



Dynamic Beats of the Great War at Sea

Chris Carlson & Rich Satore
Historicon 2016

Admiralty Trilogy & Seekrieg Seminar

Outline



- ◆ Briefly survey three significant battles from World War I
 - Battle of Falkland Islands
 - Battle of Dogger Bank
 - Battle of Jutland

- ◆ Why these three? Because they are excellent examples of the employment of capital ships during the war
 - Trade protection, scouting, fleet action

- ◆ Examine each battle and look at:
 - Setup and Results
 - Highlight key issues that affected the outcome



Battle of the Falkland Islands



VADM Sir Doveton Sturdee

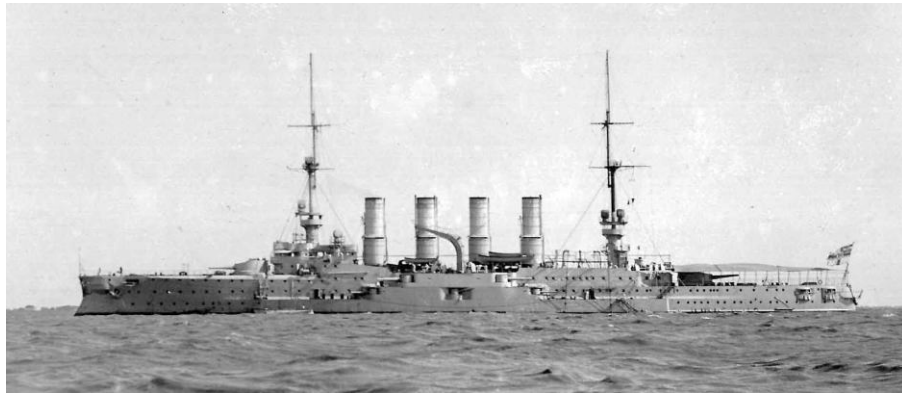


VADM Maximilian, Graf Von Spee

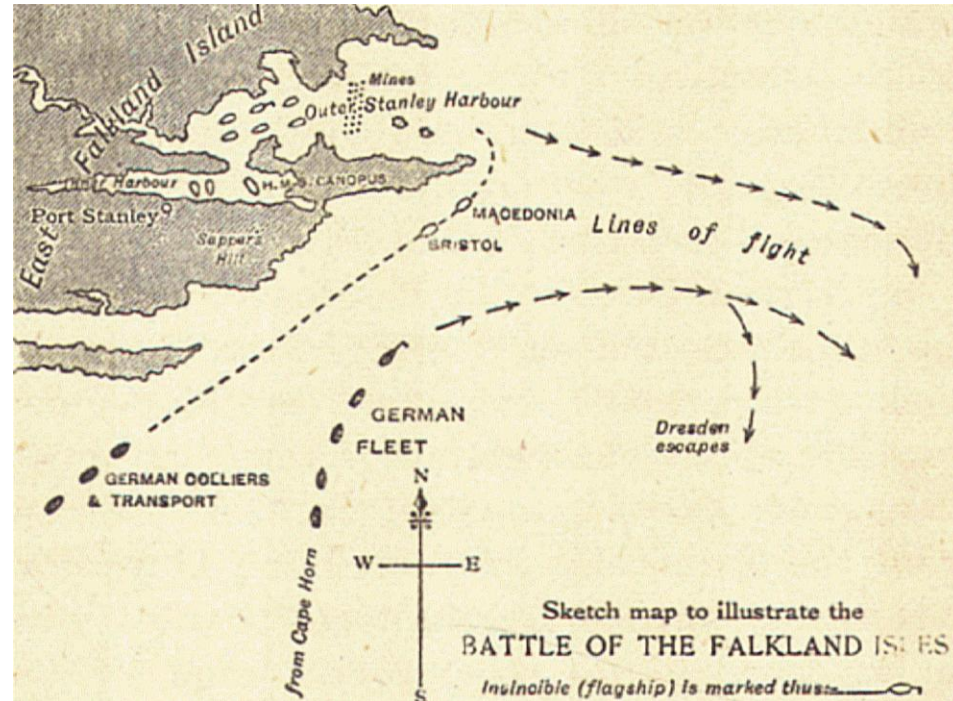
- ◆ Battle took place on the morning of 8 December 1914
- ◆ Spee intended to shell the wireless tower on Hooker's Point, near Port Stanley, and destroy the harbor facilities—especially the coaling station
 - Spee's captains/most of the senior staff wanted to give the Falklands a wide berth
- ◆ Sturdee arrived with *Invincible* and *Inflexible* on 7 December 1914
 - Leisurely transit – 15 knot average, reluctant to tax the propulsion plant
 - Began coaling his cruisers that evening, battle cruisers would coal in the morning



