



Welsh Wreck Web Research Project (North Cardigan Bay)

On-line research into the wreck of the motor-vessel

Ilesha,

Which foundered off Bardsey Island in 1915.



The stern of the motor-vessel 'Ilesha', showing the port-propeller. The starboard-propeller is partially buried in the seabed.

Report Title: *Welsh Wreck Web Research Project (North Cardigan Bay)*

On-line and practical research into the wreck of the motor-vessel 'Ilesha', now lying on the seabed close to the east coast of Bardsey Island.

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Date & time created: 16 November 2020 11:16 AM

Report Ref: **Leave blank**

1.0 Abstract

The Malvern Archaeological Diving Unit (MADU) currently has a database of 453 shipwrecks in the north end of Cardigan Bay in north west Wales. These wrecks date from 1590 to 1993 and very few have been investigated in any depth!

The author of this report is an amateur diver who has visited many of the shipwrecks around the Welsh coast between Barmouth and the Dee Estuary. He wrote and published 'The Essential Underwater Guide to North Wales, Volumes One and Two', and co-wrote 'Life and Death on the Royal Charter'.

He is also the licensee of the submarine 'Resurgam', a historic vessel that lies on the seabed off Rhyl after being lost in 1880.

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2.2 Contributors

Chris Holden.

2.3 Abbreviations used in this report:

MADU Malvern Archaeological Diving Unit

NAS Nautical Archaeology Society

CPH Chris Holden

3.0 Introduction

The author has spent many wonderful days exploring the seabed around Bardsey Island at the north-west extremity of Cardigan Bay, and has visited some of the shipwrecks that have occurred there. Several of these wrecks remain unidentified, but the 'Ilesha' has been positively identified as being the wreck that lies in around twenty-metres of water near Pen Cristin on the eastern coast of the island.

(g.) Wrecked.									
(Under this heading are included vessels lost through stranding, or through striking rocks, sunken wrecks, &c.)									
No. in Reg. Book. 1915-16.	Vessel's Name.	Tons.		Nation-ality.	Descrip-tion.	Voyage.	Cargo.	Circumstances and place.	Date.
		Net.	Gross.						
1270	Britannia	401	740	U.K.	Stl. Sc.	Newcastle—Leith...	General.....	On Farne Islands	25th Sept.
628	Dorando	56	139	U.K.	Stl. Sc.	On Haisboro Sands	1st Sept.
154	Edison	79	196	U.K.	I. Sc.	6th July.
258	Finchley	2528	4126	U.K.	Stl. Sc.	Mejillones— Archangel.	Nitrate of soda.	On Tree Island	20th Aug.
538	Glentow.....	58	159	U.K.	Stl. Sc.	Larne—Ballycastle.	Ballast	On Fair Head. co. Antrim.....	10th Sept.
3 Sup.	Ilesha	52	109	U.K.	Stl. Tw. Sc.	Liverpool— W.C. Africa.	Ballast	Stranded on Bardsey Island refloated, but sank in deep water.	8th Aug.

Note that the spelling of the town of Porthmadog varies in the early newspapers, so it may appear as 'Port Madoc' or 'Portmadoc'. 'Tudwal' also appears as 'Tudwall' or 'Tudwel'. Aberystwyth appears as 'Aberystwith'.

Caernarfon appears as 'Carnarvon' or 'Caernarvon'.

Wherever possible, the spellings in the published newspapers have been used.

4.0 Background.

The author has spent many hours scanning the microfilmed copies of the 19th-Century newspapers, and would like to acknowledge the tremendous effort previously done by the late John Stubbs, who kindly allowed the author of this report to access his records.

Research is now much easier, given that we have access to these newspapers from our homes via the internet, thereby allowing quicker and more thorough research to be undertaken from the comfort of our home rather than from a former prison-cell in the old county jail at Ruthin.

5.0 Research Methodology.

Equipment and sources used:

Boat, Echo-sounder, GPS.

Richard Larne's Shipwreck Index of the British Isles. West Coast and Wales.

