Report on the Battle of Dogger Bank by the Austro-Hungarian Naval Attaché in Berlin, Fregattenkapitän Colloredo-Mannsfeld

Essay by Mihály Krámli

Preface

In February 2024, I published on NavWeaps a report on the Battle of Jutland[1] written by the Austro-Hungarian naval attaché in Berlin, Fregattenkapitän Graf Hieronymus Colloredo-Mannsfeld. Simon Harley of The Dreadnought Project recommended to me that the Austro-Hungarian naval attaché's report on the Battle of Dogger Bank was also worth publishing. Fortunately, my colleague and friend, Gábor Kiss, was able to find Colloredo-Mannsfeld's two reports on the battle at the Kriegsarchiv in Vienna and copied them for me, for which I would like to thank him.

Colloredo-Mannsfeld wrote his first report on the Battle of Dogger Bank on 28 January 1915, four days after the event. The title of this report is "Naval Battle in the North Sea on the 24th of the Current Month."[2] As at that time the fleet's official report had not yet reached Berlin, and so only few and contradictory facts were available, which meant that the naval attaché did not have a clear view on the battle. Consequently, his report is short, less than two and half pages. In this report Colloredo-Mannsfeld states that the *Blücher* sank two British destroyers while a third was sunk by a German U-boat.[3] As I found that this report had little historical value, I decided that it was not worth publishing.

The second report bears the date of 7 February 1915. Colloredo-Mannsfeld had accompanied Kaiser Wilhelm II on his visit to the damaged *Seydlitz* on 4 February.[4] During this

[1] "The Report on the Battle of Jutland by the Austro-Hungarian Naval Attaché in Berlin, Fregattenkapitän Colloredo-Mannsfeld."

[2] KA Kriegsmarine Marineattaché Berlin Korrespondenz ex 1915 Res. Nr. 30

[3] In fact, no British destroyers were sunk in this battle. *Blücher* had only hit and disabled the destroyer *Meteor* which was towed back to the Humber and repaired.

[4] As a consequence of the battle, the commander of the High Seas Fleet (Hochseeflotte), Admiral Friedrich von Ingenohl, was sacked on 2 February, two days before the imperial visit. On 4 February, after the Emperor made a speech on board *Seydlitz*, the new commander of the fleet, Vizeadmiral Hugo von Pohl, made a short speech. In his

visit, he was able to speak with the German officers who had participated in the battle. The title of this report is "Visit of His Majesty the German Emperor in Wilhelmshaven" and is eighteen pages long. This report consists of three parts: the first is on the visit itself, the second is on the damages suffered by the German fleet during the battle and on the course of the battle, and the third is on the experiences of the German U-boats in the waters around Britain. Considering that the first and third parts of the report do not contain much of interest about the battle, I have decided to publish only the second part in this essay.

Looking at the report, it is obvious that Colloredo-Mannsfeld's main source of information was Vizeadmiral Gerhard Gerdes, the head of the Waffendepartment (Weapons Department) of the Reichsmarineamt. He held this position from September 1909 to October 1917. Colloredo-Mannsfeld's access to Vizeadmiral Gerdes was mainly due to the fact that they travelled together on the train from Berlin to Wilhelmshaven and again on the train back to Berlin, and so Colloredo-Mannsfeld made the most of this opportunity to discuss the battle with him. In his later report after the Battle of Jutland, the attaché mentions Gerdes again, as after that battle the Naval Officers made Gerdes the scapegoat for the late increases of gun caliber, especially the late introduction of the 38 cm gun.[5]

At last, but not least, I would like to say a few words about what lessons were learned by the Austro-Hungarian Navy from the German experiences. The Austro-Hungarian Navy had constructed the gun turrets of its latest battleships (*Radetzky* and *Tegetthoff* classes) with a so-called Umladestation (working chamber) which were one level below the gunhouse. This was not a true working chamber in the British sense as the ammunition hoists ran uninterrupted from the shell handling room up to the gunhouse. These working chambers had a storage capacity of 12 ready-use ammunition on the *Radetzky* class and 16 on the *Tegetthoff* class. The sole purpose of this design was to achieve the greatest possible rate of fire. In the case of this so-called Rapidfeuer (quick fire) method, the auxiliary hoists (Nebenaufzug) fed the working chamber and

report, Colloredo-Mannsfeld noted this change of command and remarked that while Pohl was as unpopular as his predecessor, he was at least more energetic and competent.