Battle of the Falkland Islands



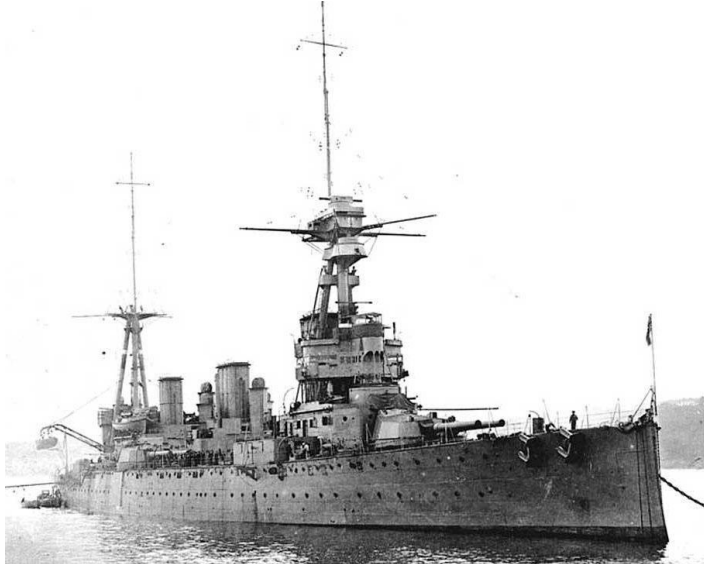
SMS *Gneisenau*



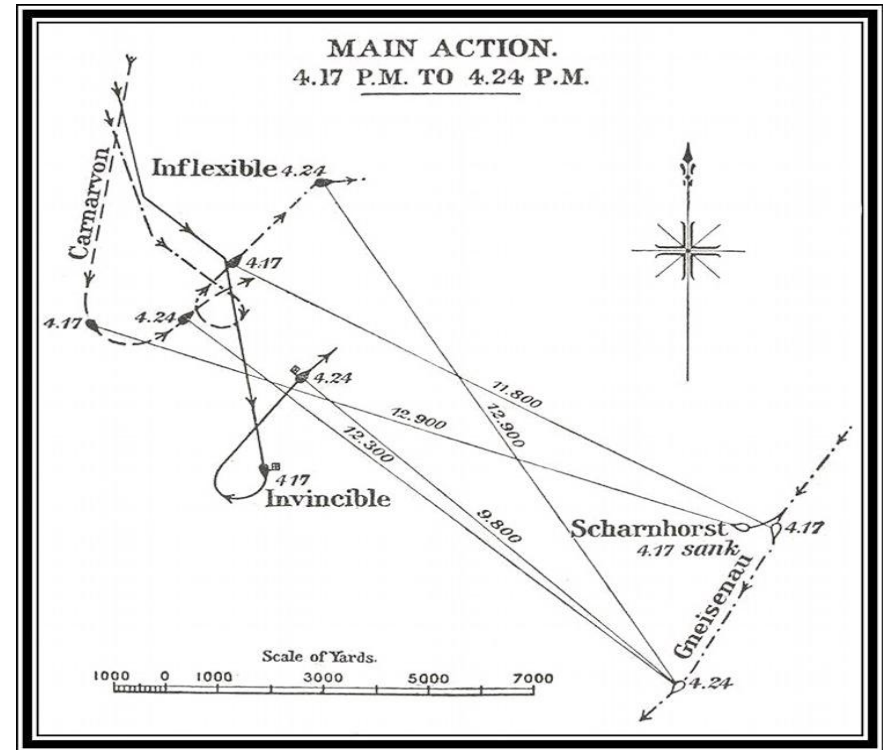
- ◆ Spee arrived late, planned on a dawn attack, detached *Gneisenau* and *Nürnberg* to carry out his orders
 - German ships sighted at 0750, Sturdee orders ships to stop coaling and raise steam
- ◆ 0930 – *Gneisenau* spots multiple tripod masts in outer harbor
 - Captain Maerker misidentifies ships as pre-dreadnoughts
 - *Canopus* opens fire, a practice round ricochets and hits *Gneisenau*'s aft funnel
 - Spee withdraws at high speed, believes he has a speed advantage over RN ships



Battle of the Falkland Islands



Invincible class battlecruiser



- ◆ 1000 – Sturdee’s ships are in hot pursuit, Spee soon realizes his squadron is in peril; the battlecruisers are faster and the weather is clear
- ◆ Sturdee opens fire at about 16.5 yds – accuracy was very poor
 - Closes, but maintains a range of about 11-12 kyds – immune to German APC shells
- ◆ 1320 – Spee signals *Leipzig*, *Nürnberg* and *Dresden* to leave and escape
 - British cruisers, except *Carnarvon*, breakoff and follow



Battle of the Falkland Islands

- ◆ The battle was a foregone conclusion, the Germans were overmatched
 - *Scharnhorst*, *Gneisenau*, *Nürnberg*, and *Leipzig* were all sunk with heavy loss of life
 - Sturdee's ship suffered very light casualties
- ◆ German gunnery was excellent, but ineffective. British gunnery was initially poor, but improved as range was reduced to their training norm
 - Neither battlecruiser had been fitted with a director
 - Sturdee was cautious, under orders to not let the battlecruisers get badly damaged
 - Smoke interference and poor APC shells made Sturdee's work harder
- ◆ The errors made by the Germans were fatal
 - Attempting an attack on Port Stanley
 - Misidentifying the tripod masts
 - Spee assuming he had a speed advantage when he broke off
- ◆ Protecting merchant trade from cruiser warfare was a crucial consideration in the development of the battlecruiser
 - At the Falklands, Fisher's "greyhounds of the sea" did what they were designed to do



Battle of Dogger Bank

- ◆ Battle took place on the morning of 24 January 1915
- ◆ Hipper wanted to conduct a sweep of Dogger Bank, find and eliminate spy trawlers with wireless sets acting as fishing vessels
 - Von Ingenohl approved the foray, but did not deploy the High Seas Fleet
 - CinC signal sent to 1st and 2nd Scouting Groups mid-morning on 23 January
- ◆ Signal was intercepted and dashed to Room 40
 - By early afternoon, Churchill ordered Beatty to ready the Battle Cruiser Fleet for sea



