



Rampion Offshore Wind Farm



ES Section 13 – Marine Archaeology - Appendix 13.2

Moore Marine Services Ltd

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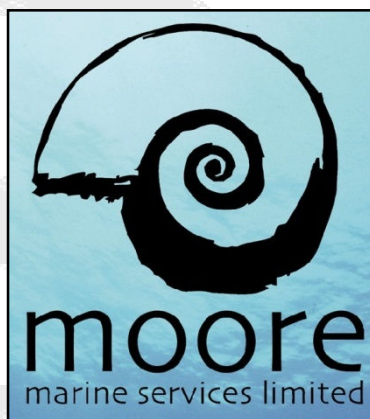
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E.ON Climate & Renewables UK Rampion Offshore Wind Limited

**MARINE ARCHAEOLOGICAL ASSESSMENT
OF
RAMPION OFFSHORE WINDFARM
FOR
RSK GROUP
ON BEHALF OF
E-ON POWER**



Moore Marine

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ABBREVIATIONS

BC	Box core	ppm	parts per million
CAD	Computer Aided Design	psi	Pounds per square inch
CM	Central Meridian	QC	Quality Control
CPT	Cone Penetrometer Test	RTK	Real Time Kinematic
CSF	Coordinated System File	ROV	Remotely Operated Vehicle
CRP	Common Reference Point	RTCM	Radio Technical Commission for Maritime Services
DGPS	Differential Global Positioning System	S	Seconds
DP	Dynamic Positioning	SBES	Single Beam Echo Sounder
DTM	Digital Terrain Model	SBP	Sub-Bottom Profiler
EBS	Environmental Baseline Survey	SEG-Y	Seismic Data Format
ED50	European Datum 1950	SOLAS	Safety of Life at Sea
FLO	Fisheries Liaison Officer	SOW	Scope of Work
FM	Frequency Modulation	SRB	Sulphate Reducing Bacteria
GeoTIF	Geographically Referenced TIF	SSS	Side-Scan Sonar
GPS	Global Positioning System	SVP	Sound Velocity Profiler
GS	Grab Sample	TIF(F)	Tag Image File (Format)
HAT	Highest Astronomical Tide	TPU	Topside Processing Unit
HSA	Health and Safety Authority	TM	Transverse Mercator
HSE	Health and Safety Executive	UHF	Ultra-High Frequency
HV	High Voltage	UKOOA	United Kingdom Offshore Operators Association
IP	Intersection Point	USBL	Ultra Short Base Line
kHz	Kilohertz	UTC	Coordinated Universal Time
km	Kilometre	UTM	Universal Transverse Mercator
KP	Kilometre Point	UXO	Unexploded Ordnance
LAT	Lowest Astronomical Tide	VC	Vibro-Core
m	Metre	WD	Water Depth
Mag	Magnetometer	WE	Work Element
MBES	Multi-beam Echo Sounder	WGS	World Geodetic System
MM	Marine Magnetometer	XTF	Extended Triton Format
MMO	Marine Mammal Observer	XYZ	Three Primary Spatial Dimensions
MRS	Marine Route Survey		
MSL	Mean Sea Level		
m/s	Metres per second		
nT	Nano Tesla		
PGC	Piston Gravity Core		

EXECUTIVE SUMMARY

Moore Marine Services Ltd. was commissioned by RSK Group on behalf of Providence Resources PLC to carry out a programme of archaeological assessment and interpretation of geophysical data acquired during a site survey of the proposed Rampion Windfarm, located approx. 10 miles off Shoreham, W Sussex.

The aim of the programme of archaeological assessment was to consider the archaeological and historical background of the project and to analyse the acquired data for the presence of possible archaeological features or anomalies which may be impacted by later construction works.

Geophysical survey operations took place from the period 4th May to 19th August 2010. The survey was undertaken using Osiris Projects dedicated survey vessels, MV Freja and MV Lia. High-resolution side scan sonar, swath multi-beam, single beam bathymetry and magnetometer data were acquired along all survey lines, in order to accurately map the seabed within the wind farm area. Main survey lines were run at 50m centres, with cross lines at 750m centres. A total of 4,860 design line kilometres were acquired.

The desktop historical and archaeological assessment of the subject site indicated that the area of the assessment and its surrounding vicinity was one of considerable archaeological and historical significance. There had been continued human habitation of the region since the Palaeolithic Period, with visible archaeological evidence of the development and significance of the area through successive periods and cultures until present day. In addition the desktop historical assessment highlighted how there were a large number of National Monuments and UK Hydrographic Office recorded wrecks in the general area.

The archaeological assessment reviewed the following techniques: Side scan sonar, marine magnetometer and sub bottom profiler. There were 29 features of note on the side scan sonar survey data. 20 of these were of high archaeological significance and 9 were of moderate archaeological significance. On the magnetometer data, there were 15 recorded high magnetic contacts. All these were reflected in the side scan sonar record. The sub bottom profiler data recorded the presence of a number of palaeo-channels. None of these were deemed to be of archaeological significance.

1 SCOPE OF WORKS

1.1 Introduction

Moore Marine Services Ltd. was commissioned by RSK Group on behalf of Providence Resources PLC to carry out a programme of archaeological assessment and interpretation of geophysical data acquired during a site survey of the proposed Rampion Windfarm, located approx. 10 miles off Shoreham, W Sussex.

The aim of the programme of archaeological assessment was to consider the archaeological and historical background of the project and to analyse the acquired data for the presence of possible archaeological features or anomalies which may be impacted by later construction works.

The Osiris Projects was commissioned by E.ON Climate and Renewables UK Southern Array Ltd to undertake a detailed geophysical survey of the proposed offshore wind farm site. The object of their survey was primarily to inform turbine foundation and cable route engineering design. Equipment used included multi-beam echo sounders, side scan sonar, sub bottom profiler and marine magnetometer.

1.2 Archaeological Assessment and Data Review

The programme of archaeological assessment and real time data review was specifically designed to produce a number of results. These were:

1. To establish the archaeological and historical context to the survey area.
2. To review the acquired data for signatures which may be indicative of the presence of archaeological material and features at the survey area.
3. Where archaeological material is recorded, to inform survey strategy and resolution in order to optimise feature identification and provide sufficient data to positively identify the exact nature, extent and form of the feature.
4. To provide an indication of the potential for the project to impact archaeological materials and features.
5. To provide suggested mitigatory measures to ensure the survival of any identified archaeological features or deposits.

2 PROPOSED DEVELOPMENT

2.1 Location of the Proposed Survey Area

The proposed offshore wind farm site was located approx. 10 miles off Shoreham, W Sussex.

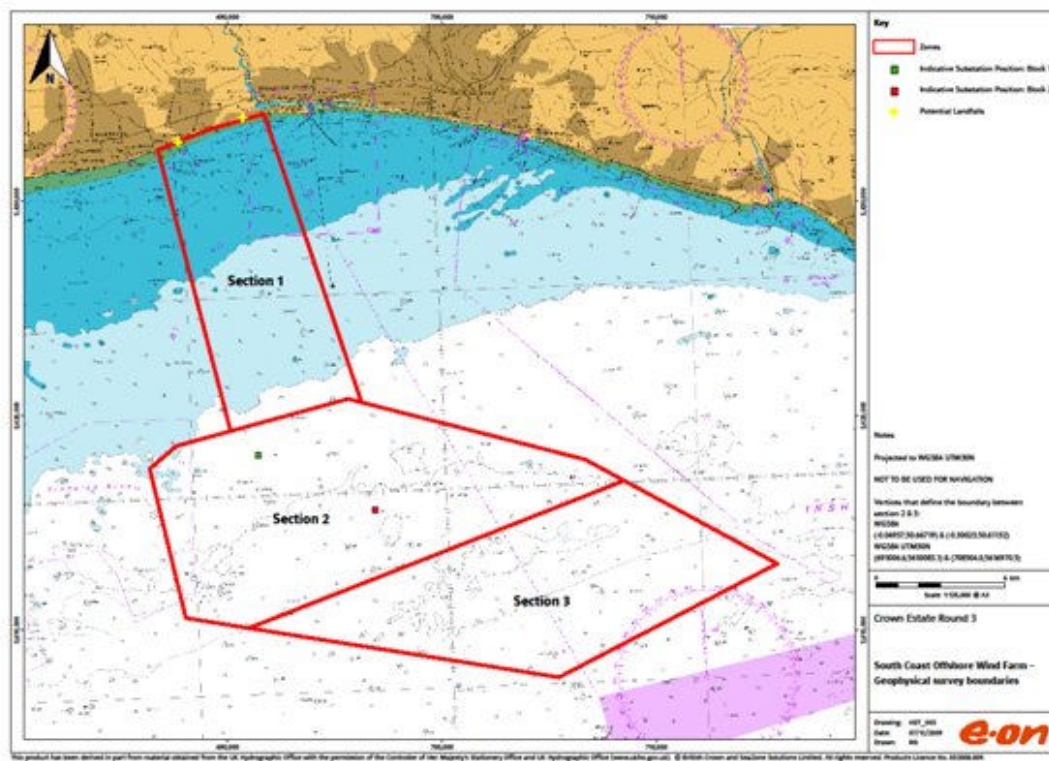


Figure 1. Survey area

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 Archaeological and Historical Background

The Palaeolithic or early Stone Age period began in Britain between 800,000 and 1 million years ago and lasted until the end of the last ice age, around 12,000 years ago. For much of that time, Britain was an arctic region of glaciers or tundra. During warmer interglacial periods successive waves of humans occupied the region. Very few sites of habitation are known, one notable exception being near the village of Boxgrove, just outside Chichester in West Sussex, which is one of the earliest. Many of the Palaeolithic tools found in England, have not been found in situ but in river terrace gravels where they were deposited by the waters from rivers and melting glaciers. There are 123 Palaeolithic find spots in West Sussex alone, most are hand axes and flakes.

The coastline and landscape of what would become modern Britain began to emerge at the end of the last Ice Age around 10,000 years ago. At this time the North Sea, Irish Sea and the English Channel were all dry land which connected both Ireland and England to continental Europe. Melting ice and rising sea levels would slowly inundate these lower regions and Britain finally became an Island approximately 8000 years ago. The Land Bridge once occupied and traversed by Palaeolithic and Mesolithic Peoples was gone for good.

In recent years there has been an upsurge of interest in the archaeological potential of submerged landscapes as noted by Fulford et al (1997). This in part was due to an audit of the English coastline in 1997 which recorded coastal prehistoric peat deposits that were seen to follow ancient river systems extending offshore. Rich sources of Mesolithic material were found submerged in the Solent area off the Isle of Wight and the large number of finds found in Essex (Flemming 2004; Fulford et al 1997: 108; Momber 2004). More areas have been discovered since then, off the Humber being an example. Furthermore, there are confirmed examples of prehistoric sites in the intertidal zones from the Neolithic period at Wootton Quarr on the Isle of White and Langstone Harbour an inlet of the English Channel in Hampshire stressing the historic character of these submerged landscapes. Fleming (2002) also identified a series of hotspots for palaeo-landscape including fossilised river valleys, cliff coasts, estuaries, wetlands, mudflats and peat deposits. In addition numerous archaeological remains have been recovered offshore through processes such as fishing and aggregates dredging, indicating the presence of further landscapes. An example of this is the wonderfully worked bones dating to the Mesolithic trawled up by fishermen around the Dogger Bank and Brown Bank areas off the east coast and a number of Palaeolithic hand-axes were recovered from aggregate dredging area off Great Yarmouth.

The maritime history of the English Channel is one of fishing, habitation, migration, trade, the spread of new technologies, war, piracy, invasion and defence. Being so closely bordered by water meant boat-building and seafaring became a way of life for the ancient Britons. The Channel has been used for navigation since prehistoric times and it is believed that log boats (canoes made from hollowed out tree trunks) and hide boats were probably very common, and used during early periods as ferries, fishing boats, trading or war vessels (Friel 2003: 22; McGrail 2001).

During the Neolithic period sometime around 4000BC people took up agriculture as a way of life, and stopped being nomadic hunter-gatherers. Ideas and technology of farming, and perhaps some of the first livestock, crossed the Channel and arrived in England. Stable communities of farmers cleared land for their crops and domesticated animals and they built great monuments such as causewayed enclosures, communal graves and hillforts. Those communities that settled along the southern coast of

Britain would have enjoyed access to large amounts of flint due to the large number of flint mines in Hampshire and West Sussex. The archaeological record around these mines testifies to a large number of flint tools being manufactured and from about 4300 BC to about 3400 BC the mining of flint for use locally and also for wider trade was a major activity in Neolithic Sussex. These successful communities built monument such as the Causewayed Enclosures at Combe Hill in Eastborn and Whitehawk Camp in Brighton. Neolithic log boats have been found in England such as the two Iron Age log found in peat beside the River Witham at Fiskerton near Lincoln and the remains of large Iron Age log boats have been found in Poole Harbour.

By 2500BC, the Channel was transporting a new wave of people from continental Europe. They brought not only patriarchal society but also the technology of metal smiting. Vessels attributable to the Bronze Age are the earliest craft thus far discovered which would have been capable of sea voyages. Vessels such as the Ferriby and Brigg (both in the Humber region), and another found in Dover, were relatively substantial vessels (McGrail 2001). In 2009, another Bronze Age vessel was found off England's south-western coast. This trading vessel was carrying an extremely valuable cargo of tin and hundreds of copper ingots from the Continent when it sank off the coast of Devon around the year 900BC. These craft and exotic artefacts found in Bronze Age burials testify to the increase in overseas trade across the English Channel. Bronze Age settlements occur right across the southern coast of Brittan as they do in Brighton, Shore-by-Sea and Worthing.

Beginning around 800BC, the Iron Age saw the gradual introduction of iron smiting technology and iron artefacts did not become widespread until after 500-400 BC. Trading and exchange contacts, between Britain and mainland Europe that had developed in the Bronze Age continued throughout the Iron Age. Swords were imported, copied and often improved upon by the natives. Wonderful art forms and techniques were copied from Europe and perfected back in Brittan. Iron Age Brittan was trading with northern Europe across the North Sea as well as with Mediterranean culture across the English Channel. Farming techniques improved and the introduction of the iron-tipped ploughshare made the cultivation of heavy clay soils possible. Iron Age field systems such as those at Shoreham-by-Sea in West Sussex were introducing new varieties of crops and these facts were likely catalysts to population growth.

Near Worthing the Iron Age hill-fort Cissbury Ring was built in 300BC as a symbol of power and a refuge in times of threat. It is one of many that are being built in Brittan during this time. Towards the end of the second century BC, Roman influence began to extend into the Western Mediterranean and Southern France which lead to growing contact between Britain and the Roman world. Initially this contact was confined to the trading of limited quantities of Roman luxury goods such as wine, probably exchanged for slaves, minerals and grain. The Iron Age in Brittan would end with the Roman invasion.

The Roman route into England was made easier because of existing trade routes and supporters within England including Cogidumnus, the Belgic ruler, who was an ally of Rome long before the invasion. Initially it had not been to Rome's benefit to invade England as it was thought the British paid more in customs and duties than they would in taxes under Roman occupation (Strabo Geography). However by 40AD the political situation in England was unstable as the various tribes were battling for power.

The Romans moved in in 43AD, and the south of England which was already familiar with Roman ways quickly accepted the Roman way of life, the town of Niviomagus Reginorum (Chichester) was built taking advantage of a good location on Stane Street. There was also a palace built at Fishbourne, south of Chichester and an amphitheatre was built in Chichester around 85AD. Sussex is littered with Roman roads, the remains of Roman villas and other buildings suggesting that Sussex prospered under the Romans. The Roman reign lasted until early in the 5th century when the entire Roman Empire was threatened and troops were withdrawn, but Britain was already suffering from raids by the Saxons. The Saxon Shore was a military command of the late Roman Empire, consisting of a series of fortifications on both sides of the English Channel. It was established in the late 3rd century to try to curb the raid by the Germanic tribes. Roman sea power and trade in north-west Europe had kept Brittan linked to the imperial realms of the continent. Both collapsed in the early fifth century, catastrophes that must have done as much, if not more, to cut Britain off from the failing empire as the official withdrawal of the Roman Legions (Friel 2003).

Britons were in disarray, politically and economically following the loss of the Romans and they may well have welcomed in certain parts an organised and well-ordered invader to fill the vacuum. Few Roman settlements have survived to become modern towns and villages as the period following the Roman withdrawal was very unruly and many people left the Roman towns or their villas and returned to more secure places such as the Iron Age forts.

By the 7th century the way of life began to change as the open field system of farming was introduced. Now families had to co-operate with each other to get the best out of the arrangement and so they began living close to each other and villages began to develop. As many of the Sussex villages developed around this time their names have Saxon origins. Sussex itself means 'suth seaxe' – South Saxon's.

