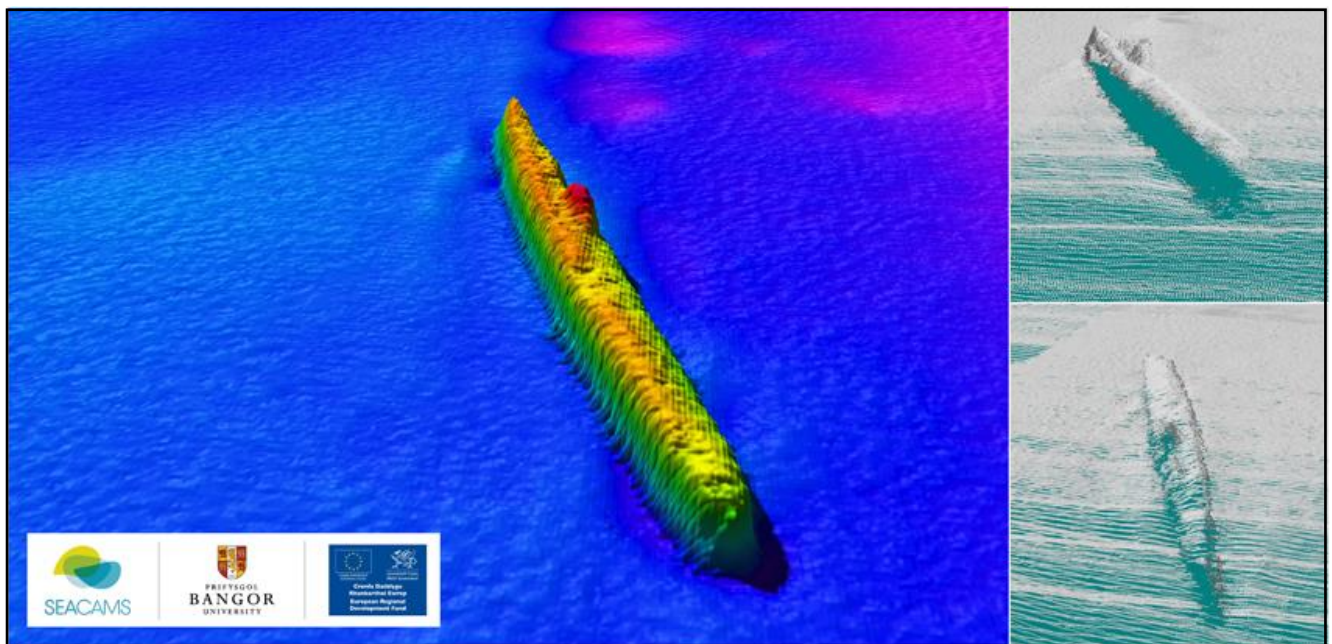


**Welsh Wreck Web Research Project**  
**(North Cardigan Bay)**  
**On-line research into the wreck of the**  
**Imperial German Navy Submarine**  
**SM U-87**



*Side scan SONAR images of the wreck of SM U-87*

Report compiled by:  
**Mark Blondeau**

Report Title:

**Welsh Wreck Web Research Project  
(North Cardigan Bay)  
On-line research into the wreck of the  
Imperial German Navy Submarine SM U-87**

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Date:

**March 2021**

Report Ref:

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## 1.0 Abstract

Since 2001 the Malvern Archaeological Diving Unit (MADU) has developed a database of vessels known to have wrecked around the coast of Wales. This online research project is into the wreck of the World War I Imperial German Naval submarine SM *U-87*, sunk with all hands in action with the Royal Navy on Christmas Day, 1917.

*U-87* (MADU # Not assigned) is a particularly noteworthy wreck, both for the relative abundance of archival material available on the web that pertains to her construction, career and eventual sinking, but also for the recent side scan SONAR images that have been collected on the wreck by the Centre for Applied Marine Sciences at Bangor University.

The intent of this project is to collate the extant material available on *U-87* from both an archival and marine archaeological perspective, in the hope of assisting in future further physical investigations of this historically important wreck, as well as in support of the project , 'Commemorating the forgotten U-boat war around the Welsh coast 1914-18: Exploration, Access and Outreach', led by the Royal Commission on the Ancient and Historical Monuments of Wales in partnership with Bangor University and the NAS. This report's research has been necessarily limited to information available on-line, as access to libraries and record offices was not possible at the time of writing due to lockdown policies for the COVID19 pandemic.

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## 2.4 Contributors

Mr. Christopher Perry, Royal Canadian Navy (RCN) Command Historian provided contact details for his counterpart in the Deutsch Marine.

## 2.5 Abbreviations

AAR	After Action Report
KptLt	Kapitänleutnant (German naval rank wearing insignia of a Lt Cdr & exercising command, but ranking as a junior officer)
MADU	Malvern Archaeological Diving Unit
NAS	Nautical Archaeology Society
NPRN	National Primary Resource Number
RCAHMW	Royal Commission on the Ancient & Historical Monuments of Wales
ROV	Remote Operated Vehicle
SEACAMS 2	Sustainable Expansion of the Applied Coastal and Marine Sectors

### 3.0 Introduction

SM *U-87* is an important wreck both as a representative vessel of a period of rapid technological revolution in warfare at sea, and as the war grave of her last crew, entombed within since her sinking. U-boats, including *U-87*, were a critical component in the continuously evolving naval arms race that characterised the first two decades of the last century, roughly from the launch of HMS *Dreadnought* in 1905 through to the Armistice of 1918. This technological revolution at sea is often overshadowed by the sheer apocalyptic sense of contemporary industrial warfare on land, enabled by technological advancement with which doctrine and tactics failed to keep apace, resulting in horrific extended battles of attrition. The concurrent technological advances in naval warfare also enabled the doctrine of unrestricted warfare at sea to be developed and instituted, underpinned by the stealth, independence and relative low cost of a new strategic weapon, the U-Boat.