VADM Sir David Beatty

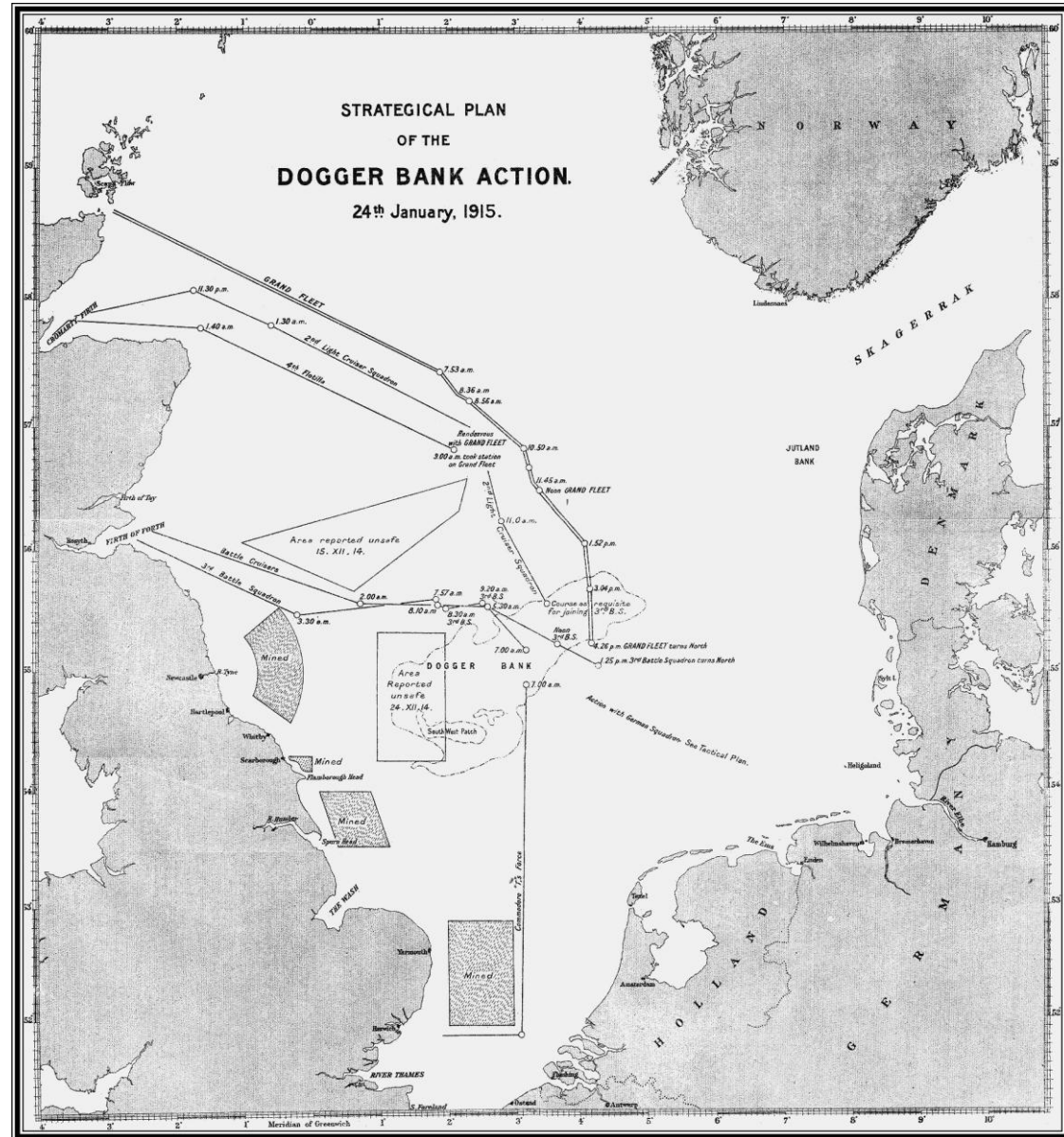


RADM Franz Hipper



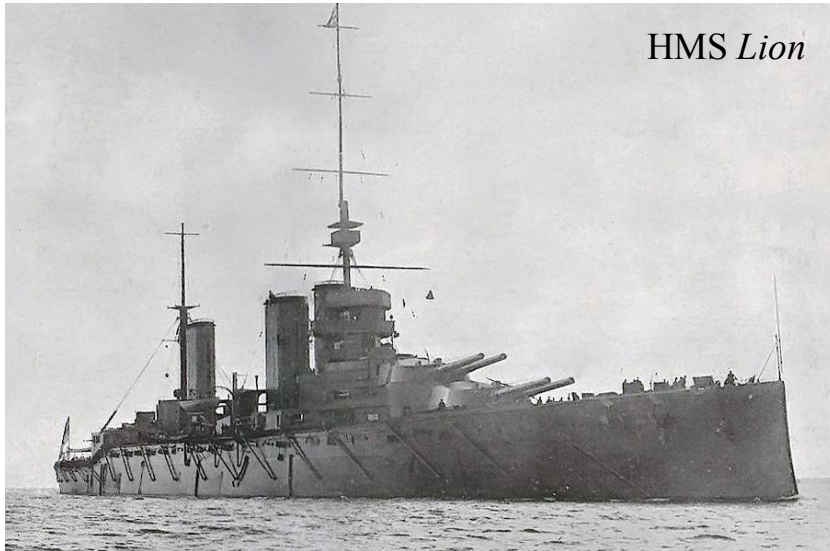
Battle of Dogger Bank

- ◆ Hipper's screen sighted at 0700 by a BCF light cruiser, battlecruisers at 0730
 - Beatty himself didn't get visual contact until 0750
- ◆ Hipper, surprised by the BCF's appearance turned away, increased speed to 22 knots
 - This was about the best speed *Blücher* could make
- ◆ At 0905 the BCF started firing at a range of 19 kyd
 - Weather was clear, with good visibility

