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GERMAN NORTH SEA OPERATIONS, INCLUDING JUTLAND,
IN THE WORLD WAR

by

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As submarines are covered separately, my reference to them is only incidental.

At the beginning of the war Germany was faced in the North Sea by an enemy who was superior in homogeneous modern ships; her enemy was also strongly superior in reserve strength if we consider the strength of her Allies as available and this was a consideration which Germany could certainly not neglect. On the other hand England, who was Germany's chief naval enemy, was, because of her insular position, particularly vulnerable to naval attack.

The German Navy had been built up for use as an instrument in Germany's determination to win a world empire. Tirpitz had had a guiding hand in the development of the German fleet and he has laid down one principle regarding the building of ships which we should not forget. He expressed himself as follows:- "The supreme quality of a ship is that she should remain afloat x x x So long as a ship is afloat it retains a certain value and can afterwards be easily repaired". We will see later how well the effort expended in applying this principle was repaid.

During the whole war, the German Navy was under the Army General Staff and all important policies regarding the Navy had to be approved by that Staff. When the war started, it was the belief of the General Staff that the German Army would soon be able to win a decision as it had done in the Franco-Prussian War. Under the influence of this belief, it was the plan of the German General Staff to win the war on the land and not to risk the fleet in active operations in home waters. This was a plan for what Tirpitz rather decisively called "dry land war".

This plan for "dry land war" did not call for any activity on the part of the Navy in home waters and there was accordingly little German activity in the North Sea in the early days of the war; no attempt was made to support the Army by coastal operations; no attempt was made to interrupt the cross-channel passage of British troops; and there was no raiding.

Although the German fleet carried out no important operations in the early days of the war, it was not without an important influence during this period. The chief effect of this influence was the holding of British troops in England to meet the threat of invasion from across the North Sea.

The first operation carried out by German surface craft in the North Sea was the mining of the Thames Estuary by the Konigin Louise on August 5th. After having laid her mines, the Louise was intercepted and sunk by the light forces of the Harwich flotillas. One of the Harwich vessels struck and was sunk by one of her mines. This operation was an indication of important similar operations to follow.

At the beginning of the war, the Germans were quick to appreciate the importance of the defense of the Heligoland Bight but their defenses in these waters do not seem to have been designed to meet the requirements of modern war. These defenses included a circular screen during daylight composed of destroyers in the outer circle supported by light cruisers. The British submarines of Commodore Keyes' command which had been observing the Bight noted and reported the German dispositions.

As a result of the reports received from their submarines the British planned a raid into the Bight which gave good promise but was without important result; it seems that the reason for this British disappointment is to be found in the defective organization of their forces employed. A secondary motive in this British raid was to support the landing of their marines at Ostend.

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The British force employed in this operation consisted of 5 battle cruisers, 1 division of light cruisers, 2 flotillas of destroyers and submarines. The forces came from the Grand Fleet, the Humber and Harwich and arrived in the Bight at daylight on August 28th. The Harwich ships first made contact with the German patrol vessels which withdrew from the engagement. The various parts of the British force then made contact with one another and were confused because they had not been informed as to all of the British forces present. The British forces withdrew and were followed by German light cruisers. These German cruisers appear to have been acting independently and three of them which encountered superior force were sunk. The losses were: German, 3 light cruisers and 1 destroyer; British, 1 light cruiser badly damaged but saved. It seems that in this first engagement, the co-ordination on neither side was what it was later developed into.

As a result of this raid, the German defenses of the Bight were re-organized. The cruisers and destroyers were withdrawn from their patrol and replaced by fishing vessels which were armed for action against submarines and were equipped with radio; a mine field was laid to the westward of Heligoland. That these measures were effective is shown by the fact that, during the remainder of the war, the British did not attempt another similar operation.

During September and October, the Germans continued their mining and submarine operations; their submarines were gradually extending the field of their operations which had, at first, been confined to waters near their bases. On September 22, 1914, the Cressy, Aboukir and Hague were sunk by a submarine. In October the Germans increased their mining operations on the East Coast of England by using auxiliary merchant ships and converted destroyers. The converted merchantman Berlin went around north of Iceland and mined the north-west coast of Ireland. The net result

of all these operations was to subject the Grand Fleet and merchant vessels in these waters to considerable danger.

In order to avoid this danger, the Grand Fleet base was moved to Lock Ewe and then Lough Swilly temporarily until submarine defenses for Scapa could be made effective. On October 27, the new battleship Audacious struck one of the Berlin's mines off Lough Swilly and was lost. On October 30th Jellicoe wrote to the British Admiralty a letter in which he set forth his intentions with regard to the handling of the Grand Fleet in case of contact with the German Fleet.

This letter of Jellicoe's, which received the entire approval of the Admiralty, was important as it laid down the principles by which Jellicoe would be guided if the Grand Fleet and High Seas Fleet made contact. It will be further commented on under the Battle of Jutland but the important point to note here is that the attitude of the British high command toward a fleet action was dictated by the necessity of avoiding the German mine and torpedo offensive. Thus it seems that the British had surrendered to a certain degree "freedom of movement" in a fleet action; their movements were to be based upon the necessity of avoiding the German submarine and mine menace.

It is interesting to note here the instructions which kept the High Sea Fleet inactive so far as the North Sea was concerned. At about this time, the German Commander-in-Chief received from the Naval Staff instructions which read in part as follows:-

"The existence of our fleet ready to strike at any moment, has hitherto kept the enemy away from the North Sea and Baltic coasts and made it possible to resume trade with neutral countries in the Baltic. The fleet has thus taken over protection of the coast and troops required for that purpose are now available for use in the field. After even a successful battle, the ascendancy of the fleet under the numerical superiority of the enemy would give way, and under the pressure of the enemy fleet the attitude of the

neutrals would be prejudiciously influenced. The fleet must therefore be held back and avoid actions which might lead to heavy losses. This does not, however, prevent favorable opportunities being made use of to damage the enemy. An employment of the fleet outside the German Bight which the enemy tries to bring about through his movements in the Skagerrak, is not mentioned in the orders for operations as being one of the favorable opportunities. There is nothing to be said against an attempt of the big cruisers in the North Sea to damage the enemy."

