet to a passive role, which, while safe behind the mine barriers, did not allow it any practical sea-going experience in the open sea. Thus while the Royal Navy regularly swept the North Sea to maintain its sea-worthiness and also to battle the enemy if chance appeared, the High Seas Fleet lay in anchorage in Wilhelmshaven.

Also, the Royal Navy entered the war in 1914 with a numerical superiority over the German Navy. It had twenty-two dreadnoughts and ten battlecruisers, and had thirteen dreadnoughts and five battlecruisers under construction. Opposing this, the German Navy could muster fourteen dreadnoughts and six battlecruisers, with five dreadnoughts and two battlecruisers under construction. To augment this numerical inferiority, it added six pre-dreadnoughts to the battle fleet, with the result that the speed and maneuverability of the fleet in action was seriously hampered (as at Jutland). Materially speaking, therefore, England had a substantial superiority over Germany.

Up until 1906, the Anglo-German rivalry was not a unique one among the continental great powers. Certainly France bore a far more intense hatred towards Germany for the defeat of 1871 and the subsequent loss of Alsace and Lorraine, and the general relations between the powers was anything but cordial. But after 1906, the Anglo-German antagonism took a special meaning for the English public. With the launching of the *Dreadnought*, the possibility of England losing her naval supremacy became, for the first time, a distinct reality. For the first time, the English public became aware how thin its margin of naval superiority over the other powers was, and hence became more sensitive to this question. This sensitivity was later turned into resentment, focused specifically on Germany, when the

other powers (especially Germany) sought to catch up and counter England with their own fleet of dreadnoughts.

One needs only to glance at the headlines of the newspapers during the decade preceding the outbreak of the war to gauge the public opinion regarding the naval rivalry. While the efficiency and formidableness of the German army was something taken for granted, the emergence of a new, powerful battle fleet just across the North Sea sent a genuine wave of alarm throughout England. Likewise, the report of the ever-increasing size of the Royal Navy, punctuated by the cries of *"einkreisung"*, confirmed the German public in their belief that England was bent on keeping her monopoly in naval matters, and denying Germany its "rightful place in sun." And as the public took more and more interest in the naval rivalry, the political attention on it rose correspondingly. By 1910, the naval budget and planning was the most intensely debated items on agenda in the *Reichstag* and the Parliament.

The role of the navies of the other Great Powers during the war was largely dictated by the strategies of the Royal Navy and the German Navy. France, England's historical rival and the possessor of the third-strongest navy in Europe, concentrated its fleet, per the agreements of the *Entente*, in the Mediterranean Sea. In that sea, Austria-Hungary's battle fleet of four dreadnoughts was more than countered by the French fleet and later, the Italian fleet. Turkey had one capital ship (a battlecruiser "bought" from Germany at the outbreak of the war) which carried out some minor operations against Russian Black Seas fleet. But there was no major confrontation between the Allied and the Central Powers in the Mediterranean Sea during the war.

It is tempting to contemplate what would have happened if the Anglo-German Naval Race had not taken place, or if it had on a lesser scale. Would there have been a war?

Europe in 1914 was indeed a volatile place. France's hostility and fear of Germany, Russia and Austria-Hungary's dilemma over the Balkan countries, and the intense nationalist forces at work within those and other countries made it inevitable that sooner or later a conflict would result. Diplomatic, or peaceful, solution was out of the question, since the very creed of nationalism ran counter to that. The tremendous rapidity with which political and technological changes have taken place further added to mayhem:

> It was a period of amazing swaggering. . . Statesmen. . . on the slightest provocation or with none at all, rattled their sabres. . . The climax of a century of expanding political democracy . . . was a new level of hysteria and irresponsibility in politics. . . So much talk of war, made ever more real by the tightening system of alliance by which each great Power was more helplessly bound to its allies, led inevitably to the building of vast national armaments. . . Any form of disarmament was out of the question when international fears were so great. . . So the chains of the alliance system, in a world filled with fear, pulled one nation after another into the entanglement.[31]

For England, however, the German challenge to its naval supremacy was far more important than any continental power intrigues. For England, the preservation of its navy as the most powerful one of the European navies was deemed vital to its survival. This naval

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[31] Thompson, *England in the Nineteenth Century* (Penguin Books, 1950), p. 213.

supremacy had enabled her to withstand and later vanquish Napoleon's continental Empire, and history had proved that the control of sea was more valuable than any combination of continental alliances. England prepared for, and entered, the war in 1914 for this reason. "Germany's growth would, perhaps, have provoked the traditional British reluctance to permit the continent to be dominated by a single power in any case, but the decision to build a first-class fleet made British rivalry and resistance a certainty."[32]

[32] Steinberg, *Yesterday's Deterrent*, p. 18.

III. The Armageddon: The War at Sea, 1914-18

A. Outbreak of the War

The news of the assassination of Archduke Ferdinand caught the two navies mentally unprepared for general hostilities; a British squadron was paying a friendly visit to Kiel to commemorate the widening of the Kiel Canal. But there was no reason to assume that general hostilities would immediately break out between the Great Powers. Assassinations were common methods to bring attention to political minorities, and given the volatility of the region following the two Balkan Wars, there was nothing to indicate that this incident would lead to a general European war. For the next four weeks, the fleets of the two Great Powers carried on their normal peacetime practices, while the diplomats worked frantically to avoid a war that was approaching. The High Seas Fleet sailed on July 7th for Norwegian waters for its summer maneuvers, and the Royal Navy carried out its long-planned mobilization of the Reserve Fleet, which joined the Home Fleet for a royal review at Spithead. It "constituted incomparably the greatest assemblage of naval power ever witnessed in the history of the world."[33] Afterwards, the Fleet returned to its bases to discharge the reservists, another indication that the Admiralty did not take the international situation seriously.

The news of Austria-Hungary's rejection of the placatory Serbian response to its ultimatum reached the Admiralty on July 24. The First Sea Lord, Admiral Prince Louis of Battenberg, recognizing this as a crucial moment, issued orders postponing the Home Fleet's

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[33] Winston Churchill, *The World Crisis, 1914-1918* (C. Scribner's Sons, 1931), p.98.

summer leave. The next day, Austria-Hungary declared war on Serbia, and the High Seas Fleet was recalled back to its base from the summer maneuvers. Therefore, when Russia ordered a general mobilization[34] on July 29 in response to Serbia's appeal, the gravity of the situation forced the Admiralty to order the British Fleet to its war stations, and it accordingly reached its base at Scapa Flow on August 1. In the meantime, the Kaiser had counterreacted with a declaration of war to Russia, and sent an ultimatum to its ally, France. Using the agreements of the *Entente* as a pretext, Sir Edward Grey, the British Foreign Secretary, declared: "If the German Fleet undertakes hostile operations against French coasts or shipping, the British Fleet will give all the protection in its power."[35] Before the *Entente* was put to the test, however, the German Army's advance through the Ardennes obliged Britain to fulfil its guarantee of Belgium's neutrality, and it sent an ultimatum to Germany. No reply was given, and at 2300 hours on August 4 (midnight German time), the British Empire declared war on a stunned Germany, which had thought that Britain would not go to war over a "scrap of paper" (German Chancellor Prince von Bülow's words, referring to the guarantee of Belgian neutrality).

