

The identification of HMS Bayano **Courage on the Clyde**

This report outlines the identification and documentation of *HMS Bayano*, an armed merchant cruiser, torpedoed and sunk by German submarine *U-27* on 11 March 1915, which sits at a depth of 106m in the North Channel between Northern Ireland and Scotland.

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Contents

Contents	2
Acknowledgements	2
Executive summary	3
ProjectXplore: introduction and aims	4
<i>HMS Bayano</i> as a target for exploration	4
Overview of British armed merchant cruisers (“AMCs”) in the First World War	5
<i>HMS Bayano</i> : her design, construction and early service record	7
<i>U-27</i> : her design, construction and early service record	9
<i>HMS Bayano</i> : her role in the 11 March 1915 action	12
<i>HMS Bayano</i> : the circumstances of her loss and rescue of survivors	13
Archival research from September 2025	19
Side scan sonar survey in October 2025	20
Documentation by ProjectXplore divers in October 2025	25
Remembrance of the sailors who lost their lives	37
The wreck today	44
Bibliography	45

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Executive summary

On 12 October 2025, ProjectXplore divers, supported by skipper Richard Lafferty and crew Timmy Donaghy on board the dive charter *MV Aquaholics 5*, successfully identified the wreck of *HMS Bayano*, at a depth of 106m in the North Channel between Northern Ireland and Scotland. On 12 October 2025, the team surveyed the site using a towed side scan sonar (SSS). Subsequently, on 12 and 13 October 2025, the team documented the site.

The wreck of *HMS Bayano* sits in 106m, with a least depth of 84m, lying bow NNW / stern SSE, with a 20-degree list to starboard. In places, the wreck rises over 15 metres high from the seabed. Much of her superstructure is still in place above her.

We are confident that we have conclusively identified the wreck as *HMS Bayano*, on the basis that she remains the only British Armed Merchant Cruiser ("AMC") from the First World War sunk in the North Channel with an armament of 6" (152mm) guns. No other British AMC from the First World War was sunk in the North Channel with this type of armament.

Two of the 6-inch guns were photographed, one on the forward starboard rail and one on the centre line of the stern, confirming her conversion from a merchant ship to an AMC. We also measured and photographed the internal diameter of the muzzle of the 6" gun at the stern. Furthermore, the barrel length was confirmed via sonar to measure 6.3m as expected for a Mark 1 QF 6-inch central pivot naval gun.

In addition, we located the following features that reinforce the identification:

- ▶ Machinery consistent with early 20th-century refrigeration systems was identified, including insulated piping and compressor remnants, evidence of the ship's pre-war service as a refrigerated fruit carrier.
- ▶ The forecastle 6-inch gun remained on the starboard rail, as reported by Johnny Caulfield, the 20-year-old reservist on look-out duty when *U-27*'s torpedo struck (*"I was on look-out duty under the bridge at the time, when there was a fearful crash ... Almost instantly the gun on the forecastle went over the side."*)¹.
- ▶ The bridge foundation and funnel base were identified amidships, confirming the single-funnel layout typical of Alexander Stephen & Sons designs. Two masts were documented, one forward and one aft, both collapsed onto the deck.
- ▶ We found the distinctive 5-bar safety railings on the promenade deck parallel with the gunwales outside the companionway as per the photographs here in the report.
- ▶ The well-preserved stern section showed the vessel's characteristic elliptical transom profile. The hull's steel construction, riveted seams, and framing pattern matched Alexander Stephen & Sons merchant shipbuilding methods.
- ▶ The vessel's dimensions matched the dimensions of *HMS Bayano*: 126m long and 16m beam confirmed via sonar.
- ▶ The pattern of damage on the seabed today closely matches reports of the circumstances of her loss. There was a clear break forward of the bridge at its largest on the starboard side, which matches reports from the Royal Marine, Arthur Craze, that *U-27*'s torpedo struck *"directly under the bridge on the starboard side, and the fore part of the ship seemed to be blown up"*.
- ▶ The location of the wreck sits just 1.7nm from the position indicated by Royal Marine, Private Arthur Craze, and 2.4nm from the position indicated by *U-27*'s Kriegstagebuch ("KTB" or war diary) maintained by Kapitänleutnant Wegener.

ProjectXplore: introduction and aims

ProjectXplore is a Global Underwater Explorers project that connects divers with opportunities for shipwreck exploration and documentation organised by Dan McMullen and Leo Fielding. We are passionate about understanding and conserving maritime history. We are committed to three goals that guide everything we do:

- 1) Education - to document historically significant shipwrecks to better understand their design and the circumstances of their loss;
- 2) Conservation - to understand the shipwrecks' condition today and how it is changing so that as far as possible our maritime history can be properly conserved for future generations; and
- 3) Remembrance - to commemorate the sailors who lost their lives at sea and to provide insights into their stories and experiences.

“ProjectXplore is a GUE project that connects divers with opportunities for shipwreck exploration and documentation.”

HMS Bayano as a target for exploration

For over 110 years, mystery had surrounded the identity of *HMS Bayano*. To the best of our knowledge, *HMS Bayano* had never been dived or identified prior to our expedition. The authors of *Clyde Shipwrecks*, Ian Crawford and Peter Moir, who have been diving and researching Scottish shipwrecks for over forty years, confirm: “*The wreck of the Bayano ... has not been identified as there are a number of large wrecks charted in this area.*”² The Irish dive charter skippers we consulted, Richard Lafferty and Dean Cullen, were not aware of the wreck having been dived or identified. Wreck databases (e.g. WreckSite.EU) listed the reliability of the stated position as ‘Bad > 1km’ and the survey details stated: ‘No previous record’.

It is perhaps not surprising that the wreck was yet to be dived or identified prior to our expedition. The closest Scottish port, Stranraer, had no dive centre or dive boat charter business. The general depth of chart datum in the area is over 100m with trenches going as deep as 200m. And the North Channel is known for challenging visibility and tides even by British standards.

The aims of the *HMS Bayano* project in 2025 were three-fold, namely:

- 1) To dive and identify the wreck of *HMS Bayano*;
- 2) To better understand the ship’s design, loss and her condition today; and
- 3) To commemorate the sailors who lost their lives in the 11 March 1915 action.

¹ *Daily Sketch*, 15 March 1915.

² Moir and Crawford, *Clyde Shipwrecks*, 2004, page 126.

Overview of British armed merchant cruisers (“AMCs”) in the First World War

At the start of the First World War, the operational demands placed on the British Royal Navy quickly exceeded the capacity of its dedicated warship fleet. While the Royal Navy was then the largest naval force in the world in terms of capital ships, it faced a critical shortage of cruisers. These cruisers were essential for safeguarding global shipping lanes, protecting convoys, and enforcing the naval blockade against Germany. To address this gap, the Royal Navy converted merchant ships into warships - Armed Merchant Cruisers (“AMCs”) - as a rapid, temporary solution that became an indispensable part of the war effort.³

The role of the AMCs was multifaceted, reflecting the extreme strain on Royal Navy resources. They were deployed as “watchful eyes” in the cold, distant waters north of Britain, where they patrolled for German surface raiders trying to break into the North Atlantic. These auxiliary vessels also substituted for purpose-built cruisers and escorts, which were otherwise engaged in fleet operations or committed to more high-risk zones. By using AMCs in this way, the Royal Navy was able to keep its dedicated warships focused on the most critical areas of engagement, such as direct confrontations with the enemy fleet.

The scale of this strategic reallocation was immense. By the end of 1916, the British military had requisitioned approximately 8.5 million tons of merchant shipping for war purposes. AMCs were just one part of this broader effort to convert civilian vessels into warships. Other merchant ships were converted for uses such as troop transport, hospital ships, and supply vessels. The shift from peacetime commerce to wartime military service was a defining feature of Britain’s total war strategy.

AMCs were tasked with enforcing the Allied economic blockade against Germany, a strategy aimed at crippling the enemy’s war effort through the denial of essential supplies. The majority of AMCs, including *HMS Bayano*, were assigned to the 10th Cruiser Squadron, which operated the Northern Patrol.⁴ This squadron was responsible for monitoring trade routes and preventing German access to the seas north of Great Britain. The blockade, maintained from 1914 to 1919, became one of the war’s most significant and complex operations.

More widely, the AMC program highlighted the importance of adaptability and resourcefulness in wartime, demonstrating how civilian assets could be quickly mobilized to support military objectives. In many respects, the AMCs were emblematic of Britain’s innovative use of its mercantile resources to meet the demands of total war.

“AMCs were tasked with enforcing the Allied economic blockade against Germany, a strategy aimed at crippling the enemy’s war effort through the denial of essential supplies.”

³ Osborne, Spong & Grover, *Armed Merchant Cruisers 1878-1945*, page 57.

⁴ Osborne, Spong & Grover, *Armed Merchant Cruisers 1878-1945*, page 50.

Figure 1: HMS Bayano, Courtesy of www.ScottishShipwrecks.com



HMS Bayano: her design, construction and early service record

Before the outbreak of war, *SS Bayano* started life as a twin-screw, twin-masted, steel-hulled, schooner-rigged steamship used as a commercial refrigerated cargo carrier. She was built in Glasgow by Alexander Stephen & Sons and launched on 19 April 1913. Key aspects of her design included:

- ▶ **Displacement:** 5948 gross register tonnes, 3400 net tonnes⁵
- ▶ **Dimensions:** 126.9m / 416.6ft x 16.2m / 53.2ft x 9.1m / 30.1ft⁵
- ▶ **Stern:** Elliptical
- ▶ **Decks:** Four⁶
- ▶ **Masts:** Two⁶
- ▶ **Bulkheads:** Five
- ▶ **Propulsion:** Twin-screw; 2-shafts; two reciprocating triple-expansion engines; Four boilers⁶
- ▶ **Anchor equipment:** 2 x kedge anchors (one either side of the bow).

Originally, the Elders & Fyffes Line commissioned her as a so-called “banana boat”⁷: these vessels were designed to transport perishable fruit in insulated holds, making relatively fast and regular runs from tropical plantations in the southern hemisphere to markets in the north.

Following the outbreak of war, on 21 November 1914, the vessel was requisitioned by the Royal Navy for wartime service, receiving the designation *HMS Bayano* and the pendant number M78. The conversion process at Avonmouth, typical of the rapid, ad hoc measures adopted during the early months of the conflict, involved only minimal alterations to her original civilian design, including retaining her original merchant hull.

As part of her conversion to an AMC, she was fitted with an armament of 6 x Mark 1 QF 6-inch central pivot naval guns, plus 2 x 3-pounder guns.⁵ The 6-inch gun was considered the natural gun, because it was the largest gun whose shell could be handled by a single man, hence the largest which did not require a powered hoist and elaborate loading arrangements.⁸

However, *HMS Bayano*’s fundamental design, optimized for speed and refrigerated cargo rather than combat, proved fatal. Civilian merchant hulls lacked the robust, subdivided compartmentalization and internal armour essential for surviving battle damage.³ The ship’s structural layout, engineered for commercial efficiency rather than military resilience, meant that when struck by a torpedo, catastrophic flooding rapidly compromised her stability. This explains the vessel’s swift sinking and the heavy loss of life among her crew.³

Critically, on 23 February 1915, less than 1 month before *HMS Bayano* sank, the Rear Admiral commanding the 10th Cruiser Squadron in which *HMS Bayano* served

⁵ Armaments are confirmed in ADM 186/196 (*Quarterly appropriation list of gun mountings for breech-loading quick firing and machine guns, Nov 1914*), pages 26 and 109, and ADM 186/864 (*List of His Majesty’s Ships, 1 October 1914*) page 65. The references in secondary textbooks suggesting that 2 x 6” guns were fitted to *HMS Bayano* (Osborne, Spong & Grover, page 96; Conways, page 101; Dittmar & Colledge, page 119) are not supported by the Admiralty documents.

⁶ BT 110/250 – Registry of Shipping and Seamen: Transcripts and Transactions.

⁷ Williams – *Wartime Disasters at Sea*, page 19.

⁸ Friedman – *British Cruisers*, page 19.

“As part of her conversion to an AMC, she was fitted with an armament of 6 x Mark 1 QF 6-inch central pivot naval guns, plus 2 x 3-pounder guns.”

commented that *HMS Bayano, Patia, Patuca, Motagua, Changuinola* were “very good indeed, and very economical steamers, but they have a weak point structurally, viz: the two large holds have no sub division, being only two large tanks, and the flooding of either would be sufficient to sink the ship.”⁹

Upon commissioning, *HMS Bayano* was immediately assigned to the 10th Cruiser Squadron. This was the operational unit tasked with enforcing the Northern Patrol. The squadron’s primary responsibility was to enforce the Allied blockade, preventing enemy trade from utilizing the seas north of Great Britain. Specifically, the squadron was charged with intercepting merchant vessels traveling between Shetland and Norway, later extended to include the Faeroes, Iceland, and the Denmark Strait.

According to the Royal Navy’s own report to Parliament, 17 British AMCs were sunk in the First World War: 1 in 1914 (*Oceanic*), 4 in 1915 (*Viknor, Clan MacNaughton, Bayano* and *India*), 1 in 1916 (*Alcantara*), 6 in 1917 (*Laurentic, Hilary, Avenger, Otway, Champagne* and *Orama*), and 5 in 1918 (*Calgarian, Moldavia, Patia, Marmora* and *Otranto*)¹⁰: see table below. *HMS Bayano* remains the only British AMC from the First World War sunk in the North Channel with an armament of 6" (152mm) guns. No other British AMC from the First World War was sunk in the North Channel with this type of armament.