Under the authority granted in the last sentence of the above instructions the German coastal raids were started.

On Nov. 3, 1914, three battle cruisers accompanied by light cruisers proceeded to the S.E. Coast of England and laid mines. No attempt was made to raid the coast and, although enemy light forces were encountered, no losses were sustained on either side.

On December 15th the raid was made against Hartlepool, Whitby and Scarborough. The ostensible reason for these raids was that they were against fortified towns. No military result was attained from the bombardment nor could it have been expected. The real object of these raids seems to have been the following:-(1) To keep British land forces at home by keeping alive the fear of invasion; (2) To mine the trade lanes, and (3) To create a situation in which inferior British forces could be engaged to advantage. The battle cruisers which took part in the bombardment were the Seydlitz, Moltke, Derfflinger, Blucher and von der Tann. Because of heavy weather all destroyers and light cruisers except the Kolberg were detached before the British coast was reached; the Kolberg laid mines.

On this occasion, the High Sea Fleet went to the vicinity of the Dogger Bank as support. The British battle cruiser squadrons, and Second battle squadron with light cruisers and destroyers were also at sea, the British Admiralty having estimated that the Germans

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might attempt cruiser raids after publication of the news that British battle cruisers had been engaged at Falklands. In the early hours of December 15th the High Sea Fleet and the British Force were only 50 miles apart, and, at 5:15, their screens met and fought. Admiral von Ingenohl promptly withdrew with the High Sea Fleet as his orders required and we seen an example of an opportunity lost through a strict interpretation of orders. The German battle cruisers evaded the British force and returned to their base; their evasion was made possible by reports received from one of their detached cruisers, the Stralsund, which encountered and tracked the enemy.

At dark on January 23, 1915, Hipper went to sea with three battle cruisers, the Blucher, four light cruisers and twenty-two destroyers "to reconnoiter off the Dogger Bank x x x and there to destroy any of the enemy's light forces to be met with". The British had been informed of probable German activity and, just before daylight of the 24th, Beatty was also heading for the Dogger Bank with five battle cruisers, seven light cruisers and thirty five destroyers.

At 7:15 a.m. the screens of these two forces met and engaged. Heavy smoke was soon after reported to Hipper who withdrew and, as soon as he ascertained the presence of large enemy ships, increased to full speed. A chase soon developed, the German ships running on southeasterly course and the British ships slowly overhauling them from a position on their starboard quarter. At 9:00 the Lion, which was leading the British column, commenced firing and soon was hitting the Blucher which was the rear German ship. By 9:30 all the German ships were under fire and they were concentrating heavily upon the Lion. At 9:40 the British turned away temporarily to avoid a threatened torpedo attack; this decreased the intensity of the fighting. At 10:48 the Blucher sheered out disabled. At 10:54 Beatty made a sharp turn to the northward to avoid a reported submarine; the Lion was now in bad shape and Beatty signalled his

second in command to engage the enemy bearing N.E. The second in command understood this to mean the Blucher and all the British ships engaged and sank the disabled Blucher while the remaining German ships escaped.

There was little or no use of light forces on either side in this action. The British destroyers had early taken station astern on account of their smoke and seem to have taken no part; it seems that, had they been disposed in Beatty's van, he need not have given way to the German destroyer and submarine threats. The German destroyers might, at any time, have made an attack upon the British battle cruisers which the latter must have faced or broken off the engagement with the major ships. The reason the German destroyers did not attack seems to be because, had they done so, they would probably soon have lost the support of their battle cruisers and any damaged vessels must have fallen to the pursuing British. This policy of not risking vessels in exposed and unsupported attacks seems to have always been strongly held to by the German fleet.

The Seydlitz was heavily hit in this action. While her mobility was in no way affected, her two after turrets were burned out and the ship narrowly escaped the fate which later fell to the Inflexible and other British battle cruisers. Upon her return to the dockyard, extensive experiments covering a period of six weeks were made in her turrets and an improved system of fire prevention was adopted and installed in all the battle cruisers. The German care and thoroughness in this case was well repaid at Jutland where several of their battle cruisers successfully withstood very heavy hitting.

We should now see how the war was going in other fields. The Allied plans for 1915 contemplated:—A French offensive on the Western front, a British offensive at the Dardanelles, a Russian offensive against Austria-Hungary, and Fisher's nebulous plan for combined operations in the Baltic absorbed most of the British ship-building facilities. The plans of the Central Powers called for

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an offensive against Russia and holding fast elsewhere. In the execution of these plans the Central Powers were successful; the Russian Army was driven back in disorder; Bulgaria joined the Central Powers; and the Allied offensives were nowhere successful. This sea power was one of the few advantages the Allies enjoyed over the Central Powers. The Allies were not able to bring the whole effect of this sea power to bear because the Baltic and Black Seas were open to their enemies and a large amount of trade still reached Germany through neutral countries but still their sea power remained one of their trump cards.

But even the Allied sea power was soon to be seriously threatened from an unexpected direction. While the German plans would not allow the active use of the High Sea Fleet in the North Sea, their Navy had been steadily extending the operations of their submarines. In early 1915, the confidence of the German naval authorities in these vessels had reached such a point that they urged upon the government the adoption of submarine warfare against merchant shipping in order to cut off trade to and from England. The German choice of time for starting these operations and legal grounds upon which to base their action seem to have been unwise and this led them into serious difficulty with neutrals. The submarine campaign against merchant ships in British waters was first started on 18 February, 1915, and lasted until September of the same year; in September this warfare against neutral merchant ships was abandoned. No decisive damage was done but an indication was given the Allies as to what might be done against them by such methods. This lesson seems to have been lost upon them; the reason for this is probably because they considered that the steps they had taken against submarines had nullified them whereas the real reason the Germans gave up this warfare was to avoid serious complications with neutrals.

It appears that the German Naval operations in the North Sea during 1915 had kept alive in England the fear of a German invasion. Corbett has said of this period, "It was felt in certain naval

quarters that owing to recent developments the old confidence of the sea service in its ability to intercept any formidable raiding force could scarcely be maintained in full integrity." A large force of troops was kept in England at this time in order to repel this possible invasion.