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[34] In those days, ordering a general mobilization meant a certain war, and a certain defeat for the other power if it did not counteract promptly. The development of railroad networks had made rapid transition of troops possible, with the result that the governments had to order their own mobilizations quickly or else face defeat.

[35] Bennett, *Naval Battles of the First World War*, p. 10.

B. Goliath vs. Goliath

The War at Sea, like its land counterpart, did not take place as expected. The High Seas Fleet (which, Tirpitz had so often boasted, was created to battle the Royal Navy) did not venture out of its base at Kiel to harass French coastal shipping or interfere with the cross-channel embarkation of the British Expeditionary Force. The Kaiser, expecting a quick victory on land, did not permit his precious navy to venture outside the protective shield of minefields, and when the anticipated decisive victory on land did not materialize, he was further reluctant to risk his fleet in battle, the loss of which could weaken his position on land and in diplomatic spheres. Thus August and September passed without heavy units of the High Seas Fleet venturing outside the Heligoland Bight.

There were, however, more naval activities overseas. Right at the beginning of the war, Germany scored an important strategic and diplomatic *coup* when its Mediterranean squadron, comprising the battlecruiser *Goeben* and the light cruiser *Breslau*, eluded British and French naval forces and succeeded in arriving at Istanbul. Their presence there eventually added weight to the pro-German elements within the Turkish government, which resulted in that country's joining the Central Powers. Outside European waters, the German commerce-raiding cruisers and armored merchant cruisers (peace-time merchantmen converted into commerce raiders), especially the cruiser *Emden*, wrecked havoc among the allied shipping and troop movement, forcing the Allies to divert desperately-needed resources from home waters to trade route protection. The only significant German naval force outside European waters, Vice-Admiral Maximilian Graf von Spee's East Asiatic Squadron (comprising of two armored cruisers and three light cruisers), ran loose in the Pacific and

Atlantic oceans, eluding superior Allied forces and striking terror into the hearts of allied shipping and coastal installations. It scored a decisive victory against the British Empire when it destroyed Rear-Admiral Christopher Cradock's cruiser squadron as it attempted to engage the German cruisers near Coronel off the coast of Chile. This victory, important as it was tactically, hastened the German squadron's end, as the stunned Admiralty despatched more and more ships to hunt it down. It met its own end in December 8 as it tried to attack the British naval base at Falkland Islands. It was met by a superior British task force led by two battlecruisers (which had arrived the day before), sent in the aftermath of Coronel, and which promptly proceeded to annihilate the German squadron. Other raiders were soon hunted down, and by July, 1915, no German warships remained outside the German waters.

In home waters, the first naval action took place in August, 1914, when British light forces, operating near the Heligoland Bight and supported by battlecruisers, surprised and inflicted a sharp defeat on German light ships sent out to challenge them. This was followed by the Battle of Dogger Banks in January of 1915, when a German battlecruiser force, attempting to raid the British Dogger Bank patrols and fishing fleets, was intercepted by a superior British battlecruiser forces. In the ensuing battle, Germans lost a hybrid armored cruiser, and were sent flying home, while British suffered severe damages to their flagship.

All these actions were minor prelude to the fleet action of the war, the Battle of Jutland, which took place on May 31-June 1, 1916. The German Fleet ventured out to the coast of Denmark, hoping to draw out a part of the Grand Fleet and destroy it. But superior British intelligence enabled the Grand Fleet to sortie out to intercept the Germans, and during the ensuing battle, the eagerly sought-after dream of total victory nearly came within the

grasp of the Royal Navy. The High Seas Fleet, when it discovered that the entire Grand Fleet was at sea, promptly turned tail and fled without offering battle. Even so, the strategic placement of the Grand Fleet and its numerical superiority would have given it a decisive edge had it not been for the darkness that descended only two hours after the initial contact between the main fleets. During the course of the night, small-scale engagements took place between the light forces of the two fleets, but by the morning, the German Fleet had eluded the Grand Fleet and had gained the safety of its minefields. Thus ended the Battle of Jutland, the greatest naval confrontation of the dreadnoughts in modern times.

Statistically, Germans did better than the British, having lost only one battlecruiser and one old pre-dreadnought (as well as few light vessels), while the latter lost three battlecruisers and three armored cruisers (plus light ships). The High Seas Fleet suffered 2,551 casualties, while the Grand Fleet suffered 6,097. The superior design and protection of the German ships proved their worth in the battle line, while the poor quality of British shells and inferior protection of their ships (especially the battlecruisers) cost them so dearly. But strategically, it was a clear British victory; the fact that the High Seas Fleet fled ignominiously in the face of the Grand Fleet without stopping to challenge its control of the sea indicates that. Also, the Grand Fleet was ready for action within 12 hours of returning to harbour, while the High Seas Fleet made no such claim. A New York newspaper put the matters succinctly when it stated: "The German prisoner assaulted the gaoler, but is still in jail."

The indecisiveness of the Battle of Jutland frustrated almost everyone involved, and many have often blamed the admirals in command for the lack of a Nelsonic victory. But it

should be remembered that the earlier naval battles did not have to be so vital for the safety of England; even at the Battle of Trafalgar, Nelson engaged the Combined Fleet of France and Spain with twenty-seven ships-of-the-line, while behind him the Royal Navy possessed further fifty-four ships; whereas at the Battle of Jutland, Jellicoe, the British Commander-in-Chief, took with him twenty-eight dreadnoughts and nine battlecruisers, against the High Seas Fleet's sixteen dreadnoughts, six pre-dreadnoughts, and five battlecruisers--virtually the entire strength of the respective navies. This "one-shot" mentality reinforced the reluctance of the admirals to risk their fleets to a set-piece battle, the defeat of which could mean the defeat in the war. Truly, as Churchill remarked, "Jellicoe was the only man who could have lost the war in an afternoon."