	Ship	Loss Location	Armament
1	Alcantara	Sunk Norwegian coast by SMS Greif	8 x 6" + 2 x 6-pdr guns
2	Avenger	Sunk 80 miles west of the Shetland islands by U-69	8 x 6" + 2 x 6-pdr guns
3	Bayano	Sunk off Corsewall Point, Stranraer by U-27	6 x 6" + 2 x 3-pdr guns
4	Calgarian	Sunk off Rathlin Island by U-19	8 x 6" guns
5	Champagne	Sunk off Dundrum Bay, Ireland by U-96	6 x 6" + 2 x 6-pdr guns
6	Clan MacNaughton	Lost in action/ Heavy Weather North Atlantic	8 x 4.7" guns
7	Hilary	Sunk 60 miles west of the Shetland Islands by U-88	6 x 6" + 2 x 6-pdr guns
8	India	Sunk off the island of Helligvaer, Norway by U-22	6 x 6" guns
9	Laurentic	Sunk 2 miles North East from Fanad Head, Ireland	8 x 6" + 2 x 6-pdr guns
10	Marmora	Sunk of the south coast of Ireland by UB-64	8 x 6" guns
11	Moldavia	Sunk off Beachy Head by UB-57	8 x 6" + 2 x 6-pdr guns
12	Orama	Sunk south of Ireland by U-62	8 x 6" guns
13	Oceanic	Grounded off Foula Island, Shetland	8 x 4.7" guns
14	Otranto	Sunk off Islay after a collision with Kashmir	8 x 6" guns
15	Otway	Sunk Near Rona, North Minch by UC-49	8 x 6" + 2 x 6-pdr guns
16	Patia	Sunk in the Bristol Channel by UC-49	6 x 6" + 2 x 3-pdr guns

⁹ ADM 137.1081 – letter from Rear Admiral dated 23 February 1915.

¹⁰ His Majesty’s Stationery Office (HMSO), *Navy Losses*, 1919, pages 1-7.

“HMS Bayano remains the only British AMC from the First World War sunk in the North Channel with an armament of 6” (152mm) guns.”

17	Viknor	Sunk off Northern Ireland whilst enroute to coal	8 x 4.7" + 2 x 3-pdr guns
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U-27: her design, construction and early service record

U-27 was part of the Type U-27 class of ocean-going submarines constructed at the Kaiserliche Werft Danzig shipyard. Launched on 14 July 1913 and commissioned on 8 May 1914 under Kapitänleutnant Bernd Wegener, the vessel represented a crucial technological step toward Germany's ocean-capable U-boat fleet. Displacing 685 tons surfaced and 878 tons submerged, U-27 measured 64.7 metres in length with a beam of 6.3 metres and draught of 3.7 metres. Propulsion was provided by two diesel and two electric motors, producing surface speeds of 16.7 knots and submerged speeds up to 9.8 knots. Her armament, four 50 cm torpedo tubes and one 8.8 cm deck gun reflected the emerging doctrine of submarine warfare as both strategic and offensive.

Following her commissioning, U-27 was assigned to the IV U-boat Flotilla, operating in the North Sea and North Atlantic. At the outset of the First World War, the Royal Navy imposed a strict maritime blockade on Germany, forcing the Imperial Navy to respond through asymmetric means. Submarines became Germany's principal weapon against British maritime superiority. U-27 achieved early distinction on 18 October 1914 when she sank the British submarine *HMS E3* near Borkum, marking the first instance of a submerged submarine sinking another, an unprecedented tactical success.¹¹

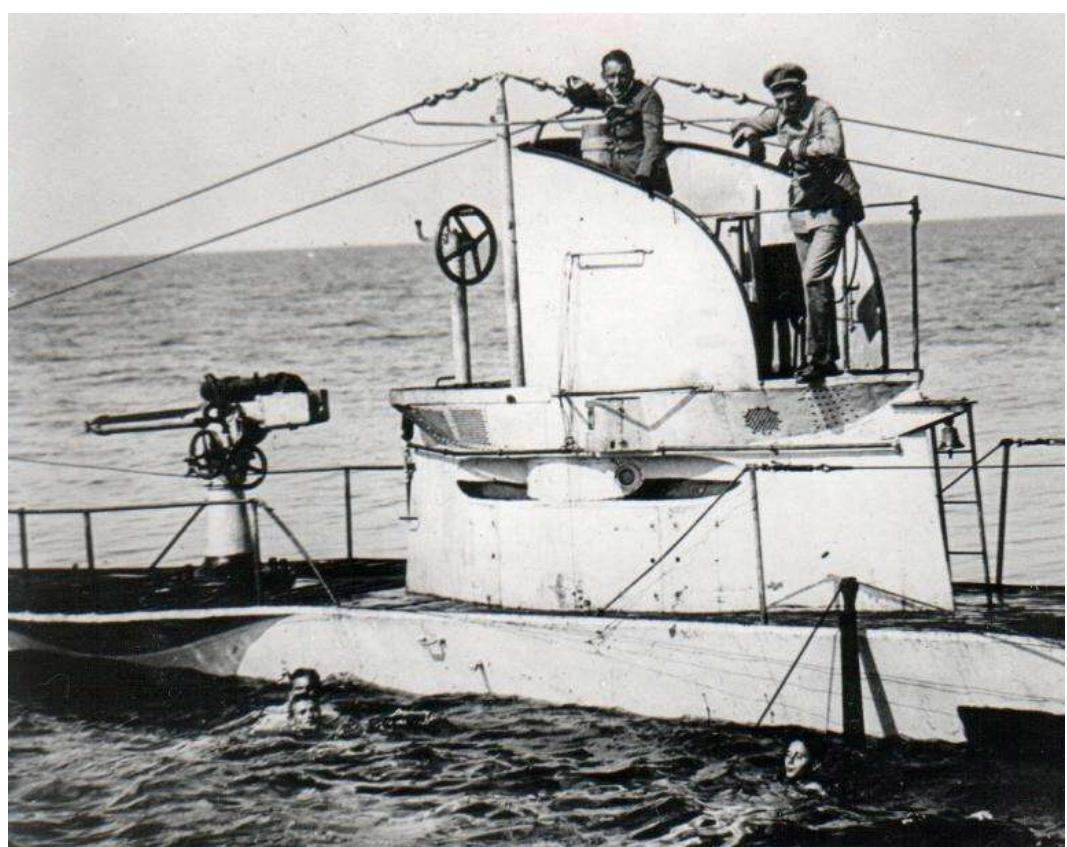


Figure 2: U-27 with crew during surface operations, 1915. The deck gun (8.8 cm SK L/30) and partially open conning tower are visible. Source: Deutsches U-Boot-Museum, Cuxhaven-Altenbruch.

¹¹ Gray – *The U-Boat War, 1914–1918*, 1994; Halpern – *A Naval History of World War I*, 1995.

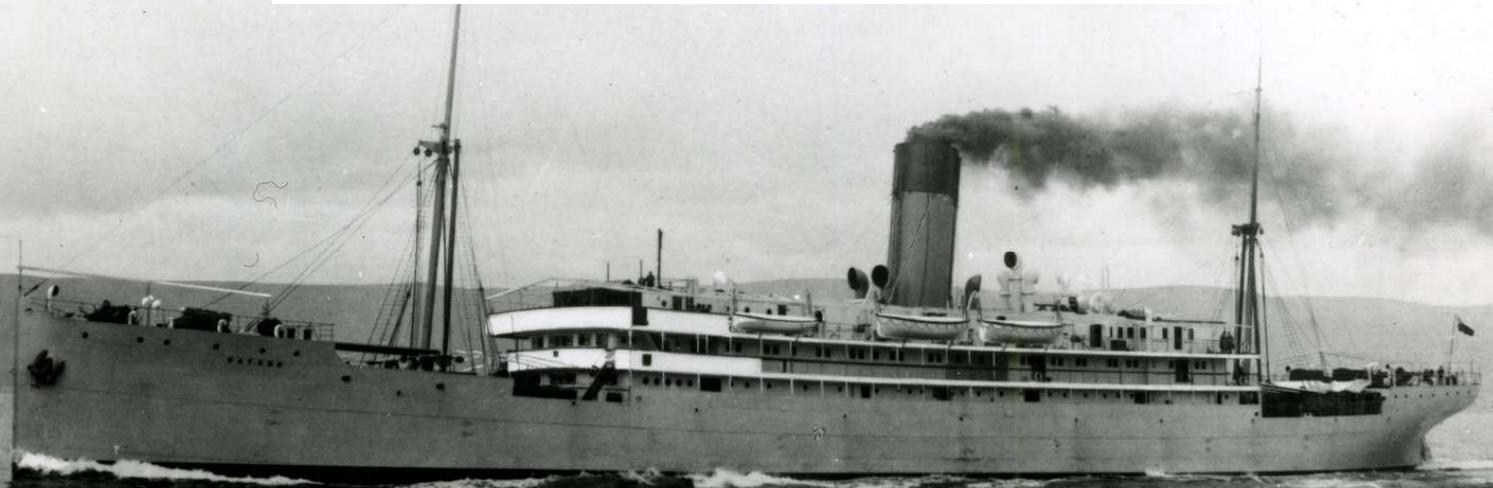


Figure 3: *U-27* moored alongside a supply ship, circa mid-1915. The image emphasizes logistical interdependence between frontline U-boats and naval support vessels during Germany's North Sea and Atlantic operations. Source: Imperial German Navy Archives, Public Domain.



Figure 4: *U-27* underway in the Adriatic, circa early 1915. The photograph illustrates the vessel's Type U-27 configuration, showing her streamlined hull and conning tower design typical of Imperial German Navy engineering of the period. Source: Deutsches Bundesarchiv, Public Domain.

“...there was absolutely no panic, and until the vessel was engulfed, not a man left the ship.” -The Western Times, 15 March 1915



HMS Bayano: her role in the 11 March 1915 action

On 11 March 1915, *HMS Bayano* was on route from Glasgow to Liverpool to refuel under the command of Captain Henry Carr. This journey was a necessary part of maintaining the ship's operational status, ensuring she could continue her patrol duties enforcing the naval blockade against Germany.

The early morning hours of 11 March found *HMS Bayano* navigating the North Channel, the strait between Scotland and Northern Ireland. This was a strategically important waterway, heavily trafficked by merchant vessels and naval ships moving between the Irish Sea and the Atlantic.

Captain Carr, demonstrating prudent seamanship, had reduced the ship's speed to avoid passing the experimental submarine indicator nets in the dark. The Admiralty had established one of these nets in the North Channel as part of its efforts to counter the growing German submarine threat. These indicator nets were a new anti-submarine measure being tested by the Admiralty, which were designed to wrap around the vessel and indicate its presence via a buoy being pulled along the surface.

As *HMS Bayano* proceeded cautiously through the North Channel in the pre-dawn darkness, she was unaware that German submarine *U-27*, under the command of Kapitänleutnant Bernd Wegener, had positioned herself nearby. Wegener had stationed *U-27* a few miles off Corsewall Point at the entrance to Loch Ryan, a location that provided an excellent vantage point for intercepting shipping.

The reduced speed of *HMS Bayano*, while a prudent measure for navigating near the indicator nets, unfortunately made her a more vulnerable target for submarine attack. Additionally, the early hour approximately 5:15 am, meant that most of the crew was still asleep, further reducing the ship's readiness to respond to a sudden attack.

HMS Bayano's role that morning was representative of the broader function of armed merchant cruisers in the First World War. These vessels, despite their armament, were primarily engaged in patrol and blockade enforcement rather than direct combat operations. Their presence in strategic waterways served as a deterrent to blockade runners and provided a means of inspecting neutral shipping to prevent contraband from reaching Germany.

The ship's journey from Glasgow to Liverpool also highlights the logistical challenges faced by the Royal Navy in maintaining its expanded wartime fleet. Armed merchant cruisers like *HMS Bayano* required regular refueling and resupply, necessitating movements between ports that could expose them to enemy action. In this case, what should have been a routine transit between two friendly ports would become *HMS Bayano*'s final voyage.

"I was one of the last to speak to the captain, who was absolutely the finest gentleman I ever served under."

HMS Bayano: the circumstances of her loss and rescue of survivors

At 5:15 am on 11 March 1915, *U-27* launched her attack. The submarine had positioned herself about 10 nautical miles west of Corsewall Lighthouse, a strategic location that allowed her to intercept shipping in the North Channel. Kapitänleutnant Wegener, having spotted the armed merchant cruiser, maneuvered *U-27* into an attack position and fired a single torpedo from his bow tube.

The torpedo struck *HMS Bayano* forward of the bridge with devastating effect. The armed merchant cruiser, with her limited armor protection and compartmentalization compared to purpose-built warships, proved highly vulnerable to submarine attack. The ship began to sink immediately, and with alarming speed.

The rapidity of the sinking was one of the most tragic aspects of the incident. According to accounts, *HMS Bayano* sank in just three or four minutes after being torpedoed. This left precious little time for the crew to abandon ship, particularly given that most were asleep at the time of the attack. Additionally, the doors of the cabin jammed, trapping those inside.¹²

"I can hardly realise I'm not dead," said Johnny Caulfield, the 20-year-old Naval Volunteer Reservist who was on look-out duty. *"I was on look-out duty under the bridge at the time, when there was a fearful crash, then a pause, and then another crash, following by a loud, roaring noise. Almost instantly the gun on the forecastle went over the side. I at once went to the mess room and called "All hands" and then made for the bridge deck, where I began to get out and distribute the lifebelts."*¹³

According to the telegraphist, John Taylor, *"I was in bed at the time when the Bayano was torpedoed. On hearing the terrific noise of the explosion, I made a scramble for the boat-deck, and when I reached it I found the vessel settling down. It was all over, so far as the vessel and the majority of the crew were concerned, in three or four minutes. An effort was made to get boats launched, but there was no time. If the vessel had not gone down so quickly, I believe all aboard would have been saved ... I was one of the last to speak to the captain, who was absolutely the finest gentleman I ever served under. I deplore his loss exceedingly. I was on the boat-deck when I last spoke to the captain, who said 'Make for the boat, as it is your only chance.' At that time the vessel was under water The vessel went down stern uppermost, and during this time I must have been struck by one of the masts, for I found myself going under water and was in the sea half-an-hour, perhaps, before I could clutch at something."*¹⁴

"The last I saw of Commander Carr, he was standing on the bridge, cool and smiling, and he waved good-bye to the men in the boats and shouted 'Good luck to you boys'."

¹² *The Western Times*, Monday 15 March 1915.

¹³ *Daily Sketch*, 15 March 1915.

¹⁴ *Evening Star*, 15 March 1915.