Gwynedd Archives Record Office, Caernarfon.

Denbighshire Records Office, Ruthin.

British Library on-line newspaper records.

National Library of Wales on-line records.

Lloyd's List records.

6.0 Details.

Vessel Name: Ilesha. Previous name: Kingsholm.

Type: Motor Vessel. Designed by J. Pollock and Sons, of London.

Launched July, 1914, by Abdela and Mitchell, of Queen's Ferry, Flintshire, North Wales.

Original owners: for Messrs W. Butler and Sons, for trading between their Bristol, Cardiff and Port Talbot works.

Owners when she sank: Elder Dempster.

Dimensions: Length 85ft 3in; Breadth 17ft; Depth of hold 7ft 3in

Weight: 52 tons net; 109 tons gross.

Propulsion: A pair of two-cylinder 50 horse-power Bolinder engines.

Construction Materials: Steel hull. Weight: 52 tons net; 130 tons gross.

Location.

The remains of the 'Ilesha' lie in around twenty metres of water, close to the east coast of Bardsey Island, North Wales.

Overview.

Marked on the chart as a wreck in a minimum of 17.1-metres of water, the motor-vessel "Ilesha" lies broken up on a sandy seabed off the east coast of Bardsey, approximately 200 metres south of Pen Cristin. This is the remains of a twin-screw vessel, built during 1914 by Isaac J. Abdela & Mitchell, of Queensferry, North Wales, and originally named 'Kingsholm'. The ship was sold to Butler & Co. of Bristol for service in the Bristol Channel, but it was later purchased by Elder, Dempster & Co. and renamed 'Ilesha'. Sent for service in West Africa, the ship developed problems with its starboard engine off South Wales, so headed back towards the safety of the St. Tudwal's Islands. Less than 24 hours later, the port engine failed in a position less than 3 miles off Bardsey. The ship did have a set of sails in case of emergency, but when the wind dropped she was abandoned and drifted on to the rocks on the west side of Bardsey Island. There was still hope of recovering the situation, so the salvage steamer 'Lady of the Isles' was sent to assist, using divers to blast away a channel into deeper water. This was successful, but while the 'Ilesha' was being taken round to the east side of Bardsey for further repairs, she suddenly foundered in 11 fathoms (20 metres) of water. Apart from cutting away the protruding foremast, the wreck was left alone until revisited by divers in the 1980s.

The 'Ilesha' was named after a Nigerian town, and the wreck has been positively identified by its maker's name-plate. Its twin, two-stroke oil engines were an early version of this type of propulsion, having been built by Bolinder Ltd. of Stockholm. Before the engine could be started, a cast-iron dome on each cylinder head needed to be warmed up by means of a blowlamp. A wonderfully-restored example of a Bolinder engine can be seen at Ellesmere Port Boat Museum. Other vessels built by Abdela & Mitchell had their Bolinder engines replaced fairly early in their working life, possibly because of a known design fault. If these engines were known to be unreliable, why was such a vessel, less than 30 metres long, being sent all the way to West Africa?

The vessel lies approximately east - west, with the bows at the east in around 23 metres of water, slightly deeper than the stern. The rounded stern rail lies on the seabed, close to the stern-post, twin-propellers and the rudder. Although made of iron, the port propeller is still



easily recognised but the starboard one is very badly corroded. Moving forward from the stern-post, the two engines can be seen among a tangled mass of winches, ribs, riveted hull-plates, hand-wheels, bitts and other unidentified machinery. The forward section of the vessel has totally collapsed, with many ribs and plates still visible, but the bow has either broken off or is covered with sand and gravel.

Large ballan wrasse will be seen swimming around the wreck, while the cavities under the hull provide a home for crabs and the odd lobster.