The beginning of 1916 saw a revival of German naval activity. Scheer, who took command of the High Sea Fleet in January, has given two reasons for this activity; he said "The conviction that English maritime power was a serious menace to our capability of resistance seemed to make it imperative that, if a successful issue of the war were to be expected, it must be waged more energetically against that adversary" and "If the utility of our High Sea Fleet were not made more distinctly manifest, then its deeds were not sufficient to justify its existence and the vast sums exacted from the resources of our people for its maintenance".

The first step taken by Scheer was to extend and stiffen the patrol of the Heligoland Bight. This change included starting air reconnaissance, increasing and extending mine sweeping and anti-submarine operations; cruisers were also used to stiffen these patrols. These changes extended the "free zone" covered by the patrolling craft to a radius of about 120 mis. Light cruisers were also used to support airships on their raids to England and the cruisers in turn were supported by the battle cruisers which did not however yet leave the "free zone". "In this way", says Scheer, "the entire Fleet was kept in a certain state of tension, and unvarying alertness in view of eventualities at sea was maintained".

On the night of 10-11 February there was a brush on the Dogger Bank between the 10th British sloop flotilla and three German destroyer flotillas as a result of which the sloop Arabis was sunk.

On 5 March the High Sea Fleet carried out its first excursion into the North Sea. Submarines had previously been stationed off

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the East coast of England and airships were used for scouting. The object of this excursion was to gain an opportunity to engage the British forces to advantage. No contact was made.

On the night of 25 March the light forces of the Harwich flotillas made a raid in the Bight and some damage was done on both sides, mostly by ramming.

In mid-April, as a result of the sinking of the British passenger ship Sussex by a submarine, the U.S. made a strong protest. The stand taken by the U.S. at this time caused the abandonment on April 20th of the use of submarines against any merchant vessels except in accordance with Prize Law. This meant that submarines could no longer be used against merchant ships and this released a large number of submarines for operations with the High Sea Fleet.

On April 25th the High Sea Fleet made a bombardment of Lowestoft and Yarmouth. As on the occasion of previous bombardment, the ostensible reason for this operation was to reduce the forts of these towns and the probable real reason was to find an opportunity to engage a part of the Grand Fleet to advantage. Both Jellicoe and Beatty were at sea at this time but no contact of importance was made. The Seydlitz had been mined leaving the swept channel and repairs to her and other ships delayed further operations until the end of May,

"BATTLE OF JUTLAND"

It first seems best to consider why the two fleets were at sea as their purposes had a bearing upon the action:

The German submarine war against merchant ships having been temporarily abandoned, Scheer had a considerable number of submarines available for operations with the fleet. In pursuit of the German policy at this stages of the war, Scheer had planned an operation against Sunderland, about the middle of the English east coast. This operation contemplated the stationing of submarines off the East coast of England, then a bombarding raid against Sunderland by battle— and light cruisers supported by the High Seas Fleet, with dirigibles disposed so as to scout and protect the High Sea Fleet against surprise by superior force; it was hoped that this would draw out the British fleet in such a way as to give the Germans an opportunity to give battle to a part of the British fleet "under conditions favorable to us". (Scheer). On 23 May, 12 submarines were stationed off the English coast and all preparations were made. The weather did not however— serve for scouting from the air and Scheer was obliged to wait in port. The weather continued unfavorable for air operations and the submarines having reached the limit of their endurance, Scheer abandoned the Sunderland operation and adopted an alternative plan with the same objective, namely drawing out the British Fleet in order to engage a part of it under "conditions favorable to us". The bait in this case was to be commerce raiding in the Skagerrak by Scheer's cruisers. In pursuance of this latter objective he put to sea in the early morning of 31 May and stood North up the coast of Jutland, his battle cruisers with their screening vessels preceding his Battle Line.¹

1. "Naval History" II, Chapter XV.

Jellicoe made his attitude in regard to a fleet engagement entirely clear in a letter to the British Admiralty dated 30 October, 1914. In this he said "My object will therefore be to fight the fleet action in the northern portion of the North Sea, which position is x x x nearer our own bases" and "If for instance the enemy Battle Fleet were to turn away from an advancing Fleet, I should assume that the intention was to lead us over mines and submarines, and should decline to be so drawn." From the tenor of this letter and from the fact that it received the entire approval of the British Admiralty, we must assume that the attitude of the British high command toward a fleet engagement was one of extreme caution and that it was the considered conviction that the High Sea Fleet should be decisively engaged only if the opportunity came under conditions favorable to the British Fleet. The two parts of Jellicoe's fleet put to sea on the night of 30-31 May because of information received by the Admiralty which indicated activity on the part of the High Sea Fleet. Jellicoe says in his book that "The Grand Fleet put to sea x x x for the purpose of carrying out one of its periodical sweeps in the North Sea."¹

I have tried to find out the tactical attitude of the two fleets towards a fleet engagement because this attitude had an important bearing upon the conduct of the action. It appears clear that the mission of both fleets was "to engage under conditions favorable to us" and to decline a decisive engagement under other conditions:

At 2:15 p.m. 31 May, the two fleets were disposed about as follows: Scheer with 16 battleships 1st line, 6 battleships 2nd line, 6 light cruisers and 31 destroyers was off the Jutland coast standing to the northward. Hipper with

1. Reeves, page 6.

5 battlecruisers, 5 light cruisers and 30 destroyers was 52 miles ahead of Scheer. Beatty with 4 fast battleships 1st line (25 knots), 6 battle cruisers, 14 light cruisers and 51 destroyers and leaders was 45 miles about west of Hipper and standing slightly north of east. Jellicoe with 24 battleships 1st line, 3 battlecruisers, 8 armored cruisers, 12 light cruisers, 51 destroyers and leaders and one light minelayer was 73 miles NNW of Beatty standing to the SE'd.

A rough comparison of forces shows as regards the advance forces (Beatty and Hipper) the following ratios:

	<u>British</u>	<u>German</u>
Heavy Ships	10	5
Light cruisers	14	5
Destroyers	27	30

As regards the main fleets, leaving out the advance forces:

	<u>British</u>	<u>German</u>
Battleships 1st line	24	16
" 2nd "	0	6
Battle Cruisers	3	0
Armored Cruisers	8	0
Light Cruisers	26	11
Destroyers	78	61

A comparison of fighting strengths of British and German ships of similar types would show that, in some cases, the advantage was on one side, and some on the other. Leaving out, for the moment, the question of comparison by types on the assumption that the differences will about balance one another, it seems that Beatty had a clear preponderance of strength over Hipper and that Jellicoe had the same over Scheer.