After apparent sharp decline in maritime trade during the early post-Roman period, commercial trading activity with continental Europe was stimulated again from the late 6th century, and the 8th and 9th centuries saw the greatest resurgence of European trade since the fall of the Roman Empire. Most of this trade relied on water transport and, as a consequence, urban settlements were revitalised along rivers and near to the coast, changing the character of the landscape/seascape (Clarke 1985).

Alfred was the king of the southern Anglo Saxon kingdom of Wessex (Sussex and the south east of England) and was given the epithet 'the Great' following his defence of the kingdom against the Danish Vikings. A number of forts in Sussex were important to Alfred's defence including Hastings, Lewes, Burpham, Chichester and Heorepeburan (possibly Pevensey). The locals of Chichester defended their town using the Roman walls killing many Vikings and putting the rest to flight.

With the Vikings defeated some security was restored for the next few years but the Vikings began their raids again damaging if not destroying villages along the Sussex coastline. Many stone built churches date from this period – built after the Vikings burnt down the wooden churches that existed before.

Between the 8th and 11th centuries, Scandinavian influence spread widely across Europe and beyond, disrupting earlier trade patterns and patrons but creating new ones. This was achieved often through previously unparalleled feats of navigation and endurance, facilitated by their longship design: open, clinker-built vessels which could be propelled both by oars and sail. Modifications of the hull shape and the addition of a sail meant that by the 9th century the Viking ship was capable of sailing long distances on the high seas and was not limited to coasting (Binns 1985). The Viking ships, both the Longship and the merchant ship or 'Knórr', could equally well handle ocean voyages across the Atlantic. Neither needed a harbour, but could land on beaches or river banks anywhere. This period of Scandinavian expansion and influence is known as the Viking Age, with huge social, political and economic impacts in England. The material role of their ships in their success was mirrored in their spiritual role in Viking mythology where they often figure as the final transport and resting place in heroes' funerary rites, a role finding expression in the occasional discoveries of Viking Age boat burials.

The Norman conquest of 1066 reorientated England towards continental Western Europe and away from Scandinavian influence. Over the course of the next century as the Anglo-Norman Empire grew it opened up important new trading areas for England, including the wine growing region of Gascony (Friel 2003). Both sides of the channel were under Norman control and they faced little external naval threats. Following the conquest, large numbers of Anglo-Saxons, including groups of nobles, fled the country. The Normans were master castle builders and set about building. After 1066, England witnessed a massive castle building programme on the orders of William the Conqueror. First, motte and bailey castles were built. Once William had firmly established his rule in England, he built huge stone keep castles. By the time of Edward I, concentric castles were being built. They quickly established themselves along the southern coast of England to secure the English Channel and pushed northwards.

The Normans in Sussex

Lewes Castle in east Sussex was built circa 1000. Remains of flint built castle, begun circa 1100, extended in the 12th and 14th centuries, recently modified. The castle is approached from the South by an early 14th century barbican which is followed by the Early Norman gatehouse which contains herring-bone coursing. There is some contemporary walling to its right and left, also, and more substantial curtain walling east of the Castle Gate House. On the West mound stands a shell-keep, again early Norman though strengthened by two 13th century turrets.

Steyping is a small town located north of Shoreham-by-Sea in West Sussex. It is located at the north end of the River Adur. It was founded during the Saxon period but was also a Norman town and port. Steyping was a port on the Adur until it became un-navigable, probably in the C12th. It was a settlement by Cnut's reign, and a mint from ca.1023 until the early Norman period.

St Margrets Church in Hoe. Round towered church with nave and South porch. There is some Norman work in the church, and the porch is 15th century.

Normans in Hampshire

Barton Copse is a roughly square enclosure defined by a bank and ditch, which may be the site of a motte and bailey. It is probably of mid 12th century date.

Basing House is a Medieval motte and bailey castle with keep, possibly 12th century in date, converted to a fortified house after 1531, and with 17th century defences. After 1531, the site was redeveloped as a fortified house with the construction of the Old House. This was constructed of brick in English Bond with an entrance via a bridge spanning the ditch between the motte and bailey. The New House was also constructed about the same time outside and to the north east of the castle. It comprised a series of rectangular buildings arranged around a central courtyard. Both buildings survive as ruins. In the Civil War, the defences around the bailey were extensively remodelled. The site was stormed by Cromwell in 1645. Excavations have also identified a possible Saxon settlement and recovered Mesolithic and Bronze Age flint, and Iron Age and Roman pottery.

Although ships and boats made from wooden planks have a better survival rate than log or hide boats, few early medieval examples have been found in England. Important examples of early plank-built vessels include the Dover Bronze Age boat dated to c. 1300 BC. It was found in freshwater sediments with associated peat layers about 30m from the course of the modern River Dour. A long sequence of channel-narrowing puts the original context of the Bronze Age boat in a riverside location, with direct access to the sea. This indicates some use of the area as a refuge or landing place for that period (for further details see Clark 2004). Other plank-built Bronze Age boats include those found in the Humber such as Brigg and Ferriby. One of the most famous examples of an early medieval boat is the Sutton Hoo

ship, the ghost traces of which were discovered in an Anglo-Saxon burial mound near Woodbridge (Suffolk) (Friel 2003: 24). Other medieval ships include the Magor Pill and Newport ships from Wales but English examples are rare.

The Cinque Ports were developed in 1155 to maintain ships ready for the Crown to use if needed. The towns were New Romney, Hythe, Dover and Sandwich in Kent and Hastings in Sussex along with Rye and Winchelsea. A number of other towns were also connected to the Cinque Ports including Pevensey. Over time the coast changed as sections were silted up and others were washed away – in 1250 Winchelsea, which was an important trading port, was being submerged and lost to the sea so Edward I ordered a new town to be built to replace it. The new town was built with a tidal harbour on the river Brede and the original town of Winchelsea was lost completely to the sea in 1287. The new Winchelsea remained an important trade until the mid 14th century when it suffered from French and Spanish raids and was badly hit by the Black Death. However the silting of the river and harbour reduced it from a busy port town to the small inland village that it is today.

The location of shipbuilding sites seems to have been rather haphazard in England's medieval landscape. The sites themselves were rudimentary, although ships were being built in simple docks from at least the 1330s (Friel 2003). Accounts from between the late 13th and early 15th centuries state that shipbuilding was still based on clinker construction (Friel 2003; McGrail 1998; 2001). Changes in European shipping during the 15th century were influenced by the skeleton-built Portuguese caravels. Skeleton construction involved nailing hull planks to a pre-erected skeleton of strong frames; the planks did not overlap, but were laid against each other, giving the hull a smooth exterior (Friel 2003; McGrail 1998, 2001). Other 15th century shipping changes included the introduction of two- and three-masted ships and a decline in the number of large ships. The latter may have been due to changes in the demand for goods being transported. Merchant ships of more than 100 tons were uncommon in England until the late 16th century, when they were constructed for long-distance bulk trade and war (Friel 2003; McGrail 1998, 2001).

The 16th Century saw the Thames and surrounding region grow to become the shipbuilding capital of the country. In 1559 there were 520 shipwrights employed in the royal yard in the Thames and at Portsmouth (Friel 2003).

Shoreham shipbuilders were said to be famed for the neatness and good sailing qualities of their craft, using timber which was cheap because it was floated down the river from the Weald. In 1720 there were many shipwrights, both naval and merchant, 12 years later, when naval shipbuilding was seen as past, there were said to have been up to 15 merchant ships, of 100-500 tons, on the stocks at a time. In 1766 it was said that shipbuilding was the chief object and support of most of the inhabitants. Some

warships were built, and in 1782 there were still two shipyards. By the 1780s some of the shipwrights were evidently based at Kingston and after that period there seems to have been a decline in the industry.

Nevertheless, shipwrights were recorded at Shoreham in the first decade of the 19th century and in 1814 the firm of Edwards and Balley was building ships. J. B. Balley (d. 1863) was in business as a shipbuilder by 1838 and launched many vessels of over 500 tons. From 1838 to 1871 the firm of May & Thwaites at the Kingston shipyard was building vessels of up to 500 tons, and in the 1840s smaller craft and yachts were built, Shoreham and Southwick each having at least one boat builder in 1845. The increase in New Shoreham's population in the 1850s was attributed in part to the extension of the local industry, which in 1849 employed over 100 people and was noted for the speed of its ships.

The English shipping industry underwent a particularly rapid development following the Seven Years War against France (1756-63), and the rate of English naval construction rapidly increased (see Parry 1971: 113-129). Before that war, French warships were considered to be better designed and faster than the English ships (see Lavery 1983; Parry 1971: 119). Subsequently, the English shipping industry promptly flourished since they based their ship designs on those of the French, the English becoming a maritime power from the end of the 18th century onwards. By contrast, after the declaration of the Seven Years War, the French shipping industry remained steady, and after some time, declined. The rapid development of the shipping industry and trade in the middle decades of the 18th century was linked to increased competition among the expanding European powers as well as processes such as capitalism and colonialism (see Davis 1962; Dellino-Musgrave 2006; Staniforth 2003). The English shipping industry underwent a particularly rapid development following the Seven Years War against France (1756-63), and the rate of English naval construction rapidly increased (see Parry 1971: 113-129). Before that war, French warships were considered to be better designed and faster than the English ships (see Lavery 1983; Parry 1971: 119). Subsequently, the English shipping industry promptly flourished since they based their ship designs on those of the French, the English becoming a maritime power from the end of the 18th century onwards. By contrast, after the declaration of the Seven Years War, the French shipping industry remained steady, and after some time, declined.

During the mid 19th century, technological and economic progress gained momentum with England as a world leader in the development of steam-powered ships and railways, and later the internal combustion engine and electrical power generation. England became one of the leading industrial powers of the 19th century, due in no small part to the strength of its shipping industry (Hedges 1989, 5). During this period, steamships gradually replaced sailing ships for commercial shipping. Many new demands on rapid freight transport were made which could be more easily met by steam-powered

vessels, especially from the 1840s when iron hulls and the screw propeller were introduced (Hobsbawm 1999; Pearsall 1985). In the 1900s, the internal combustion engine and gas turbine replaced the steam engine in most ship applications. Trans-oceanic travel, transatlantic and transpacific, was a particularly important application, with steam powered ocean liners replacing sailing ships, culminating in the 'Superliners' such as those of the White Star Line, including the unfortunate RMS Titanic.

3.2 National Monuments Record

The National Monuments Record (NMR) has recorded a number of vessels as having foundered in the vicinity of the proposed development. Whilst the review of the geophysical data did not identify any of these shipwrecks, a number of unidentified shipwrecks were identified and these may be an NMR recorded wrecks. A full list of NMR monuments in the survey area is contained in Appendix 3.

3.3 UK Hydrographic Office

The UK Hydrographic Office records list over 70,000 wrecks and obstructions, of which over 20,000 are named wrecks. The Data is stored centrally and can be accessed upon request. A search of the UK Hydrographic Office recorded that there were 51 recorded wrecks or obstructions in the vicinity of the subject site. Of these, 13 were positively identified during the review of the geophysical data, with an additional three wrecks remaining unidentified. A complete list of the UK Hydrographic Office records for the area is contained in Appendix 4.

Wreck	UK HO Wreck No	Easting	Northing
Unnamed Trawler	20017	702158mE	5614268mN
Unnamed Wreck, coal barge	19975	692602mE	5610780mN
Pagenturm Wreck	20001	696816mE	5612837mN
Glenarm Head Wreck	20012	698571mE	5613983mN
HMS Minion, L Class Destroyer	20014	695620mE	5613922mN
Unnamed Wreck ,	19991	689724mE	5611778mN

Steam ship, ballast cargo			
City of Waterford	20056	704093mE	5617768mN
Unknown Freighter Wreck	19996	689064mE	5612131mN
Quail Wreck	20000	690308mE	5612630mN
Stanwold Wreck	19998	688447mE	5612547mN
Ingo Wreck	19998	695102mE	5618514mN
Unknown Trawler Wreck	20059	688562mE	5617453mN
Ikeda/City of London	20080	694935mE	5620736mN

Table 1. Table of identified UKHO wrecks.

4 GEOPHYSICAL SURVEY

4.1 Survey Objectives

The main objectives of the geophysical survey were as follows:

- To provide an accurate bathymetric chart of the site regions and cable routes region.
- To chart natural seabed features and any obstructions, manmade objects, debris or wrecks.
- To produce isopachyte charts to show sediment thickness of the upper, loose, and any mobile material, and of any other significant reflector levels which might impact on the engineering design to 50m below seabed. For Section 1 this depth is 10m below seabed.
- To locate any structural complexities or geohazards within the shallow geological succession such as faulting, accumulations of shallow gas, buried channels etc to 50m. For Section 1 this depth is 10m below seabed.
- Locate and identify sites of near surface soft materials pertinent to jack up operations.
- To provide a detailed geological interpretation to show facies variations and structural feature changes via appropriate maps and sections.
- To produce a comprehensive factual report describing methods and events within the survey.
- To produce a comprehensive interpretative report on the survey results obtained to assist design of the offshore foundations / structures and cable burial.
- To correlate magnetic anomalies and sonar contacts to identify items that may require further physical surveys; for example UXO, wrecks, MMO, etc.
- During survey period, to identify items/areas of “Specific Areas of Interest & Archaeology” and inform the Employer as required

4.2 Survey Vessels

MV Lia and MV Freja were utilised for the duration of the survey works. The vessels mobilised in Shoreham Port between the 5th and 11th of May, with the mobilisation and calibrations being delayed due to unfavourable weather conditions. Fieldwork commenced on the 12th May 2010, initially with both vessels operating within Section 2 and based out of Shoreham Port. However, due to restricted vessel access issues, Lia relocated to Brighton Marina on the 13th May and Freja on the 21st May, where they remained for the duration of the works. Freja demobilised from site on the 14th August, following a period of stand down between the 4th and the 11th August. Lia demobilised from site on the 19th August, following completion of the sparker trials.

4.3 Survey Control

4.3.1 *Horizontal Control*

Primary positioning was provided by either a CNAV 3050 (Lia) or 2050 (Freja) DGPS system. The C-NAV system is utilised across many industries, including marine construction, dredging and marine survey contractors. The C-NAV 3050 system consist of a 66 channel, multi-constellation, multi-frequency receiver whilst the 2050 system consists of a 10 channel single constellation receiver. Both systems utilise correction data from either the General Lighthouse Authority (GLA) Medium Frequency (MF) radio transmission via external modem or Satellite Based Augmentation System (European Geostationary Navigation Overlay System (EGNOS)) via internal receiver

For this survey the SBAS EGNOS differential correction service was utilised providing a typical positional accuracy of <1 metre at 95% confidence levels.

Secondary positioning (Freja and Lia) was provided by a Leica GX 1230 Smartnet RTK GPS System. The Leica GX1230 GPS is a 12 channel receiver capable of static and on-the-fly Real Time Kinematic (RTK) ambiguity resolution on satellite carriers L1 and L2. When using the Smartnet service, horizontal and vertical accuracies of 10mm +1 part per million (ppm) and 20mm +1 ppm are achievable with reinitialisation times following complete loss of lock at less than 60 seconds.

Tertiary positioning was provided by a Hemisphere Crescent VS100 GPS Compass. The VS100 system delivers sub-metre dGPS positioning accuracy when using decoded correction data. The VS100 sensor is capable of receiving differentially corrected data from land-based General Lighthouse Authority (GLA) and from Space the Based Augmentation System (SBAS) European GPS Navigation Overlay System (EGNOS).

For this survey the General Lighthouse Authority (GLA) differential correction service was utilised providing a typical positional accuracy of <1 metre at 95% confidence levels. The system also provides accurate heading data between 0.3° to 0.1° RMS at baseline lengths between 0.5m and 2m and this data was used for secondary vessel orientation.

Primary vessel heading was provided by a TSS Meridian Surveyor Gyrocompass. The Meridian is covered by IMO, Wheelmark and HSC certification.

Subsea towfish tracking was provided by an Ultra-Short Baseline (USBL) system. Subsea positioning of the side scan sonar towfish and magnetometer towfish was provided by a Sonardyne Scout USBL system. The Scout is interfaced to the navigation software to enable real time tracking of subsea targets relative to the vessel frame.

A dedicated navigation computer was utilised to integrate all of the onboard sensors and to provide a single reference timeframe for all the onboard data acquisition systems taken from the incoming GPS data. In order to allow the navigation computer to display the specified project co-ordinates in real time, the incoming positional data, which is received as a WGS84 (GPS datum) Lat/Long co-ordinate, is projected into the UTM Zone 30 North coordinates. No datum transformation was required for this project.