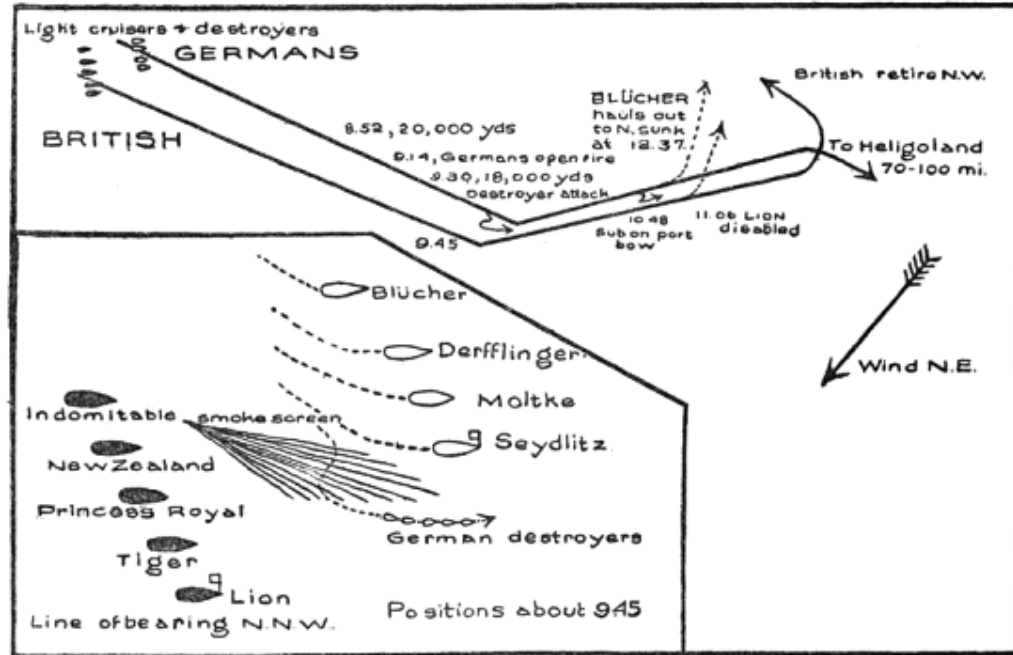




Battle of Dogger Bank



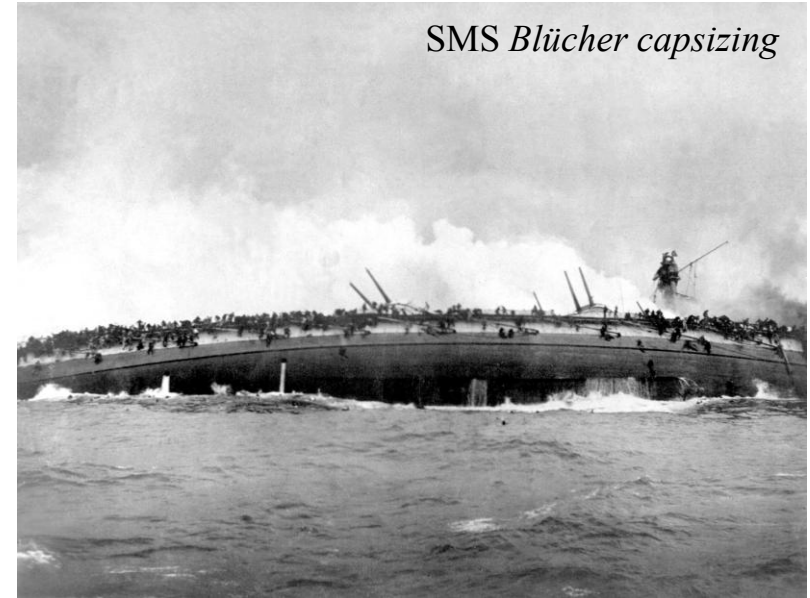
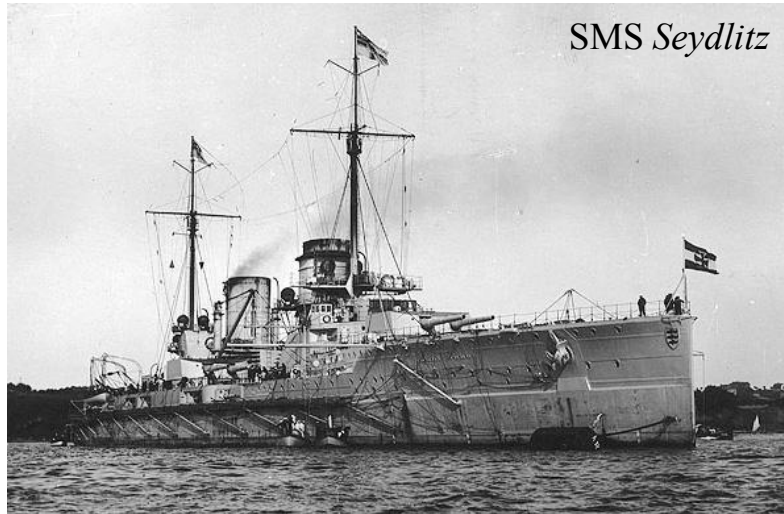
HMS *Lion*



- ◆ Beatty had a slight speed advantage (avg 26 knots) and slowly gained on Hipper's 1st Scouting Group
 - Hipper increases formation speed to 23 knots, *Blücher* can barely keep up
- ◆ Range throughout the battle varied from approx 16.5 kyds to 20 kyds
- ◆ About 0945, a 13.5-inch shell from *Lion* hits *Seydlitz*'s aft main turret
 - Magazine fire nearly destroys the ship, anti-flash doors left open – to support rapid fire
 - More stable propellant and shell filler, along with prompt damage control saved the ship



Battle of Dogger Bank



- ◆ Both *Lion* and *Blücher* were badly damaged and began to slow down
- ◆ Two confusing signals from *Lion* effectively ended the chase
 - Beatty ordered an 8 point (90°) turn to port after he thought he saw a periscope
 - Seymour's combination of two separate signals caused the rest of BCF to close on *Blücher* – “Course North East. Attack the enemy's rear” was read as “Attack rear of the enemy, bearing North East”
- ◆ *Blücher* was summarily pummeled by the British battlecruisers, at short range (≤ 6 kyds) until she capsized and sank



Battle of Dogger Bank

- ◆ British gunnery was quite poor – really only one good hit on *Seydlitz*
 - Germans scored 25 hits on the BCF, the British only scored 6 hits on the German battlecruisers and about 70 on *Blücher*, but the vast majority were at the end of the battle
 - 1st Scouting Group out shot the BCF by about 2:1 (not counting *Blücher*'s pummeling)
 - Germans had some issues with dud shells
 - British battlecruisers didn't have their directors – *Lion* and *Tiger* fitted in May 1915
 - Smoke interfered with coincidence rangefinders, stereoscopic rangefinders less so
 - Both the FQ2 and Bg3m were beyond their effective rangefinding range, but the German gunnery system handled longer ranges better
 - 1912-13 IGN conducted training at 13-14 kyds, the Royal Navy was training at 10-12 kyds
- ◆ Poor ammunition handling procedures by the Germans nearly cost them *Seydlitz*, the more stable RP C/12 propellant and TNT filler along with good damage control by the crew saved the ship
- ◆ Poor communication practice by *Lion* caused the BCF to break off pursuit and focus their undivided attention on *Blücher*
- ◆ All three issues would haunt the British at Jutland