According to the Royal Marine, Arthur Craze: “*We got clear, and were about 18 miles north-west of Ailsa Craig rock when we were struck...I said to the boys, 'That's a bullseye,' as I heard the crash of the explosion. I was asleep in the State apartments on the promenade deck, and we all rushed on deck as quickly as we could. As I turned out I put on my trousers and a serge [uniform]. I went on to the hurricane deck, above the upper deck, and we tried hard to get the boats out, but the ship was going down by the bows so fast that we could not manage it. The captain was on the deck near us, having walked from the bridge, and I heard him say to some of those near me, 'Good lad, save yourself.' He tapped several on the shoulders and said 'Look after yourselves, boys.' The torpedo hit us directly under the bridge on the starboard side, and the fore part of the ship seemed to be blown up. Those below could have had no chance, and must have been drowned like rats in a trap, for the water was rushing in with a fearful roar. I could never have believed that under such circumstances everything could have been so very orderly and quiet. Men were moving about as unconcerned as if nothing had happened and they were just doing their ordinary duty. I remained until the sea took me away from the ship. The biggest part of her was down by the bows. I can remember quite plainly the sea coming right over me and covering me up. I pushed out with my legs, swimming on my back. The life-collar, we call them Zeppelins, was in my pocket deflated, but I did not trouble about that, as I am a very strong swimmer. The last thing I saw of the ship was the propellers up in the air, perfectly still.*”¹⁵

In these desperate moments, acts of heroism and dignity were displayed by the ship’s officers and crew. Johnny Caulfield, the 20-year-old Naval Volunteer Reservist, “*rushed below to rouse the men, and returning to distribute lifebelts, he met Captain Carr. "Good lad, now save yourself", were the captain's fatherly words as his ship sank.*”¹⁶ Johnny Caulfield said: “*I was the last one to see Captain Carr. Noticing me busy with the lifebelts, he came over to me and patted me on the back, saying: 'Good lad! Good lad! Now look after yourself.' With a little smile to all round him he went forward, after shaking hands with some of us.*”¹⁷ It seems Captain Henry Carr himself remained on the bridge until the end. In a poignant account provided by Lieutenant Commander Guy, one of the survivors, Captain Carr was described standing on the bridge without fear, waving goodbye while shouting “*Good luck to you boys*” before the ship disappeared beneath the waves.¹⁸ Additionally, the telegraphist, John Taylor, said that “*the wireless operator, [Walter] Lloyd, remained at this post till the last and went down as he was giving the SOS message.*”¹⁹

The tremendous suction caused by the huge ship sinking dragged down many of the unfortunate seamen who had jumped into the sea.²⁰ According to Johnny Caulfield, “*I just managed to crawl aft when the*

“*... the wireless operator, [Walter] Lloyd, remained at this post till the last and went down as he was giving the SOS message.*”

¹⁵ Hampshire Telegraph, 19 March 1915.

¹⁶ Daily Sketch, 15 March 1915.

¹⁷ Daily Sketch, 15 March 1915.

¹⁸ Barbados Agricultural Reporter, 16 March 1915.

¹⁹ Evening Star, 15 March 1915.

²⁰ Moir and Crawford, Clyde Shipwrecks, 2004, page 126.

ship went down, carrying me with it. As I went down I got 'fouled' by the funnels stay – which gave me a nasty cut on the head – and for a time could not move. At last somehow or another I became freed, and after going down, down, down for ever such a distance, was shot up like a bolt to the surface.”.²¹

The aftermath of the sinking left survivors struggling in the cold waters of the North Channel. According to John Taylor, “*The scene in the water in the early dawn was a heartrending one, but there was absolutely no panic. It was a scene that made me proud of being a Briton. The men faced death with calmness and fortitude. If the weather had been rough not one of us would have been saved.*”²² Able Seaman Arthur Lucas said: “*I was swimming for one-and-a-half hours, when I got to a boat lying bottom upwards, and shouted to some of my mates. We righted the boat, and dragged three more men aboard a few minutes later. One died almost immediately the exposure had been so terrible. The boat began to sink under our combined weight, and we had to rely on our lifebelts once more. We were up to our shoulders in the icy waters for a further two-and-a-half hours, when a raft sighted us, and the men on it came to our aid. They had lashed their oars to the raft with braces and pieces of clothing in the absence of row-locks. We were all more or less done up. We then made for another raft which had two officers and other survivors aboard, and waited until a ship should sight us. We tied some clothes to our oars and waved them to attract attention.*”²³

The rescue operations themselves were not without danger. The British collier *SS Castlereagh*, skippered by Captain McGarrick, was the first vessel on the scene. They attempted to search the area in the hope of saving any men who might still be alive, but were prevented by the appearance of an enemy submarine.²⁴ Captain McGarrick described the horrific scene that confronted him on arrival. He stated that the first they knew of anything wrong was “*when they steamed into a sea of corpses in lifebelts. They were all round the ship ... Meanwhile while I was watching on all sides. Suddenly a mile away I saw the dome of a submarine. Her body was awash, and she was coming rapidly towards me. I decided to run for it so as to show my stern. The submarine altered her course trying to get on my quarter. I then altered, too, and ran for the County Antrim coast, and after a minute's exciting chase the submarine dropped off.*”²⁵ This corroborates the account in *U-27*'s log that Kapitänleutnant Wegener remained in the area after the attack seeking additional targets.

Approximately four hours after the sinking, some survivors were picked up by the steamer *SS Balmarino*, skippered by Captain James Foster, which was on a passage from Belfast to Ayr. According to Captain Foster, “*We found a couple of rafts and a ship's boat upturned, with 24 men on them. Two of the men had no other clothing than shirts. Others*

“...We were up to our shoulders in the icy waters for a further two-and-a-half hours, when a raft sighted us, and the men on it came to our aid. They had lashed their oars to the raft with braces and pieces of clothing in the absence of row-locks.”

²¹ *Daily Sketch*, 15 March 1915.

²² *Evening Star*, 15 March 1915.

²³ *The Courier*, 2 April 1915.

²⁴ Hocking, *Dictionary of Disasters at Sea during the Age of Steam (1824-1962)*, page 74.

²⁵ *Montrose, Arbroath, and Brechin Review*, 19 March 1915.

had only their sleeping garments on. One had an ugly wound on the head, and was covered with blood, and nearly all of them had bruises, and were bleeding. They were more dead than alive from the wet and cold and exposure, but they cheered up as we came up to them. They were all fine fellows, and it would have touched you to see the condition they were in.”²⁶

The loss of life was significant. In total, only 27 men survived the sinking: 18 men were thought to have been rescued on the *SS Balmerino*, 8 men on *HMS Tara* and 1 man, the Royal Marine, Arthur Craze, was added in a later Admiralty message increasing the numbers of survivors on aboard the *SS Balmerino* to 19.²⁷ This represented a small fraction of the ship’s complement, highlighting the devastating nature of the attack. The attack provoked strong condemnation in Britain, where newspapers denounced it as an act of piracy. However, German naval doctrine at the time permitted attacks on AMCs as legitimate military targets. Strategically, the sinking underscored the vulnerability of Britain’s blockade patrols and heralded a new phase of unrestricted submarine warfare.

A key primary source for reconstructing the events of 11 March 1915 is *U-27*’s Kriegstagebuch (KTB, or war diary), maintained by Kapitänleutnant Wegener. This document provides first-hand operational data, weather conditions, manoeuvres, and target engagement parameters recorded on the morning of the attack. With thanks to project diver Steffen Scholz for the translation, the following excerpt of *U-27*’s KTB, translated from German, captures the tactical decision-making of the crew during the encounter with *HMS Bayano*:

“11 March 1915

Wind 2 (Beaufort), wave height 2, clear visibility light rain.

Stayed overnight at Lødingen, 03:50 to 5:00 am: Surfaced and commenced charging batteries. Numerous steamers sight; one bound for Glasgow. Large unlit merchant steamer – initially mistaken for a warship – held course. From the inner fjord approached in sight. Attack carried out. Bow torpedo hit steamer in forward third. Firing distance = 300 m. Size of steamer about 8,000 tons, unlit, nationality unknown. Steamer sank bow first in about 10 minutes. Three boats with torchlights observed. After firing, planned to proceed south to continue operations, but diverted to attack auxiliary cruiser.

07:40: Operating at depth. Set course toward Red Bay. Situation changed—Red Bay evacuated. Numerous fishing steamers (about forty) observed. Cargo steamer of about 5,000 tons escorted by two destroyers (300 m distance on each side). Attack aborted.” (Emphasis)

“The attack provoked strong condemnation in Britain, where newspapers denounced it as an act of piracy. However, German naval doctrine at the time permitted attacks on AMCs as legitimate military targets.”

²⁶ *Western Times*, 15 March 1915

²⁷ *Staffordshire Sentinel and Leeds Mercury*, 13 March 1915.

British Account For 10,000 Germans In Three Days.—Official.

DAILY SKETCH.

GUARANTEED DAILY NETT SALE MORE THAN 1,000,000 COPIES.

No. 1,876.

LONDON, MONDAY, MARCH 15, 1915.

[Registered as a Newspaper.] ONE HALFPENNY.

THE LONDON BOY HERO OF THE TORPEDOED LINER.



The survivors of the Bayano as they landed at Ayr. One still wears his life-saving collar.



Johnny Caulfield thought first of his messmates when the ship was struck. It was the proudest moment of his life when the captain said, "Good lad!"



In borrowed clothes, but very cheerful. They were lucky to escape death.

Johnny Caulfield, a 20-year-old Naval Volunteer Reservist, was one of the heroes of the auxiliary cruiser H.M.S. Bayano when she went down with 200 of her crew after being torpedoed. He was on look-out duty at the time. As soon as he heard the explosion he rushed below to rouse the men, and, returning to distribute lifebelts, he met Captain Carr. "Good lad; now save yourself," were the captain's fatherly words as his ship sank.



Caulfield with his cousin, who also is "doing his bit" for King and Country.

He was at Mons.

Rescued men glad to reach Glasgow. Inset: Captain Foster, their rescuer.

Captain Foster, their rescuer.
Rescued men glad to reach Glasgow. Inset: Captain Foster, their rescuer.

Figure 6 – Front page of *Daily Sketch*, 15 March 1915: the sinking of *HMS Bayano* was headline news in Britain.

**“Bow torpedo hit
steamer in forward
third. Firing distance
= 300m ... Steamer
sank bow first in
about 10 minutes.”**

1/3.15 W 2. Seeg. 2
klar bisweilen
350Vm diesig durch fei- Aufgetaucht zum Laden, zahlreiche
nen Regen. Dampfer laufen aus und ein nach
5h *Treff* Gissgov hin.

 $\varphi = 55^{\circ}5'N$
 $\lambda = 5^{\circ}23'5'AT$
 W.T. ~~ungef. 60m~~
 740Vm *Bayario*
 740Nm *(5948t)*
Progress

Figure 7: Extract from U-27's KTB for the 11 March 1915 mission (German Naval Archive, Kiel).

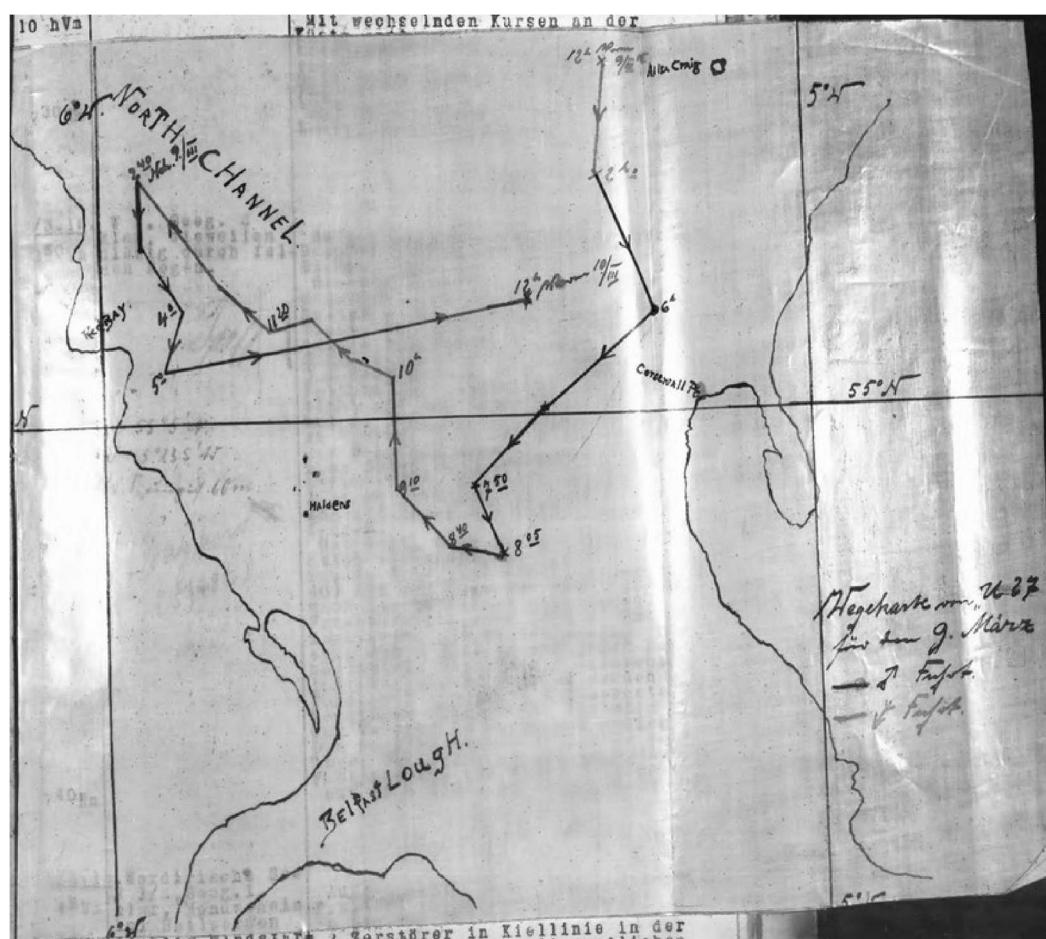


Figure 8: The navigational track record (“Wegekarten”) appended to U-27's KTB for the North Channel mission (German Naval Archive, Kiel).

Archival research from September 2025

From September 2025, the team researched the wreck and the circumstances of her loss. We visited the National Archives in Kew, London and the Glasgow City Archives in Scotland.