4.3.2 Vertical Control

The vertical component of the Leica Smartnet RTK solution was used for the reduction of the bathymetric data to Lowest Astronomical Tide (LAT). The GPS height solution was recorded at 1Hz, reduced to the measured waterline level and smoothed using a sixth order polynomial and consequently sampled into a 30-second period to remove the short term effects of vessel heave and squat.

All high accuracy GPS surveying within the UK is conducted using the European Terrestrial Reference System 1989 (ETRS89). WGS84 was designed for navigational purposes, where the required accuracy is one metre or lower. A number of high accuracy equivalents of WGS84, known as the International Terrestrial Reference System (ITRS) have been created since 1989 (ITRS89).

The data was subsequently Quality Control checked (QC) against the Proudman Oceanographic Laboratory (POL) National Tidal and Sea Level Facility (NTSLF) tide gauge located at Newhaven (50° 49.914'N 0° 3.42'E).

4.4 Survey Operations

The survey was undertaken using Osiris Projects dedicated survey vessels, MV Freja and MV Lia, during the period 4th May to 19th August 2010.

High-resolution side scan sonar, swath multi-beam, single beam bathymetry and magnetometer data were acquired along all survey lines, in order to accurately map the seabed within the wind farm area. Main survey lines were run at 50m centres, with cross lines at 750m centres. A total of 4,860 design line kilometres were acquired.

Mobilisation of both vessels began on the 4th of May in Shoreham-by-Sea harbour, West Sussex. During the mobilisation phase navigation checks, gyro and USBL calibrations were completed. Both vessels initially operated from Shoreham-by-Sea harbour; however, due to restricted access, they were subsequently relocated to Brighton Marina to reduce transit times. The vessels were based in Brighton Marina for the duration of the works, with typical transit times to site of approximately 45 minutes. Data acquisition began on 12th May 2010, with both boats commencing acquisition in Section 2.

Initially, 'boomer' sub-bottom profiler data was acquired on half of the cross lines (orientated north-south), in an attempt to provide a coarse reconnaissance survey of the geology, in order to decide which particular sub bottom profiler system was best suited to the geological conditions at the site. Several areas of acoustic blanking were discovered within channel features, most likely the result of organic gas deposits rather than coarse infill material. It was determined that, due to the nature of these channel infill materials, the 'sparker' system would not achieve additional penetration and would have resulted in lower sub-bottom resolution across the site. The Client therefore decided to continue to acquire boomer data on all survey lines, with an option to obtain some trial 'sparker' data, upon completion of the survey. Following the coarse grid data acquisition, both boats began running prime line data acquisition (orientated north east-south west) within Section 2, with Freja starting from the northern section boundary moving southwards. Lia commenced acquisition from a mid-section line moving southwards.

On the 8th June 2010, following the completion of the first fisheries scouting survey, Freja began acquisition within Section 1, focussing on the prime lines (orientated south east – north west). A Fisheries Industry Representative (FIR) was assigned to the project at this time, to ease any conflict between active fisheries parties and Osiris Projects, and remained on the project for the duration of the works. Freja continued to acquire data within Section 1, ensuring that operations were carried out with minimal impact to fisheries activities. Several subsequent fisheries scouting surveys were completed by Brown and May, identifying and plotting any visible surface equipment. The survey of Section 1 passed without any conflict between parties, however Freja's sensors became entangled on two occasions. Freja continued to survey within Section 1 up to the 14th August 2010 and was subsequently demobilised from site. During this period, Lia continued to survey within sections 1 and 2, until all data acquisition was completed.

The GeoResources 'GeoSpark' system was mobilised to site on the 15th August 2010, in an attempt to achieve deeper penetration within the infill channel materials. A total of 25km of trial data was acquired on the 18th August 2010, following a period of adverse weather and Lia demobilised from site on the 19th August 2010.

4.5 Survey Equipment

The following equipment was used during the survey:

<i>Item #</i>	<i>Equipment Utilised</i>	<i>MV Freja</i>	<i>MV Lia</i>
1	LEICA GX1230 Smartnet RTK	✓	✓
2	C-NAV 3050G dGPS		✓
3	C-NAV 2050R dGPS	✓	
4	TSS Meridian Gyro Compass	✓	✓
5	HEMISPHERE Crescent VS100 GPS Compass	✓	✓
6	QPS QINSy Navigation Software	✓	✓
7	GEOACOUSTICS Geoswath Swathe Bathymetry Echo Sounder	✓	✓
8	TSS DMS3-05 Motion Reference Unit (SN 39924)		✓
9	TSS DMS2-05 Motion Reference Unit (SN 4305 – 04/05/2010 to 11/06/2010)	✓	
10	TSS DMS2-05 Motion Reference Unit (SN 31161 – 12/06/2010 to 03/08/10)	✓	
11	VALEPORT Mini SV (SN 19307)	✓	
12	VALEPORT Mini SV (SN 23582)		✓
13	VALEPORT Monitor SVP (SN 23727)	✓	
14	VALEPORT Monitor SVP (SN 23728)		✓
15	SIMRAD EA400 Single Beam Echo Sounder		✓
16	KNUDSEN 320M Single Beam Echo Sounder	✓	
17	SONARDYNE Scout USBL System	✓	✓
18	SONARDYNE WSM Transponder	✓	✓
19	GEOMETRICS G882 Marine Magnetometer	✓	✓
20	GEOACOUSTICS SS941 Side Scan Sonar	✓	✓
21	AAE CSP 300/1000/500/1200D	✓	✓
22	AAE 200 Boomer Plate (Catamaran Mounted)	✓	✓
23	AAE 8 Element Hydrophone Streamer	✓	✓
24	CODA DA2000 Digital Acquisition System	✓	✓

Table 2. Table of equipment used

The three systems most relevant to the archaeological assessment were the sub bottom profiler, side scan sonar and marine magnetometer.

4.5.1 Sub Bottom profiler

A combination of boomer and sparker systems were used for sub bottom profiling on the site.

The Boomer Sub-Profiling System that was used during this survey comprised of a CSP (300/500/1000/1200D) Portable Seismic Energy Source, an Applied Acoustics AA200 Boomer Plate, a CAT200 Catamaran and Applied Acoustics AAE 8 Element Hydrophone Streamer.

Data was acquired and processed through the Coda DA2000 Digital Data Acquisition System, for later post-processing and archiving.

An average velocity of 1700 ms^{-1} was used for all sub-bottom interpretation.

Boomer Settings Summary:

System Power	100 and 200 Joules
Sweep Time	200 ms
Hydrophone	AAE 8-element (365mm element spacing)
Trigger Rate	250 (100J) 333 (200J) Hz
Layback from Towpoint	20 m
Recording Media	CODA DA2000 (COD Format)

Table 3. Table of Boomer Settings

During the sparker trials, a Geo-Resources 'GeoSpark' Sparker Sub-bottom Profiling System was mobilised to site and utilised to attempt to provide greater depth penetration through the infill channels.

The system consists of four individually powered banks of submerged electrodes, each containing 50 sparker tips, mounted on a depth-adjustable, surface-towed catamaran. The catamaran is towed behind the vessel using a reinforced coaxial cable, whilst a towed hydrophone relays the reflected signals back to the processing unit on board the vessel.

The acoustic returns are detected by a 24 element hydrophone, which was towed parallel to the source catamaran astern of the vessel. This configuration was used in an attempt to minimise the direct source-receiver signal.

Raw data were recorded directly to the CODA DA2000 digital data acquisition systems, for later post-processing and archiving.

System Power	200 Joules
Sweep Time	250 mS
Hydrophone	Geo-Sense Mini Streamer
Trigger Rate	3 Hz
Layback from Towpoint	30 m
Recording Media	CODA DA2000 (COD Format)

Table 4. Table of Sparker Settings

4.5.2 *Geoacoustics Side Scan Sonar*

A GeoAcoustics SS941 Side Scan Sonar System, together with a 159D dual frequency tow fish, was utilised for this aspect of the works. The GeoAcoustics Side Scan Sonar System offers a selectable frequency operation (110 or 410 kHz) enabling both long range, low-resolution scanning and short range, high-resolution investigations.

The system comprises SS941 transceiver and 159D towfish which houses a SS942 multiplexer and two 196D dual frequency transducers. Data is acquired, and processed through CODA GeoSurvey DA2000. The DA2000 system accepts input data from the SS941 system, together with data from the navigation computer, providing simultaneous yet independent display, processing and interpretation facilities.

The system was operated in high frequency at a maximum range scale of 80m per channel throughout the survey.

The side scan fish was positioned using a USBL system. A secondary manual layback system was also recorded which consisted of indicators positioned at regular intervals along the length of the Sidescan cable.

4.5.3 *Marine Magnetometer*

A Geometrics G882 Caesium Vapour Marine Magnetometer was utilised to obtain magnetic data throughout the survey. The system incorporates a towed 'fish', which houses a total magnetic field sensor and CM221 Larmor counter. The unit provides absolute readings of total magnetic field, with a resolution of 0.004nT/Hz RMS.

The fish was towed at a known distance 50-120m (depending on water depth) from the survey vessel, and buoyed off at as necessary in the shallow water to prevent the towfish grounding on the seabed.

The position of the towfish was by USBL. All data acquired was logged to the navigation computer via an RS232 link and combined with positional data for later retrieval and post-processing.

4.5.4 *Echo Sounder/Multibeam Echo Sounder*

The GeoAcoustics GeoSwath, high-frequency (250 kHz) interferometric swathe bathymetry system was the multibeam system used. It is specifically designed for shallow water (<100m) and under optimum conditions, enables bathymetry coverage of 300m swath width approximately 10 times water depth. However general achievable swathe widths of usable data are between 4 to 8 times, dependent on acoustic conditions. The system provides a cross track resolution of 1.5cm. The along track resolution is dependent upon vessel speed and the 'ping' length of the system and a typical along track resolution of <20cm can be achieved at a vessel speed of 2ms-1 (~4 knots with 150m swath width).

The system comprises of a high spec Windows XP Central Processing Unit (CPU) running GeoSwath Plus software. The software is standalone and sensors providing position, heading, motion and sound velocity are all interfaced to the CPU.

The multibeam system was calibrated as per the manufacturer's recommendations to resolve the errors in system latency and misalignment between the transducers and peripheral equipment.

A Simrad EA400 Dual Frequency Hydrographic echo sounder was utilised, in order to provide a quality check on the absolute values obtained from the swathe bathymetry system on Lia.

Accurate single beam data can be invaluable in resolving any fixed offset and reduction issues that may occur during processing of the multi-beam data.

The echo sounder was operated in dual frequency mode, with both the 30 kHz and 200 kHz transducers working continuously. The unit produces a continuous digital output, enabling both data channels to be logged to disk at a rate of up to 10 Hz. The unit also records digital image files which can be post printed as hard copy if required. The general measurement precision of the instrument is reported to be $\pm 0.12\%$ of full scale.

A Knudsen 320M Dual Frequency Hydrographic Echosounder was utilised in order to provide a quality check on the absolute values obtained from the swathe bathymetry system on Freja.

The single beam echo sounders were calibrated at the start and end of the survey, using the standard 'bar-check' method to ensure that values for transducer draft and acoustic velocity are correctly applied to the data.

5 ARCHAEOLOGICAL ASSESSMENT OF GEOPHYSICAL DATA

The programme of geophysical survey recorded a total of 4,860 design line kilometres comprising almost 1,000 side scan sonar line files

The first stage of the archaeological review of the geophysical data is analysis of the previously acquired geophysical data, namely; side scan sonar, magnetometer and sub bottom profiler data. Moore Marine Services has developed a methodology for post acquisition analysis of geophysical data which involves review of individual raw geophysical data through a number of processes. The data is reviewed in its own individual context and also in reference to the results of other techniques. The resulting information relating to the individual techniques can be cross referenced and displayed both in text and in graphic form.

- For side scan sonar data, all data is reviewed using both SonarWaz Map 5 and Coda software.
- For sub bottom profiler data, all data is also reviewed using both SonarWaz Map 5 and Coda software.
- For magnetometer data, all data is reviewed using Hypack 2010 and Surfer 8 software

5.1 Side Scan Sonar

Review of the side scan sonar data concluded that the seabed within the survey area appeared to be characterised by coarse sediments, ranging from clays to coarse gravels, with sandy ribbon ripple sediments and boulders.

There were 29 features of note in the survey area. 20 of these are of high archaeological significance and 9 are of moderate archaeological significance. The below table details the contact descriptions, its archaeological significance and suggested mitigation measures. The prefix RMP SSS applies to all Rampion Windfarms Side Scan Sonar contacts. A full description of all contacts are contained in Appendix 2.

Contact Number	Description	Easting	Northing	Archaeological Significance	Proposed Mitigation
RMP SSS 1	Unknown Wreck (1)	686522.2	5615377	High	Avoid
RMP SS 2	Unknown Debris (1)	688613.5	5617450	Moderate	Avoid
RMP SSS 3	Seafloor Scar	696338.4	5620372	Moderate	Avoid
RMP SSS 4	Ikeda/City of London (Wreck No. 20080)	694837.8	5620699	High	Avoid
RMP SSS 5	Unknown Debris (2)	693107.5	5626435	Moderate	Avoid

RMP SSS 6	Unknown Wreck (2)	693176.7	5622636	High	Avoid
RMP SSS 7	Unknown Debris (3)	692942.9	5623529	Moderate	Avoid
RMP SSS 8	Unknown Wreck (3)	693162.5	5622655	High	Avoid
RMP SSS 9	Pipeline (1)	688090.9	5632538	High	Avoid
RMP SSS 10	Unknown Debris (4)	691581.7	5611265	Moderate	Avoid
RMP SSS 11	Unknown Debris (5)	690844.3	5618387	Moderate	Avoid
RMP SSS 12	Trawler Wreck (Wreck No. 20059)	688512.1	5617422	High	Avoid
RMP SSS 13	Cable (1)	687701.5	5632565	Moderate	Avoid
RMP SSS 14	City of Waterford (Wreck No. 20056)	704116.3	5617766	High	Avoid
RMP SSS 15	Unknown Wreck (4)	689659.7	5611766	High	Avoid
RMP SSS 16	Steam Ship Wreck (Wreck No. 19991)	689749.5	5611770	High	Avoid
RMP SSS 17	HMS Minion (Wreck No. 20014)	695553.1	5613903	High	Avoid
RMP SSS 18	Unknown Wreck (5)	689637.4	5611750	High	Avoid
RMP SSS 19	Glenarm Head (Wreck No. 20012)	698516.1	5613990	High	Avoid
RMP SSS 20	Unknown Wreck (6)	689437.3	5610487	High	Avoid
RMP SSS 21	Cable (2)	695342.1	5616914	Moderate	Avoid
RMP SSS 22	Un Named Trawler (Wreck No. 20017)	702157.6	5614285	High	Avoid
RMP SSS 23	Coal Barge (Wreck No. 19975)	692534.5	5610734	High	Avoid
RMP SSS 24	Stanwold Wreck (Wreck No. 19998)	688446.3	5612544	High	Avoid
RMP SSS 25	Un Named Wreck (19996)	689062.3	5612133	High	Avoid
RMP SSS 26	Quail Wreck (Wreck No. 20000)	690449.5	5612682	High	Avoid
RMP SSS 27	Pagentum Wreck (Wreck No. 20001)	696853.4	5612973	High	Avoid
RMP SSS 28	Pipeline (2)	687732.8	5632517	Moderate	Avoid
RMP SSS 29	Ingo Wreck (Wreck No. 19998)	686522.2	5615377	High	Avoid