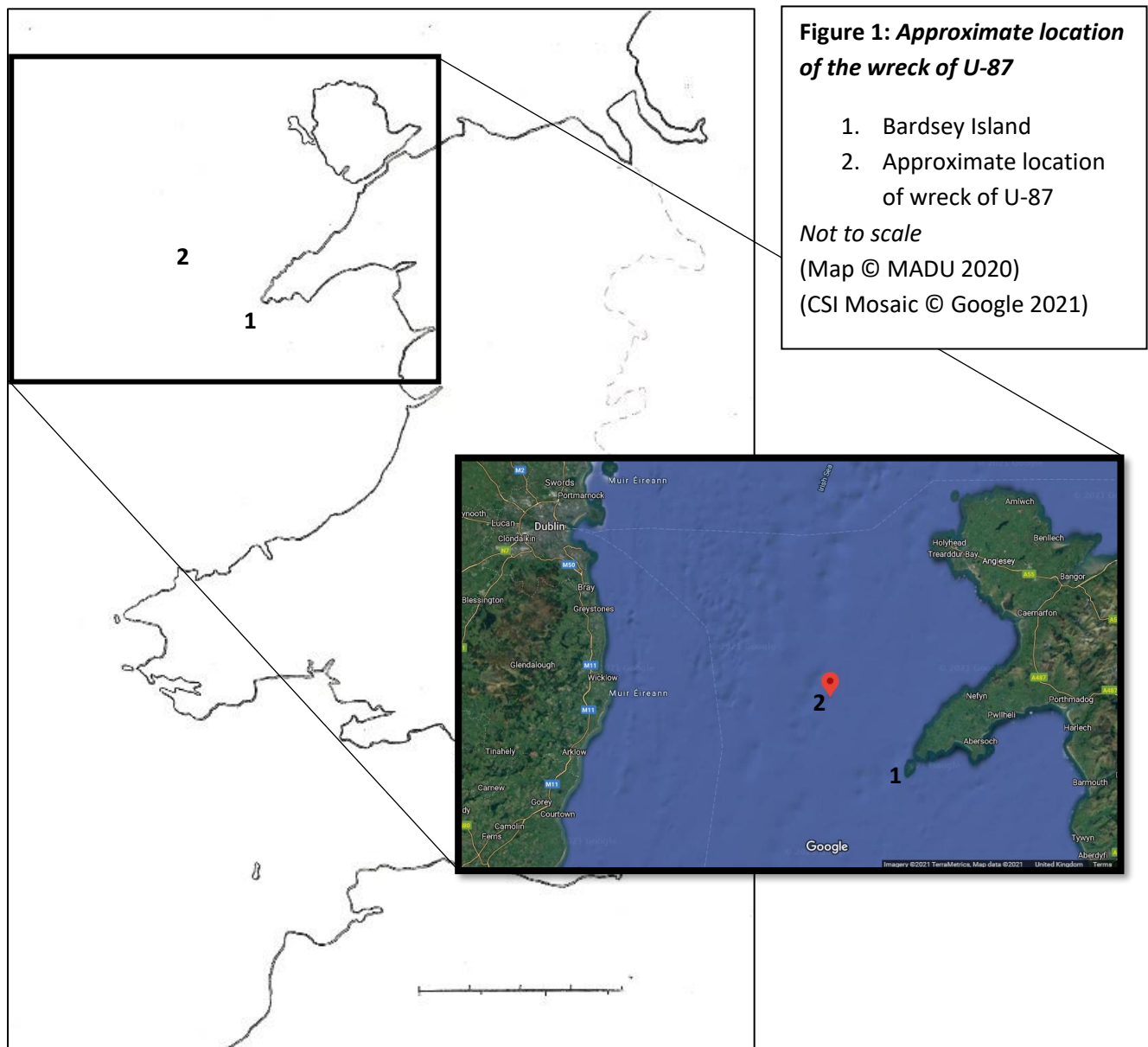
However, SM *U-87* is much more than an example of a footnote in modern political or strategic history, or a technological marvel. She is a particularly poignant representation of the human costs of naval warfare, sunk as she was on Christmas Day 1917 with all hands lost. This report seeks to consolidate the information on this important wreck, through addressing the following research questions:

1. What were the vessel's specifications?
2. What historical information is available relating to the vessel?
3. What was the story leading up to wrecking?
4. What caused the wrecking?
5. What has happened since the wrecking?
6. Has anyone previously investigated or researched the vessel's story?
7. Has anyone dived, recorded, surveyed or worked on the site?
8. Has any salvage, etc. been carried out?
9. Have there been any previous reports produced relating to the vessel?

## 4.0 Background

SM *U-87* was the lead ship of her class of U Boats, launched on the 22<sup>nd</sup> of May, 1916 by Kaiserliche Werft shipyard, Danzig and subsequently commissioned into the Imperial German Navy on the 26<sup>th</sup> of February, 1917. Over the following year *U-87* completed five patrols, accounting for 22 ships sunk and two damaged, until she engaged Convoy HD15 (Dakar to Liverpool) on Christmas Day of 1917.

Eighteen miles NWN of Bardsey Island in the Irish Sea, *U-87* torpedoed the steamship *SS Agberi* (4,821grt). However, *U-87*'s new captain, on his first cruise in command, stayed too long on the surface. Convoy HD15's escorts spotted *U-87* and the sloop *HMS Buttercup* rammed the U-boat; badly damaged, *U-87* could not submerge or escape. *PC-56*, a P-boat built as a Q-ship, was following up behind the sloop and sank the submarine with all hands, forty-four men in total.



*U-87* lay on the sea bed for nearly a century, until rediscovered during multi-beam SONAR survey work being undertaken in support of the development of Marine Renewable Energy by the SEACAMS 2 project, a joint initiative of Bangor and Swansea Universities.

