Forgotten Wrecks of the First World War

RMS Alaunia
Site Report

Maritime Archaeology Trust
LOTTERY FUNDED

First World War Centenary
LED BY IWM

April 2018
FORGOTTEN WRECKS
OF THE FIRST WORLD WAR

RMS ALAUNIA SITE REPORT

Maritime Archaeology Trust: Forgotten Wrecks of the First World War
Site Report: Alaunia (April 2018)
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MAT staff involved in the recording: Jan Gillespie, Christin Heamagi
MAT staff involved in research and reporting: Julie Satchell

ii Copyright Statement
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1. Project Background
Forgotten Wrecks of the First World War is a Heritage Lottery Funded project which is dedicated to raising the profile of a currently under-represented aspect of the First World War. While attention is often focused on the Western Front and major naval battles like Jutland, historic remains from the war lie, largely forgotten, in and around our seas, rivers and estuaries.

With over 1,100 wartime wrecks along England’s south coast alone, the conflict has left a rich heritage legacy and many associated stories of bravery and sacrifice. These underwater memorials represent the vestiges of a vital, yet little known, struggle that took place on a daily basis, just off our shores.

The study and promotion of these archaeological sites presents a unique opportunity to better interpret them and improve physical and virtual access.

The project focuses on underwater and coastal sites between Kent and Cornwall, which include merchant and naval ships, passenger, troop and hospital ships, U-boats, ports, wharfs, buildings and foreshore hulks. These sites, under water and on the foreshore, have been degrading and deteriorating due to natural and human processes for approximately 100 years and, as a result, are extremely fragile. In many cases, this project represents a final opportunity to record what remains on the seabed and foreshore before it is lost forever.

The project aims to characterise the nature and extent of the maritime First World War archaeological resource surviving on the south coast’s seabed and around the coast. This will enable an understanding of maritime activity just off our shores during the conflict and provide a window onto some of the surviving sites. While it will not be possible to visit and record all c.1,100 vessels dating to the First World War, lost off the south coast of England, a representative sample of sites have been selected for more detailed study, analysis and interpretation.

This report collates information collected during the project, relating to one of the south coast’s First World War wrecks, namely that of RMS Alaunia. The report constitutes one of the project outputs and will be lodged with the Archaeological Data Service, ensuring free public access beyond the life of the project.

2. Methodology
General detail on the methodologies employed during the project are outlined within Forgotten Wrecks of the First World War: Project Methodology Report, this report section concentrates on approaches and resources relating specifically to the Alaunia.

2.1 Desk Based Research
A range of sources were consulted for information on the RMS Alaunia. As a Cunard Liner the ship has a significant amount of documentation available related to it, in addition to featuring in a number of publications. The wreck’s popularity as a dive site further adds to available photographs and video of the seabed site. The following sources were explored during research:

<table>
<thead>
<tr>
<th>Online Research</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>You Tube:</td>
<td>As a popular dive site there are a number of videos available created by divers. Just one example of a sport diver video is: <a href="https://www.youtube.com/watch?v=ELuck9eLpPM">https://www.youtube.com/watch?v=ELuck9eLpPM</a> (British Diver)</td>
</tr>
<tr>
<td>Uboat.net</td>
<td><a href="http://uboat.net/wwi/ships_hit/144.html">http://uboat.net/wwi/ships_hit/144.html</a></td>
</tr>
<tr>
<td>Other URL:</td>
<td><a href="https://en.wikipedia.org/wiki/RMS_Alaunia_(1913)">https://en.wikipedia.org/wiki/RMS_Alaunia_(1913)</a></td>
</tr>
</tbody>
</table>
The National Archives
ADM 137/ 2960 1916 British Merchant Vessels sunk and captured by the enemy: The report of the loss of the vessel provides information time, date and manner of loss.

BT365 Board of Trade and successors: War Risk Insurance Records: These War Risk Insurance records can provide an interesting insight into the nature and insurance value of some of the cargo on board when ships were lost. The *Alaunia* was included within these records and detail of some of the cargo is included in Section 3.

Other Board of Trade records for *Alaunia* (BT 110/234) included the Certificate of Registration which provide detail on the size, propulsion and capacity of the vessel.

