

**Room 40:
German Naval Warfare
1914 - 1918**

Volume I: The Fleet in Action

Edited by Hans Joachim Koerver

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Part One - Origins

The Source

This history of the German Fleet in World War I was written 1919 - 1920 by Frank Birch, William F. Clarke, and other, unnamed members of Room 40. Room 40 was the department of the British Admiralty in WWI responsible for decoding German naval and diplomatic messages.

The original text of this Volume I, *The Fleet in Action*, can be found in the National Archives, Kew, London:

- HW 7/1 - Contribution to the History of German Naval Warfare, 1914-1918: volume one, *The Fleet in Action*, written by Birch and Clarke, chapters I-X
- HW 7/2 - Contribution to the History of German Naval Warfare, 1914-1918: chapters XI-XX

The original text of Volume II, *The Fleet in Being* (published in June 2009 as separate book), can be found in the National Archives, Kew, London:

- HW 7/3 - Contribution to the History of German Naval Warfare, 1914-1918: volume two, *The Fleet in Being*, written by Birch and Clarke

The Authors

Frank Birch (1889 - 1956) worked from 1915/16 to 1919 as cryptographer in Room 40.

“Frank Birch was another Etonian and also a fellow of King’s, an Exhibitioner in modern languages and a double First in History. [...] a keen yachtsman, he had enlisted in the RNVR at the outbreak of war and had served at sea in the Atlantic and at the Dardanelles. His hobby was

amateur dramatics, and he delighted in playing the ‘Widow Twankie’ in personal pantomimes in the Christmas vacations. He seems to have found his way to Room 40 at the end of 1915 or early in 1916, and was one of the few inmates at that time in Naval uniform. [...] Birch’s strength was not so much cryptanalysis as analysis and appreciation of the intelligence gained from the decodes.”¹

Frank Birch served again as cryptographer in World War II at Bletchley Park, working on the decryption of the German Enigma (ULTRA). He became there the head of the Naval Section until the end of WW II.

William F. Clarke (1883 – 1961) joined Room 40 in 1916 .

“ [...] W. F. Clarke, a barrister who arrived early in 1916. Son of a famous Edwardian QC, he had always loved the Navy, and by knocking 10 years off his real age (thirty-three) had secured a commission as an Assistant Paymaster RNVR at the beginning of 1915. He had been educated at Uppingham and Magdalen College, Oxford, and was a fluent German speaker. Early in 1916 he came to Hall’s attention and found himself, not at sea as he had wished, but a member of Room 40. Like Frank Birch, with whom he became very friendly, he was no more than an average cryptanalyst, but his legal training made him a good Intelligence officer, and as Room 40 expanded and specialised sections began to be formed, he assisted Hope in compiling appreciations and ‘working up’ the raw material provided by the code-breakers.”²

After the First World War, William F. Clarke stayed within the Government Code and Cipher School, the successor of Room 40, now part of the Foreign Office. He became head of its Naval Section in 1924. In World War II, he worked on the decryption of the German Enigma (ULTRA) at Bletchley Park.

Room 40 in World War I

Thanks to the capture of some important German Navy code-books at the beginning of the First World War, the British Admiralty was able to systematically decode German Navy wireless traffic (W/I) from November 1914 on.

Room 40 was the organisation that dealt with this decoding. The initial set-up of Room 40 had been made by Winston Churchill, at that time the First Lord of the Admiralty, on November 8th, 1914, together with Admiral Jack Fisher:

¹ Patrick Beesley: *Room 40, British Naval Intelligence 1914 – 1918*, Oxford and New York, 1984 (first ed. London 1982), p. 124. A very good general history of Room 40.

² Beesley: *Room 40*, p. 127.

“

C.O.S.

D. of Education

An officer of the War Staff, preferably from the I.D., should be selected to study all the detected intercepts, not only current but past, and to compare them continually with what actually took place in order to penetrate the German mind and movements and make reports. All these intercepts are to be written in a locked book with their decodes and all other copies are to be collected and burnt. All new messages are to be entered in the book and the book is only to be handled under instructions from C.O.S.. The officer selected is for the present to do no other work. I should be obliged if Sir Alfred Ewing will associate himself continuously with this work.

W.S.C.

F.

8/II

8/II/14.”³

Room 40 went ‘productive’ very quickly, as Captain Hope, the head of the decryption section, remembered later:

“One day in December [1914] a new type of message appeared about certain orders to the lightships. This was followed immediately by the Scarborough raid. When subsequently in January similar messages appeared, we were able to warn D.O.D. [Operations Division] that probably some operation was in progress, and this proved to be the case - the Dogger Bank. On all subsequent occasions, it was found that any messages which were not according to routine were to be looked on with great suspicion, and in this way we were able to build up a large number of signs and portents and were thus able to always warn the Staff when anything out of the ordinary was on the tapis; sometimes we were able to make a shrewd guess and sometimes we were completely ignorant; but I do not think that there was any occasion of anything out of the ordinary happening when we had not some kind of warning. In a very few months we obtained a very good working knowledge of the organisation, operations, and internal economy of the German Fleet. Had we been called upon by the Staff to do so, we could have furnished valuable information as to the movements of submarines, minefields, minesweeping, etc. But the Staff was obsessed by the ideas of secrecy; they realised that they held a trump card and they worked on the principle that every effort must be made to keep our knowledge to ourselves, so as to be able to keep it up our sleeves for a really great

³ NA, HW 3/3, History of Room 40, Chapter 2, “Charter of Room 40 O.B.”, by William F. Clarke, 1951.

occasion such as the German Fleet coming out in all their strength to throw down the gage in battle.

In other words, the Staff determined to make use of our information defensively and not offensively.”⁴

There was a strong feeling of dissatisfaction among the members of Room 40 about the “workflow” of this special Intelligence from the decyphering specialists in the day-and-night watches of Room 40 via Captain Hope to the Operational Division (O.D.) at the Admiralty and then to the commanders of the Grand Fleet, Admirals Jellicoe and Beatty and their staff. William F. Clarke remembered in 1959:

“When I joined in 1916, the practice was for each message, when it came in, to be decoded by one of the Watch and shown to Admiral (then Capt) Hope, who decided whether it should be circulated to Operations Divisions; if not thought of sufficient importance it was put on side and later entered in a book labelled ‘Not send in, logged’. If it came in when Hope was not there the responsibility for sending it in or not rested with the head of the night watch, which usually consisted of two, one experienced, the other less so. In my early days, I was fortunate of being in Nigel de Grey’s watch.[...]