Table 5. Table of Side Scan Sonar Contacts

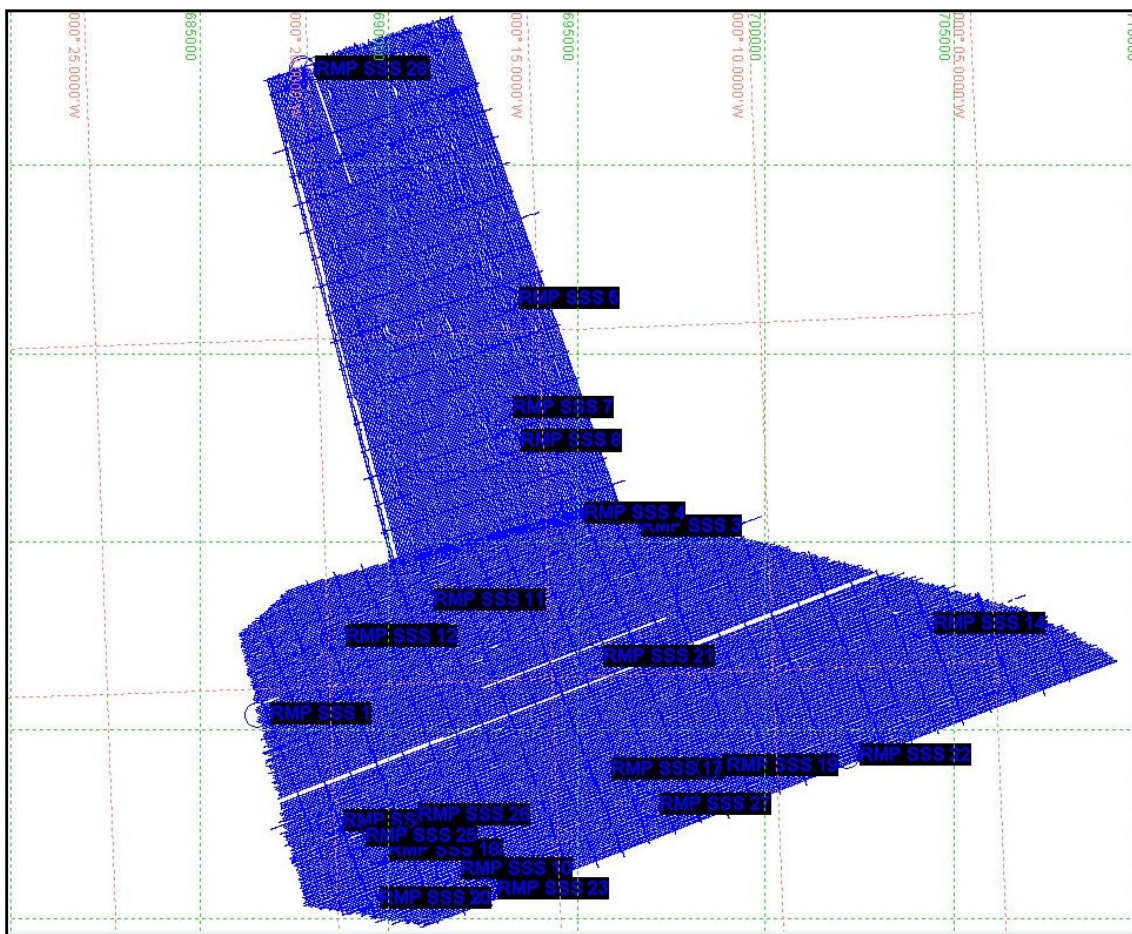


Figure 2. Side Scan Sonar Contacts

5.2 Marine Magnetometer

The marine magnetometer recorded 16 isolated ferrous contacts. These isolated contacts generally represented archaeological heritage with a large majority of the contacts recorded by the side scan sonar also recorded by the magnetometer. A number of the smaller side scan sonar contacts were not recorded by the magnetometer. This can be explained by the small size and low magnetic signature of the features and also the high magnetic signature of the background geology. A table detailing the results of the marine magnetometer survey is contained below. The prefix RMP Mag applies to all Rampion Windfarms Magnetometer contacts. It details the magnetic signature, its location and cross reference to the side scan sonar survey.

Contact Number	Description	Easting	Northing	SSS Reference	SSS
RMP Mag 1	High Magnetic Signature	687732.8	5632517	RMP SSS 28	Pipeline/Cable
RMP Mag 2	High Magnetic Signature	693162.5	5622655	RMP SSS 8	Wreck
RMP Mag 3	High Magnetic Signature	694837.8	5620699	RMP SSS 4	Ikeda/City of London
RMP Mag 4	High Magnetic Signature	704116.3	5617766	RMP SSS 14	City of Waterford
RMP Mag 5	High Magnetic Signature	702157.6	5614285	RMP SSS 22	Un Named Trawler
RMP Mag 6	High Magnetic Signature	698516.1	5613990	RMP SSS 19	Glenarm Wreck
RMP Mag 7	High Magnetic Signature	695342.1	5616914	RMP SSS 21	Cable/Pipeline
RMP Mag 8	High Magnetic Signature	695553.1	5613903	RMP SSS 17	HMS Minion
RMP Mag 9	High Magnetic Signature	692534.5	5610734	RMP SSS 23	Coal Barge Wreck
RMP Mag 10	High Magnetic Signature	690449.5	5612682	RMP SSS 26	Quail Wreck
RMP Mag 11	High Magnetic Signature	689637.4	5611750	RMP SSS 18	Unknown Wreck
RMP Mag 12	High Magnetic Signature	689062.3	5612133	RMP SSS 25	Unknown Wreck
RMP Mag 13	High Magnetic Signature	688446.3	5612544	RMP SSS 24	Stanwold Wreck
RMP Mag 14	High Magnetic Signature	688512.1	5617422	RMP SSS 12	Trawler Wreck
RMP Mag 15	High Magnetic Signature	686522.2	5615377	RMP SSS 29	Ingo Wreck

Table 6. Table of Magnetometer Contacts

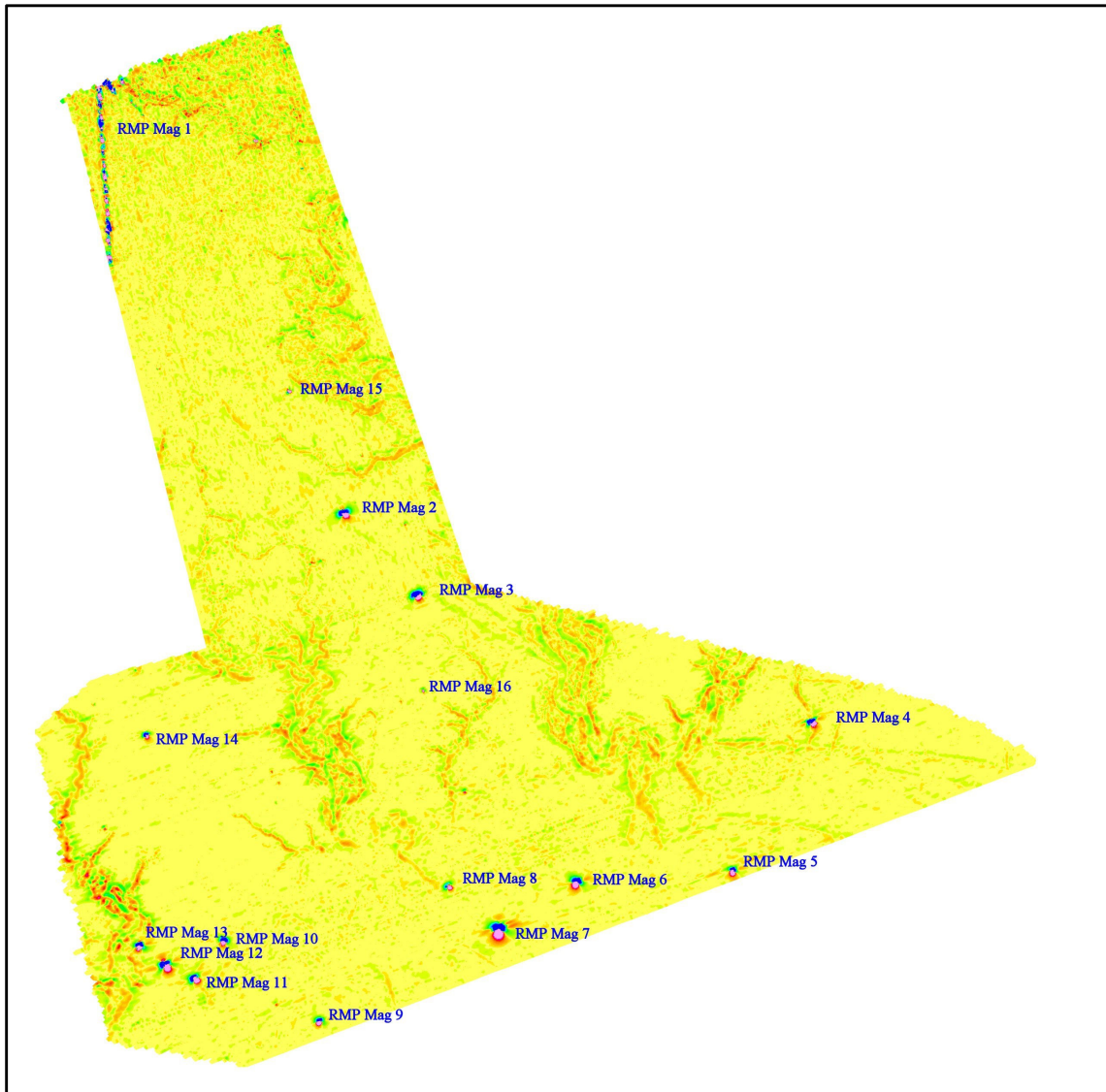


Figure 3. Rampion Magnetometer Contacts

5.3 Sub Bottom Profiler

Review of the Sub Bottom Profiler data concluded that whilst there were a number of shallow horizons, none were considered to be of archaeological significance. There was no apparent submerged archaeological heritage noted in these areas.

6 SUMMARY AND CONCLUSION

6.1 Summary

The desktop historical and archaeological assessment of the subject site indicated that there has been the site of continued human habitation since the Palaeolithic Period, with 123 Palaeolithic find spots in West Sussex alone. Most of these finds comprise mainly of hand axes and flakes. During the Neolithic period, around 4000BC, those communities that settled along the southern coast of Britain enjoyed access to large amounts of flint due to the large number of flint mines in Hampshire and West Sussex. The archaeological record around these mines testifies to a large number of flint tools being manufactured and from about 4300 BC to about 3400 BC the mining of flint for use locally and also for wider trade was a major activity in Neolithic Sussex. The discovery in 2009 of a Bronze Age vessel off the coast of Devon gave an insight into contemporary maritime activities. It was carrying an extremely valuable cargo of tin and hundreds of copper ingots from the Continent when it sank around the year 900BC. These craft and exotic artefacts found in Bronze Age burials testify to the increase in overseas trade across the English Channel. The arrival of the Iron Age saw increased trading and exchange contacts, between Britain and mainland Europe. The later Roman route into England was made easier because of these existing trade routes.

After an apparent sharp decline in maritime trade during the early post-Roman period, commercial trading activity with continental Europe was stimulated again from the late 6th century. The 8th and 9th centuries saw the greatest resurgence of European trade since the fall of the Roman Empire. Most of this trade relied on water transport and as a consequence urban settlements were revitalised along rivers and near to the coast, changing the character of the landscape/seascape. Between the 8th and 11th centuries, the distinctly maritime orientated Scandinavian influence spread widely across Europe and beyond, disrupting earlier trade patterns and patrons but creating new ones. The Norman conquest of 1066 reorientated England towards continental Western Europe and away from Scandinavian influence. It opened up important new trading areas for England, including the wine growing region of Gascony.

Throughout the medieval period, the location of shipbuilding sites seems to have been rather haphazard in England's landscape. The sites themselves were rudimentary, although ships were being built in simple docks from at least the 1330s. The 16th Century saw the Thames and surrounding region grow to become the shipbuilding capital of the country. In 1559 there were 520 shipwrights employed in the royal yard in the Thames and at Portsmouth. In later years, the English shipping industry underwent a particularly rapid development following the Seven Years War against France (1756-63), and the rate of English naval construction rapidly increased. During the mid 19th century, technological and economic

progress gained momentum with England as a world leader in the development of steam-powered ships and railways, and later the internal combustion engine and electrical power generation. England became one of the leading industrial powers of the 19th century, due in no small part to the strength of its shipping industry.

The geophysical survey of the site in question was undertaken using Osiris Projects dedicated survey vessels, MV Freja and MV Lia, during the period 4th May to 19th August 2010.

High-resolution side scan sonar, swath multi-beam, single beam bathymetry and magnetometer data were acquired along all survey lines, in order to accurately map the seabed within the wind farm area. Main survey lines were run at 50m centres, with cross lines at 750m centres. A total of 4,860 design line kilometres were acquired.

The archaeological assessment reviewed the following techniques: Side scan sonar, marine magnetometer and sub bottom profiler. There were 29 features of note on the side scan sonar survey data. 20 of these were of high archaeological significance and 9 were of moderate archaeological significance. On the magnetometer data, there were 15 recorded high magnetic contacts. All these were reflected in the side scan sonar record. The sub bottom profiler data recorded the presence of a number of palaeo-channels. None of these were deemed to be of archaeological significance.

6.2 Conclusion

The programme of desktop assessment concluded that the proposed site was of considerable archaeological significance with a number of known shipwrecks in the immediate area. Consequently it was deemed that the likelihood of there being archaeological material on the site was high.

The programme of geophysical data review noted that the data quality was generally good. It recorded the presence of 29 side scan sonar targets and 15 magnetometer targets. All the magnetometer targets cross referenced with known side scan sonar targets.

Consideration should be given to the establishment of exclusion – no construction zones surrounding the identified sites. The nature and extent of these exclusion zones should be developed in conjunction all relevant legislative, commercial and local parties.

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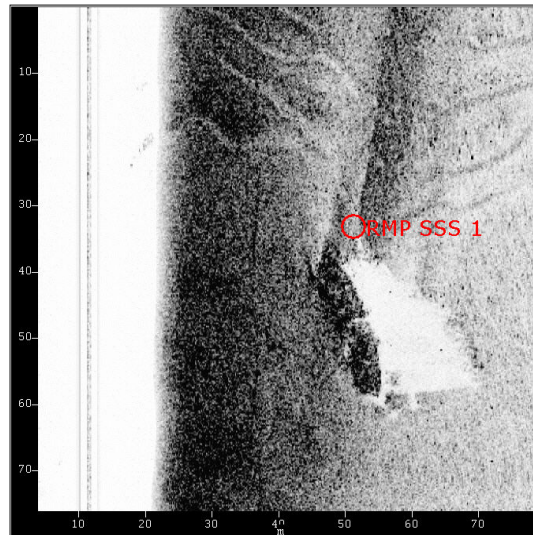
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APPENDIX 2 SIDE SCAN SONAR CONTACTS

RMP SSS 1

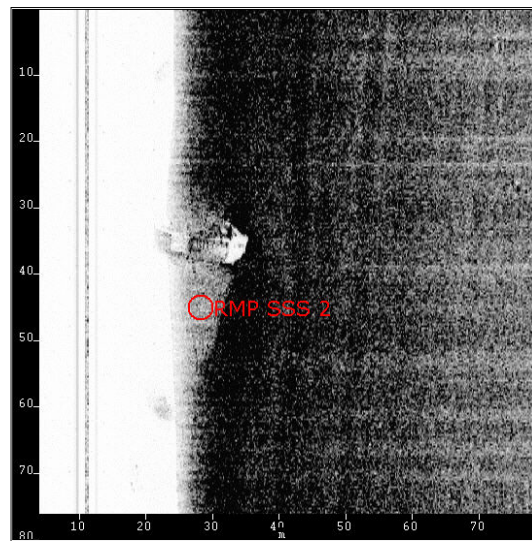
**Contact Info: RMP SSS 1**

- Sonar Time at Target: 06/02/2010 15:48:39
- Click Position (Lat/Lon Coordinates)
50.6603355408 -0.3608759940 (WGS84)
50.6603355408 17.3057171727 (Local)
- Click Position (Projected Coordinates)
(X) 686522.19 (Y) 5615377.00
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod Files\All files Freja\020610.141333.cod
- Ping Number: 671149
- Range to Target: 39.57 Meters
- Fish Height: 9.70 Meters
- Heading: 258.900 degrees
- Event Number: 33763
- Line Name: 020610.141333

User Entered Info

Target Height: = 2 Meters
 Target Length: 24 Meters
 Target Shadow: 11 Meters
 Target Width: 4 Meters
 Mag Anomaly: No
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Unknown Wreck

RMP SSS 2



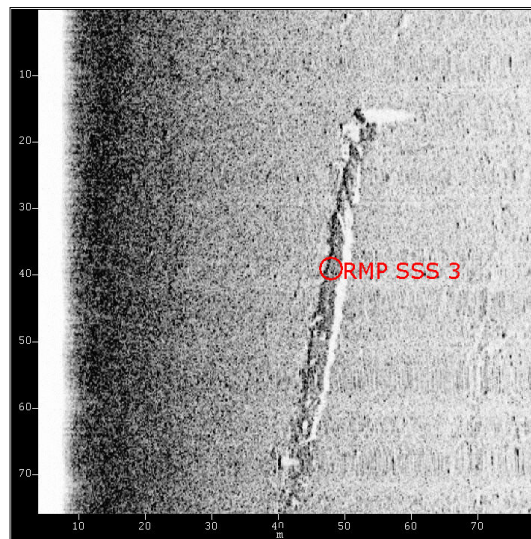
Contact Info: RMP SSS 2

- Sonar Time at Target: 05/17/2010 12:11:31
- Click Position (Lat/Lon Coordinates)
50.6782760620 -0.3302640021 (WGS84)
50.6782760620 17.3363291646 (Local)
- Click Position (Projected Coordinates)
(X) 688613.44 (Y) 5617449.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All files Freja\170510.105659.cod
- Ping Number: 868079
- Range to Target: 17.02 Meters
- Fish Height: 12.25 Meters
- Heading: 64.100 degrees
- Event Number: 9618
- Line Name: 170510.105659