Geophysical Survey data
The site of the *Alaunia* is included within the Maritime and Coastguard Agency dataset HI4 1476 2015-83465 Hastings to Beachy Head, a copy of this data was kindly supplied via the UKHO through the Open Government Licence v2. Interrogation of the dataset provided a high resolution bathymetric image of the site (See Section 4.3).

### 2.2 Associated Artefacts
While the Forgotten Wrecks project had a non-recovery policy, where possible, the project aimed to ‘virtually reunite’ artefacts historically recovered from the Forgotten Wrecks. Artefacts recorded by the Receiver of Wreck (RoW) having been recovered from the *Alaunia* are outlined below. As a popular dive site it is likely that further material was raised from the site prior to 2001, before this date there are no digital records of reports to the RoW available.

<table>
<thead>
<tr>
<th>RoW records (via Pastscape):</th>
<th>A brass valve wheel, a fan blade, 3 porthole wing nuts and 6 EPNS silver spoons (Droit A/362)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The telegraph main engine head, a pedestal, the helm indicator bell, 2 lamps, 2 portholes (Droit A/969)</td>
</tr>
<tr>
<td></td>
<td>9 oil lamps, 4 portholes and 3 hose nozzles (Droit A/2993)</td>
</tr>
<tr>
<td></td>
<td>A brass vent cover (1&quot; x 3&quot;), and a broken cup with a Cunard crest recovered from this wreck (Droit A/2063)</td>
</tr>
<tr>
<td></td>
<td>A brass porthole (Droit 203/04)</td>
</tr>
<tr>
<td></td>
<td>A square porthole without glass (Droit 030/05)</td>
</tr>
<tr>
<td></td>
<td>A brass porthole, no glass (Droit 243/05)</td>
</tr>
</tbody>
</table>

### 2.3 Site Visit/Fieldwork
Forgotten Wrecks diving from the dive boat *DIVE 125* took place on the wreck of the *Alaunia* on 19 July 2017. Divers aimed to assess the condition of the remains in the bow area of this large wreck, create a sketch of key features and undertake photography including a photogrammetry survey.

A total of 5 divers undertook a total of 293 minutes diving on the wreck. The dive team used self-contained breathing apparatus (SCUBA) with a breathing gas of nitrox using accelerated decompression procedures.

Maritime Archaeology Trust: Forgotten Wrecks of the First World War
Site Report: *Alaunia* (April 2018)
3. Vessel Biography: Alaunia

Alaunia was chosen as one of the Forgotten Wrecks case study sites due to being representative of a large ocean going liner and its use as a troop carrying ship (Figure 1 and 2).

Figure 1: SS Alaunia (image from Wrecksite.EU stated copyright unknown, age of image out of copyright)

Figure 2: SS Alaunia Cunard postcard image (source Cunardshipwrecks.com, but image out of copyright)
3.1 Vessel Type and Build

*Alaunia* was built by Scott’s Shipbuilding and Engineering Co. Ltd, in Greenock and completed in 1913. The ship was an ocean-going liner designed to carry both passengers and cargo, it was constructed of steel and had four decks and bridge superstructure. There were two masts and two funnels (Figures 1, 2 and 3).

![Figure 3: Plan of the layout of the Alaunia (source Wrecksite.eu, stated copyright unknown).](image)

Details from the ships Certificate of Registration provide further information on the construction which included transverse framing, ten bulkheads, an elliptical stern and 21 water ballast tanks with a capacity of 2572 tons. It also includes the following detailed measurements:

<table>
<thead>
<tr>
<th>Area of the ship</th>
<th>Feet</th>
<th>Tenths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length from forepart of stem, under the bowsprit, to the aft side of the head of the stern post</td>
<td>520</td>
<td>3</td>
</tr>
<tr>
<td>Length at quarter of depth from top of weather deck at side amidships to bottom of the keel</td>
<td>519</td>
<td>7</td>
</tr>
<tr>
<td>Main breadth to outside of plank</td>
<td>64</td>
<td>0.5</td>
</tr>
<tr>
<td>Depth in hold from tonnage deck to ceiling at amidships</td>
<td>26</td>
<td>3</td>
</tr>
<tr>
<td>Depth in hold from upper deck to ceiling at amidships, in the case of the three decks upwards</td>
<td>43</td>
<td>1</td>
</tr>
<tr>
<td>Depth from top of beam amidships to top of keel</td>
<td>47</td>
<td>3.3</td>
</tr>
<tr>
<td>Depth from top of deck at side amidships to bottom of keel</td>
<td>46</td>
<td>3</td>
</tr>
<tr>
<td>Round of beam</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Length of engine room</td>
<td>137</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 1: Detail of the measurement of *Alaunia* from the Certificate of Registration (TNA, BT 110/234)

The ship had a horsepower of 1324 and top speed of 14.5 knots, a gross tonnage of 13,405, with the capacity to carry 8,000 tons of cargo. The 540 ft (c.158.6m) long ship had a beam of 64 ft (c.19.5m), a draught of 44ft (13.4m) and was powered by twin screws driven by four quadruple expansion engines. The diameter of the cylinders in each engine were 26” (0.66m), 37” (0.94m), 53” (1.35m) and 76” (1.93m). The engines were also made by the shipbuilders. There were five boilers with a loaded pressure of 210lbs.

The ship had accommodation for 520 second class and 1,620 third class passengers. The third class passengers had four and six berth cabins (Macdonald, 2012).

*Alaunia* was one of three ships ordered to service the passenger trade from Canada to Britain, the other two vessels in the same class were the RMS *Andania* and RMS *Aurania*.
3.2 Pre-war Career
The *Alaunia* was a British vessel, owned by the Cunard Line and was operated at the time of loss by Cunard (official number 135513). *Alaunia* was launched on the 9th June 1913, registered on the 5th November 1913 and made its initial voyage on the 27th November 1913. It sailed from Liverpool to Boston via Queenstown and Portland. During the first half of 1914 *Alaunia* continued regular Atlantic crossings between Britain and America with four round voyages on this route.

There was a slight route change on the 9 April 1914 when the ship was loaded with cargo in London, then picked up passengers in Southampton prior to heading for its destination in Portland. On the 14 May 1914 *Alaunia* left London, via Southampton, this time heading for Quebec and Montreal (ShipsList.com; quoting Bosnor).

3.3 First World War Use & Loss
At the outbreak of war the *Alaunia* was requisitioned as a troop ship and was the first Cunard ship to transport Canadian troops. The website for the Royal Montreal Regiment quotes from a publication by Duguid ‘Official History of the Canadian Forces in the Great War 1914-1919, Vol 1, part 2’, which includes a table with the statistics of what was carried on each of the two ships that transported the first Canadian Contingent. It was the *Alaunia* and its class vessel *Andania* that left Canada at the end of September with the *Alaunia* on the 27th and the *Andania* on the 29th. On board the *Alaunia* were:

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crew</td>
<td>321</td>
</tr>
<tr>
<td>Troops – officers</td>
<td>101</td>
</tr>
<tr>
<td>Troops – other ranks</td>
<td>1,961</td>
</tr>
<tr>
<td>Total Troops</td>
<td>2,062</td>
</tr>
<tr>
<td>Horses</td>
<td>19</td>
</tr>
<tr>
<td>Vehicles – horsed</td>
<td>40</td>
</tr>
<tr>
<td>Small arms and ammunition</td>
<td>88 boxes of S.A.A</td>
</tr>
<tr>
<td>Military cargo</td>
<td>40 tons baggage</td>
</tr>
<tr>
<td>General Cargo</td>
<td>2,000 tons grain and 50 tons lumber</td>
</tr>
</tbody>
</table>

*Table 2: Details of the people, animals and cargo carried on Alaunia on its initial voyage when requisitioned.*

In 1915 *Alaunia* was involved in transport for the Gallipoli campaign, the Captain at this time was Arthur Rostron who had been master of the *Carpathia* during the rescue of the *Titanic* passengers (Warwick & Roussel, 2012). Later in 1915 *Alaunia* carried troops to Bombay. Board of Trade records indicate that Master of the vessel from the 28th September 1915 was Earnest Granville Diggle. With this role passing on the 16 June 1916 to Horace Mills Benison.