The High Seas Fleet did not attempt to challenge the Royal Navy in battle again after the Battle of Jutland. The Kaiser now looked upon submarines, the U-boats, with favor, believing that here was a weapon that could grant him victory that was denied to him on land and on sea. The submarines, the military value of which was not proved until during the war, had largely been neglected by the respective naval powers in their naval arms-buildup. As it was, the appreciation of the military value of the submarines, and the consequent full scale production did not take place until well into the war. The following restricted, and later unrestricted, submarine warfare nearly succeeded. Britain was at one point reduced to six weeks' supplies, with the ships coming to it were sunk with grim regularity. But in the end, the unrestricted submarine warfare proved to be Germany's bane: in attacking merchant ships coming to Britain, the German submarines inevitably attacked neutral ships, and the United States, the strongest neutral nation, strongly resented having its right of freedom of

seas challenged. Following the disastrous *Lusitania*[36] incident, the relations between the U.S. and Imperial Germany rapidly deteriorated, and finally, in November, 1917, the U.S. entered the war on allies' side. Her navy protected and escorted the merchant shipping to Britain, now organized in convoys, and also brought over millions of fresh troops. In the end, it was sea power and its related interests, that proved to be the final arbiter of history.

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[36] On May 7th, 1915, a British passenger liner, the *Lusitania*, was sunk by a Germa submarine off the coast of Ireland. Almost 1,200 lives were lost, including 128 Americans German authorities had correctly claimed that the ship carried military contraband, and ha warned passengers to not board the ship.

C. The End

The High Seas Fleet met an ignoble end. The crews of its ships mutinied against their officers when the fleet was ordered to sea to combat the Royal Navy in a desperate act of bravery (to secure a better bargaining position at the negotiating tables), and the fleet was interned by the Royal Navy as a part of the armistice agreements. When the fate of the ships became known (that they were to be divided up between the victorious nations as war prizes), their crews scuttled the ships in the final act of defiance. Thus this magnificent fleet, the pride of Kaiser, which was so responsible for igniting the Anglo-German rivalry and antagonism, found its resting place in the seabeds of Scapa Flows, adding an ironic twist to the Anglo-German naval rivalry and its results and signalling the end of "old" Europe.

The Royal Navy fared little better. It ended the war with the strongest fleet in the world. Considering the price at which this fleet was created, maintained, and used, the Admiralty was understandably reluctant to reduce its size, especially when faced with the new challenge of the rapidly growing navies of the United States and Japan. But the war-weariness on the public's part, coupled with the economic hardships following the war, made it plain that the preservation of the fleet in the time of peace would be impossible. It was therefore with relief that the politicians embraced the Washington Naval Treaty of 1922, which reduced all the different navies' strength and implemented a "naval holiday" of shipbuilding. In signing in this treaty, Britain accepted the United States as an equal naval power--an idea unthinkable some ten years ago, and the reason why it entered the war against Germany. But it should be noted that the Anglo-German rivalry had a fundamentally

different nature than an Anglo-American one; the former was of abrasive and confrontational nature, while the latter was of conciliatory and friendly one.

Thus the proud ships of the Royal Navy, the victors of the Great War, were meted out the same end fate as their vanquished German adversaries. Only the most modern units were retained (some fourteen in number); the Treaty fated the remainder (more than twenty) of the fleet to be broken up over a period of years, in the same manner as the German ships which were being raised from the bottom of Scapa Flow to be broken up. So ended the final chapter of the Anglo-German naval race.

IV. Conclusion

The Anglo-German Naval Race was the decisive factor in bringing the British Empire into the war in 1914. More so than the German Army's traditional dominance on the continent--which was an accepted factor in the international scene--and more so than the rising industrial strength of the German Empire, it was the German Navy's rise to a position hitherto unheld by any other European sea power that threatened the very existence of the British Empire and the *status quo* of its supremacy. For the German Empire, the naval race was not a significant factor in the decision itself to enter the war. Germany was a land power; it was through its superb army that the Kaiser and the imperial statesmen sought to dominate on Europe. Navy was given a second priority, as is reflected in the Kaiser's reluctance to make use of it before the issues on land were decided.

The rapid change in naval technology since 1860[37] had dramatically changed the nature of British naval supremacy. Until then, Britain's traditional predominance in the wooden ship-of-the-line--a legacy of its struggle with Napoleon--had ensured that no one power could displace its position overnight; those wooden ships, "which took a long time to build, and which no Power had the materials to multiply indefinitely" were "once built. . . serviceable for sixty years."[38] Now new technologies and improvements in armor, guns, and propulsion took place every few years, with the result that today's most advanced warship was obsolete only a few years later. It was not until 1906, with the launching of the

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[37] In 1860, the French Navy launched the world's first ironclad, the *Gloire*.

[38] David Ensor, *England 1870-1914* (Oxford, 1988), p. 287.

Dreadnought, that this race of technological innovations was somewhat slowed down. This had the dire result of reinforcing the British Admiralty with a "must-stay-ahead" mentality, which gave it preciously little space to negotiate with other powers in matters regarding the balance of power at sea. The notion of losing its supreme position in maritime affairs was unthought of; the existence of Britain as a worldwide empire demanded an supreme navy.

This attitude is reflected by the British Government's budget in the years preceding the Great War. The table below gives an idea of the importance and priority attached to the Royal Navy:

Growth of Budgets, 1901-1914[39]
(Figures in £ millions)

Year	Revenue budgeted for	Civil service estimates	Fighting services estimates	Navy	Army
1901	132.25	23.60	60.90	30.87	30.03
1903	144.27	26.56	60.11	30.45	29.66
1905	142.45	28.61	63.20	33.38	29.81
1907	142.79	30.10	59.17	31.41	27.76
1909	162.59	40.37	62.57	35.14	27.43
1911	181.62	46.78	72.08	44.39	27.69
1913	195.82	54.98	74.52	46.30	28.22
1914	209.45	57.06	80.39	51.55	28.84

The rising concern over the size and the purpose of the German navy caused one of the most controversial partisan conflicts in modern British history, the Budget Crisis of 1909.

The *Dreadnought* revolutionized naval warfare. It gave the Royal Navy a clear

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[39] Ensor, England 1870-1914, p. 526.

advantage and headstart on new technology, and further enhanced its prestige throughout the world. At the same time, however, by making obsolete all the existing capital ships of the world, it also wiped away Britain's superiority over Germany in the pre-dreadnought fleet. In 1906, Britain possessed some fifty-three pre-dreadnoughts to Germany's twenty. But now, Britain possessed, at most, a two or three year's advantage over Germany. Although Germany did not launch its first dreadnought until 1909 (by which time Britain had launched an additional six), and its first battlecruiser until 1910 (Britain had three), her rapidly-expanding shipbuilding industry, backed by government-sponsored loans, was by 1909 in a position to catch up with, and indeed surpass, British shipbuilding capacity. While Britain was laying down two capital ships per each year, Germany was laying down four ships per each year, and the Admiralty projected in the spring of 1909 that at the current rate of shipbuilding, Germany would have one **more** capital ship than Britain by August, 1911.