As shown in the adjacent photo, broken crockery has been found scattered around this wreck and in the bay to the south. These plates have a blue printed pattern on a white background, and are marked 'B.B. & Co, Patent Ironstone Pottery'. The 'Encyclopaedia of British Pottery & Porcelain'

lists this mark as that of Baker, Bevans & Irwin (Glamorgan Pottery, Swansea), who produced dishes and plates from 1813 to 1838. This factory did produce dedicated 'ship-plates', but the crockery probably does not come from the wreck of the 'Ilesha', which did not sink until 1915. Therefore, the remains of another vessel may lie close to this wreck, perhaps making an echo-sounder and magnetometer search worthwhile.

THE BOLINDER ENGINE.

The Bolinder engines fitted to “Ilesha” were an early version of what eventually led to the marine diesel engine, the method of propulsion that replaced the steam-engine. John Lamb, in his book entitled ‘The Running and Maintenance of the Marine Diesel Engine’, published in the first quarter of the 20th-Century, discusses the many problems encountered with these engines. Perhaps those on-board the “Ilesha” should have read a copy before embarking on their voyage to Africa! We are all familiar with turning the ignition key of a vehicle or boat in order to start a petrol- or diesel-engine, but a Bolinder engine required pre-heating with a blow-lamp. This is how John Lamb describes them:

“HOT BULB ENGINES.

The hot bulb, or semi-Diesel engine, as it is called, coupled to a dynamo or air compressor, usually forms part of a large motor ship’s equipment, and in smaller vessels is employed for propulsion. There are numerous makes which differ in detail, the principle on which they work, however, are alike.

The fuel oils suitable for these engines are refined Russian and American oils, having a specific gravity of about 0.85, but crude oils of fair quality may be used with success.

In this type of engine, the air in the cylinder is only compressed to from 150 to 200 lbs. per square inch. The fuel is injected by a pump into a bulb fitted above, and open to, the cylinder, wherein the pressure rises suddenly to about 300 lbs. per square inch.

Before starting, this bulb is heated by a blow-lamp to obtain the necessary temperature to ignite the fuel, and, when working, the bulb is kept hot by the heat of combustion. Engines of this class are now usually provided with an electrical device, which obviates the necessity of heating the bulb prior to starting.

The fuel enters the bulb through a burner or sprayer, which projects into the bulb. Inside the burner or sprayer, means are usually provided to break up or pulverise the fuel so that it is more easily vaporised. The pressure on the fuel at the moment of injection is said to be in the neighbourhood of 700 lbs. per square inch.

The smaller-sized engines are started by hand, but the larger ones are usually started by compressed air. The common arrangement for replenishing the starting air reservoir is very simple, the starting air valve being left open just a little to allow part of the air and gases during the compression stroke of the engine to pass back to the reservoir.

The two-cycle engine, being of simpler construction, having no valves in the cylinder cover, is more commonly used in marine practice.”



The author's anchor-chain lies draped across the remains of one of the Bolinder engines.

CREW.

A. Balls; rank/rating, Master; age, 26; place of birth, South Shields.

Henry John Newman; rank/rating, Mate; age, 63; place of birth, Bridgwater.