User Entered Info

Target Height: = 0 Meters
 Target Length: 10 Meters
 Target Shadow: 0 Meters
 Target Width: 6 Meters
 Mag Anomaly: No
 Avoidance Area: Yes
 Classification 1: debris
 Classification 2:
 Area:
 Block:
 Description: Unknown Debris

RMP SSS 3



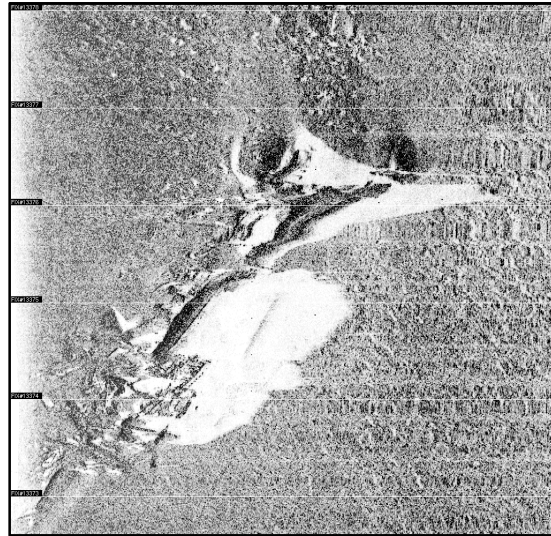
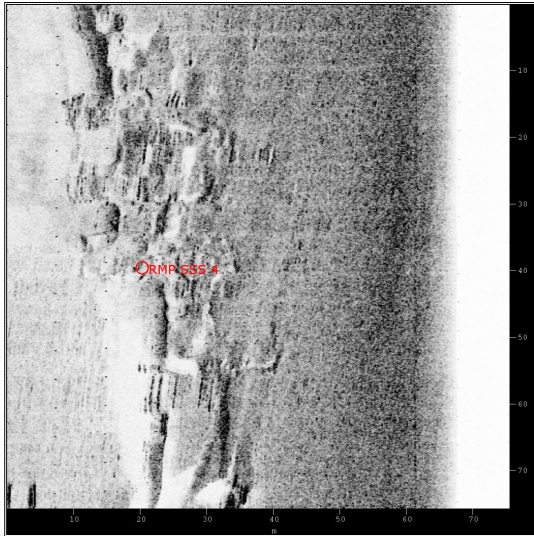
Contact Info: RMP SSS 3

- Sonar Time at Target: 05/17/2010 14:49:46
- Click Position (Lat/Lon Coordinates)
50.7019729614 -0.2195039988 (WGS84)
50.7019729614 17.4470891679 (Local)
- Click Position (Projected Coordinates)
(X) 696338.38 (Y) 5620372.00
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All files Freja\170510.131258.cod
- Ping Number: 901136
- Range to Target: 47.78 Meters
- Fish Height: 7.40 Meters
- Heading: 72.600 degrees
- Event Number: 9980
- Line Name: 170510.131258

User Entered Info

Target Height: = 0 Meters
 Target Length: 61 Meters
 Target Shadow: 0 Meters
 Target Width: 0 Meters
 Mag Anomaly: No
 Avoidance Area: Yes
 Classification 1: Scar
 Classification 2:
 Area:
 Block:
 Description: 62m long seafloor scar

RMP SSS 4



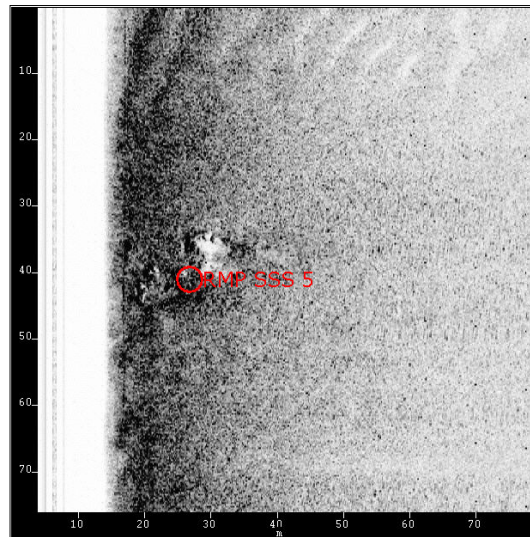
Contact Info: RMP SSS 4

- Sonar Time at Target: 05/19/2010 13:34:07
- Click Position (Lat/Lon Coordinates)
50.7054138184 -0.2405550033 (WGS84)
50.7054138184 17.4260381634 (Local)
- Click Position (Projected Coordinates)
(X) 694837.81 (Y) 5620699.00
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All files Freja\190510.122653.cod
- Ping Number: 1217739
- Range to Target: -59.17 Meters
- Fish Height: 11.75 Meters
- Heading: 248.100 degrees
- Event Number: 13451
- Line Name: 190510.122653

User Entered Info

Target Height: = 0 Meters
 Target Length: 81 Meters
 Target Shadow: 0 Meters
 Target Width: 20 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Ikeda/City of London (Wreck No. 20080)

RMP SSS 5



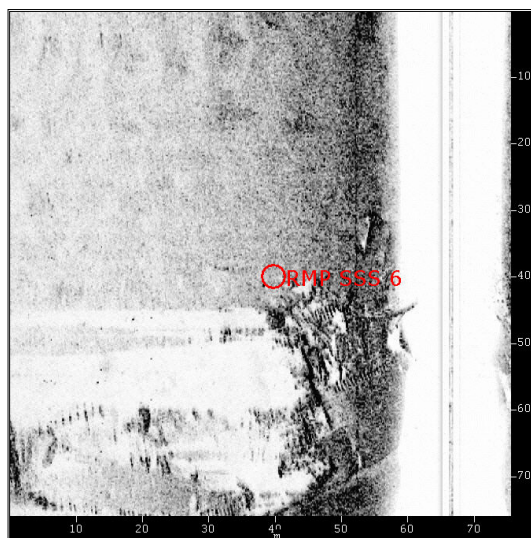
Contact Info: RMP SSS 5

- Sonar Time at Target: 06/09/2010 16:28:55
- Click Position (Lat/Lon Coordinates)
 - 50.7575149536 -0.2620269954 (WGS84)
 - 50.7575149536 17.4045661712 (Local)
- Click Position (Projected Coordinates)
 - (X) 693107.56 (Y) 5626435.00
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod Files\All files Freja\090610.144714.cod
- Ping Number: 1958298
- Range to Target: 20.28 Meters
- Fish Height: 7.33 Meters
- Heading: 335.500 degrees
- Event Number: 45606
- Line Name: 090610.144714

User Entered Info

Target Height: = 0 Meters
 Target Length: 15 Meters
 Target Shadow: 0 Meters
 Target Width: 8 Meters
 Mag Anomaly: No
 Avoidance Area: Yes
 Classification 1: debris
 Classification 2:
 Area:
 Block:
 Description:

RMP SSS 6



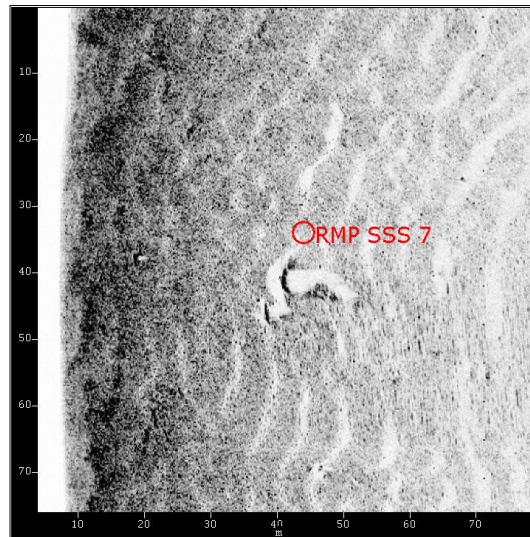
Contact Info: RMP SSS 6

- Sonar Time at Target: 06/20/2010 11:35:48
- Click Position (Lat/Lon Coordinates)
50.7233657837 -0.2630389929 (WGS84)
50.7233657837 17.4035541738 (Local)
- Click Position (Projected Coordinates)
(X) 693176.69 (Y) 5622635.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All files Freja\200610.101558.cod
- Ping Number: 2671889
- Range to Target: 26.86 Meters
- Fish Height: 7.42 Meters
- Heading: 357.400 degrees
- Event Number: 53713
- Line Name: 200610.101558

User Entered Info

Target Height: = 0 Meters
Target Length: 82 Meters
Target Shadow: 0 Meters
Target Width: 31 Meters
Mag Anomaly: No
Avoidance Area: Yes
Classification 1: Wreck
Classification 2:
Area:
Block:
Description: Unknown Wreck

RMP SSS 7



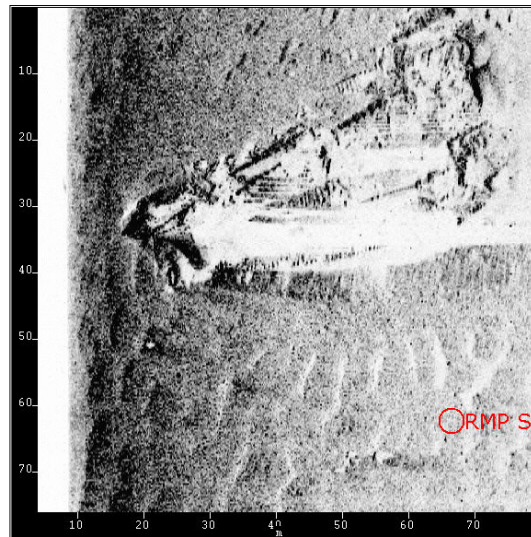
Contact Info: RMP SSS 7

- Sonar Time at Target: 06/20/2010 11:43:15
- Click Position (Lat/Lon Coordinates)
50.7314720154 -0.2658799887 (WGS84)
50.7314720154 17.4007131780 (Local)
- Click Position (Projected Coordinates)
(X) 692942.88 (Y) 5623529.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All files Freja\200610.101558.cod
- Ping Number: 2675956
- Range to Target: 43.19 Meters
- Fish Height: 6.21 Meters
- Heading: 0.400 degrees
- Event Number: 53758
- Line Name: 200610.101558

User Entered Info

Target Height: = 0 Meters
Target Length: 10 Meters
Target Shadow: 0 Meters
Target Width: 13 Meters
Mag Anomaly: No
Avoidance Area: Yes
Classification 1: debris
Classification 2:
Area:
Block:
Description: Anomalous shaped debris

RMP SSS 8



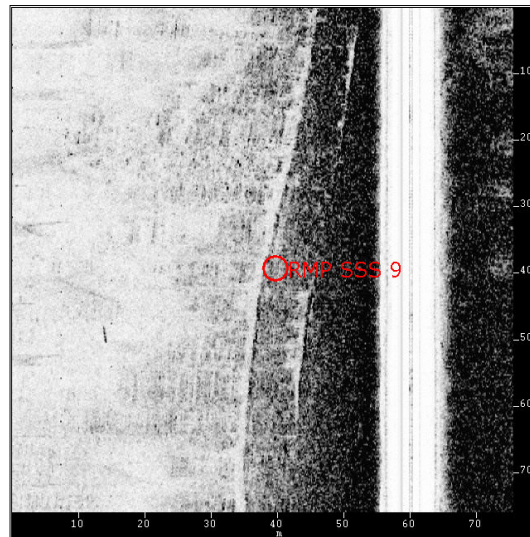
Contact Info: RMP SSS 8

- Sonar Time at Target: 06/20/2010 14:07:00
- Click Position (Lat/Lon Coordinates)
50.7235488892 -0.2632299960 (WGS84)
50.7235488892 17.4033631707 (Local)
- Click Position (Projected Coordinates)
(X) 693162.44 (Y) 5622655.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All files Freja\200610.125043.cod
- Ping Number: 2745601
- Range to Target: 66.26 Meters
- Fish Height: 8.05 Meters
- Heading: 344.700 degrees
- Event Number: 54515
- Line Name: 200610.125043

User Entered Info

Target Height: = 0 Meters
 Target Length: 68 Meters
 Target Shadow: 0 Meters
 Target Width: 29 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Unknown Wreck

RMP SSS 9



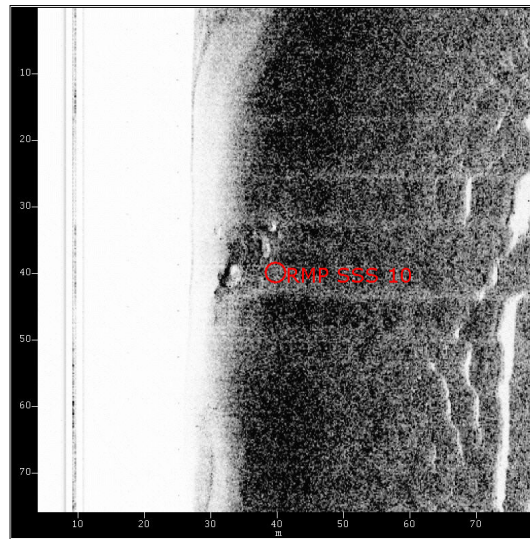
Contact Info: RMP SSS 9

- Sonar Time at Target: 07/09/2010 10:25:21
- Click Position (Lat/Lon Coordinates)
50.8139915466 -0.3299489915 (WGS84)
50.8139915466 17.3366441751 (Local)
- Click Position (Projected Coordinates)
(X) 688090.88 (Y) 5632538.00
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All files Freja\090710.092344.cod
- Ping Number: 3430465
- Range to Target: 20.49 Meters
- Fish Height: 2.93 Meters
- Heading: 155.600 degrees
- Event Number: 91877
- Line Name: 090710.092344

User Entered Info

Target Height: = 0 Meters
 Target Length: 0 Meters
 Target Shadow: 0 Meters
 Target Width: 0 Meters
 Mag Anomaly: No
 Avoidance Area: Yes
 Classification 1:
 Classification 2:
 Area:
 Block:
 Description: Pipeline/Cable

RMP SSS 10



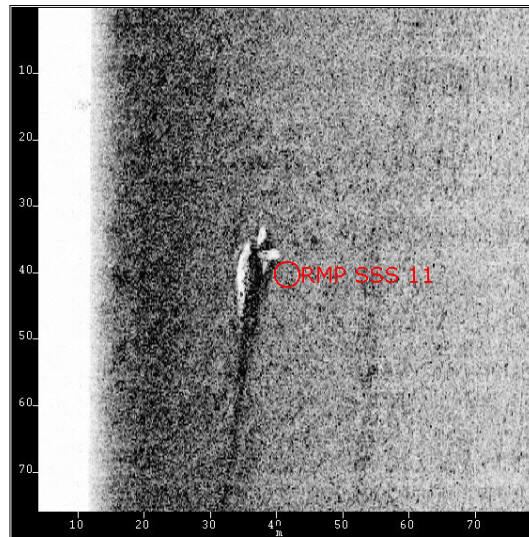
Contact Info: RMP SSS 10

- Sonar Time at Target: 05/22/2010 13:24:58
- Click Position (Lat/Lon Coordinates)
50.6217498779 -0.2914980054 (WGS84)
50.6217498779 17.3750951613 (Local)
- Click Position (Projected Coordinates)
(X) 691581.75 (Y) 5611264.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All files Freja\220510.121341.cod
- Ping Number: 102536
- Range to Target: 30.27 Meters
- Fish Height: 17.71 Meters
- Heading: 345.900 degrees
- Event Number: 19381
- Line Name: 220510.121341

User Entered Info

Target Height: = 0 Meters
 Target Length: 13 Meters
 Target Shadow: 0 Meters
 Target Width: 10 Meters
 Mag Anomaly: No
 Avoidance Area: Yes
 Classification 1: debris
 Classification 2:
 Area:
 Block:
 Description: Debris

