Forgotten Wrecks of the First World War

SS Pandion
Site Report

Maritime Archaeology Trust

LOTTERY FUNDED

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FORGOTTEN WRECKS
OF THE FIRST WORLD WAR

SS PANDION
SITE REPORT
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i Acknowledgments
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MAT would like to thank all the volunteers who gave up their time to help with research and to dive on the SS Pandion. They were Jane Maddocks, Lucy Smith and Michael Winter.

MAT staff involved in fieldwork: Jose Oscar Encuentra, Jan Gillespie, Brandon Mason.

MAT staff involved in research and reporting: Jan Gillespie, Julie Satchell.

Special thanks also go to local dive boat skipper and historian Dave Wendes who made his research collection available for scrutiny by MAT staff.

ii Copyright Statement
This report has been produced by the MAT with the assistance of funding provided by the Heritage Lottery Fund through their Heritage Grants Programme. Unless otherwise stated all images are copyright of the MAT.

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1. Project Background
Forgotten Wrecks of the First World War is a Heritage Lottery Funded project 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 from the Isle of Thanet in Kent, to beyond the Isles of Scilly, and over half way into the English Channel. The sites include merchant and naval ships, passenger, troop and hospital ships, U-boats, ports, wharfs, buildings and foreshore hulks. These sites, underwater, on the foreshore and around the coast, 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 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 SS Pandion. 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 in relation to the SS Pandion.

2.1 Desk Based Historic Research
2.1.1 Online information/sources
A range of online sources were searched for information on SS Pandion, with the following being identified.

<table>
<thead>
<tr>
<th>Source</th>
<th>URL</th>
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<tbody>
<tr>
<td>Other URL</td>
<td><a href="http://1915crewlists.rmg.co.uk/document/193179">http://1915crewlists.rmg.co.uk/document/193179</a></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.tynebuiltships.co.uk/P-Ships/pandion1904.html">http://www.tynebuiltships.co.uk/P-Ships/pandion1904.html</a></td>
</tr>
<tr>
<td>Historical RFA</td>
<td><a href="http://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=MWS10012&amp;resourceID=1032">http://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=MWS10012&amp;resourceID=1032</a></td>
</tr>
</tbody>
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2.1.2 Records at The National Archives
Research was further extended through visits to view relevant material held at The National Archives at Kew which discovered the following document.

<table>
<thead>
<tr>
<th>Document</th>
<th>Ref.</th>
<th>Where</th>
<th>Date accessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transcript of Register for Transmission to Registrar General of Shipping and Seamen</td>
<td>BT110-381</td>
<td>TNA</td>
<td>2017</td>
</tr>
</tbody>
</table>

2.1.3 Records at other archives/collections
The personal records of Dave Wendes relating to SS Pandion were consulted, which included ships plans of the 1904 Pandion, they were digitised courtesy of Dave Wendes, and with the kind permission of the Tyne and Wear Archives and Museums (see Section 3).

Documents relating to people connected with Pandion:

<table>
<thead>
<tr>
<th>What</th>
<th>Ref.</th>
<th>Where</th>
<th>Date accessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half-Yearly Agreement and Account of Voyages and Crew of a ship engaged in the home trade only (and official Log Book for a Vessel exclusively employed on the Coasts of the United Kingdom)</td>
<td>RSS/CL/3666/007</td>
<td>National Maritime Museum (on line)</td>
<td>12/4/15</td>
</tr>
</tbody>
</table>

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.

Research identified artefacts recovered from the Pandion which had been reported to the Receiver of Wreck and are detailed within Pastscape (Pastscape, 2015), but it is now known that the wreck originally thought to be the Pandion (from where the artefacts came), is that of the SS South Western.

In 1995 divers from Eastleigh sub aqua club brought up the letter ‘O’ and later the letter ‘P’ was found. Both possibly from the name plate of this wreck thought now to be the Pandion.

2.3 Site Visit/Fieldwork
Forgotten Wrecks site visits and fieldwork aimed to:

- Provide opportunities for volunteers to access and take an active role in the recording and research of a range of different types of maritime First World War site.
- Record extant remains for heritage records.
- Record extant remains for public dissemination.

The most appropriate methods for site recording were chosen from the following, on a site-by-site basis: site sketch, measured survey, photography and/or video.

Forgotten Wrecks diving from the dive boat Wight Spirit took place on the wreck of the SS Pandion on 14 July 2016.

Initial dives aimed to assess the condition of the remains and obtain a sketch drawing, then to build on this information with a measured sketch/survey and photographic recording where possible. Four divers undertook a total of 196 minutes diving on the wreck. The dive team used self-contained...
breathing apparatus (SCUBA) with a breathing gas of enriched air nitrox (EANx) using accelerated decompression procedures.

The diving conditions were described as very poor. There was very low light and limited visibility hampering survey and photography.