[5] In May 1910, during the design work of the future *König* class, the German Navy considered the introduction of a larger caliber gun as a response to the British and American caliber increase. This was rejected as budget limitations did not allow for a greater displacement for this class from the previous *Kaiser* class battleships. Thus, mounting larger caliber guns would have required a decrease in the armor thickness. As it was a collective decision, with Admiral Tirpitz having the final say, it was unjust to blame only Gerdes. See Grießmer pp. 108-110.

the main hoists (Hauptaufzug) brought up ammunition from here to the gunhouse. This arrangement reduced hoisting time from 8-11 seconds down to 3.5 seconds.[6] The Austro-Hungarian Navy learned from Colloredo-Mannsfeld's second report on the Battle of Dogger Bank that Vizeadmiral Gerdes considered the Umladestation the main culprit for turret fire on *Seydlitz*. It seems that the leaders of the Navy agreed with this conclusion and in the spring of 1915 cartridge cases were removed from the Umladestation down to the lower part of the revolving stalk on the cartridge rings.[7] More radical changes in ammunition handling were not implemented until well after the Battle of Jutland.[8]

[6] For more information on the turret designs of the Austro-Hungarian battleships, see "Austro-Hungarian Battleships and Battleship Designs 1904-1914" by Mihály Krámli, pp. 157-167 (Links to pdf documents: Hungarian and English).
[7] KA MS/II. GG 47D/2 81 ex 1916.
[8] In 1917 these cartridge rings were removed and all cartridges were then stored only in the magazines until needed.

Report of Fregattenkapitän Colloredo-Mannsfeld[9]

Naval Attaché
At the k. u. k. Embassy in Berlin
Res. Nr. 47

Visit of His Majesty the German Emperor in Wilhelmshaven

To
The k. u. k. Ministry of War, Naval Department,[10] Vienna

Berlin, 7 February 1915

On the 4th of the current month the emperor visited his fleet for the first time since the outbreak of the war, making a brief stopover in Wilhelmshaven from 9 a.m. until 1 p.m.
[…]
In the supplement, I report on the damages seen and the course of the naval battle, as far as I can form a picture from various reports. /Supplements/