## **5.0 Research Methodology**

This project was undertaken via regular online research through a standard Acer laptop, initially accessed through a Canadian ISP, and then completed through a UK ISP. Research was conducted via Google search engine, initially through a key word search of the term: "U-87", which was then expanded as results were investigated to include "HMS Buttercup", "SEACAMS", "Rudolph Schneider", "Rudolph von Speth-Schulzburg", "WWI U-Boats", and "RCAHMW". Links within source material were also followed and bookmarked for future reference.

Unfortunately, due to a mixture of time constraints and the realities of conducting research during COVID-19, the only primary source that was consulted was an After-Action Report (AAR) of HMS *PC-56*, an excerpt of which was included in one of the secondary sources online (<https://rcahmw.gov.uk/new-imaging-techniques-capture-forgotten-u-boat/>). Data from this primary source was used via Google Earth to plot the approximate position of the wreck in the mosaic commercial satellite imagery inset within figure 1.

Contact with some naval historians was also initiated through the good graces of the office of the Royal Canadian Navy (RCN) Historian, Mr. Chris Perry, who provided contact details for his current counterpart in the Deutsch Marine; however, time and connectivity constraints external to the project prevented a proper follow up being conducted.

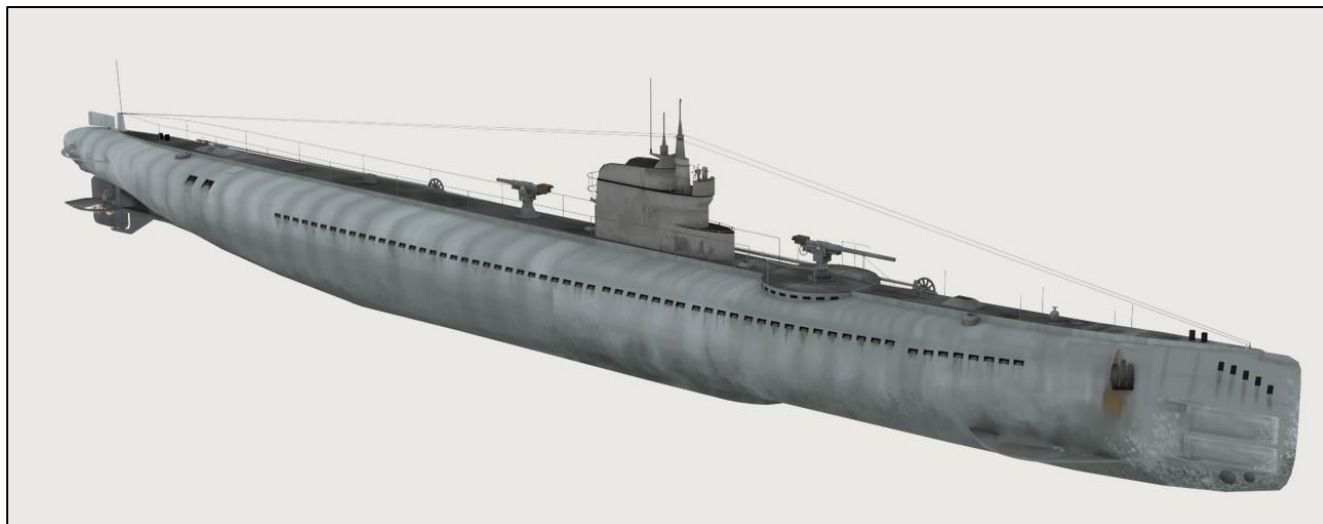
## 6.0 Results

### 6.1 Research Question 1

What were the vessel's specifications?

Vessel	Name	SM U-87		
	Type	Submarine		
	Flag	Imperial German Navy		
Built	Date	Laid down: 28 Oct 1915		
		Launched: 22 May 1916		
		Commissioned: 26 Feb 1917		
	Builder	Name: Kaiserliche Werft		
		Location: Danzig		
Construction	Materials	Steel		
	Decks	1 internal		
	Bulkheads	Pressure hull of 50.07m x 4.18m		
Propulsion	Type	Engine		
	Details	Diesel Electric		
Engine	Details	Type: Diesel		
		HP: 2400 bhp/1200 shp		
		Manufacturer: MAN		
		Number: two		
Drive	Type	screw		
	Motors	2		
	Number	Two shafts		
Dimensions	Length	224 ft	9 ins	65.80 m
	Beam	20 ft	4 ins	6.20 m
	Draught	12 ft	9 ins	3.88 m
Displacement	Surfaced	757 tons		
	Submerged	998 tons		
Armament	Guns	1 x 105mm/45, 1 x 88 mm/30 deck guns		
	Torpedoes	6 x 500mm torpedo tubes (4 bow, 2 stern)		
		12 torpedoes (6 in tubes, 6 reloads)		
Performance	Range (Surface)	8000 nm at 8 knots		
	Range (Submerged)	56 nm at 5 knots		
	Speed (Surface)	15.5 knots		
	Speed (Submerged)	8.5 knots		
History	Patrols	5		
	Ships Sunk	22 (total of 59,828 tons)		
		2 (total of 7,638 tons)		
Final Voyage	Captain	Kapitan Lt. Freiherr Rudolf von Speth-Schülzburg		
	Crew	44		
Wrecking	Date	25 December 1917		
	Location	In vicinity of 52 56 N and 005 07 W (Approx. 18 nm NWN of Bardsey Island)		
	Cause	Depth charging, surface fire and ramming by HM Ships <i>Buttercup</i> and <i>PC-56</i>		
	Loss of life	44 (All hands lost)		
	Outcome	Total Loss		

**Table 1: Technical and historical specifications for SM U-87.**



**Figure 2: A CGI reconstruction of the U-87 class.** The model's deck armament is representative of the first two vessels of the class (*U-87* and *U-88*).  
(Source: [www.weaponsandwarfare.com/](http://www.weaponsandwarfare.com/))

## 6.2 Research Questions 2 to 4

*What historical information is available relating to the vessel?*

*What was the story leading up to wrecking?*

*What caused the wrecking?*

These three research questions are intimately linked, as the relative wealth of historical information on *U-87*, her brief career and ultimate destruction (as with that of the 22 ships she was directly responsible for sinking) are a result of the greater global story of the First World War. There are therefore not only some primary sources extant, of particular note being the logs and reports of the two Royal Navy escorts that sank her in action, but also several secondary sites which provide a good synthesis of the available information on *U-87*. All of the secondary sources consulted shall be listed in Section 9.0 References; it is through these latter sites that some primary sources have also been able to be investigated.