The British public was galvanized into action by this news. Alarmed by Austria's recent annexation of Bosnia and Herzegovina, and fearing the eclipse of the Royal Navy (and therefore, the Empire), coupled with the rumors of the acceleration of the German shipbuilding program in *The Times* (October 15, 1908), the public demanded that the government take measures to preserve the Royal Navy's superiority over the German fleet. Help also came from Dominions overseas; Australia and New Zealand each offered to pay for the cost of a battlecruiser, and Malaya that of a battleship. In the end, after a bitter argument between the Conservatives and the Liberals (at this time, Asquith's Cabinet was focusing all its resources on the creation of a social welfare program), it was agreed to lay down four capital ships, with the provision that four more would be laid down if there was sufficient

evidence of Germany's acceleration of her program. Needless to say, the four additional ships were laid down among navy "scares" and "panics," and this gave the Royal Navy the crucial numerical superiority when the war broke out in August, 1914.

The Budget Crisis of 1909 signalled a turning point in the government's commitment to the preservation of the superiority of the Royal Navy. Now it was recognized that the German fleet was designed to challenge the Royal Navy, and the navy budget increased accordingly to meet this challenge.

Also, the British government made clear, on many occasions, the importance it attached to the German navy for the growing antagonism between the two countries. There was a genuine concern among the British statesmen of the time over the growth of the German navy. While none refuted Germany's right to build a navy befitting its prestige, most resented the implicit purpose (made clearer by the Kaiser's unfortunate boasts) for which it was designed. Sir Edward Grey, the British Foreign Secretary, made this clear in a statement made during the Budget Crisis of 1909:

> There is no comparison between the importance of the German Navy to Germany, and the importance of our Navy to us. Our Navy is what their Army is to them. To have a strong navy would increase their prestige, their diplomatic influence, their power of protecting their commerce; but as regards us--it is not a matter of life and death to them that it is to us. No superiority of the British Navy over the German Navy could ever put us in a position to affect the independence or integrity of Germany, because our Army is not maintained on a scale which, unaided, could do anything on German territory.

> But if the German Navy were superior to ours, they, maintaining the Army which they do, for us it would not be a question of defeat. Our independence, our very existence would be at stake.[40]

Winston Churchill, the young liberal First Lord of Admiralty, commented that "the British Navy is to us a necessity; the German Navy is in the nature of a luxury," which was considered an insult in Germany. Even Lloyd George, the most Germanophile of the leading statesmen of the day, gave Germany a sharp rebuke when it pressed its claims in the Mediterranean during the Agadir Crisis[41]. Apparently, some German diplomats thought the same way. In 1906, Count von Metternich, the German ambassador in London, warned his government that "the real cause of political tension is not commercial rivalry but the growing importance of our Navy."[42] The German Naval Attaché wrote in 1907: "The steadily increasing sea-power of Germany constitutes the greatest *obstacle to England's freedom of political action*. This is the central point of the unsatisfactory relations of the two nations to one another. All other frequently-advanced grounds--competition in commerce, industry, and shipping, partisanship during the Boer War, etc.--are side issues."[43] But the Kaiser did not

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[40] Sir Edward Grey, speech to the House of Commons, March 29, 1909, as quoted in Woodward, *Great Britain and the German Navy*, p. 231.

[41] In March, 1905, Wilhelm II went to Tangier (which was under French influence) and gave a speech supporting Moroccan independence. This was Germany's attempt to test the strength of the Anglo-French *Entente* and to isolate France. A war scare ensued, and although the French foreign minister was forced from office, the incident strengthened, rather than weakened, the *Entente*.

[42] Woodward, *Great Britain and the German Navy*, p. 198.

[43] Admiral Carl von Cörper's memorandum of March 14, 1907; *Die Grosse Politik*, xxiii. 48; as quoted in Marder, *From the Dreadnought to Scapa Flow*, vol. 1, p. 432.

listen; he told his Chancellor, Prince von Bülow, that "the English agitation about our new naval building programme is simply bluff for reasons of domestic policy."[44] Also, he--as well as the politicians, influence by von Treitschke[45]--wanted Germany's "rightful place" among the other Powers, and increasingly, they came to view the British Empire and the Royal Navy as obstacles in that course. The course was set for an Anglo-German clash, in which one side had to fall.

The Death of "Navalism"

The Armistice found the European Great Powers essentially on the verge of collapse, having spent all their power and resources in a titan's struggle. Europe had lost a generation of young men to the trench warfare and machine guns. Imperial Germany and the Austria-Hungarian Empire, as well as Tsarist Russia, were no more. From then on, the central stage of the world diplomacy gradually passed from the Old World to the New World, with the United States emerging from the war as the world's largest creditor-nation.

Britain fared little better than its European counterparts. While it suffered relatively

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[44] Bennett, *Naval Battles of the First World War*, p. 8.

[45] Heinrich von Treitschke (1834-1896) was an influential German historian and nationalist, who advocated German unification under Prussian leadership, and supported an authoritarian state, and imperial expansion.

small amount of human casualties[46], it had expended all its accumulated wealth and resources in fielding, maintaining, and replacing its armed forces on an unprecedented scale. It had also incurred an enormous debt to the United States, which was to retard its economic development in the postwar years.

The Royal Navy in November, 1918, was, in terms of number, efficiency, and battle experience, the strongest naval organization in the world. It consisted of some thirty-four dreadnoughts and nine battlecruisers, as well as numerous cruisers and destroyers. The fleet was manned by officers and men of ample wartime experience against surface opponents and submarines. It was the challenge to this fleet and the implied threat which had compelled Britain to enter the war, and it was this same fleet which had sailed out to meet the surrendering High Seas Fleet. A full cycle had been completed, and once again the Royal Navy reaffirmed its tradition.

But its supremacy, so dearly bought, was not to be kept. Even as early as 1919, the United States was announcing its policy to build a navy "second to none," and in the Far East waters, Japan, once Britain's erstwhile ally, had embarked on an ambitious "8-8" program, that of building eight dreadnoughts and eight battlecruisers. And while the Admiralty was determined to see that the Royal Navy's position was maintained, Lloyd George's coalition government was equally determined to cut back on the military budget and facilitate the transition from a wartime economy to one of peacetime. Moreover, the public--after four

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[46] British Empire lost some 3 million men killed and wounded, while France lost 5.6 million, Russia 6.7 million, Germany 6 million, Austria-Hungary 5 million, and other minor powers 1.7 million. By comparison, the United States lost only 0.36 million. The total casualty rate is same as about 20,000 people being killed and wounded every day, or 12 people every minute for four and a half years.

years of exhausting warfare and the imposed wartime rationing--was not thrilled to see more money spent on armament. This war-weariness attitude became more pronounced later, when the economic hardihood created social unrest. The result of these sentiments, prevalent in Britain and other war-worn countries, was the Washington Naval Treaty of 1922.