In a comparatively short time we had developed into a set of intelligence experts who were more capable of inferring the significance of the signals than the juniors in O.D.[...]

Our greatest handicap was complete ignorance of what use, if any was being made of our efforts; it was not till after the war that one learned with horror of the mistakes that had been made. There was never any camaraderie between us and those in O.D. We had no idea that both Jellicoe and Beatty were being given such inadequate information as to composition of the German Fleet or other necessary items or that when they were given they were told not to let their staff know. A couple of remarkable examples of this way may be given. During the Battle of Jutland, J.R.J. sent one of his staff below to get the charts of the swept ways into the Bight, which none but he had seen. In November 1918, just before the armistice, I was in the Q.E. [Queen Elizabeth] and had a yarn with the officer whose job it was to plot German submarine positions and found he had been given only the callsigns used, though the identification of them was well known to us; each submarine had about three, so his chart contained about three times the number actually operating.”⁵

And the judgement of Admiral Beatty, the C.-in-C. of the Grand Fleet in 1918, told by William F. Clarke:

⁴ NA, HW 3/3, History of Room 40, “Admiral Hope’s Narrative”, by Capt. Hope, 1925

⁵ NA, HW 3/3, History of Room 40, “Retrospect 1916 – 1945”, by William F. Clarke, 8.2.1956.

“ [...] on Nov. 1st [1918], I left for Scapa Flow, where a German submarine had just been sunk when attempting to enter a by then almost empty harbour. On the way, I was told to go to the Queen Elizabeth, the fleet flagship. As the divers had not yet succeeded in getting inside the wreck, I stayed in the Q.E. for a few days, having interesting talks with W.T. and other officers. The night before I left, just before dinner I was startled by ‘Flags’ coming to me and saying would I excuse short notice but C.-in-C. would like me to dine with him. I was of course delighted; I had never met Beatty. More pleasure was in store as after dinner B. took me into his private cabin; he had discovered I was the officer responsible for the daily reports mentioned above and wanted to talk over them, our work of which he knew but little and possible improvements in our intercommunications. We made various plans, one of which was my suggestion that one of his staff should come and see us at work. Then I had a shock; he sent for and showed me the famous Admiralty telegram saying on the day of Jutland that the German Fleet had not sailed and that its flagship was still in the Jade and said ‘What am I to believe of your work when this happens and within an hour I meet the whole of their Fleet?’”⁶

The information workflow inside the Naval Intelligence Division of the Admiralty, of which Room 40 was only a part, was handicapped, as William F. Clarke remembered:

“One other matter may be mentioned, which was the complete watertight division of our party and other intelligence sections of the I.D.; we could have helped them and they could have helped us, but it was not till late we heard of the work, valuable as it was of Brandon and Trench in their section. Also, it was not until late in the war that a small but very efficient submarine section with which we were in closest touch was set up under the very able control of Thring and Eves. We were also in close touch with Convoy Section under Henderson and Mine Sweeping under Piton.”⁷

Not to mention the information flow between the Allies:

“In October 1917, after a Zeppelin raid during which eleven were driven down in France, I was sent over to Paris to see if the French had found as we had always done, any code-books or other valuable material. I had two interviews with Colonel Cartier head of our opposite number; I went to their quarters in the Rue St. Dominique, but he said they had found nothing, an obvious untruth; so I returned empty handed. I went into their working rooms and saw some of their work; I was very amused

⁶ NA, HW 3/3, History of Room 40, “Retrospect 1916 – 1945”, by William F. Clarke, 8.2.1956.

⁷ NA, HW 3/3, History of Room 40, “Retrospect 1916 – 1945”, by William F. Clarke, 8.2.1956.

when I was shown some messages they were working on without apparent success which I recognised as being in a code, a copy of which supplied by us was in a shelf just above the head of the officer in charge. In the court yard of the building I saw a soldier hoisting baskets to an upper floor and saying, 'Encore des chiffres.'"⁸

It was not before 1917/18 that things slowly went better:

"When our Intelligence Staff was instituted in 1917, as stated above, I was allowed to send C.-in-C. every night full particulars of all movements and changes; this got to him early next morning, and Beatty told me personally that he had to wait for that to get a true picture of what was happening. At the same time, I was given full right of access to Operations and checked their charts to see they were in order."⁹

The origins of the "Contributions to the History of German Naval Warfare 1914 - 1918"

William F. Clarke in 1959¹⁰:

"At the armistice our decoding of German traffic ceased as the enemy now run by the rank and file of the services only used plain language. We all had some joy-rides, some to see the surrender of the fleet, others to Germany on Armistice commissions. I was lucky, as I went north to see the surrender and early next year to Germany twice. When I went back to work after the second of these, plans as to our possible further employment were in progress and at first I was sent to join a small party under Frank Birch to put in order our papers; this was to be our first task and then we were detailed to write a history based on our work. This took just over a year during which we had several moves; this was due to the fact that no sooner had we started at one address than it was derequisitioned and we had to move elsewhere. We started in Berkely Square, went to Park Lane, then to Queen Annes Gate and finally to Queens Gate - a very troublesome business as it involved packing up and unpacking our very large store of paper and books. Our work was also hindered by changes in staff due to the natural desire of some of us to get back to civilian work or to get back to their normal service employment; thus our submarine section, after a short spell of work, was completely ended by the departure of a paymaster officer and his staff; this was a sad business as he was a most capable officer who had been employed on the study of submarine movements for a considerable time;

⁸ NA, HW 3/3, History of Room 40, "Retrospect 1916 – 1945", by William F. Clarke, 8.2.1956.

⁹ NA, HW 3/3, History of Room 40, "Retrospect 1916 – 1945", by William F. Clarke, 8.2.1956.

¹⁰ NA, HW 3/3, History of Room 40, "Epilogue", by William F. Clarke, 4.3.1959

luckily we found an excellent member of our staff, one Elisabeth Jenkin (later to become well known as an Aunt on the BBC). The Admiralty, probably at the instigation of the Treasury, was not very helpful as it seemed to think that history could be written at so many pages a day. However, we did complete our job, partly thanks to the wonderful support of our staff, who though only temporary, worked on without any pay which our employers had stopped.

