

TARGET OLYMPIC: *FEUER!*

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U53's commander, Otto von Schrader, watched with excitement as a column of water shot up between the steamer's second and third funnels, appearing suspended for a moment as the huge ship continued forward. This time, there was no mistaking that the torpedo had functioned as intended.

It was early morning on September 4th 1918 when, at 5.57 a.m.,¹ *U53's* crew had first spotted the large four funnelled steamer around 10,000 feet away. Patrolling the western entrance of the English Channel, here was a large target. She appeared to be alone, unaccompanied by escorts, and travelling at a speed of around twenty knots. It was hard to estimate her speed with any precise accuracy, for she was also steering a zigzag course to

Mark Chirnside's Reception Room

make it harder for any attacker. Eight minutes later, von Schrader gave the order to attack. One torpedo was fired from *U53*'s Tube I, followed by another from Tube II.

Unfortunately, one of the torpedoes had either fallen short, or missed its target. This sort of failure was a common frustration to U-boat commanders during the conflict, for even if they hit their target there was a chance that their efforts might have been rendered pointless as a result of a mechanical malfunction. Luckily for von Schrader, at least one of his torpedoes had worked, and had hit directly amidships.

Olympic's hull quivered under the strain. The torpedo had hit her on the port side, between ten and twenty feet below the waterline. Amidships, the hull plating was at its thickest, and the joints between the two rows of hull plating where it struck – strakes P and O – were quadruple riveted, with steel rivets to ensure even further strength. However, it was no match for the torpedo's impact and explosion. It penetrated easily the outer shell plating, and the inner skin was also ruptured in the explosion. To make matters even worse, the watertight bulkhead dividing boiler rooms 2 and 3 was also damaged and lost its watertight integrity, while rivets were sprung for a distance on each side of the point of impact. As a result, there was the hissing of steam from the hot boilers as both boiler rooms rapidly flooded. Boiler room 2 – sixty feet long – and boiler room 3 – fifty-seven feet long – together accounted for almost 120 feet of the ship opened to the sea. Ten of *Olympic*'s twenty-four double-ended boilers were immediately out of action, or sixty of the ship's 159 furnaces. Captain Hayes asked the senior wireless operator to call for assistance; requested the lifeboats readied for lowering; and the deck guns manned.

One of the main steamlines had ruptured in the explosion, and as the steam supply declined *Olympic*'s speed fell off until she drifted to a stop. The engineering staff all took in hand the task of isolating the damaged section of the steamline and the flooded boiler rooms from the rest of the propulsion system. After a great deal of time and effort, they were able to arrange all the cross-connections so that the remaining, undamaged boiler rooms could supply steam for the engines. Two double-ended boilers were also isolated from the main steam supply, so that they could supply auxiliary steam whenever it might be needed to assist with pumping, and keep the ship's electricity available.

Fortunately, all the ship's watertight doors had been closed at the time of the explosion. Once the ship's engineers confirmed that *Olympic* was stable and the flooding contained to boiler rooms 2 and 3, Captain Hayes ordered the engines to be worked up gradually to 'slow ahead'. Although his ship was capable of proceeding slowly and was in no immediate danger of sinking, he hoped that destroyers would come to his assistance before another attack increased the ship's peril and put any more of the ship's propulsion or electric plant out of action.

Target Olympic: Feuer!

Happily, the preceding scenario never happened. It appears that *U53*'s torpedo did hit *Olympic*'s side that morning, piercing the outer shell plating, but it failed to explode. One torpedo certainly should not have been enough to sink the ship, but real life experience showed that it was always a possibility.

History records that *U20*'s commander, Walter Schwieger, was responsible for *Lusitania* sinking in May 1915. Remarkably, a single torpedo led to her loss in a mere eighteen minutes. Although we can be confident – on the basis of the available evidence – that *Britannic* was wounded by a mine rather than a deliberately targeted torpedo, Gustav Siess's *U73* is recorded as being responsible for starting the chain of events that led to her sinking. Yet it seems Otto von Schrader's *U53* could have gone down in history for sinking *Olympic*, sole survivor of White Star's trio of 'Olympic' class liners following *Britannic*'s loss. We may have seen the loss of *Titanic* in on April 15th 1912, *Britannic* on November 21st 1916, and *Olympic* on September 4th 1918.