In 1916 the *Alaunia* returned to the North Atlantic carrying troops from Canada and America (Wikipedia 2018). In addition to troop transport the *Alaunia* continued carrying civilian passengers, mail and freight from America and Canada to Europe and it was on one of these voyages that the ship was to be lost.

At the time of the sinking the *Alaunia* was on route from New York (departed 19 September) bound for London. Records in The National Archive (ADM 137/2960) state the vessel was not armed. The ship was carrying passengers and a mixed cargo of zinc, foodstuff and hosiery. Table 3 provides further detail of the nature and value of the cargo on board from information held in the Board of Trade War Risk Insurance Records.
Table 3: Detail from War Risk Insurance Records of cargo on board the Alaunia at the time of loss (TNA, BT365).

<table>
<thead>
<tr>
<th>Date of Settlement</th>
<th>Steamer</th>
<th>Insurer</th>
<th>Claimant</th>
<th>Nature of Goods</th>
<th>Value (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/10/1916</td>
<td>Alaunia</td>
<td>Morris Ashly Ltd</td>
<td>Henry Head + Co Ltd</td>
<td>Zinc Oxide</td>
<td>8580</td>
</tr>
<tr>
<td>30/10/1916</td>
<td>Alaunia</td>
<td>John Howell + Co Ltd</td>
<td>Thomas Meadows + Co</td>
<td>Hosiery</td>
<td>3000</td>
</tr>
<tr>
<td>01/11/1916</td>
<td>Alaunia</td>
<td>H.B. Barnard + Sons</td>
<td>Geo. J. Emanuel + Co Ltd</td>
<td>Zinc Sheets</td>
<td>5145</td>
</tr>
<tr>
<td>09/11/1916</td>
<td>Alaunia</td>
<td>Berry Barclay + Co</td>
<td>Berry Barclay + Co</td>
<td>Flour</td>
<td>1200</td>
</tr>
<tr>
<td>17/11/1916</td>
<td>Alaunia</td>
<td>E. Capel Cure + Co Ltd</td>
<td></td>
<td>Wheat</td>
<td>1000</td>
</tr>
</tbody>
</table>

Alaunia arrived at Falmouth on the 17th October where most of the passengers and mail were discharged before the ship carried on its voyage up the channel. The Captain had a policy of steaming at full capacity to counter the threat of submarines by outrunning them, so the vessel was at full speed when it struck a mine at 04.30 on 19 October 1916.

The mine exploded under the propellers, breaking the propeller shafts and stopping the ship. The official account of the loss as recorded in British Merchant Vessels sunk and captured by the enemy states: “The Master dropped both anchors and part of the crew were ordered into the boats. While being lowered one boat capsized and two men were drowned. At 5am a patrol vessel came alongside and took off the Master and the rest of the crew. Several Naval vessels and a tug arrived later and the Naval crews weighed the starboard anchor but were unable to weigh or slip the port one, and the ship sank at 9.30AM” (ADM 137/2960 1916).

Of the 165 crew, two lost their lives – a Steward and a Trimmer (see Section 3.5) – during the sinking of the ship. There were only a few passengers remaining on board as most had alighted at Falmouth, those rescued were landed at Dover and Newhaven by Patrol vessels.

It is reported that the mine that the Alaunia struck was laid earlier that day by SM UC-16, commanded by Egon von Werner (uboot.net).

3.4 Associated Vessels

The mine which sank Alaunia is reported to have been laid by submarine UC-16, which was part of the Flanders submarine flotilla, it had been launched on 1 February 1916 and commissioned on 18 June 1916. The UC submarines were designed primarily for mine laying, although they did also carry torpedoes. UC-16 undertook 13 patrols and is credited with sinking 42 ships (Wikipedia, 2018).

3.5 People Associated with the Alaunia

The two crew members who died during the sinking were:

- Charles Frederick Morris, aged 42, 2nd Steward. From Liverpool. He is commemorated at the Liverpool (Toxteth Park) Cemetery.
- Joseph William White, aged 16, Trimmer from London. He is recognised on the Tower Hill Memorial.