The research covered Admiralty records such as ships' logbooks, telegrams, charts, Imperial German Navy records including *U-27*'s war diary ('Kriegstagebücher' or 'KTB'), real-world data (hydrographic data and wreck databases), ship's plans for *HMS Bayano*, crew research, secondary texts, and online newspaper archives. A bibliography for further reading is included at the end of this report.

We uncovered numerous clues to the location of the wreck from the historical record:

- First, *U-27*'s KTBs gave the sinking position as 55° 05' N, 005° 23.5' W. This position was broadly consistent with the track of *U-27* sketched in the navigational track record ("Wegekarten"), appended to *U-27*'s KTB for the North Channel mission.
- Second, a survivor, Royal Marine Arthur Craze, told the *Portsmouth Evening News* that the ship was torpedoed 18 miles south-west of the Ailsa Craig rock [i.e. 55° 02.34593' N, 005° 28.73665' W].
- Third, newspaper archives stated where survivors were picked up. *The Western Times* of 15 March 1915 recorded: "The exact nautical position where they were picked up was 18 miles north-east by east from Blackhead [i.e. 55° 00.92475' N, 005° 23.95213' W], and eight miles west-south-west of Corsewall Point [i.e. 54° 57.45528' N, 005° 22.25784' W]."

We then identified bathymetric data that suggested a large object in the general area indicated by the historical record. All positions were plotted on charts in SonarWiz.

"We uncovered numerous clues to the location of the wreck from the historical record ... We then identified bathymetric data that suggested a large object in the general area indicated by the historical record."

LAST SCENES IN THE TORPEDOED BAYANO.

Calm Heroism of Commander and 200 Men as Ship Went Down.

STEP FROM CABIN INTO SEA.



Side scan sonar survey in October 2025

On 10 and 11 October 2025, 7 divers travelled from across the UK, Germany and Spain to identify and document *HMS Bayano*. The divers were equipped with GUE-configured JJ-CCR rebreathers and diver propulsion vehicles. Our boat *MV Aquaholics 5* moved from Ballycastle to Stranrear on 11 October.

We aligned on scanning first and diving second. We agreed to dive the Belfast HW slack at around 3pm as this had a longer window (even if the tide would start to run more suddenly once HW slack was over). The tide after LW slack was not as sudden to start running, but the LW slack had a shorter window.

On 12 October 2025, ProjectXplore divers, supported by skipper Richard Lafferty and crew Timmy Donaghy, loaded the dive charter *MV Aquaholics 5* at 8am and set sail from Stranraer at 9am to search for the wreck of *HMS Bayano*. The transit to the main search area was only about 20nm. After about 1.5 hours of transit, we were on site.

Key challenges for scanning were the general depth of the seabed in the search area (106m) requiring a following tide to allow the fish to run deeper, and the time constraints created by scanning and diving on the same day. However, on the plus side, the seabed was relatively even to help distinguish rock from wreckage. And we could make use of a strong tide running in line with the orientation of the wreck to help sink the fish.

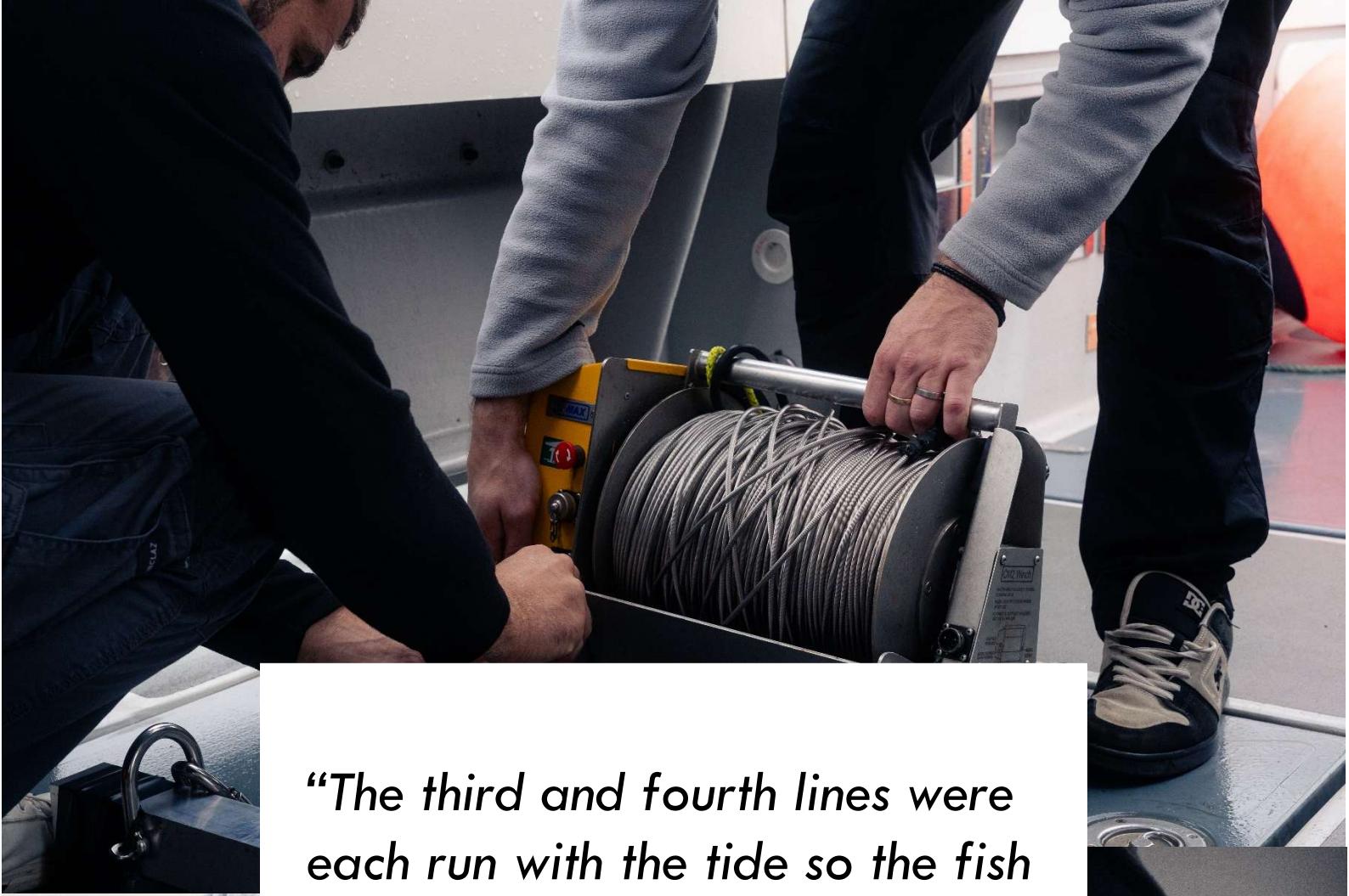
We carried out the initial search on medium frequency 325kHz, and spaced survey lines 50m from the presumed location of the wreck taken from our bathymetric data and the historical record.

Upon arrival, we ran four SSS survey lines that correlated to our bathymetric data:

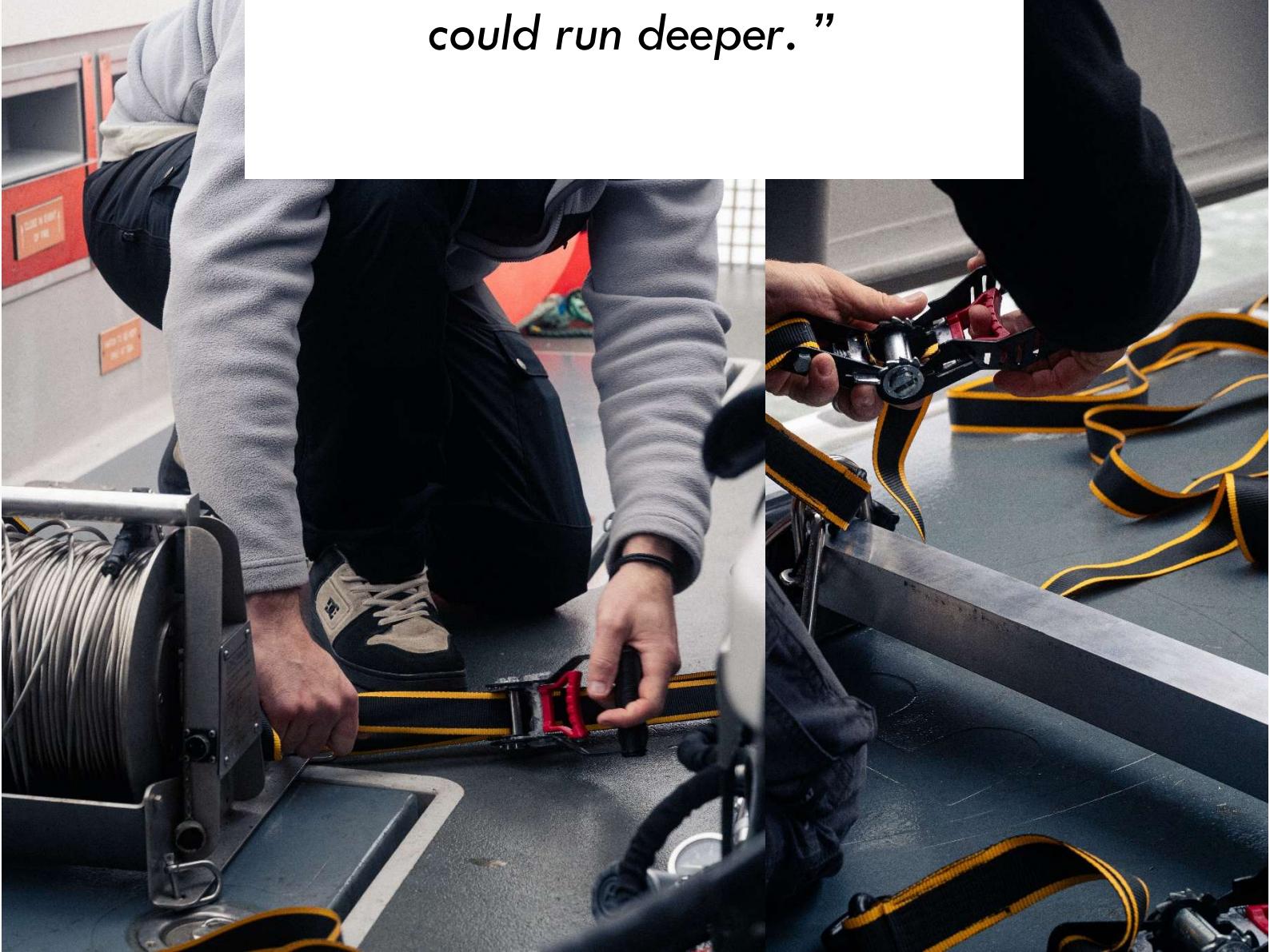
1. The first line was on the port side of the target. We were running into tide (fish running south to north; tide north to south), which meant the fish flew too high. Also, as the ship was heeling slightly to starboard away from the fish, we picked up an excessive return from the hull. The range was 200m and altitude 30m.
2. The second line was also on the port side, but running with the tide this time, which allowed the fish to run deeper. We also reduced the range. The range was 150m and fish altitude around 15-20m.
3. The third and fourth lines were each run with the tide so the fish could run deeper, but on the starboard side, which allowed us to pick up more of the superstructure. We also reduced the range. The range was 100m and fish altitude around 15m.

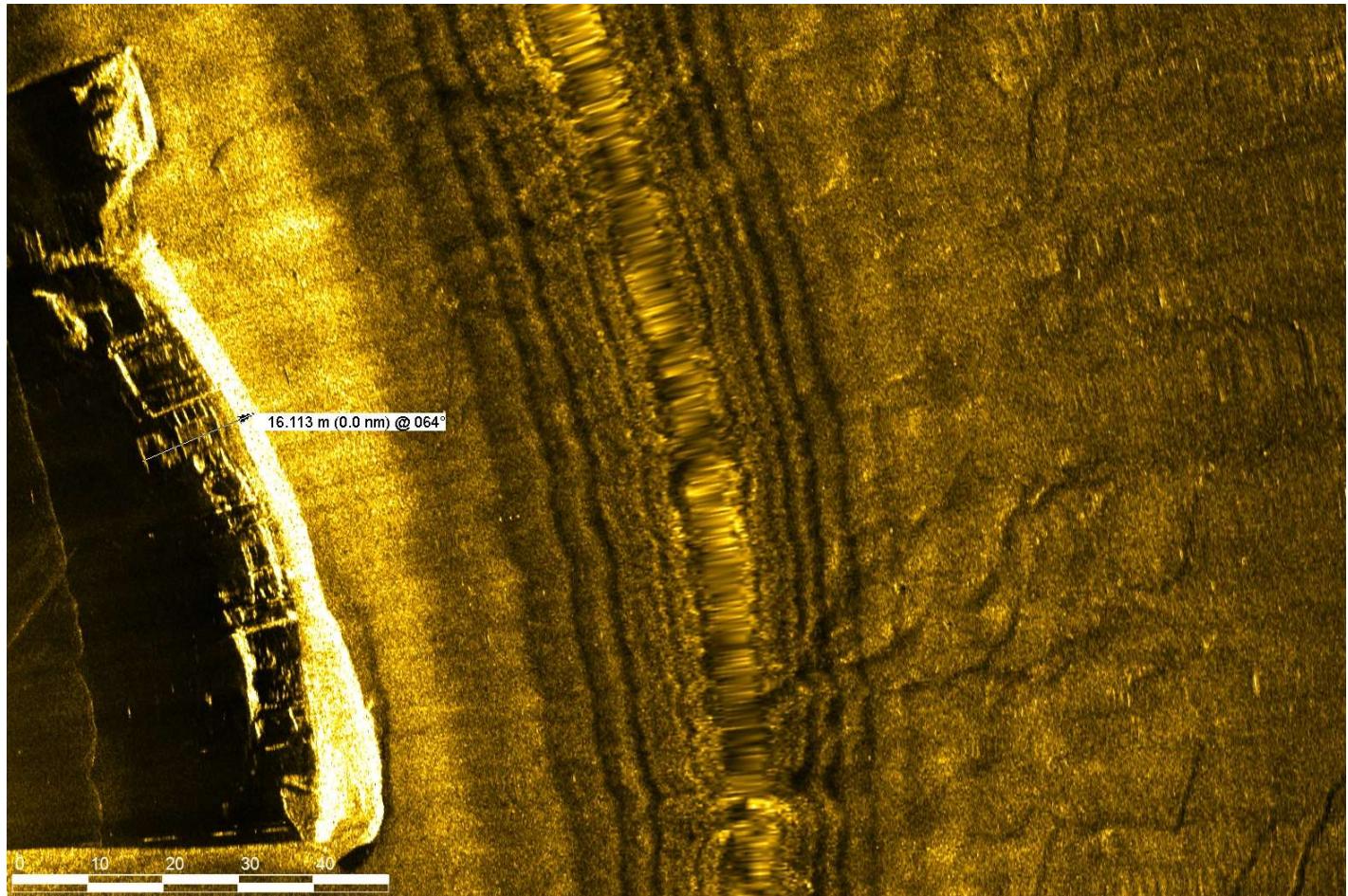
As with our expedition to discover *HMS Nottingham*, we used a C-MAX CM2 sonar, digital towfish, counting pulley, electric winch, transceiver, GPS receiver, laptop, external monitor and a 1kw portable power station.