When we had finished we had prepared the following documents:

1. 'The German Fleet in Action' This detailed all the activities of the fleet.¹¹
2. 'The German Fleet in Being'. This contained a history of every units activities.¹²
3. About 3,000 volumes of our papers and records, arranged according to their contents; a few may be particularised. Vols 851 to 1081 contain decoded W.T. messages translated and passed as and when received to Operations Division; these cover the period from Oct. 1914 to June 1918. Their total is about 54,000. Vols 1299 - are similar, covering the period June 1918 to Aug. 1918. Number uncertain. After this date decodes were not sent in, but were replaced by a War Diary - vols 1320 - 1328. This was compiled by our Intelligence Office and was made up of what we regarded as of importance. There are many other volumes including all originals of messages received during Jutland and other important occasions. Other interesting volumes are those which contain Captain Hope's daily comments on events.¹³
4. The catalogue with particulars of the contents of each of the 3,000 volumes.¹⁴

This account shows, it is hoped, the monumental nature of our work and it seems to me regrettable that more use has not been made of it. A careful study of it might have taught many lessons which seem to have been either forgotten or ignored to judge from bad mistakes made during the last war.

It was originally intended to circulate 'The Fleet in Action' as a C.B., but after some discussion, of which I know no details this was negated. I think that the first chapter, the introduction by Frank Birch, was probably responsible; it started with an interview in Heaven between St. Peter and a new arrival. The two copies which we prepared were kept by

¹¹ NA, HW 7/1 and HW 7/2, see above.

¹² NA, HW 7/3, see above.

¹³ Many of these volumes have been released and are now available at the National Archives at Kew.

¹⁴ NA, HW 7/4: Contribution to the History of German Naval Warfare, 1914-1918, Vol. III, Authorities.

D.N.I., they were frequently missing and I was often asked to trace them, a task I generally solved. Where they are now I have only a vague idea. Up till the outbreak of the last war I was always consulted about them, and when I was asked about their removal to a safer place than an attic in the Old Building; when however I wrote to the Secretary of the Ay [Admiralty] a couple of years ago I was informed in a private letter from one who had served under me between 1939 and 1945 that I could not be told but that I could be assured they were in a safe place, which would give me a very good idea as to where they were. The letter was couched in very familiar terms which included addressing me by my christian name, a liberty he would not have dared to use before. I wrote back to the Secretary saying I had had the reply and it led me to assume where the records were, if my guess was correct I could imagine no worse place. So on rather a sad note ends this chapter but I still believe our time was not wasted and that some future historian may find useful material there as did for instance Corbett and the Dewars many years ago.

William F. Clarke

4.3.59”

Patrick Beesly mentioned this “safe place” in 1982:

“ [...] History of German Naval Warfare 1914 – 1918 by Birch and Clarke, at present in the Naval Historical Branch of the Ministry of Defence.”¹⁵

Why was this work not published in the 1920s?

William F. Clarke himself gives an answer. In a draft for the Admiralty, he argues in another case against the publication of details of the communication between Room 40, Operations Division and Admiral Jellicoe during the Battle of Jutland¹⁶:

“(1) The source of this secret information will be practically made public and the publication will probably invoke a storm of criticism. The critics will ask why, if the Admiralty had this source of information at their disposal, better use was not made of it, and the Board of Admiralty will be subjected to constant embarrassment.

(2) Certain well-known critics and public men are aware of the existence of the work in question. If they see intercepts published for the benefit, or otherwise, of Lord Jellicoe, they may bring pressure to bear in order

¹⁵ Beesly, Room 40, chapter “Sources and Select Biography”, see also the footnote on p. 127 of this book.

¹⁶ NA, HW 3/3, History of Room 40, “Epilogue”, by William F. Clarke, 4.3.1959

that other intercepts may be published for the benefit, or otherwise, of other commanders or politicians.

(3) The existence of the political side of the work may also come to light, and certain matters, which for reason of State, it is most undesirable to publish, may be given publicity.

(4) The future of the Code and Cypher School will probably be seriously jeopardised.

(5) It must be realised that certain other signals giving the position of the German Fleet between 10 p.m. and 2.30 a.m. (31st May – 1st June) were intercepted which were not transmitted to the C. in C. Lord Jellicoe, as First Sea Lord, must have had knowledge of this and may demand their publication. It is difficult to see how such a request could be refused, if the signals which were transmitted to the C. in C., are published.

(6) With the publication of these signals, the whole matter of the Naval History now being written by Sir J. Corbett, may have to be reconsidered, as no historian could undertake to produce a serious history of the naval warfare omitting an important source of information, which had in the meantime become public. ”

So - no “serious history of the naval warfare” published in the 1920s; no re-discussion of Jutland in the light of Room 40’s messages sent or not sent; no discussion about the ‘Mexico’ (Zimmermann)–Telegram, nor about the Swedish diplomatic collaboration with Imperial Germany, nor about the British decoding of American diplomatic messages, nor about the LUSITANIA case, nor about Gallipoli, etc. etc.

Publishing details about Room 40 after WWI would have meant opening a Pandora’s box of unpleasant questions.

Part Two - Contents

Contents of Volume I: The Fleet in Action

Chapter I: Introductory

A history of the organisation of Room 40 and the British Naval Intelligence in general, the development, the errors, the reforms. Some ideas about - and the need for - a better organisation and training of Intelligence officers:

“ [...] if in the next war we are not again to stake our chances on improvisations and blindly back our luck.”¹⁷

Chapter II: The Organisation of the High Sea Fleet at the Outbreak of War
Structure of the German Fleet: Ships, bases, organisation. The German Fleet was organised defensively in August 1914. There was never any idea of attacking the British Fleet, because this was overwhelmingly stronger. The battleships did not leave the shelter of their defensive minefields before December 1914.

The Germans were not aware of the weakness of their W/T traffic:

“However, the staff work was bad, those responsible for it lived in depot ships out of visual range of most of the other units of the Fleet, and the volume of W.T. traffic was enormous. Important details of intended operations, dispositions of battle squadrons, cruisers and flotillas, the ordering of lights, etc., were conveyed by this means, with the result that very definite news of contemplated movements were given to the enemy. [...] the use of wireless in the German Navy was, like their submarine warfare, ‘unrestricted’.”¹⁸

Room 40 was often faster in intercepting and deciphering German messages than the Germans themselves:

“Their interception, possibly owing to a shortage of good personnel, was, however, very inferior, and it frequently happened that a signal made by a German vessel was deciphered and in the hands of the English Admiralty before it had properly reached its original address.”¹⁹

But the Germans were also able to intercept and decipher British W/T:

“The British Fleet itself used codes and ciphers of ridiculous simplicity [...]”²⁰

Chapter III: Submarine Warfare – The First Phase, August 1914 – February 1915

“[...] it is curious to reflect that Germany’s pre-war policy with regard to submarine construction was marked for many years by extreme caution, not to say hostility.”²¹

¹⁷ NA, HW 7/1, p. 60 (in this edition on p. 28).