Battle of Jutland



ADM Sir John Jellicoe



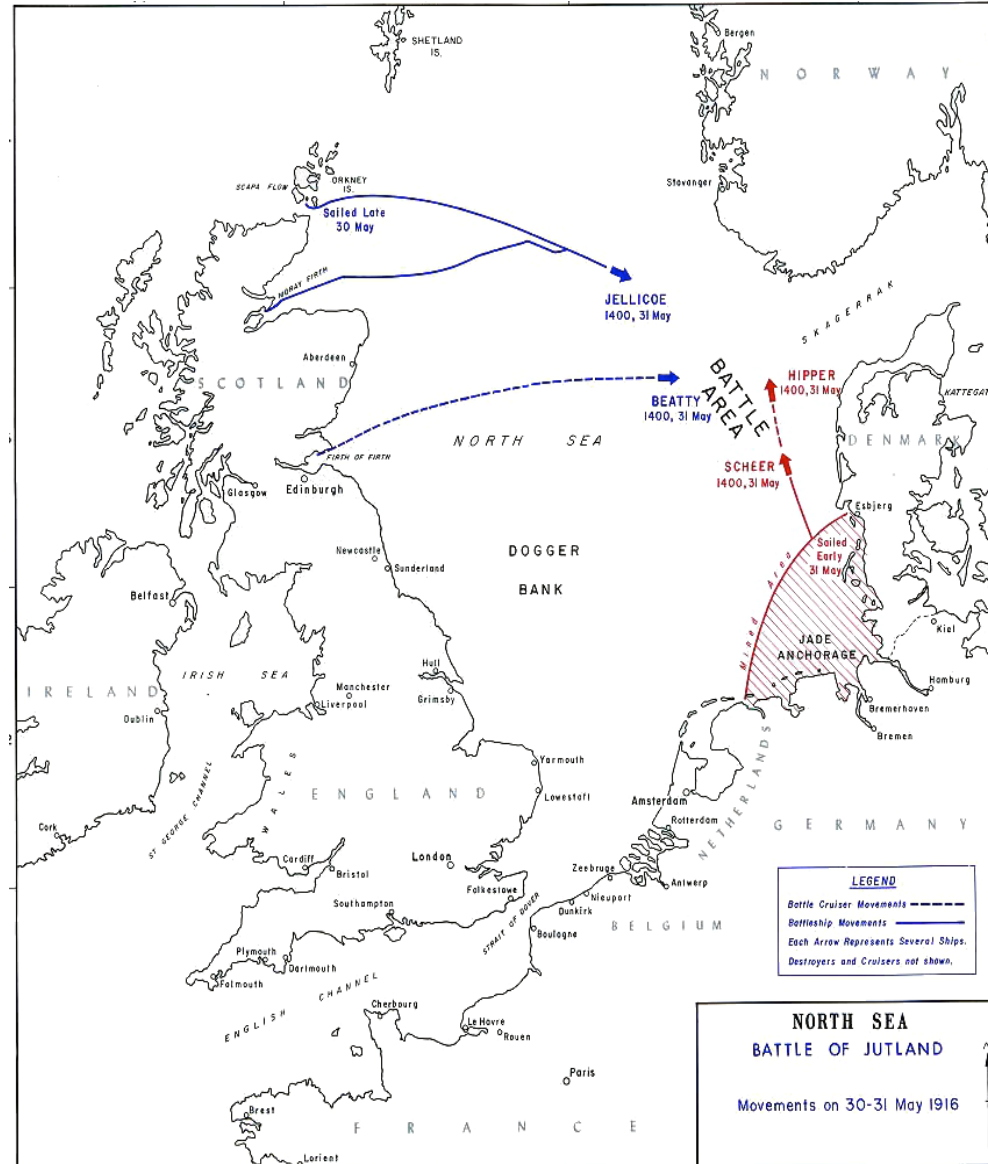
VADM Reinhard Scheer

- ◆ Battle took place on 31 May – 1 June 1916
- ◆ The only massed fleet action of the war – 250 ships total – and the only large scale dreadnought battle in history
- ◆ Both battle fleets had plans for a major sweep in late May/early June
- ◆ Warned by signal intercepts, both Jellicoe and Beatty took their forces to sea before the Germans set sail on the morning of 31 May
 - Delay in confirming the HSF was at sea was due to a new cipher



Battle of Jutland

- ◆ Elements of both the Grand Fleet and BCF were spotted by U-boats as they sortied
 - Scheer and Hipper were warned
- ◆ Poor weather prevented any follow up by Zeppelins due to low cloud cover
- ◆ Contact was first made at 1410 when the German cruiser *Elbing* and two destroyers stopped the Danish tramp steamer, *NJ Fjord*
 - *Galatea* spotted the German ships
- ◆ BCF and 1st Scouting Group sight one another about 1520