H. H. Kingston; rank/rating, Chief Engineer; age, 33; place of birth, London.

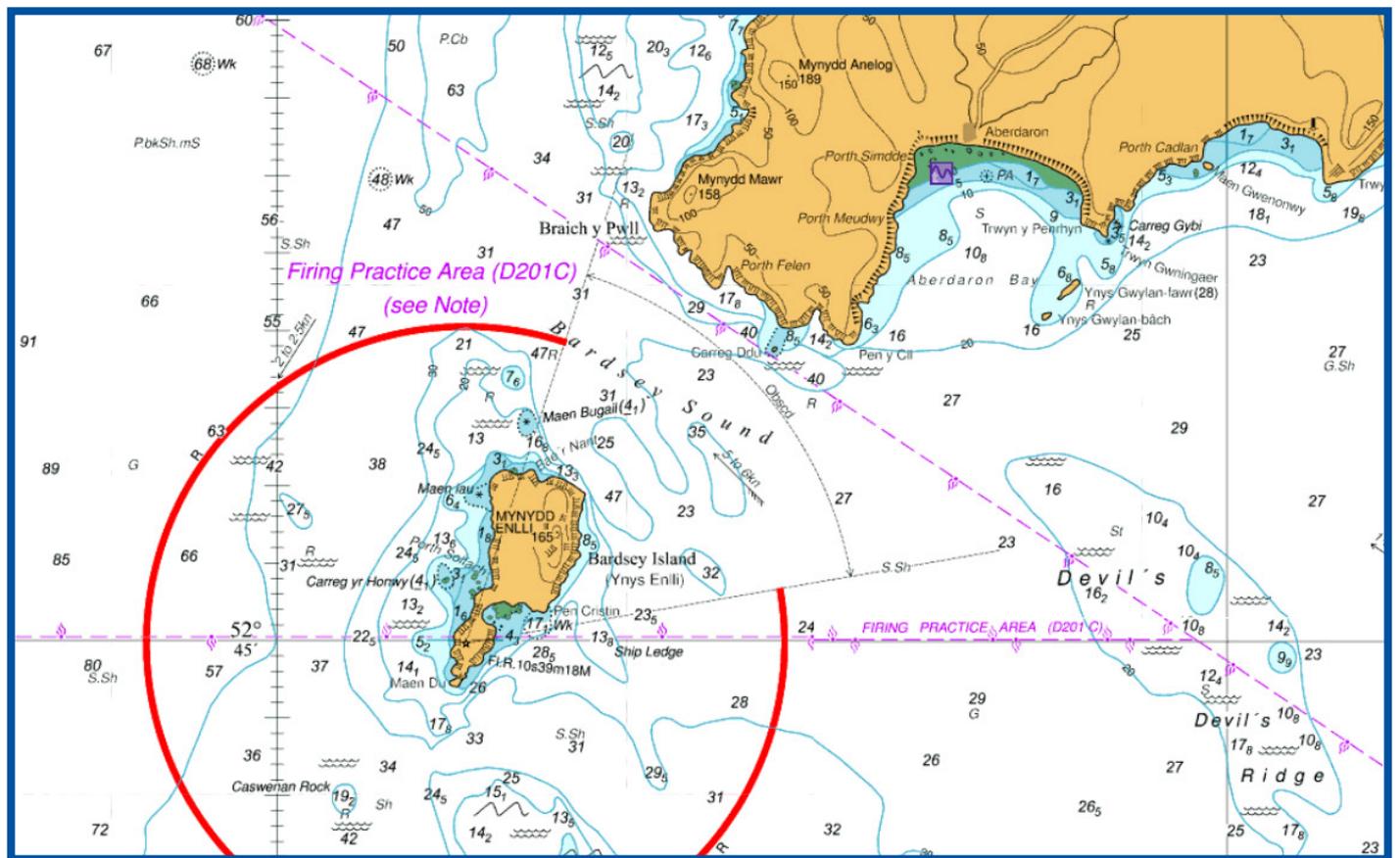