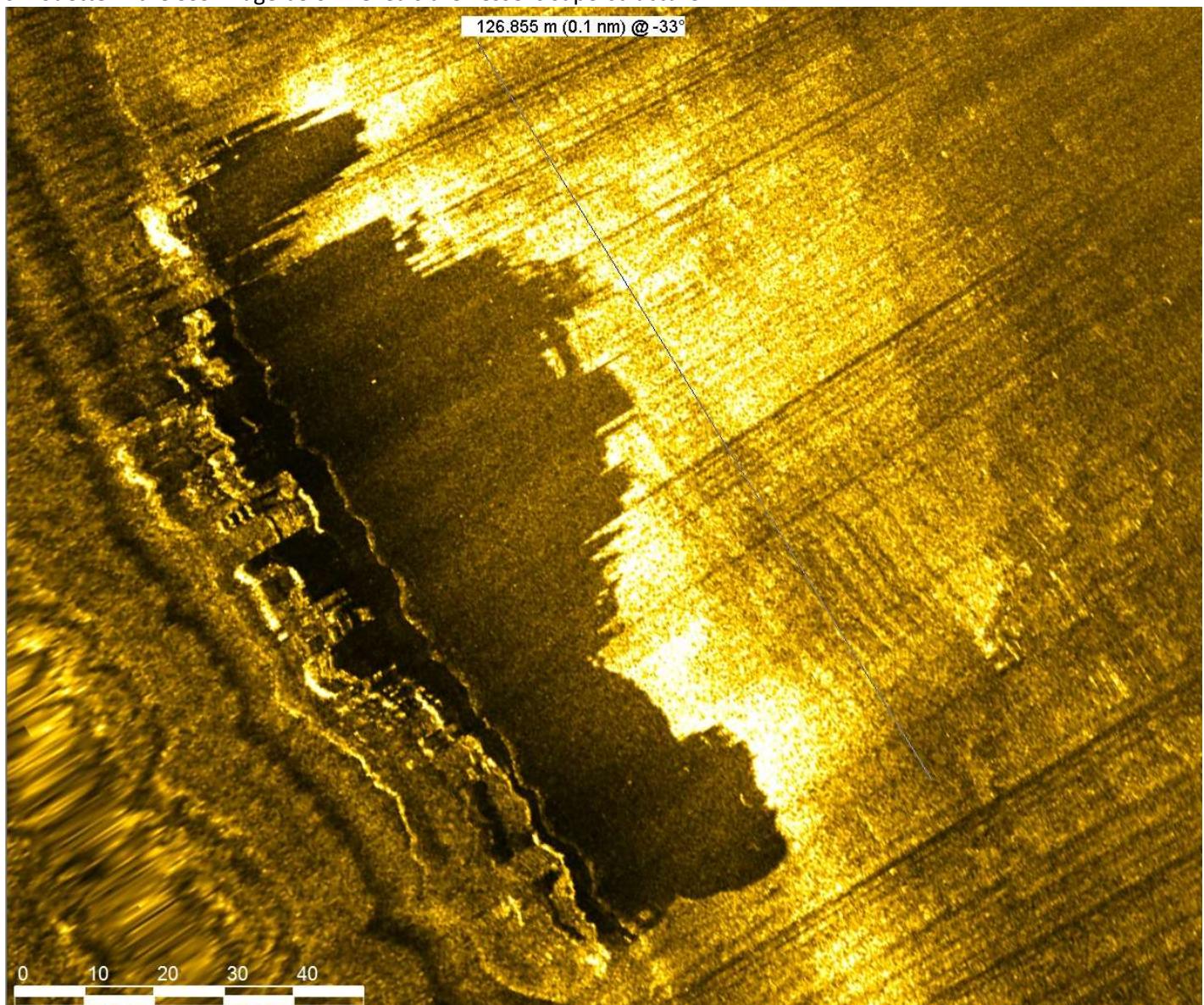


“The third and fourth lines were each run with the tide so the fish could run deeper. ”





Figures 9 and 10: SSS images with scale confirming the dimensions of *HMS Bayano*: 126m long and 16m beam. The silhouette in the SSS image below reveals the vessel's superstructure.



It was clear we had located a large shipwreck in 106m. Based on the measurements taken on the SSS, she matched the dimensions of *HMS Bayano*: 126m long and 16m beam. Her single funnel was located as expected.

There was a clear break forward of the bridge as expected. We also identified 2 x 6-inch guns with barrel length confirmed via SSS imagery to measure 6.3m as expected for a Mark 1 QF 6-inch central pivot naval gun.

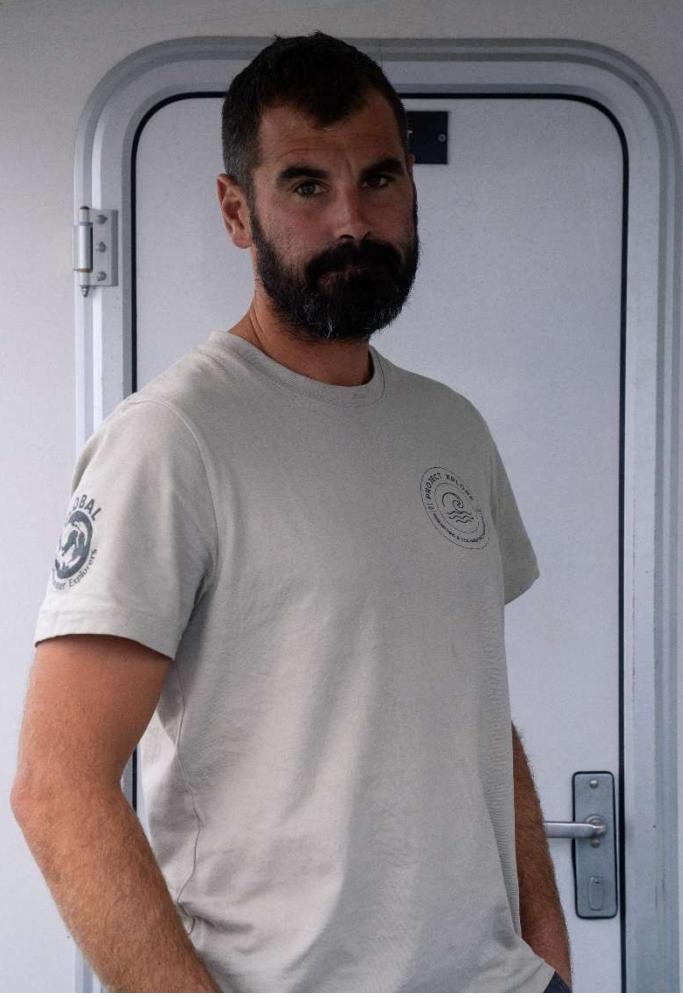
The wreck was located 1.7nm away from the position indicated by the Royal Marine, Private Arthur Craze, and 2.4nm from away from the position indicated by *U-27*'s KTBs, demonstrating the importance of analyzing the historical record and comparing it with bathymetric data.

We established the wreck was lying bow NNW / stern SSE and with a 20-degree list to starboard. At 12.30pm, with the afternoon drawing on, we decided to switch from sonar to diving. We packed away the SSS and made preparations to shot the wreck.

"We also identified 2 x 6-inch guns with barrel length confirmed via SSS imagery to measure 6.3m as expected for a Mark 1 QF 6-inch central pivot naval gun."



Figure 11: Left to right: Dan McMullen, Leo Fielding, Maya Luisa Yglesias and Joe Colls-Burnett on 12 October 2025, after the team on *MV Aquaholics 5* successfully located the wreck of *HMS Bayano*.



Documentation by ProjectXplore divers in October 2025

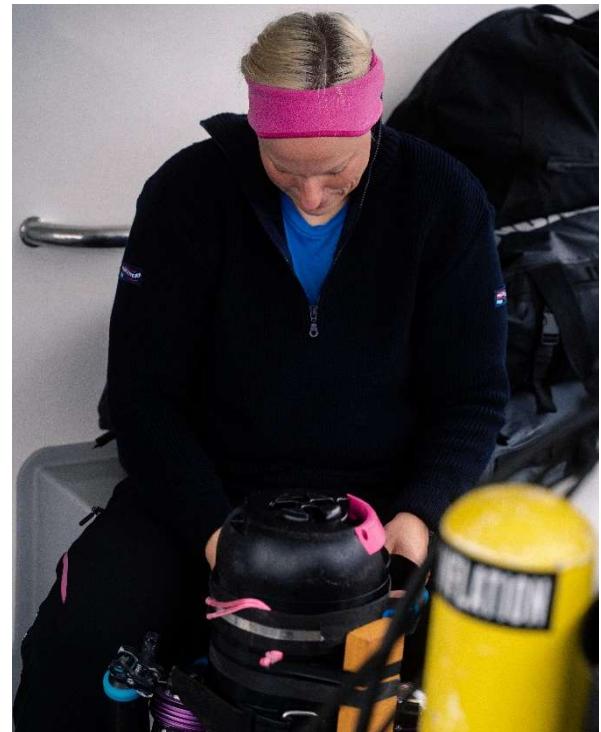
Objective. Our aim was to verify the identity of the wreck believed to be *HMS Bayano* through underwater observations and measurements conducted during two dives. The aim was to compare observed characteristics of the wreck against historical specifications of *HMS Bayano*, confirming its authenticity or highlighting any discrepancies. Particular attention was given to architectural and engineering features unique to *HMS Bayano*'s conversion from a civilian refrigerated cargo carrier to an AMC. We intended to evaluate both the conformity of the wreck to historical records, and the preservation of key structural components under deep-sea conditions.

Methodology. Two dives were conducted at the suspected wreck site using JJ-CCR closed-circuit rebreathers configured in Global Underwater Explorers (GUE) standard. This allowed for extended bottom times and safe decompression procedures at depth. Due to limited visibility and strong tidal flow typical for the highly dynamic North Channel region, measurement of the wreck's overall dimensions using direct tape or laser measurements was impractical. Instead, length and beam were determined using high-resolution sonar visualization (SonarWiz): see previous section. Photographic and video documentation supplemented the verification of armament placement, hull form, and superstructure elements.

Dive conditions. Visibility during both dives ranged between 2 and 5 metres. Suspended sediment reduced optical visibility but allowed sufficient sonar-based documentation. Ambient water temperature was measured at 14 °C. On the first dive, the tide was running gently southwards towards the stern and then swung north towards the bow later in the dive. The site's depth and low temperature have contributed to the excellent preservation of major structural components, particularly in the stern and machinery sections.

Observations during dive 1 – 12 October 2025. The main deck of the wreck lies at approximately 96 metres depth, with the seabed around 106 metres. The wreck rests in a bow-down orientation of approximately 12°, consistent with historical accounts describing a forward torpedo strike that caused the vessel to sink bow-first.

The first dive (two teams) focused on general wreck orientation and initial identification of armament positions. Two of the six gun positions were verified. We measured and photographed the internal diameter of the muzzle of the 6" (152 mm) guns, confirming the expected 6-inch Mark 1 QF calibre used aboard *HMS Bayano*.



“On 10 and 11 October 2025, 7 divers travelled from across the UK, Germany and Spain to identify and document *HMS Bayano*.”

