Battlecruiser Chronology North Sea Operations in World War One

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Preface

More than a century after the events there are still significant gaps in the operational history of the opposing Grand Fleet and High Seas Fleet during the First World War. The frenzy of activity during the first six months of the war has been well documented but a sparsely covered void follows the Battle of the Dogger Bank. Then the exhaustive literature on Jutland so completely dominates the remaining history of the surface fleets that it is easily forgotten that the sudden tempest of May 31 was neither the beginning nor the end of the 1916 campaign.

This document is one step towards filling out that history and creating a concise chronology of the entire four-year naval campaign in the North Sea. For reasons of time, available source material, and personal interest, it focuses largely on those events in which either British or German battlecruisers were involved. Given the scouting role of the battlecruisers, every action involving the main battle fleets is also included. This is a summary account of every recorded operational sortie (excluding the many training sorties and changes of base) where these capital ships were at sea, even if the opponents did not meet. Additionally, certain planned operations are included if they were on the verge of being launched and only canceled because of foul weather or other circumstances. Readers who are familiar with the monumental "Chronology of the War at Sea 1939-1945" (Rohwer and Hümmelchen, 1974) will recognize similarities in the concept and format. The reader is referred to the listed sources for maps and detailed tactical descriptions of the various battles and additional information on the strategy, leadership, politics, composition of fleets, and other factors that influenced the campaign.

The Outbreak of Hostilities – July 31, 1914 to February 2, 1915

Admiral Jellicoe's Grand Fleet began the war at a completely frenetic pace with ships hardly being in port for long enough to replenish their stores before setting out to sea again. With the declaration of war against Germany on August 4, the Royal Navy was tasked with a myriad of responsibilities including; instituting a distant blockade of commerce to Germany, the safe transit of the BEF to France and later the arrival of troop convoys from distant parts of the Empire, and the protection of the English coast from either raids or the much feared (if wholly imaginary) threat of invasion by German troops. At the Admiralty, the volatile trio of Churchill, Oliver, and Fisher debated their respective schemes for operations against Borkum Island or Heligoland or the Baltic Sea but none of them ever matured to the stage of operational planning. It was soon realized that the main fleet anchorage at Scapa Flow was virtually undefended against being penetrated by submarines and for a time the Grand Fleet moved about like vagabonds from one place to another, ultimately to Lough Swilly on the north coast of Ulster, until a semblance of protection was established at Scapa Flow by the end of the year.

On October 13, a stroke of incredible fortune delivered a set of German code books (recovered by the Russians after the stranding of the cruiser *Magdeburg*) into the hands of the Admiralty. A secretive department, known only as "Room 40", had already been established in August to attack the German signals traffic and with this assist it was able in late November to begin delivering valuable, although sometimes fragmentary, signals intelligence about German plans and movements. Throughout the war there were issues with the tight-fisted manner in which this intelligence was doled out to, or withheld from, the forces afloat but when things worked well it gave the British a valuable secret advantage.

The Germans began the war expecting the numerically superior British to institute their traditional policy of close blockade (which had in fact been the British intention as late as 1912). The German plan was a defensive strategy termed *Kleinkrieg* ("small war") which would attempt to reduce the British blockaders by a campaign of attrition (using submarines, mines, and light forces) before engaging in any major battles. The German army high command (OHL) never requested any naval assistance in covering their seaward flank in Belgium and France or for interfering with the transit of British troops to France. As time passed, with the British keeping their distance, there was a growing discontent among some German officers insisting on more aggressive measures. Hipper even proposed that the battlecruisers could break out into the Atlantic to engage in commerce raiding but the plan was so fraught with risks and difficulties that it was shelved. Under pressure, Admiral von Ingenohl began a series of raids into the North Sea in the hopes of meeting isolated portions of the Grand Fleet and defeating them piecemeal.

Force Composition

Initially the active British battlecruisers in Home waters comprised the 1st Battlecruiser Squadron (*Lion, Princess Royal, Queen Mary, New Zealand*). Cruiser Force K (*Invincible, New Zealand*) was created as a temporary detached squadron in early August, after the rebuilding of *Invincible* was completed on August 6. Cruiser Force K then became 2nd Battlecruiser Squadron (*Invincible, Inflexible*) not long after *Inflexible* arrived from the Mediterranean in late August. The German battlecruisers in the North Sea comprised the First Scouting Group (*Seydlitz*,

Moltke, Von der Tann), which also included armored cruiser *Blücher* on most operations. The first line strength of the Grand Fleet also included 20 modern Dreadnought type battleships (1st, 2nd, and 4th BS) and 8 older pre-Dreadnought battleships (3rd BS). The opposing High Seas Fleet (*Hochseeflotte*) included 13 Dreadnought battleships (I and III BS) and 8 pre-Dreadnought battleships (II BS) in its first line strength. (Detailed fleet lists can be found in the websites listed in the Bibliography.)

In Royal Navy practice at this time a Battle Squadron (BS) was comprised of battleships, a Battlecruiser Squadron (BCS) of battlecruisers, a Cruiser Squadron (CS) of armored cruisers, a Light Cruiser Squadron (LCS) of light cruisers, and a Destroyer Flotilla (DF) of destroyers. German practice was similar, using Roman numerals rather than Arabic, with a few exceptions. The German battlecruisers always comprised the First Scouting Group (I SG) while the higher numbered Scouting Groups (II SG, III SG, and IV SG) were comprised of light cruisers or the older armored cruisers. (In German language histories, the Scouting Groups were *Aufklärungsgruppe* (e.g., I AG). The more familiar English rendering will be used here.) German destroyers tended to be somewhat smaller than British and the terms "destroyer" and "torpedo boat" have been used almost interchangeably to describe them. They were organized in Torpedo Boat Flotillas (TBF). In many entries below the term "light forces" is used generically to refer to the various accompanying light cruisers and destroyers.

Initial movements, August 1914

As hostilities between Britain and Germany became imminent, the British Grand Fleet under Jellicoe moved to its war station at Scapa Flow, arriving on July 31. The High Seas Fleet under Ingenohl concentrated at Wilhelmshaven. The initial British move was a sortie on August 3 (the day before the declaration of war) by 2^{nd} and 3^{rd} CS with the 1^{st} BCS (*Lion, Princess Royal, Queen Mary, New Zealand*) as a covering force to the Shetland Islands as a result of an alarm that the Germans might try to occupy them. The entire Grand Fleet followed the next day and then swept east towards the coast of Norway, stopping and examining merchant ships along the way. Screening ahead of the fleet, the light cruiser *Birmingham* rammed and sank the submarine *U15*. Alarmed by the presence of submarines, the Grand Fleet left the North Sea for the Orkneys on August 10.

Transit of the BEF and continued movements, August 1914

The British accorded the highest priority to the safe passage of the BEF to France. The multitude of naval forces covering the Channel approaches, including the close covering force of 5th, 7th, and 8th BS (18 pre-Dreadnoughts), was augmented by the temporary detachment of Cruiser Force K (*Invincible, New Zealand*) under Moore to the Humber from August 19. The transit of troops from Southampton to Le Havre and stores from Newhaven to Boulogne began in earnest on August 9, reached peak intensity from August 15 to 17, and was complete by August 23 without loss or disruption. In the meantime, the main body of the Grand Fleet began another sweep of the North Sea, leaving Scapa Flow late on August 13. Scouting units reached Horns Reef, on the edge of the Heligoland Bight, at 09.30 on August 16 and the Grand Fleet then retired to the north. During all this time the High Seas Fleet waited in expectation that the Grand Fleet would soon appear and institute a close blockade of the German coast. Hipper's I SG (*Seydlitz, Moltke, Von der Tann*) was at the mouth of the Jade but was refused permission to sortie in support of the various light cruiser activities.

First Battle of Heligoland Bight, August 28, 1914

Several groups of light cruisers and destroyers of the Harwich Force, supported by Cruiser Force K (*Invincible, New Zealand*) entered the Heligoland Bight. Beginning from 07.00, there were a series of confused and uncoordinated encounters in poor visibility with German light forces. Beatty eventually swept through the Bight with 1st BCS (*Lion, Queen Mary, Princess Royal*) and the British forces withdrew. German battlecruisers (*Moltke, Von der Tann*) were initially unable to cross the Jade Bar and arrived at 14.25 as the British were departing, followed by *Seydlitz* one hour later. German battleships *Helgoland* and *Thüringen* had been at anchor outside the bar but were expressly ordered not to join the action. Belatedly informed of the plan, Jellicoe put to sea with the Grand Fleet at 05.45 on August 27 but did not come near the scene. The operation was also timed to serve as a diversion during the landing of the Marine Division at Ostend on August 28.

Multiple sweeps in the North Sea, August 31 to September 9, 1914

From late on August 31, 1st BCS (*Lion, Princess Royal, Queen Mary, New Zealand, Inflexible*), 3rd BS, and 3rd and 10th CS began a sweep from the Scottish coastline towards Norway searching for suspected enemy minelayers. On September 4, 1st BCS with 2nd and 3rd CS and light forces began a sweep to the entrance of the Skagerrak on reports of German cruisers attempting to enter the North Sea. The reports were inaccurate in both cases and nothing was encountered. 1st BCS sortied again from Rosyth on September 8 as a backing force for light forces conducting stop and board actions of merchant vessels in the northern zone of the North Sea.

Support for sweep into Heligoland Bight, September 10, 1914

The Grand Fleet battleships ended training exercises on September 8 and swept south to provide distant heavy support, along with 1st BCS, for a sweep by light forces into the Heligoland Bight on September 10. The Germans did not react to the intrusion and no action resulted. On the return the Grand Fleet swept for enemy merchant ships, with *Invincible* and *Inflexible* detached as a separate unit, entering Loch Ewe on September 13.

Continued sweeps in the North Sea, September 1914

Inflexible and *Invincible* detached on September 14 to support sweeps by 2nd, 3rd, 6th, and 10th CS in the North Sea. The Grand Fleet departed Loch Ewe on September 17 and 1st BCS (*Lion*, *Princess Royal, Queen Mary, New Zealand*) departed Scapa Flow on September 19 to sweep down the Norwegian coast inspecting trawlers with the Battle Fleet in support. The operation was canceled on September 20 due to deteriorating weather conditions. On the northward return they searched for a reported German cruiser force until September 22 returning to Scapa Flow on September 24. 1st BCS sortied again on September 26 for a further sweep of the Norwegian coast.

Planned raid on the British blockade line, September 21, 1914

The Germans planned an operation in September to raid the presumed location, between the Shetlands and Norway, of the line of British cruisers that were enforcing the distant blockade against German trade. The initial plans swelled to the scale of a fleet operation before being drastically scaled back. Eventually on the evening of September 21, the I SG (*Seydlitz, Moltke, Von der Tann*) was prepared to put to sea with additional light forces to follow in distant support.

The search for targets would have been conducted during daylight hours the next day. The operation was canceled at the last minute when intelligence reports suggested that significant British forces were operating in the intended target area. The auxiliary minelayer *Berlin* did sail that night but returned early. The blockade at this time was being maintained by the *Edgar* class armored cruisers of the 10^{th} CS with one of the lines extending from the Orkneys to Norway.

Cover for Canadian troop convoy, October 1914

Princess Royal was detached from 1st BCS on September 28 to prepare to meet the Canadian troop convoy in the North Atlantic on October 7. *Invincible* and *Inflexible* remained engaged in patrolling north of Faroe Islands until September 29. The Grand Fleet departed Scapa Flow beginning from October 2 to cruise between Scotland and Norway behind a cruiser screen deployed to prevent any breakout of German warships into the Atlantic. 1st BCS (*Lion, Queen Mary, New Zealand*) patrolled north of Scotland while 2nd BCS (*Invincible, Inflexible*) ranged north and east of the Shetland Islands.

Sweep of North Sea, October 1914

From October 12, 1st BCS (*Lion, Queen Mary, New Zealand*) with cruiser supports conducted a sweep from the Dogger Bank towards Norway. The sweep concluded on October 15 without encountering the enemy.

Sweep towards Skagerrak, October 1914

1st BCS (*Lion, Queen Mary, New Zealand*) sortied from Loch-na-Keal on October 21 in response to reports that German light forces were enroute from Danzig to the North Sea. The force swept towards the Skagerrak and north towards the Norwegian coast without contact and returned to Cromarty.

Attempted air attack on Cuxhaven Zeppelin sheds, October 25, 1914

On October 22, 2nd BCS (*Invincible, Inflexible*) was detached to accompany light forces and three small seaplane carriers (*Engadine, Riviera, Empress*) in the southern North Sea for an attempted air strike on the Zeppelin sheds at Cuxhaven. The aircraft were unable to take off from the rough seas and the operation was canceled. The Zeppelin sheds that were the repeated target of the long series of "Cuxhaven" raids were in fact located at Nordholz, eight miles to the south. The enormous persistence with which this endeavor was attempted again and again is perhaps best explained by the English public's exaggerated fear of the destructive potential of the Zeppelins combined with the apparent lack of any other means of countering the threat.

Yarmouth Raid, November 3, 1914

The German I SG (*Seydlitz, Moltke, Blücher, Von der Tann*) sortied along with four light cruisers at dusk on November 2 for a combined bombardment and mine laying raid on the English coast. Becoming embroiled with British destroyers at dawn of November 3, the Germans fired only a few shots in the direction of Yarmouth, laid their mines, and withdrew. The I and III BS of the High Seas Fleet sortied to the edge of the Bight to provide distant support and turned for home at 08.00. On the return, armored cruiser *Yorck* strayed into a defensive minefield and was lost. The Admiralty, having had no advance warning of the raid, finally ordered a response by the Grand Fleet, including 1st and 2nd BCS, at 09.55. The orders were canceled before any ships had departed when it became clear that the raid was not part of a larger German movement. (Two

days later, 2nd BCS (*Invincible, Inflexible*) was detached to prepare for operations in the South Atlantic while *Princess Royal* was sent to Halifax and then the Caribbean, all to counter the threat of the von Spee cruiser squadron after the disaster at Coronel.)

Sweep of North Sea, November 6, 1914

1st BCS (*Lion, Queen Mary, New Zealand*) conducted a sweep of the North Sea, beginning and ending at Cromarty.

False alarm of German sortie, November 17, 1914

Based on a mistaken interpretation of decrypted messages by Room 40 it was feared that German battlecruisers might attempt to enter the Atlantic. 1st BCS (*Lion, Queen Mary, New Zealand*), 2nd CS and 1st LCS took up a blocking position east of the Shetland Islands while 2nd BS deployed to the west. Nothing was encountered and the forces returned to base on November 20. The alert may have been related to the movement of *Derfflinger* through the Kiel Canal to join I SG on November 15 followed by a short advance by I SG into the North Sea for training exercises on November 20.