3. Vessel Biography: SS Pandion

The SS Pandion was chosen as one of the Forgotten Wrecks case study sites because the site has been misidentified in the past. The wreck originally thought to be that of the Pandion has subsequently been identified as the South Western (Wendes, 2006). Dive boat skipper and historian Dave Wendes has located another wreck which is now thought to be that of the Pandion and is some considerable distance from the reported position of the ships loss (Dave Wendes (2015) pers. comm).

There were three ships of the same name, one built in 1904 and lost in 1917 (which is the subject of this report), another Pandion built in 1917 and a third Pandion built in 1926. A drawing by Dave Wendes (Figure 1), and the ships plans from the Tyne and Wear Archives (Figure 2) are those of the Pandion built in 1904 (Dave Wendes (2015) pers. comm).

![Figure 1: Drawing by Dave Wendes of SS Pandion built 1904 based on the original ships plan (with permission from Dave Wendes)](image)

3.1 Vessel Type and Build

SS Pandion was built by Swan Hunter & Wigham Richardson Ltd in Newcastle upon Tyne and completed in May 1904. The ship was a steel screw steamer with one deck, a well deck and fitted with electric lights. Its propulsion was steam with a triple expansion three cylinder engine and two single ended boilers, a new donkey boiler was fitted in 1912. The 255ft 4in (c.77.72m) long ship had a beam of 33ft 7in (c.10.24m) and a gross tonnage of 1279 tons (Wrecksite EU, 2001-2015).
3.2 Pre-war Career
The *Pandion* was launched at the Neptune Shipyard. The intention was to work for the carriage of a few passengers and cargo between Liverpool and Dutch and Belgian ports (Pastscapes, 2015).

3.3 First World War Use & Loss
The *Pandion* was an Irish vessel, owned by the Cork Steam Ship Company Ltd and was still operated at the time of loss by the Cork Steam Ship Company Ltd (official number 115119, Yard number 710). At the time of the sinking the *Pandion* was on route from Rotterdam bound for Manchester under the command of Captain J A Smith carrying a general cargo, boxes of WW1 ammunition have been found on the wreck. The vessel was reported to be defensively armed but no record has yet been found to indicate what with.

On 15 March 1917 when *Pandion* was passing 11 miles to the west of the Owers Light Vessel south of Selsey Bill, it was in a collision with the much larger government transport and Liverpool registered ship SS *Northwestern Miller*. The *Northwestern Miller* was 6504 gross tons, so therefore inflicted severe damage to the 1279 ton *Pandion*. To date there have been no detailed accounts found of what actually happened, but the *Pandion* sank, and of the 21 crew members one was lost (Wendes, 2006, p. 92).

3.4 Associated Vessels
The *Northwestern Miller* was built by Northumberland Shipbuilding Co Ltd in 1914 and owned by the Norfolk and North American Steam Shipping Co Ltd (Furness Withey & Co), Liverpool. In 1927 the ship was owned by Nordeutscher Lloyd, Bremen and renamed *Augsburg* (Figure 3), then Teikoku Kisen KK, Tokyo in 1941 and renamed *Teiryu Maru*. It was torpedoed by US submarine USS *Guardfish* on 19 July 1944 and sank 180 miles NW of cape Bojeador (Tyne Built Ships).

3.5 People Associated with the SS *Pandion*
A mixture of nationalities made up the crew as can be seen in a crew list document available via the National Maritime Museum website (National Maritime Museum, no date). The website shows the original document entitled “Half-Yearly Agreement and Account of Voyages and Crew of a ship engaged in the home trade only (and official Log Book for a Vessel exclusively employed on the Coasts of the United Kingdom”). It is interesting that the crew was made up of 13 different nationalities being,
Arabia, Belgium, Chile, Denmark, Greece, Holland, Norway, Portugal, Romania, Russia, Singapore, Spain and the United Kingdom.

3.6 Post-loss Activity

There has been some confusion as to the identity of the Pandion shipwreck site. It was originally thought that another wreck, which has subsequently been identified at the South Western, was that of the Pandion.

With evidence from the ships plans, the size, description and approximate location, it is now believed that the ship, which is the subject of this report, is that of the Pandion built in 1904, although this has not been positively proven as yet (Wendes 2006, p. 92). It does not appear to have been a regularly dived site, and the artefacts that have been attributed to the Pandion (Pastscape, 2015), are now known to have come from the South Western, and no artefacts have been found to have been recorded as being recovered from this site as yet.

The Eastleigh branch of the British Sub Aqua Club discovered the letters ‘O’ and the letter ‘P’ which they brought to the surface. This is another clue as to the identity of the wreck.

