

Research Report

Forgotten Wrecks of the First World War



LOTTERY FUNDED



LED BY **IWM**

During the Maritime Archaeology Trust's Heritage Lottery funded Forgotten Wrecks of the First World War project, scores of volunteers undertook online research into vessels that were lost off the south coast of England during the First World War.

Their findings were used to populate the project database and contributed to Site Reports. Both are publicly available via the Forgotten Wrecks website.

This Research Report was undertaken by one of our volunteers and represents many hours of hard and diligent work. We would like to take this opportunity to thank all our amazing volunteers.

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GERMAN SUBMARINE SM U-8

SM U-8, in this article by MAT volunteer Roger Burns, is a notable example of an early German submarine and the wreck site is now designated under the Protection of Wrecks Act 1973. It was first designated on 21 July 2016, at 50.93387N, 1.25638E, for the following reasons: (Historic England)



Image: <http://uboot-recherche.de/en/smU-8-bootsblaetter>

- Period: The *U-8* was the first U-boat of the First World War sunk in England's coastal waters;
- Potential: The *U-8* was one of only four Type *U-5* boats ever built and is the earliest U-boat wreck in England's territorial waters;
- Rarity: The *U-8* is a rare example of a pre-First World War German-built submarine;
- Vulnerability: The *U-8* remains vulnerable to legitimate, but uncontrolled, salvage.



Source for both images of SM U-8:
Chipchase Nick, Personal collection
sourced from:

<https://www.wrecksite.eu/wreck.aspx?476>.

The *U-8* marked a turning point in submarine development from small coastal craft to devastatingly effective weapons of war. There is a considerable level of documentation available related to *U-8* including design plans and English and German accounts of the loss, in paragraphs 3.2.12 to 3.2.20 in the Wessex Archaeology Report (Ref:108280.14.) which notes that *“It is highly unusual to have both sides of events preserved in the historical record. It is also the first captured U-boat to be photographed during the First World War with many different images being taken as the crew were evacuated from the sinking vessel, and the photographing of the sinking U-8 demonstrates a*

marked change in the way in which war events were reported". An absorbing account of life on board is included below as Appendix 1.

Historic England continues with "Following experiments with U-1 to U-4 (chiefly in surface speed), the design for a 500-ton boat with a surface speed of 14.5 knots (U-1 managed 10.6 knots) was submitted by Germaniawerft (GW) in February 1908, with naval contracts to follow for the construction of U-boats U-5 to U-8 in April 1908. These boats were to form the first real German U-boat force to be superior both in fighting ability and seaworthiness to all foreign competition at the outbreak of war".

SM U-8 was one of a set of 4, U5 – U8, Type U5 Gasoline-powered boats built. U-8 was originally ordered on 8 April 1908, laid down on 19 May 1909, launched on 14 March 1911 and was commissioned at Kiel on 18 June 1911. Gasoline is the terminology used in uboat.net but was actually kerosene or paraffin – this motive power source was used for boats up to SM U-18 and diesel replaced kerosene in all subsequent submarines. All had electric motors.

SM U-8 was powered by two kerosene engines and one battery powered electric motor on each of the two shafts, giving a speed of 13.4 knots surfaced, 10.2 knots submerged, and a range of 3,300 miles surfaced at 9 knots or 80 miles submerged at 5 knots. Interestingly, the surfaced range was very poor compared to later vessels whereas the submerged range was excellent. Twin hulled, the pressure hull was 43.10m long and 3.75m wide and could dive to 50m although it could go deeper if necessary. It was equipped with 6 x 45cm torpedoes fired through 2 bow and 2 stern tubes, one 105mm deck gun with 300 rounds, but no mines, and had a nominal complement of 35 men (uboat.net). When the crew were captured, there were 4 officers and 25 men on board. The submarine also had three periscopes, two at the conning tower, and one forward.