Supplements

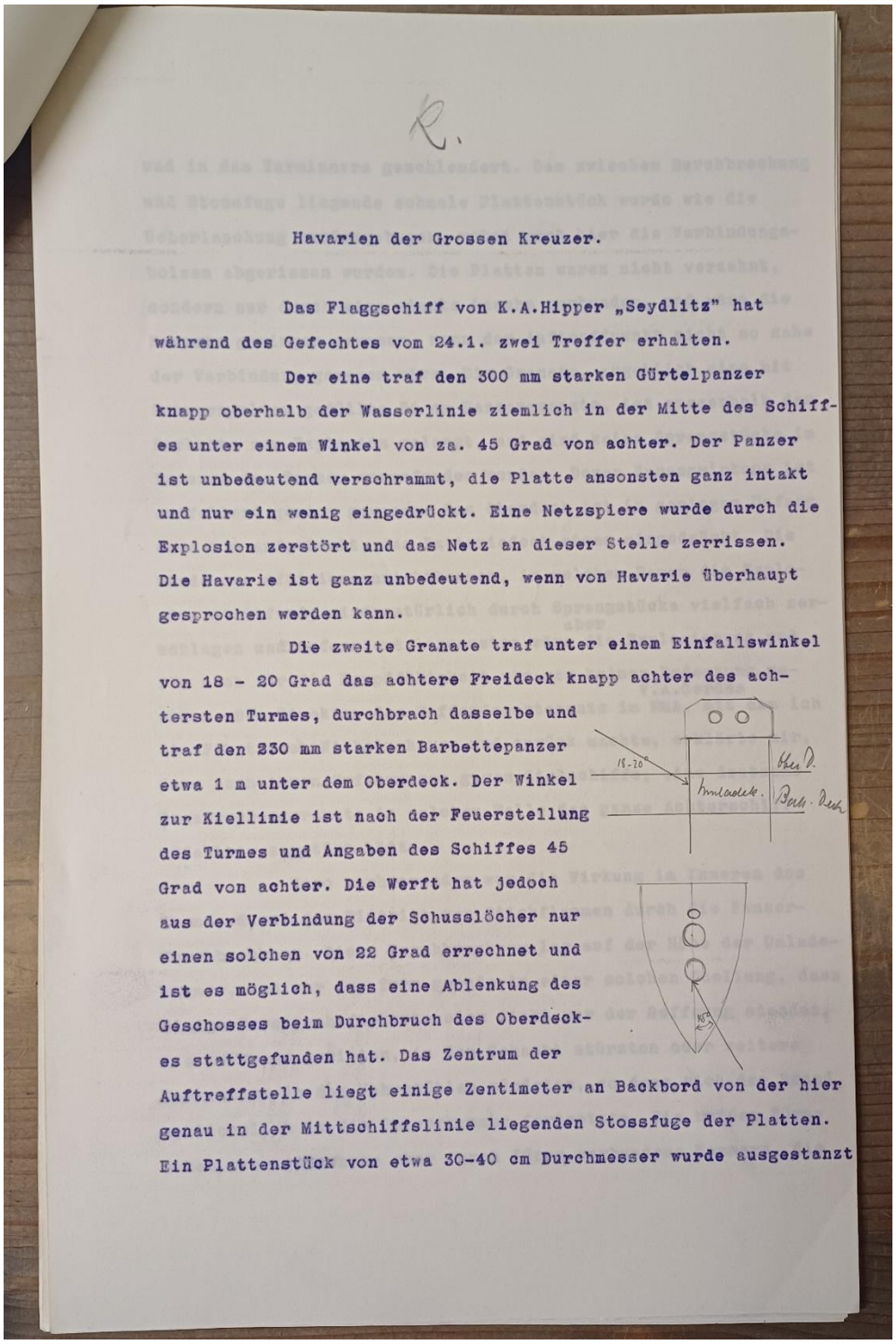
Damages to the large cruisers

The flagship of K.A. [Konteradmiral] Hipper "Seydlitz" received two hits[11] during the battle on 24 January.

One hit the 300 mm belt armor just above the waterline in the middle of the ship at an angle of about 45 degrees from aft. The armor is insignificantly scratched, the plate otherwise

[9] KA Kriegsmarine Marineattaché Berlin Korrespondenz ex 1915 Res. Nr. 47
[10] K. u. k. Kriegsministerium, Marinesektion
[11] Campbell states that she was hit three times. Campbell pg. 44.

completely intact and only slightly dented. A net spar was destroyed by the explosion and the [anti-torpedo] net was torn at this point. The damage is quite insignificant, if one can speak of damage at all.



R.

Havarien der Grossen Kreuzer.

Das Flaggschiff von K.A.Hipper „Seydlitz" hat während des Gefechtes vom 24.1. zwei Treffer erhalten.

Der eine traf den 300 mm starken Gürtelpanzer knapp oberhalb der Wasserlinie ziemlich in der Mitte des Schiffes unter einem Winkel von za. 45 Grad von achter. Der Panzer ist unbedeutend verschrammt, die Platte ansonsten ganz intakt und nur ein wenig eingedrückt. Eine Netzspiere wurde durch die Explosion zerstört und das Netz an dieser Stelle zerrissen. Die Havarie ist ganz unbedeutend, wenn von Havarie überhaupt gesprochen werden kann.