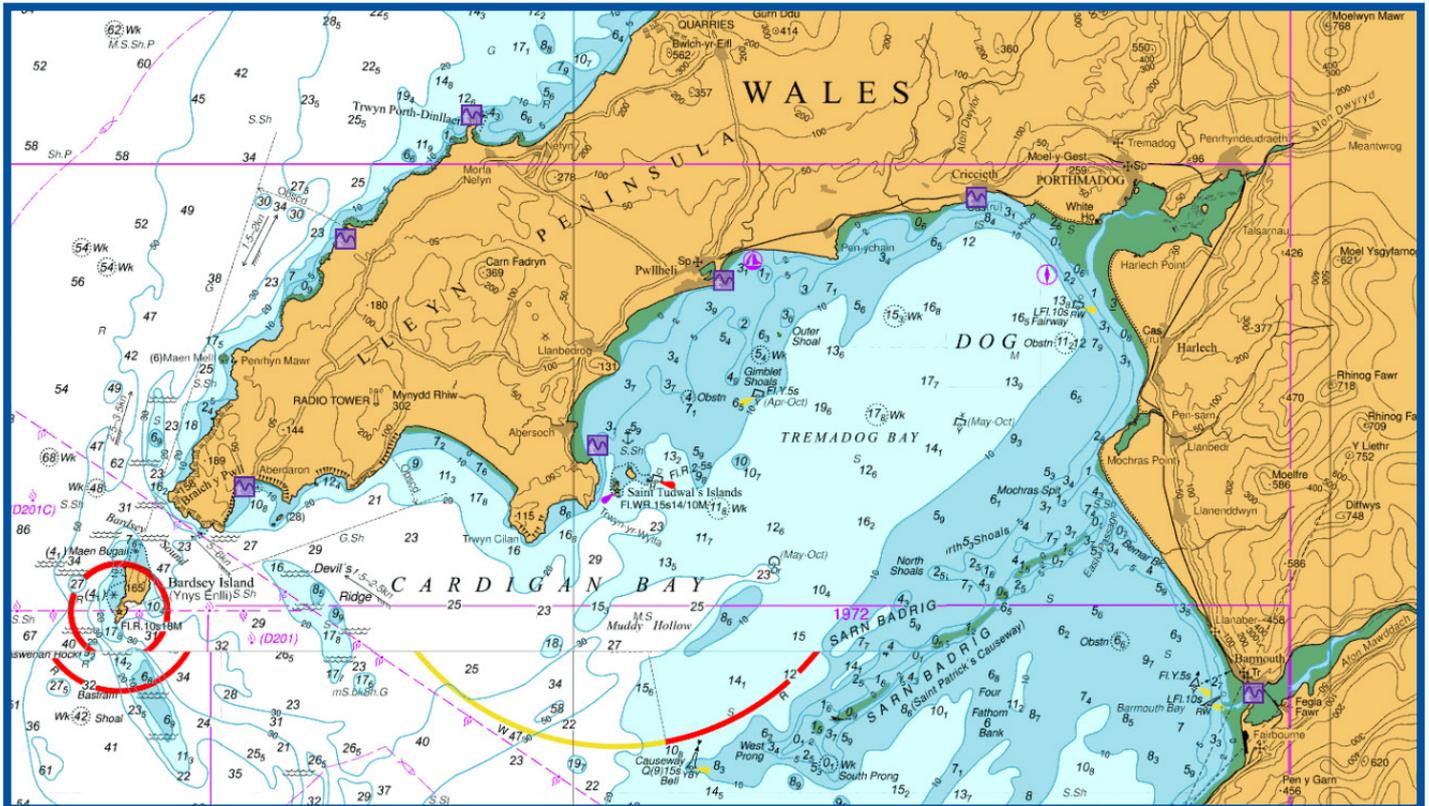
Welham Harrison; rank/rating, Assistant Engineer; age, 28; place of birth, Liverpool.