SM U-8 undertook only 1 patrol, (uboat.net) operating out of I Flotilla although the Wessex Archaeology study reports that prior to 21 February 1915, it also operated out of Brunsbüttel and Historic England mentions that there was one unsuccessful voyage in the Heligoland Bight. The first commander was Kptlt. Konrad Gansser (Royal House Order of Hohenzollern). The second commander was Kptlt. Alfred Stoß, who recorded the only successes on 23 and 24 February 1915 torpedoing and sinking 5 British steamships, *Branksome Chine*, *Oakby*, *Harpalion*, *Rio Parana* and *Western Coast*. (uboat.net) (*Western Coast* was dived and researched as part of the Forgotten Wrecks project, report can be downloaded from: http://forgottenwrecks.maritimearchaeologytrust.org/uploads/images/Articles/Site%20Reports/FW_Site%20report_Western_Coast.pdf). Each is a wreck within the Forgotten Wrecks Project area. *Branksome Chine* and *Oakby* were non-commissioned Admiralty chartered colliers, and there were 3 Chinese fatalities from *Harpalion*, each of whom is commemorated on Hong Kong Memorial. Historic England also mentions an aborted attack on hospital ship *St. Andrew* was recorded. The first neutral ship attacked, on 19 February 1915, is said to be the Norwegian tanker *Belridge*, carrying oil from USA to Holland, and the damage thereto is attributed to U-8 (naval-history.net).

There are conflicting accounts of how SM U-8 was captured and the crew taken prisoner. A common thread is that on 4 March 1915, the submarine encountered two minefields associated with the Dover Barrage, that the day was foggy and that the submarine was on the surface to ensure its location prior to negotiating the Dover Strait. Apparently, U-8 dived when the fog

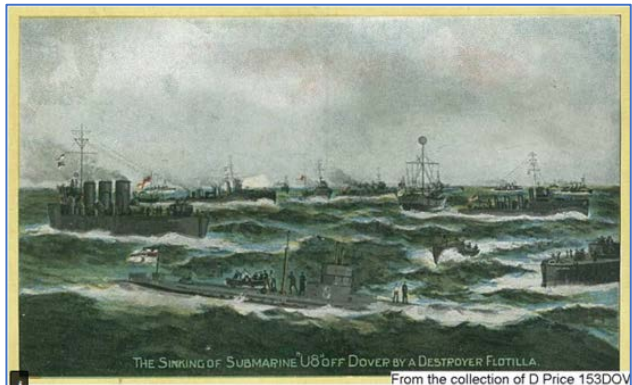
thickened but the seabed at that point was rocky with strong currents forcing it to re-surface when, as the fog cleared in the early afternoon, it was spotted by HMS *Viking* which, by some accounts, opened fire. *U-8* dived again and a few hours elapsed as the submarine tried to evade its attackers, which by now included HMT *Roburn*, a hired drifter patrolling the barrage, HMS *Ghurka*, *Maori*, *Mohawk*, *Nubian*, *Cossack*, *Ure* and *Syren* all of which were destroyers. Some reports indicate that the submarine became snagged in the barrage nets, and/or triggered an alarm to patrolling vessels. The accounts agree that there was an explosion, caused either by a mine or, as it was attributed to by the British authorities, an explosive sweep by HMS *Ghurka*. This forced the submarine to surface, and the crew were taken prisoner but not before its officers opened sea cocks causing it to sink very soon afterwards. The Wessex report states “*U-8 was the first U-boat sunk in the Dover Strait and the first sinking U-boat ever captured on film. Numerous photographs of the crew evacuating U-8 were taken by eye-witnesses on the destroyers and one of these images was taken by Surgeon Parkes and is now part of the Imperial War Museum collection*”.



Annotated as “U-8 cornered off Dover 1915”

Copyright unknown, sourced from

<https://www.wrecksite.eu/wreck.aspx?476>



THE SINKING OF SUBMARINE U8 OFF DOVER BY A DESTROYER FLOTILLA
From the collection of D Price 153DOV

Above – from a postcard

Sourced from <http://kentww1.com/3338/>



First German submarine to be sunk during the war by the Dover Patrol. U-8 from Surgeon Parkes Collection of Ships Portraits SP1240 © Crown Copyright. IWM.

Innes McCartney’s book *The Maritime Archaeology of a Modern Conflict: Comparing the Archaeology of German Submarine Wrecks to the Historical Text* includes the following narrative. “*The British version of events as*

described by various witness in the Dover Packs corroborates the visual sighting by HMS Viking and the detonation 4 hours later of an explosive sweep by HMS Ghurka, which brought U-8 to the surface. Revealingly, Rear Admiral Hood stated in his report that he could not prove the nets were involved in the sinking but wished to pay the drifters the customary £500 (approx. £50,000 in 2017) reward to keep them motivated in the “apparent want of success” of the drifter fleet” (McCartney 2015: 43).

The same Naval History website reference also states “*U-8 detected by indicator nets in their first success, then sunk by destroyers Ghurka and Maori in Strait of Dover*”.