Attempted air attack on Cuxhaven Zeppelin sheds, November 24, 1914

A plan was hatched to use a raid on the Zeppelin sheds at Cuxhaven as "bait" to draw German forces into a trap. The bulk of the Grand Fleet sortied late on November 22 to sweep the North Sea and take up positions with 1st BCS (*Lion, Queen Mary, New Zealand*) and 1st LCS detached south of the battle squadrons. The air attack was canceled at the last moment because of signals intelligence suggesting that a superior German force was operating in the Bight. (This force was in fact *Derfflinger* and *Blücher* engaged in a training exercise.) Instead on the morning of November 24, ships of 2nd CS and the Harwich Force (*Falmouth, Liverpool, Shannon, Cochrane, Achilles, Natal*) showed themselves in the Bight but failed to induce the Germans to chase them. Bombs were dropped near *Liverpool* and the batteries on Heligoland Island opened fire although out of range. The British withdrew. Simultaneously four *Duncan* class old battleships conducted a bombardment of the submarine base at Zeebrugge with little effect.

Scarborough Raid, December 16, 1914

The Germans next planned another operation which they hoped would induce the British to divide their fleet and spread it out in defense of the East Coast towns. An advance force, Hipper's I SG (*Seydlitz, Moltke, Blücher, Von der Tann, Derfflinger*) would conduct a coastal raid to lure out a British response while Ingenohl with the main body of the High Seas Fleet; I, II, and III BS, waited in the North Sea to attack them. Room 40 decrypted signals indicating that the Germans were about to bombard Scarborough but missed that the German battle fleet would also be at sea, and the Admiralty elected to direct the details of the response themselves. Orders went out to concentrate Beatty's 1st BCS (*Lion, Queen Mary, Tiger, New Zealand*), 1st LCS, 3rd CS, and Warrender's 2nd BS (*King George V, Orion, Ajax, Centurion, Conqueror, Monarch*) on the morning of December 16 in a position to cut off the withdrawal of the expected German force. Hipper sortied at 02.00 on December 15 with Ingenohl following in the afternoon. Before dawn the next morning, Ingenohl's destroyer screen tangled with Warrender's destroyers in heavy seas. Ingenohl, fearing that the entire Grand Fleet was at sea, reversed course at 05.42 and headed for home. Hipper, unaware that he was now unsupported, divided I SG to bombard Scarborough and Hartlepool at dawn, and then reconcentrated the force to withdraw. 1st LCS,

operating with Beatty, made fleeting contact with Hipper's light cruiser screen in foggy conditions but gave up the chase because of confused signals. Hipper altered course, evaded the British forces, and returned safely to base. Both sides had missed opportunities to strike a blow at a numerically inferior force.

Air attack on Cuxhaven Zeppelin sheds, December 25, 1914

With only the light cruisers of Tyrwhitt's Harwich Force in close support, the three seaplane carriers ventured again into the Bight during the dark hours of December 24. By 08.00 on Christmas morning, seven of the nine aircraft embarked had struggled into the air but none of them managed to score any hits on the target. In response, German seaplanes and the Zeppelins *L4* and *L5* made repeated bombing attacks on the ships, also without result. Ingenohl was so concerned that the Harwich Force might be the vanguard for the entire British fleet that he refused to allow any of the surface forces to sortie, to the intense frustration of the Scouting Group commanders who had four battlecruisers with steam up and waiting in the outer anchorage. Even light cruisers could have chased down and attacked the slow seaplane carriers (probably capable of no more than 18 knots) but no attempt was made. The Grand Fleet had in fact sortied on the morning December 25 to conduct a sweep far to the north of the Bight. The battleships *Monarch* and *Conqueror* collided in heavy weather while reentering Scapa Flow on December 26 and were detached for repairs.

North Sea sweep, January 3-5, 1915

1st BCS (*Lion, Queen Mary, Tiger, New Zealand*) and 1st LCS conducted a sweep of the central North Sea without incident from January 3 to 5, 1915. *Princess Royal* returned to Home waters on January 1 from detached service on the North American station.

Sweep into Heligoland Bight, January 19, 1915

The British expected the Germans to be maintaining torpedo boat patrols in the Heligoland Bight and mounted a sweep to scoop some of them up. Tyrwhitt's Harwich Force sailed on January 18 and entered the Bight on the morning of January 19 with Beatty's 1st BCS (*Lion, Princess Royal, Tiger*) and 2nd BCS (*New Zealand, Indomitable*) in support outside the Bight. Only blizzard conditions and aircraft, including the Zeppelin *L5*, were encountered as there were in fact no German surface ships at sea and the British withdrew in disappointment. Submarines *U8* and *U17* had sighted Beatty's battlecruisers lurking outside the Bight but were unable to close to an attack position.

Planned operation against the Firth of Forth, January 1915

Recognizing the missed opportunity of the Scarborough Raid, at a conference on December 27 the Germans planned another major fleet advance against the British coast. This time the objective would be for light cruisers to lay a minefield off the Firth of Forth with the battlecruisers and the main battle fleet waiting in supporting distance. Originally planned for January 17, the date was repeatedly set back because of foul weather. On January 22, the operation was again postponed until at least February 6 and *Von der Tann* was released for a scheduled refit.

Battle of the Dogger Bank, January 24, 1915

There was a strong desire to "do something" while awaiting the next opportunity to mount the Firth of Forth operation. When the weather cleared unexpectedly on January 22, it was decided to make a brief sortie to the Dogger Bank to inspect the fishing craft in the area and perhaps catch an isolated British light force. Hipper sailed at 17.45 on January 23 with I SG (*Seydlitz, Moltke, Derfflinger, Blücher*) and supporting light forces. Room 40 had again decrypted the German radio signals and the Admiralty War Room directed the response. Beatty sailed at 18.00 with 1st BCS (*Lion, Tiger, Princess Royal*), 2nd BCS (*New Zealand, Indomitable*) and supporting forces for an intended dawn interception; 3rd BS and 3rd CS for close support and 1st, 2nd, and 4th BS while the rest of the Grand Fleet sortied for distant support during the night.

The first sighting occurred at 07.05 on January 24 with Beatty to the northwest of the Germans. Hipper reversed course when he recognized the strength of the opposing force and the action became an extended stern chase. The three fastest British ships had a considerable speed advantage making 27 knots versus the German squadron speed (restricted because of poor quality coal) of 23 knots. As the range closed, gunnery rate of fire and accuracy favored the Germans. Flooding from multiple hits on *Lion* eventually disabled the engines and brought the ship to a halt while *Tiger* had Q turret jammed. In return, a hit on *Seydlitz* caused an ammunition fire that burned out C and D turrets. *Blücher* kept up with the rest of I SG for over an hour while subjected to a largely inaccurate fire from the ships of 1st BCS that resulted in only one inconsequential hit to the bow. Then at 10.30 a devastating hit on *Blücher*, probably from *New Zealand*, burned out the ammunition supply train for the forward wing turrets and sent a shell splinter through a main steam pipe that reduced the ship's speed to 19 knots.

As the battle reached the moment of decision, *Lion* with Beatty aboard suddenly altered course to port and dropped out of the chase while *Blücher* was falling behind the German squadron. What Beatty clearly desired at this instant was for Captain Pelly (next in the formation aboard *Tiger*) to seize the initiative and continue the chase, with *Tiger* leading *Princess Royal* and *New Zealand* while leaving behind the slower *Indomitable* to dispatch *Blücher* and assist the crippled *Lion*. This would have resulted in a three-on-three resumption of the battle with an outcome that can only be guessed at. It was not to be. Because of what can most generously be described as a confusion of signals and intentions, Pelly instead led all the battlecruisers to close on the hapless *Blücher*. Hipper briefly turned about to reengage and support *Blücher*, then thought better and made his escape. *Blücher* was shot to pieces by more than seventy heavy caliber hits and at least two (possibly seven) torpedoes before finally rolling over and sinking. *Indomitable* took *Lion* under tow for the return to base. The High Seas Fleet, including most of I and II BS with escorts, made a belated sortie in the late morning which met Hipper's returning force at 14.30 in the afternoon north of Borkum Island.

Attempted Cuxhaven raid, January 29, 1915

The Harwich Force set off on yet another attempt to raid Cuxhaven but turned back because of adverse weather. A portion of 1st BCS (*Princess Royal, Queen Mary*) was at sea in support.

Summary and Outcomes

The Germans began the war expecting to fight a defensive *Kleinkrieg* against a close blockading force that failed to appear. Then when the British did trail their coats through the Heligoland Bight (August 24, September 10, November 24, December 25) the Germans missed the opportunities presented because they were too wary of falling into a trap. Sometimes there hadn't

even been a trap. The dynamic of the campaign changed when the Germans began making raids on the English coast. The first raid on Yarmouth (Operation 19) just happened to fall into a gap between British sweeps in the North Sea and was over before the British could react. The dynamic changed again when Room 40 began providing advance notice of German fleet advances. This allowed the British to initiate their response and position ships based on signals intelligence rather than making constant sweeps of the North Sea and hoping for a chance encounter. So long as the Germans continued their aggressive operations, a battle was now inevitable. The British response to the Scarborough Raid (Operation 20) was badly fumbled by both sides. The next planned Operation 21 against the Firth of Forth would likely have resulted in a battle close to the English coast but it was delayed by the weather. In the interim the Germans made a squadron sortie to the Dogger Bank, nowhere near the English coast, and the British elected to pounce on Hipper's force. Once again, the British failed to close the trap, Hipper escaped with the loss of one ship, the Germans reacted with a change of leadership and policy, and any chance of catching the German fleet far from home vanished for the time being.

The Cautious Year – February 2, 1915 to January 18, 1916

The recriminations after the Dogger Bank debacle finally drove the mounting frustrations with Ingenohl's leadership to a climax. On February 2, he was replaced in the command of the High Seas Fleet by Admiral von Pohl, although many officers would have preferred Admiral Scheer instead. Pohl's operational philosophy was to make frequent short advances into the North Sea that might lead to a decisive battle under favorable circumstances. By remaining close to German waters, where damaged ships could more easily return home, he expected to always have fewer losses than the enemy.

The Zeppelin bombing campaign, which is a separate story in itself, also began in earnest with the goal, at least in the mind of their commander Captain Strasser, that "England shall be destroyed by fire." At the same time the Zeppelin scouting patrols were considered absolutely vital for preventing the High Seas Fleet from being surprised at sea by the Grand Fleet. There may be no similar instance in history when so much expectation and responsibility has been invested in such an untried and ultimately fragile weapon.

Much of the British Admiralty's attention during this period became focused on countering the first unrestricted U-boat campaign, the upheaval of Fisher's resignation and Churchill's dismissal from the Admiralty, and the Dardanelles Expedition that began with extravagant hopes of decisive results. Fisher had always maintained that the blockade of Germany would be incomplete without a British force in the Baltic to block the vital Swedish iron ore trade. Churchill anticipated May as the date for an invasion of Borkum Island, his first step towards making an entry into the Baltic. The Dardanelles eclipsed both of their political fortunes and nothing came of their plans. There was also a widespread belief that Kitchener's New Armies in France would force a breakthrough of the German front and restore the war of movement and that the economic blockade of Germany would ultimately win the war if given enough time. All of this could too easily lead to a "wait and see" attitude towards operations. The lack of visible results by the end of this year set the stage for the increased tempo of operations in the next year.

Force Composition

In February the portion of the Grand Fleet under command of Admiral Beatty at Rosyth became known as the Battle Cruiser Fleet. It was comprised of *Lion* (Flagship), 1st BCS (*Princess Royal, Queen Mary, Tiger*), 2nd BCS (*Australia, New Zealand, Indefatigable*), 3rd BCS (*Invincible, Indomitable*), and the light cruisers of 1st, 2nd, and 3rd LCS. *Inflexible* joined 3rd BCS on June 19 after returning from the Mediterranean. (For tactical purposes, *Lion* always operated as a unit of 1st BCS.) Across the North Sea, Admiral Hipper continued in command of I SG (*Seydlitz, Moltke, Von der Tann, Derfflinger*) which usually operated with the light cruisers of II SG. The first line strength of the Grand Fleet had grown to 23 Dreadnoughts and 8 pre-Dreadnoughts opposed by the High Seas Fleet with 17 Dreadnoughts and 8 pre-Dreadnoughts.

North Sea cruises, March 1915

The Grand Fleet conducted a cruise from March 7 to 10 in the northern part of the North Sea while simultaneously the Battle Cruiser Fleet (less *Lion* still under repair) cruised in the central North Sea. A similar cruise was repeated from March 16 to 19.

German fleet advance, March 29, 1915

The High Seas Fleet put to sea on the morning of March 29, conducted tactical exercises in the North Sea, and began to enter port again by 21.00. I SG (*Moltke, Derfflinger, Von der Tann*)

participated in the advance while Zeppelins *L6*, *L7*, and *L9* scouted ahead in the first instance of tactical cooperation. Room 40 had detected early indications of a German cruiser sortie but did not expect the entire High Seas Fleet to come out until the operation was already underway. The Grand Fleet was belatedly alerted and sailed at 17.30. It was soon recalled when it was realized that the Germans were returning to port.

North Sea cruises, April 1915

The Battle Cruiser Fleet cruised in the northern North Sea from April 5 to 9 and again in the central North Sea from April 11 to 14 in company with the Grand Fleet.

Swarte Bank minelaying operation, April 17-18, 1915

The High Seas Fleet, including I SG (*Seydlitz, Moltke, Von der Tann, Derfflinger*), sortied at 21.00 on April 17 to support a minelaying operation on the Swarte Bank by light cruisers *Stralsund* and *Strassburg*. Zeppelins and U-boats scouted ahead of the fleet. The British, alerted as usual by intercepted signals, sailed at 20.00 on April 17 towards the middle of the North Sea with the Battle Cruiser Fleet leading the Grand Fleet by about seventy miles. The German minelaying operation was complete by 05.00 on April 18 and the fleet back at anchor by 17.00. The Grand Fleet made its juncture with the Battle Cruiser Fleet at 16.00 on April 18 and finding nothing returned to base. The noon position of the Grand Fleet had been about 150 miles north of the German track.

German fleet advance, April 22, 1915

The German Fleet sortied again late on April 21 and proceeded northwest to the Dogger Bank with I SG leading the main body of the High Seas Fleet. Zeppelins began to scout ahead of the fleet at first light. The Germans reversed course at 11.00 on April 22 and then carried out exercises in the Bight during the afternoon. Alerted by signals intelligence the Grand Fleet sailed immediately after dark on April 21. The Grand Fleet and the Battle Cruiser Fleet finally made rendezvous at 16.30 on April 22, a considerable distance north of the Dogger Bank, and finding nothing turned for home at dusk.

Final attempted air strikes on Cuxhaven, May 1915

Three more attempts were made by the Harwich Force to raid the Cuxhaven Zeppelin sheds on May 3, 6, and 11 but all failed because of adverse weather. At long last the project was deemed to be unworkable. With newer floatplane fighters embarked several unsuccessful attempts were next made, beginning on July 3, to intercept and attack patrolling Zeppelins in the air.