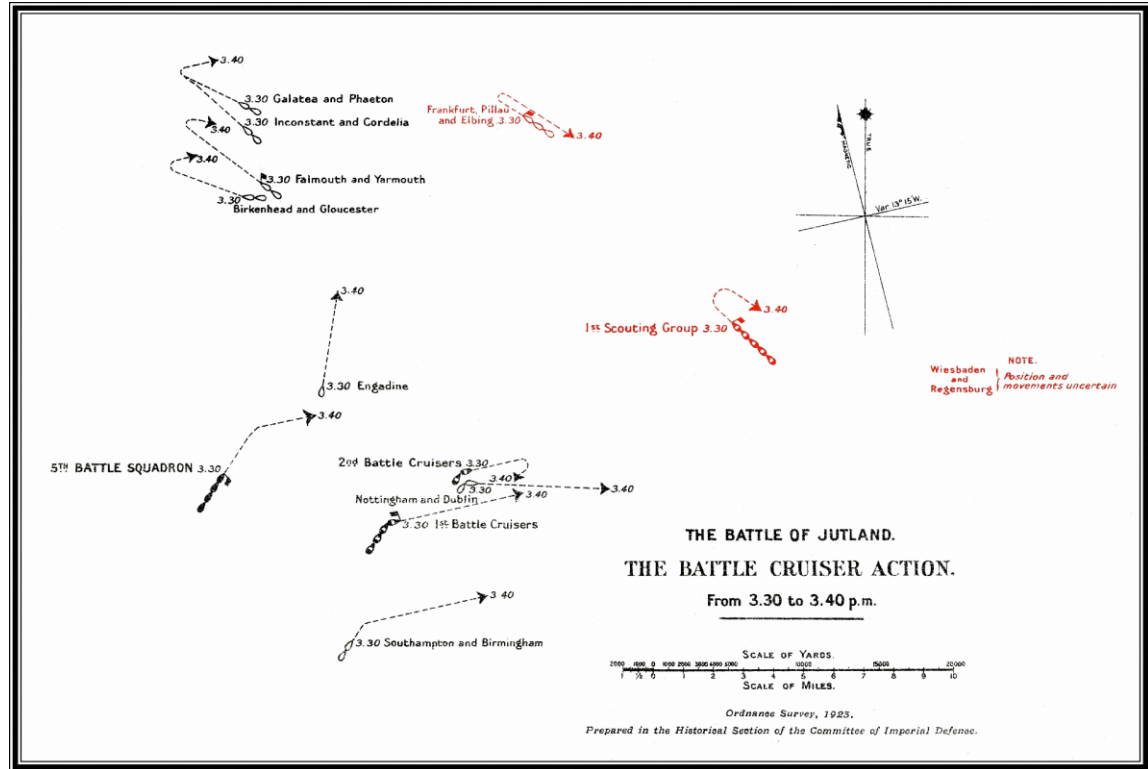




The Run to the South



RADM Hugh Evan-Thomas

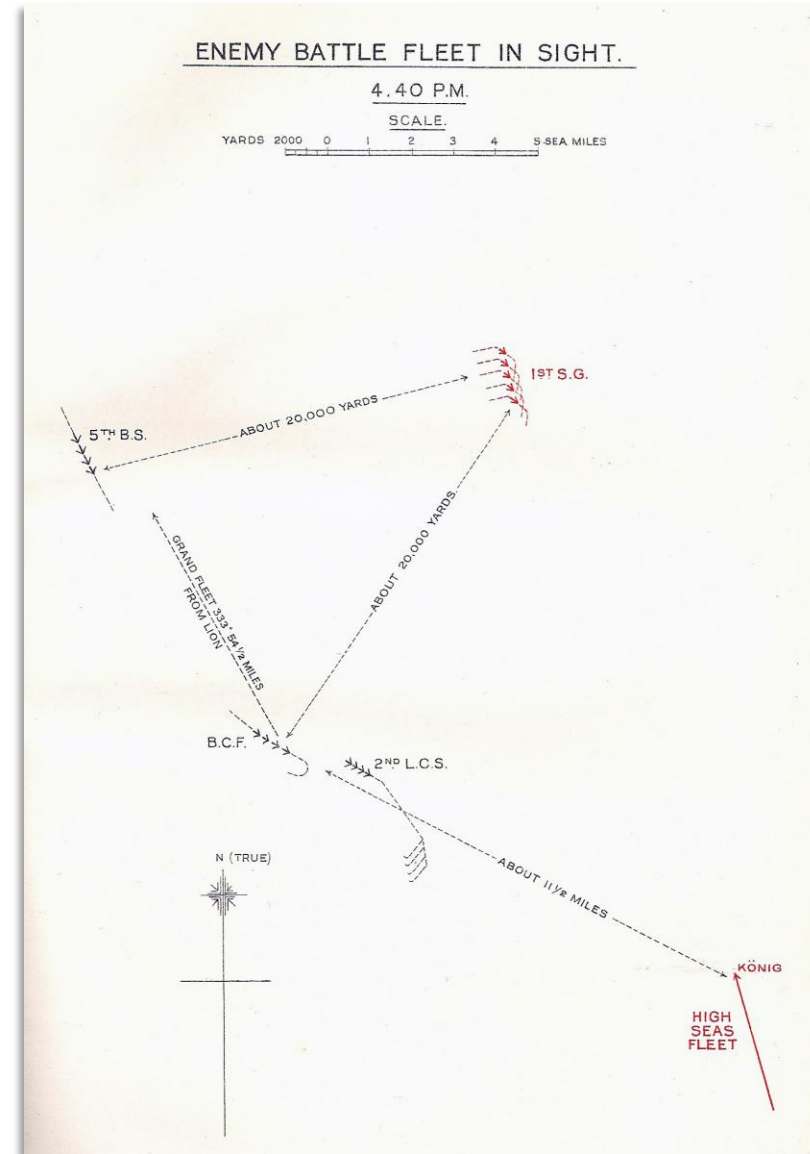


- ◆ British force disposition was less than ideal at the start of the battle
 - 5th Battle Sqdn's initial position put a 5 NM separation from the BCF at the onset
- ◆ The separation grew to about 10 NM due to poor BCF signaling
 - Turn order sent by flags only, no signal lights were used, 5BS didn't see the signal
 - Evan-Thomas was a stickler for proper comms protocol – delayed turn by 8 minutes
 - 5BS not in range to support Beatty when the shooting started



The Run to the South

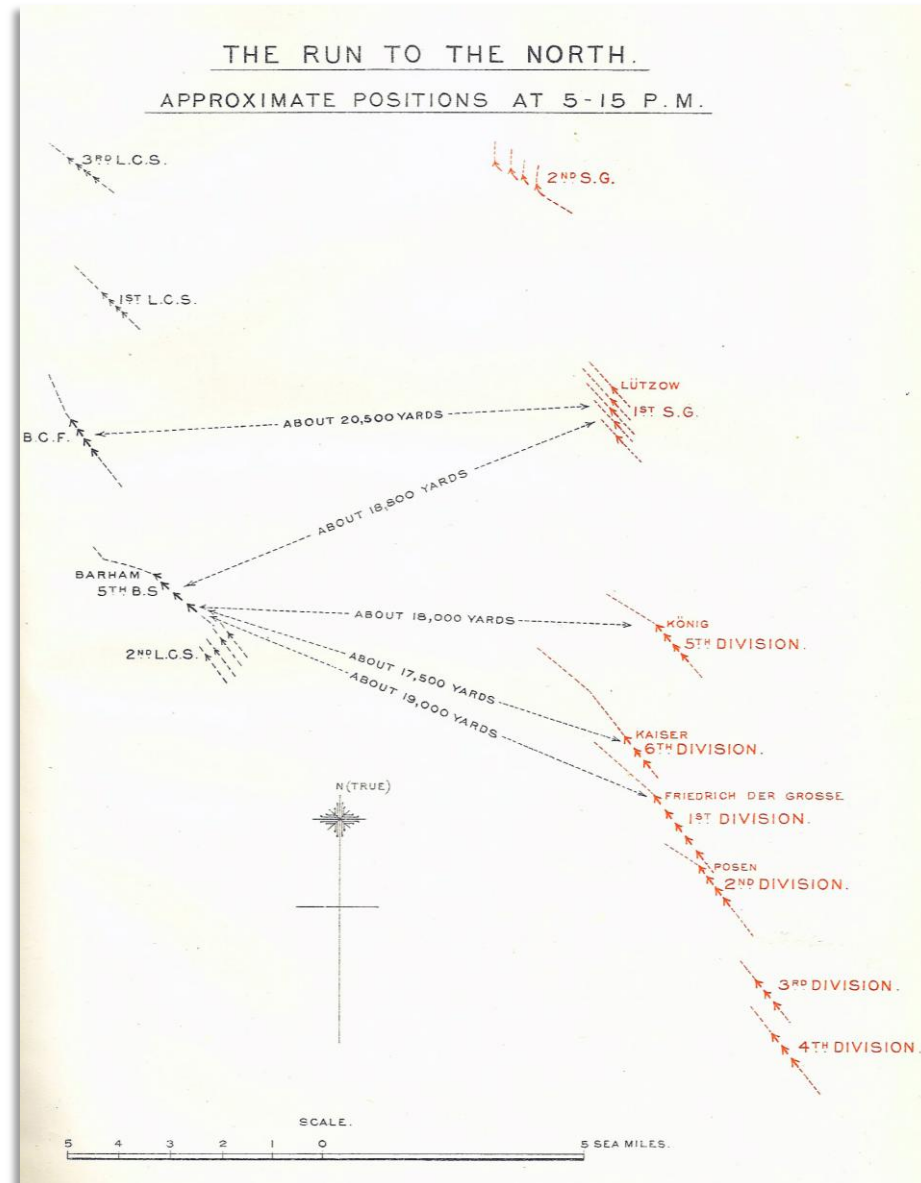
- ◆ BCF and 1st Scouting Group open fire nearly simultaneously - 1548
 - Initial range was about 15.3 kyds, Hipper was pleasantly surprised at the delay
 - BCF first shots were grossly off – nearly a full nautical mile long
- ◆ Poor ammunition handling in the BCF resulted in the catastrophic loss of two ships
 - *Indefatigable* blew up at 1605
 - *Queen Mary* blew up at 1626
 - *Lion* very nearly blew up as well (\approx 1628)
 - BCF training emphasized rate of fire, left flash doors open and stacked shells/bags in turret
- ◆ Declining visibility and smoke hamper the BCF's shooting
- ◆ 5BS opened fire around 1610