RMP SSS 11



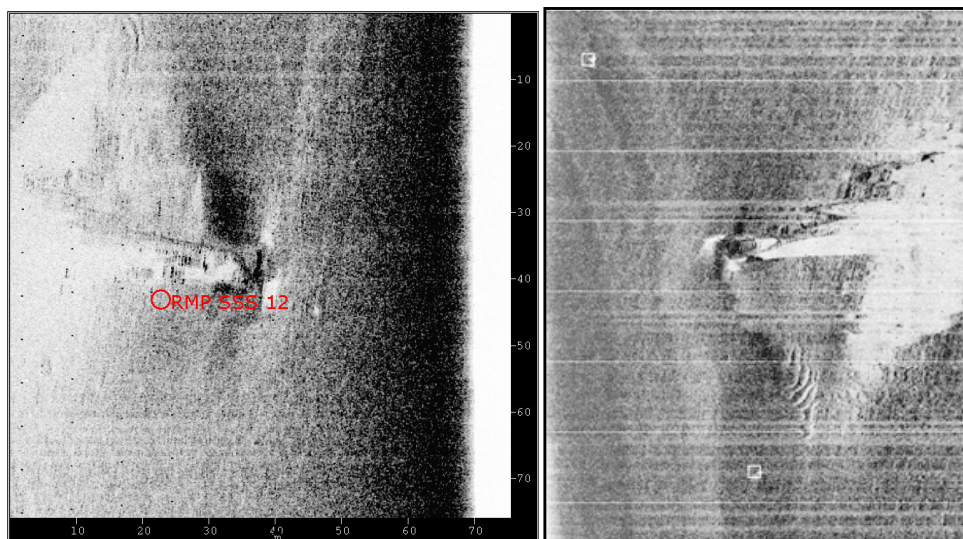
Contact Info: RMP SSS 11

- Sonar Time at Target: 05/24/2010 16:23:28
- Click Position (Lat/Lon Coordinates)
50.6859664917 -0.2982409894 (WGS84)
50.6859664917 17.3683521772 (Local)
- Click Position (Projected Coordinates)
(X) 690844.31 (Y) 5618386.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All files Freja\240510.145059.cod
- Ping Number: 665791
- Range to Target: 41.45 Meters
- Fish Height: 11.54 Meters
- Heading: 75.000 degrees
- Event Number: 25553
- Line Name: 240510.145059

User Entered Info

Target Height: = 1 Meters
Target Length: 15 Meters
Target Shadow: 3 Meters
Target Width: 3 Meters
Mag Anomaly: No
Avoidance Area: Yes
Classification 1: Unknown
Classification 2:
Area:
Block:
Description: Debris

RMP SSS 12



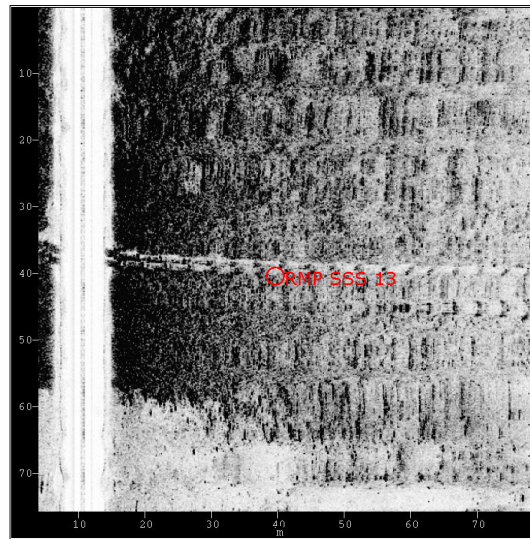
Contact Info: RMP SSS 12

- Sonar Time at Target: 05/27/2010 09:53:40
- Click Position (Lat/Lon Coordinates)
50.6780662537 -0.3317120075 (WGS84)
50.6780662537 17.3348811591 (Local)
- Click Position (Projected Coordinates)
(X) 688512.06 (Y) 5617422.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod Files\All files Freja\270510.072146.cod
- Ping Number: 738099
- Range to Target: -55.80 Meters
- Fish Height: 8.54 Meters
- Heading: 251.300 degrees
- Event Number: 550
- Line Name: 270510.072146

User Entered Info

Target Height: = 0 Meters
 Target Length: 32 Meters
 Target Shadow: 0 Meters
 Target Width: 6 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Trawler Wreck (Wreck No 20059)

RMP SSS 13



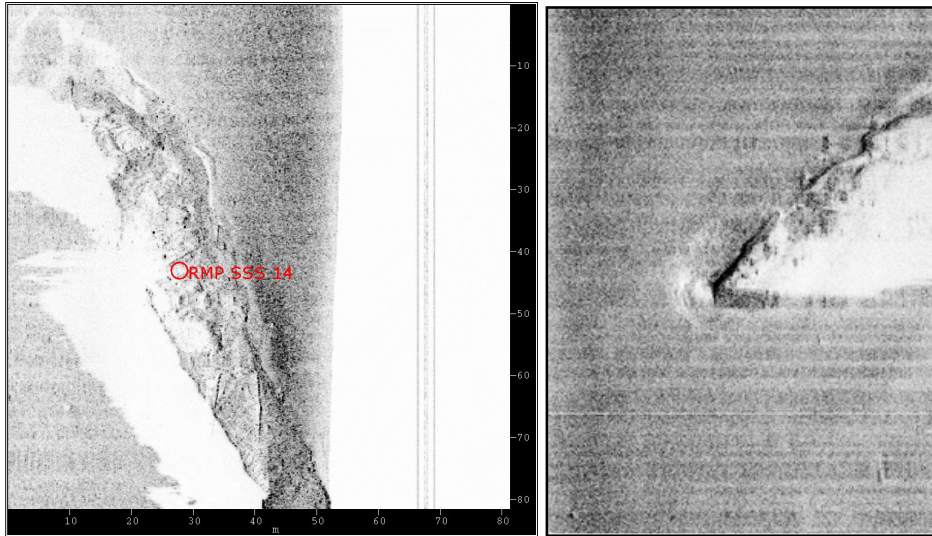
Contact Info: RMP SSS 13

- Sonar Time at Target: 07/27/2010 12:30:42
- Click Position (Lat/Lon Coordinates)
50.8143539429 -0.3354560137 (WGS84)
50.8143539429 17.3311371530 (Local)
- Click Position (Projected Coordinates)
(X) 687701.50 (Y) 5632565.00
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All files Freja\270710.112015.cod
- Ping Number: 3571258
- Range to Target: 29.03 Meters
- Fish Height: 1.09 Meters
- Heading: 64.400 degrees
- Event Number: 106130
- Line Name: 270710.112015

User Entered Info

Target Height: = 0 Meters
 Target Length: 0 Meters
 Target Shadow: 0 Meters
 Target Width: 0 Meters
 Mag Anomaly: No
 Avoidance Area: Yes
 Classification 1: Cable
 Classification 2:
 Area:
 Block:
 Description: Cable

RMP SSS 14



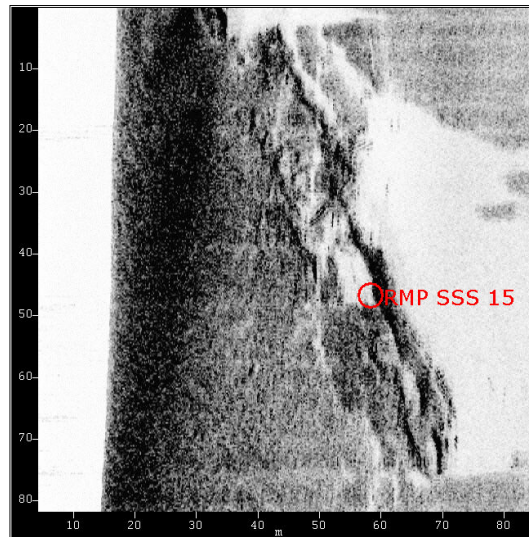
Contact Info: RMP SSS 14

- Sonar Time at Target: 05/13/2010 15:10:23
- Click Position (Lat/Lon Coordinates)
50.6758842468 -0.1109400019 (WGS84)
50.6758842468 17.5556531648 (Local)
- Click Position (Projected Coordinates)
(X) 704116.31 (Y) 5617765.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod Files\All Files Lia\130510.135958.cod
- Ping Number: 328684
- Range to Target: -40.03 Meters
- Fish Height: 14.76 Meters
- Heading: 75.700 degrees
- Event Number: 4009
- Line Name: 130510.135958

User Entered Info

Target Height: = 9 Meters
 Target Length: 85 Meters
 Target Shadow: 15 Meters
 Target Width: 13 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: City of Waterford (Wreck No 20056)

RMP SSS 15



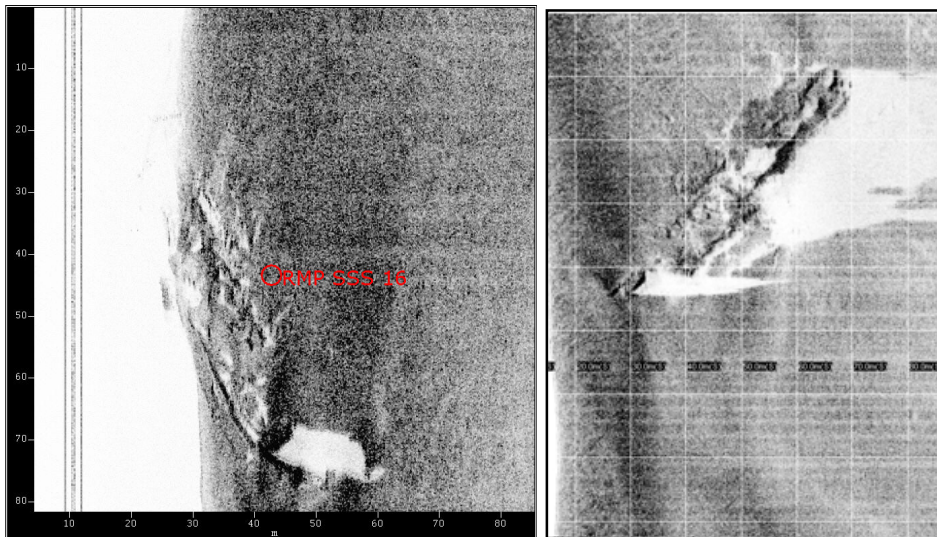
Contact Info: RMP SSS 15

- Sonar Time at Target: 05/15/2010 14:07:47
- Click Position (Lat/Lon Coordinates)
50.6268806458 -0.3183830082 (WGS84)
50.6268806458 17.3482101584 (Local)
- Click Position (Projected Coordinates)
(X) 689659.69 (Y) 5611766.00
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\150510.130532.cod
- Ping Number: 788302
- Range to Target: 56.45 Meters
- Fish Height: 14.46 Meters
- Heading: 253.100 degrees
- Event Number: 9457
- Line Name: 150510.130532

User Entered Info

Target Height: = 0 Meters
 Target Length: 83 Meters
 Target Shadow: 0 Meters
 Target Width: 17 Meters
 Mag Anomaly: No
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Unknown Wreck

RMP SSS 16



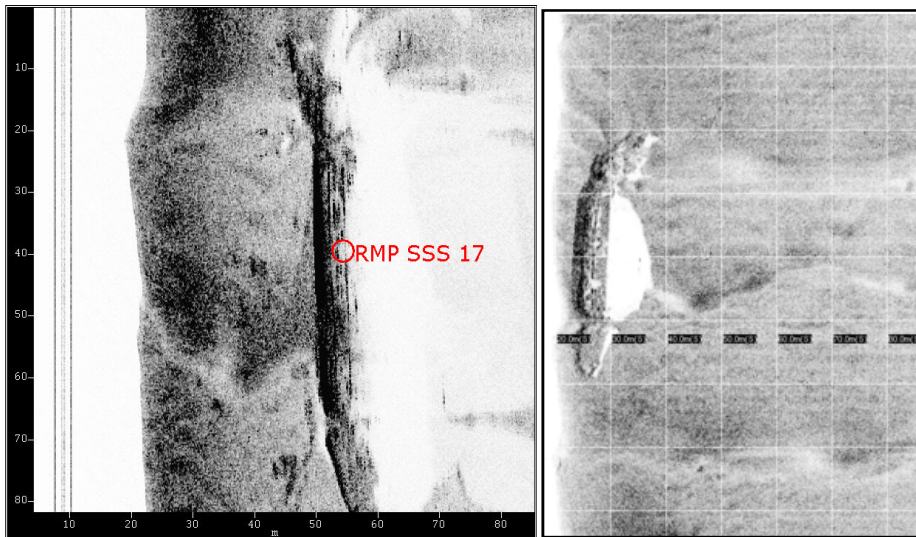
Contact Info: RMP SSS 16

- Sonar Time at Target: 05/17/2010 08:43:51
- Click Position (Lat/Lon Coordinates)
50.6268844604 -0.3171130121 (WGS84)
50.6268844604 17.3494801546 (Local)
- Click Position (Projected Coordinates)
(X) 689749.44 (Y) 5611769.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\170510.072339.cod
- Ping Number: 877367
- Range to Target: 32.06 Meters
- Fish Height: 18.28 Meters
- Heading: 69.200 degrees
- Event Number: 10517
- Line Name: 170510.072339

User Entered Info

Target Height: = 0 Meters
 Target Length: 54 Meters
 Target Shadow: 0 Meters
 Target Width: 18 Meters
 Mag Anomaly: No
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Steam Ship Wreck, (Wreck No. 19991)

RMP SSS 17



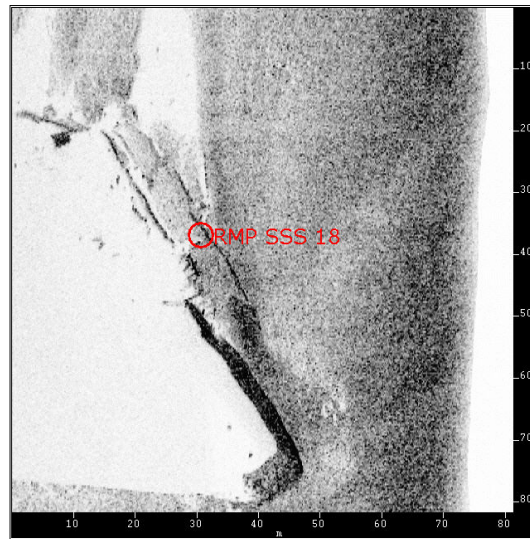
Contact Info: RMP SSS 17

- Sonar Time at Target: 05/18/2010 08:47:08
- Click Position (Lat/Lon Coordinates)
50.6441307068 -0.2340299934 (WGS84)
50.6441307068 17.4325631733 (Local)
- Click Position (Projected Coordinates)
(X) 695553.06 (Y) 5613903.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\180510.072228.cod
- Ping Number: 1054008
- Range to Target: 45.35 Meters
- Fish Height: 12.50 Meters
- Heading: 253.600 degrees
- Event Number: 12617
- Line Name: 180510.072228

User Entered Info

Target Height: = 5 Meters
 Target Length: 82 Meters
 Target Shadow: 28 Meters
 Target Width: 8 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: HMS Minion (Wreck No. 20014)

RMP SSS 18



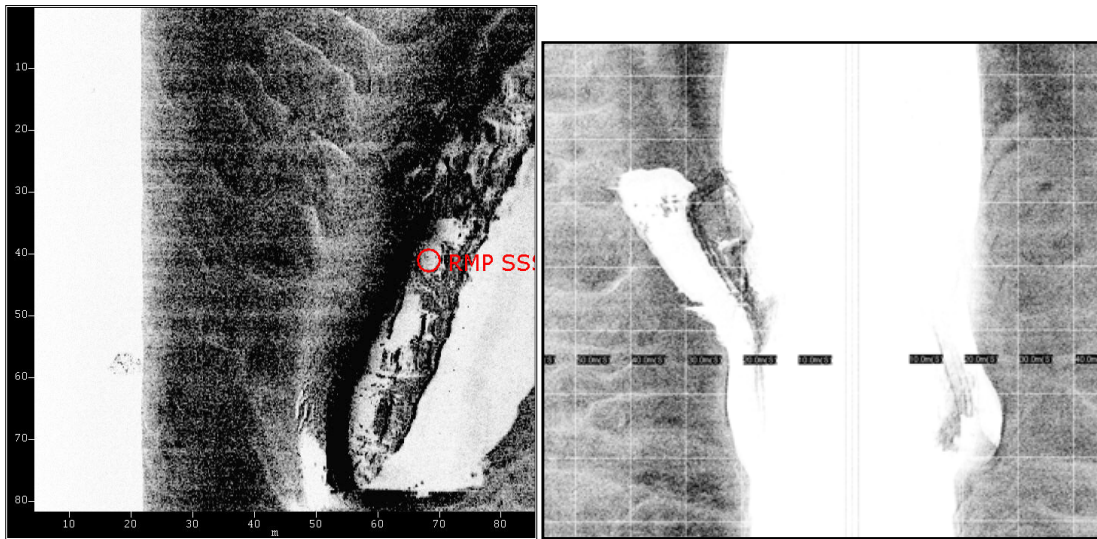
Contact Info: RMP SSS 18

- Sonar Time at Target: 05/18/2010 15:41:34
- Click Position (Lat/Lon Coordinates)
50.6267433167 -0.3187049925 (WGS84)
50.6267433167 17.3478881741 (Local)
- Click Position (Projected Coordinates)
(X) 689637.44 (Y) 5611750.00
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\180510.142807.cod
- Ping Number: 1254870
- Range to Target: -54.35 Meters
- Fish Height: 9.54 Meters
- Heading: 249.500 degrees
- Event Number: 15006
- Line Name: 180510.142807