¹⁸ NA, HW 7/1, p. 94, 95 (in this edition on p. 46-47).

¹⁹ NA, HW 7/1, p. 98, 99 (in this edition on p. 48).

²⁰ NA, HW 7/1, p. 100 (in this edition on p. 49).

²¹ NA, HW 7/1, p. 106 (in this edition on p. 53).

The result was, that instead of the 72 submarines planned in 1912, Germany only had 24 boats available in August 1914, most of them short-range coastal-defence submarines. The destruction of 3 old British cruisers (CRESSY, HOGUE, and ABOUKIR) by a single German submarine, U-9, on 22nd September 1914 was one of the principal foundations of the whole German submarine campaign. The overall result of the first months of German submarine warfare was deceiving: a handful of British cruisers and merchant vessels sunk against several German submarines lost in action. And no interruption of the cross-channel traffic between Britain and France:

“In view of the vital importance of this traffic for the Allies, it is somewhat surprising [...]”²²

Chapter IV: First Encounters

The first months of Naval War, the dangers posed by mines and submarines. German raids against the English east coast. The sinking of the German battle cruiser BLÜCHER.

Chapter V: The Second Phase of Submarine Warfare, February 1915 – January 1917

In February 1915 Germany declared unrestricted submarine warfare against commerce ships, Allied and neutral, around the British Isles. From the beginning, this caused problems with the USA, the most important neutral nation. The Prize Law was interpreted differently by Germany; they started to sink merchant ships without warning. German policy of “frightfulness” became “brutality” or “barbarity” in the eyes of the non-belligerent nations.

“Had the warfare from the beginning been conducted as a whole with a reasonable regard for principles of humanity and chivalrous behaviour at sea, the civilised world would have been much more likely to condone the irregularity of the methods employed and might have accepted, though under protest, Germany’s plea of necessity, very much as it accepted certain highhanded methods of blockade and general interference in neutral rights practised by Great Britain.”²³

The sinking of the passenger ship LUSITANIA caused 1,198 civilian dead, which caused strong American pressure on Germany to stop the unrestricted submarine warfare. In April 1915, the submarine warfare was restricted again to Prize Law (Cruiser) warfare.

Germany began unrestricted submarine warfare in March 1915 with only a handful ocean-going submarines available: only 2 boats were at sea at the

²² NA, HW 7/1, p. 113 (in this edition on p. 56).

²³ NA, HW 7/1, p. 145, 146 (in this edition on p. 73).

beginning of the campaign. Germany now started an excessive submarine construction program. In March 1916, there were around 40 submarines available. When Germany declared unrestricted submarine warfare on January 31st, 1917, there were 105 ocean-going submarines in service.

Chapter VI: Von Pohl and Scheer

Von Pohl, before becoming the new German C.-in-C. in 1915, had been Chief of the Admiralty in Berlin, where he appears

“ [...] to have spent his time in senile bickerings with Tirpitz, whose view on naval operations seems to have taken the form of destructive criticism rather than of practical strategical ideas. Tirpitz, tortured by the fear that, unless the Navy which he had created could achieve some striking success in the war, he would not be able later on to get enough money for his pet hobby, acted rather as a disappointed politician than as a sailor. Thus he would constantly press for action but, when faced with an invitation to formulate a definite plan, would fall back in platitudinous generalisations, unaccompanied by any useful suggestion. Von Pohl had also frequent altercations with the Army Chiefs, who wanted to know ‘what the Navy was doing’, and were apt to make statements about the uselessness of the Fleet [...]”²⁴

Von Pohl was forced by the Kaiser and his court to an “extreme cautious policy” regarding the actions of the Fleet, not to take the slightest risk to lose any of the precious ships.

After von Pohl’s death, Admiral Scheer became German C.-in-C at the beginning of 1916. He risked a more active naval policy and undertook several sorties of the High Sea Fleet into the North Sea, which finally led to the Battle of Jutland.

Chapter VII: The Baltic Naval Station

British submarines entered the Baltic in 1915. In the autumn of 1915, they started from Russian bases a British submarine war against German commercial shipping, interrupting the important iron-ore traffic from Sweden to Germany in October and November 1915. German Q-ships were trying to destroy British submarines, but only by organising a convoy system and convoy escorting flotillas were the Germans successful in overcoming the British submarine threat in the spring of 1916. So already in 1916 the Germans had experience with the convoy-system - their own, in the Baltic.

²⁴ NA, HW 7/1, p. 190 (in this edition on p. 94).

Chapter VIII: War in the Air

The use of Zeppelins for naval reconnaissance and bombing raids against Great Britain.

Chapter IX: Flanders as Submarine Base

Brugge, Ostend, and Zeebrugge were used as German naval bases from 1915 on. A flotilla of small coastal submarines (UB-I boats) failed to interrupt the cross-channel traffic. 1916 ocean-going submarines were stationed in Flanders, which took part in the war of commerce in the Channel and the Atlantic. The Flanders submarines suffered heavy losses: 80 of 92 submarines stationed here were sunk in the war.

Chapter X: Jutland

The inevitable Battle of Jutland: Room 40 was aware some days before, that the Germans were planning another sortie. Because decisive information about the direction of Scheer's nightly retreat was not sent from the Admiralty to Admiral Jellicoe, the German Fleet was able to avoid its annihilation.

Chapter XI: America and Germany

Or: How Germany created a situation:

“ [...] which would force America to enter into the war [...]”²⁵

Room 40 was deciphering much interesting diplomatic traffic between the German Government in Berlin and the German embassy in Washington. German chancellor Bethmann-Hollweg, for example, tried to use President Wilson's mediation to enforce the start of peace negotiations against the will of the militarist party (Hindenburg, Ludendorff) in Germany:

“Popular opinion will not stand Wilson's mediation in the direction of peace proposals [...]”²⁶

Against these prospects of a peace of negotiations, only the declaration of unrestricted submarine warfare could help the militarists in the German Navy and Army to continue the war. This militarist official clique - “ignorant, stupid and short-sighted” - had taken power in Germany at the end of 1916, and easily found helping hands in the Imperial government. State Secretary Zimmermann under-mined Bethmann-Hollweg's policy in a parallel secret-diplomacy, which astonished even the personnel of Room 40:

²⁵ NA, HW 7/2, p. 387 (in this edition on p. 194).