The loss of Frederick Morris was reported in a number of United States newspapers. The New York Times (21 October 1916) reported “Morris had been coming to this port for many years on the Carmania, Lusitania, Aquitania and Lacunia before he went to the Alaunia. The steward had a
Belgian sheep dog as a pet on the ship. It was given to him by the crew of the *Queen Elizabeth*. The dog was called Hoodoo Nelly because she had been on five warships that were sunk before she went to the *Queen Elizabeth*.

Further detail of the life of Hoodoo Nelly was covered by the Los Angeles Herald on 3 July 1916 “During her adventurous career which is vouched for by Second Steward Morris, Nelly was wounded in the battle of the Marne, took part in the naval relief at Antwerp and was blown up twice in the North sea on mine sweepers. Later Nelly was on the battleship *Goliath* when she was torpedoed at the Dardanelles and after being blown up twice more on a mine sweeper and a torpedo boat destroyer she was rescued from the *Queen Elizabeth*. Later the big brown dog was handed over to the *Alaunia* and has now made a voyage to the Persian gulf and this is the second trip she has made to New York”.

It is unknown whether Hoodoo Nelly survived the sinking of the *Alaunia*.

3.6 Post-loss Activity
The site was marked with a buoy until 1920, it was then wire swept in 1937 to remove upstanding structure that could be a danger to shipping traffic (PastScape, 2018). A DiverNet article (April 2012) indicates that the site was salvaged in the 1960s and 70s, which is likely to have contributed to the more broken up nature of the rear two thirds of the vessel. This is further corroborated by Warwick & Roussel (2012: 95) who state that commercial salvors have taken advantage of the relatively easy access to the vessel and the propellers have been removed and explosives used to remove cargo and other valuable items.

Divers in 1981 reported that the ship was lying on its port side with the forward 30m of structure being relatively intact (PastScape, 2018). The site has continued to be very popular with sport divers with Warwick and Roussel (2012: 95) stating “The *Alaunia* is probably the best diveable Cunard Line wreck in inshore UK waters and has been a popular destination for divers for many years. It is ranked number twenty-two in Kendall McDonald’s top 100 UK wrecks and featured among Rod Macdonald’s ten entries in ‘Dive England’s Greatest Wrecks’. The wreck is visited regularly by dive clubs and the many charter dive boats that operate in the area. Like most wrecks on the south coast of England, the *Alaunia* has been stripped of most removable non-ferrous material, but there is still a lot to enjoy, including the abundant marine life”.

4. Seabed Remains
4.1 Site Location and Environment
The wreck of the *Alaunia* lies off the East Sussex coast approximately 2 miles south of the Royal Sovereign Light Vessel (Figure 4). The remains lie at a minimum depth of 24m, maximum 36m, on a gravel seabed.
4.2 Archaeological Methodology

The divers investigated the wreck at slack water and had a visibility of 6-7 metres. The depth of 32 metres meant the light levels were relatively low, but for photography this was compensated through the use of lights.

Photogrammetry survey was undertaken by Christin Heamagi and Marco Palmer. Christin undertook photogrammetry of the area behind the bow moving towards the midships area. Beginning on the starboard side she crossed directly over the wreck to the port side, she then returned across the wreck moving further back on the wreck at each pass. In total there were six passes across the wreck finishing back on the starboard side. Marco undertook photogrammetry at the bow area.

Martin Davies photographed the bow area and detail of a number of the features in place here – winches, anchor and machinery. Jim Fuller and Roger Morgan collected photographs and video in addition to undertaking measured survey of a number of features on the wreck site.

4.3 Description of Surviving Vessel Remains

Due to the availability of high-resolution geophysical survey data gathered by the Maritime and Coastguard Agency, it is possible to review detail of the wreck remains on the seabed (Figure 5). This image, along with diver observations, allows the structural remains to be described. Diving as part of the Forgotten Wrecks project concentrated on the bow of the vessel, which has provided particular detail of the structure here.