User Entered Info

Target Height: = 12 Meters
 Target Length: 79 Meters
 Target Shadow: 31 Meters
 Target Width: 10 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Unknown Wreck

RMP SSS 19



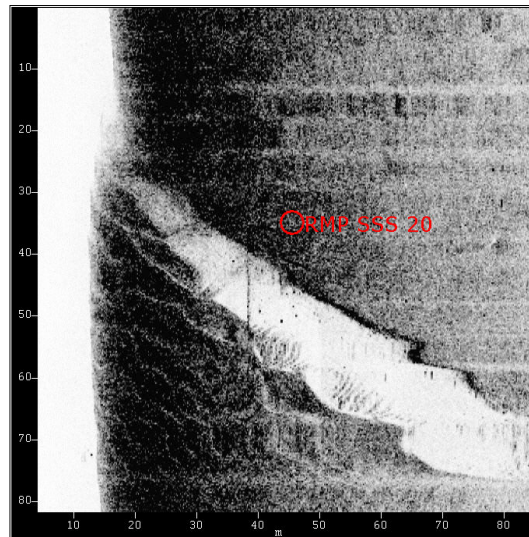
Contact Info: RMP SSS 19

- Sonar Time at Target: 06/02/2010 15:19:27
- Click Position (Lat/Lon Coordinates)
50.6439056396 -0.1921270043 (WGS84)
50.6439056396 17.4744661624 (Local)
- Click Position (Projected Coordinates)
(X) 698516.13 (Y) 5613989.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\020610.123430.cod
- Ping Number: 3226300
- Range to Target: 68.11 Meters
- Fish Height: 21.58 Meters
- Heading: 249.900 degrees
- Event Number: 38812
- Line Name: 020610.123430

User Entered Info

Target Height: = 4 Meters
 Target Length: 74 Meters
 Target Shadow: 17 Meters
 Target Width: 10 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Glenarm Head (Wreck No. 20012)

RMP SSS 20



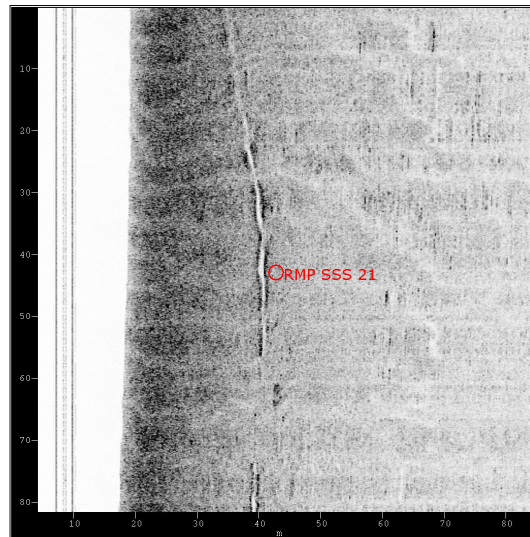
Contact Info: RMP SSS 20

- Sonar Time at Target: 06/02/2010 16:44:03
- Click Position (Lat/Lon Coordinates)
50.6154632568 -0.3221769929 (WGS84)
50.6154632568 17.3444161738 (Local)
- Click Position (Projected Coordinates)
(X) 689437.25 (Y) 5610487.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\020610.141957.cod
- Ping Number: 3268955
- Range to Target: 45.37 Meters
- Fish Height: 12.30 Meters
- Heading: 253.600 degrees
- Event Number: 39320
- Line Name: 020610.141957

User Entered Info

Target Height: = 0 Meters
Target Length: 84 Meters
Target Shadow: 0 Meters
Target Width: 14 Meters
Mag Anomaly: No
Avoidance Area: Yes
Classification 1: Wreck
Classification 2:
Area:
Block:
Description: Unknown Wreck

RMP SSS 21



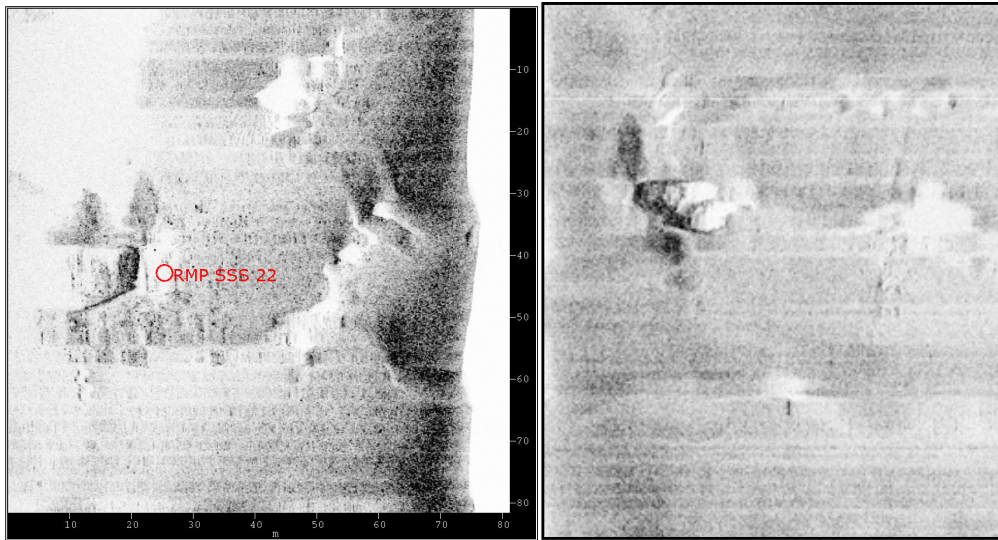
Contact Info: RMP SSS 21

- Sonar Time at Target: 06/18/2010 13:51:52
- Click Position (Lat/Lon Coordinates)
50.6712493896 -0.2354220003 (WGS84)
50.6712493896 17.4311711664 (Local)
- Click Position (Projected Coordinates)
(X) 695342.06 (Y) 5616914.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\180610.113308.cod
- Ping Number: 5002275
- Range to Target: 34.23 Meters
- Fish Height: 10.07 Meters
- Heading: 249.000 degrees
- Event Number: 62726
- Line Name: 180610.113308

User Entered Info

Target Height: = 0 Meters
Target Length: 85 Meters
Target Shadow: 0 Meters
Target Width: 0 Meters
Mag Anomaly: Yes
Avoidance Area: Yes
Classification 1: cable
Classification 2:
Area:
Block:
Description: Cable

RMP SSS 22



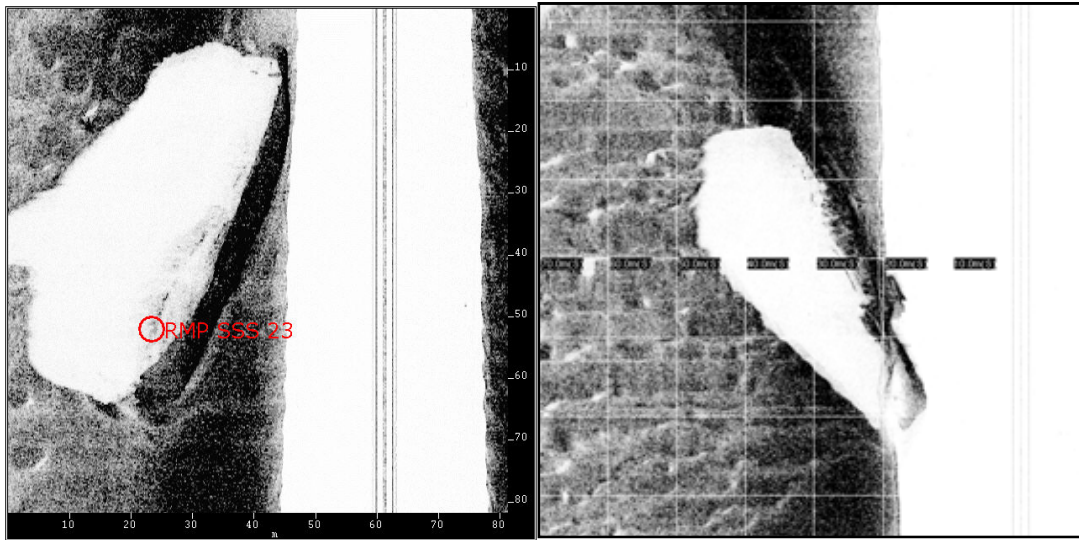
Contact Info: RMP SSS 22

- Sonar Time at Target: 06/22/2010 17:01:27
- Click Position (Lat/Lon Coordinates)
50.6453056335 -0.1405279934 (WGS84)
50.6453056335 17.5260651732 (Local)
- Click Position (Projected Coordinates)
(X) 702157.56 (Y) 5614284.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod Files\All Files Lia\220610.143030.cod
- Ping Number: 5874379
- Range to Target: 60.12 Meters
- Fish Height: 9.41 Meters
- Heading: 253.200 degrees
- Event Number: 72994
- Line Name: 220610.143030

User Entered Info

Target Height: = 0 Meters
 Target Length: 19 Meters
 Target Shadow: 0 Meters
 Target Width: 10 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Unnamed Trawler (Wreck No 20017)

RMP SSS 23



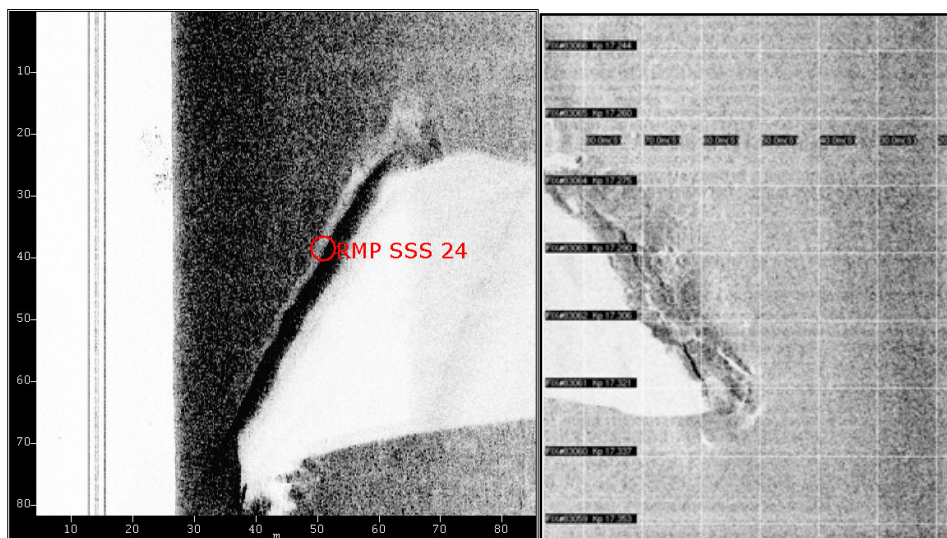
Contact Info: RMP SSS 23

- Sonar Time at Target: 06/23/2010 13:49:09
- Click Position (Lat/Lon Coordinates)
50.6166725159 -0.2783200145 (WGS84)
50.6166725159 17.3882731522 (Local)
- Click Position (Projected Coordinates)
(X) 692534.44 (Y) 5610734.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod Files\All Files Lia\230610.122829.cod
- Ping Number: 6076209
- Range to Target: -37.93 Meters
- Fish Height: 15.85 Meters
- Heading: 251.900 degrees
- Event Number: 74886
- Line Name: 230610.122829

User Entered Info

Target Height: = 58 Meters
 Target Length: 63 Meters
 Target Shadow: 30 Meters
 Target Width: 9 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Coal Barge (Wreck No 19975)

RMP SSS 24



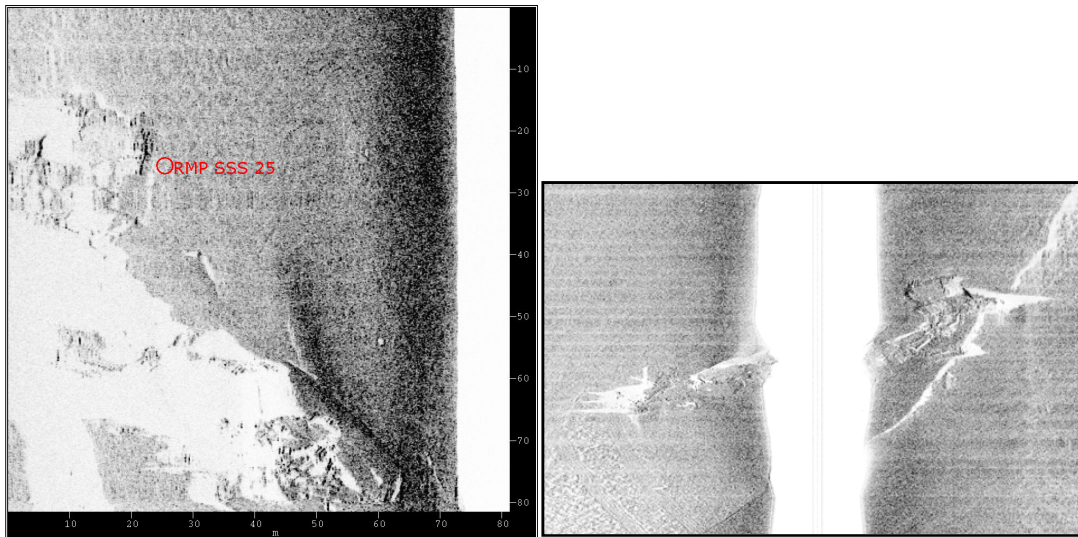
Contact Info: RMP SSS 24

- Sonar Time at Target: 06/27/2010 09:02:02
- Click Position (Lat/Lon Coordinates)
50.6342582703 -0.3351239860 (WGS84)
50.6342582703 17.3314691807 (Local)
- Click Position (Projected Coordinates)
(X) 688446.31 (Y) 5612543.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\270610.075253.cod
- Ping Number: 6839832
- Range to Target: 36.71 Meters
- Fish Height: 0.23 Meters
- Heading: 70.700 degrees
- Event Number: 83959
- Line Name: 270610.075253

User Entered Info

Target Height: = 0 Meters
 Target Length: 61 Meters
 Target Shadow: 43 Meters
 Target Width: 4 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Stanwold Wreck (Wreck 19998)

RMP SSS 25



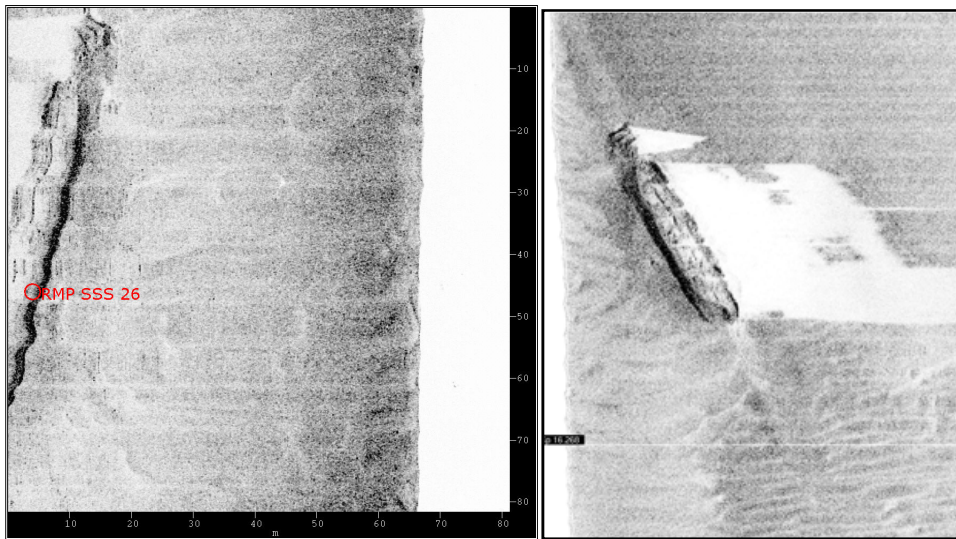
Contact Info: RMP SSS 25

- Sonar Time at Target: 07/01/2010 16:33:30
- Click Position (Lat/Lon Coordinates)
50.6303672791 -0.3266319931 (WGS84)
50.6303672791 17.3399611736 (Local)
- Click Position (Projected Coordinates)
(X) 689062.38 (Y) 5612133.00
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\010710.151403.cod
- Ping Number: 7965016
- Range to Target: -60.10 Meters
- Fish Height: 12.59 Meters
- Heading: 68.600 degrees
- Event Number: 97325
- Line Name: 010710.151403