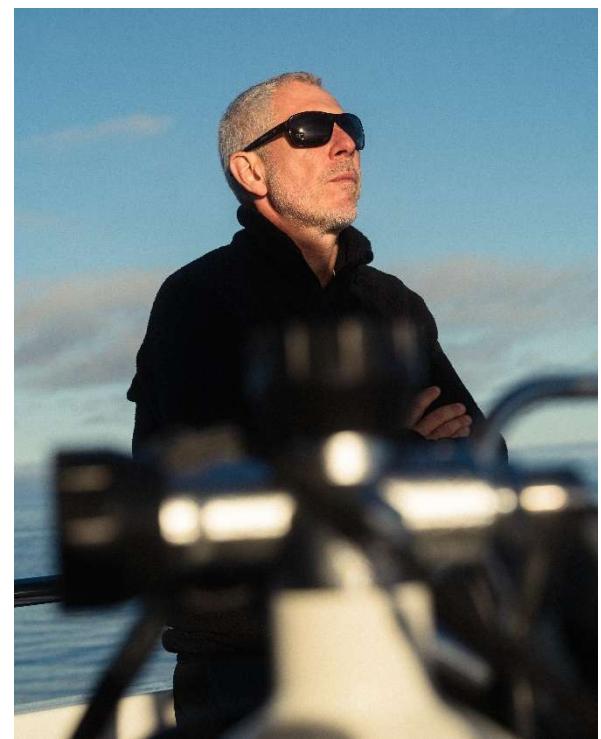
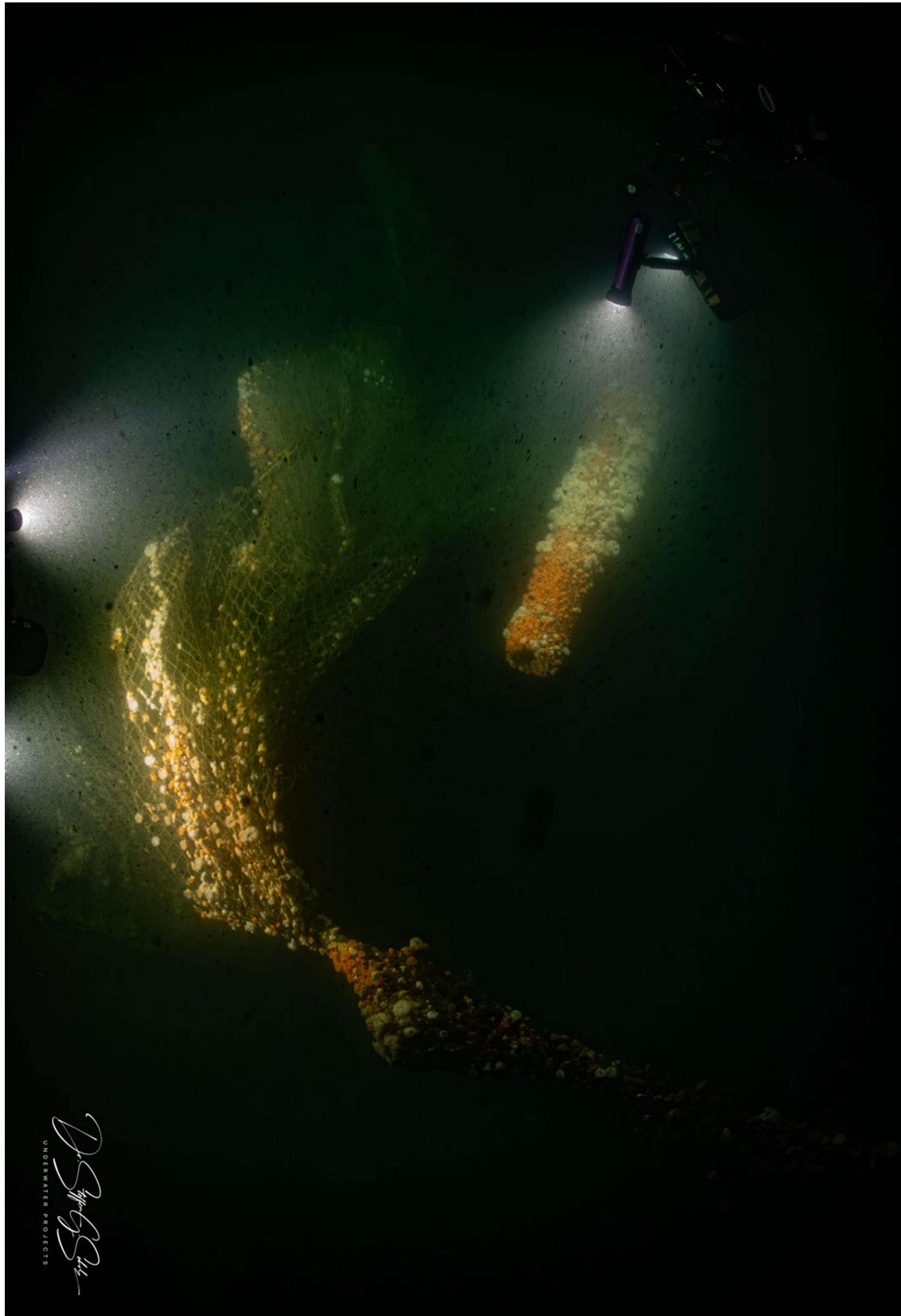
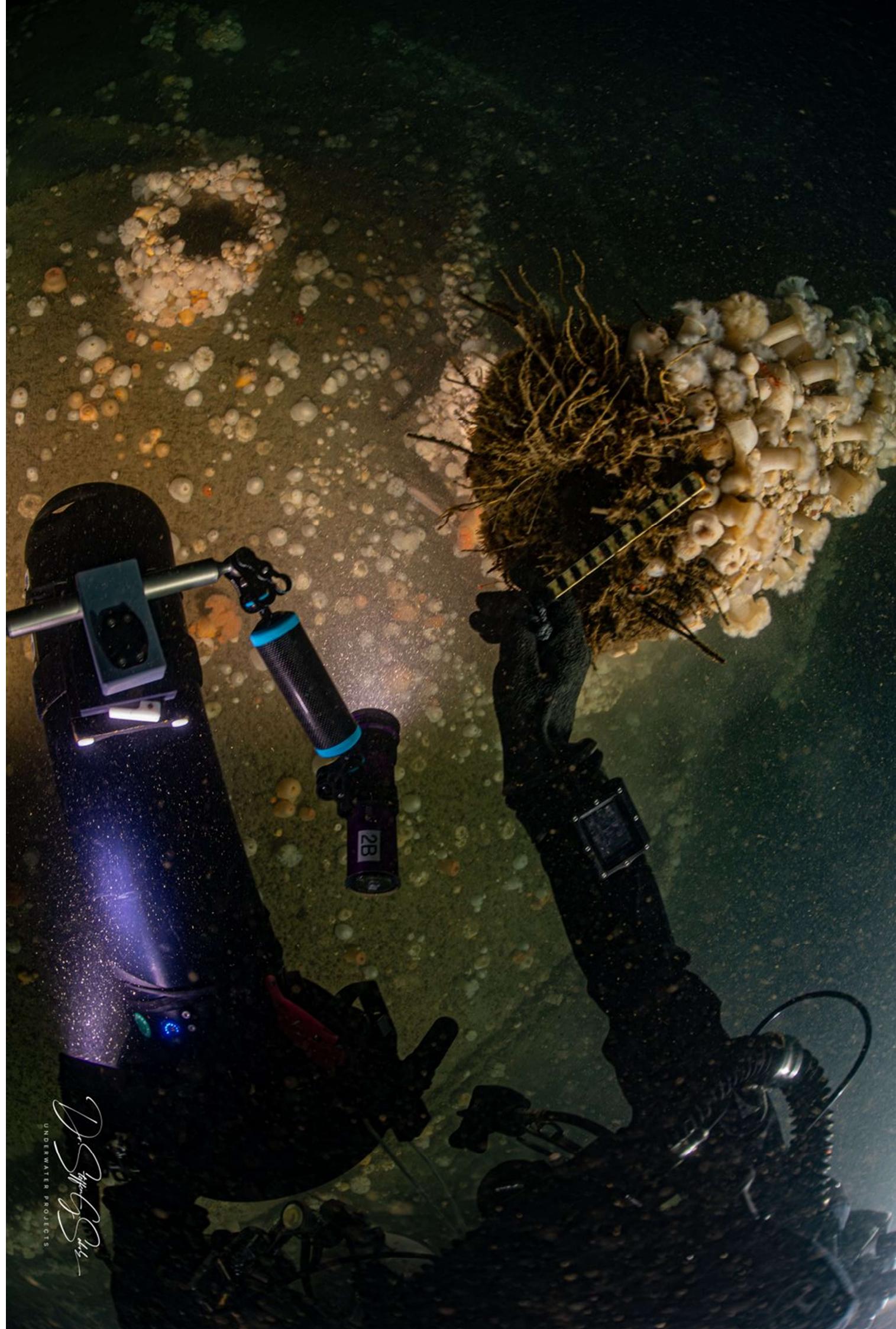


Figure 12: Barrel of the 6" gun on the bow, still offset on the starboard rail, as reported by Johnny Caulfield, the 20-year-old reservist who was on look-out duty.



D. J. Miller
UNDERWATER PROJECTS

Figure 13: Joe Colls-Burnett used a ruler to confirm the internal diameter of the muzzle of the 6" gun at the stern.



D. S. Colls-Burnett
UNDERWATER PROJECTS

Figure 14: Artillery shell casing recovered near the bow section.



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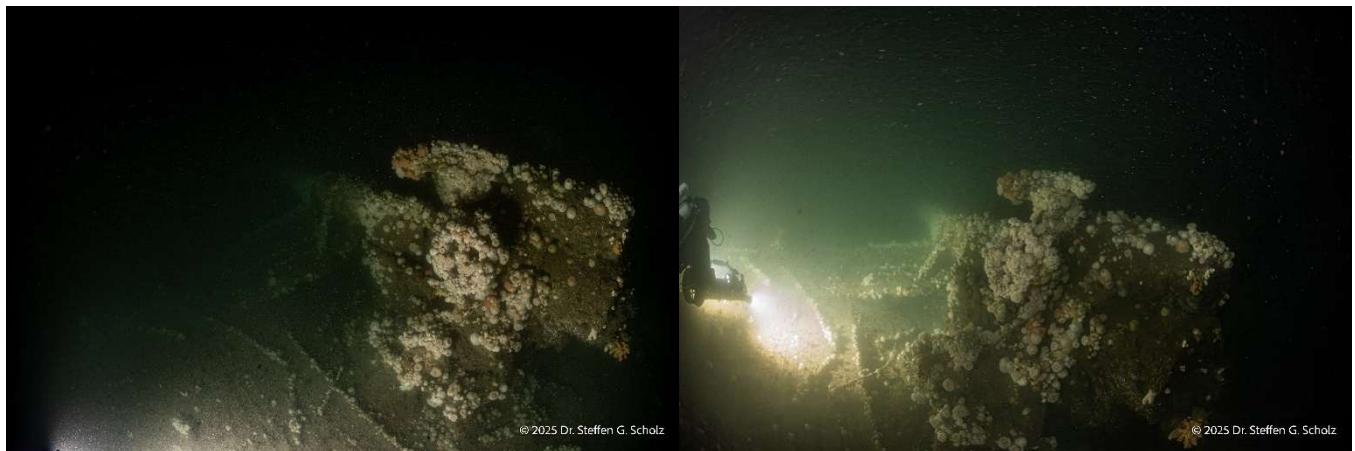


Figure 15: 6-inch Mark 1 QF central pivot naval gun mounted on the stern.

The well-preserved stern section showed the vessel's characteristic elliptical transom profile. The hull's steel construction, riveted seams, and framing pattern matched Elders & Fyffes merchant shipbuilding methods.



Figure 16: Stern section overgrown with soft corals, obscuring the ship's nameplate and finer hull details.



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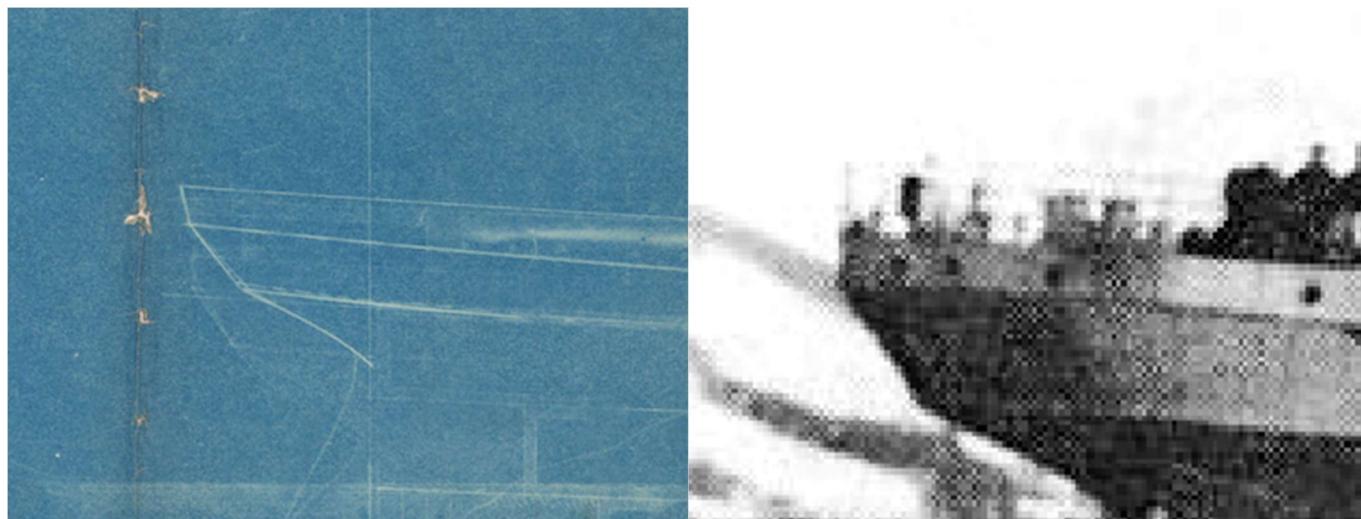


Figure 17: Distinctive elliptical stern transom profile, consistent with builder's plans.



Figure 18: Skylight structure adjacent to the aft cargo hold, part of the ship's original ventilation system.

Due to silt and low visibility, the propeller configuration could not be checked during the dive.

Observations during dive 2 – 13 October 2025.

The second dive focused on the central and aft sections, verifying structural details such as the bridge foundation, cargo holds, and refrigeration machinery.

Machinery consistent with early 20th-century refrigeration systems was identified, including insulated piping and compressor remnants, evidence of the ship's pre-war service as a fruit carrier.