4. Seabed Remains

4.1 Site Location and Environment

The wreck of the Pandion is located 11 miles to the west of the Owers Light Vessel, south of Selsey Bill in position 50.1416667 -0.973611111 WGS84 (UKHO) (Figure 4). The vessel is said to be some considerable distance from the reported position of its loss (Wendes, D 2006, p.92). Divers confirmed that the seabed surrounding the site is formed of sand and shingle.

![Figure 4: Location of the wreck now believed to be that of the SS Pandion](image-url)
4.2 Archaeological Methodology
A range of survey techniques were to be carried out on the Pandion but owing to the underwater conditions the following were undertaken:

**Visual survey**
- Locate the site and determine whether there are any coherent pieces of structure or parts of the wreck
- To help confirm identity, look out for evidence of deck cranes and access doors on the sides of the hull
- Identify features of the vessel for more detailed recording through photographs and video
- Confirm the nature of the seabed around the wreck

**Photographic survey**
- Gather general photographs of the wreck and divers on the wreck
- Photograph key features

**Video survey**
- Conduct general Go-pro video of the wreck and divers on the wreck
- Gain footage of key features of the wreck

**Measured survey**
- Take measurements of diagnostic features

Unfortunately, the very poor conditions on the site at the time of the dive prevented much of the photography and video footage from being of good enough quality for analysis.

Images for use with photogrammetry were taken using a Nikon D7000 held within an underwater housing. An Orca 3000 Lumin light was used for illumination and some Go-pro video footage was obtained. The poor conditions hampered these images. Some measurements of key features were taken by divers.

4.3 Description of Surviving Vessel Remains
The Pandion lies in 38m of water and to help clarify the identity of the ship, amongst other key features, the divers were looking for evidence of deck cranes, of which Pandion had five according to the original ships plans held by historian Dave Wendes. The plans also show that the ship had access doors on the sides of the hull which were also sought (see Section 3.1 this report). Unfortunately, during the Forgotten Wrecks dive, neither of these features could be confirmed, in part because of the very poor underwater conditions.

Divers reported that the wreck is listing over to its starboard side on a seabed of sand and gravel, the bows point towards the west. The dark conditions in very poor visibility hampered the divers from getting a clear picture of the remains (Figure 5). The highest part of the wreck stands around 6 meters. The hull remains are substantial with frames visible where the plating has fallen away (Figure 6), some areas near the centre of wreck structure appear to be a jumble of pipes and metal fittings (Figure 7).
Figure 5: Diver attempting photography in poor conditions diving the Pandion

Figure 6: Hull frames of the Pandion
In the midships area, are two boilers which measured 360cm in length, in which rivets were observed to be present. They have rolled slightly, but are still in their original position forward of the engine. An inspection panel or gauge insert 50cm long is present in the starboard boiler and some broken down hull plating covers the port boiler (Figure 8). A toothed wheel along with a steam valve wheel is also apparent in this area.
Behind the boilers, the triple expansion engine block has fallen upside down and the piston con rods stand horizontally (Figure 9, 10 and 11).

Figure 9: The engine block which has toppled over

Figure 10: Parts of the conrod mechanism
Moving towards the stern a possible mast is lying across the vessel with evidence of hatch covers nearby. The stem of the ship was observed to be laying towards its port side with a Danforth anchor over on the starboard side.

The extent remains of the *Pandion* are quite coherent, but the area around the triple expansion engine has succumbed to corrosion and there are a jumble of rods, steam pipes and metal fittings in this area. Considering it has survived the natural processes under water for nearly 100 years it is still recognisable. Closer inspection in improved conditions will help clarify how intact the remains are and to try to positively identify the vessel by seeking out the specific features identified from the ships plans.

### 5. Site Significance & Potential Further Research
There is still some confusion over the true location of remains of SS *Pandion* as the position of the wreck investigated as part of this project does not equate to the position for the recorded loss. Other confusing factors are caused by the fact that that the *Pandion* in question was built in 1904 and was lost in 1917, another *Pandion* was built in 1917 and a third one was built in 1926. A photograph of the *Pandion* which was believed to be that built in 1904, does not adhere to the original ships plans, of which Dave Wendes has a copy, although there are similarities (Figure 12).
The 1904 Pandion had deck cranes (according to the plans) but it is uncertain if the later Pandion’s also had cranes (but it is possible). The plans from the 1904 Pandion show that the ship had access doors in the side of the hull (see ships plans section 3.1) but the Pandion on the photograph in question does not have these. There is also the possibility that the plans were altered during the building of the ship (Dave Wendes (2016) pers. comm., 14 July).

Further research and diver observation is required to confirm that the remains of the Pandion built in 1904, and sunk during the First World War in 1917, is the ship located at this site.

6. Bibliography
Tyne Built Ships (No date). SS Pandion. Available at: http://www.tynebuiltships.co.uk/P-Ships/pandion1904.htm Accessed (12/4/15)