The Run to the North

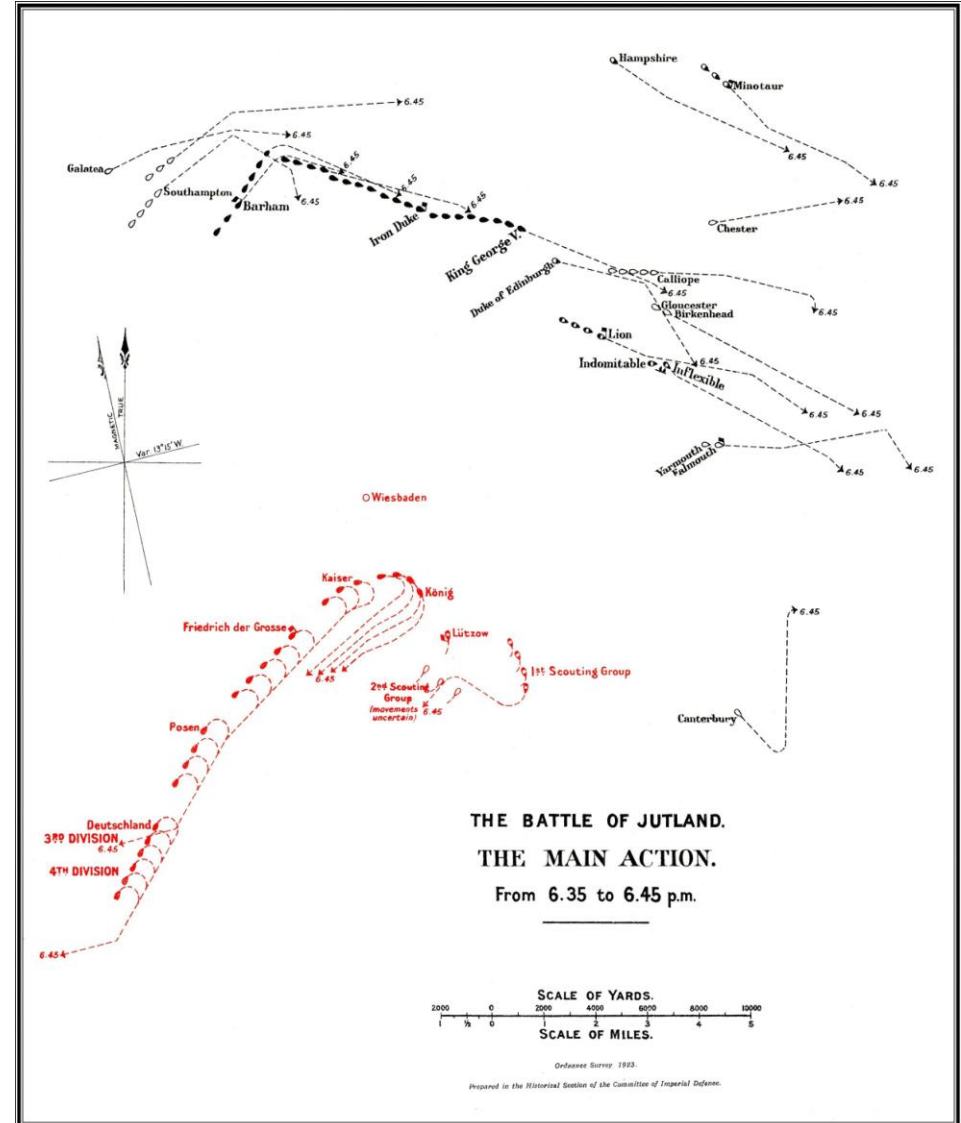
- ◆ 1638 – Beatty sights the High Seas Fleet and orders a 180° turn to starboard two minutes later
- ◆ Beatty signaled Evan-Thomas to turn to starboard at 1650 as he passed by
 - Waited for the signal flags to be hauled down before executing his turn
- ◆ Beatty headed north while trying to keep the German ships in sight
 - Lost visual contact around 1800
- ◆ 1740 – Jellicoe receives first report the HSF was approaching
 - Many following reports were conflicting
- ◆ 1814 – Beatty regains visual contact and reports enemy is to the SSW





Main Fleet Engagement

- ◆ 1815 – Jellicoe orders the fleet to deploy to port
 - Feared a deployment to starboard would have the fleet engaged by the HSF battle line before the maneuver was finished
- ◆ 1820 – Grand Fleet units open fire
- ◆ 1834 – *Invincible* is hit, blows up
- ◆ 1835 – HSF first battle turn about
- ◆ 1855 – HSF second turn about
 - Scheer felt he had to engage again or be cut off from base
 - HSF sails into a storm of shells
- ◆ 1913 – 1st SG ordered to charge
 - Mass torpedo attack also ordered
- ◆ 1918 – HSF third turn about





Lost Contact & Night Encounters

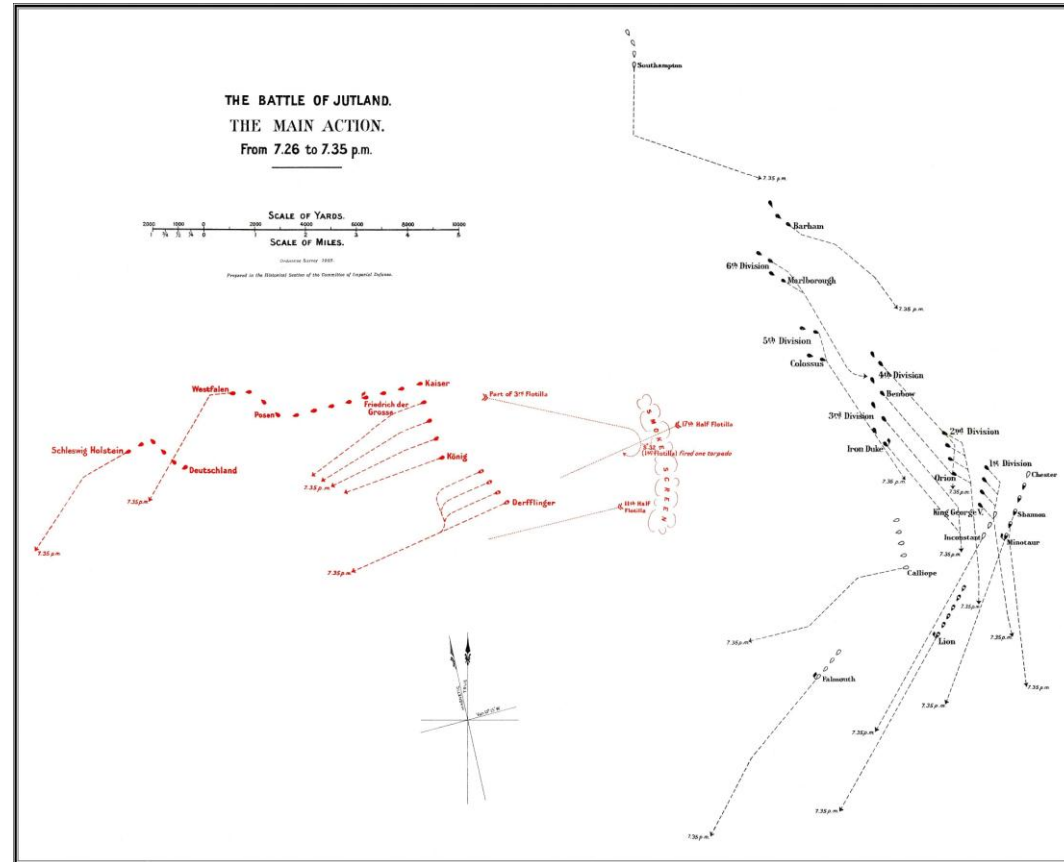
◆ Jellicoe lost contact with HSF at 1930 due to the thick smoke screen and mass torpedo attack