²⁶ NA, HW 7/2, p. 426, Bethmann-Hollweg in a telegram to the German ambassador in Washington, to Bernstorff, 7.1.1917 (in this edition on p. 213).

“His knavery was sufficient to cloak a certain degree of folly, but at each step we are left wondering whether behind his apparent folly some deeper knavery did not lurk.”²⁷

President Wilson had allowed the German Government to use the official American cable line to accelerate negotiations. Zimmermann even went so far as to use this official American line for sending encrypted telegrams to the German ambassador in Washington - proposing an alliance with Mexico to declare war on America. Room 40 was successful in de-coding this telegram. The British Admiralty informed President Wilson about it, and this so-called “Mexican“- or “Zimmermann-telegram” gave Wilson the decisive moral argument to declare an unpopular war on Germany.

Chapter XII: Unrestricted Submarine Warfare

With 105 ocean-going submarines available Germany felt strong enough to start unrestricted submarine warfare in February 1917. America could be ignored, because England would be forced to capitulate within 6 months - this was the optimistic belief in Germany. And for a short while in the spring of 1917, England was under a deadly threat:

“The submarine campaign failed, but it came nearer to achieve success than the German people in the bitterness and disillusionment of defeat seem quite to have realised.”²⁸

Only the introduction of the Convoy system helped Britain to stop the threat in the late summer and autumn of 1917. America had declared war on Germany in April.

The change of tactics from restricted (Prize Law) submarine warfare to unrestricted in 1917, which forced America into the war, did not pay out on the battlefield. British statistics show that unrestricted submarine warfare in 1917 was no more effective than restricted (Cruiser / Prize Law) submarine warfare in 1916, and that in general the results per boat and trip were sinking:

“The average destruction per boat at that time [second half of 1916] worked out at 17,000 tons per trip. During the first months of 1917, the figure was 14,000 tons, and from August onwards fell to 9,000 tons per boat per trip.”²⁹

Not the torpedoing of ships without warning, but only the higher total number of submarines in service and the higher percentage of submarines on cruise in 1917 and 1918 produced a higher total number of merchant ship sinkings than in 1915 and 1916. The sinkings without warning only served to force America

²⁷ NA, HW 7/2, p. 415 (in this edition on p. 208).

²⁸ NA, HW 7/2, p. 467 (in this edition on p. 235).

²⁹ NA, HW 7/2, p. 447, 448 (in this edition on p. 224).

into the war, but did not in spite of all propaganda for the unrestricted submarine warfare in Germany increase the “efficiency” of the submarine.

In 1917 and 1918, the Germans were already trying co-operation between submarines, but without much success. So already by the second half of World War I, the idea of a group attack of submarines on convoys (the later wolf pack tactics of WWII) was discussed on the German as well as on the British side:

“Had regular patrol lines of submarines, working together and passing intelligence from the outer to the inner boats, been organised in such areas for instance as north of Ireland, the approaches to the Irish Sea and English Channel, and in the North Sea, there seems little doubt that the destruction of ships could have been greatly increased.”³⁰

In 1918, the German submarine warfare was stagnating:

“The German Admiralty appears to have fallen into the mistake of calculating results more by the number of boats on active service, than by the efficiency of those boats [...]”³¹

“ [...] boats were hurried to sea after incomplete refits and with only semi-trained complements.”³²

“The high morale of submarine crews during the first years of the war declined rapidly during 1918; the heavy losses naturally produced depression and a strong presentiment of death, and the cumulative effect of the incessant attacks made by the Allied patrols was such as to keep the crew in a perpetual state of nervous tension.”³³

Chapter XIII: Fall Albion

The history of a perfectly organized and executed German amphibian landing operation at the Russian coast in the Baltic. An operation with:

“ [...] the task assigned to the fleet of conveying to, and landing on, a hostile shore some 23,000 men [...] is one of exceptional historical interest, since the only precedent precedent for such an undertaking in modern times, the Franco-British landing at the Dardanelles in 1915 was rather a warning than an example.”³⁴

After the successful end of this landing operation:

³⁰ NA, HW 7/2, p. 455 (in this edition on p. 229).

³¹ NA, HW 7/2, p. 463 (in this edition on p. 233).

³² NA, HW 7/2, p. 463 (in this edition on p. 233).

³³ NA, HW 7/2, p. 464 (in this edition on p. 233).

³⁴ NA, HW 7/2, p. 478 (in this edition on p. 241).

“ [...] the Kaiser issued a bombastic message of congratulation, endorsed by a less blasphemous communication from the inevitable Hindenburg. Admiral Schmidt thanked General von Katten. General von Katten thanked Admiral Schmidt. Both thanked the fleet. Both thanked the Army. [...] the curtain rang down on the proceedings amid general applause and a veritable shower of Iron Crosses.”³⁵

Chapter XIV: Mediterranean Submarine Warfare

The German submarines were based at the Austrian ports of Cattaro and Pola in the Adriatic – Austria was a sea-power at this time with a small dreadnought fleet and some Mediterranean bases.

Chapter XV: Minelaying

Trench warfare at sea: German, British and Russian offensive and defensive minefields; mining and counter-mining in the North Sea and the Baltic, executed by surface crafts and specially constructed minelaying submarines. The Russian mines were especially effective: the Germans once lost seven destroyers in one night on a single Russian minefield.

The Germans copied early in the war the Russian mines, and the British later these German mines, because the English mines were at the beginning of the war regarded as quite harmless. One German submarine commander in this early phase:

“ [...] deliberately fished up two of the [British] mines, carried them home as trophies and later had them converted into punch-bowls.”³⁶

Chapter XVI: Finnish Adventures

German Fleet and Army intervene in the Finnish Civil War in March and April 1918. Germany is at the height of its power and megalomania, it cannot let pass away any chance of expansion, not even on the remotest and most unimportant side-theatres of war. While the decision is falling on the Western Front, the Germans swarm out in the east, between Finland and the Caucasus.

A short flashlight on the German support for the Bolshevik Revolution: Geheimrat Kurt Riezler, former right-hand of Bethmann-Hollweg, takes the way from Stockholm to the Åland Islands to free Lev Kamenev, the right-hand of Lenin, who has been arrested here on a voyage from London to Petersburg by the new independent Finnish Government. The German Navy,

³⁵ NA, HW 7/2, p. 508 (in this edition on p. 256).