The wreck lies on its port side, at an approximate angle of 45 degrees, with the bow pointing towards the east, the wreck is orientated east south east to west north west (Figure 5). The bow is intact for approximately 25 metres before the vessel becomes more broken.
In 2003 Kendall MacDonald reported that the superstructure lies in a heap of twisted metal at the foot of the steeply sloping decks. The wheelhouse, relatively intact, lies 10 metres from the wreckage on the port side. However, in 2012, Warwick & Roussel state that nothing recognisable as a 'wheelhouse' can be seen on the seabed.

Warwick & Roussel (2012) provide further description of the seabed remains: at the bow a large foredeck derrick angles upwards, aft from the bow two more anchors can be seen among the wreckage. Towards the stern a propeller shaft can be seen, leading towards what remains of the steering gear and a larger steering quadrant.

The bow rises up to 12 metres proud of the seabed. Diving survey confirmed that at the bow, part of the foredeck is still in place complete with wooden decking (Figure 6). Mooring bollards are also present around this intact area of structure (Figures 7 and 8).

Significant features at the bow include the anchor which is hanging from the starboard bow (Figure 9) the anchor winch with the chains still visible in place (Figure 10), and a further large deck winch (Figures 11 and 12), there are additional smaller winches also surviving. Measurements of the large deck winch demonstrate a total length of the winch at 480cm, with the length of the warp ends measuring 80cm.
Diver survey measurements of the anchor revealed a height of 250cm and maximum width of 230cm. The anchor arms are 150cm measuring from inside the tip of the fluke to the join with the main shank. The general width/diameter of the arm is 40cm with the fluke measuring 60cm across.

Divers searched for the port bow anchor, and although the chain was located (Figure 13) it is thought that the anchor lies buried in the seabed. The situation with one anchor being raised and the other on the seabed is corroborated by the account of the loss in The National Archive included in Section 3.3 above, which stated “The Master dropped both anchors and part of the crew were ordered into the boats..... Several Naval vessels and a Tug arrived later and the Naval crews weighed the starboard anchor but were unable to weigh or slip the port one, and the ship sank at 9.30AM” (TNA, 137/2960).

Figure 6: Close up of the bow of the vessel, showing the intact wooden decking, the starboard anchor chain can be seen to the right of the photograph.
Figure 7: Row of mooring bollards at the bow (composite image modelled from a number of photographs).

Figure 8: Close up images of two, from a set of four bollards.
Figure 9: Starboard bow anchor.

Figure 10: Anchor winch with chains still in place, a derrick can be seen hanging over the port side of the bow.
Figure 11: Large deck winch.

Figure 12: Large deck winch, shown at a different angle than in Figure 11.
As there is a break in the structure at the bow behind the coherent forward section, this provides an opportunity to view the framing and support structure of the vessel hull and decks and associated fixtures. Figure 14 shows the vessel’s framing and internal supports for the deck structure above, while Figure 15 provides a view of the inside of the hull structure with a row of portholes clearly visible. Detail of the deck supports and brackets are visible in Figure 16. An interesting feature present within a relatively well preserved area of structure is a rectangular opening (Figure 17), this is thought to be a gangway entrance and appears to coincide with one visible on the ship’s plans just aft of the forward mast (see Figure 18 for ship’s plans).
Figure 14: The hull framing and supports for upper deck structure.

Figure 15: The inside of the hull in the bow area, the positions of portholes can be clearly seen.
As Forgotten Wrecks project diving concentrated on the bow, for more information on the amidships and stern area it is possible to review other diver reports and the geophysical survey image. Figure 18 shows the plan of the vessel alongside the geophysics.
An account in DiverNet (April 2012) outlines that moving back past the bridge area and accommodation the wreck is more broken up. There is little to be seen of the engines, but there are two massive boilers, one of which has rolled away from its original position. Behind the boilers it is possible to follow the prop shaft to the steering gear and rudder. Further winches can be seen towards the stern prior to reaching the large steering quadrant. The propellers are not on site, likely to have been salvaged.

In Figure 18 one of the boilers can be clearly seen, comparing this to the plans of the vessel it matches up with the position of the forward boiler room, indicating that this boiler is still in its original position with the hull. Further interrogation of Figure 18 reveals the two masts are still present, although lying on the seabed on the port side.