Contact was made at 2:20 between Beatty's and Hipper's screens. The point of contact was about 12 miles east of Beatty and about the same distance west of Hipper. At the time of contact, Hipper's Scouting Division I (5 battle cruisers) was in close formation; Beatty's main strength was in an irregular dispersed formation, the 5th Battle Squadron (4 fast battleships) being 5 miles to the northwestward of Beatty. Soon after the contact, Beatty changed to a south easterly course by flag signal in order to cut off the German forces from their line of retreat via Horn Reef; due to the distance, the 5th Battle Squadron did not get this signal promptly and was thus thrown astern of Beatty about 10 miles on what later proved to be the battle course. Hipper proceeded to the northwestward with his forces well in hand.

At about 3:12 Beatty turned all forces simultaneously to the northeastward and proceeded at high speed in order to close Hipper. At 3:25 Beatty in the Lion sighted Hipper's battle cruisers and formed the 2nd Battle Cruiser Squadron astern of the 1st and turned to a southeasterly course which Hipper had already taken. Note that, although an hour had elapsed since the first contact and although the presence of enemy heavy ships had been reported to Beatty by his screen, he had taken no steps to concentrate the ships which composed his main strength and his maneuvers had had the effect of increasing the dispersion of these ships from about 5 miles to about 10.

At the time of the sight contact between the two battle cruiser fleets, Beatty's ships were still forming up and were reclosing the range fast in line of bearing. Although the British ships out-ranged the Germans, the latter apparently opened fire first and, due to their formation, the British ships were unable to make effective reply. The Germans opened fire at 3:48 at range 14,500.¹ Within about 13 minutes of

1. Reeves, page 22.

the time the Germans opened fire, the Indefatigable sank and the Lion was so heavily hit as to be obliged to leave the column temporarily; the German accounts say that their ships received practically no damage. Thus, by good maneuver and effective fire in the early stages, Hipper had changed what had been a numerical inferiority into a numerical superiority.¹ It seems worth while noting here that, during this stage of the action, Beatty was proceeding at 25 knots while Scouting Division I (Hipper's battle cruisers) was proceeding at 18 knots in order to allow Scouting Division II (Light cruisers) to close. Something was certainly radically wrong with the firing of Beatty's ships at this stage and it seems that the maneuvers in which they were engaged must have had an important effect. It looks like a case where "more haste" in maneuvering produced "less speed" in damaging the enemy.

The Battle Cruiser action continued on generally SSE courses. Soon after the Indefatigable sank, Beatty hauled off and the firing ceased temporarily; also the 5th Battle Squadron (Evan-Thomas in 4 Queen Elizabeths), by proceeding at 25 knots and cutting corners, was able to close up and, at 4:11 opened fire at extreme range. Shortly after the 5th Battle Squadron engaged, the range between the two battle cruiser fleets closed due to converging courses taken up by both Beatty and Hipper. At 4:15 the battle cruiser action had become hot at a range of about 19,000 yards which was still closing. At about 4:25 both Beatty and Hipper apparently thought things were not enough and hauled off to increase the range. At 4:26 the Queen Mary blew up; by 4:30 the 5th Battle Squadron had closed the range to 15,000 where their fire must have been felt.

1. Reeves, pp. 23 and 24.

We now come to the only occasion when the British made a concerted destroyer attack. At 4:09 the 13th flotilla with eleven destroyers moved out to attack in accordance with orders from Beatty. At about the same time 16 German destroyers supported by a light cruiser moved out; whether their mission was to frustrate the British destroyer attack or to attack themselves is not clear. These two flotillas met between the lines, had a close engagement and both fired torpedoes; the net results were that the British lost 2 destroyers and the Germans 2 and the British got one torpedo hit in the Seydlitz and the Germans none.

A good deal has been said in criticism of the British flotilla on the ground that they should have persisted in their attack instead of engaging the German destroyers. It seems to me that this is probably not merited. It is not clear what the mission of the German destroyers was; if they came out and engaged the British ships, how were the British to avoid them? Or, if on the other hand, the Germans intended to leave the British destroyers alone and attack heavy ships, they were in an ideal position to attack the 5th Battle Squadron in such a way that it must either withdraw its support from Beatty or accept the dangerous attack in full strength; in this case, would it have been better for the British flotilla to have pushed on with their attack and allowed the most effective support of the hard-pressed battle cruisers to be driven off?

The Battle Cruiser action continued at indecisive ranges without important incident until 4:33 when the Commander, 2nd Light Cruiser Squadron (Goodenough in the Southampton) who was about 4 miles ahead of Beatty reported "Battleships S.E." It appears that, for reasons which it is not necessary to discuss here, this was a complete surprise to Beatty who headed in the direction of the reported ships, apparently

to verify the report. At 4:42 Beatty sighted the High Seas Fleet on northerly course and immediately countermarched with his Battle Cruisers.

The presence of the High Seas Fleet was reported to Jellicoe by the Southampton in complete reports at 4:38 and again at 5:00, and by Beatty at 4:45. Beatty's report was incomplete and was garbled so that, when it reached Jellicoe, it said the enemy was on a SE course. Incredible as it may seem, it is nevertheless a fact that this is the only message Beatty, the commander of the British advance force, gave to Jellicoe until about 6:30 by which time the two had made sight contact with one another.

We should note here that Scheer, upon learning that Hipper was coming South engaged with Beatty, stood to the westward with the object of catching Beatty between the High Seas Fleet and Scouting Division I when contact was made. Upon being later informed of the presence of battleships (5th Battle Squadron) with Beatty, Scheer abandoned this plan and shaped his course to meet Hipper ahead. The two parts of the German Fleet met head on in a very well executed manner and the whole German Fleet was, in a few minutes, concentrated and ready for action.