*U-87* began her brief career on the 26<sup>th</sup> of February 1917, when she was commissioned under the command of Kapitänleutnant (KptLt) Rudolf Schneider. *U-87* was his second command, as he was already arguably a U-Boat ace having sunk the RN Battleship HMS *Formidable* during the very first underwater attack at night on the 1st January 1915 off Portland Bill, along with another twenty-five vessels sunk, three damaged and one taken as prize while in command of *U-24*. However, it was for his very first sinking, two months before that of *Formidable*, that he was arguably a critical figure in the development of the course of the First World War. On 26 October 1914 *U-24* torpedoed the French steamship SS *Admiral Ganteaume* without warning in the Dover Strait. This was the first time that a merchant vessel had been attacked in this way, although its example would quickly alter the objective of submarine warfare to become a strategic form of economic warfare, a trend that would continue for the next generation of U-boats throughout the Second World War, and remain a lynchpin of Soviet Cold War submarine doctrine until 1991. Schneider's success as a U-boat commander continued aboard *U-87* as he racked up another nineteen ships sunk and two damaged between the 23<sup>rd</sup> of May and the 27<sup>th</sup> of August, 1917. However, on the 13<sup>th</sup> of October KptLt Schneider's lucky streak came to an abrupt end when he was lost overboard from *U-87*'s conning tower during stormy weather in the North Sea; although the crew managed to recover him, he was already dead. He was buried at sea between the Shetland Islands and Norway.



**Figure 3: Kapitänleutnant (KptLt) Rudolf Schneider.** First commanding officer of *U-87*, washed overboard from her conning tower during heavy weather and drowned on the 13<sup>th</sup> of October, 1917. (Source: [www.uboot.net/wwi/men/commanders/304.html](http://www.uboot.net/wwi/men/commanders/304.html))

After her return to port under the temporary command of Schneider's first officer KptLt Rudolph von Speth-Schulzburg, *U-87* was then placed under the latter's permanent command. On its subsequent fifth, and ultimately final, patrol –the first undertaken under the command of von Speth-Schulzburg– *U-87* departed Wilhelmshaven on the 8<sup>th</sup> of December, 1917. She headed to the western end of the English Channel via the Dover Straits sinking a small sailing vessel (*Little Gem*, 114 tons) on route on the 13<sup>th</sup> of December. On Christmas Eve, *U-87* then attacked and sank a rather larger target, the 3238-ton British steamer *Daybreak* off Northern Ireland. Fresh from this success, during the afternoon of Christmas day 1917 *U-87* attacked a convoy in St George's Channel (in particular, the 4812-ton British steamship *Agberi*, her last kill).

One of convoy HD15's (Dakar to Liverpool) escorts, the sloop HMS *Buttercup*, was reportedly only 150 yards away from the *Agberi* when the latter was torpedoed at 14:42. *Buttercup* subsequently spotted and engaged a submarine (*U-87*) on the surface some 42 minutes after *Agberi* had been struck, but apparently while the latter was still afloat. *Buttercup's* log states that:

*03:30 While zig-zagging round AGBERI submarine spotted on surface. HMS P56 engaged and rammed it. BUTTERCUP fired and hit conning tower.*

*03:40 SS AGBERI sank. Submarine sank.*

Note that the times listed in *Buttercup's* log are in the afternoon, as the log is not using a 24-hour clock as would normally be expected. The After-Action Report (AAR) of her consort, HMS *PC 56* provides more detail on the action and its

immediate aftermath.



**Figure 4: HMS Wisteria, Arabis class sloop & sister ship of HMS *Buttercup*** (Source: IWM, SP 827)

I. D.—Form I.		Submarine Losses.		No. of Paper	SUBJECT
No. of Paper	<u>P.56</u>	SUBJECT	25.12.17.	No. of Paper	SUBJECT
December 25 5E°56'N. 08°07'W.	<p>Report from H.M.S. "P.56".</p> <p>H.M.S. P.56, forming part of the escort force for a convoy of six ships from Dakar to Liverpool, <del>was</del> had been detached to escort E.S. "AGBERI" which had dropped astern. When rejoining convoy at 1440 she observed a steamer the "AGBERI" torpedoed and received a signal from H.M.S. "BUTTERCUP", escorting convoy, to join her with all despatch. On coming up she was ordered to pick up survivors and was proceeding to carry out the order when at 1210 the periscope of a submarine was sighted one point on the port bow, distant 150 to 200 yards. P.56 passed periscope about 10 yards on her port side and when it was abreast the bridge released two "D" depth charges. A heavy explosion took place which brought submarine to surface. Helm was put hard a starboard to turn and ram, and fire opened with the port 12 pdr 12 cwt. Three rounds were fired, two of which were hits, the second round striking port side of conning tower and splitting it, the third hitting shaft conning tower.</p> <p>P.56 struck the submarine at a speed of about 20 knots on the port side between conning tower and stem, cutting her clean in two. The stern portion came to the surface momentarily and sank, <del>the</del> forward part remained on the surface with bow dipping, exposing the interior to view. Details of the interior could be plainly seen both by P.56 and H.M.S. "BUTTERCUP".</p> <p>Helm was put to starboard. Four rounds were fired</p>	<p>from the 4" gun and five more from the port 12 pdr. 12 cwt. at a range of about 200 yards. The 2nd and 4th round from the 4 inch were hits and the first three rounds from the 12 pdr. 12 cwt., and the submarine then sank bow first.</p> <p>When "AGBERI" was torpedoed the "BUTTERCUP" turned towards where the submarine was likely to be and considered she hit her, the shock being fairly severe. After P.56 had rammed, "BUTTERCUP" opened fire with her foremost 4" and a shot hit the base of the conning tower.</p> <p>The action lasted 10 to 15 minutes.</p> <p>On docking P.56 the damage to bows was found to be very extensive.</p> <p>N. 017929. (Green 22 p)</p> <p>Known.</p>			