Die zweite Granate traf unter einem Einfallswinkel von 18 - 20 Grad das achtere Freideck knapp achter des achtersten Turmes, durchbrach dasselbe und traf den 230 mm starken Barbettepanzer etwa 1 m unter dem Oberdeck. Der Winkel zur Kiellinie ist nach der Feuerstellung des Turmes und Angaben des Schiffes 45 Grad von achter. Die Werft hat jedoch aus der Verbindung der Schusslöcher nur einen solchen von 22 Grad errechnet und ist es möglich, dass eine Ablenkung des Geschosses beim Durchbruch des Oberdeckes stattgefunden hat. Das Zentrum der Auftreffstelle liegt einige Zentimeter an Backbord von der hier genau in der Mittschiffslinie liegenden Stossfuge der Platten. Ein Plattenstück von etwa 30-40 cm Durchmesser wurde ausgestanzt

Portion of the report describing the "fatal hit" on Seydlitz

The second shell hit the aft open deck just aft of the aftermost turret[12] at an angle of incidence of 18-20 degrees, broke through it and hit the 230 mm barbette armor about 1 m below the upper deck. The angle to the keel line is 45 degrees from aft according to the turret's firing position and the ship's specifications. However, the shipyard only calculated an angle of 22 degrees from the connection of the shot holes and it is possible that the projectile was deflected when the upper deck was penetrated. The center of the point of impact lies a few centimeters to port from the butt joint of the plates, which lies exactly on the midship line. A piece of plate about 30-40 cm in diameter was punched out and hurled into the interior of the turret. The narrow piece of plate lying between the hole and the butt joint was bent back like the overlapping lashing, whereby the connecting bolts were also torn off here. The plates were not interlocked, but only connected by a strong lug, and the damage would have been less if the point of impact had not been so close to the joint. The shell, allegedly a 34 cm shell[13] filled with black powder, exploded outside the barbette and no splinters were found inside the turret. Its explosive effect was remarkably low. The upper deck is slightly dented by about 1 m [probably in diameter], the battery deck is somewhat dented. The walls of the officers' pantry, in which the explosion took place, were of course shattered and deformed in many places by splinters, but otherwise the explosion in and of itself would have been of no significance for the combat capability. The director of the Weapons Department [Waffendepartment] in the RMA, V.A. [Vizeadmiral] Gerdes, with whom I made the trip to Wilhelmshaven and back, explained to me that according to their experience against target ships, a German armor-piercing shell in such a case would have infallibly destroyed the entire aft portion of the ship.

The effect inside the turret was all the more devastating due to the entry of jet flames through the hole in the armor. This hole was at the level of the working chamber [Umladestation], and the turret was in such a position that some ready cartridges were close to the opening. These caught fire, fell into the shaft or ignited further cartridges in the hoists, so that the fire finally spread down into the magazine. The two [after] turrets have separate magazines connected by hatches, which must have been open, as the fire also spread to the other magazine.

[12] Turret D
[13] This was a 34.3 cm (13.5”) APC from *Lion*.

Around 10 tons[14] of propellant burned in both magazines until the flooding of the magazines[15] put an end to any further danger. The insides of both turrets were, of course, completely burnt out, and the flames reached up to about mast height from all openings, and the paint on the outside of the turrets was burnt wherever a flame found its way out. Gases penetrated into the surrounding compartments, causing symptoms of poisoning to the people inside. However, the men in the aft conning tower, which is close to the forward turret [aft superfiring], remained unharmed. The entire crew of both turrets and the magazines, 160 men, were burnt to death and 30 were seriously injured.[16]

It must be emphasized that the interior of the turret was only burnt by its own propellant charges, but otherwise did not suffer from any explosion or splinter effect, apart from the minor damage that the piece of armor may have caused, so that the mechanisms also remained relatively intact, and the turrets could also be turned immediately with manual operation. Similarly, the gun barrels suffered no damage.