³⁶ NA, HW 7/2, p. 447 (in this edition on p. 224).

still suffering from mutinies of its lower-deck, has to play the nurse for Bolshevik Revolutionaries:

“A Russian republican envoy, Kamenew, had been promised by Berlin a safe passage home via the islands, and RHEINLAND was instructed to make the necessary arrangements.”³⁷

Chapter XVII: The Flanders Destroyer Campaign

Directly after Jutland, in the summer of 1916, German destroyer flotillas of the High Sea Fleet were stationed in Flanders to threaten and endanger British forces protecting the Dover Barrage, enabling by this an easier passage of German submarines from Flanders and the Bight into the English Channel and the Atlantic. The submarine war finally gets strategic priority in German naval policy.

Chapter XVIII: The U-cruisers

German private companies ordered large civil submarines in 1915 and 1916 for merchant traffic with America. The first in service, U-DEUTSCHLAND, made two voyages to America in the second half of 1916, and:

“Towards the end of December [1916], arrangements for a regular postal service to and from America by submarine were announced with a great flourish of trumpets in all the German papers.”³⁸

After the American declaration of war the merchant submarines became superfluous and were converted into military U-cruisers.

In England, it was expected already in 1916 that large numbers of these long-range cruisers would be available. But it was not before 1918, that several of these boats started war on commerce off the American east coast, the Azores, the Canaries and West Africa, seizing valuable cargoes like rubber, copper etc. from captured vessels. There were early attempts to use these large boats as swimming submarine bases, providing smaller boats with torpedoes and fuel in the middle of the Atlantic, a tactic used again - but not originally invented - in World War II.

Chapter XIX: The End of the Scheer Regime

Some more fruitless sorties of the High Sea Fleet 1917 and 1918. Successful attacks of German cruisers on Allied convoys off Norway.

³⁷ NA, HW 7/2, p. 586 (in this edition on p. 297).

³⁸ NA, HW 7/2, p. 176 (in this edition on p. 87).

Chapter XX: Revolution

The German High Sea Fleet, or - The Prussian Caste-System at Sea:

“[...] the spirit of Pan-Germanism, of Prussian militarism, fostered by the influence of William II, 'the babble of professors, the irritating activity of the Navy League and similar societies, and the talk of an ignorant and unprincipled press', had all contributed towards a caste-system tending to isolate officers from intercourse and sympathy with the men. The arrogance of executive officers soon knew no bounds. They could suffer no other gods but themselves. They became a 'hermetically sealed corps'.“³⁹

“The connecting link between officers and men was thus irretrievably lost. The spirit of the latter was mishandled owing to a lack of understanding of the feelings of simple men and to a complete disregard of their existence as individuals.“⁴⁰

“In a sense, 'the Fleet' had never meant quite the same thing to Germans as it does to the British. We have already observed that this term, as used by many German officers, hardly included the lower deck. There was never much trace of a conception of the Navy as a unity, as a Society, of which all ranks were members.“⁴¹

“Whoever ploughs through the mass of German naval post-war literature cannot fail to notice in the chance phrases dispersed about the letters to the press of almost every writer of wardroom rank, in the articles contributed by senior officers, in the publications of Admirals and even in Scheer's own book, that terms such as 'the Navy' or 'the Fleet' are not meant to include the lower deck. Stokers and seamen are necessary, no doubt, to the existence of 'the Navy', but like the less attractive organs of the human anatomy, they are not to be mentioned or considered more than is necessary. They are not held to contribute to the honour or virtue of the whole system. Their needs may have to be supplied, but they have no other call upon our notice. To vary the metaphor, it is rather as if the mention of 'the Navy' to them evoked very much the same conception as the phrase 'the firm' does to us. We picture the board of directors rather than the employees.“⁴²

The German sailors were suffering hunger:

“The High Sea Fleet lay for the most part inactive. The unbroken monotony of life on board, the crowded quarters, the constant drill,

³⁹ NA, HW 7/2, p. 721 (in this edition on p. 369).

⁴⁰ NA, HW 7/2, p. 721 (in this edition on p. 369).

⁴¹ NA, HW 7/2, p. 774 (in this edition on p. 395).

⁴² NA, HW 7/2, p. 723 (in this edition on p. 370).

humiliating treatment, excessive punishment for minor offences, the completely illusory right of complaint - all combined to exercise a depressing influence. On these obvious incentives to discontent we need not dwell, nor need we repeat what has already been said about the insufficiency and irksome sameness of the rations.“⁴³

“ [...] their [the officers] luxurious habits in regard to food and drink scandalised and outraged the feelings of the strictly rationed seamen and stokers.“⁴⁴

“ [...] the lack of adequate nourishment must have been throughout the most constant and, in the end, the most decisive source of unrest. It is true that some improvement in quantity was effected as a result of the mutiny of 1917, but greater variety was not practicable, and envy of the super-abundance in the officers' messes continued unabated.“⁴⁵

Then came the last days of October 1918. The German Government was already negotiating the armistice, when the naval officers wanted to start a last desperate attack:

“The rumour spread that, as a result of recent Pan-German Propaganda, a "Battle of Despair" was to be fought in which the entire fleet was to be sacrificed.“⁴⁶

The sudden collapse of the Prussian society came with the refusal of the ordinary soldiers to follow their officers any longer:

“The men no longer regarded themselves as bound up with the honour of a great institution. It was not for their Navy that they were asked to fight, but for a corps of Officers for whom they had neither sympathy nor respect.“⁴⁷

“The commander of the THÜRINGEN called in vain upon the patriotism of the men. 'We will fire our last round', said he, 'and go down with flying colours.' The men replied that, if he wanted to do so, he would have to go alone.“⁴⁸

This was the end of the German Fleet. The two fleets – submarines and High Sea Fleet – were treated separately: The submarines had to surrender

⁴³ NA, HW 7/2, p. 724 (in this edition on p. 371).

⁴⁴ NA, HW 7/2, p. 723 (in this edition on p. 370).

⁴⁵ NA, HW 7/2, p. 725 (in this edition on p. 371).

⁴⁶ NA, HW 7/2, p. 739 (in this edition on p. 375).

⁴⁷ NA, HW 7/2, p. 774 (in this edition on p. 395).

⁴⁸ NA, HW 7/2, p. 743 (in this edition on p. 380).

immediately in the days after the armistice and were handed over by their crews to the British. The fate of the boats was sealed: they were all scrapped or sunk by the British in the following years.