**Figure 5: After Action Report of HMS PC 56 for Christmas day, 1917.** (Source: ADM137/4144, The National Archives Kew; as shown in rcahmw.gov.uk report)

The AAR of HMS *PC 56* largely substantiates the cursory log entries of HMS *Buttercup* while providing significant more detail on both the sequence of counterattacks on *U-87* and her subsequent sinking. One of the more striking details from the AAR are the specific details of the sinking. *PC 56* reported that she rammed *U-87* abaft the conning tower at a speed of 20 kts, 'splitting her clean in two,' subsequently elaborating that '[t]he stern section came to the surface momentarily and sank' while '[t]he forward part remained on the surface with bow dipping, exposing the interior to view...details of the interior could be plainly seen by both P.56 and H.M.S. BUTTERCUP.'

After the ramming by *PC 56* both of the escorts opened fire on the submarine, both recording successful hits on the (forward part of the) submarine by their 4-inch guns as well as *PC 56*'s port side 12 pdr. The action, which was recorded by *PC 56* as having lasted 10-15 minutes, had commenced with a possible ramming of *U-87* by *Buttercup*, while the former was likely at periscope depth immediately after the torpedo attack on *Agberi*.

## 6.3 Research Questions 5 to 9

*What has happened since the wrecking?*

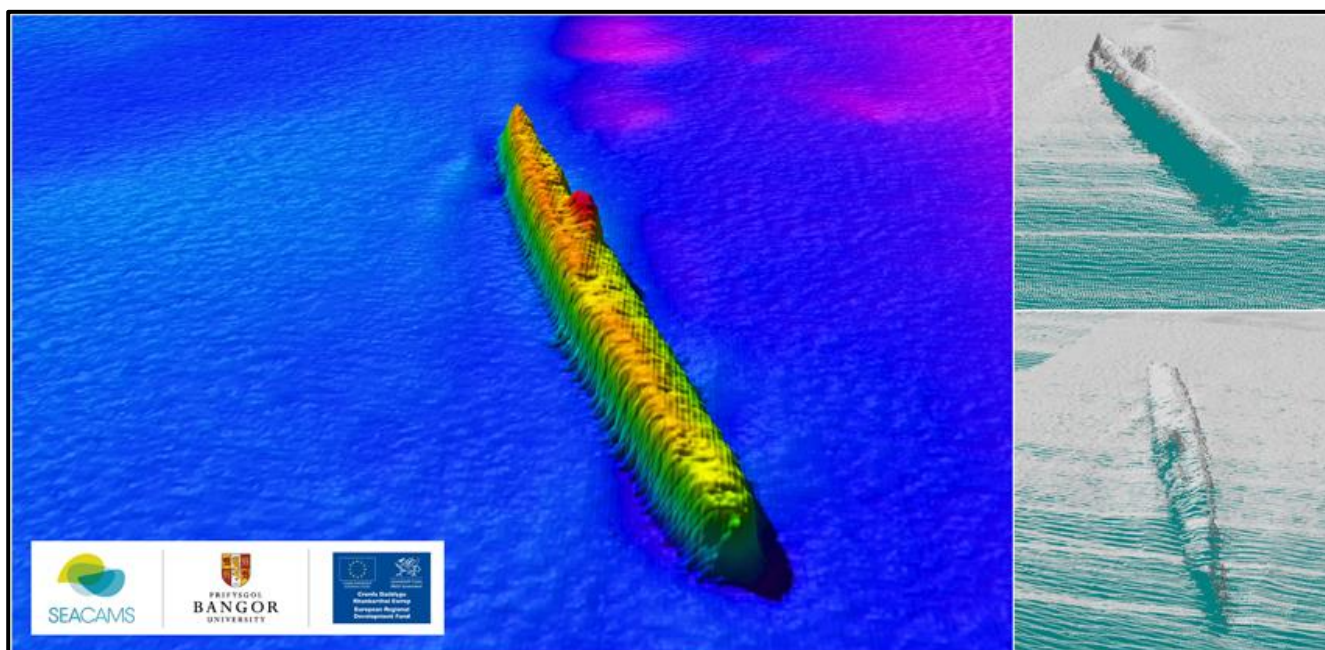
*Has anyone previously investigated or researched the vessel's story?*