V.A. Gerdes explained to me what he thought had happened in the magazine during this incident. As is well known, the metal cartridges [fore and rear charges] on all ships in the German navy are stowed away in zinc containers with screw-on lids. Some of the cartridges had probably already been removed from the containers, and these would be the first to catch fire. The enormous temperature generated by these burning cartridges then caused the zinc containers of the rest of the charges, or even just their lids, to melt in many cases, thus igniting further charges. In one case, the fore charge was burnt while the rear charge in the same container remained intact.[17] The wooden frames are partially charred. This propellant burning was relatively slow due to the lack of oxygen, and had a duration of about 7 minutes before both magazines were fully flooded. The pressure in the magazines also seems to have been quite considerable, as their walls are bent out in several places.

Gerdes attributes the fact that there was no detonation, and the ship did not blow up was solely due to the fact that they [fore and rear charges] were stored in metal containers, of which

[14] According to Campbell, only 6 tons were burned. Campbell p. 44.
[15] Pumpenmeister Wilhelm Heidkamp succeeded to flood the magazines by turning the glowing red-hot valves. He was helped by firefighter Franz Müller.
[16] According to Campbell, 159 men were killed and 33 wounded. Campbell pg. 44.
[17] German fore charges were in silk bags while the rear charges were in brass casings.

experience has already been gained from a magazine fire several years ago. These metal containers involve a number of inconveniences; [such as] great weight, greater space requirements, increased personnel in the magazines and have cost many millions, but this one incident has certainly shown that they paid for themselves. Damage to the iron ammunition[18] in the turrets and the shell rooms under the magazines did not occur.

This one hit at a distance of about 15,000 m, which put two turrets out of action and destroyed or injured 200 men, will in any case also provide the impetus for the most intensive study of how to further develop the protection of vital parts. The working chamber, which is mainly to blame, was always fought against and rejected by the shipbuilders and also by Gerdes, and was only installed on many ships because of the fleet's constant demand for a high rate of fire, 4 rounds per minute, which could not be achieved in any other way, but could not be utilized in practice anyway. However, it has already been abandoned on the ships currently under construction.[19]

The roofs of the two turrets have been lifted off, the guns disembarked, and the repair work, which will take several weeks, is underway.

"Derfflinger", now in dock, received a similar hit on the belt armor (300 mm) as 'Seydlitz' at about 45 degrees from aft. The plate remained apparently intact on the outside but has some cracks up to about 2/3 of the thickness deep, and the whole plate was pushed about 10 cm or more into the ship, causing the bulwark to sink completely and the ship to heel to 1 degree, flooding the opposite side. The shell, whose tip had melted onto the armor, knocked out a piece of the armor from the neighboring plate when it exploded, so to speak from the rear, after the plate that had been hit had already been dented. In addition, the net spars and net were destroyed in exactly the same way as on "Seydlitz", but no further damage was done.

The plate has now been lifted off to repair the shattered base and will then be put back in place, which work will be completed in a few days. However, a new plate will be ordered and the old one replaced.

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[18] *Eisenmunition* in the original, this certainly means shells.

[19] Editor's Note: As an aside comment, reading this essay and the earlier Jutland essay have me wondering if these findings influenced future USN mounting designs. The World War I battleships had working chambers located directly below the gunhouse and split propellant hoists, but in the World War II battleships, the propellant hoists were single stage running from the "working chamber" [powder flat] located at the bottom of the stalk with a double-wall isolation from the magazines. This sounds very similar to the post-Jutland German designs.

In addition, the blades of the forward starboard screw propeller show strong indentations at their ends and a piece of the blade has broken off at one point, and there is a strong indentation of the plates on the aft part of the ship under water and some rivets have broken off here, so that the ship is leaking somewhat. The ship's officers do not attribute this damage to direct hits, but rather to one or two shells that hit as short shots a few meters from the ship and exploded in the water. This is probably correct with regard to the dents, but the shipbuilding authorities attribute the screw propeller damage to a grounding in the Kiel Canal, which is probably also correct.