Dogger Bank minelaying operation, May 18, 1915

On the evening of May 17, I SG (*Seydlitz, Moltke, Von der Tann, Derfflinger*) put to sea at 18.00 followed by the battle squadrons of the High Seas Fleet. Rendezvous was made at 02.30 the next morning with II SG (6 light cruisers) that had laid two mine barriers on the Dogger Bank during the night. The weather was too poor for Zeppelin reconnaissance so the fleet conducted exercises east of the Dogger Bank during the afternoon and returned to port by 18.30. Room 40 had detected the impending operation but not the details. The Grand Fleet sailed from its various bases after dark on May 17, made rendezvous at 07.00 the next morning, and then swept to the southeast with the Battle Cruiser Fleet some 30 to 50 miles ahead of the Grand Fleet. When

Room 40 intercepted signals indicating that the Germans were returning home, a recall message was sent to the Grand Fleet at 11.00 and at noon the fleet headed back to its own bases.

Cover for sortie of minelayer Meteor, May 30, 1915

The High Seas Fleet sortied again late on May 29, this time to provide an escort for the departing minelayer *Meteor*. The *Meteor* split off during the night to go its own way, eventually laying a minefield in the White Sea. The rest of the fleet continued west until 08.00 on May 30, with I SG leading ahead of the battle fleet as usual, and then turned back for home. In the afternoon on the return leg, *Moltke* was narrowly missed by a torpedo from the submarine *E6*. The British were again alerted to the impending operation. The Grand Fleet sortied after dark on the May 29, made rendezvous and conducted a sweep in the North Sea the next day, and turned back on receiving a signal that the Germans were returning to base.

North Sea sweeps, July 1915

From July 11 to 13 the 2nd BCS (*Australia, New Zealand, Indefatigable*) made a sweep down to the Dogger Bank. From July 28 to 31, 2nd BCS with 2nd LCS and destroyers acted in support of the Harwich Force cruisers and destroyers in an operation to intercept German traffic in the Skagerrak. Only one minor German vessel was encountered.

Operations in the Baltic, August 1915

German naval forces mounted an operation to break into the Gulf of Riga. Between August 6 and August 23, I SG (*Seydlitz, Moltke, Von der Tann*) made three sorties into the Baltic to provide protection from possible movements by the Russian battle fleet. *Moltke* was torpedoed by the British submarine *E1* on August 19 and returned home early. (*Derfflinger* was out of service during August for turbine repairs.)

Interception of the minelayer Meteor, August 9, 1915

The German minelayer *Meteor* was pursued from August 8 by cruisers of 1^{st} LCS, 2^{nd} LCS, and the Harwich Force while attempting to return to Germany. *Meteor* was finally intercepted near the Skagerrak and forced to scuttle at midday on August 9. All of this was observed and reported by the Zeppelin *L7* which attempted to guide *Meteor* to safety. No attempt was made by the Germans to send out any surface forces to assist the return.

Cover for minelaying operations, September 1915

A first attempt to lay mines near Horns Reef, supported by the Harwich Force on the night of August 17, was frustrated by a division of German destroyers. It was decided to repeat the operation with a heavier covering force. From September 10 to 12, *Lion* with 1st BCS (*Princess Royal, Queen Mary, Tiger*), 3rd BCS (*Invincible, Indomitable, Inflexible*), 1st and 2nd LCS, and 16 destroyers cruised in the North Sea in support of a mine laying operation conducted by other light forces near Horns Reef on the night of September 10/11. The rest of the Grand Fleet remained in harbor at short notice for steam. Soon afterwards, I SG (*Seydlitz, Von der Tann, Derfflinger*) sortied late on September 11, with the rest of the High Seas Fleet in support, to meet light cruisers that were laying mine barriers on the Swarte Bank (south of the Dogger Bank) during the night. I SG made rendezvous with the cruisers at 04.40 on September 12 and led the return by a roundabout route well to the north of Heligoland Island arriving home at about 19.40. Although the two forces operated through virtually the same waters on consecutive nights there

was no contact. The British force was spotted by Zeppelins but the Germans regarded the British presence as "just a coincidence" (*nur zufälliges Zusammentreffen*). Reportedly Room 40 detected signs of the pending German operation but it was assessed as only a training exercise and the Grand Fleet was not ordered to sea.

Operations off Danish coast, October 19, 1915

Part of the Harwich Force (5th LCS and destroyers) conducted a search off the Danish coast north of Horns Reef during the daylight hours of October 19. They were supported by *Lion* with 1st BCS (*Princess Royal, Queen Mary, Tiger*) and destroyers. No enemy vessels were found and the forces turned for home after dark. During the night of October 19/20 the 1st BCS was diverted to Scapa after a report of possible minelayers being sighted near the approaches to Rosyth. The German airship *L16* failed to detect the operation. One objective of the sweeps during this period was to search for other minelayers like *Meteor* that were believed to pose a threat to the approaches to the British fleet bases.

Reconnaissance of the Skagerrak, October 24, 1915

On the evening of October 23 at 18.30, I SG (*Seydlitz, Moltke, Von der Tann, Derfflinger*) put to sea leading the rest of the High Seas Fleet north past the Amrun Bank and then northwest into the North Sea. The plan was to raid merchant traffic between Britain and the Scandinavian neutrals on the route into the Skagerrak. The Germans were also prepared to engage a portion of the British fleet if it appeared but would not risk battle with the entire Grand Fleet. High winds forced the Zeppelins tasked with reconnaissance ahead of the fleet to turn back and Pohl decided to break off the operation. The forces turned about at 05.00 on October 24 and returned to base. Since the operation ended earlier than planned, the return was in daylight and several of the light cruisers were narrowly missed by torpedoes from submarines near the entrance to the swept channels. On the British side, Room 40 apparently detected the operation but the Grand Fleet only raised steam and did not put to sea.

Sweep of the Skagerrak, November 7, 1915

The 1st and 2nd LCS with destroyers conducted a sweep of the Skagerrak from east to west during the daylight hours of November 7. The intention was to cut off the retreat into the Baltic of any suspicious vessels. Acting in support were *Lion* with 1st BCS (*Princess Royal, Queen Mary, Tiger*), 3rd BCS (*Invincible, Indomitable, Inflexible*) and destroyers. A large number of vessels were stopped and searched but none were identified as enemy.

Support for commerce raid on Danish coast, December 16, 1915

The light cruisers of II SG (*Regensburg, Pillau, Frankfurt, Wiesbaden, Rostock, Strassburg, Stralsund*) with two destroyer flotillas conducted a commerce raid around the coasts of Denmark from December 16 to18. Setting out after dark on December 15, their course took them up the west coast of Denmark, through the Skagerrak and Kattegat, and back through the Danish Belts to Kiel. It was intended that I SG would make a brief sortie on the Amrun Bank route on the morning of December 16 to provide support while I BS waited inside the Jade Bar (Wilhelmshaven) and III BS later met the returning force in Kiel Bay. In the event, heavy fog prevented I SG from leaving harbor so they remained inside on alert. No enemy warships were encountered by the raiders which examined a number of Norwegian and Danish steamers.

Sortie to the Amrun Bank, December 30, 1915

There was a short advance to the Amrum Bank on December 30 by I SG (*Seydlitz, Moltke, Von der Tann*).

Summary and Outcomes

In the early months of 1915, there was little sense of urgency on the British side to try to force a conclusion in the North Sea. When the Grand Fleet did put to sea in response to warnings of a German movement, Jellicoe waited until after dark to sortie so that the fleet would not be spotted by U-boats. This also reduced his chances of it being in time to make an interception the next day. Then in the summer a nationwide coal strike during July and August seriously restricted the movements of the Grand Fleet.

The operations of the High Seas Fleet under Pohl were equally tentative. The German cover sorties for the minelaying operations were very cautious and involved only the minimal exposure necessary to protect the minelayers. The other fleet advances in the spring were too brief to result in anything other than a chance encounter at sea. German radio intelligence eventually detected that the Grand Fleet was coming out in response to German movements (although they did not guess the reason why) and they could have used this information to plan an operation with a serious likelihood of action. The October 24 sortie might have finally brought this to fruition but Pohl was still not willing to risk an action with the entire Grand Fleet and it was called off when weather prevented the Zeppelins from scouting ahead.

The Dardanelles expedition was mounted to open a passage to Russia but the British failed to hedge their bets by making any simultaneous effort towards opening a passage through the Baltic Sea. By the end of 1915 Russia remained as isolated as ever. Meanwhile for the Germans, the opportunity slipped away to draw the British into a major engagement when the relative strengths of the battle fleets were as closely balanced as they would ever be.

The Quest for Battle – January 18, 1916 to February 1, 1917

Admiral Scheer assumed command of the High Seas Fleet on January 18, 1916 when Admiral von Pohl stepped down because of illness. Scheer immediately took a more aggressive posture. It was never his policy to confront the full strength of the Grand Fleet head-to-head but he believed that he had the chance to create opportunities for attacking portions of the British fleet and defeating them in detail. Part of his strategy involved using what could today be termed a "combined arms approach", employing his Zeppelins for operational reconnaissance and U-boats to ambush and whittle away at the British strength. The Neumünster station for signals interception and direction finding was also operational and provided valuable intelligence on British activity.

There was also a growing disquiet in both the English public and the Royal Navy at the lack of results in the previous year. The long anticipated "second Trafalgar" had still not been fought. The Admiralty had rejected every scheme that was proposed for "rash" offensive actions in the coming year but there remained a growing sense that perhaps more could be done. With prompting from First Sea Lord Jackson, Jellicoe began to mount operations near the German coast that were designed to lure the High Seas Fleet out of its bases.

Composition of Forces

The battlecruiser forces were almost unchanged from the previous year. The Battle Cruiser Fleet commanded by Beatty, comprised *Lion* (Flagship), 1st BCS (*Princess Royal, Queen Mary, Tiger*), 2nd BCS (*Australia, New Zealand, Indefatigable*), 3rd BCS (*Invincible, Indomitable, Inflexible*). (Tactically, *Lion* acted as a unit of 1st BCS.) Across the North Sea, Admiral Hipper commanded I SG (*Seydlitz, Moltke, Von der Tann, Derfflinger*) with *Lützow* working up and due to join in March. The first line strength of the Grand Fleet had grown to 28 Dreadnoughts. The 7 surviving pre-Dreadnoughts of the 3rd BS no longer operated with the Grand Fleet and in April they were transferred to Sheerness for coastal protection duties. The High Seas Fleet continued with 17 Dreadnoughts and 7 pre-Dreadnoughts. The pre-Dreadnoughts of II BS participated in most operations until after Jutland.

Beatty lobbied hard but unsuccessfully to have the new fast battleships of the 5th BS (*Queen Elizabeth, Warspite, Barham, Valiant, Malaya*) included in his force. Fortuitously the 5th BS was with Beatty at Jutland because of a temporary exchange for 3rd BCS which had gone to Scapa to use the gunnery training range.

Operations in the Skagerrak, January 26-28, 1916

The 2nd BCS (*Australia, New Zealand, Indefatigable*) and 1st LCS left Rosyth with destroyers on January 26 for operations in the Skagerrak. 1st LCS swept through the Skagerrak on January 27 with 2nd BCS in support. The sweep, with the addition of 4th LCS, was repeated from a different direction the next day. Considerable traffic was observed inside of Norwegian territorial waters but no vessels were intercepted outside territorial waters. The remainder of the Battle Cruiser Fleet remained at short notice for steam during the operation. At the same time the Harwich Force with seaplane carrier *Vindex* approached the Schleswig coast for an intended attack on the Zeppelin bases on January 29. They withdrew after a submarine attack and the onset of dense fog.

Search for missing airship, February 2, 1916

Derfflinger and *Von der Tann* made a short advance into the North Sea on February 2 to search unsuccessfully for the missing Zeppelin *L19* which had failed to return from a bombing raid on England.

Support for TBF advance, February 11, 1916

I SG (*Seydlitz, Moltke, Von der Tann, Derfflinger*) sortied at 00.20 on February 11 to support a nighttime operation by II, VI, and IX TBF on the Dogger Bank. The torpedo boats sank the British minesweeper *Arabis*. The support forces were back in harbor by 12.35 of the same day. On first news of the raid, the Grand Fleet and the Battle Cruiser Fleet raised steam and put to sea but were recalled when the situation had clarified.

Planned sweep of the Heligoland Bight, February 26, 1916

The Grand Fleet put to sea for a planned sweep of the Heligoland Bight, in combination with the Harwich Force, on February 26. The operation was abandoned after the weather conditions were reported to be unsuitable.

Cover for return of Mowe, March 4, 1916

A short fleet advance to the Amrun Bank by I SG, IV SG, and I BS met the auxiliary cruiser *Mowe* in the early morning of March 4 and returned to port in the afternoon.

Advance to the Hooften, March 6, 1916

The first major operation under Scheer's command was a fleet advance to the Hooften (the sea area off Holland) with the objective of cutting off and destroying any British light forces in the area. I SG (*Seydlitz, Moltke, Von der Tann, Derfflinger*) sortied at 19.30 on the evening of March 5, in company with II SG and followed by I and III BS of the High Seas Fleet. The Scouting Groups reached a position off the Texel by 08.55 the next morning before turning back without encountering any significant shipping. Later on the afternoon of March 6 the I SG supported the advance of a light cruiser screen to the Dogger Bank. All the forces returned to harbor by midday on March 7. The Grand Fleet set out to intercept when it was learned that the Germans were at sea and ran into a heavy easterly gale. The weather forced a significant speed reduction, especially for the destroyers, and the Grand Fleet reversed course at around midnight of March 6/7 when it became apparent that an interception was not possible.

Attempted sweep off the Norwegian coast, March 11, 1916

The Battle Cruiser Fleet attempted an operation on March 11 in support of 1st LCS to search for German merchant ships outside of territorial waters near Stadlandet on the Norwegian coast. The operation was canceled when the weather became too severe for destroyers to continue in company with the force.

Attack on Schleswig Zeppelin sheds, March 25, 1916

The Harwich Force escorted the seaplane carrier *Vindex* to a location off the coast of Schleswig for an early morning air attack on March 25 against the suspected Zeppelin base at Hoyer. The Battle Cruiser Fleet stood by in support at a point 45 miles west of Horns Reef. Five aircraft were launched with the only result being to discover that there were no airship sheds at Hoyer. The destroyers posted to recover the returning aircraft engaged some German trawlers that they

encountered. Two of the destroyers collided, and much time was lost while the weather deteriorated before it was decided to abandon and scuttle one of the stricken ships. Then after dark, two German destroyers stumbled upon the scene. The light cruiser *Cleopatra* rammed and sank one of them only to be rammed in turn by *Undaunted* which left the latter limping at a slow speed.

Meanwhile the Germans had become aware of the British location from wireless intercepts and were reacting. The High Seas Fleet sortied in the early hours of March 26 with I SG (*Seydlitz, Moltke, Derfflinger, Lützow*) in the lead. Belatedly the rest of the Grand Fleet also sortied from Scapa Flow into heavy seas. The Battle Cruiser Fleet advanced to meet the Harwich Force and cover the withdrawal of *Undaunted*. Momentarily the Germans had the opportunity to fall upon an inferior British force and defeat it but they were unaware of the full situation. At 07.30 the I SG turned back because the seas had become too heavy for the destroyers to continue and Hipper signaled to Scheer that an engagement would be impossible. The British finally struggled home the next day.