*Has anyone dived, recorded, surveyed or worked on the site?*

*Has any salvage, etc. been carried out?*

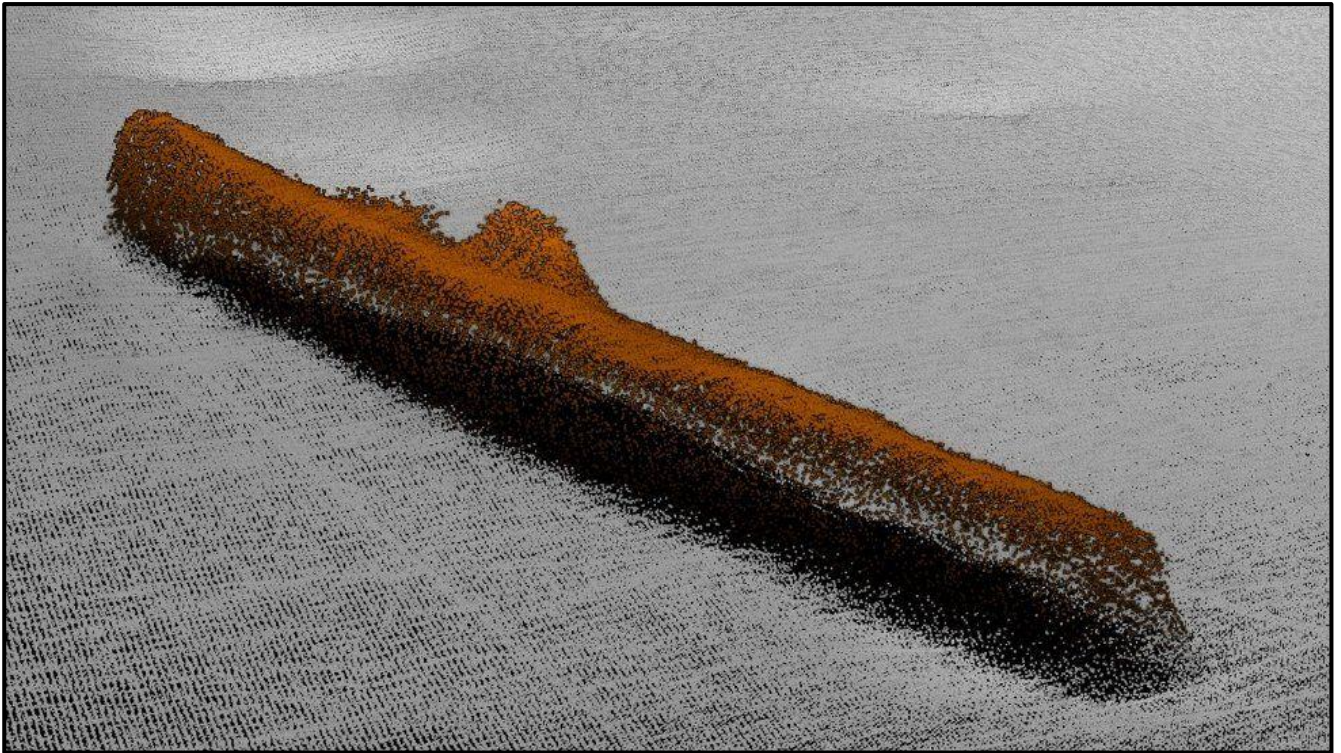
*Have there been any previous reports produced relating to the vessel?*

SM *U-87* lay unseen on the bottom of the Irish Sea for nearly a century, until discovered during a multi-beam side scan SONAR survey during the summer of 2017. The latter survey, undertaken as part of the SEACAMS 2 project intended to support developing the Marine Renewable Energy sector within Wales, captured several excellent 3D SONAR images of a submarine wreck in the reported location of *U-87*. These images notably demonstrate that the hull is lying on her keel and intact, although a large gash visible in the hull immediately abaft the conning tower could likely indicate the point of collision where HMS *PC 56* reportedly rammed her.



**Figure 6: Multi beam SONAR images of the submarine wreck identified as SM *U-87*.** The images show the wreck from three different angles, with the main picture apparently of the port quarter looking forward, the top right from a similar angle but more obliquely, and the third from just off the starboard bow. (Source: SEACAMS 2 via [rcahmw.gov.uk](http://rcahmw.gov.uk))

The wreck lies in relatively deep and low visibility water, and as far as can be ascertained from open sources has not yet been dived upon by either divers or Remote Operated Vehicles (ROVs). The RCAHM has compiled a series of excellent webpages on SM *U-87* and the discovery of her wreck, including a CGI movie recreation of her final action and sinking. These pages are tied into the joint 'The Forgotten U-boat War around the Welsh Coast' Project of the RCAHM, Bangor University and NAS.



**Figure 7: Another multi beam SONAR image of the wreck.** This image is from abaft midships on the port side, and at an even more oblique angle. What may be a debris field is forward of the conning tower. (Source: SEACAMS 2, via BBC)

## 7.0 Analysis

### 7.1 Analysis of Findings

A few discrepancies between the wreck discovered in the summer of 2017, and the historical records of SM *U-87* stand out. Most notably is the fact that the hull of the submarine wreck discovered in 2017 is clearly in one piece, while the AAR of HMS *PC 56* is very explicit in the details that the sub broke apart after the initial ramming, that the stern sank immediately, but that the forward half of the sub remained afloat until struck by multiple 4" and 12 pounder shells from both *PC 56* and *Buttercup*. The more detailed image from abaft the port beam of the wreck (Fig. 7, above) also appears to show some design anomalies from the *U-87* design, most notably in the rake of the after end of the conning tower, which was nearly vertical on the *U-87* class (see Fig. 2 in comparison), although the bow of the wreck also appears to be more of a high cain spoon bow in design, while that of the *U-87* was more vertical (straight bow). The tumblehome at the stern also appears more prominent in the SONAR images of the wreck than on the 3D model of *U-87*. In these features the wreck appears to be more reminiscent of earlier designs, particularly with regards to her conning tower (see *U-51*, *U-57* particularly, and *U-63*). Of note *U-61* of the *U-57* class was likely lost in the general vicinity soon after the 23<sup>rd</sup> of March 1918, after having sunk SS *Etonian* in St George's Channel.