However, as the officers assure us, shells hitting and exploding close to the ship cause strong vibrations, which are the same as those caused by direct hits. Splinters also fell on board many times.

"Moltke" did not receive a hit. In the three-hour battle, the British, if one disregards the sunken "Blücher", only scored three hits, all of which, strangely enough, were on the heaviest armor. [The British guns fired] an estimated 70-80 rounds each, so that Admiral Gerdes is of the opinion that they must be replaced.

As far as the combat status of the German ships is concerned, it should be noted that they carry absolutely no boats, with the exception of one folding boat each.[20]

Course of the naval battle on 24 January

I have the following approximate picture of the course of the battle from various, albeit incomplete, reports:

In view of the superior force, K.A. Hipper had no intention of engaging in a decisive battle and, after sighting the 5 English dreadnought cruisers, set course at full speed towards Helgoland, where he was overtaken mainly due to the slower speed of "Blücher," which was also soon left heavily damaged, apparently by an engine hit, and abandoned to her fate. "Seydlitz" was in the lead, followed by 'Moltke' and 'Derfflinger'. The Germans held such a position towards the enemy on a roughly easterly course that the forward turrets over starboard could only

[20] The author is commenting on that the German ships had "cleared for action" and had off-loaded non-essential equipment like the ship's boats.

just engage.[21] The moderate breeze was from the NE, so the Germans were upwind, and the large masses of smoke were more or less always in the direction of fire, often obscuring the target for both sides and unfavorable for continuous artillery fire.

The first distances do not seem to have been quite as great as originally reported, but started at about 18,000 m, although it should be noted that the daily ratio (Tagesrelation)[22] was over minus 1000 m, so that the actual distance was probably between 16-17,000 m, and then decreased to around 14,000 m.

"Seydlitz" received the fatal[23] hit in an early phase of the battle when the aft turrets had only fired 18 shots. "Seydlitz" continued to fire from her forward and starboard turrets, which had almost completely wiped themselves out with 70-80 rounds per gun. The "Moltke" and "Derfflinger" had also fired the same number of shots. The port turrets on "Seydlitz" and "Moltke" were wooded and were unable to fire. "Derfflinger" was able to fire a few salvos from her 15 cm secondary guns.

On the enemy side, the failure [crippling] of the two leading ships was observed,[24] so that in the end only 3 large ships followed, and the English admiral is said to have transferred from his badly damaged flagship to another. Despite the eyewitness accounts of the sinking of an English battlecruiser, this is not absolutely certain, and there is by no means a general conviction in the fleet that this was the case.[25] The only thing that seems certain is that "Lion" had badly wrecked both engines and is to be regarded as incapable of fighting for at least the next few months, as admitted by the British side. It is also not clear whether this damage was caused by artillery or torpedoes. A torpedo boat, which could not keep up with the flotilla ahead and remained behind between the fighting lines, decided to attack, claiming to have scored one or two hits, which, however, do not appear to be confirmed. The general opinion is rather that it was a

[21] In other words, the forward turrets needed to be trained so far back that they were nearly wooded by the forward superstructure.
[22] "Tagesrelation" refers to the German method of daily calibrating the rangefinders for determining changes in range due to many factors, such as barrel wear, atmospheric conditions, magazine temperature, etc.
[23] "Verhängnisvollen" in the report, which may be translated as "disastrous" or "fatal."
[24] Only HMS Lion was disabled at this time.
[25] No British battlecruisers were actually sunk during this battle.

projectile hit, and one is completely convinced that the English ships suffered considerably more than the Germans.[26]

The small German cruisers and torpedo boats held a forward position and gradually advanced towards the English line. "Graudenz", the flagship of K.A. Hebbinghaus, was no more than 14,000 m from the English leading ship at the end, but, apparently like the small cruisers in general, was not fired upon. However, the torpedo boat attack, which was perhaps ordered too late, did not take place, as the British had turned in the meantime. Since, as noted, the German squadron was already almost completely out of action at this time, and in view of the serious accident on "Seydlitz", it could no longer think of taking up the battle, even though the moment might have been favorable now that the numerical balance had been established.