The *Yorkshire Evening Post* - Friday 05 March 1915 – reported that an announcement from the Press bureau confirmed that the *U-8* had been sunk the previous day in the Channel, off Dover, by destroyers and the officers and men had been taken prisoner. The article continues with an official communique issued by the French Ministry of Marine giving the same news, plus that the 29 German naval crew had been marched under armed escort through the streets of Dover to the Castle, and goes on to speculate about the technical details of *U-8* which are now known to be incorrect.

The *Edinburgh Evening News* - Saturday 06 March 1915 – headlined an article “Sunken Submarine – German Official Report” and reported that a telegram from Berlin to Amsterdam with an official statement issued by the German Naval Staff stated: *According to an official report by the British Admiralty the German submarine U-8 was sunk by a British torpedo boat near Dover on Thursday evening. The crew was saved. (Signed) Von Behncke, Naval staff.* (There is a Vice Admiral Paul Behncke listed as State Secretary, Navy Office in October 1918). (Imperial German Navy Flag Officers, 1914 -1918).

There were many reports in the Press in the days after *U-8* was sunk that its officers had been entertained at Dover. A syndicated announcement read “*The Press Association understands that the statement that four officers of the sunken German submarine U-8 were entertained by the officers of the Garrison Artillery at Dover Castle is untrue*”. The *Sunday Post* - Sunday 07 March 1915 – expanded on this under the headline “*An Incredible Story. The question of the treatment of British prisoners of war in Germany, compared with the treatment meted out to the German prisoners in this country, is a topic of unusual interest in the Metropolis. People are not overwhelmed with pleasure at the thought that Germans should be allowed to bask in the sumptuous surroundings of Donnington Hall while our Tommies miserably exist in the temporary huts of concentration camps. But that is not all. The other day the officers and men who manned the German submarine U8 were taken prisoners. For some time, a controversy has been raging whether crews of these submarines when captured should be tried as murderers or treated as ordinary prisoners of war. The latter seems the more likely, for I read that the officers of the U8 were yesterday the guests of the Royal Artillery officers at lunch at Dover Castle! This incredible story provoked quite a lot of comments, and one man even suggested that it would be a privilege to many to be a prisoner of war in this country. Everyone will be glad to hear that the luncheon story has been officially denied*”.

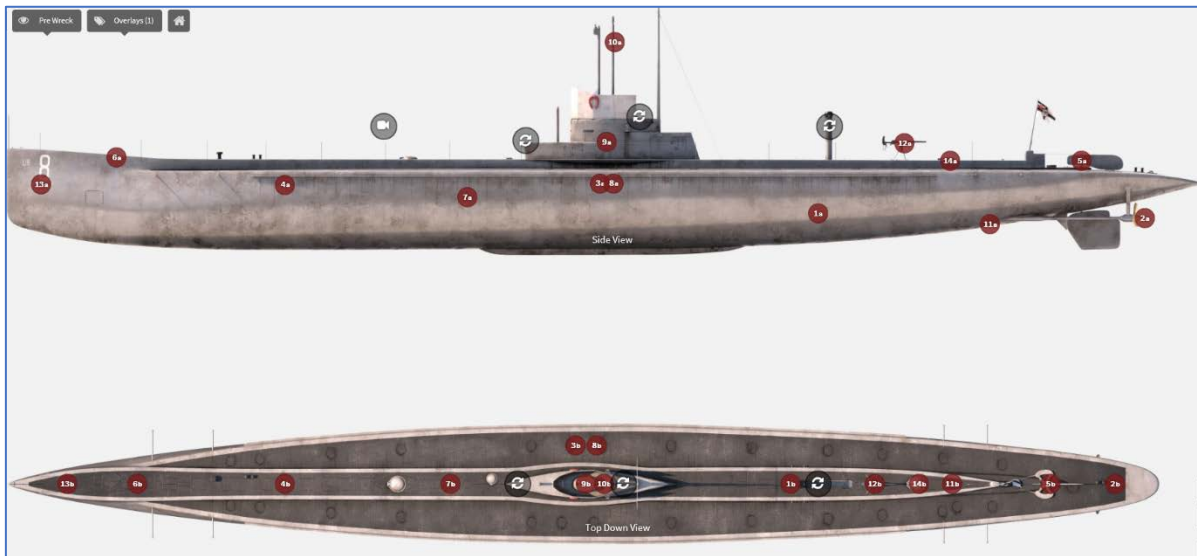
SM *U-8* was identified as a wreck in 1977, definitely as a submarine in 1985, and identified as *U-8* on 16 June 2003 by a local diver by the collapsible columns on deck used to expel exhaust gases from the kerosene engines. It was reported as being approximately 1.75 miles west of the southernmost tip of the Varne, upright and intact, with the main hatch open, in a general depth of 33m. (Pastscape U8). Canterbury divers have visited the wreck and report that it is upright, the stern and bow are intact, propellers had been salvaged and there is a lot of fishing hooks, weights, and lines plus a net on the wreck. (Canterbury Divers). A number of artefacts were found but there was confusion as to whether some sections of a navigational lamp, a deck filler cap, a breather vent, a ship’s well and pelorus came from the wreck of the nearby SM *UB-33* or the *U-8* but they have been attributed to *U-8*. (Pastscape U8).