The High Sea Fleet with its dreadnoughts and cruisers and destroyers was to be “interned” with their crews in Great Britain. A peace conference should decide about their fate later. So in the

“ [...] morning of November 21st, the tall ships of the German fleet pass to captivity between the columns of the British ships, [...] afterwards internment was converted into surrender, and the crews scuttled their ships [21st June 1919].”⁴⁹

Contents of Volume II: The Fleet in Being

Chapter I: Battleships and Squadrons

Chapter II: Scouting Groups and Cruisers.

Chapter III: Gunboats, etc.

Chapter IV: Hulks

Chapter V: Submarines, their Flotillas and their School

330 of the 1006 pages of the original text of this volume are dedicated to submarines: types and numbers, armament, building yards, flotillas. A short “biography” for each of the about 400 German U-, UB- and UC-submarines, including their cruises, known sinkings, etc., from U-1 to UC-114.

Chapter VI: Naval Aircraft.

Zeppelins and sea planes, with a “biography” for each Zeppelin.

Chapter VII: Torpedoboat Flotillas

Chapter VIII: Mineseeking and Sweeping Formations and Barrier Breakers

Chapter IX: Outpost Formations

⁴⁹ NA, HW 7/2, p. 775 (in this edition on p. 396).

Chapter X: Other Auxiliary Formations

Chapter XI: Torpedo Craft.

Chapter XII: A-boats

Chapter XIII: F-, M-, FM-, and UZ-boats

Chapter XIV: Classified List of Auxiliaries and Minor Naval Vessels

Chapter XV: History of Auxiliaries and Minor Naval Vessels

Chapter XVI: Losses

A list of several hundred submarines, torpedoboats, trawlers, cruisers, and battleships lost during the war, with cause, date, and place of loss, if known.

Chapter XVII: The Routes of the German Bight

Chapter XVIII: German Codes and Ciphers

A history of deciphering in World War I; British and German failure to protect their communication. The British were very successful in breaking the Germans codes throughout the war; the Germans were only somewhat successful in this. But the British advantage was partly given away by the bad organisation of their naval intelligence. Details about the capture of the German code-books, the organisation of the signal system of the “Kaiserliche Marine” and its weakness. A critique of the “childish” system of German ciphering and encryption, their total lack of foresight, their inability to protect their codes and code-books, even after the war:

“ [...] a code which is still (May 1920) in force.”⁵⁰

Appendix Battle of Jutland - Deciphered German Fleet W/T

3 double pages of German W/T messages deciphered at the Battle of Jutland by Room 40 and handed over to Operations Division and from there to the C.-in-C. of the Grand Fleet – or not.⁵¹

⁵⁰ NA, HW 7/3, p. 981. (In Vol II, The Fleet in Being, p. 645)

⁵¹ NA, HW 7/1, p. 377 – 379.

Part Three - Appendix

Why publish this work now?

Firstly – this work offers a fresh eye-witness on events. The war had just ended, and the authors of this book had worked in the day and night watches of Room 40 to decode and analyse German messages; they had been present in Room 40 in the days of Jutland. These young men had their own ideas about naval warfare, and they expressed their opinion with decisiveness.

Secondly - even if Room 40s achievements had not had the slightest meaning for the history of World War I, this work would deserve to be published. It is the result, a summary of the work of Room 40. And Room 40 was the predecessor of Bletchley Park. Based on the experience of Room 40 as an organisation and on the spirit of its members like Birch and Clarke, or like its founder Churchill, the success of ULTRA was possible, whose goal was to prevent something much more dangerous than the hegemony of Kaiser Willy's Imperial Germany over Europe. This work is part of the pre-history of Bletchley Park.

Thirdly – there is hardly any objective and complete history of the German Navy in WWI to be found. I know no other work that gives such a detailed and vast and systematic and objective history of the German Fleet in World War I. From the latest battleship to the last harbour tug, from the organisation of the battle cruisers to minesweeping operations in the Baltic, from submarine cruises off the east coast of the USA to the organisation of the Submarine School at Kiel.

This work is dedicated to submarine warfare. It is strategically concentrated on it, and offers many details, which deserve to be published. In Germany, it took from 1932 until 1966 to publish the “official” history of the submarine merchant war⁵². The reason for this extreme shyness on German official side about publishing details and correct numbers about the German Fleet in World War I is easy to explain - the German authorities also had their Pandora's box of unpleasant questions, among them:

- Why did they build this extremely expensive and useless battleship fleet before the war, which was never strong enough to stand the British Fleet alone, but served only to force Britain to the side of France and

⁵² Arno Spindler (ed), Der Handelskrieg mit U-Booten, 5 vols, Berlin 1932 – Freiburg 1966.

Russia, and which not even could prevent the British blockade of German merchant traffic?

- Why didn't they build more submarines before the war - instead of all promises and planning?
- Why didn't they build more submarines in 1915 and 1916? Why did they continue the senseless arms race with Britain and laid on keel another half a dozen new super-battleships which were never finished?
- Why didn't the German Admiralty continue restricted Prize Law submarine warfare in 1917? Why did they switch to unrestricted submarine war, which served for nothing else than forcing America into the war?

The whole German Navy after 1898 only seemed to have caused Germany's ruin. Mankind would have been better served had it not existed in its disproportionate and megalomaniac size.

Appendix: Jutland and the Intelligence Disaster

A detailed description of the intelligence disaster in the Battle of Jutland:

“Early on May, 31st, 1916, the High Sea Fleet began to emerge from the Jade and the Elbe with the intention of surprising Beatty's battlecruisers before Jellicoe and the main body of the Grand Fleet could intervene, and in the hope of luring the latter into a U-boat trap. More than 12 hours earlier, however, Room 40 had detected signs of the impending sortie and Jellicoe had been duly alerted. As a result he was in fact at sea and steaming south two hours before the first of Scheer's ships left harbour. So far so good.

Around noon that day, the Director of the Operations Division, Captain Thomas Jackson, came into Room 40 and inquired where the direction finding stations placed call sign DK, the call sign normally used by the German commander-in-chief. He was told, quite correctly, 'In the Jade'. Jackson turned on his heel and left the room. Had he asked where Admiral Scheer was at that particular moment, he would have received a very different answer, for everyone in Room 40 knew that, when Scheer put to sea, he transferred call sign DK to the shore command in Wilhelmshaven and himself used another one in an effort to deceive the British. Quite unknown to Room 40, Jackson then proceeded to signal Jellicoe and Beatty that the main German Fleet was still in the Jade, its intended sortie apparently postponed due to lack of reconnaissance by its Zeppelins. By this time, in fact, Scheer had been steaming north for more than 10 hours. Both Jellicoe and Beatty were, therefore, taken very much by surprise when, less than four hours after the receipt of Jackson's wretched and ill-conceived signal, they found themselves confronting not

just the German battlecruisers, but the whole of the High Sea Fleet. Their faith in the reliability of the Admiralty as a source of intelligence about the enemy was shattered.