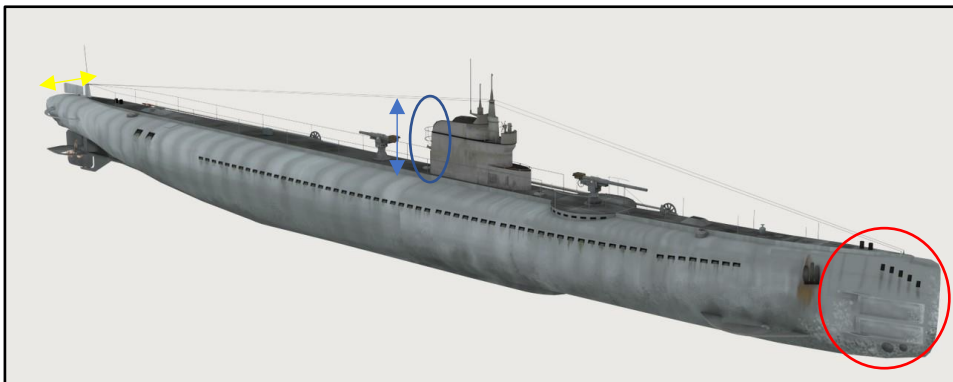


Figure 8a: *U-87 Class*

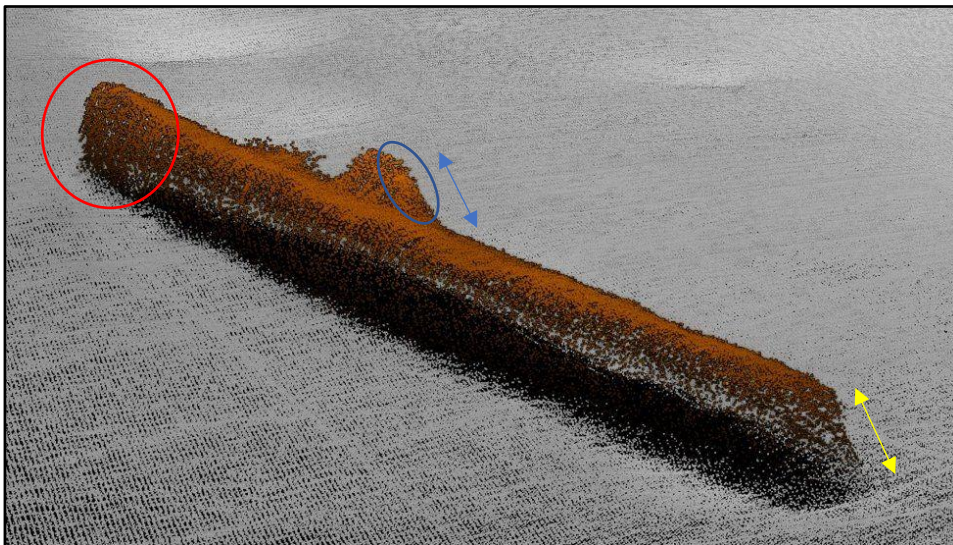


Figure 8b: *2017 wreck*

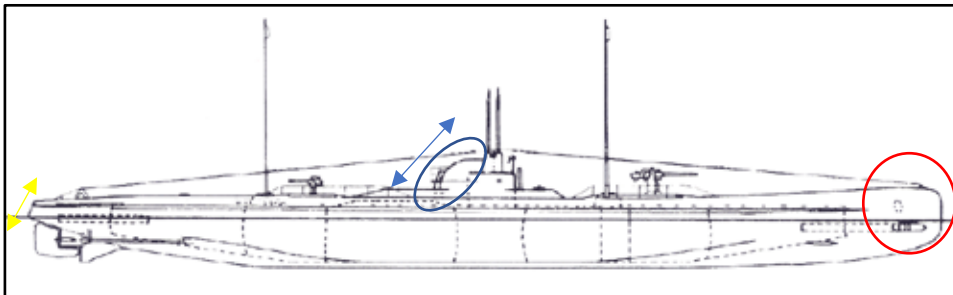


Figure 8c: *U-57 Class*

**Figure 8: Key features of the wreck.** Comparison of angle of aft edge of conning tower (blue), shape of bow (red) and shape and angle of stern (yellow), between the *U-57* and *U-87* classes and the SONAR imagery of the submarine wreck discovered in 2017. (Sources: 8a and 8b as previously noted; 8c [www.uboat.net](http://www.uboat.net))

## 7.2 Analysis of Methodology

Were there both sufficient time and resources available, section 7.1 would have benefited significantly through a more comprehensive mensuration analysis between multiple SONAR images of the 2017 wreck and detailed 3D models of a variety of U-boat types. Online research could also have been more thorough, had direct engagement via email with subject matter experts been pursued. In particular, the lead with the Deutsche Marine historian as well as contact with Nicola Roberts of the RCAHMW should have been pursued.

## 8.0 Conclusions & Recommendations

Far from being a completely understood and identified wreck, the 2017 discovery of the submarine identified as SM *U-87* in fact remains enigmatic. The evidence from the multi-beam SONAR survey undertaken by the SEACAMS 2 project does not fit squarely with the historical records of the sinking of *U-87*, nor indeed do those SONAR images examined in this report appear to correspond completely with that vessel's structure. However, the latter anomalies may be a result of hull deterioration, a lack of proper software mensuration capability, and a very small sample size of SONAR images. More difficult to reconcile is the AAR of HMS *PC 56*, which was very precise in the details and sequencing of the sinking of *U-87*, with a great emphasis on the latter's having broken in two after being rammed, and then the two halves having sunk with some (unspecified, but certainly less than 15 minutes) time between them. Indeed, the AAR indicates that the forward part of the submarine required additional shelling to sink, while the after part had sunk almost immediately after the ramming. This account simply does not seem reflective of the wreck discovered in 2017.

*U-87* is an important historical artifact in her own right: linked directly to a commander who initiated several key aspects of U boat warfare including both night time attacks and covert attacks on merchant vessels, and also as a significant design inspiration for the German Type IX U Boats of the beginning of WWII. She is also a war grave, both for the 44 men who went down with her, but also indirectly to those merchant sailors who lost their lives in the 22 ships she sunk. Whether the wreck discovered in 2017 is actually *U-87*, she is still likely a war grave. Because of this latter reality any dive on her should be carefully considered.

None-the-less the enduring mysteries about the sinking of *U-87* and her subsequent positive identification, in light of the contradictory historical accounts, means that a dive to the wreck would be highly beneficial. Such a dive would allow a proper investigation of the wreck's physical structures, the potential sighting of firmly diagnostic artifacts, and also establish her material condition. Given the boat's (likely) war grave status, as well as her depth, it is recommended that one of two options for the investigation be pursued:

- a. A dive led by the RN with professional marine archaeologists; or,
- b. A survey by ROV.