The Washington Naval Conference, called by the U.S., proposed limiting the size of different navies. The final ratio between the different powers was 5:5:3:1.5:1.5 for the capital ships, between Great Britain, United States, Japan, France, and Italy, respectively. It also proposed a ten-year "holiday" in capital ship building, and limited the size and armament of the ships of different categories.

While the Treaty was hailed as a genuine move towards world peace, in long run it created more problems than it solved. Japan was angered at being treated as an inferior power to Britain and the United States; it realized that the Western Powers would only respect armed might, and therefore committed itself to secret arms building in violation of the treaty, which eventually led to further aggression in Asia and the Pacific War. Also, France was humiliated at being treated the same as Italy, whom it considered a second-rate power; this led to future Franco-Italian antagonism.

The equality conferred on the Royal Navy and the United States Navy signalled the end of an era. The Royal Navy had gone to war in 1914 in response to the naval challenge of Germany, but now, less than a decade later, it agreed to co-exist with a naval power of same strength (but it should be noted that while the Anglo-German relations had a rather hostile overtone and character, the Anglo-American one had innumerable ties in forms of culture, language, arts, and ancestral bond). From then on, Britannia's trident slowly passed

from its hand, aided by a vigorous push in the form of the Second World War, into the enthusiastic hands of the United States.

The Meaning

When the Navy Law of 1898 was passed by the *Reichstag*, Kaiser Wilhelm II proclaimed: *"Aus dem deutschen Reich ist ein Weltreich geworden"* ("the German Empire has become a world empire"). He could not have known that the ensuing naval race between Germany and Great Britain would eventually result in a war that would end his dynasty. The Kaiser simply wanted a large navy, because that was a status symbol of a Great Power and Germany had now become one. The growth of the German Empire and its overseas possessions required a strong navy capable of protecting its commerce, and for a people so enraptured with their newly-won status, it was not a hard argument to accept. The Kaiser, the navy, and the public all wanted a powerful navy, each for different reasons, and they all used a common theme to justify its existence. Certainly they never thought of the navy as a potential source of disaster, only as a symbol of glory.

As for the British, it meant that the *status quo* of their lives was at risk. The affluence and progress of the Victorian and Edwardian eras had, in a sense, spoiled them into thinking that was the way things traditionally had been. For them, the rise of the German fleet could only mean one thing: if unchallenged, the German fleet would one day surpass the Royal Navy and wrest from it the command of the seas. It meant that the Empire and all

it represented would be at peril, at the whim of a hostile foreign power. From this fear rose the resolve to retain naval supremacy at all costs, to clutch at the trident at not let go.

The Anglo-German Naval Race, starting in 1897 with the appointment of Tirpitz as the Secretary of the Navy, and ending in 1914 with the outbreak of the First World War, was the first arms race in the modern sense. On one side stood a fledgling young giant, trying to flex its muscles and change the world to suit its own interests. On the other side stood an old, graying titan, struggling to keep its dominant position in world affairs and not tolerating any newcomers. The resulting clash between the two, and the process leading up to it, perhaps best defines the meaning of the Anglo-German Naval Race.

Appendix A

The Tirpitz Memorandum of June 1897

Very Secret

June 1897

General Considerations on the Constitution of our Fleet according to Ship Classes and Designs

1. In the distinctions between one class of ship and another, and in the choice among ship designs within the various classes, the most difficult situation in war into which our fleet can come must be used as a basis. For that constitution of our naval force which meets the most difficult situation will be seen to be sufficient for all other situations. The limits of our resources prevent any attempt to meet every conceivable eventuality on its own in an ideal manner.

2. For Germany the most dangerous naval enemy at the present time is England. It is also the enemy against which we most urgently require a certain measure of naval force as a political power factor.

3. Commerce raiding and transatlantic war against England is so hopeless, because of the shortage of bases on our side and the superfluity on England's side, that we must ignore this type of war against England in our plans for the constitution of our fleet.

4. Our fleet must be so constructed that it can unfold its greatest military potential between Heligoland and the Thames.

5. A fleet constructed on this basis corresponds so well to our requirements, both against France as far as Brest or Cherbourg and against Russia as far as Kronstadt, that for the moment we need not pay particular attention to those enemies in the determination of our ship classes and in the selection of designs. The precondition here is that the coal capacity of the individual ship designs should be sufficiently large to permit a radius of action as far as Brest or Cherbourg.

6. The military situation against England demands battleships in as great a number as possible. Given the measure of our powers of development, which are limited by the capacity of our shipbuilding, armour and armament industries, by the expansion of our military harbours and shipyards, by the possibility of training the necessary personnel and making available the necessary funds, and by our organisation which has been developed and tested in the last few years, we cannot create in the near future, that is, roughly up to 1905, more than two full squadrons of eight battleships each. Reserve material is vital in case of mobilisation. The minimum here is one ship for each squadron, *i.e.*, two ships for the fleet. It can be left to later experience to say whether this number of reserve vessels is sufficient to maintain two squadrons in uninterrupted operational readiness.

7. The present coastal squadron ("Siegfried" Class) must temporarily be considered as an existing quantity.

8. The battleships for our squadrons must be designed for actions in the line. This demands above all flexibility of the line, heavy guns and armour thick enough to prevent hits from penetrating. Because of the cost and also because of the depth of our home waters, we shall be prudent if we go no further in the displacement of our battleships than a "good" capability for action in the line makes absolutely necessary.

9. Torpedo boat forces can still reasonably be estimated, by using the established calculations, at twelve divisions. This number should be quite adequate for the forces we plan to have in the line.

10. We possess much less experience and certainty about the value and means of using scouting groups in association with the main body of the fleet than we do about the forces in the fighting line. Against England, indeed against any fleet penetrating our home waters, the value of scouting vessels is much reduced. In principal therefore we shall be wise not to make the relationship between the reconnaissance vessels and the fleet larger than absolutely necessary; such vessels represent in a sense a reduction from the forces needed for the ultimate outcome.

11. In the case of reconnaissance vessels, we have to remember that they can be used "detached". This requires, in the first place, certain strategic characteristics which here I shall assume to be sufficiently studied. All types of reconnaissance vessels must take account of these strategic requirements.

There are two types of detachment at sea. In the first, one must be tactically strong, while in the second it is less a question of strength than of the presence of an individual vessel. These facts lead naturally to a large and a small cruiser. Since we do not at present have sufficient experience about the value and operations of scouting vessels, especially in a war with England, it would be wise not to stick too much capital and personnel into the large cruiser, but rather to choose the smallest possible ship design. The large cruiser must, of course, have the force to resist and must thus possess a certain measure of the quality of the vessels of the line. This does not mean that the heavy cruiser should be designed to lie in the line of our home battle fleet.