Whereas *Titanic* and *Britannic* were unlucky victims of circumstances – surely the odds on *Titanic* being fatally wounded by an iceberg, and *Britannic* by a single mine were miniscule – *Olympic* seemed to have a charmed life. Had *Olympic* been sunk during her war service, none of the three sisters would have seen service for more than seven years. By any measure, *Olympic*'s reliable, popular service throughout the 1920s was a great success and she generated considerable profits for the White Star Line. We can only speculate as to what would have happened after the war, had the company lost all three of its planned express liners.

Olympic survived. In February 1919, as Captain Bertram Hayes recalled, a celebration was held to commemorate *Olympic*'s war service. The White Ensign was lowered, to be replaced by the Red. Naval and military officials, as well as prominent Liverpudlians, attended. *Olympic*'s luck had been highlighted 'a few days' before the dinner, when she had entered dry-dock.

There was a dinge in her hull about eighteen inches or so in diameter, with a crack about six inches long, in the centre of it.

On closer examination, when the dock was dry and a stage had been rigged, it looked to me that whatever had caused the damage had been travelling at a high rate of speed, and had rebounded, as there were no scratches on the paint round the dinge, and that to my mind indicated that she had been hit by a torpedo which had not exploded. If so, it had been a very good shot, as it was right amidships between the second and third funnels.²

The damage had gone unnoticed for a number of months. Hayes discussed the damage with his officers:

Mark Chirnside's Reception Room

On talking the matter over with my officers, we remembered an occasion when we were coming up Channel some voyages previous to the dry-docking, and before the Armistice, when the baggage was being got on deck ready for landing on our arrival. The men who were down the hold working came rushing up on deck thinking the ship had been struck by a torpedo, and when they found no excitement going on had returned to their work.³

It had not existed when *Olympic* was examined after ramming *U103* in May 1918. Hayes recalled at that time 'everybody, Board of Trade surveyors and so on, who saw the damage that we had sustained said that nobody could have escaped from the submarine that we had rammed.'⁴ (That supposition was not true, but the damage to *U103* herself was certainly fatal.) Clearly, the faulty torpedo had hit *Olympic's* side sometime after the *U103* incident and before the Armistice of November 11th 1918.

It is also known that several plates within strakes O and P, on the port side amidships, had to be renewed during *Olympic's* post war refit, to ensure that what was described as 'submarine damage' had been permanently repaired. This appears to be the precise location of the damage, and accords with Hayes' description.

However, the occasion Hayes described when *Olympic* was approaching Southampton does not appear to have been the same occasion when she was in the vicinity of *U53*. *Olympic* had left her Southampton pier at 10 a.m. on September 3rd 1918 bound for New York, where she arrived at 2 p.m. on September 10th 1918.⁵ She was not, therefore, coming up the channel prior to arrival at Southampton, but rather near the beginning of a crossing in the other direction, to New York.

An examination of *U53's* log (Figure 1) reveals some fascinating information:

Figure 1. (Opposite page): *U53's* log from the morning of September 4th 1918, showing the relevant extracts. It reveals that two torpedoes were fired at an 'Olympic' type steamer, one from each of *U53's* bow tubes. The steamer was some 3,000 meters away (10,000 feet, or around eleven of *Olympic's* lengths), had four funnels, and was steering a zigzag course. Its speed was estimated at twenty nautical miles an hour, or twenty knots. The torpedo fired from bow tube I had the number 12,200; and the torpedo fired from bow tube II had number 11,495. Running at a depth of four meters, this means the torpedoes were running some thirteen feet beneath the surface. Given the location of the damage, it is known that *Olympic* was struck some ten to twenty feet beneath her normal load waterline.