The latter option, undertaken with an academic partner, is likely the most viable.

## 9.0 References

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<https://www.uboaat.net/wwi/men/commanders/304.html;>  
<https://www.uboaat.net/wwi/men/commanders/333.html> &  
<https://www.uboaat.net/wwi/boats/successes/u87.html>

U-Boat Project Commemorating the War at Sea, *U-87*

<https://uboaatproject.wales/wrecks/u-87/>

Weapons & Warfare.com, *Buttercup vs. U-87*

<https://weaponsandwarfare.com/2019/07/19/41154/>

Wikipedia, *SM U-87*

[https://en.wikipedia.org/wiki/SM\\_U-87](https://en.wikipedia.org/wiki/SM_U-87)

**Appendices:****Appendix A – Crew of *U-87* lost December 25, 1917**

<b>Name</b>	<b>Notes</b>
Adam, Friedrich	
Andermann, Fr	
Balleer, Max	
Brandt, Johannes	
Collinet, Joseph	
Dahlmann, Friedrich	
Dethloff, Otto	
Dost, Fritz	
Faßel, Herbert	
Fimpler, Adolf	
Gaßmann, P	
Grill, Georg	
Hansen, Robert	
Heinrich, Freidrich	
Hilgenberg, Karl	
Hoffmann, Wilhelm	
Hummel, Ernst	
Jørgensen, J	
Kloß, Karl	
Koppehele, Fritz	
Krimme, Otto	
Kurth, Jakob	
Labahn, Hans	
Lehmann, Ernst	
Lehmann, Walter	
Ludwig, Edwin	
Mrodzikowski, Anton	

Name	Notes
Patege, August	
Petermann, Hermann	
Preisker, Theodor	
Reuting, Hermann	
Schaff, Paul	
Schnellke, Heinrich	
Siebel, Johann	
Siebke, Gustav	
Speth-Schülzburg, Rudolf Frhr. V.	Commanding officer, former First Officer Image: Figure A-1
Tetmeyer, Robert	
Viebranz, R	
Wandt, Kurt	
Wille, Wilhelm	
Willmer, Hubert	
Wodrig, Franz	
Zander, Paul	

**Table A-1: Alphabetical list of the crew of U-87 for her final patrol.**

All lost at sea 25<sup>th</sup> of December, 1917.



**Figure A-1: Kapitänleutnant Freiherr Rudolf von Speth-Schülzburg.**  
Last commanding officer of U-87. Von Speth-Schulzburg was a member of the Imperial German aristocracy, Freiherr approximating Baron in rank.  
(Source: Mr. Hermann Hampe, via uboat.net)

**Appendix B – List of ships sunk or damaged by U-87**

Date	U-87 CO	Name of Ship / Flag	Type of Ship	Tons	Notes
23 May 1917	Rudolf Schneider	<i>Bernisse</i> NL	Steamer	951	Damaged only
23 May 1917	Rudolf Schneider	<i>Elve</i> NL	Steamer	962	
26 May 1917	Rudolf Schneider	<i>Lucipara</i> RU	Sailing vessel	1,943	
26 May 1917	Rudolf Schneider	<i>Saint Mirren</i> UK	Sailing vessel	1,956	
30 May 1917	Rudolf Schneider	<i>Bathurst</i> UK	Steamer	2,821	
30 May 1917	Rudolf Schneider	<i>Hanley</i> UK	Steamer	3,331	
2 Jun 1917	Rudolf Schneider	<i>Eliofilo</i> IT	Steamer	3,583	
2 Jun 1917	Rudolf Schneider	<i>Mississippi</i> FR	Steamer	6,687	Damaged only, Torpedoed 150 miles WSW of Brest Image: Fig B-1
4 Jul 1917	Rudolf Schneider	<i>Loch Katrine</i> UK	Trawler	151	
8 Jul 1917	Rudolf Schneider	<i>Valetta</i> UK	Steamer	5,871	
10 Jul 1917	Rudolf Schneider	<i>Seang Choon</i> UK	Passenger steamer	5,807	
11 Jul 1917	Rudolf Schneider	<i>Kioto</i> UK	Steamer	6,182	
12 Jul 1917	Rudolf Schneider	<i>Castleton</i> UK	Steamer	2,395	

16 Jul 1917	Rudolf Schneider	<i>Tamele</i> UK	Steamer	3,932	
19 Jul 1917	Rudolf Schneider	<i>Artensis</i> NW	Sailing vessel	1,788	
21 Jul 1917	Rudolf Schneider	<i>Coniston Water</i> UK	Steamer	3,738	
19 Aug 1917	Rudolf Schneider	<i>Eika li</i> NW	Steamer	1,268	
21 Aug 1917	Rudolf Schneider	<i>Oslo</i> UK	Steamer	2,296	
22 Aug 1917	Rudolf Schneider	<i>Alexander Shukoff</i> DK	Steamer	1,652	
27 Aug 1917	Rudolf Schneider	<i>Anna</i> DK	Steamer	1,211	Image: Fig B-2
27 Aug 1917	Rudolf Schneider	<i>Aurora</i> DK	Steamer	768	Image: Fig B-3
13 Dec 1917	Rudolf von Speth-Schülzburg	<i>Little Gem</i> UK	Sailing vessel	114	
24 Dec 1917	Rudolf von Speth-Schülzburg	<i>Daybreak</i> UK	Steamer	3,238	
25 Dec 1917	Rudolf von Speth-Schülzburg	<i>Agberi</i> UK	Steamer	4,821	Sunk in same action as <i>U-87</i>

**Table B-1: Details of the ships attacked by U-87 during her five patrols in 1917.**



**Figure B-1: French steamship *Mississippi*** (Source: uboat.net)



**Figure B-2: Danish steamship *Anna*** (Source: Danish Maritime Museum, Elsinore via uboat.net)



**Figure B-3:** *Danish steamship Aurora* (Source: Danish Maritime Museum, Elsinore via uboat.net)