When Beatty countermarched, no orders were sent the 5th Battle Squadron which continued on its southerly course until 4:53 when Beatty, standing to the northward, passed it and directed it to turn. The 5th Battle Squadron countermarched but it was so late that it was 3.5 miles astern of Beatty and was soon (at 5:00) being heavily hit by concentrated fire from both Hipper and Scheer. Beatty stood on to the northward at high speed so that 5:05 he had run out of range from Scouting Division I and had lost touch with Scheer's ships. Beatty says that his mission was now "to lead them (the German Fleet) towards the Grand Fleet." This he undoubtedly did but in such

a way that, when he himself found Jellicoe, he was unable to give him any useful information regarding the enemy.

While the Battle Cruisers were engaged, Jellicoe had been standing to the southeastward at 20 knots with his battle squadrons in line of bearing about NE-SW. About 8 miles ahead of him the armored cruisers were stretched in a screen across his front. The light cruisers and destroyers were close to the battle line. At 5:55 the Marlborough which was leading ship of the right hand squadron with Jellicoe sighted and reported Beatty's battle cruisers bearing about south and coming to the northward engaged with an unseen enemy.

Thus, Jellicoe had made contact with Beatty broad on his starboard bow. This was unexpected as all Jellicoe's dispositions had been made for sighting the engaged ships ahead; Hood, with the 3rd Battle Cruiser Squadron, whom Jellicoe had sent ahead to join Beatty, was now well over on the disengaged bow of Scouting Division one. This unexpected situation was caused by the fact that there was a difference of eleven miles between the reckoning of the Iron Duke and the Lion; this error contributed to what must have been a very confusing few minutes to Jellicoe.

The Black Prince in the armored cruiser screen ahead of Jellicoe had reported Scouting Division I but Jellicoe was again confused by a garbled despatch from the Southampton which reported the German battleships ahead of Scouting Division I.

Upon making contact with the Grand Fleet Beatty headed across its bows to gain station on its N.E. flank. By doing this he smoked up the area ahead of Jellicoe so that nothing could be seen ahead of the Grand Fleet. At the same time he gave Jellicoe no adequate information as to the enemy.

In the midst of this confusion at 6:15 Jellicoe deployed the Grand Fleet on its left flank squadron which was the strong one. Jellicoe now slowed to 14 knots to allow Beatty to get ahead of the Battle Line.

This confused state in the British fleet persisted until after 6:30 by which time the battle cruisers had gained station ahead of the Battle Line and the whole fleet was pretty well straightened out on a south-easterly course. The 1st, 2nd and 3rd battle cruiser squadrons were in the lead, then the battle-ship squadrons and last the 5th Battle Squadron.

During all this time, the High Sea Fleet had closed up (at 5:40) so that the fleet was well in hand and continued to the northward. Scouting Division I which was in the lead, gradually turned to the eastward under pressure from the British battle cruiser squadrons. By 6:30 Scouting Division I was on a southeasterly course and was hard pushed by the British battle cruisers. At 6:30 the Invincible blew up from the effects of shell fire, and at 6:37 the Lutzow was out of formation and slowed to 17 knots with 20 major hits.

The situation of the German Fleet was now becoming critical as the British battle squadrons approached the sharp bend produced in the German column by its turns away. Scheer now got out of this tight corner by executing for the first time in the action the rehearsed "turn away together" which soon took them out of range from the British Fleet.

The British apparently failed to understand what the German fleet had done although it is hard to believe that none of the British ships saw the German fleet well enough to take in just what had happened.

Both fleets continued on, the British on a southeasterly and the Germans on a southwesterly course and there was a lull in the action.

Scheer now determined to re-engage and, with this purpose, at 6:55 made another simultaneous turn of 180°. The reasons he has given for doing this are interesting and seem convincing.

"It was too early for a nocturnal move."

If Scheer continued to tae southwestward, his action would "partake of the nature of a retreat" and, if pursued he would be "compelled to sacrifice" damaged ships or to "decide on a line of action enforced by enemy pressure, and not adopted voluntarily."

"There was but one way of averting this - to force the enemy into a second battle x x x and forcibly compel his torpedo boats to attack."

"The success of the turning of the line while fighting encouraged me xx and decided me to make still further use of the facility of movement."

"The maneuver would be bound to surprise the enemy, to upset his plans for the rest of the day, and, if the blow fell heavily" to "facilitate the breaking loose at night."

During the lull Jellicoe had turned toward Scheer by a simultaneous turn of squadrons so that at 7:00, when the British reopened fire on the leading German ships, the two fleets were rapidly approaching one another. Jellicoe turned away 3 points soon after fire was re-opened but the firing was nevertheless very heavy against the Germans.

Things got so hot for the German fleet that, at 7:15, Scheer ordered his second turn away under fire. This time he sent destroyers in to attack as he turned and Scouting Division I, instead of turning 180° at once, turned first into column on a southerly course, thereby covering their battleships. The destroyers fired torpedoes and made smoke; the number of torpedoes fired by the German destroyers has been variously estimated and

from 20 to 25 seems to be about right. This does not seem to be a very great threat when fired at a column of more than thirty ships but it was enough to convince Jellicoe that he should turn his fleet away. The Grand Fleet turned away 2 points at 7:22 and another 2 points at 7:25 and this movement combined with the westward retirement of the High Sea Fleet broke off the action which was never again effectively renewed.

Scheer's second turn away apparently mystified the British Fleet as his first had done. Soon after the German retirement, Jellicoe turned to the southwestward in pursuit and, at 8:20 Beatty, who was in the van, again opened fire on Scouting Division I; the German fleet promptly retired and the engagement was again broken off. The sun had now set and the daylight action was ended.

During the early part of the night, both fleets proceeded on about parallel courses in a S x E direction about six miles apart without being in contact. The 1st, 2nd and 3rd British Battle Cruiser Squadrons were to the southwestward of Jellicoe which put them directly ahead of the German fleet distant only about 3 miles from the leading German ships; the British destroyers were following the Battle Squadrons at a distance of about 5 miles. At 10:50 the High Sea Fleet changed course to the eastward/^{and} about midnight passed under the stern of the Grand Fleet whence it proceeded to its bases. A number of contacts were made during the night by the light forces of both fleets and losses were sustained on both sides. The British command however remained in ignorance throughout the night as to the movements of the enemy; the contacts which were made by the British forces were not reported to Jellicoe so that, although he must have known that fighting was going on astern of him, he apparently did not know what forces were engaged. The German fleet remained concentrated during the night and

proceeded with the definite intention of proceeding to its bases, by evasion if possible, but fighting if necessary; the British fleet made no concerted effort to locate the enemy fleet but proceeded in a general southerly direction with the hope that the enemy would be found to the westward where it could be re-engaged at daylight. We can only decide that the German objective was attained and that their movement was consequently successful.