D. Davies; rank/rating, Able Seaman; age, 47; place of birth, Liverpool.

James Johnson; rank/rating, Able Seaman; age, 30; place of birth, Liverpool.

Alphonso James; rank/rating, Cook and Steward; age, 22; place of birth, Barbados.

Location.



Cheshire Observer - Saturday 21 February 1914.

LAUNCH.—On Monday there was launched from the Dee Shipbuilding Works of Messrs. I. J. Abdela and Mitchell, Ltd., the steel barge No. 7, G.W.R., built the order of the Rea Transport Co., of Liverpool. There are five similar vessels the stocks in advanced stages of construction. The steel vessel Oceania, for Pernambuco, was laid down immediately after the launch. The twin screw motor vessel, Kingsholm, of Bristol, is nearly ready for launching, and a number of smaller craft are in progress. The builders are in for a busy year, and considerable extensions are contemplated.

Western Daily Press - Tuesday 07 July 1914

A NEW MOTOR COASTER. The latest local development in the rapidly-increasing oil trade is the arrival of a motor-coaster now berthed near Prince's Street Bridge, built by Messrs. Abdella and Mitchell, of Queen's Ferry, near Chester, for Messrs W. Butler and Sons, for trading between their Bristol, Cardiff and Port Talbot works. The Kingsholm, as she is named, is driven by a pair of two-cylinder 50 horse-power Bolinder engines, and was designed by J. Pollock and Sons, of London. The trial trip from the Dee was accomplished very satisfactorily in 41 hours without the engines having been stopped or slowed down. Gasoleum is the fuel used, and on account of the low weight of the machinery, the vessel, with a tonnage of 130, will carry from 20 to 25 tons more cargo than if she were a steamboat.

Western Daily Press - Thursday 22 July 1915

OFFICIAL NOTICE. PROPOSAL TO CHANGE A SHIP'S NAME.

We, ELDER DEMPSTER & Co. Ltd., of Colonial House, Water St., Liverpool, HEREBY Give NOTICE that in consequence of the present name not being suitable for the trade in which she is about to be employed, we have applied to the Board of Trade, under section 47 of the Merchant Shipping Act, 1894, in respect of our MOTOR TUG 'KINGSHOLM' of Bristol, official number 134,704, of gross tonnage 109 tons, of register tonnage 52 tons, heretofore owned by Wm. Butler and Co., Bristol, Ltd, for permission to change her name to 'ILESHA', to be registered in the said new name at the Port of BRISTOL, as owned by Elder, Dempster and Co. Ltd. Any objection to the proposed change of name must be sent to the Assistant Secretary, Marine Department, Board of Trade, within seven days from the appearance of this advertisement.

Dated at Liverpool, this 20th day of July, 1915.

For Elder, Dempster & Co., Ltd.

J. Craig, Liverpool, Managing Director.

Manchester Evening News - Monday 09 August 1915

The Elder Dempster Company's motor craft 'Ilesha' ran on the rocks yesterday. The crew of seven took to the boat, and were picked up by a fishing boat. The company state that it is expected the vessel will be re-floated.

Lloyd's List. 9th August, 1915.

August 1915. Telegram from lighthouse keeper Bardsey Island. Motor boat 'Ilesha' ashore here. Crew saved.



Bardsey Island as viewed from Bardsey Sound.

Lloyd's List. 9th August, 1915.

Mynydd Mawr (Pwllheli) August 9th. Motor vessel 'Ilesha' of Bristol, owners Elder Dempster & Co. foundered west side of Bardsey Island yesterday morning. Believed total wreck.

Hull Daily Mail - Tuesday 10 August 1915

SEVEN MEN A BOAT FOR TWO. The Elder Dempster motor craft Ilesha, from Liverpool to West Africa, with cargo of oil, went on the rocks off Bardsey Isle in fog on Sunday. The crew of seven had to take a small boat fit only for two persons. They were carried miles out sea by the tide, and were in great peril of swamping when they were rescued by a fishing boat from Bardsey Isle.

Lloyd's List. 11th August, 1915.

Owners state that expected that the vessel will be re-floated.

Lloyd's List. 12th August, 1915.

August 9th. The motor vessel Ilesha, from Liverpool for Lagos which stranded here was returning to St. Tudwels to effect repairs to engines, the starboard engine having broken down on August 7th when 15 miles off the Smalls, and the port engine on August 8th when about 3 miles off Bardsey Island. The vessel proceeded under sail, but the wind dropped and she drifted with the tide and eventually went on the rocks at Bardsey Island.



Bardsey Lighthouse.

Lloyd's List.

Aberdaron August 13th. Steamer Ilesha, Liverpool for Lagos, no cargo, after being abandoned by crew morning 8th inst., owing to engine breakdown, stranded north side – south-west end of Bardsey Island on rocky ground. Consider prospects salvage hopeful.

Cambrian News and Merionethshire Standard. 13th August 1915.

On the Rocks. The Elder Dempster motor boat "Ilesha" with a cargo of coal for West Africa, went ashore on Sunday morning on the rocks of Bardsey Isle during a fog. The crew of seven had to take to a small boat capable under ordinary conditions of carrying two persons only. The boat was carried by the tide about eight miles out to sea and the crew were in great peril from swamping when they were rescued by a boat which put out from Bardsey.