SM *U-8* was featured in a *Time Team* special in 2013, a 47-minute programme from TV Channel 4 with summary “*Sir Tony Robinson examines a forgotten chapter in underwater history: The First*

World War development of submarines from catastrophic death traps to key weapons of war” and U-8 features after general information. (Time Team Specials – available on-line).

YouTube (<https://www.youtube.com/watch?v=laGaqAS02gA&feature=youtu.be>) has a shortened version. There is also a dive video on Vimeo dated approximately October 2017. (<https://vimeo.com/235826148>). The lower rudder is visible at the stern and a brief glimpse is given of the base of the deck gun. The conning tower with two periscopes is shown with blue rope wrapped around this feature and a breach in the hull forward of the conning tower on the port side is evidence of the explosive sweep damage.

MSDS Marine presented on 10 November 2017 “U8 Virtual Trail” and this takes the reader via a link to the following image in profile and plan. (MSDS & Cloudtour). The Virtual Trail was created



with funding and guidance from Historic England with support from Deutsches U-Boot-Museum, Artas Media, Neptune Charters, and Folkstone Divers. The resultant 3D model is very informative,



providing pre-wreck and post-wreck modes, either in profile as shown above or in blueprint mode, with many drop down menus. This facility is also highlighted on the Divernet webpage. For example, it explains why the paraffin (or kerosene) engines imposed significant operational constraints on the submarine, such as emitting white smoke as shown. Early submarines

navigated using the periscope, and some were fitted with magnetic compasses, but were problematic in metal hulled vessels. The gyrocompass was invented in 1910, and SM U-8 was one of the first submarines to be fitted with a gyrocompass, situated in the control room. It was damaged during a torpedo attack on a merchant vessel on 24 February 1915, and in the war diaries Kptlt. Alfred Stoß noted the need for two to be fitted due to the ease which these instruments were damaged. The rudders were hydraulically operated and this U5 class of submarine was the first to be fitted with them, previous versions being manual systems. (Cloudtour).

“Two divers have been fined plundering historic treasure from shipwrecks off the British coast “on an industrial scale”. This was the lead statement in the *Daily Telegraph* with by-line of Miranda Prynne dated 2 July 2014, which is of particular interest as recovery of the plundered items included one of the bronze propellers from SM U-8. They were fined a total of £63,500. The full article is on-line at <https://www.telegraph.co.uk/news/uknews/crime/10941834/Divers-fined-for-plundering-historic-shipwrecks.html>

The sequel to this was the return of the U-8 propeller to the German Navy, narrated in Appendix 2.

Appendix 1 – Living Conditions aboard

The following account of life in a 1914 German U-Boat was written by Johannes Speiss, First Watch Officer of the early kerosene powered submarine SM *U-9*, captained by Otto Weddigen, but very similar to SM *U-8*. The use of kerosene gave off a large amount of smoke and necessitated the use of a demountable funnel, but this funnel was not required in later Diesel-powered submarines.

The original document is in the Royal Navy Submarine Museum and was published in the book, *Submarines and the War at Sea, 1914-1918*, written by Richard Compton-Hall, 1991, MacMillan. Available on-line, WW1 Resource Centre at <http://www.vlib.us/wwi/resources/archives/texts/uboa9.html>

"Living aboard U9 in 1914"

"Far forward in the pressure hull, which was cylindrical, was the forward torpedo room containing two torpedo tubes and two reserve torpedoes. Further astern was the Warrant Officers' compartment, which contained only small bunks for the Warrant Officers (Quartermaster and Machinist) and was particularly wet and cold.