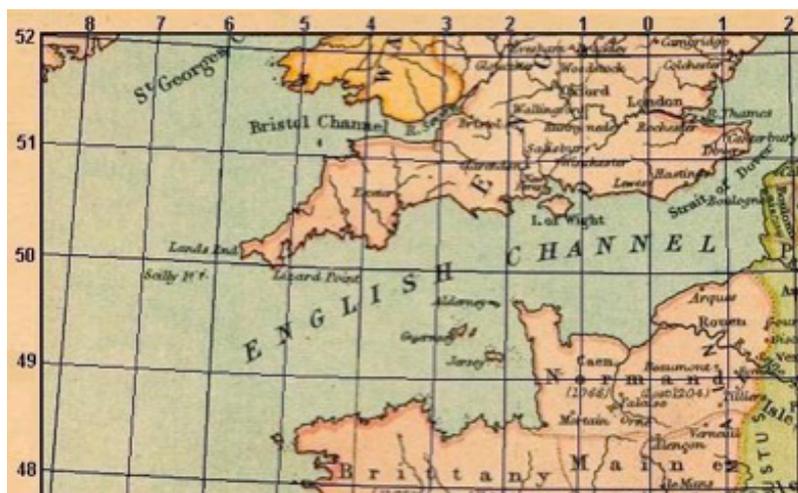
A torpedo with 'M.Z.' was one with a magnetic detonator. The British government first became aware of this sort of detonator – a 'magnetic firing attachment' – in

Target Olympic: Feuer!

Date Time	Position, wind, weather, sea state, lighting, visibility of the air, moonshine etc.	Events.
4.9.18 5 h 57 a.m.	Western entrance of the Channel, wind SSE 4, very dark, occasional rain, strong marine phosphorescence	direction 100° steamer with 4 funnels (type <i>Olympic</i>), steering 230 – 270° zigzag, crossing angle 30°, distance nearly 3000 metres, speed 20 miles, Escort not observed
6 h 05 a.m.	square 2584 O	double-bowshot. tube I G6 A.V. * with M.Z. Nr. 12200, depth 4 m tube II G6 A.V. * with M.Z. Nr. 11495, depth 4 m
12 midday	square 2581 O ...	shots missed. As the steamer didn't give an ALLO-message, it's assumed, that the torpedoes didn't reach. Distance was greater than estimated.
...		signed von Schrader

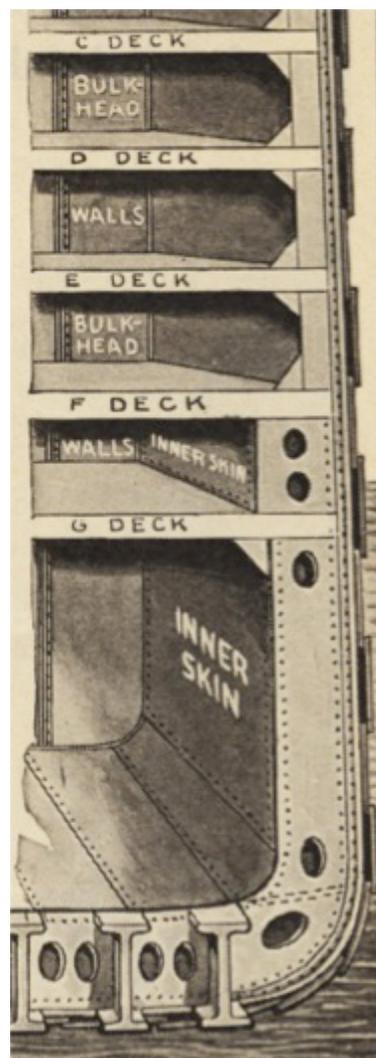
1917. Known as a *Magnet Zunder*, or Magnetic Fuse, it was often referred to as an 'M.Z.' An adequate description of this device is beyond the scope of the present article. However, in 1918 it was described as follows: 'The essential parts of the attachment comprise rotating armature and a relay connected in circuit with the armature. The current in the circuit is normally made practically zero by the use of a compensating magnet which counter balances the effect of the earth's magnetic field. When the value of the field is changed by the presence of a ship in the neighbourhood of the torpedo the increased armature current operates the relay, which in turn fires the torpedo by a combination of electrical and mechanical means...' (Document and translation courtesy Oliver Lörcher; *Bundesarchiv-Militärarchiv*.)