Operations off the Danish coast, April 21-23, 1916

On April 20 a British cruiser force sortied for a sweep into the Kattegat to disrupt German merchant traffic. Radio intercepts in recent days had led the Germans to believe that another raid against the Tondern airship base was imminent and fresh intercepts detected this British sortie but magnified the size of the force. During the night on April 21, *Moltke* and *Derfflinger* made an unrelated short advance to cover the return of IX TBF. Later in the morning of April 21, IV SG with *Von der Tann* advanced to the Amrun Bank to search for British forces but found nothing. Scheer then ordered the High Seas Fleet to concentrate the next day south of Horns Reef. I SG (*Von der Tann, Seydlitz, Lützow*) with light forces put to sea at 20.00 on April 21 followed by the main body at 22.00. *Derfflinger* followed later.

Room 40 had in turn intercepted some of the German signals. The Kattegat sweep was canceled and the entire Grand Fleet was ordered to sea on April 21 with the Battle Cruiser Fleet directed to take a position 40 miles in advance of the battle fleet on the morning of April 22. The Germans failed to detect their departure. During the morning of April 22, the Zeppelins *L20*, *L21*, and *L9* and the scouting ships of I and II SG searched the region of the Heligoland Bight and the Danish coast that a force would need to enter in order to launch an airstrike against Tondern. When nothing was found, Scheer ordered all ships to return to harbor at 16.40.

Meanwhile on the morning of April 22, Jellicoe had been informed that the High Seas Fleet was at sea. The 4th LCS was ordered to advance to the Skagerrak and make a sweep, east to west, on April 23 with the hope of drawing out the Germans. The Battle Cruiser Fleet was directed to advance towards Horns Reef with the battle fleet in support. But at 15.00 on April 22, a dense fog descended. Three hours later the battlecruisers *Australia* and *New Zealand* collided and were sent home badly damaged. During the night, battleship *Neptune* collided with a merchant ship and three destroyers had a triple collision. In view of the conditions, a general withdrawal began on the morning of April 23 with the Grand Fleet remaining on the scene until midmorning to cover the damaged ships.

Lowestoft Raid, April 25, 1916

Scheer now launched the second major fleet advance under his command, a raid on Lowestoft and Yarmouth intended to draw out the British forces. The date of the bombardment was set for April 25 to correspond with the planned Irish uprising on Easter Sunday. I SG (*Seydlitz*,

Derfflinger, Moltke, Lützow, Von der Tann) with 6 light cruisers and 2 TBF put to sea at 09.55 on April 24 (with Boedicker in temporary command) followed at 12.40 by the main body of the High Seas Fleet. *Seydlitz* struck a mine at 14.48 and returned to port while the rest of the force altered course to avoid the mined area and continued west. Room 40 apparently detected the German activity early but there were delays in ordering the response. At 15.50 the Grand Fleet was put on "two hours notice", then ordered to raise steam and put to sea at 19.05, and was finally heading south against heavy seas before midnight. On this occasion Jellicoe detached the 5th BS from the Grand Fleet and sent it ahead to strengthen the Battle Cruiser Fleet (*Lion, Tiger, Princess Royal, Queen Mary, Indefatigable, Invincible, Indomitable, Inflexible*) which sortied from Rosyth.

The next morning, April 25, I SG had a brush with the Harwich Force (3 light cruisers and 18 destroyers) at 03.50 and continued on to commence a 53 minute bombardment of Lowestoft at 04.11. The force then turned north for a brief bombardment of Yarmouth which was largely shrouded in fog. I SG sparred again with the Harwich Force, caused some damage, but made no attempt at pursuit. Wind conditions were preventing the Zeppelins from reaching their intended stations to cover Scheer's flank and at 09.20 he ordered a general retirement which proceeded uneventfully. Beatty rounded the corner of the Dogger Bank at 08.07 and pressed on hard through the morning with the Battle Cruiser Fleet, far in advance of the 5th BS and the Grand Fleet. He finally gave up the chase at 12.40 and turned back for his base. A comparison of the track charts suggests that he missed intercepting the retiring I SG by about 45 miles. In a later letter to Jellicoe, Beatty complained that the forces could have been at sea 3 ¹/₂ hours earlier on April 24 if the Admiralty had not delayed in passing on the alert.

Attempted raid on Tondern, May 4, 1916

British forces put to sea on the afternoon of May 2 to carry out another air attack on the Tondern Zeppelin sheds with the hope that the attack might also draw out the High Seas Fleet. Coincidentally, a raiding force of eight Zeppelins attacked England during the night of May 2/3. *L20* was damaged and radioed being driven towards Norway by strong winds. I SG (*Derfflinger, Moltke, Lützow*) put to sea in the early morning of May 3 to search for *L20* and steamed for eight hours towards Norway. They were recalled in midafternoon after *L20* made a forced landing in a Norwegian fjord. If they had steamed north for a few more hours there might have been a surprise meeting engagement with the approaching British.

The British operation began with the laying of mine fields by *Abdiel* and *Princess Margaret* near Horns Reef and Terschelling during the night of May 3/4. At dawn on May 4, 1st LCS escorting the seaplane carriers *Vindex* and *Engadine* was in location near Horns Reef. The Battle Cruiser Fleet (*Lion, Tiger, Princess Royal, Queen Mary, Indefatigable, Indomitable, Inflexible*) with destroyers was in a supporting position nearby. Farther north was the main body of the Grand Fleet. Eleven aircraft were hoisted into the choppy waters but only one managed to get into the air and underway. The appearance of the single aircraft, which dropped one bomb on Danish soil, prompted the Germans to send the Zeppelins *L7* and *L9* out on a search mission. *Galatea* and *Phaeton* of 1st LCS saw the *L7* in the distance, decided to try a few rounds from their 6" guns, struck the fuel tank, and sent *L7* crashing into the sea in flames before it could radio a sighting report. The Germans had still not noticed the bait that was intended to lure them into a trap and Jellicoe next compounded the problem when he decided that the fleet had spent long enough in the vicinity of Horns Reef. He ordered a general retirement at 14.00 because his destroyers were nearing the end of their endurance.

In fact, the submarine *U24* had sighted the Grand Fleet and made a report at 13.10. The High Seas Fleet began to come out at 15.00, first destroyers and later I SG (*Derfflinger, Moltke, Lützow, Von der Tann*) and the battle squadrons (except for 5 ships of III BS that were transiting the Kiel Canal). The Germans sortied as far as the Sylt and finding nothing turned back for their base at 04.00 on May 5.

Planned demonstration in the Kattegat, June 2, 1916

The British planned an operation to take place on June 2, designed to draw out the High Seas Fleet. Two light cruiser squadrons would enter the Kattegat and sweep as far as the Great Belt with a battle squadron in support in the Skagerrak. Farther back would be the Battle Cruiser Fleet and the rest of the battle squadrons, ready to spring if the Germans responded to the bait. The plan was preempted by the Jutland action.

Planned Sunderland raid, May 1916

In response to pressure from the United States after the *Sussex* incident, the German high command issued orders that from April 24 the U-boat offensive against commerce would only continue under the Prize Regulations. The next day Scheer rejected that option and sent out a recall signal to all of the German based U-boats then at sea. With the abandonment of the U-boat offensive in the North Sea (but not the Mediterranean) a substantial force of U-boats became available to operate in coordination with the High Seas Fleet against warships.

The Germans planned an operation that would repeat many of the features of the earlier Lowestoft Raid with the addition of an enlarged force of U-boats lying in wait outside the British bases. I SG would bombard Sunderland to draw out the Battle Cruiser Fleet, which would hopefully pass through a U-boat trap as it sortied. I SG would then lead them to the German battle fleet, near Flamborough Head, where they could be engaged before the Grand Fleet arrived. The operation was originally scheduled for May 17 but was set back to May 23, and then again to May 29, because of delays in repairing the mine damage to *Seydlitz*. By that date the weather had become unsuitable for Zeppelin reconnaissance which was considered an essential part of the plan to prevent the High Seas Fleet from being surprised if the Grand Fleet was already at sea. Since the U-boats were already on station outside the British bases, a less ambitious plan for an advance to the Skagerrak was substituted instead.

Battle of Jutland, May 31, 1916

Scheer now set the High Seas Fleet in motion for the Skagerrak operation. I SG with the II SG and other light forces put to sea at 01.00 on May 31 followed by the battle squadrons at 02.30. Course was set to the north so that the scouting groups could show themselves off the coast of Norway in the early morning of June 1. Once again, Room 40 had discerned the German intent to sortie (but not the direction or target of their movements) and the Grand Fleet and Battle Cruiser Fleet were at sea by 22.30 on May 30. Lacking any specific information about the German objectives, Jellicoe designated the point where the Grand Fleet and Battle Cruiser Fleet were to rendezvous the next afternoon in the central North Sea so as to cover multiple eventualities. It was far enough north to act against a raid on the Northern Patrols while also being far enough south and east to cut off the retirement of a raid against an English coastal target. Notably in view of the importance that Scheer had placed on the 18 U-boats stationed near the British bases, only one fired torpedoes which missed and their reports contained no information of value.

Through the early hours of May 31, the two fleets approached each other unawares. At 14.20 in the afternoon Beatty had just completed a course change from east to north to head towards the rendezvous point when Galatea on the extreme eastern wing of the formation signaled "Enemy in sight." The Danish freighter N J Fiord midway between the British and German formations had drawn in scouts from each and "catalyzed" the start of the battle at least an hour (and possibly as much four hours) before it otherwise would have begun. Beatty and Hipper turned their forces towards each other and closed until suddenly at 15.30 Lion sighted the enemy column and opened fire at 15.48. Both forces altered course to the south and began engaging in parallel lines; 1st BCS (Lion, Tiger, Princess Royal, Queen Mary) and 2nd BCS (New Zealand, Indefatigable) versus I SG (Lützow, Derfflinger, Seydlitz, Moltke, Von der Tann). Due to an earlier confusion with signals, 5th BS (Barham, Valiant, Warspite, Malaya) began the engagement 10 miles back and took time to draw within range. During the Run to the South, Indefatigable and Queen Mary were lost to magazine explosions, Seydlitz was torpedoed during the destroyer melee between the lines and other ships were significantly damaged. At 16.30 Southampton leading 2nd LCS made the first sighting of the main body of the High Seas Fleet approaching from the south. Within minutes the battlecruiser forces reversed course and began the Run to the North.

The meeting engagement with the Grand Fleet battle line was confused by poor visibility and faulty position reporting. Jellicoe deployed his line without being observed by the German scouts which had been headed off by 1st BCS. *Defence* and *Warrior*, part of 1st CS, charged between the lines to engage the stricken *Wiesbaden* and were shot to pieces by I SG. When 3rd BCS (*Invincible, Inflexible, Indomitable*) appeared on the east flank they began an engagement with I SG that quickly resulted in the explosion of *Invincible*. As the German III BS entered the fray leading the High Seas Fleet, it found its T crossed and executed a simultaneous battle turn away to break contact. Groping through poor visibility and gathering darkness, Scheer reversed course again, struck the British line, and again had to break away, this time covering his retreat by a destroyer torpedo attack and a charge by I SG. The British turned away from the torpedoes and contact was lost once more. Fleeting contacts at last light produced no results and the fleets assumed their night cruising formations.

Jellicoe expected to resume the battle in the morning and wanted to avoid the risks of a night action so he drew the battle squadrons into a compact mass of parallel columns steaming south with his destroyers deployed in the rear. Scheer drew his own fleet into a single line ahead and steered a SSE course for Horns Reef. During the night the Germans passed across the rear of the Grand Fleet, scattering the British destroyer flotillas in a series of confused actions. *Pommern* was lost to a torpedo attack but incredibly none of the destroyers reported their encounters to Jellicoe. By dawn the Germans were in the clear having reached Horns Reef with the Grand Fleet nowhere in sight. Of the battlecruisers, *Derfflinger* and *Von der Tann*, both badly damaged, attached themselves to the rear of Scheer's battle line. *Lützow* succumbed to progressive flooding during the night and was scuttled after destroyers removed the crew. *Moltke* and *Seydlitz*, each sailing alone, slipped like ghosts around and through the Grand Fleet, frequently sighted but never fired upon, and returned home safely.

Jellicoe was poorly served by both the Admiralty and his subordinates who failed to pass on crucial information. Nonetheless, if Jellicoe had given more credence to even the information he did possess he could have drawn the conclusion that the High Seas Fleet was seeking to return home via the Horns Reef route in time to have positioned the Grand Fleet across its path of escape. This would have led to a resumption of the battle at dawn with unknowable results since

visibility in the area of Horns Reef that morning was 3 miles or less with patchy fog. Instead the Grand Fleet cruised on an empty sea, littered with wreckage from the previous day, and belatedly set course for home.

In the aftermath of the losses at Jutland, the 3rd BCS was dissolved and the Battle Cruiser Fleet was reorganized on June 2 as *Lion* (flag), 1st BCS (*Princess Royal, New Zealand, Tiger*), and 2nd BCS (*Australia, Indomitable, Inflexible*).

Sunderland Raid, August 19, 1916

With most of the repairs of the Jutland damage completed, Scheer planned another operation that would attempt to catch a portion of the British fleet at a disadvantage. This time the planned bombardment of Sunderland would take place near sunset so that the fleet could withdraw in darkness. The 24 U-boats available were deployed in five groups across the probable British lines of advance instead of around the exits from their bases. Eight Zeppelins were deployed to provide early warning of the British approach. The High Seas Fleet put to sea at 20.00 on August 18. I SG (*Moltke, Von der Tann, Bayern, Grosser Kurfürst, Markgraf*) was strengthened with fast battleships because *Seydlitz* and *Derfflinger* were still under repair. The battle fleet sortied with I and III BS while the II BS of pre-Dreadnoughts was left behind for harbor defense.

Room 40 discovered the impending operation and the alert went out in time for the Grand Fleet to be at sea before the Germans. The Grand Fleet sortied at 16.00 on August 18 and 18.20 saw the departure of the Battle Cruiser Fleet; *Lion* plus 1st BCS (*Princess Royal, New Zealand, Tiger*) and 2nd BCS (*Australia, Inflexible*). The fleets made rendezvous east of Rosyth the next morning and proceeded south with the Battle Cruiser Fleet being kept within visual distance of the Grand Fleet. Then at 05.57 on August 19, the screening cruiser *Nottingham* was torpedoed by *U52* and sank an hour later. Uncertain whether *Nottingham* had been mined or torpedoed and fearing a trap, Jellicoe reversed course and steamed north for two hours before resuming course to the south. In the meantime, battleship *Westfalen* was torpedoed at 06.05 by *E23* and broke wireless silence to report it before turning back for base. Room 40 soon decoded the Germans location and passed the information to Jellicoe.