There is one point, not covered in a narrative of the battle, which should be noted. This is the striking difference shown in the ability of different ships to withstand serious hitting. To consider first the German ships:

The Derfflinger received 19 major hits and maintained station throughout.

The Seydlitz received 21 major hits and 1 torpedo hit and maintained station.

The Lutzow received 20 major hits and possibly a torpedo which forced her out of formation and finally caused her abandonment.

As to the British ships:

The Warspite received 27 major hits which disabled her but she was worked into port.

The Warrior and Black Prince both received about 15 major hits before they were destroyed.

The Tiger received 16 major hits and maintained station.

The Lion received 12 major hits and, while out of station for about half an hour, was able to otherwise maintain station.

The Invincible blew up with all hands after receiving 8 major hits.

The Queen Mary blew up with all hands after receiving 9 major hits.

The Indefatigable blew up with all hands after receiving 6 major hits,¹

A consideration of the damage received by these vessels shows that the British battle cruisers which were of oldest design must have been very weak in protection and that von Tirpitz' shipbuilding policy and the changes made in the protection of the German battle cruisers after the Dogger Bank action gave the German battle cruisers superior strength to the British. The British battle cruisers which were lost are reported to have blown up after receiving fewer hits than were sustained without destruction by the "Black Prince" and "Warrior". These battle cruisers were looked upon as powerful ships and their utter destruction a few minutes after they came under effective fire must have had a shattering effect upon the remaining British ships. On the other hand, the German Battle Cruisers sustained heavy hitting without destruction and we can imagine now the spirits of the German ships must have risen as the superior numbers of the enemy were reduced.

Effects of the Battle of Jutland

In leaving the narrative of events at Jutland to discuss its results or its possibilities, we leave what is only a mildly controversial field for one that is very controversial. A great deal of ink has been spilt to show what should or might have been done in this battle and this ink-spilling has extended over to the discussion of the results of the battle in order to show that the conduct of one side or the other was the best under the circumstances.

The Germans of course claimed a victory because they inflicted more damage than they received. They were quick to realize the propaganda possibilities of the action and made the greatest

1. O.N.I. "Monthly Information Bulletin," March, 1924.
"Analysis of Jutland" by Frost.

possible use of it for propaganda purposes. There seems to be no doubt that the German government and the German people felt that they had won an important naval victory. Scheer felt this wave of popularity and seems to have ridden it for all it was worth; he said "as those visits proved, the battle had greatly enhanced the interest in the Fleet throughout the whole country". A result of this increased popularity of the Navy was that the German government paid more attention to its naval leaders. Partly as a result of this increased influence, the naval authorities were soon able to convince the government that the country should embark on unrestricted submarine warfare. In order to show that this was an important indirect effect of the battle, it is only necessary to recall that the submarine campaign very nearly won the war for Germany. Admiral Sims quotes Jellicoe as having said to him at the time we entered the war, "We are losing the war".

The British claim is that the battle was a victory for them because they were left "in possession of the field" and the German Fleet never again disputed this possession with them. There is no disputing this claim. For the lack of a better comparison, we might compare this battle with that between the Monitor and Merrimac. No one will, I think, seriously maintain that the Monitor did not gain all the fruits of victory even though she failed to destroy the Merrimac. So also would the British have enjoyed all the fruits of victory if it had not been for the fact that the German fleet retired into a base with outlets in both the Baltic and North Seas and for the fact that the submarine has injected a new element into naval warfare.

The fact that the German fleet retired into a "double-ended base" allowed it to maintain complete control in the Baltic while the British fleet was tied down to the North Sea. This was a most important advantage for Germany because it allowed her to trade with Norway and Sweden and to continue the isolation of Russia. It was largely because of this isolation that Russia later collapsed and the Allied cause lost her great strength.

The fact that the submarine has injected a new element into naval warfare seems to mean, among other things, that a new strength has been given to the weaker "fleet in being". The German fleet, though immobilized so far as the North Sea was concerned, was still able to exert, through its submarines, a great influence, not only in the North Sea, but all over the British coasts. This influence was of great importance and was almost decisive in the war; it did not exist in any previous war.

We should now ask ourselves the question "What would have been the effect upon the war of a decisive British victory at Jutland?" It seems certain that such a victory would have had a considerable moral effect which is hard to estimate; it would have opened the Baltic to the Allied fleets thus supporting hard-pressed Russia and cutting off a large German trade; it would have allowed the British to drive in the German patrols in the Heligoland Bight and thus make infinitely more difficult the passing in and out of German submarines; and it would have denied to the Central Powers the moral effect of the victory which Germany proclaimed. That the effect of such a decisive British victory would have had an important, perhaps decisive, effect seems beyond question.

We are not concerned here with the question as to who won this battle but we should try to get from the battle any lessons for the future which its history may contain. It seems to me that the outstanding lesson of the battle is that, while the submarine and mines have greatly increased the dangers to which a superior fleet is subjected in exercising control of the sea, they have also made it even more necessary than it was in the past that the superior fleet take full advantage of every opportunity to do decisive damage to the fleet of the enemy. For, if the inferior fleet can continue to exist as the German fleet existed after Jutland, then it can also exert its influence through its submarines as Germany did.

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German Operations Subsequent to Jutland.

On June 5th the British cruiser Hampshire ran upon a mine near the Orkney Islands and was lost with practically all hands. The mine was one of those which had been laid by submarines just before Jutland. The loss of the Hampshire was, in itself, a small matter but, due to the fact that Kitchener was on board her bound for Russia, the incident assumed an importance in the eyes of the combatants and of the neutral world. Kitchener's loss with the ship drew great attention to the incident; it was interpreted as another example of how incomplete the "control of the sea" was in this war; it consequently gave German morale another boost.

After Jutland, the mine laying activities of both sides were increased but without any decisive effect.