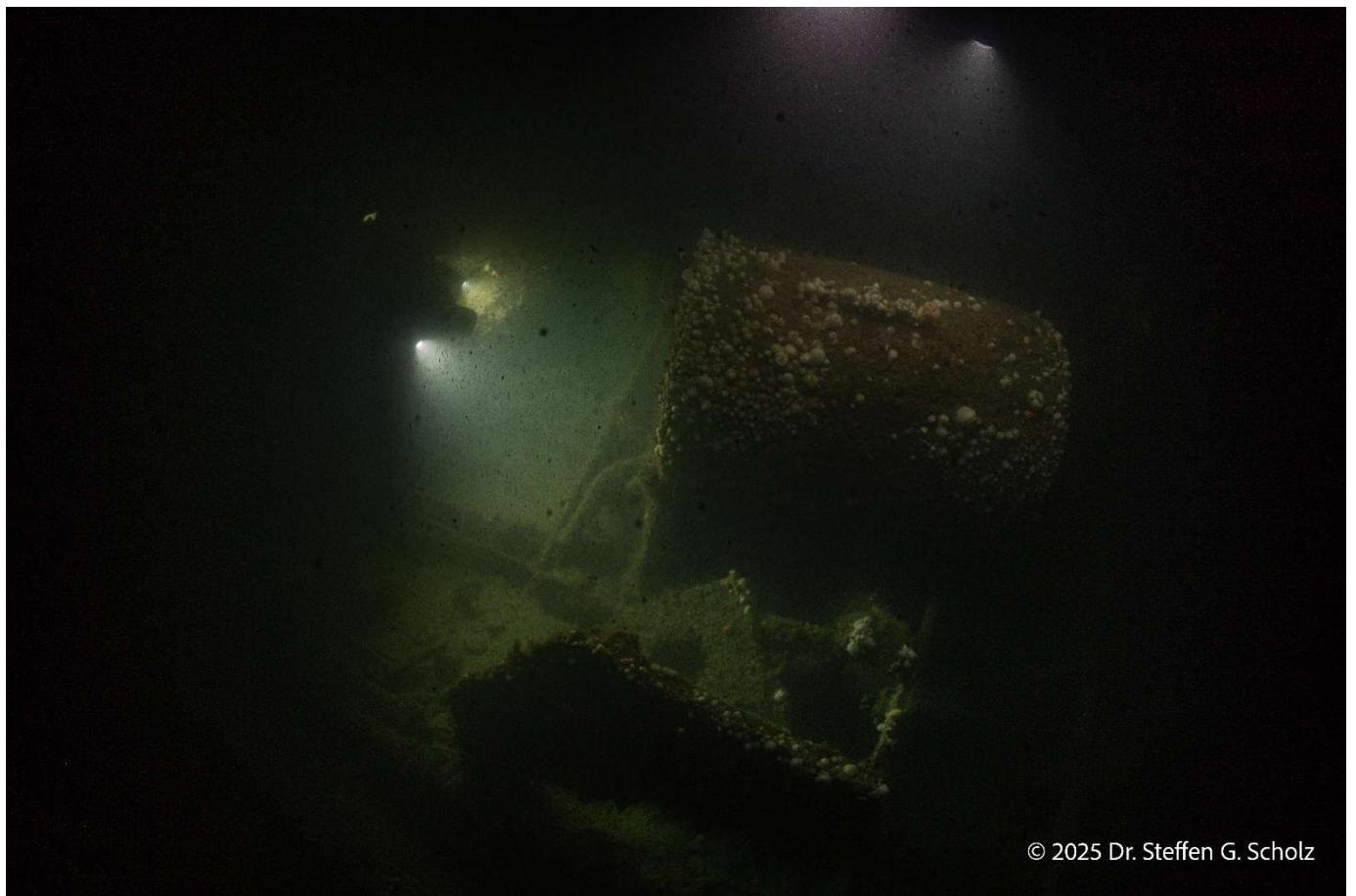


Figure 19: Refrigeration machinery and piping located on deck near the aft cargo hold.

Several cargo holds were clearly visible and partially accessible. Reinforcements consistent with wartime conversion to an armed auxiliary cruiser were noted.



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Figure 20: Cargo hold area with visible porthole structures and internal reinforcements from the wartime modification.

The bridge foundation and funnel base were identified amidships, confirming the single-funnel layout typical of Elders & Fyffes designs.

Anchoring gear and propellers could not be observed in detail due to low visibility and tidal situation.

Summary

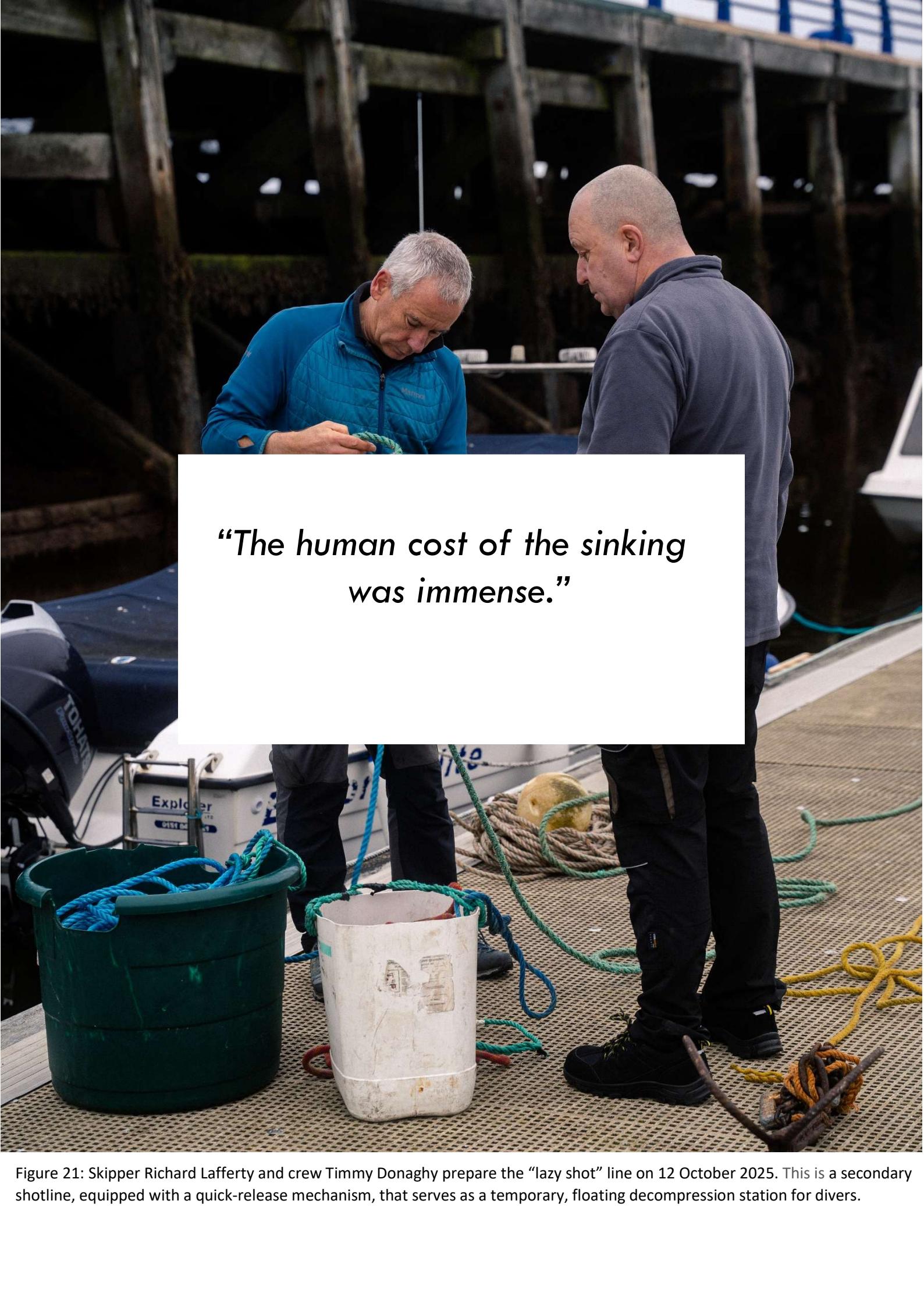
Despite the challenges posed by strong tides and reduced visibility, verification objectives were achieved through a combination of sonar imaging and diver-based observation. Continued monitoring, photogrammetric documentation, and further examination of the propulsion and anchoring systems are recommended to complete the technical record of the vessel.

Feature	Expected Specification	Observed Condition
Length	≈ 126.9 m	≈ 126 m (confirmed via SonarWiz)
Beam	≈ 16.2 m	≈ 16 m (confirmed via SonarWiz)
Propulsion	Twin-screw, steam powered	Not observed (stern partly silted)
Armament	6 × 6-inch (152 mm) guns; barrel length 6.33m	Two positions verified; muzzle internal diameter measured 6-inch (152 mm); barrel length approx. 6.3m (confirmed via SonarWiz)
Hull Material	Steel	Riveted steel plating confirmed
Superstructure	Single funnel, midship bridge, two masts	Confirmed; collapsed but visible
Anchoring equipment	Stockless bower anchors, steam windlass	Not yet identified



DAN MCMULLEN
PHOTOGRAPHY





*“The human cost of the sinking
was immense.”*



Figure 21: Skipper Richard Lafferty and crew Timmy Donaghy prepare the “lazy shot” line on 12 October 2025. This is a secondary shotline, equipped with a quick-release mechanism, that serves as a temporary, floating decompression station for divers.

Remembrance of the sailors who lost their lives

The human cost of the sinking was immense. The combination of the early hour of the attack, the speed at which the compartments flooded, the jamming of the cabin doors, and the water temperature, contributed significantly to the high casualty rate.

In the days following the sinking, the tragedy took on a grim new dimension as bodies began to wash ashore around the Irish Sea. On the east coast of the Ards Peninsula in Northern Ireland, six bodies were found at Cloughey, Tara and Ballygunton, with a funeral procession held Ballyphilip Church.²⁸

The Isle of Man was also particularly affected by the tragedy, as numerous bodies washed up on the island. In a moving display of solidarity, a funeral procession for Alfred Hellyer and James Geraghty, held on the Isle of Man, was attended by thousands of people. This was reportedly the first time for hundreds of years that such a funeral had been seen on the island. According to local newspapers, “*it was probably the largest funeral ever seen in Douglas.*”²⁹

From the outset of the project, we believed it was important to remember the sailors who lost their lives. To the best of our knowledge, the names of the crew are recorded below, with the 27 survivors highlighted.³⁰

	Surname	Forename	Rank/Role
1	Absalom	George	Private, Light Infantry Royal Marines Reserve
2	Appleby	Thomas	Ordinary Seamen, Royal Naval Reserve
3	Archer	Arthur	Private, Light Infantry Royal Marines
4	Ashton	James	Private, Light Infantry Royal Marines Reserve
5	Atcheson	James	2nd Steward, Mercantile Marine Reserve
6	Atkinson	Thomas	Private, Light Infantry Royal Marines
7	Bailey	Albert	Private, Light Infantry Royal Marines
8	Bailey	Leslie	Midshipman, Royal Naval Reserve
9	Bain	Alexander	Private, Light Infantry Royal Marines Reserve
10	Baker	Richard	Able Seaman, Royal Fleet Reserve
11	Baldwin	William	Carpenter's Mate, Mercantile Marine Reserve
12	Balsom	William	Fireman, Mercantile Marine Reserve
13	Barnes	William	Fireman, Mercantile Marine Reserve
14	Barratt	Fred	Able Seaman, Royal Fleet Reserve
15	Batson	Richard	Probationary Surgeon, Royal Naval Reserves
16	Battrick	Arthur	Boy Telegraphist
17	Beer	Philip	Petty Officer 2nd Class, Royal Navy
18	Bell	Richard	Able Seaman, Royal Fleet Reserve
19	Bird	Archie	Third Cook

²⁸ *The Tyrone Constitution*, 2 April 1915.

²⁹ *Ramsey Courier and Northern Advertiser*, 26 March 1915.

³⁰ <https://www.cwgc.org/find-records/find-war-dead/>; <https://www.greatwarforum.org/topic/30516-hms-bayano/>; <https://www.naval-history.net/xDKCas1915-03Mar.htm> all as at 3/11/2025; *Hampshire Telegraph*, 19 March 1915.

20	Blacken	Thomas	Fireman, Mercantile Marine Reserve
21	Blyth	John	Fireman, Mercantile Marine Reserve
22	Blyton	Cyril	Fireman, Mercantile Marine Reserve
23	Bowen	David	Engine Room Artificier
24	Brailsford	Samuel	Carpenter's Crew
25	Brattan	Arthur	Lieutenant, Royal Naval Reserve
26	Broom	John	Assistant Steward, Mercantile Marine Reserve
27	Brown	Alfred	Able Seaman, Royal Fleet Reserve
28	Brown	Edmond	Seaman, Newfoundland Royal Naval Reserve
29	Brown	Ernest	Lieutenant, Royal Naval Reserve
30	Brown	James	Ordinary Seamen, Royal Naval Reserve
31	Brown	James	Armourer, Royal Navy
32	Burbidge	Stephen	Shipwright 1st Class, Royal Navy
33	Burridge	Albert	Bugler, Royal Marine Light Infantry
34	Buttle	Charles	Able Seaman, Royal Fleet Reserve
35	Button	Alec	Able Seaman, Royal Fleet Reserve
36	Campbell	John	Seaman, Royal Naval Reserve
37	Carpenter	Alfred	Able Seaman, Royal Fleet Reserve
38	Carr	Henry	Commander, Royal Navy
39	Carrigan	James	Assistant Steward, Mercantile Marine Reserve
40	Case	George	Cooper, Royal Navy
41	Castle	James	Leading Seaman, Royal Navy
42	Caulfield	John	Ordinary Seaman, Royal Naval Reserve
43	Chant	John	Private, Light Infantry Royal Marines Reserve
44	Chater	Frederick	Able Seaman, Royal Naval Reserve
45	Chick	James	Fireman, Mercantile Marine Reserve
46	Chiddle	Frederick	Able Seaman, Royal Fleet Reserve
47	Chorley	Dudley	Assistant Paymaster, Royal Naval Reserve
48	Clark	James	Seaman, Royal Naval Reserve
49	Coates	George	Seaman, Royal Naval Reserve
50	Coker	Frank	Able Seaman, Royal Fleet Reserve
51	Cole	Ernest	Fireman, Mercantile Marine Reserve
52	Copley	Thomas	Seaman, Newfoundland Royal Naval Reserve
53	Courtney	Percy	Able Seaman, Royal Fleet Reserve
54	Craze	Arthur	Private, Light Infantry Royal Marines