The two fleets continued to converge until noon when everything was upended by an erroneous sighting report from Zeppelin *L21*. *L21* mistook the small Harwich Force (5 cruisers and 20 destroyers), 60 miles to the south of Scheer, for a much larger force including battleships and signaled this to Scheer at 12.03. Scheer grasped at the opportunity to overwhelm a small but valuable British force, abandoned the plan to bombard Sunderland, and changed course to pursue. By 14.35 Scheer had found nothing (the Harwich Force was also steaming south), *U53* had made a sighting report of the Grand Fleet, and it was too late to resume the original plan. Scheer set course for home. Beatty and Jellicoe continued south during the afternoon with high hopes of an impending battle until Room 40 passed the information at 15.46 that Scheer had turned for home. The Grand Fleet return to its own bases was plagued by a string of U-boat sightings and the torpedoing of the light cruiser *Falmouth* which sank the next day. The track chart of the operation suggests that without the four hour delay from the backtracking after *Nottingham* was attacked, the two opposing fleets might have come together at about noon. Alternatively, if Scheer had continued towards Sunderland, without the *L21* diversion, he might have found his own retreat cutoff with the Grand Fleet to the east of him in the late afternoon.

Three Conferences, Summer 1916

Three conferences took place at this time that would have a marked impact on the future course of the North Sea campaign. On August 31, the question of unrestricted U-boat warfare was debated again by the German high command without reaching a final resolution. As an interim compromise it was decided to resume commerce warfare under Prize Regulations. Scheer raised no objections, even though it meant that the U-boats would soon become unavailable to cooperate with the High Seas Fleet, because he saw it as a step towards the unrestricted campaign which he supported.

On September 13 at a conference aboard the Grand Fleet flagship *Iron Duke*, it was resolved that the risks from submarines and minefields were so great as to justify an even more cautious policy in the employment of the Grand Fleet. The frequent U-boat alarms and the loss of two ships during the August 19 operation had shaken the confidence of Jellicoe and Beatty in their ability to operate in submarine infested waters. Jellicoe produced a memorandum stating that only "under exceptional conditions" would the Grand Fleet go south of latitude 55.30 (this being roughly the latitude of Newcastle and Horns Reef). This left the entire southern coast of England exposed to potential German raids which the Grand Fleet would no longer attempt to respond to preemptively and in general had the effect of curtailing most operations by the capital ships in the southern portion of the North Sea. The essence of this cautious policy was reasserted by Beatty in January 1918 and remained in effect until the end of the war.

Also at about this time word reached British ears, through Swedish intermediaries, that the Germans were mocking the ineffectiveness of the British AP shells at Jutland. Many AP shells had either broken or exploded on impact (before penetration) upon hitting heavy armor. Ultimately a Shell Committee was formed in March 1917 under Captain Dreyer to test the shells and recommend changes. The result was the wholesale redesign and replacement of all the heavy caliber ammunition. The new shells, known familiarly as "Green Boys", did not begin to reach the fleet in quantity until April 1918 and the replacement was not complete until the summer. During the interim the realization of the problem, known only at the highest levels, could only have added to the desire for caution in the employment of the fleet.

Sweep to the Naze, September 4, 1916

The 2nd BCS with 2nd LCS and destroyers made a sweep from Rosyth in the direction of the Naze (Norwegian coast), then southward to the Little Fisher Bank (east of the Dogger Bank), and back to Rosyth.

Planned North Sea operation, September 1916

Scheer planned another High Seas Fleet operation into the North Sea in September. It would have been of a similar nature to the August raid but bad weather forced its cancellation on September 19. Then with the resumption of the U-boat war against commerce, Scheer lost the opportunity for any further joint operations with the submarines.

Cover for TBF advance, September 26, 1916

Von der Tann, Moltke, and *Bayern* sortied late on September 25 to support an operation by II SG and II TBF against convoy traffic near the Maas light vessel. The returning ships were met at 05.25 on September 26 and the force returned to port by 12.45.

Sweep to the Naze, September 30, 1916

The Battle Cruiser Fleet (*Lion*, 1st BCS, 2nd BCS, 2nd LCS) made a sweep from Rosyth in the direction of the Naze on September 30 and then proceeded to Scapa.

Sweep to Little Fisher Bank, October 7, 1916

The Battle Cruiser Fleet with 2nd LCS left Scapa on October 7 and swept to the Naze and then the Little Fisher Bank to examine trawlers.

Sortie into the North Sea, October 19, 1916

Scheer planned another operation, this time without U-boat support, which would advance the High Seas Fleet to the middle of the North Sea and then send the light forces ahead to raid commercial traffic and take prizes. I SG (*Von der Tann, Moltke*) put to sea at 22.00 on October 18 followed by the rest of the High Seas Fleet. Eight Zeppelins scouted ahead at daybreak. I SG scouted along the eastern edge of the Dogger Bank at midday but deteriorating weather prevented the full deployment of the light forces. The submarine *E38* evaded the screen and torpedoed light cruiser *München* which was towed home. At 14.00 Scheer called off the operation and the forces turned back, reaching their bases during the night. Room 40 had picked up the operational order for the sortie but not the specifics. At 19.46 on October 18 the Grand Fleet was put on short notice to raise steam. In line with the new strategy, Jellicoe waited for the German intentions to become clear before responding and ultimately did not put to sea.

Support for TBF transfer, October 23, 1916

Von der Tann and *Moltke* were at sea on October 23 to support the transfer of III and IX TBF to the Flanders base.

Cover for rescue of stranded U-boats, November 5, 1916

Scheer dispatched *Moltke* and *Seydlitz* together with the battleships *Grosser Kurfürst, König, Markgraf,* and *Kronprinz* to provide cover for an attempt to rescue U20 and U30 that had gone aground on the north Jutland coast. During the return trip, *Grosser Kurfürst* and *Kronprinz* were torpedoed by the submarine J1. There were recriminations from the Kaiser about the risk of exposing valuable ships on such a questionable mission.

Advance to cover returning airships, November 28, 1916

Moltke was part of an advance to cover the return of the missing airship *L21* which had however been shot down just off the coast of England.

Changes in command, November 29, 1916

On November 29 it was announced that Jellicoe would become the new First Sea Lord. Beatty was elevated to take his place in command of the Grand Fleet. In turn, Pakenham (previously in command of 2nd BCS) assumed command of the Battle Cruiser Fleet which became the "Battle Cruiser Force" at this time.

Cover for TBF advance, December 28, 1916

Moltke and *Derfflinger* made a brief advance into the North Sea on December 28 as cover for a TBF force.

Cover for advance by IV TBF, January 30, 1917

Seydlitz and *Derfflinger* departed after midnight on January 30 and ran out to the west to meet the returning IV TBF. All forces returned to base by midday.

Summary and Outcomes

So long as both sides maintained an aggressive posture it was almost certain that a battle would take place during this period. A number of early opportunities vanished because of mistakes, excessive caution, and strokes of fortune but on the afternoon of May 31 the rival fleets finally met. The battle of Jutland failed to produce a decisive result, in part because it began with only a few hours of daylight remaining and the British lacked the doctrine and the means to maintain contact and prevent the German fleet's escape during the night.

The High Seas Fleet put to sea again in August for the same type of operation that they had mounted in April and May. This time Scheer's U-boat trap succeeded in sinking two British cruisers. Although the material loss to the Grand Fleet was small, Jellicoe was so alarmed by the flurry of submarine sightings on August 19 that on September 13 he issued a directive restricting the Grand Fleet from operating in the southern half of the North Sea. This was the actual decisive moment of the 1916 campaign. Wartime propaganda would boast that after Jutland the High Seas Fleet remained confined to its harbors but the reality of Jellicoe's September 13 decision was a *de facto* standoff in the North Sea. It left the Germans in full control of the waters surrounding the Heligoland Bight including the entrances to the Baltic. The High Seas Fleet continued to operate there in the remaining months of 1916 without being challenged by the Grand Fleet.

The U-boat Years – February 1, 1917 to November 11, 1918

On February 1, 1917, Germany embarked upon the unrestricted U-boat campaign, in no small part because it was seen as the only option where Germany could assume the offensive in a war where the army had increasingly been forced onto the defensive. From this date on the High Seas Fleet became, in Scheer's words, "the hilt of the sword" while the U-boats were the blade. Its primary mission became keeping the British at a distance from the U-boat bases, protecting the mine sweepers that kept open the swept passages through the minefields, and in any other way advancing the war against commerce. Secondarily, the continued existence of the High Seas Fleet also served to maintain the vital German control of the Baltic Sea including the shipping lanes to Sweden. Many of the best personal were transferred away to the U-boats but the fleet remained trained and operational until the last days of the war.

The U-boat campaign also had an impact on the Grand Fleet as resources, especially personnel and destroyers, were increasingly diverted away to the escort forces. Beatty also had misgivings about the balance of battlecruiser strength believing that the four oldest as well as the two newest of these ships (*Repulse* and *Renown*) were so weakly protected that they were inferior to any of the existing German ships. He also expected that three new (in fact only one) ships of the *Hindenburg* class would enter service by 1918. Nonetheless, Beatty's greatest frustration was the prospect that the war could end without the opportunity for "a second Jutland." What the Grand Fleet principally lacked was any means, without incurring undue risks, of drawing the High Seas Fleet out onto the open seas to do battle.

Composition of Forces

The new battlecruisers *Renown* and *Repulse*, completed in late 1916, were soon taken in hand again to strengthen their deck armor, and then joined the 1^{sr} BCS. The composition of the Battle Cruiser Force (BCF) in early 1917 then became; 1st BCS (*Lion, Princess Royal, Tiger, Renown, Repulse*), 2nd BCS (*Inflexible, Indomitable, New Zealand, Australia*). At various dates *Lion, Tiger*, and *Renown* each served as the BCF flagship. Beatty lobbied again after Jutland to have the 5th BS permanently attached to the BCF but this was refused by Jellicoe. The "large light cruisers" *Glorious* and *Courageous* commissioned into the 3rd LCS (later redesignated 1st CS) in early 1917. They frequently operated in a supporting role with other cruiser squadrons but never as true "battlecruisers" and their detailed movements are largely outside the scope of this document.

On the German side, only *Moltke* was serviceable immediately after Jutland. For a time it became the practice to bolster the strength of I SG with fast battleships from the newer *Bayern* and *König* classes. Once the Jutland repairs were completed, the composition was again; I SG (*Seydlitz, Moltke, Von der Tann, Derfflinger*). *Hindenburg* joined the I SG in October 1917. *Mackensen* was launched on April 21, 1917 and *Graf Spee* on September 15 but neither was ever completed even though by 1918 the British were convinced that *Mackensen* was an active member of I SG. (See also Appendix 1.)

On February 1, 1917, the first line strength of the Grand Fleet had grown to 32 Dreadnoughts opposed by the High Seas Fleet with 18 Dreadnoughts. The German pre-Dreadnoughts had been dropped from first line service after Jutland.

Raid on the Hoofden, February 21-22, 1917

The light cruiser *Graudenz* led a torpedo-boat flotilla on a raid into the Hoofden (southern North Sea) on the night of February 21/22. *Moltke* and *Von der Tann* put to sea to act as cover for the advance and to meet the returning ships.

Planned raid against Dutch convoys, February/March 1917

Scheer made plans for a raid by the High Seas Fleet during February 1917 against the cross-Channel convoys to Holland in the Hoofden. The intention was to sweep the convoy route with cruisers and destroyers under bright moonlight conditions while the battle squadrons waited nearby in support. The Kaiser insisted that Zeppelin reconnaissance be undertaken to prevent the force being surprised by the Grand Fleet. The fleet operation was ready to be launched on February 25 to coincide with a raid by the Flanders torpedo-boat flotillas. It was canceled at the last minute on account of "unfavorable light conditions" although the Flanders operation went ahead with mixed results. Scheer issued a warning order to conduct the raid on the night of March 10 regardless of the weather, but the Kaiser insisted that Zeppelins must be able to accompany the fleet. The raid continued to be deferred by bad weather and was later shelved as the energies of the fleet were directed to support of the U-boat campaign.

Support of mine laying operations, April 1917

In April 1917, Jellicoe asked Beatty to make a demonstration in the North Sea to relieve possible pressure on the Russian Fleet during the ice-breaking season in the Gulf of Finland (the period when the defensive mine fields needed to be relaid). In response, the Battle Cruiser Force made a sortie in late April to the Little Fisher Bank (west of the Jutland Bank) acting as a covering force for a mine laying operation.

Projected landing on the Belgian coast, August 1917

Preparations were made to land the 1st division of the 4th Army with 24,000 men and tanks behind the German lines on the Belgian coast in aid of a major offensive to retake Zeebrugge and Ostend. Large pontoons, 550 by 32 feet, were constructed to carry the men and equipment ashore. Monitors and light forces would have been in close support while the heavy German coastal defense batteries were to be masked by smoke screens. The Grand Fleet would presumably have provided distant cover against any response by the High Seas Fleet. The projected landing was part of the larger plan for the British offensive that became the Third Battle of Ypres. The landing was set to take place as soon as the army advance reached the key railway junction of Roulers, expected to be between August 4 and 8. As things developed, the land offensive bogged down far short of Roulers and the landing date was repeatedly postponed and then finally called off on September 23.

Cover for minelaying operations, August 1917

Ships of the 1st BCS (*Lion, Tiger, Repulse, Renown*) left Rosyth on the morning of August 10 followed by 2nd BCS (*New Zealand, Australia*) in the afternoon. Light cruisers including 1st LCS, mine laying cruisers, and destroyers left Rosyth on August 12. The minelayers put down a field in the Horns Reef area on the night of August 13/14 and returned to Rosyth while 1st LCS remained and patrolled near the Danish coast in daylight on August 15 and then returned to Rosyth next day. The cruisers repeated the operation departing Rosyth on August 18 with minelayers operating on the night of August 19/20 and patrols off the Danish coast on August 20

and 21. Given the similarities to the September operations it is likely, but not confirmed, that the battlecruisers also provided distant cover during these August operations.

Cover for minesweeping operation, September 5-6, 1917

The 2nd BCS left Rosyth on August 30 followed by 1st LCS on August 31. At first light on September 1 the force of three battlecruisers, four light cruisers, and eight destroyers conducted a sweep towards the Jutland coast and intercepted two U-boats escorted by four German mine sweeping trawlers. The U-boats dived and escaped but the trawlers were chased and destroyed inside Danish waters. On September 5-6 the force provided cover for a British mine sweeping operation on the Horns Reef by Flower class mine sweeping sloops intended to create sea room for later operations. 2nd BCS returned to Rosyth on September 8.

Cover for mine sweeping operation, September 11, 1917

The 1st BCS and 1st LCS plus *Galatea* left Rosyth on September 10 and met the mine sweeping force near the northeast corner of the Dogger Bank on the morning of September 11. Sweeping was conducted during the day and the force returned to Rosyth by the next morning.