By the middle of August, the damage to German major ships had been sufficiently repaired for Scheer to feel justified in making another excursion into the North Sea. As at Jutland, the direct objective of this operation was a bombardment of Sunderland but Scheer states the main objective "was to defeat portions of the English Fleet; the bombardment of Sunderland was only a secondary object; merely a means to this end". The plans for the disposition of the German Fleet differed from those for the operation which led to Jutland in the following important particulars: Squadron II of pre-dreadnoughts was left behind because of its slow speed; airship scouts were disposed, four off the English coast and four between that coast and Norway; two battle cruisers of Scouting Division I were still repairing and were replaced by three first line battleships; the distance by which Scouting Division I preceded the battle squadrons was decreased to 20 mis. to prevent possible isolation; as the dispositions of submarines for the Jutland operation had, in Scheer's words, "resulted in no success worth speaking of", the plan for

their use in this operation was entirely different. The Germans, in this operation, used their submarines for the first time as a unit to maneuver with, and cover, their battle fleet, while the battle fleet moved to the westward from its base, the submarines were disposed to the northward of it in, as Scheer said, "a movable base line in the direction of the probable approach of the enemy".

On the morning of August 19th, the High Sea Fleet was proceeding to the westward in the southern part of the North Sea in accordance with the above-outlined plan. At 7:05 a.m. the Westfalen (battleship) was torpedoed by a submarine and returned to port under her own power; this of course disclosed to the British the fact that the High Sea Fleet was at sea. At 2:22 p.m. Scheer received reports from his airships which indicated enemy forces to the southeastward; after pursuing these reported vessels without success, Scheer returned to his bases without making contact with any British major force.

Upon being informed of the activity of German submarines which had been disposed for this operation, the Grand Fleet went to sea and stood to the southward. Instead of proceeding direct to a position in which he could cut off the return of the High Sea Fleet to its bases, Jellicoe was also influenced by a desire to prevent a bombardment or a landing and, probably, a raid around the north of England; he thus had many and widely varying possibilities to cover. The light cruiser Nottingham was sunk by a submarine during the morning of the 19th and the light cruiser Falmouth during the afternoon. At 3:56 p.m. on the 19th the Grand Fleet withdrew in order to avoid being drawn into a submarine or mine trap.

Here, as at Jutland, it appears that any chance of decisive action was precluded by the missions of the two fleets; each desired to engage only under certain conditions. The Germans wished to engage only an inferior part of their enemy's fleet; the British

wished to engage only when there was no possibility of a "submarine or mine trap". Thus, so far as decisive action between the two fleets was concerned, things remained in a stalemate and there was never again an occasion when the two main fleets came anywhere near a decisive action.

During the late fall and early winter of 1916 certain operations carried out by the Germans gave another indication of how difficult was the British task of trying to hem in the German fleets by means of distant blockade. During this time, the Germans sent out a total of four commerce raiders disguised as merchant ships. None of these were fast or powerful vessels but all but one of them succeeded in getting through the British patrols and making extended cruises against Allied commerce. These three raiders destroyed 120,000 tons of shipping and damaged 37,500 tons; they also caused a considerable amount of diversion and delay of shipping in order to avoid them.

On February 1, 1917, Germany started unrestricted submarine warfare against commerce. Scheer makes it clear that, with the starting of this submarine warfare, the mission of the High Sea Fleet was changed. The fleet's mission had, up to that time, been the prosecution of what might be called an "attrition campaign" against the Grand Fleet; their mission now became support of the submarine campaign. In pursuit of this new mission, the patrols of surface craft in the Heligoland Bight were increased and extended in order to ensure the safe passage of submarines in and out. In the words of Scheer, "Our fleet became the hilt of the weapon whose sharp blade was the U-boat. The fleet thus commenced its main activities during the war to maintain and defend the new form of warfare against the English fleet", and "In spite of all the difficulties, we managed to prevent anything from stopping the U-boats from going out. There were altogether very few days when for safety's sake we had to avoid the direct route into the

North Sea and take the roundabout way through the North Baltic Canal and the Kattegat". The support thus given the submarines by the fleet consisted of mine sweeping and anti-submarine operations which were carried out by light craft supported by cruisers and even battleships. The British fleet never made any attempt to combat this German support of the submarine campaign.

Perhaps the most effective step taken by the Allies to combat the submarine warfare against them was the adoption of the convoy system for merchant ships. In order to partly meet this step of their enemies, the Germans made a number of raids against the British Norwegian convoys. On Oct. 17, 1917, the light cruisers Brummer and Bremse attacked one of these convoys in the northern part of the North Sea and sank two destroyers and nine merchant ships. On December 12th, four German destroyers attacked another convoy and destroyed six merchant ships, four armed trawlers and one destroyer and disabled another destroyer.

In order to meet this serious threat against their North Sea convoys the British started to escort these convoys with battleships and this put an end to the effective raids of German **surface craft**. On April 23, 1918, the High Sea Fleet went to sea to intercept one of the British Norwegian convoys but failed to make contact and returned to its base after the Moltke had been torpedoed.

This attempted raid against convoys by the High Sea Fleet practically speaking ended the operations of German surface craft in the North Sea except the maintenance of patrols in the Bight to ensure the safe going and coming of submarines. From the time of this raid on to the end of the war, the German fleet went through a process of disintegration which finally ended in the mutiny which destroyed all effectiveness of the fleet.

Lessons to be Learned from North Sea Operations.

The lessons to be learned from the North Sea operations in the last war are as numerous as the particular operations which are investigated; their number is controlled only by the amount of time available to look into these various operations. With the time available for the preparation of this paper it is only possible to touch on what might be called the outstanding lessons regarding the major operations without making any attempt to touch upon the interesting and important lessons which could be gleaned from a detailed examination of the operations of smaller units. The following of this limited study necessarily fails to cover many important points but it is believed that the following points, by their importance, thrust themselves forward in even a casual examination of North Sea operations.

Effect of Mines and Torpedoes upon Fleet Action.