The other cruiser should be make only as large as is necessary to preserve sufficient speed even in rather bad weather. 3,000 tons must thus be considered appropriate for the main purposes of a small cruiser. That there are nevertheless individual cases where a 3,000 ton cruiser in the North Sea in heavy weather and under full steam loses a great deal of its usefulness can and must not be decisive.

12. The tactical strength of reconnaissance vessels must be controlled by grouping or by combinations of several groups depending on the requirements. To try to design, develop and organize scout vessels into fixed fighting units would be the wrong thing to do. Naturally one cannot doubt that in certain cases reconnaissance vessels must combine to form a unit corresponding to their composition. There are, for example, individual groups of:

2 large and 2 small cruisers
1 large and 2 small cruisers
1 large and 3 small cruisers possibly also strengthened
1 large and 4 small cruisers by battleships;

or also some composed of two or three small cruisers without large ones. It would not be wise to try to seek the tactical strength of a group (apart from coastal waters) in the small cruisers. In the interest of the fleet as a whole, these latter must be kept as cheap as possible. Only in this way is it possible to keep ready a large number of scouting vessels without investing inappropriate sums of money and energy in them. The small cruisers are especially suitable for operations where the detachment involves distance from the probable place of battle and therefore their absence from the spot during the battle. This holds true both for the group and squadron engagements. A fleet which possessed no lightly armoured cruisers for planned detachment would not be correctly composed.

13. Although probably more than necessary (to be sure, less than a commander might wish) for a German fleet to be built against England, we have accepted the number estimated earlier of six reconnaissance groups composed of six large and 18 small cruisers. In the number of small cruisers, the older types are included.

14. That makes in total a Home Fleet of

1 fleet flagship
2 squadrons of 8 battleships
2 ships as reserve material
total 19 battleships

We can leave it to our experience up to 1905 to decide whether the number of reserve ships stated above will be sufficient in the long run.

1 squadron of 8 coastal armoured ships
6 large cruisers
18 small cruisers

Reserve material has not been provided for the cruisers. It is contained in the reserve for overseas service.

15. The ships of the overseas service may be regarded as detached from the home fleet, mainly because we do not possess wholly adequate bases for operations (fortified shipyards with dry docks). This state of affairs suggests that for the time being we should employ naval vessels which correspond to the characteristics of the scouting vessels at home. This basic principle of design is supported by the requirement that all vessels on duty abroad be able to combine as perfectly as possible with any support vessels from the home fleet and, accordingly, be able to form groups with them. At the same time, vessels withdrawn from overseas duty must fit into the home fleet.

16. We must therefore establish as our basic principle that vessels provided for overseas service must be constructed according to the design specifications of the home fleet, as long as the necessity to depart from them is not demonstrated by experience. So far that has not been the case. Only if we hold firmly to this principle and to the view that the design of each individual class of vessel must be subordinate to the requirements and overall performance of the entire fleet, shall we be able to make the development of our designs logical. If we were to take the existing ships of foreign nations as the standard for the design

of our own and to try always to match their performance, we should be compelled constantly to change our own designs. We should never arrive at a development of consistent designs, uninfluenced by the fashion of the day, and we should impair the maximum performance of our fleet.

We must maintain for ourselves a certain proud initiative, both in the grouping of classes of ships within the fleet and in the military, and hopefully also in the technical, development of our designs. A measure of economy, perhaps even of one-sidedness, in the number of designs is more important than its opposite. The fact that occasionally an individual cruiser overseas may be weaker than its opponent must never be considered important. Only the main theatre of war will be decisive. In this sense the selection of a ship design in peace-time is applied naval strategy. It will never be possible, in any event, to prevent a German ship occasionally confronting a stronger adversary. It is a delusion to imagine that it is possible to meet such an eventuality by the appropriate choice of ship types.

17. In all those situations abroad where we want to have available the weight of real sea power, we shall have to revert to ships with the quality of vessels of the line. In view of the detached position of our ships overseas, the large cruiser at present meets this need better than the battleship. This cruiser is the appropriate vessel of the line in encounters with small transatlantic nations. Wherever larger forces are necessary, these ships can be formed into divisions and possibly into squadrons (the cruiser division). In such encounters, and also for the command of weakly fortified coastal positions, a situation often likely to confront our transatlantic naval forces, vessels without armour would be totally inadequate.

On the other hand, the need to pass through the Suez Canal sets the upper limit on the displacement of those vessels stationed between the east coast of Africa and the west coast of America, and thus, in the interests of uniformity, on all our large cruisers. Overseas harbour and dockyard facilities as well as considerations of cost make it desirable to reduce the size of such vessels even further than the Suez Canal makes absolutely necessary. Under such circumstances, 8,000 tons seems to be almost too large a planned displacement for the heavy cruisers. The ambition to give these ships full-fledged quality as ships of the line and at the same time to make them suitable for service with the battle fleet at home must lead to an improper choice of design. Admittedly, it remains vitally necessary, for example, in encounters between small groups, that two large cruisers should have a chance against one individual battleship.

18. In addition to the large cruisers, we need vessels overseas whose effect depends more on the flag than on any existing force of their own or whose military tasks (for example, against natives or unfortified land positions) require very little force. These vessels correspond to the small cruisers. They permit the detachment of a relatively minimal fighting force.

19. For the overseas service planned for the years up to 1950, the following ships have been provided:

3 large cruisers
9 small cruisers
4 gunboats

In addition a reserve at home to strengthen the above of:

3 large cruisers
3 small cruisers

In can be left to the further development of Germany's interests at sea to decide whether in additional strengthening of our forces overseas after 1905 is needed.
20. In total the following ships are required:

19 battleships (2 as reserve)
8 armoured coastal ships
12 large cruisers (3 overseas reserve)
30 small cruisers (3 overseas reserve)
12 torpedo boat divisions

This fleet can be largely completed by 1905. The expenditure for shipbuilding, including guns and torpedo armaments, will amount to M 408 million or 58 million per annum, plus final payment after 1905 of 72 million. The ordinary estimates will be increased by 4 million per annum as well, thus reaching 86 million by the fiscal year of 1904/5.
21. Gunboats and vessels of other description have not been included in the estimates for the fleet, because we cannot predict precisely the numbers we shall need. In any case such vessels are without importance for the political significance of our fleet.
22. In the attached table, a few points of comparison have been set out between the fleet as it was initially planned and as now amended.