Operations in the Baltic, October 1917

A major German force including *Moltke* (flagship) and ten battleships provided cover and support for Operation Albion, the amphibious assault on the islands in the Gulf of Riga, from October 12 to November 2, 1917.

First Scandinavian convoy attack, October 17, 1917

German cruisers *Brummer* and *Bremse* ambushed and destroyed a Scandinavian convoy off the coast of Norway at 06.00 on October 17. Despite receiving some advance intelligence from Room 40 the attempt to cut off the return of the German ships was fumbled. The Admiralty deployed several squadrons of cruisers including 1st CS (*Courageous, Glorious*) in the Skagerrak and southern North Sea but all of these were evaded. The German I BS with escorts sortied 120 miles north to meet the returning cruisers.

Demonstrations in the North Sea, October 1917

As a gesture to relieve pressure on the Russians in the Baltic the Admiralty directed that "several squadrons" should cruise in the North Sea to attract German attention. When pressed by the Russian Naval Attaché, Jellicoe expanded the operation into a raid of the central Kattegat in late October. Light cruisers and destroyers sank a few small German vessels while the Battle Cruiser Force and 2nd BS provided distant support.

Escort for U-boat convoy, November 2, 1917

Derfflinger plus five battleships provided support for minesweepers in the outer Heligoland Bight and a convoy of U-boats exiting into the North Sea.

Cover for Torpedo Boat return, November 13, 1917

Moltke, Derfflinger, and IV SG (light cruisers) sortied on November 12 to the edge of the Heligoland Bight mined area. The next morning, they met the 14th TB Half Flotilla returning from an operation in the North Sea.

Second Battle of Heligoland Bight, November 17, 1917

German minesweepers operated regularly at the outer edge of the Heligoland Bight mined area to maintain swept lanes for transiting U-boats. The British saw an opportunity to ambush these forces and their escorts. The attack force comprised 1st CS (Courageous, Glorious), 6th LCS, and 1st LCS with 1st BCS (*Lion, Princess Royal, Tiger, New Zealand, Repulse*) in immediate support and 1st BS in distant support. The British sortied from Rosyth at 16.30 on November 16 and approached the mined area at 07.00 the next morning. The German force; two half flotillas of minesweepers, II SG (Königsberg, Frankfurt, Pillau, Nürnberg), and eight destroyers was taken completely by surprise. The German ships immediately fled to the southeast making smoke screens and maneuvering wildly. They were pursued into the mined area by the three cruiser squadrons and *Repulse* operating independently. The chase continued for some two hours with minimal damage to both sides and the British hoping to deal a decisive blow while the Germans hoped to lead their opponents into a trap. By 09.40 the British had reached waters that were beyond the edge of their charts and Napier, commanding 1st CS, signaled the cruiser squadrons not to proceed further into the minefields. Minutes later at 09.50, the battleships Kaiserin and Kaiser appeared and started dropping heavy shells around the leading British cruisers. The British quickly retired. About an hour later *Hindenburg* and *Moltke* reached the scene, followed later by battleships Friedrich der Grosse and König Albert, but the action had long since ended with no significant damage inflicted by either side. The next day the entire I SG (Seydlitz, Derfflinger, Moltke, Von der Tann, Hindenburg) returned to the scene to escort the torpedo boats that had been detailed to retrieve indicator buoys that had been placed the previous day.

Second Scandinavian convoy attack, December 12, 1917

The German 3rd Destroyer Half Flotilla (four destroyers) struck the Scandinavian convoy at 11.55 on December 12 and quickly sank every ship except for one of the escorts. There had been no warning from Room 40 and there was concern that the entire High Seas Fleet might be at sea. Beatty immediately ordered the Battle Cruiser Force, 5th BS, and 2nd and 4th LCS to raise steam. Ultimately the Germans returned home through the Skagerrak unmolested. The ships of the Grand Fleet covered the rescue of survivors and the return of the damaged destroyer *Pellew*.

Coverage of minesweepers, December 1917

After the British attack on November 17, the Germans decided to strengthen the forces covering the minesweepers in the Heligoland Bight. Beginning in December and continuing until the end of the U-boat campaign, two or more battlecruisers or battleships accompanied the other escort forces on minesweeping missions. The coverage began with *Moltke* and *Hindenburg* on December 21 and then *Von der Tann* and *Seydlitz* on December 28.

Cover for minelaying operation, January 3, 1918

"Large forces from the Grand Fleet" acted as the covering force for a minelaying operation near Terschelling on January 3. It is unclear whether this involved any BS or BCS.

Escorts for Scandinavian convoys, January 1918 and ongoing

The Admiralty was chagrined by the destruction of the two Scandinavian convoys and concerned that the Germans might employ their battlecruisers in future such raids. As a protective measure it was decided to employ a division of battleships or battlecruisers (typically four ships) from the Grand Fleet as a covering force to escort each of these convoys. From January 9, 1918 until the

end of the war the convoys sailed at three day intervals (four day intervals beginning in March and then five days from May on) between Britain and Norway with their escorts. Only scattered examples of which ships escorted which convoys are available. The 2nd BCS (*Inflexible*, *Indomitable*, *New Zealand*, *Australia*) provided the escort for the convoy that departed on January 19, again for the April 20 and April 24 convoys, and perhaps others. Even the American battleships of 6th BS drew the escort duty for the convoys that departed on March 11 and April 16. At the end of June the covering force was reduced to a squadron of light cruisers and later to a pair of armored cruisers, relieving the battle fleet of this responsibility.

Coverage of minesweepers, January through March 1918

Battlecruisers continued to accompany the other escort forces on the minesweeping missions. Typical minesweeper security operations involved a day trip through one of the dozen color coded swept channels to the open sea and back with a possible sweep through a different channel the next day. Operations during this period included January 2 (*Moltke, Hindenburg*), January 23 (*Von der Tann, Seydlitz, Derfflinger*, and *Moltke, Hindenburg* in separate groups), January 26 (*Von der Tann, Seydlitz, Derfflinger*), February 2 (*Von der Tann, Seydlitz, Derfflinger*), February 2 (*Von der Tann, Seydlitz, Derfflinger*), March 5/6 (*Von der Tann, Derfflinger*) and March 30 (*Von der Tann, Seydlitz, and Moltke, Hindenburg* separately). German battleships also participated in these escort operations, sometimes in mixed groups with the battlecruisers, although the available records are incomplete.

Reaction to raid on the Dover Straits, February 15, 1918

The II TBF from the High Seas Fleet (seven destroyers) raided the minefield and barrage patrols in the Dover Straits on the night of February 14/15 spreading havoc and confusion. According to one account (that of the Russian Naval Attaché aboard *Iron Duke*), it was initially feared that larger German forces might be at sea and the Grand Fleet set out to intercept them heading diagonally across the North Sea against tremendous seas. They were recalled by wireless the next afternoon when the situation had clarified. The returning German destroyers were later met outside the end of a swept channel through the Heligoland Bight minefields by *Derfflinger* and *Von der Tann*.

Coverage of minesweepers, April through June 1918

Regular mine sweeping continued during the Spring as British mine laying efforts also increased. Routine Zeppelin patrols in the Bight resumed with the better weather with typically two airships scouting east of the Dogger Bank each day while seaplanes watched the waters off Terschelling. Escort operations included April 6 (*Von der Tann*), April 7/8 (*Seydlitz, Hindenburg*), April 18 (*Von der Tann, Seydlitz*), April 19 (*Moltke, Derfflinger*), April 29 (*Von der Tann, Seydlitz, Hindenburg*), May 10 (*Von der Tann, Seydlitz, König, Bayern*), May 16 (*Von der Tann, Seydlitz, Hindenburg, Thüringen, Helgoland*), and multiple dates in June (*Von der Tann, Seydlitz, Derfflinger*). The operation on April 19 was part of the attempted transfer of four destroyers of the III TBF to Flanders. *Moltke* and *Derfflinger* began moving to the west in support when contact was reported with enemy surface forces but withdrew again before making contact.

Cover for minelaying in Skagerrak, April 15-16, 1918

Minelayers deployed a field southeast of the Skaw to interdict U-boats entering the North Sea through the passages from the Baltic. The operation took place on the night of April 15/16 with cover provided by 1st BCS, 5th BS, three squadrons of light cruisers, and 24 destroyers. Some of the light forces then conducted a raid into the Kattegat.

Raid on Scandinavian convoy, April 24, 1918

Building on the successes of 1917, Scheer decided to conduct a massive raid on the Scandinavian convoy route with the goal of achieving an "impressive military success" while relieving pressure on the U-boats in other areas. The operation was originally scheduled for April 10 but delayed because of poor weather. The High Seas Fleet assembled on April 22 and sortied at 05.00 the next morning under complete wireless silence. Leading the operation was Hipper with I SG (Seydlitz, Derfflinger, Moltke, Von der Tann, Hindenburg) plus II SG with light cruisers and destroyers. In support, 60 miles behind, was the main body with I, III, and IV BS (18 battleships) and light forces. Late on April 23, some of the German force was spotted in hazy conditions near Horns Reef by the British submarine J6 but no report was made because the commander mistook the ships for British. Suddenly at 05.40 on April 24, *Moltke* suffered a severe mechanical breakdown, broke wireless silence to report it, and dropped out of the operation. Hipper continued on with the rest of his force, searched the convoy route for several hours, found nothing, and turned back for home. The Germans had mistimed their raid and attacked on a day when there were no convoys near the Norwegian coast. Belatedly alerted when Room 40 intercepted the messages from *Moltke*, the entire Grand Fleet raised steam and then put to sea in the early afternoon. Leading was 1st BCS (*Lion, Tiger, Princess Royal, Renown*) followed by the battle squadrons (probably 30 battleships rather than 31 as usually reported as Warspite was absent undergoing a refit) and light forces all steaming due east. (Repulse was apparently delayed but followed later.) By this time it was too late and the attempted interception was missed by 150 miles or more. While returning to harbor at reduced speed, *Moltke* was struck by a torpedo from the submarine E42 on April 25 and the damage put the ship out of operation until October.

Coverage of minelayers, May 10, 1918

The I SG (*Von der Tann, Seydlitz, Derfflinger, Hindenburg*) went out on a special operation on May 10 to cover II SG and the minelayer *Senta* while they lay defensive mine barriers on the outer edge of the Bight.

Cover for Harwich Force sweeps, June 1, 1918

The Harwich Force conducted offensive sweeps into the Heligoland Bight to gather intelligence and attempt to engage the Zeppelin patrols with aircraft towed on lighters. Some of these operations in May and June were covered by 1st BCS and other formations. The force for Operation F3 departed Rosyth on May 31 with 1st BCS (*Lion, Princess Royal, Tiger, Repulse, Renown*), 1st CS (*Courageous, Glorious*), and 2nd LCS (*Birmingham, Sydney, Dublin, Melbourne*). On the morning of June 1, two German seaplanes dropped bombs near *Tiger* and *Courageous. Sydney* and *Melbourne* each launched a Sopwith 2F.1 Camel fighter from their flying off platforms and the *Sydney* aircraft managed to overtake and shoot down one of the Germans for the first such interception in history.

Coverage of minelayers, June 28, 1918

The 1st BCS along with 1st and 7th LCS and other ships were at sea from June 27 to 29 for a mine laying operation in the Bight. (*Galatea* was part of other North Sea operations in enemy waters, sometimes in company with the carrier *Furious*, during this month (June 1, June 12, June 19) but only on the morning of June 29 is there a log entry reading "5.20 Sighted 1st BCS" that confirms the presence of a battlecruiser covering force.)

Coverage of minesweepers, July through September 1918

Mixed groups of battlecruisers and battleships continued to provide escorts for multiple mine sweeping sorties and direct support for groups of U-boats moving through the mined area on the surface. Poor weather in much of September interfered more with operations than any actions of the British. Operations included July 1/2 (*Seydlitz, Hindenburg*), July 7/8 (*Von der Tann, Derfflinger, Thüringen, Oldenburg*), July 14/16 (*Derfflinger, Kaiser, Kaiserin*), July 17 (*Von der Tann, Friedrich der Grosse, König Albert*), July 21 (*Seydlitz, Hindenburg*), August 2 (*Hindenburg, Markgraf, Kronprinz Wilhelm*), August 11 (*Von der Tann, Derfflinger, Hindenburg*), August 29 (*Derfflinger, Hindenburg*), and September 7 (*Von der Tann, Derfflinger* and separately *Seydlitz, Hindenburg, Kaiser, König Albert*)

Air attack on the Tondern Zeppelin sheds, July 19, 1918

An earlier attempt on June 29 was abandoned because of bad weather. On July 19 the carrier *Furious* approached the Danish coast for Operation F7 escorted by 1st LCS. The heavy covering force included 1st Division of 1st BS and 7th LCS. A strike of two flights of Sopwith 2F.1 Camels (seven aircraft) was launched in the early morning against the Zeppelin base at Tondern, the target of so many failed operations in 1914 and 1915. Six of the aircraft attacked the base and bombs from one exploded in the "Toska" shed where the *L54* and *L60* were consumed in flames.

Operation to punch through minefields, July 30, 1918

A strong advance was made to the outer edge of the mined belts to test a new tactic for punching through the British minefields and releasing U-boats into the North Sea. I SG (*Seydlitz, Derfflinger, Von der Tann, Hindenburg*) followed the minesweepers with III and IV BS and numerous cruisers and destroyers also advancing in support.

Cover for minelaying, September 1918

The 2nd BCS, on multiple dates, provided part of the cover for the squadrons laying the Northern Barrage of minefields in the North Sea between the Orkney Islands and Norway. Minelaying began in late May and continued through October.

Coverage of minesweepers, October 1918

Escort operations by groups of battlecruisers and battleships included; October 3 (*Von der Tann, Derfflinger*), October 9 (*Von der Tann, Moltke, Seydlitz, Derfflinger, Hindenburg*), and finally on October 22/23 (*Von der Tann, Seydlitz, Derfflinger, Hindenburg*). A planned operation for October 25 was canceled because of bad weather. In an attempt to comply with the demands of President Wilson, Admiral Scheer had ordered the U-boat campaign to be abandoned and recalled all of the boats at sea on October 20.

Planned raid in the North Sea, October 30, 1918

On October 21, the German government ordered an end to the U-boat campaign and the submarines at sea were recalled. That same day, Scheer sent an order to Hipper (commander of the High Seas Fleet since August 11) to prepare for an "attack and battle with the English fleet." Hipper prepared a plan for the High Seas Fleet to advance into the southern part of the North Sea. On the second day of the operation, II SG (four light cruisers and five destroyers) would attack the mouth of the Thames with I SG (*Seydlitz, Derfflinger, Moltke, Von der Tann, Hindenburg*) as a covering force. Simultaneously, three cruisers and ten destroyers would attack the Flanders coast with the battle squadrons (19 battleships) in support. All the forces would then retire to a location off Terschelling and wait to give battle with the Grand Fleet. The IV SG (six light cruisers and ten destroyers) was responsible for laying mine barriers along the possible routes of British approach, as many as 25 U-boats were deployed on six interception lines, and it was hoped to have seven Zeppelins active for reconnaissance. Hipper ordered the fleet to be assembled on October 29 with the intention of commencing the operation the next day. During the night mutiny and insubordination broke out aboard a number of ships and the next day Hipper called off the operation and dispersed the fleet.