"Then came the Commanding Officer's cabin, fitted with only a small bunk and clothes closet, no desk being furnished. Whenever a torpedo had to be loaded forward or the tube prepared for a shot, both the Warrant Officers' and Commanding Officers' cabins had to be completely cleared out. Bunks and clothes cabinets then had to be moved into the adjacent officers' compartment, which was no light task owing to the lack of space in the latter compartment.

"In order to live at all in the officers' compartments a certain degree of finesse was required. The Watch Officer's bunk was too small to permit him to lie on his back. He was forced to lie on one side and then, being wedged between the bulkhead to the right and the clothes-press on the left, to hold fast against the movements of the boat in a seaway. The occupant of the berth could not sleep with his feet aft as there was an electric fuse-box in the way. At times the cover of this box sprang open and it was all too easy to cause a short circuit by touching this with the feet. Under the sleeping compartments, as well as through the entire forward part of the vessel, were the electric accumulators which served to supply current to the electric motors for submerged cruising.

"On the port side of the officer's compartment was the berth of the Chief Engineer, while the centre of the compartment served as a passageway through the boat. On each side was a small upholstered transom between which a folding table could be inserted. Two folding camp-chairs completed the furniture.

"While the Commanding Officer, Watch Officer and Chief Engineer took their meals, men had to pass back and forth through the boat, and each time anyone passed the table had to be folded.

"Further aft, the crew space was separated from the officers' compartment by a watertight bulkhead with a round watertight door for passage. On one side of the crew space a small electric range was supposed to serve for cooking - but the electric heating coil and the bake-oven short-circuited every time an attempt was made to use them. Meals were always prepared on deck! For this purpose, we had a small paraffin stove

such as was in common use on Norwegian fishing vessels. This had the particular advantage of being serviceable even in a high wind.

"The crew space had bunks for only a few of the crew - the rest slept in hammocks, when not on watch or on board the submarine mother-ship while in port.

"The living spaces were not cased with wood. Since the temperature inside the boat was considerably greater than the sea outside, moisture in the air condensed on the steel hull-plates; the condensation had a very disconcerting way of dropping on a sleeping face, with every movement of the vessel. Efforts were made to prevent this by covering the face with rain clothes or rubber sheets. It was in reality like a damp cellar.

"The storage battery cells, which were located under the living spaces and filled with acid and distilled water, generated gas [hydrogen gas] on charge and discharge: this was drawn off through the ventilation system. Ventilation failure risked explosion, a catastrophe which occurred in several German boats. If sea water got into the battery cells, poisonous chlorine gas was generated.

"From a hygienic standpoint the sleeping arrangements left much to be desired; one awoke in the morning with considerable mucus in the nostrils and a so-called 'oil-head'.

"The central station was abaft the crew space, closed off by a bulkhead both forward and aft. Here was the gyro compass and also the depth rudder hand-operating gear with which the boat was kept at the required level similar to a Zeppelin. The bilge pumps, the blowers for clearing and filling the diving tanks - both electrically driven - as well as the air compressors were also here. In one small corner of this space stood a toilet screened by a curtain and, after seeing this arrangement, I understood why the officer I had relieved recommended the use of opium before all cruises which were to last over twelve hours.

"In the engine room were the four Korting paraffin [kerosene] engines which could be coupled in tandem, two on each propeller shaft. The air required by these engines was drawn in through the conning-tower hatch, while the exhaust was led overboard through a long demountable funnel. Astern of the gas engines were the two electric motors for submerged cruising.

"In the stem of the boat, right aft, was the after-torpedo room with two stem torpedo tubes but without reserve torpedoes.

"The conning tower is yet to be described. This was the battle station of the Commanding Officer and the Watch Officer. Here were located the two periscopes, a platform for the Helmsman and the 'diving piano' which consisted of twenty-four levers on each side controlling the valves for releasing air from the tanks. Near these were the indicator glasses and test cocks.

"Finally, there was electrical controlling gear for depth steering, a depth indicator; voice pipes; and the electrical firing device for the torpedo tubes.

"Above the conning tower was a small bridge which was protected when cruising under conditions which did not require the boat to be in constant readiness for diving: a rubber strip was stretched along a series of stanchions screwed into the deck, reaching about as high as the chest. When in readiness for diving this was demounted, and there was a considerable danger of being washed overboard.