Mark Chirnside's Reception Room



Above: On the morning in question, Olympic was roughly thirty-eight nautical miles south of the Lizard. (Courtesy Sam Halpern.)

Right: Although it is not an exact, technically accurate or scale diagram, this cutaway view of Olympic (which was published in 1913) helps to illustrate the general concept of the inner skin running alongside the outer shell plating amidships. If the torpedo had exploded, it seems certain that the plating of the inner skin would have ruptured and failed to protect the boiler rooms from flooding. However, when the torpedo did not explode, it merely pierced the outer shell – by causing the riveted seams to fail – and the plating of the inner skin contained the subsequent ingress of water. Olympic sailed with a small portion of the inner skin flooded for months. (Author's Collection.)



ACKNOWLEDGEMENTS

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ENDNOTES:

¹The time reported here is taken from the U-boat's own clocks.

²Hayes, Captain Bertram. *Hull Down: Reminiscences of Windjammers, Troops and Travellers*. New York: Macmillan; 1925. Page 244.

Target Olympic: Feuer!

Description of U53,
Washington, Tuesday.

The German submarine U53 is officially described as having four torpedo tubes, two fore and two aft. She is also stated to have carried ten torpedoes, one four-inch gun forward, and one three-inch gun aft. Wireless poles are erected on the starboard side, and are so constructed that they can be folded down along the deck. The vessel has three periscopes, one leading down to the chief engineer in the engine room, and is also fitted with a gyro compass, with heaters, and two Deisel-Nurembert 1,200 horsepower engines. She has a speed of 18 knots on the surface and 14 knots when submerged. The U53 is also stated to be able to submerge for a radius of 5,000 nautical miles and is accompanied by a submarine tender - Exchange.

Excerpted from *The Daily Mail* newspaper, October 11th 1916. This publication of a short description of U53 is almost two years before her encounter with *Olympic*. (Author's collection.)

³ *Ibid.* Page 245.

⁴ *Ibid.* Page 233.

⁵ Although *Olympic* was in the right location, is it possible that it might have been another liner with a similar four-stack profile? *Mauretania* was not a candidate, as she was at Liverpool on the morning of September 4th 1918, having returned from New York in late August. As for *Aquitania*, she left New York at 4.28 p.m. on September 2nd 1918, and she did not arrive at Southampton until 10 p.m. on September 9th 1918. Neither could possibly have been in that general area at the time of the attack. *Lusitania* and *Britannic*, of course, had both been on the ocean floor for several years.

There seems to be no record of *France*, serving as a troopship in 1918, being attacked at this time, September 4th 1918; nor *Kronprinz Wilhelm*, *Kaiser Wilhelm II* or *Kronprinzessin Cecilie* (all renamed during the war). The Union Castle four stackers were not yet in service, while *Deutschland* was laid up. *Kaiser Wilhelm der Grosse* had gone down in 1914.

Kronprinzessin Cecilie (renamed *USS Mount Vernon*) did suffer damage and flooding, which she survived, following a torpedo attack at 7.53 a.m. on September 5th 1918, after she had left Brest. However, this was the following day, and the torpedo had been fired by *U82*. She was in convoy with *Agamemnon* (the re-named *Kaiser Wilhelm II*), escorted by the destroyers *Winslow*, *Nicholson*, *Wainwright* and *Conner*, much further to the south of the attack on a lone four-funnelled steamer the previous day. In fact, the convoy's existence was reported to *U53* and *U67*, but they were too far away to reach it in time.

(See files BT 100/351 and BT 100/510 in the National Archives, for *Mauretania* and *Aquitania* information; also John H. Shaum and William H. Flayhart's *Majesty at Sea: The Four Stackers*. Patrick Stephens Ltd.; 1981.; I am indebted to Oliver Loerscher for his generosity in sharing his research into *U82*'s attack. See also National Archives of Canada, RG 9 III D3 Vol 5056.)