COMPARISON between the Fleet as first planned and as it is now projected

To compare	First	Now	Comments
1) Planned establishment	4 Types: 17 battleships 8 large cruisers (10,000 tons) 30 medium cruisers (6,600 tons) 16 small cruisers (2-3,000 tons) To 1910	3 Types: 19 battleships 12 large cruisers (8,500 tons) 30 small cruisers (3,000 tons) To 1905	Provisionally to 1905: Already achieved 2 battleships, 4 large armoured cruisers, plus 5 additional years for further construction
2) Displacement of ships WITH armoured sides (in thousand tons)	250 (to 1910)	292 (to 1905)	
3) Displacement of ships WITHOUT armoured sides (in thousand tons)	238	81	
4) Percentage of total displacement without armour	48% (approx 1/2)	22% (approx 1/5)	
5) Total cost in ship-building (in million Marks) after replacement of all existing vessels	848	708	Uniform rates: battleships 20 Mill. Mks 10,000 ton cruiser 18 Mill. Mks 8,500 ton cruiser 15 Mill. Mks 6,600 ton cruiser 10 Mill. Mks 3,000 ton cruiser 5.5 Mill. Mks 2,500 ton cruiser 4 Mill. Mks
6) According to the draft Bill it is expected to spend on shipbuilding including artillery and torpedo armaments	To 1910 NOT CALCULATED	To 1905 408 Million Marks	The difference with the row above arises from the number of ships which will not have reached replacement age by 1905
7) Increase in the ordinary expenditure	To 1910 (not calculated) estimated at approx.: 90 Mill. Mks Now: 58 Mill. Mks 1910: 150 Mill. Mks	To 1905 Increase: 28 Mill. Mks Now: 58 Mill. Mks 1905: 86 Mill. Mks	
8) Increase in personnel	20,588 per annum: 1,722 (to 1910)	7,973 per annum: 1,139 (to 1905)	
9) Annual rate of expenditure on shipbuilding	Not calculated	On average to 1905 58.4 Mill. Mks	In 1897/98 estimates as passed: 49.1 Mill. Mks

MEMORANDUM APPENDED TO THE GERMAN NAVY BILL, 1900

I. NECESSITY AND SCOPE OF THE INCREASE OF THE NAVY.

THE GERMAN EMPIRE NEEDS PEACE AT SEA.--For the German Empire of to-day the security of its economic development, and especially of its world-trade, is a life question. for this purpose the German Empire needs not only peace on land but also peace at sea--not, however, peace at any price, but peace with honour, which satisfies its just requirements.

A naval war for economic interests, particularly for commercial interests, will probably be of long duration, for the aim of a superior opponent will be all more completely reached the longer the war lasts. To this must be added that a naval war which, after the destruction or shutting-up of the German sea fighting force, was confined to the blockade of the coasts and the capture of merchant ships, would cost the opponent little; indeed he would, on the contrary, amply cover the expenses of the war by the simultaneous improvement of his own trade.

An unsuccessful naval war of the duration of even only a year would destroy Germany's sea trade, and would thereby bring about the most disastrous conditions, first in her economic, and then, as an immediate consequence of that, in her social life.

Quite apart from the consequences of the possible peace conditions, the destruction of our sea trade during the war could not, even at the close of it, be made good within measurable time, and would thus add to the sacrifices of the war a serious economic depression.

NAVY LAW[1] DOES NOT YET MAKE ALLOWANCE FOR THE POSSIBILITY OF A NAVAL WAR WITH A GREAT SEA-POWER.--The Navy Law does not make allowance for the possibility of a naval war with a great naval Power, because, when it was drafted in the summer of 1897, the first consideration was to secure the carrying out in modern ship material of the 1873 plan for the founding of the fleet, limiting the increase to the small number of battleships which was necessary to establish, at least for a double squadron, the organization demanded by tactical exigencies.

The Justificatory Memorandum to the Navy Law left no doubt as to the military significance of the Battle Fleet. It is therein expressly stated:

"Against greater sea-powers the Battle Fleet would have importance merely as a sortie fleet."

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[1] In this Memorandum "Navy Law" means the Navy Act of 1898.

That is to say, the fleet would have to withdraw into the harbour and there wait for a favourable opportunity for making a sortie. Even if it should obtain success in such a sortie, it would nevertheless, like the enemy, suffer considerable loss of ships. The stronger enemy could make good his losses, we could not. In war with a substantially superior sea-power, the Battle Fleet provided for by the Navy Law would render a blockade more difficult, especially in the first phase of the war, but would never be able to prevent it. To subdue it, or, after it had been considerably weakened, to confine it in its own harbour would always be merely a question of time. So soon as this had happened, no great State could be more easily cut off than Germany from all sea intercourse worthy of the name--of her own ships as also of the ships of neutral Powers. To effect this it would not be necessary to control long stretches of coast, but merely to blockade the few big seaports.

In the same way as the traffic to the home ports, the German mercantile ships on all the seas of the world would be left to the mercy of an enemy who was more powerful on the sea. Hostile cruisers on the main trade-routes, in the Skager Rack, in the English Channel, off the north of Scotland, in the Straits of Gibraltar, at the entrance to the Suez Canal, and at the Cape of Good Hope, would render German shipping practically impossible.

Also with regard to this the Justificatory Memorandum to the Naval Law speaks unambiguously. In it is observed:

"Protection of sea trade on all the seas would occur principally in time of peace. In case of war it would be the task of the foreign service cruisers to afford their own mercantile ships the "utmost protection."

That is to say, the ships would do the "utmost possible." What would be possible in this respect is clear when it is realized that the Navy Law provides altogether for forty-two cruisers, whilst the greatest Naval Power, for example, to-day already possesses 206 cruisers (finished or under construction), and, moreover, has as its disposal bases and coaling stations on all the chief trade-routes.

FOR THE PROTECTION OF SEA TRADE AND COLONIES THERE IS ONLY ONE MEANS--A STRONG BATTLE FLEET.--To protect Germany's sea trade and colonies in the existing circumstances there is only one means--Germany must have a battle fleet so strong that even for the adversary with the greatest sea-power a war against it would involve such dangers as to imperil his position in the world.

For this purpose it is not absolutely necessary that the German Battle Fleet should be as strong as that of the greatest naval Power, for a great naval Power will not, as a rule, be a position to concentrate all its striking forces against us. But even if it should succeed in meeting us with considerable superiority of strength, the defeat of a strong German Fleet would so substantially weaken the enemy that, in spite of the victory he might have obtained, his own position in the world would no longer be secured by an adequate fleet.

In order to attain the goal which has been set, the protection of our sea trade and of our colonies by ensuring a peace with honour, Germany requires, according to the standard of the strength-relationships of the great Sea-Powers, and having regard to our tactical formations, two double squadrons of efficient battleships, with the necessary cruisers, torpedo-boats, and so on, pertaining thereto. As the Navy Law provides for only two

squadrons, the building of a third and fourth squadron is contemplated. Of these four squadrons two will form a fleet. The second fleet is to be organized in its tactical composition in the same way as the first fleet provided for in the Navy Law.