"The Officer on Watch sat on the hatch coaming, the Petty Officer of the Watch near him, with his feet hanging through the hatch through which the air for the gas engines was being drawn. I still wonder why I was not afflicted with rheumatism in spite of leather trousers. The third man on watch, a seaman, stood on a small three-cornered platform above the conning tower; he was lashed to his station in heavy seas.

"This was the general arrangement for all seagoing boats at that time of the Types U-5 to U-18 with few exceptions."

Appendix 2 – Return to German Navy of SM U-8 Propellor

There are two narratives. The images are sourced from the respective sources as listed.

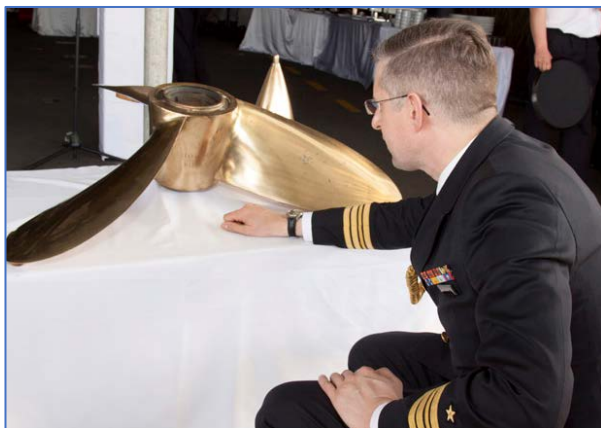


MCA). (Coastal Heritage)

(1) A propeller from *U-8* had been removed illegally from the sunken wreckage by divers and found by Kent police in a Sandgate property in June 2014 apparently fashioned into a coffee table, was returned to the German Navy at a ceremony aboard *Karlsruhe* in Portsmouth Naval Base in June 2015.

A handover ceremony took place on the German Naval vessel *Karlsruhe* in the Portsmouth Naval Base (Photo:

(2) An historic relic from a sunken U-boat has been returned to the German Navy as part of the centenary commemorations of the Great War. The propeller from *U-8*, sunk off Folkestone in March 1915, was presented to the Germans when their frigate *Karlsruhe* visited Portsmouth Naval Base. Pictures: Nicola Harper, BAE Systems. (Navy News)



Fregattenkapitän Jan Hackstein – Germany's Naval Attaché to the UK – admires the red bronze propeller which a century ago drove his nation's most feared naval weapon through the seas. This once belonged to submarine U-8, sent into the Channel in the spring of 1915 to destroy British shipping and starve the mother country of the Empire into

submission.

A century on, the relic was returned to its original owners aboard the frigate Karlsruhe in Portsmouth Naval Base in a gesture of friendship and reconciliation.

This autumn the propeller will be rededicated at the imposing German Naval Memorial in Laboe, near Kiel, which is to its nation's seafarers what the mighty cenotaphs in Chatham, Portsmouth and Plymouth are to the Senior Service's fallen from the two world wars.

Fregattenkapitän (Cdr) Hackstein said the presentation of the propeller was "a wonderful sign" of the closeness between the two nations and navies in 2015.

"Although the German public is still a bit reserved about war and armed forces, we are seeing rising historic interest – especially on the centenary of World War 1 – and the fate of people during the war," he said. "So, there will be interest in seeing the propeller and discovering the story of the Kaiser's U-boat and the crew."



That story reached its climax in February and March 1915 during two patrols. On the first, U-8's commander, the 29-year-old Kapitänleutnant (Lt Cdr) Alfred Stoß, found rich pickings in the waters off Beachy Head, sending 15,000 tonnes of shipping to the Channel seabed.

But when he tried to repeat those successes on his next

sortie at the beginning of March 1915 and force his way through the Dover Strait, U-8 either became snared in anti-submarine nets or damaged by depth charges – or both – and was forced to surface.

Stoß and his 28 crew scrambled to safety before the guns of HMS Gurkha and Maori sent the boat to the seabed three dozen metres below. And there she has lain ever since – except that at some stage salvage hunters raided the wreck and illegally removed the propeller. It – and other items unlawfully taken from shipwrecks – was recovered by Kent Police last year and handed to the Maritime and Coastguard Agency, who used the opportunity of the Karlsruhe visit to Portsmouth to return it.

"This shows how times have changed," said Charles Ball, head of coastal operations for the MCA. "We can transfer this historical artefact back to our friends, not just in commemoration of the sacrifices suffered by both nations, but also in celebration of what we have achieved since then."

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