Lloyd's List. August 16th, 1915.

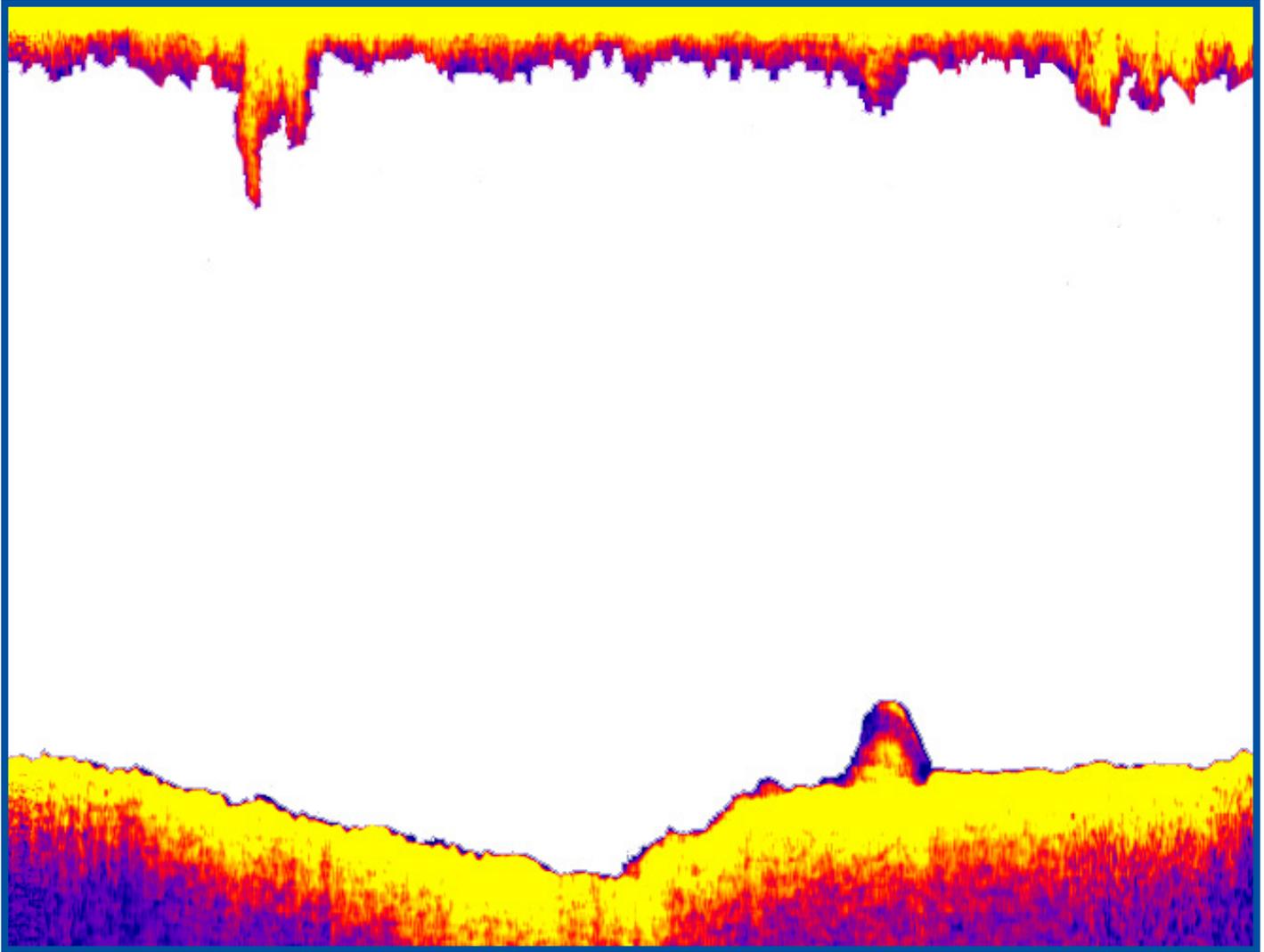
Salvage steamer 'Lady of the Isles' arrived.