The English are said to have fired with both partial and full salvos, and the dispersion at the beginning of the battle was low. However, the fire became much worse as the battle progressed. They had achieved numerous covering positions, but the low number of hits proves that chance plays too great a role at such long distances and that a decision against well-armored ships can hardly be achieved. At one point, 3 English ships concentrated their fire on "Derfflinger".

According to K.A. Hipper, the English fired both armor-piercing and high explosive shells, which could be determined from the different color and water columns when they hit the water. V.A. Gerdes, however, is of the opinion that this observation is probably based on deception, and that the height of the water column depends on the different depths at which the shell explodes, and that the English with large calibers only fired with armor-piercing shells[27] and had retracted all the fuzed shells, which were completely unsafe and had resulted in many barrel bursts. The British had no suitable fuzes and had tried everything to obtain some from Krupp shortly before the war.[28]

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[26] The disabling of HMS Lion was the result of two 28 cm hits from *Seydlitz* which allowed salt water to leak into the boilers. Campbell, pg. 29.

[27] In fact, *Tiger* and *Princess Royal* fired several 34.3 cm (13.5") HE and CPC shells during the battle. Campbell pg. 32 and pg. 40.

[28] V.A Gerdes may be referring to the problems with fuzes experienced by the Japanese at The Battle of the Yellow Sea where many British-built guns suffered burst barrels caused by bore prematures. These were traced back to faulty fuzes in the British-built projectiles and the new Shimose (picric acid) bursters. The fuzes used at Dogger Bank were newer types and no such problems occurred. However, the British did not have delay fuzes at this battle nor at the later Jutland battle. Post-Jutland, as part of the studies that led to the "Greenboy" APC projectiles, the

Even if there is still confusion and divergence of opinion on many points, there is complete agreement that all of the material, armor, guns, turret mechanisms, etc., have proved themselves excellently and are in the best possible condition, and that despite the great stress on the turrets, no accidents are said to have occurred. One is still fully convinced of the absolute superiority of the projectiles and the ship's armor over those of the English and considers one's own fire to be better and more effective.

As far as speed is concerned, I was able to follow part of a conversation between the State Secretary and K.A. Hipper at the table, in which the latter expressed himself in a very positive way that the German ships and destroyers[29] are at a great disadvantage compared to the English due to the lack of oil firing. The State Secretary expressed himself as follows: I recommend that you use the torpedo boats more, make the most extensive use of them, they are our strongest weapon, they will not be hit, etc., to which Hipper replied that their speed was completely insufficient, that his small cruisers and flotillas hindered him extremely, that he could not drive them forward as they only had 23 knots and they always remained in front of his bow. They could not be forced without oil firing and the English had this enormous advantage, to which the Secretary of State only replied that oil supplies were dangerously short and nothing could be done about it. So not everything seems to be going according to plan in this area.

The uneven wearing of the guns, which results from the fact that the aft turrets of "Seydlitz" only fired a few rounds and the port turrets none, will probably be compensated for in such a way that one ship receives the less worn tubes and the other the more worn ones. Some of these now have over 100 rounds but should not have any burnouts and are still good for an allowance.[30]

[…]

[unsigned]

British investigated German delay fuzes recovered from hits on British ships and developed the Number 16D ("D" for delay) fuze. For more information, see "British Fuzes after Jutland" by Nathan Okun.

[29] The Imperial German Navy officially called its destroyers torpedo boats (Torpedoboot). Here Colloredo-Mannsfeld uses the word Fahrzeug (vehicle) which is the shortened form of the official Austro-Hungarian term for destroyer, Torpedofahrzeug.

[30] "Allowance" (Dotation in German) here meant that the guns were still serviceable and could fight another battle before replacement.

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