- Jellicoe had turned away exactly as he told the Admiralty he would

◆ Between 2000 31 May and 0230 on 1 June, elements of the two fleets bumped into each other about ten times, but none of these resulted in Jellicoe regaining contact

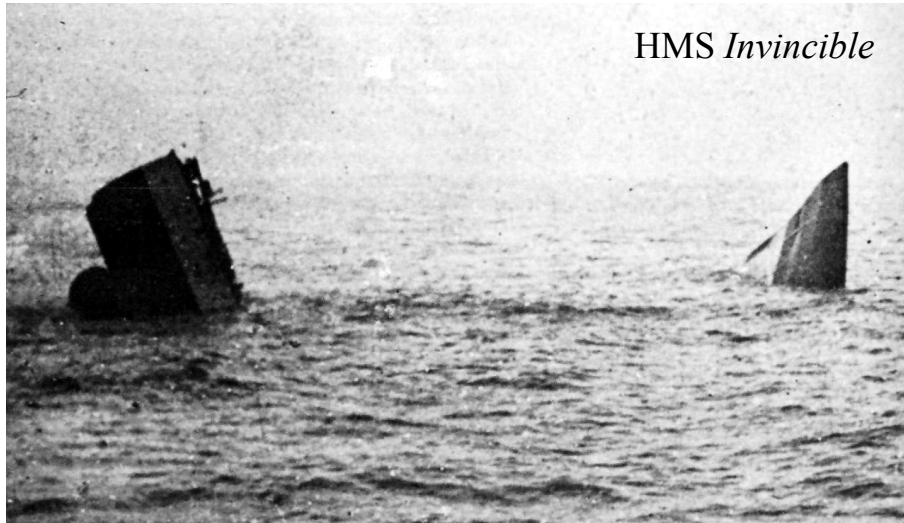
- More than one senior RN officer failed to engage the HSF when detected, or even communicate the detection to Jellicoe

◆ 0415 – Jellicoe receives message that said the HSF had escaped

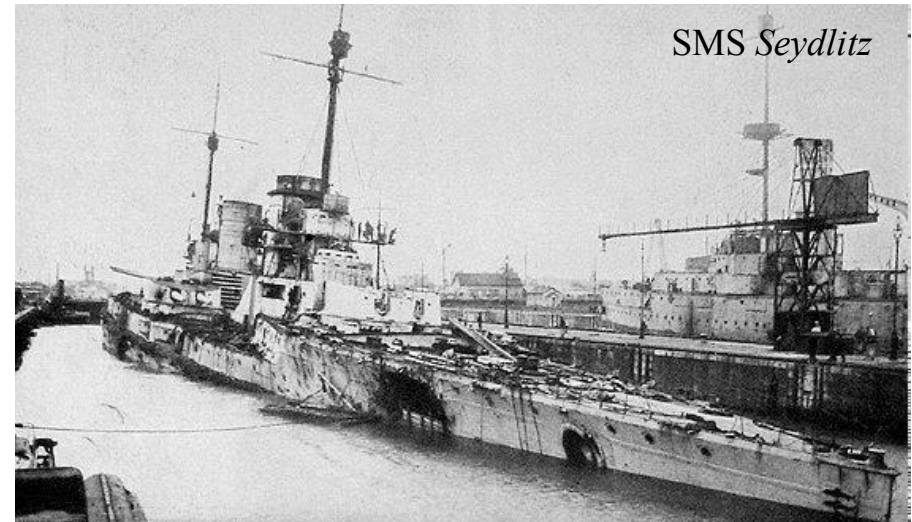




Battle Damage Assessment



HMS *Invincible*



SMS *Seydlitz*

- ◆ Technically a tactical victory for Germany – sank more ships
 - Royal Navy lost – 3 battlecruisers, 3 armored cruisers, 8 destroyers
 - German Navy lost – 1 battlecruiser, 1 pre-dreadnought, 4 light cruisers, 5 destroyers
 - Germans were very fortunate, they could have lost much more
- ◆ While an “unpalatable result,” from the Royal Navy’s perspective, it was still a strategic victory – if only acknowledged in hindsight
 - The blockade of Germany was intact, and the HSF avoided engaging the Grand Fleet again
 - Scheer forced to rely on unrestricted submarine warfare that ultimately doomed Germany



Lessons Learned

- ◆ Finding and fixing a target's location is critical
 - Scouting is the hardest part of naval warfare, and usually glossed over in wargames
 - Players have far more information than they have any right to
- ◆ Communicating is laborious, dull and difficult, but absolutely essential
 - Non-reporting, or worse bad reporting, can cost a commander victory
 - BCF's poor comms practices repeatedly interfered with achieving their mission
- ◆ Advanced technology isn't a benefit if it doesn't work
 - Both sides suffered from ordnance problems, but the Royal Navy suffered far worse
 - Shock sensitive shells and propellants contributed to the loss of three ships at Jutland
 - Robbed them of at least two more ships – *Seydlitz* and *Derfflinger*
- ◆ Advanced technology isn't a benefit if a crew doesn't train properly
 - Battle Cruiser Fleet's shooting through out the war was uniformly poor
 - Accuracy at ranges of 15+ kyds much worse than the IGN and the rest of the Grand Fleet
 - The emphasis on rate of fire pushed ships to bypass/ignore safety measures and procedures
 - High rate of fire did little to improve hit rate, and cost the Royal Navy dearly