A side-scan image of the wreck.

Cambrian News and Merionethshire Standard. 20th August 1915

In reference to the Elder Dempster motor steamer "Ilesha", wrecked on the rocks at Bardsey Isle last week, the report that the crew of seven had to take to a boat capable under ordinary circumstances of carrying two persons only, does not appear to be accurate. Our correspondent is informed that the crew entered the steamer's lifeboat, which was designed to hold all the crew and was fitted up with life-saving appliances. The lifeboat was swept out to sea by the tide, but the islanders of Bardsey saw it and immediately put out and rescued the shipwrecked crew. The steamer is much damaged, but hopes are entertained of salving her.



An echo-sounder trace of the wreck.

North Wales Chronicle and Advertiser for the Principality. 20th August 1915

SHIPWRECK. A twin motor driven ship, belonging to Messrs Elder, Dempster and Co., Liverpool, became disabled off the Smalls last Sunday, owing to the propellers being crippled through the breaking of the motor connecting tube. A heavy gale was blowing at the time, and the vessel became unmanageable, and was driven on the outer rocks of Bardsey Island, where she became a total wreck. The crew (seven) were all saved.

Lloyd's List. August 21st., 1915.

Awaiting favourable weather.

Lloyd's List. 23rd August.

Work proceeding satisfactorily. Weather fine.

Lloyd's List. August 26th., 1915.

Telegram from captain of 'Lady of the Isles'. Steamer 'Ilesha' re-floated 4 o'clock yesterday, but with regret owing to increased leakage vessel sank in 11 fathoms low water on east side Bardsey. Have now abandoned further, except blasting operations away for mast to clear any traffic.



Divers getting ready to visit the wreck.



Mooring bitts on the wreck.



A Bolinder engine at the National Waterways Museum, Ellesmere Port.



Engine parts recovered from the 'Ilesha', and donated to the National Waterways Museum at Ellesmere Port.

7.0 Analysis.

By the early years of the 20th-Century, steamships had become the major means of transporting cargo around the world, but their boilers and engines occupied a considerable amount of space that could be more profitably put to use. Replenishing the bunkers with coal was a dirty, back-breaking chore, that took a tremendous amount of time and energy, whereas oil was beginning to be regarded as a possible replacement for coal. However, steamships were relatively reliable, and most ship's engineers could carry out repairs should the need arise. As shown in the report and in John Lamb's reference book, Bolinder engines were more complex, and required a ship's engineer to have additional skills and an understanding of the maintenance requirements of these methods of propulsion.

By 1914, the Swedish company, Bolinder, had introduced their series of engines that used oil rather than coal, meaning that fuel could be more easily transferred to a vessel, and these engines occupied less space, thereby allowing a vessel of a specific length to carry more cargo than an equally-sized steamship.

The 'Ilesha' was propelled by two Bolinder engines, so there was a fall-back should one fail, but in August 1915, both suffered catastrophic failure possibly due to some of the problems listed by John Lamb, in his book entitled 'The Running and Maintenance of the Marine Diesel Engine'. This lack of propulsion led to the eventual loss of the 'Ilesha'.

8.0 Conclusions & Recommendations.

The wreck lying on the seabed off Pen Cristin at Bardsey Island is undoubtedly that of the motor-vessel 'Ilesha'.

9.0. References.

Sources include:

Lloyd's Register.

Shipwreck Index of the British Isles. Vol 5 (Richard Larne, Lloyd's Register).

The Essential Underwater Guide to North Wales. Vol. One, Part One. (Chris Holden)

RCAHMW COFLEIN <https://coflein.gov.uk/>

Wrecksite website <https://www.wrecksite.eu/Wrecksite.aspx>

National Library of Wales Welsh newspapers on line <https://newspapers.library.wales/>

The British Newspaper Archive www.britishnewspaperarchive.co.uk/