To be fair, the surprise was mutual and Scheer only managed to extricate his battered ships from a desperate situation by brilliant tactics. Even then, but for the lateness of the hour at which the two main fleets made contact with each other and the poor visibility prevailing, the afternoon would probably have ended in a heavy defeat for the Germans. As it was, although they had inflicted rather more damage than they had suffered, they had taken a severe pounding, they were still outnumbered and had, unlike Jellicoe, no wish to renew the struggle on the following day. Their only hope was to find a way during the night round the British, who were between them and their bases, in order to make good their escape.

Scheer had a choice of four routes home. Jellicoe selected as the most probable one on which to base his own dispositions one which, in the event, Scheer rejected. This however would not have mattered if only the British commander-in-chief had been supplied with, and had believed, all the information that was now becoming available to Room 40. At 9.58 p.m., Jellicoe was sent a signal giving him the position and course of the rear of the German Fleet but unfortunately the navigation of the German ship upon which this signal was based was faulty and she was not in fact where she reported herself to be. Jellicoe knew that the position signalled to him by Operations Division was substantially wrong and this, coming on top of the early mistake, finally destroyed what remnants of trust he had left in the reliability of the Admiralty's information. When fifty minutes later, he received a further message informing him that the German Fleet had been ordered to return to port and which gave a course indicating the route likely to be followed, he ignored it, preferring to rely on his own assessment of the probabilities. He continued to steam in a direction which gradually took him away from Scheer, who was thus enabled to slip round the British rear and escape.

So much for the information which Operations did pass to Jellicoe. It was not however the end of the sorry story. Shortly after decrypting the signals mentioned above, Room 40 intercepted a message from Scheer requesting a dawn reconnaissance by Zeppelin of Horns Riff, the channel by which he planned to return. This and subsequent signals which made the Germans' intentions crystal clear were faithfully passed by Room 40 to Operations but they got no further than the desk of the Duty Officer. Next morning the British scoured an empty sea. Scheer was safely back in Wilhelmshaven. It was not until several years after the war that Jellicoe even learned of the existence of these vital signals.”⁵³

⁵³ Patrick Beesley, *Very Special Intelligence*, London 1977, p. 3 and 4.

Several times in HW7/1, HW 7/2, and HW 7/3, the bitterness and anger of the authors of this work is expressed about the inefficiency of the British Admiralty in exploiting the efforts of Room 40. The horrors of World War I were quite fresh in 1919 and 1920, and young men in all nations were horrified about the war.

A destruction of the German High Sea Fleet in 1916 would not have ended World War I, just as Trafalgar did not end the Napoleonic Wars. The German Army was still unbeaten. But the throne of the Kaiser and the whole Hohenzollern dynasty would have been mortally threatened. The German Navy had been the Kaisers personal pet hobby, his personal prestige was linked with the whole Fleet program. For this reason he had ordered to avoid any possible loss of ships under Admiral Ingenohl and Pohl in 1914 and 1915. There were many internal critics of Kaiser Wilhelm and his personal regime (but not of the Prussian system as a whole) in Germany, which only were searching for a pretext to raise their heads. A disastrous sea battle of the High Sea Fleet would have shaken the whole Prussian monarchy, just as the lost sea battle of Tsushima had shaken the throne of the Tsar in 1905. In any case, it would have had grave consequences on German politics and the equilibrium of internal powers. It would have changed history, but no one could say whether for the better.

But to be just: there were two German Navies, independent of each other: the High Sea Fleet and the submarines. And it was the latter which nearly brought Britain to collapse in the first half of 1917. And against the German submarines Room 40 was mostly effective: all submarine cruises were traced, their positions followed, their W/T traffic deciphered. It was against the submarines only, that Britain nearly lost the war. In this light, the value of Room 40 as an intelligence organisation cannot be overestimated.

Part Four

Technical aspects of the publication

The original text of HW 7/1 and HW 7/2 together is 775 pages, of HW 7/3 it is 1,007 pages. The book presented here – “The Fleet in Action” - contains HW 7/1 and HW 7/2. HW 7/3 – “The Fleet in Being” will be published as a separate book.

The settings of commas and points in the original text have already been corrected manually by unknown readers. I tried my best (as a non-native English speaker) to integrate all these corrections into this publication.

All Umlauts (ä, ö, ü) in ship and place names (BLÜCHER, Neumünster etc.) had already been corrected manually by unknown readers in the original text. All these corrections were integrated into this publication.

In very rare cases, minor corrections of obvious orthographical errors were made.

Times and ship-position details (8 a.m., 54°35'N., 6°05'E.) were unified over all chapters, also the writing of personal and ship names in lower- and UPPERCASE, with or without hyphens or “ (Admiral von Tirpitz, battleship RHEINLAND, British submarine E19, German submarine U-19, German zeppelin L20, etc.).

Times, unless otherwise stated, are given according to G.M.T., except in chapters VII, XIII, XVI and XX, in which German (Central-European) Time has been used.

Maps

The original maps have different sizes, varying from A5 to A0. All have been digitally photographed. In this publication, only an A4 black-and-white printout of all maps is presented. All digitally photographed maps in original size and in colour can be viewed on the Internet at:

<http://germannavalwarfare.info>

The Editor

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Feedback

Please send all feedback to: mail@germannavalwarfare.info

Thanks

My grateful thanks to the National Archives in Kew, Great Britain, which granted me generously the copyright to publish this source. The kindness of the team there is overwhelming, and the organisation of the archives is perfect. It is really great to work there.

Hans Joachim Koerver, December 2007

Editor's preface for the 2nd edition, June 2009

Together with the edition of Volume II, *The Fleet in Being* (ISBN: 978-3-902433-77-0), this book was again proofread. Many punctuation and lower- and uppercase writing errors were corrected.

Many different authors with many different orthographic styles have written the chapters of these 2 volumes – I have tried my best to harmonize the orthography. I hope the reader will excuse remaining inconsistencies.

The Editor's preface of the 1st edition was updated. 2 missing maps (Gulf of Bothnia, Routes of Finnish Expedition) were added.

Hans Joachim Koerver, June 2009

A CONTRIBUTION TO THE HISTORY OF

GERMAN NAVAL WARFARE

1914 – 1918

in 3 Volumes

VOLUME I.

THE FLEET IN ACTION

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