Planned air strike on High Seas Fleet, November 1918

Argus, the first flush-decked aircraft carrier, arrived in Scapa Flow in September. 185 Squadron, which had been training ashore with twenty Sopwith T.1 *Cuckoo* torpedo bombers, joined the ship in October. Earlier plans for a joint strike in company with *Furious* and *Vindictive* were scaled back because of the shortage of aircraft. By early November, *Argus* was ready to launch an airstrike against ships of the High Seas Fleet at anchor in the outer roadstead of Wilhelmshaven. Elements of the Grand Fleet would also have sortied in support of the operation. A continued period of unsuitable weather prevented the operation from taking place before the Armistice intervened.

Summary and Outcomes

The operational emphasis of the High Seas Fleet changed to that of a supporting arm for the Uboat campaign. The primary contribution of the Grand Fleet to countering the U-boat threat was the offensive mine laying campaign in the Heligoland Bight. For the minefields to be effective though the British also needed to prevent the Germans from sweeping passages through them as fast as they were laid. The first and only serious attempt against the German mine sweepers and their covering forces resulted in the Second Battle of Heligoland Bight. The reinforced minesweeper support forces that the Germans deployed in the aftermath demonstrated their willingness to accept battle in this area. A concerted British campaign to contest the swept channels in the Bight, with support from the battle fleet, could have forced the issue to a showdown and potentially defeated the U-boat campaign at its source. It was not to be. The British continued to use heavy covering forces to protect their own mine layers but they declined to make any further attempts to challenge the German minesweepers. As a result, the German Uboats continued to have free access to the sea until the end of the war.

Conclusions

"The only man on either side who could have lost the war in an afternoon." Churchill on Jellicoe in "The World Crisis"

The Grand Fleet is generally deemed to have been the overall winner of the North Sea campaign by virtue of their enforcement of the blockade, the protection of the coasts and Channel crossings, and in general just not having "lost the war in an afternoon." However, all of these successes were essentially defensive. They were balanced to a large degree by the defensive achievements of the High Seas Fleet. These included the protection of the German coast, preventing the U-boats from being closed up in their bases, and closing the Baltic Sea to the British which had the dual result of blockading trade to Russia while keeping open the vital iron ore trade with Sweden. In any consideration of how the campaign could have been fought differently it is worth examining the possible costs and rewards that might have followed from a more offensive strategy and a decisive clash between the two battle fleets.

The blockade of Germany would not have suddenly been lifted after a defeat of the Grand Fleet. By early 1916, roughly three quarters of all potential contraband shipments had been stopped at the source by a variety of British economic measures in the supplier countries including the United States. There was also a contingency plan worked out to shift the blockade line into the North Atlantic and maintain it from bases in Canada that would have been out of reach of any German interference. Additionally, if in fact the blockade did *not* actually win the war, then the lifting of the blockade would not necessarily have resulted in it being lost. Opinions differed even during the war on the expected result of the blockade. Beatty for example, believed that blockade would inflict great suffering, it would never cause the enemy to give in until their armies had been defeated in the field. We know in retrospect that as many as 700,000 German civilians died of hunger and cold during the "Turnip Winter" of 1916-17 and yet in 1918 the German army drove the Allied armies to the brink of defeat. Only when the German army was beaten in the field in the Fall of 1918 did the country finally collapse. Jellicoe seems to have been closer to the truth.

The more immediate consequence to the British from any defeat of the Grand Fleet would have been to the security of the coast and the supply lines to France. Even in the best of times, the English public and the War Office had a wildly inordinate fear of invasion. The Germans were believed to possess fast ocean liners capable of quickly transporting 160,000 troops, with their arms and supplies, and making a surprise landing at a chosen spot on the English coast. Despite the insistence of the Admiralty that any such attempt would be quickly crushed, the War Office was so anxious that in 1916 there were still 230,000 troops being retained in England as a mobile "Home Defence" force. Even in early 1918, at the peak of the crisis in France, and with control of the North Sea more absolute than ever, the War Office was still holding back eight divisions of troops (190,000 men) in England and could only be persuaded with the greatest reluctance to let loose of three of them. In that light, it is not hard to imagine entire armies of British soldiers being diverted from the Western Front to guard the beaches in the event of a defeat that left the Germans in control of the North Sea. Similarly, a German threat to the Channel crossings would at minimum have forced the BEF to change its supply base from Calais and Le Havre to the more distant St. Nazaire with all the attendant disruption that would have

been caused. The consequent weakening of the army in France could potentially have changed the outcome of the war.

Weighing against these risks must be considered the potential gains that would have accrued from a decisive defeat of the High Seas Fleet. Two major potential impacts have been identified; the ability to shut up the U-boats within their bases and the opening of the Baltic Sea. The High Seas Fleet was always able to protect the mine sweepers that in turn kept open the swept channels in the Heligoland Bight through which the U-boats reached the open sea. The British made only one half-hearted attempt (Second Battle of Heligoland Bight) to interrupt them. The destruction of the High Seas Fleet would have allowed the British to closely invest the Bight and the Flanders bases with minefields and prevent them from being swept. We know in retrospect that the unrestricted U-boat campaign did not win the war, but that outcome was hardly certain in 1917. In this instance, the British were doubly fortunate that a few dynamic individuals, like Prime Minister Lloyd George and Admiral Brock, were able to overcome the entrenched resistance to convoys and that the Germans did not succeed in developing the operational innovations of shadowing, reporting, and concentration (Wolf packs) that eventually worked so well in the 1940-42 period. Weighing the risks at an earlier date, it might have been prudent to gamble on seeking a decisive battle with the High Seas Fleet as a potential solution to the U-boat threat.

A major point of the ill-fated Dardanelles Expedition was to open up a supply line to Russia through the Black Sea. The failure of that expedition is seen as one of the key factors that led to the eventual collapse of Russia which in turn almost lost the war for the Allied side. Russia badly needed munitions and armaments from the West because of her own inadequate industry. A British seizure of control of the Baltic Sea would have opened up a shorter supply line to Russia and at the same time severed the vital iron ore trade between Sweden and Germany. The combination might have been fatal for Germany. Every wartime proposal for an expedition into the Baltic was rejected at the time because it was believed that none of them could succeed so long as the High Seas Fleet remained in existence. This much seems true. But if the High Seas Fleet had been destroyed first, the Baltic would have been ripe for the taking. With control of the Baltic Sea as the ultimate prize, the Grand Fleet had an ongoing opportunity to "*win* the war in an afternoon" if it could at any time decisively defeat the High Seas Fleet. Instead, the war was very nearly lost when the German blockade of Russia, enforced by the High Seas Fleet, brought about revolution and collapse in Russia.

The North Sea during the Great War was a theater that was rich in opportunities. Most of those opportunities went unrealized in the actual event. A greater tolerance for taking risks in the leadership of either side could have changed the course of the campaign and potentially shortened the war or altered its outcome.

Appendix 1 – German Construction Program

Many of the German operations in the early years of the war were undertaken as part of the broad strategic goal of achieving a parity of strength between the High Seas Fleet and the Grand Fleet. One side of this involved the attrition of the British fleet either in direct surface combat or through losses to submarines and minefields. The other factor was the construction of new ships in German shipyards. During the war years, three battlecruisers and six battleships were added to the High Seas Fleet. There were significant delays in the completion times for three of these ships. In addition, five battlecruisers and two battleships were laid down on the slipways but never completed. Many factors contributed to this including competing priorities for materials and manpower and the eventual shift from surface ship to submarine construction.

Using the building times for ships that were actually completed as a guide it is possible to estimate a range of possible completion dates for the other ships that were laid down and later suspended. In this table the 36 Month column represents a relatively best case completion date while the 42 month column represents a high priority building program with possible wartime delays.

	Keel Laid	Entered Service	Months to Build	36 Month Build	42 Month Build
Derfflinger	Jan 1912	Nov 1914	34		
Lützow	May 1912	Mar 1916	46		
Hindenburg	Jun 1913	Oct 1917	51		
Mackensen	Jan 1915			Jan 1918	Jul 1918
Graf Spee	Nov 1915			Nov 1918	May 1919
Prinz Eitel Frederick	May 1915			May 1918	Nov 1918
Fürst Bismarck	Nov 1915			Nov 1918	May 1919
Ersatz Yorck	Jul 1916			Jul 1919	Jan 1920
König	Oct 1911	Jan 1915	39		
Grosser Kurfürst	Oct 1911	Sep 1914	35		
Markgraf	Nov 1911	Jan 1915	38		
Kronprinz	May 1911	Feb 1915	33		
Bayern	Jan 1914	Jun 1916	29		
Baden	Dec 1913	Feb 1917	38		
Sachsen	Apr 1914			Apr 1917	Oct 1917
Württemberg	Jan 1915			Jan 1918	Jul 1918

Two of the ships listed experienced significant unexpected delays before completion. *Lützow* required months of repairs because an impact hammer was left in one of the turbine inlets which destroyed the blades during the initial engine trials. *Hindenburg* was delayed in part because some of the armament was diverted to replace destroyed turrets on *Derfflinger* after Jutland.

The first two battlecruisers of the *Mackensen* class were launched before work was suspended on them. The next two ships (aka *Ersatz Freya* and *Ersatz A*) were suspended while still on the slipways. The story of *Ersatz Yorck* is convoluted. The ship was originally laid down in 1916 as

a unit of the *Mackensen* class. At least 1000 tons of material was assembled on the slipway and the machinery was ordered before construction was halted. In October 1916 a new design was created and then revised to incorporate the machinery and work already done. Construction resumed, exactly when is uncertain, but eventually halted again when the ship was reportedly 17 months from completion. The two incomplete battleships were similar to the *Baden* class in design. Both were launched before work on them was suspended.

Did Germany actually have the industrial capacity to complete these ships during the war? We know that German shipyards built 346 U-boats during the war with an aggregate displacement on the order of about 200,000 tons. In comparison, the four battlecruisers and two battleships that were building at the beginning of 1916 but never completed had a combined displacement of about 180,000 tons. At least half of the material for these ships was completed during the war including some machinery, armament, and armor plate that was fabricated but not delivered to the shipyards. It is plausible to suppose then that by redirecting no more than half of the resources and shipyard workers that were employed on the wartime U-boat program it would have been possible to complete the 1915 capital ship program within the original timeframe if German priorities had been different.

Would the completion of these extra ships have made a difference? The British were far ahead of the Germans in terms of the number of battleships by 1916. Although the British had no other battleships in the pipeline after the *Revenge* class it still would have required the Germans to inflict massive losses on the existing ships to have a chance to catch up in that category. The battlecruiser race was more evenly matched. Beatty had a poor regard for the two ships of the *Renown* class and the two *Courageous* class "large light cruisers" were regarded as failures and never incorporated into the Battle Cruiser Force. The mistaken intelligence that the first of *Mackensen* class had joined the High Seas Fleet by the beginning of 1918 created a great deal of anxiety for Admiral Beatty at that time. If even two of the *Mackensen* class had been added to the existing five ships of the First Scouting Group in early 1918 it would have given the Germans close to numeric parity, and arguably a qualitative superiority, versus the Battle Cruiser Force. The possible operational consequences of that can only be imagined.

Appendix 2 – Light Cruiser Forces

It is generally possible to identify by name the exact ships that comprised the battlecruiser squadrons in the operations described here. However the light cruiser squadrons are sometimes only referred to by their squadron number in the same sources. Moreover the establishments of these squadrons fluctuated as ships joined and departed and it was common for individual ships to miss a particular operation while in dockyard hands. This appendix details the composition of the cruiser squadrons that most commonly operated with the battlecruisers.

Cruisers with the Battle Cruiser Fleet

The distribution of the Grand Fleet was in flux during the first months of the war. The armored cruisers of 3rd CS and the light cruisers of 1st LCS were based at Rosyth and frequently operated with the battlecruisers. After the reorganization in February 1915, three squadrons of light cruisers in Rosyth became the norm until 1918. The establishment strengths of these squadrons remained fairly stable, with periodic replacements in kind, and were regularly reported in the Admiralty "Pink Lists". A selection of these for about a dozen different dates can be found through the link in the Bibliography below.

Initial Composition (August 5, 1914): 3rd CS (Antrim, Argyll, Devonshire, Roxburgh) 1st LCS (Southampton, Birmingham, Nottingham, Liverpool, Falmouth, Lowestoft)

Scarborough Raid (December 16, 1914): 3rd CS (Antrim, Argyll, Devonshire, Roxburgh) 1st LCS (Southampton, Birmingham, Nottingham, Falmouth)

Battle of the Dogger Bank (January 24, 1915): 1st LCS (*Southampton, Birmingham, Nottingham, Lowestoft*) (Plus cruisers of the Harwich Force.)

Reorganization of February 1915 (with 1st LCS renumbered): 1st LCS (*Galatea, Caroline, Cordelia, Inconstant*) 2nd LCS (*Southampton, Birmingham, Nottingham, Lowestoft*) 3rd LCS (*Falmouth, Gloucester, Yarmouth, Liverpool*)

January 1, 1916: 1st LCS (*Galatea, Phaeton, Cordelia, Inconstant*) 2nd LCS (*Southampton, Birmingham, Nottingham, Lowestoft, Champion*) 3rd LCS (*Falmouth, Gloucester, Yarmouth, Birkenhead*)

Battle of Jutland (May 31, 1916): 1st LCS (*Galatea, Phaeton, Cordelia, Inconstant*) 2nd LCS (*Southampton, Birmingham, Nottingham, Dublin*) 3rd LCS (*Falmouth, Yarmouth, Birkenhead, Gloucester*)

January 1, 1917: 1st LCS (*Galatea, Phaeton, Cordelia, Inconstant*) 2nd LCS (*Southampton, Dublin, Melbourne, Sydney*) 3rd LCS (*Birkenhead, Chatham, Yarmouth, Chester, Courageous*)

June 30, 1918: 1st CS (*Courageous, Glorious*) 1st LCS (*Caledon, Galatea, Phaeton, Inconstant, Royalist*) all minelayers except *Caledon* 2nd LCS (*Birmingham, Dublin, Melbourne, Sydney*) 3rd LCS (*Birkenhead, Chatham, Southampton, Yarmouth, Chester*) 6th LCS (*Cardiff, Caradoc, Cassandra, Ceres*)

German Second Scouting Group

The light cruisers of II SG operated in conjunction with the battlecruisers of I SG on most of their sorties as well as various independent operations. The initial composition of the group and the dates when ships joined or left the group are known. (See the link for the fleet distribution of the Kaiserliche Marine in the Bibliography below.)

Initial Composition (August 10, 1914): II SG (Cöln, Kolberg, Mainz, Rostock, Stralsund, Strassburg)

August 1914: Graudenz joins. August 28, 1914: Cöln and Mainz lost in action.