55	Crease	A	Private, Light Infantry Royal Marines
56	Croft	Eustace	Able Seaman, Royal Fleet Reserve
57	Cummings	Benjamin	Petty Officer 1st Class, Royal Fleet Navy
58	Davies	David	Able Seamen, Royal Fleet Reserve
59	Davis	Ernest	Boatswain, Mercantile Marine Reserve
60	Davison	Alexander	Sub-Lieutenant, 2nd Officer, Royal Naval Reserve
61	Dempsey	John	Fireman, Mercantile Marine Reserve
62	Duncan	John	Assistant Steward, Mercantile Marine Reserve
63	Dunne	Thomas	Seaman, Royal Naval Reserve
64	Dunphy	Bernard	Lieutenant, Royal Naval Reserve
65	Eaves	Samuel	Armourer's Crew, Royal Navy
66	Eddy	Thomas	Leading Seaman, Royal Navy
67	Ellerby	Robert	Ordinary Seaman, Royal Naval Reserve
68	Farewell	Joseph	Leading Seaman, Newfoundland Royal Naval Reserve
69	Farndell	William	Able Seaman, Royal Fleet Reserve
70	Farnworth	William	Senior Reserve Attendant, Royal Naval Auxiliary Sick Berth Reserve
71	Flinn	William	Fireman, Mercantile Marine Reserve
72	Flower	Henry	Master at Arms, Royal Fleet Reserve
73	Fogarty	Francis	Assistant Steward, Mercantile Marine Reserve
74	Folkes	Alfred	Leading Seaman, Royal Navy
75	Forse	William	Firman, Mercantile Marine Reserve
76	Fox	William	Private, Light Infantry Royal Marines Reserve
77	Frampton	James	Private, Light Infantry Royal Marines
78	Gale	William	Petty Officer, Royal Naval Reserve
79	Gamblen	Frederick	Carpenters Mate, Naval Pensioner
80	Gates	William	Leading Seaman, Royal Navy
81	Geraghty	James	Leading Seaman, Royal Navy
82	Gilbert	Charles	Private, Light Infantry Royal Marines Reserve
83	Gilfillan	George	Fireman, Mercantile Marine Reserve
84	Glanville	James	Petty Officer 1st Class, Royal Navy
85	Glover	Everard	Steward 2nd Class, Mercantile Marine Reserve
86	Glover	George	Petty Officer 1st Class, Carpenters Crew, Royal Navy
87	Gorman	John	Fireman, Mercantile Marine Reserve
88	Gough	Harold	Midshipman, Royal Naval Reserve
89	Graham	George	Seaman, Royal Naval Reserve

90	Graham	John	Able Seaman, Royal Fleet Reserve
91	Green	Frank	Yeoman Of Signals, Royal Fleet Reserve
92	Greene	Barton	Seaman, Newfoundland Royal Naval Reserve
93	Gregory	Charles	Chief Petty Officer, Royal Fleet Reserve
94	Gunn	William	Seaman, Royal Naval Reserve
95	Guy	Kenneth	Lieutenant Commander, Royal Navy
96	Hamblin	Walter	Able Seaman, Royal Fleet Reserve
97	Hamill	Joseph	Fireman, Mercantile Marine Reserve
98	Hammond	Albert	Fireman, Mercantile Marine Reserve
99	Hancock	Edward	Fireman, Mercantile Marine Reserve
100	Hardy	John	Fireman, Mercantile Marine Reserve
101	Harman	Frank	Leading Signalman, Royal Navy
102	Harris	Edward	Engine Room Artificier, Royal Naval Reserve
103	Harrison	Richard	Gunner, Royal Navy
104	Hayes	John	Able Seaman, Royal Fleet Reserve
105	Hellyer	Alfred	Plumber, Royal Navy
106	Hill	Ernest	Private, Light Infantry Royal Marines Reserve
107	Hockaday	Charles	Able Seaman, Royal Fleet Reserve
108	Hockham	Robert	Able Seaman, Royal Fleet Reserve
109	Hole	Kenneth	Surgeon, Royal Naval Reserves
110	Hook	Walter	Private, Light Infantry Royal Marines
111	Hubbard	Frederick	Sergeant, Light Infantry Royal Marines
112	Huddy	John	Lieutenant, Royal Naval Reserve
113	Humble	Edward	3rd Engineer, Royal Naval Reserve
114	James	Henry	Able Seaman, Royal Fleet Reserve
115	Jewer	Henry	Private, Light Infantry Royal Marines
116	Jobling	Thomas	Ordinary Seaman, Royal Naval Reserve
117	Jones	Charles	Senior Engineer, Royal Naval Reserve
118	Jones	Stephen	Private, Light Infantry Royal Marines Reserve
119	Kanavan	James	Blacksmith, Royal Navy
120	Keates	Stephen	Leading Seaman, Royal Naval Reserves
121	Keevey	John	Fireman, Mercantile Marine Reserve
122	Kelly	John	Petty Officer, Royal Naval Reserve
123	Kelly	J	Fireman, Mercantile Marine Reserve
124	Kennedy	Stephen	Fireman, Mercantile Marine Reserve

125	King	William	Seaman, Newfoundland Royal Naval Reserve
126	King	Arthur	Sergeant, Light Infantry Royal Marines Reserves
127	Knight	Arthur	Able Seaman, Royal Fleet Reserve
128	Knight	Edward	2nd Baker, Mercantile Marine Reserve
129	Lawson	Charles	Engine Room Artificer, Royal Naval Reserve
130	Leamy	Cornelius	3rd Steward, Mercantile Marine Reserve
131	Leslie	John	Fireman, Mercantile Marine Reserve
132	Lloyd	Walter	Corporal, Light Infantry Royal Marines Reserve
133	Lloyd	Walter	Leading Telegraphist, Royal Navy
134	Lucas	Arthur	Able Seaman, Royal Fleet Reserve
135	Lucas	Richard	Able Seaman, Royal Fleet Reserve
136	Luck	Ernest	Able Seaman, Royal Fleet Reserve
137	Macguire	James	Fireman, Mercantile Marine Reserve
138	Mann	Bertram	Petty Officer 1st Class, Royal Navy
139	Mann	Edward	Seaman, Royal Naval Reserve
140	Mansbridge	Arthur	Able Seaman, Royal Fleet Reserve
141	Marshall	James	Ships Cook, Mercantile Marine Reserve
142	Martin	Henry	Seaman, Royal Naval Reserve
143	Martyn	Sylvester	Seaman, Newfoundland Royal Naval Reserve
144	May	Richard	Petty Officer 2nd Class, Royal Navy
145	McArthur	Daniel	Assistant Steward, Newfoundland Royal Naval Reserve
146	McDermott	James	Able Seaman, Royal Naval Reserve
147	McGhee	James	Fireman, Mercantile Marine Reserve
148	McGowan	Barney	Fireman, Mercantile Marine Reserve
149	McGregor	Michael	Ordinary Seaman, Royal Naval Reserve
150	McKinley	William	Petty Officer 1st Class, Royal Navy
151	McQuigg	John	Fireman, Mercantile Marine Reserve
152	McSporran	John	Carpenters Mate, Specially Entered Mercantile Crew
153	Mecklenburgh	Arthur	2nd Writer, Mercantile Marine Reserve
154	Middleton	John	Able Seaman, Royal Naval Reserve
155	Miller	James	Engine Room Artificer, Royal Naval Reserve
156	Mortimer	William	Ordinary Seaman, Royal Navy
157	Moses	William	Petty Officer 2nd Class, Royal Navy
158	Munro	John	Engine Room Artificer, Royal Naval Reserve
159	Murray	Donald	Seaman, Royal Naval Reserve

160	Murray	George	Carpenter's Mate, Mercantile Marine Reserve
161	Norman	Charles	Baker, Mercantile Marine Reserve
162	O'Connor	Martin	Fireman, Mercantile Marine Reserve
163	Otley	Henry	Leading Seaman, Royal Navy
164	Patterson	James	Ordinary Seaman, Royal Naval Reserve
165	Peach	William	Seaman, Newfoundland Royal Naval Reserve
166	Peake	Clifford	Able Seaman, Royal Naval Reserve
167	Penfold	Harry	Petty Officer, Royal Navy
168	Piercey	Charlie	Seaman, Newfoundland Royal Naval Reserve
169	Please	Charles	Signal Boy, Royal Navy
170	Pollock	Matt	Assistant Steward, Mercantile Marine Reserve
171	Potts	Thomas	Ordinary Seaman, Royal Naval Reserve
172	Price	Joseph	Petty Officer, Royal Navy
173	Price	William	Able Seaman, Royal Fleet Reserve
174	Reddie	Sam	Fireman, Mercantile Marine Reserve
175	Rees	Alfred	Royal Marine, Light Infantry Royal Marines Reserve
176	Riley	James	Junior Reserve Attendant, Royal Naval Auxiliary Sick Berth Reserve
177	Rogan	Peter	Fireman, Mercantile Marine Reserve
178	Rolfe	Thomas	Seaman, Royal Naval Reserve
179	Ross	George	Leading Seaman, Royal Naval Reserve
180	Ruddy	James	Fireman, Mercantile Marine Reserve
181	Russell	Cleophas	Assistant Steward, Mercantile Marine Reserve
182	Ryan	William	Ordinary Seaman, Royal Naval Reserve
183	Sanderson	Robert	Engine Room Artificer, Royal Naval Reserve
184	Schweitzer	A	Chief Steward, Mercantile Marine Reserve
185	Scollard	William	Assistant Steward, Mercantile Marine Reserve
186	Seelland	W	Assistant Steward, Mercantile Marine Reserve
187	Sellers	William	Ordinary Seaman, Royal Naval Reserve
188	Shaw	John	Fireman, Mercantile Marine Reserve
189	Sims	Charles	Sub-Lieutenant, Royal Naval Reserve
190	Smith	Daniel	Chief Cook, Mercantile Marine Reserve
191	Smith	George	Petty Officer 1st Class, Royal Navy
192	Smith	Roderick	Seaman, Royal Naval Reserve
193	Southwell	Alfred	1st Writer, Mercantile Marine Reserve
194	Spracklin	Edgar	Leading Seaman, Newfoundland Royal Naval Reserve

195	Stanley	Harold	Seaman, Newfoundland Royal Naval Reserve
196	Stern	Wallis	Lance Corporal, Light Infantry Royal Marines Reserve
197	Stevens	Edwin	Petty Officer, Royal Navy
198	Summers	James	Private, Light Infantry Royal Marines
199	Sutherland	James	Engine Room Artificer, Royal Naval Reserve
200	Taylor	Dennis	Able Seaman, Royal Fleet Reserve
201	Taylor	John	Boy Telegraphist, Royal Navy
202	Thompson	William	Fireman, Mercantile Marine Reserve
203	Tiltman	William	Shipwright 2nd Class, Royal Navy
204	Todd	John	Seaman, Royal Naval Reserve
205	Trumper	Arthur	Fireman, Mercantile Marine Reserve
206	Vest	George	Fireman, Mercantile Marine Reserve
207	Walsh	John	Carpenter, Mercantile Marine Reserve
208	Wareing	Francis	Junior Reserve Attendant, Royal Naval Auxiliary Sick Berth Reserve
209	Wells	Alfred	Master at Arms, Royal Navy
210	Wellstead	William	Able Seaman, Royal Fleet Reserve
211	Whalen	Simeon	Seaman, Newfoundland Royal Naval Reserve
212	Wharton	Harold	Junior Reserve Attendant, Royal Naval Auxiliary Sick Berth Reserve
213	Whitcombe	Abner	Painter, Specially Entered Mercantile Crew
214	Wilkinson	Lawrence	Able Seaman, Royal Fleet Reserve
215	Williams	Harold	Chief Engineer, Royal Naval Reserve
216	Williams	Herbert	Petty Officer 1st Class, Royal Navy
217	Williamson	Samuel	Assistant Steward, Mercantile Marine Reserve
218	Wilson	John	Captains Steward, Mercantile Marine Reserve
219	Wingate	Henry	Leading Seaman, Royal Navy
220	Wood	Richard	Chief Petty Officer, Coast Guard
221	Wood	Ronald	Engine Room Artificer, Royal Naval Reserve
222	Worke	Patrick	Ordinary Seaman, Royal Naval Reserve
223	Wright	Henry	Midshipman, Royal Naval Reserve
224	Wylde	George	Steward 2nd Class, Mercantile Marine Reserve
225	Wynne	Walter	Able Seaman, Royal Fleet Reserve

The wreck today

The loss of *HMS Bayano* marks a defining moment in the early history of submarine warfare. Consequently, the wreck holds tremendous importance from a naval historical, technological, strategic, archaeological and social history perspective.

From a naval historical perspective, the sinking of *HMS Bayano* heralded a new era: she was arguably the first major British casualty of Germany's policy of unrestricted submarine warfare, declared on 2 February 1915, just over one month before her sinking.³¹ This change of policy meant that submarines now emerged as a routine threat to mixed-use ships, capable of striking without warning.

From a technological perspective, the sinking of *HMS Bayano* underscored the vulnerability of AMCs to submarine attack, since they lacked the compartmentalization and internal armour essential for surviving modern submarine warfare. Conversely, the operation also highlighted the sophistication of German engineering in stealth and torpedo technology, and the proficiency of German U-boats in exploiting these technologies, particularly when defensive measures such as indicator nets unintentionally created tactical chokepoints.

From a social history perspective, the sinking of *HMS Bayano* revealed both the efficacy and moral dilemma of the doctrine of targeting mixed-use vessels under wartime conditions – and the significant loss of life and outpouring of grief in coastal communities around the North Channel demonstrated how the tragedy touched communities far beyond those directly connected to the ship and her crew.

From a wreck archaeology perspective, identifying and documenting *HMS Bayano* proved a challenging experience. Prior to this expedition, she was one of the last British AMCs remaining to be identified and documented: her name now sits alongside other identified AMCs that have become household names like the *Moldavia* and the *Laurentic*. Ultimately, the sinking of *HMS Bayano* encapsulates the evolution of naval combat from traditional surface battles to the total, industrialized warfare that characterized the twentieth century.

Today, we remember the sacrifice of the wireless operator Walter Lloyd staying at his post until the end to broadcast the ship's SOS message, the composure of the 20-year-old reservist Johnny Caulfield (see our final photo) who handed out lifejackets to others first as the sea rose, and finally Captain Henry Carr who went down with his ship waving goodbye from the bridge after organizing the evacuation of as many of the crew as possible. This display of courage exemplified the highest traditions of naval service.

Given the shipwreck's unique historical significance and status as the final resting place of nearly 200 British sailors, the Royal Navy has been notified. We wish to thank everybody who played a part in piecing together the story behind *HMS Bayano*, her Officers and crew.

“The loss of *HMS Bayano* marks a defining moment in the early history of submarine warfare ... she was arguably the first major British casualty of Germany's policy of unrestricted submarine warfare, declared on 2 February 1915, just over one month before her sinking.”

³¹ Osborne, Spong & Grover, *Armed Merchant Cruisers 1878-1945*, page 52.

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