We have seen how, in the early part of the war, the inferior German fleet extended its influence by extending its mining activities and the operations of its submarines;

How, in October 1914, the British Fleet withdrew from this German threat first to Lock Ewe and then to Lough Swilly and how, even in this withdrawal, it lost one of its most powerful units (the Audacious) by a mine;

How, on 30 October 1914, under the influence of this threat Jellicoe wrote to the Admiralty setting forth that he would refuse to closely pursue a retiring German Fleet in the southern part of the North Sea;

How this letter received the entire approval of the Admiralty and the cautious principle of Jellicoe thus became the guiding principle for the Grand Fleet in any engagement with the High Sea Fleet;

How the logical following of this principle at Jutland precluded any hope of closely following the German fleet when it twice

maneuvered to extricate itself from a dangerous predicament;

How, when the High Sea Fleet was at sea on 19 August, 1916, the following of this principle again induced Jellicoe to retire to his bases rather than face the threat of Scheer's "moving base line" of submarines;

How this threat prevented the British fleet from taking any effective action in the Heligoland Bight with a view to breaking up the German patrols ~~there~~ or preventing the coming and going of submarines or surface craft;

And, finally, how the German mine and torpedo operations which made this threat took some toll of British combatant ships and took such a toll of non-combatant ships that they came very close to breaking down Allied and neutral trade to such an extent as to change the whole course of the war; in other words, they almost won the war for Germany.

It is believed that such a condition of affairs as that brought about by the menace of this German mine and torpedo warfare has never existed in a war previous to the last one. In previous wars, the superior fleet has been able to maintain a more or less effective blockade of the enemy's ports; in other words, it has carried the war to the very edge of the "enemy's country" and, in some cases, (as Farragut and Porter did in our Civil War) into the heart of the enemy's country. The effect of this carrying the war to the enemy's coasts has been to bottle up the inferior fleet in such a way that it could exert little or no influence at sea.

We might reasonably say that, under modern conditions, if we are to accept the North Sea operations of the last war as typical of what wars in the future will be, great fleets of surface craft have lost a large part of their usefulness. While we cannot doubt that, in the last war, the Allied sea power, represented by their preponderance of strength in surface craft, was a decisive element in their eventual victory, ~~neither~~ can we doubt

that Germany, through the use of her submarines and mines, came very close to winning the war. The menace of this submarine and mine warfare forced upon the Allied high naval command the decision that in a fleet action they could not pursue a retreating German fleet under all conditions and that they could ^{not} force the war into the Heligoland Bight; it therefore took away from their fleet a large part of that freedom of action which is one of the evidences and fruits of superiority. If then, we are to accept the North Sea operations in the last war as typical of modern naval warfare, it appears that the great modern fleets of large ships have reached a state which is a good deal like that of the valuable mercenary armies which preceded the Napoleonic era; they are so valuable that they cannot be risked in a decisive recourse to that final "shock of the Masses" which Napoleon and many other soldiers have used on shore and which Nelson used at sea; like the armies of the pre-Napoleonic times, they can make their influence felt only by maneuver at a considerable distance from the enemy.

But, should we accept it as a fact that naval wars of the future will follow the course of naval operations in the North Sea during the last war, that the decision of the Allied high naval command not to force an action against the retiring enemy fleet and not to force operations into enemy waters was the correct one? We should certainly not blindly accept the proposition that wars of the future will closely follow the last war; it seems that the question as to the correctness of the decision of the Allied command cannot be answered. The reason this latter question cannot be answered is because, as "the proof of the pudding is in the eating", so the proof of any opinion contrary to that of the ~~British~~ high command would have to be in the execution of the operations which the carrying out of such an opinion would entail. It does seem, however, that the British, having made this important decision, dismissed all other possibilities from con-

sideration; that this decision was based only upon theoretical consideration of the dangers to be incurred in an attempt to come to close grips with the enemy and not upon any practical experience gained in an actual attempt to do so. By a queer paradox, the only British major ship destroyed in four years of war by this "submarine and mine" threat, was lost, not in an attempt to break through this threat, but during a retirement to what was considered a more secure fleet base; we now know that the submarine and mine trap through which the Grand Fleet declined to be drawn at Jutland did not exist. Might not the British Fleet have carried out operations in the Southern part of the North Sea which would have obliged the Germans to take serious damage to their patrols or risk a fleet engagement? Napoleon has said in effect that "You can't make war without taking risks"; Sherman said "Any attempt to make war safe is sure to end in disaster"; Nelson said "Nothing is sure in a sea fight above all others"; Farragut said "Damn the torpedoes, go ahead". Where can we find, in the operations of the Grand Fleet, any attempt to make the enemy feel, in spite of all he could do, the full effect of the tremendous power in that fleet; wasn't the British conduct of operations in the North Sea an attempt to make war "safe"? The Value of Careful Preparation for Maneuvering in Action.

We have the authority of Scheer's statement to show that the simultaneous turn away of the German fleet under fire at Jutland had been carefully rehearsed with a view to its use in just the way it was used. To show the importance of this maneuver we have only to imagine how different the results of the action might have been if the German fleet had been unable to execute this maneuver.

On the other hand, the British had made no attempt to prepare any maneuver by which to pursue closely a retreating enemy. On the contrary, they had decided that, if the enemy should retire, no attempt would be made to pursue him closely.

In this respect we can accurately measure the results of the

action by the preparations made by the two fleets.

The Use of Distant Screens.

I have read and heard the comment that neither the German nor the British fleets made full use of their light forces for screening in the North Sea operations; that the screens were almost never far enough advanced; and that the lesson to be learned from the use of screens by these two fleets is to avoid doing as they did.

It seems to me that this comment is probably not well-founded. Taking all the time these two fleets were at sea during the war, they had a great deal of experience in the forming and screening of a fleet at sea. The assumption that neither one of them knew what it was about is a dangerous one to go on.

Anyone who has ever been in an outer screening vessel in some of our fleet formations, knows the difficulty, almost impossibility, of maintaining station even under the best of conditions. How much more difficult this task will be in bad weather and when the movements of the fleet are uncertain. In case of a sudden contact with a strong enemy force, what proportion of these screening vessels will be unable to reach their battle stations and consequently will have their strength wasted at the most important time?

It seems to me that there is a strong possibility that the lesson to be learned from the screening operations of the fleets in the last war is not so much to avoid doing as they did but that our far-flung screens will not work when subjected to the rigors and uncertainties of war.