5. Recovered Artefacts
Information on artefacts recovered from the *Alaunia* has been derived from Pastscape (2018) (also see Section 2.2 above). Objects reported are mostly within the class of ‘fixtures and fittings’ with a small number demonstrating ‘eating and drinking’.

**Eating and Drinking** - 6 EPNS silver spoons and a broken cup with a Cunard crest have been reported. These are the types of objects frequently found on passenger liners and are likely to be in keeping with the status of the ship.

**Fixtures and fittings**

*Bridge equipment* - the telegraph main engine head, a pedestal and the helm indicator bell are all assumed to have originated on the bridge of the ship.

*Lamps* – a total of eleven lamps have been reported, of these nine specifically say they are oil lamps. It is likely that the lamps were all of a similar type.
Three hose nozzles – it is unclear if these are related to fire hoses, which would have been present throughout the ship.

Portholes – a total of nine portholes have been reported, with one of these stating it is a square porthole (without glass), three porthole wing nuts have also been reported.

As can be seen in images of the ship at sea (Figure 2) and the ship plan (Figure 3), there were originally many portholes within the structure. Diving confirmed that a few of these remain within the structure. From the ship plan it appears that square portholes were mostly situated around the amidships areas along the same deck (See Figure 19 – red areas).

Various – other fixtures and fittings reported include a brass valve wheel, a brass vent cover (1" x 3"), and a fan blade. Without further information it is difficult to say much about these artefacts. It is possible that they are related to the engine and boiler equipment.

6. Site Significance & Potential Further Research
The Alaunia is a significant site for a number of reasons. Two areas of particular note are the ship type and the ship’s role.

Ship Type: Quadruple expansion engines are relatively rare in the archaeological record, making those fitted on Alaunia of particular interest. A study of ship losses from 1914 – 1938 (Wessex Archaeology 2011: 32) identified only five examples of ships powered by quadruple expansion engines in the whole of English territorial waters, with the Alaunia being one example.

The same study (Wessex Archaeology 2011: 39) reviewed the numbers of passenger liners of the period within English territorial waters and concluded “Comprising only 2% (27 records) of the total number of records of wrecks for this period, passenger vessels may be regarded to be of special interest on the basis of their rarity……….. Passenger liners in particular are likely to be regarded as being of special interest because in this period they represent the ‘Golden Age of the Ocean Liner’. Vessels equipped with methods of propulsion that enabled them to attain greater speeds, such as turbine, diesel or oil engines, would further be regarded of special interest, representing the strong competitive market that existed between shipping lines whose emphasis was on speed”.

Ship Role: The Alaunia played a significant role in the First World War having been requisitioned to carry troops and equipment in support of the war effort, although continuing to operate as a standard Cunard Liner when not on Government work. The involvement of Alaunia in transporting
troops for the Gallipoli campaign is particularly significant, alongside its importance to both Canada and the United States, having carried troops from these countries.

Work on the *Alaunia* as part of the Forgotten Wrecks Project has begun to address the lack of archaeological recording of the site. There is great potential for further recording of the seabed remains to add to understanding of the extent of the remains and to identify elements within the more broken amidships and stern sections of the vessel. The identification and recording of any remains of the quadruple expansion engines (if still in-situ) would provide detail of these relatively rare ship engines.

There are likely to be many more objects that have been recovered from the *Alaunia* by sport divers which are in private ownership. Efforts to contact those holding material and creating records of the artefacts would help make this information publicly accessible and through digital records virtually ‘reunite’ the recovered material with the vessel.

7. Bibliography

**Websites**


nal=q&recordsperpage=10](http://www.pastscape.org.uk/hob.aspx?hob_id=911905&sort=4&search=all&criteria=alaunia&ratio

RMS *Alaunia*, Rod Macdonald: shipwrecks of Scotland. [http://www.rod-


Uboat.net, 2018, *Alaunia*. [https://uboat.net/wwi/ships_hit/144.html](https://uboat.net/wwi/ships_hit/144.html)


**Books**