Scarborough Raid (December 16, 1914): II SG (*Graudenz, Strassburg, Stralsund, Kolberg*)

Battle of the Dogger Bank (January 24, 1915): II SG (*Graudenz, Stralsund, Rostock, Kolberg*)

April 1915: *Regensburg* joins. June 1915: *Kolberg* transfer to the Baltic. August 1915: *Frankfurt* and *Wiesbaden* join. September 1915: *Elbing* joins. December 1915: *Pillau* joins. March 1916: *Stralsund* and *Strassburg* transfer to IV SG.

Battle of Jutland (May 31, 1916): II SG (*Frankfurt, Wiesbaden, Elbing, Pillau, Regensburg*) with Hipper. *Rostock* acted as destroyer leader in the main fleet with Scheer. *Wiesbaden, Elbing,* and *Rostock* lost in action.

August 1916: *Konigsberg* joins. November 1916: *Karlsruhe* and *Nurnberg* join. December 1916: *Emden* joins. July 1917: *Regensburg* transfer to IV SG. January 1918: *Cöln* joins. March 1918: *Dresden* joins. August 1918: *Frankfurt* transfer to IV SG.

Notes

Representative books with the most complete coverage are listed here for well-known actions. Some other events are so obscure that they are only mentioned in a single source. Copious details of the political and strategic background to these operations can be found in Barry, Dunn, Goldrick, Halpern, Marder, Massie, and other sources. All of the times used in this chronology are Greenwich Mean Time (GMT) which was maintained by British forces when at sea. Times taken from German sources based on Central European Time (e.g. Staff and Tarrant) have been adjusted to GMT for uniformity.

The Outbreak of Hostilities

July 31, 1914 to February 2, 1915

August 1914 (Initial): Goldrick (2015), pp 81-90. Jellicoe, pp 88-95. August 1914 (BEF): Corbett, I pp 72-82. Goldrick (2015), pp 83-99. Jellicoe, pp 96-102. August 28, 1914: Goldrick (2015), pp 111-138. Staff (2011), pp 4-27. August 31 to September 9, 1914: Jellicoe, pp 114, 118-123. September 10, 1914: Jellicoe, pp 123-126. September 1914 (Sweeps): Jellicoe, pp 127-134. September 21, 1914: Friedman (2014), loc 5077-5109 (Kindle). October 1914 (Convoy): Goldrick (2015), pp 154-155. Jellicoe, pp 134-137. October 1914 (Sweep): Jellicoe, p 140. October 1914 (Skagerrak): Jellicoe, p 145. October 25, 1914): Friedman, p 32. Jellicoe, pp 145-146. November 3, 1914: Goldrick (2015), pp 171-176. Staff (2014), pp 34-35, 81, 157. November 6, 1914: Jellicoe, p 158. November 17, 1914: Staff (2014), pp 156-157. Goldrick (2015), p 189. Groos, III Map 2. November 24, 1914: Jellicoe, pp 163-165, Goldrick (2015), p 191. Groos, III Map 3. Log book of HMS Falmouth for details of the cruiser squadron. December 16, 1914: Goldrick, pp 198-216. Staff (2014), pp 35, 81-83, 157-158, 217. December 25, 1914: Goldrick (2015), pp 236-242, Friedman, p 32. Robinson, pp 69-74. January 3-5, 1915: Jellicoe, p 190. January 19, 1915: Goldrick (2015), p 253. Jellicoe, p 191. January 1915 (Plans): Staff (2011), pp 83-84. January 24, 1915: Goldrick (2015), pp 257-284. Staff (2011), pp 84-103. Groos, III pp 202, 285, Map 18 for High Seas Fleet sortie. January 29, 1915: Jellicoe, p 198.

The Cautious Year February 2, 1915 to January 18, 1916

March 1915 (Cruises): Jellicoe, p 206.

March 29, 1915: Jellicoe, p 208. Hezlet, pp 99-100. Staff (2014), p 36. (Until the publication of Staff, Hezlet was the only English language source with details and maps of the German 1915 fleet sorties. Hezlet also provides the Room 40 background that is absent from

Jellicoe. Jellicoe describes the British movements in each case but only as "sweeps" without a hint that they were in response to known German activity.)

April 1915 (Cruises): Jellicoe, pp 210-211.

April 17-18, 1915: Jellicoe, pp 211-212. Hezlet, p 100-101. Staff (2014), pp 36-37. Faulkner pp 56-57.

April 22, 1915: Jellicoe, pp 212-213. Hezlet, pp 101-102. Staff (2014), pp 83-84.

May 1915 (Strikes): Robinson, pp 104-110. Friedman (1988), p 32.

May 18, 1915: Jellicoe, p 217. Hezlet, pp 102-104. Staff (2014), pp 36-37

- May 30, 1915: Jellicoe, p 219. Hezlet, p 104. Staff (2014), pp 84-85.
- July 1915 (Sweeps): Jellicoe, p 229. July 28-31 in Corbett, III p 54. Log book of *HMS Princess Royal*.
- August 1915 (Baltic): Staff (2014), pp 38-42, 86-89, 166-167.
- August 9, 1915: Corbett, III pp 122-126.
- September 1915 (Minelaying): Jellicoe, pp 244-245. (Corbett, III p 128 has errors in the force composition. King-Hall, pp 108-111 confirms that 2nd LCS participated in the operation.) Hezlet, p 105. Staff (2014), pp 42, 167-168. Groos, IV pp 291-293 & Map 13. Faulkner pp 78-79 is the only map ever published showing the tracks of both sides.
- October 19, 1915: Jellicoe, p 250. Corbett, III p 261. German airships in Groos, IV p 343.
- October 24, 1915: Staff (2014), p 168. Hezlet, p 105. Groos, IV pp 343-346, Map 15.

November 7, 1915: Jellicoe, pp 253-254.

December 16, 1915: Groos, IV pp 374, Map 16. Faulkner p 83.

December 30, 1915: Staff (2014), p 89.

The Quest for Battle

January 18, 1916 to February 1, 1917

January 26-28, 1916: Jellicoe, pp 267-268.

February 2, 1916: Staff (2014), p 221. Robinson, pp 145-146.

February 11, 1916: Corbett, III p. 275. Staff (2014), p 43.

February 26, 1916: Jellicoe, p 271.

March 4, 1916: Staff (2014), pp 168, 221.

March 6, 1916: Staff (2014), p 43. 168-169. Frost, pp 33-35.

March 11, 1916: Jellicoe, pp 276-277.

- March 25, 1916: Jellicoe, pp 278-281. Frost, pp 36-38. Staff (2014), pp 221-222.
- April 21-23, 1916: Staff (2014), pp 43-44, 221-222, 269. Jellicoe, pp 284-286. Frost, pp 42-48.
- April 25, 1916: Barry, pp 115-117, Staff (2014), pp 44, 91, 169, 270. Frost, pp 53-77. Robinson, p 156.
- May 4, 1916: Jellicoe, pp 288-290. Frost, pp 81-92. Corbett, III pp 309-311. Staff (2014), pp 91, 270. Robinson, pp 161-163. Faulkner pp 94-95.
- June 2, 1916: Marder, II p 444.
- May 1916 (Planned): Marder, II pp 444-445. Scheer, pp 134-135.
- May 31, 1916: Campbell, Gordon, and Tarrant (1995) are among the best modern accounts of Jutland. The German plan that led to the battle is in Scheer, p 135.

August 19, 1916: Goldrick (2018), pp 67-79. Staff (2014), pp 56, 99-100. Robinson, pp 179-186.

Summer 1916 (Conferences): German U-boat conference in Tarrant (1989), p 35. Grand Fleet conference in Marder, III pp 300-305, Shell problem in Marder, III pp 262-264.

September 4, 1916: Jellicoe, p 445. September 1916 (Planned): Barry, p 263. Goldrick, p 108. September 26, 1916: Staff (2014), p 56. September 30, 1916: Jellicoe, p 446. October 7, 1916: Jellicoe, p 449. October 19, 1916: Barry, pp 263-264. October 23, 1916: Staff (2014), pp 56, 99. November 5, 1916: Staff (2014), pp 99, 186. November 28, 1916: Staff (2014), p 99. Robinson, p 222. November 29, 1916: Marder, III pp 336-339.

December 28, 1916: Staff (2014), pp 99, 239.

January 30, 1917: Staff (2014), pp 186, 239.

The U-boat Years

February 1, 1917 to November 11, 1918

February 21-22, 1917: Staff (2014), pp 57 & 99.

- February/March 1917: Barry, p 363. Halpern, pp 375-376. Goldrick (2018), p 146. Karau, p 132.
- April 1917 (Minelaying): Marder, IV p 242.
- August 1917 (Landings): Marder, IV pp 204-205. Bacon, I pp 223-259. Duff (2017), pp 149-152.
- August 1917 (Minelaying): Records of these operations are found only in the log book of *HMS Galatea*.
- September 5-6, 1917: Jutland coast sweep in Clemmesen, p 58. Minesweeping in Goldrick (2018), p. 207. Ship departures and arrivals from the log book of *HMS Galatea*.
- September 11, 1917: Log book of HMS Galatea.
- October 1917 (Baltic): Staff (2014), p 101.
- October 17, 1917: Newbolt, V pp 152-157. I BS sortie in Horn, p 364.
- October 1917 (Demonstrations): Marder, IV p 244. Schoultz, pp 307-308.
- November 2, 1917: Staff (2014), pp 240-241.
- November 13, 1917: Staff (2014), pp 101 & 241.
- November 17, 1917: Goldrick (2018), pp 211-218. Staff (2011), pp 194-207.
- December 12, 1917: Marder, IV pp 311-312.
- December 1917 (Minesweepers): Staff (2014), pp 57, 102, 188, 297-299.
- January 3, 1918: Newbolt, V p 220.
- January 1918 (Escorts): Duff (2019), pp 189-193, 208. Barry, pp 385-387. 2nd BCS as escorts in Burt, pp 57 & 104. Goldrick (2018), p 233.

January through March 1918 (Minesweepers): Staff (2014), pp 57-58, 102, 188, 243-245, 299.

- February 15, 1918: Schoultz, p 340. Staff (2014), p 245.
- April through June 1918 (Minesweepers): Staff (2014), pp 58-59, 188-191, 246, 299-302. Robinson, pp 336-339. Karau, pp 188-189.
- April 15-16, 1918: Goldrick (2018), p 261.
- April 24, 1918: Newbolt, V pp 230-238. *Repulse* as the absent ship from 1st BCS via private communication from John Roberts through Brooks Ashley Rowlett. "Originally scheduled for April 10", Goldrick (2018), p 252
- May 10, 1918: Staff (2014), pp 58, 301.
- June 1, 1918: Goldrick (2018), p 266. Hobbs, Location 7532-7602 (Kindle).

June 28, 1918: Log book of HMS Galatea.

- July through September 1918 (Minesweepers): Staff (2014), pp 59-60, 191-192, 246-248, 302-305.
- July 19, 1918: Goldrick (2018), pp 267-268. Robinson, p 340.
- July 30, 1918: Staff (2014), pp 246-248, 303.
- September 1918 (Minelaying): Goldrick (2018) p 265. Burt, p 104.
- October 1918 (Minesweepers): Staff (2014), pp 60, 107, 192, 248, 305-306.
- October 30, 1918: Barry, pp 450-452. Goldrick (2018), pp 273-275.
- November 1918: Hobbs, pp 734-735.

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The first and only comprehensive operational history of the Grand Fleet was written over a century ago by Admiral Jellicoe. By modern standards, "The Grand Fleet" (1919) has weaknesses of style, the legacy of wartime secrecy, and a lack of balance in coverage of German activity but it makes up for much of this by including every operation of the fleet, large or small, up to the date of Jellicoe's departure at the end of 1916. The history from the German perspective was largely inaccessible to English readers until the publication of Gary Staff's "German Battlecruisers of World War One" (2014) which contains a complete and comprehensive listing of the activities of every German battlecruiser throughout the war. Barry, Goldrick, and Marder are solid accounts of the general course of the naval campaign, describing the broader context within which the operations were mounted. They also mention many, though by no means all, of the more obscure operations chronicled here.

This project quickly became something akin to assembling a jigsaw puzzle. The most wellknown actions are fully described in multiple sources and the challenge was one of collating and condensing the information. Other operations have been largely neglected. An example is the British operation between April 20 and 23, 1916 which is described in Jellicoe and Frost and has been almost forgotten since then. Most historians also gloss over Admiral Pohl's period in command as though the High Seas Fleet did nothing worth mentioning during 1915. No modern source provides more than a token account of the 1915 campaign, but it was possible to piece together the outline of events by using Jellicoe, Corbett, Groos, Hezlet, Staff, and the Naval Staff Monographs.

In the end it has been possible to assemble a reasonably complete picture of the surface campaign in the North Sea. The principle remaining gap involves the last two years of the war. Jellicoe's account ends at the close of 1916. The Naval Staff Monographs end with the events of July 1917, which is the point that the project had reached when it was suspended in September 1939. James Goldrick's "After Jutland" (2018) is the best recent account of this period although it does not attempt to cover every minor operation. There remain tantalizing clues like Operation F3 (June 1, 1918) and Operation F7 (July 19, 1918) which are well documented and that suggest other operations must have existed in this sequence for which no surviving records have been found. The chronology here has pulled together bits and details from many different sources and future research may continue to fill the remaining gaps in the records of the period.

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Selected Internet Resources

There is some material available on the Internet that I have not found in any printed source. Two types of these were particularly useful for this study.

Ship Distribution Lists detail the compositions and locations of every fleet and squadron in the navy on particular dates. These fill in the details of the force compositions that are summarized above for each period of the campaign. The first link for the Royal Navy details the fleet distribution for August 5, 1914 and then for January 1 of each following year. The second link adds additional dates within the war years. The third link details the organization of the Imperial German Navy in a different format that can also be used be reconstruct the fleet distribution on any chosen date.

Royal Navy at: http://www.naval-history.net/WW1NavyBritishShips-Locations6Dist.htm

Royal Navy at: <u>http://www.naval-history.net/WW1NavyBritishShips-Locations2PLAII.htm</u>

Kaiserliche Marine at: http://www.naval-history.net/XGW-GermanNavy1914-1918.htm

Portions of the Log Books from selected Royal Navy ships have been transcribed and made available as part of the Old Weather project. Several of these contain information about operations in the North Sea that are not found anywhere else. Especially useful for this project were the following Log Books:

HMS Princess Royal (November 1914 to September 1915) at: <u>https://www.naval-history.net/OWShips-WW1-02-HMS_Princess_Royal.htm</u>

HMS Falmouth (September 1914 to February 1915) at: <u>https://www.naval-history.net/OWShips-WW1-06-HMS_Falmouth.htm</u>

HMS Galatea (August 1917 to December 1919) at: <u>https://www.naval-history.net/OWShips-WW1-06-HMS_Galatea.htm</u>

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