For the scope of the maintenance in commission in time of peace the following consideration has been decisive: As the ship-establishment of the German Navy, even after the carrying out of the projected increase, will still be more or less inferior to the ship-establishment of some other great Powers, compensation must be sought in the training of the personnel and in tactical training in the larger combinations.

A trustworthy training of the separate ships' crews, as well as an adequate training in the larger tactical combinations, can be ensured only by permanent maintenance in commission in time of peace. To economize in commissioning in time of peace would mean to jeopardize the efficiency of the fleet for the event of war.

The minimum of commissioning is the permanent formation of that fleet which comprises the newest and best ships as an active combination--that is to say, a combination in which all battleships and cruisers are in commission. This fleet would form the school for tactical training in double squadron, and in case of war would bear the first shock. For the second fleet, which will comprise of the older battleships, it must suffice if only half of the ships are permanently in commission. For training in the larger combination some further ships must then, it is true, be placed temporarily in commission during the manœvres. In case of war this second fleet--the Reserve Battle Fleet--will have to make up its arrears in the training of the separate ships' crews and the deficiency of training in the larger combination behind the protection afforded by the Active Battle Fleet.

WITH FOUR LINE SQUADRONS, COAST SQUADRON IS LESS IMPORTANT.--If Germany possesses four squadrons of efficient battleships, a coast squadron composed of small armoured ships is less important.

INCREASE OF THE FOREIGN SERVICE SHIPS.--Besides the increase of the home battle fleet, an increase of the foreign service ships is also necessary. In consequence of the occupation of Kiauchow and the great enhancement of our oversea interests in the last two years, it has already become necessary, at the cost of the scouting ships of the Battle Fleet, to send abroad two large ships more than were provided for by the plans of the Navy Law. Indeed, for an effective representation of our interests it would have been necessary to send out even more ships, if such had only been available. In order to form a judgement of the importance of an increase of the foreign service ships, it must be realized that they are the representatives abroad of the German defence forces, and that the task often falls to them of gathering the fruits which the maritime potency created for the Empire by the home Battle Fleet has permitted to ripen.

Moreover, an adequate representation on the spot, supported on a strong home Battle Fleet, in many cases averts differences, and so contributes to maintain peace while fully upholding German honour and German interests.

A numerical demonstration of the additional requirements cannot be given for a considerable time in advance in the same manner as for the Battle Fleet, which rests upon an organic foundations.

If the demand is made that the foreign service fleet shall be in a position (1) energetically to uphold German interests everywhere in time of peace, (2) to be adequate for

warlike conflicts with oversea States without navies deserving of the name, an increase of at least five large and five small cruisers, as well as of one large and two small cruisers as material reserve, seems called for. The Navy Law foresees as ready for use three large and ten small cruisers, and as material reserve three large and four small cruisers.

A distribution of the foreign service fleet among the foreign stations cannot be given, as this distribution depends upon the political circumstances, and these can only be estimated from case to case.

Appendix C

Glossary and Explanation of Events

Defenders of the Rorke's Drift: On January 22nd, 1879, a British force of some 1,600 men (half white regulars and half native) was massacred by a superior Zulu force of some 20,000 warriors at Isandhlwana, Zululand, South Africa. The British force had not laagered, or put into defensive position, their wagons, and had been caught in the open. That night, a force of 103 British regulars and 35 sick men in hospital successfully defended a small outpost at Rorke's Drift against some 3,000 Zulu warriors, and inflicted such losses as to offset the earlier disaster of the day.

Light Brigade at Balaclava: The Battle for Balaclava was fought on October 25th, 1854, during the Crimean War of 1853-56, when British, French, and Turkish forces totalling some 10,000 men and 20 cannons prevented the capture of the key supply port of Balaclava by the Russian force totalling some 25,000 men and 78 guns. An erroneous order resulted in the famous and suicidal charge of the Light Brigade, of 678 officers and men, against a Russian strong point. During the 20-minute engagement, 247 men and 497 horses were lost. This charge was immortalized in Lord Tennyson's poem, "The Charge of the Light Brigade": "Theirs not to make reply, theirs not to reason why, theirs but to do and die..."

Pickett's Charge at Gettysburg: On the third day of the Battle of Gettysburg (July 1st - 3rd, 1863) during the U.S. Civil War, the Confederates launched a final, desperate assault against the Union-held Cemetery Ridge. Of the 15,000 men who started the mile-long attack, only some 150 reached the Ridge, where they were promptly overwhelmed. The rest fell on the way. This cost the South the crucial battle, and that night, Lee began a retreat back into Virginia.

Naval terminology: A "capital ship" refer to (usually) the biggest class of warships. From 1900 until 1918, dreadnoughts, pre-dreadnoughts, and battlecruisers were collectively known as capital ships. After 1918, aircraft carriers were known as capital ships, also. A "battleship" is a warship that was the most heavily armed and armored, i.e., a ship that can stay in battle line. Dreadnoughts and pre-dreadnoughts are collectively known as battleships. A "battlecruiser" is a warship which has the firepower of a battleship but the protection and speed of a cruiser. A "cruiser" is a ship that is smaller than battleships and battlecruisers, but which are faster than the former. A cruiser usually acted as a scout for the main fleet (this was before the advent of aerial reconnaisance). The next step down is the "destroyer," which originally stood for "torpedo-boat destroyer," that is a ship designed to intercept and destroy incoming enemy torpedo boats. It also carried torpedoes of its own that it used to attack enemy ships. Below is a comparative look at different classes of ships during the First World War:

Warships in descending order of size (British):

Battleships	
dreadnoughts	18,000 - 30,000 tons
pre-dreadnoughts	12,000 - 18,000 tons
Battlecruisers	18,000 - 30,000 tons
Cruisers	
armored cruisers	9,000 - 14,000 tons
light cruisers	3,000 - 5,000 tons
Destroyers	around 1,000 tons

Warships in descending order of speed (British):

Battleships	
dreadnoughts	21 - 24 knots
pre-dreadnoughts	16 - 18 knots
Battlecruisers	25 - 29 knots
Cruisers	
armored cruisers	22 - 23 knots
light cruisers	26 - 29 knots
Destroyers	28 - 34 knots

Warships in descending order of armament (British):

(number/size)	
Battleships	
dreadnoughts	8 - 12/12" - 15"
pre-dreadnoughts	4/12"
Battlecruisers	8/12" - 13.5"
Cruisers	
armored cruisers	4 - 10/6" - 9.2"
light cruisers	6 - 10/4" - 6"
Destroyers	3 - 5/4"

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