User Entered Info

Target Height: = 3 Meters
 Target Length: 98 Meters
 Target Shadow: 10 Meters
 Target Width: 28 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Unknown Wreck (Wreck No. 19996)

RMP SSS 26



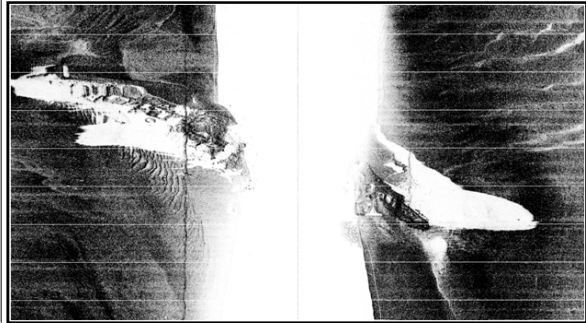
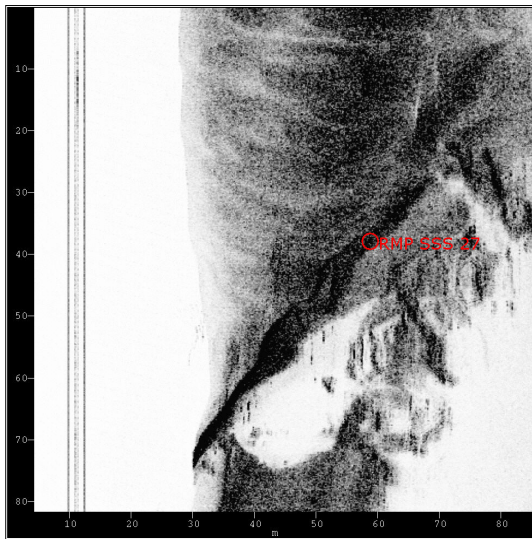
Contact Info: RMP SSS 26

- Sonar Time at Target: 07/01/2010 16:50:42
- Click Position (Lat/Lon Coordinates)
50.6348495483 -0.3067589998 (WGS84)
50.6348495483 17.3598341668 (Local)
- Click Position (Projected Coordinates)
(X) 690449.50 (Y) 5612682.00
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\010710.151403.cod
- Ping Number: 7973693
- Range to Target: -81.52 Meters
- Fish Height: 18.98 Meters
- Heading: 68.000 degrees
- Event Number: 97428
- Line Name: 010710.151403

User Entered Info

Target Height: = 0 Meters
 Target Length: 68 Meters
 Target Shadow: 0 Meters
 Target Width: 8 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Quail Wreck (Wreck No. 20000)

RMP SSS 27



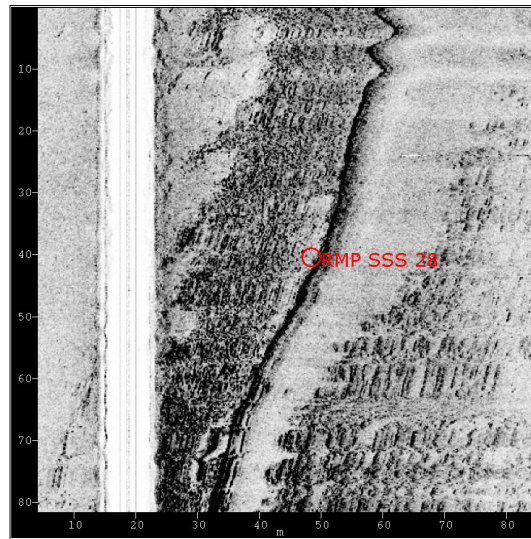
Contact Info: RMP SSS 27

- Sonar Time at Target: 07/09/2010 14:39:39
- Click Position (Lat/Lon Coordinates)
50.6353416443 -0.2161549926 (WGS84)
50.6353416443 17.4504381741 (Local)
- Click Position (Projected Coordinates)
(X) 696853.38 (Y) 5612973.50
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\090710.131519.cod
- Ping Number: 8894146
- Range to Target: 47.58 Meters
- Fish Height: 19.83 Meters
- Heading: 73.900 degrees
- Event Number: 108355
- Line Name: 090710.131519

User Entered Info

Target Height: = 0 Meters
 Target Length: 67 Meters
 Target Shadow: 0 Meters
 Target Width: 17 Meters
 Mag Anomaly: No
 Avoidance Area: Yes
 Classification 1: Wreck
 Classification 2:
 Area:
 Block:
 Description: Pagenturm Wreck (Wreck No. 20001)

RMP SSS 28



Contact Info: RMP SSS 28

- Sonar Time at Target: 08/13/2010 15:47:11
- Click Position (Lat/Lon Coordinates)
50.8139152527 -0.3350369930 (WGS84)
50.8139152527 17.3315561736 (Local)
- Click Position (Projected Coordinates)
(X) 687732.75 (Y) 5632517.00
- Map Proj: UTM84-30N
- Acoustic Source File: E:\C10011_Southern Array\Cod
Files\All Files Lia\130810.144622.cod
- Ping Number: 12062590
- Range to Target: 29.59 Meters
- Fish Height: 4.37 Meters
- Heading: 158.700 degrees
- Event Number: 147409
- Line Name: 130810.144622

User Entered Info

Target Height: = 0 Meters
 Target Length: 0 Meters
 Target Shadow: 0 Meters
 Target Width: 0 Meters
 Mag Anomaly: Yes
 Avoidance Area: Yes
 Classification 1: Pipeline/Cable
 Classification 2:
 Area:
 Block:
 Description: Pipeline/Cable

APPENDIX 3 NATIONAL MONUMENTS RECORD

The following data has been acquired from the National Monuments Record. It details historic monuments and shipwrecks in the development zone. The data provides a description of the monument, its classification, location and also reference material to the site.

Shoreham on Sea has a considerable amount of terrestrial Monuments. These are outside the landfall of the project and so have not been included in this text.

VICTORIA

DESCRIPTION

1891 wreck of English dandy which stranded 4 miles east of Littlehampton while on a fishing and return trip out of Shoreham-by-Sea. Constructed of wood in 1875, she was a sailing vessel.

DETAIL

MONUMENT NUMBER: 903179

COUNTY: WEST SUSSEX

NMR NUMBER: TV 09 NE 2

DISTRICT: ARUN

LAST UPDATED: 2007 PARISH: N/A

AREA: 4 MILES EAST OF LITTLEHAMPTON

STREET: N/A

MARITIME LOCATION: KINGSTON ROCKS WEST SUSSEX

LOCATION: TV 0926 9940

MORE INFORMATION & SOURCES

Stranded and lost in wind conditions SW force 6. (2)(3)

Stated in (3) to have been in ballast, but it is not known whether the vessel was outward- or homeward-bound.

Built: 1875 (2)(3)

Owner: Parsons, Shoreham (2)(3)

Master: C Peacock (2)(3)

Crew: 4 (2)(3)

Date of Loss Qualifier: Actual date of loss

SOURCE TEXT

(1) United Kingdom shipwreck index [pre publication typescript]

(2) Parliamentary papers

1892, Board of Trade Casualty Returns, Appendix C, Table 1 Page(s)133

(3) Richard and Bridget Larn 1995 Shipwreck index of the British Isles, volume 2 : Hampshire, Isle of Wight, Sussex, Kent (Mainland), Kent (Downs), Goodwin Sands, Thames
Section 3, Sussex (BC)

MONUMENT TYPES

POST MEDIEVAL DANDY 1875

POST MEDIEVAL WATERCRAFT 1875

POST MEDIEVAL DANDY 1891

POST MEDIEVAL FISHING VESSEL 1891

POST MEDIEVAL WRECK 1891

LE LIBERTI

DESCRIPTION

1772 wreck of craft which capsized at sea on her passage from Gdansk to Dundalk, and was found as a wreck, to be beached west of Shoreham-by-Sea. Constructed of wood, she was a sailing vessel.

DETAIL

MONUMENT NUMBER: 902617

COUNTY: WEST SUSSEX

NMR NUMBER: TQ 20 SW 8

DISTRICT: ADUR

LAST UPDATED: 2006 PARISH: N/A

AREA: WEST OF SHOREHAM-BY-SEA

STREET: N/A

MARITIME LOCATION: SHOREHAM BY SEA WEST SUSSEX

LOCATION: TQ 2209 0340

MORE INFORMATION & SOURCES

'A wreck is taken up in the Channel, the bottom upwards, brought on shore to the westward of Shoreham harbour; by her papers she is called LE LIBERTI, Beloneierle Pieters, bound from Dantzick to Dundalk.' (2)

Master: Beloneierle Pieters (2)

Date of Loss Qualifier: Reporting date of loss

SOURCE TEXT

(1) United Kingdom shipwreck index [pre publication typescript]

(2) Lloyd's 1969 Lloyd's list

13-OCT-1772, No.3816

(3) Richard and Bridget Larn 1995 Shipwreck index of the British Isles, volume 2 : Hampshire, Isle of Wight, Sussex, Kent (Mainland), Kent (Downs), Goodwin Sands, Thames
Section 3, Sussex (BC)

MONUMENT TYPES

POST MEDIEVAL CRAFT 1772

POST MEDIEVAL WRECK 1772

S N HANSEN

DESCRIPTION

1915 wreck of Norwegian brig which grounded in the harbour at Shoreham-by-Sea on her arrival from Sundsvall and/or Fredrikstad with timber. She was recovered but condemned and broken up in the harbour. Built in 1873 of wood, she was a sailing vessel.

DETAIL

MONUMENT NUMBER: 903583

COUNTY: WEST SUSSEX

NMR NUMBER: TQ 20 SW 38

DISTRICT: ADUR

LAST UPDATED: 2007 PARISH: N/A

AREA: SHOREHAM-BY-SEA HARBOUR

STREET: N/A

MARITIME LOCATION: SHOREHAM BY SEA WEST SUSSEX

LOCATION: TQ 2209 0340

MORE INFORMATION & SOURCES

Departure stated as Sundsvall.

Stranded at Shoreham carrying a cargo of firewood. Was subsequently refloated, condemned and sold for scrap at Shoreham, where she was broken up in the harbour. (3)

Delivered as S N HANSEN for O Knudsen m.fl., Lillesand, passing through several owners until she was bought in 1910 by her final owner.

Dimensions 115 x 28 x 15 feet, 317 tons gross, 297 tons net.

Stranded while sailing in to Shoreham on her arrival from Fredrikstad with timber. Condemned as a loss.

(4)

Built: 1873 (3)(4)

Builder: O and P Knudsen (3)(4)

Where Built: Lillesand (3)(4)

Master: G Noess (3)

Crew: 8 (3)

Owner: Acties. S N Hansen (3); S N Hansen (J J Naess), Sandefjord (4)

Date of Loss Qualifier: Actual date of loss

Additional sources cited in Shipwreck Index of the British Isles:

LR.1914-5 No.10(S)(Sail); LCR.1915 p12(g)

SOURCE TEXT

(1) United Kingdom shipwreck index [pre publication typescript]

(2) Parliamentary papers

1920, Board of Trade Casualty Returns, Part II 40 Page(s)53

(3) Richard and Bridget Larn 1995 Shipwreck index of the British Isles, volume 2 : Hampshire, Isle of Wight, Sussex, Kent (Mainland), Kent (Downs), Goodwin Sands, Thames

Section 3, Sussex (BC)

(4) World Wide Web page

<http://www.skipet.no/1915.pdf> accessed and translated from the Norwegian on 10-AUG-2007

MONUMENT TYPES

POST MEDIEVAL BRIG 1873

POST MEDIEVAL CARGO VESSEL 1873

POST MEDIEVAL WATERCRAFT 1873

EARLY 20TH CENTURY BRIG 1915

EARLY 20TH CENTURY CARGO VESSEL 1915

EARLY 20TH CENTURY WRECK 1915

MONUMENT NO. 1447735

DESCRIPTION

1400 wreck of French cargo vessel which stranded at Shoreham-by-Sea "by bad piloting" on her passage from La Rochelle to Flanders. Laden with wine and other goods, she was a wooden sailing vessel.

DETAIL

MONUMENT NUMBER: 1447735
COUNTY: WEST SUSSEX
NMR NUMBER: TQ 20 SW 85
DISTRICT: ADUR
LAST UPDATED: 2007 PARISH: N/A
AREA: SHOREHAM BY SEA
STREET: N/A
MARITIME LOCATION: SHOREHAM BY SEA WEST SUSSEX
LOCATION: TQ 2209 0340

MORE INFORMATION & SOURCES

1400, a ship of Brittany, lost at Shoreham. Wrecked by bad piloting on the part of the master John Cadew on the coast of "Shorham", en route from La Rochelle to Flanders. The crew and some of the cargo [66 tuns of Rochelle wine] were saved. (1)

The ship was freighted with 66 tuns of La Rochelle wine at La Rochelle for a voyage to Flanders. This was done by Robert Vanderhawe, merchant of Nieuport in Flanders. The ship was wrecked on the coast of Shoreham by bad piloting and default of the master, John Cadew of Le Conquet in Brittany, and other mariners on board. All those on the ship escaped alive, but 33 tuns of the wine, and other goods and equipment of Vanderhawe were taken by local men. The wine went to Shoreham, where Thomas Chamberlain arrested it to the use of the lady of Norfolk, lady of Shoreham. Order to hold inquest dated 8 November 1400, inquest held at Shoreham on 17 November 1400. (2)

Master: John Cadew (1)(2), of Le Conquet (2)

Owner: of cargo, Robert Vanderhawe, Nieuport (2)

Date of Loss Qualifier: Reporting date of loss

Additional sources cited in source (2):

Calendar of Inquisitions Miscellaneous, 1399-1422, No.172

SOURCE TEXT

(1) Medieval shipwreck index

Indexed under "Sussex"

(2) National Maritime Museum Medieval Wreck Index

Index card, headed "Shoreham, Sussex, c.1400"

MONUMENT TYPES

MEDIEVAL CARGO VESSEL 1400

MEDIEVAL WRECK 1400

CAMS DELIGHT**DESCRIPTION**

SLOOP, 1767

DETAIL

MONUMENT NUMBER: 1047841

COUNTY: WEST SUSSEX

NMR NUMBER: TQ 20 SW 46

DISTRICT: ADUR

LAST UPDATED: N/A PARISH: N/A

AREA: ON THE EAST POINT OF SHOREHAM HARBOUR

STREET: N/A

MARITIME LOCATION: SHOREHAM BY SEA WEST SUSSEX

LOCATION: TQ 2209 0340

MORE INFORMATION & SOURCES

'...having in foggy weather passed the Isle of Wight, and endeavoured to put into Shoreham, was, on the 27th past, forced on shore on the east point of Shoreham harbour, where she remained in great danger of being entirely lost.' (1)

Master: Henry Morns

Date of Loss Qualifier: A

SOURCE TEXT

(1) Felix Farley's Bristol Journal

12-DEC-1767 Page(s)N/a

MONUMENT TYPES

POST MEDIEVAL CARGO VESSEL 1767

POST MEDIEVAL SLOOP 1767

POST MEDIEVAL WRECK 1767

SARAH**DESCRIPTION**

1746 wreck of English cargo vessel which stranded on the coast of Sussex en route from London to Weymouth with barrel staves; a wooden sailing vessel.

DETAIL

MONUMENT NUMBER: 1093150

COUNTY: WEST SUSSEX

NMR NUMBER: TQ 20 SW 74

DISTRICT: ADUR

LAST UPDATED: 2005 PARISH: N/A

AREA: ON THE COAST OF SUSSEX

STREET: N/A

MARITIME LOCATION: SHOREHAM BY SEA WEST SUSSEX

LOCATION: TQ 2209 0340

MORE INFORMATION & SOURCES

'The SARAH of Bideford, Hartnell, bound from London to Weymouth with pipe staves was lost on Sunday the 13th inst. on the coast of Sussex.' (1)

NB: The named location of Shoreham-by-Sea has been selected as representing the approximate mid-point of the coastline of the county of Sussex as a whole, formerly not divided between East and West Sussex.

Master: Hartnell (1)

Date of Loss Qualifier: Actual date of loss

SOURCE TEXT

(1) Sherborne Mercury

28-APR-1746 Page(s)2

MONUMENT TYPES

POST MEDIEVAL CARGO VESSEL 1746

POST MEDIEVAL WRECK 1746

MONUMENT NO. 1509871**DESCRIPTION**

A heavily-eroded natural concretion, overlying a naturally-fissured sandstone bed, which has often been confused as a maritime archaeological site circa 1 mile off Shoreham-by-Sea. The feature was originally thought to be man-made, of masonry construction, based on the analysis of a sample of material taken from the feature around the time of its discovery (circa 1950). Further conjecture suggested that the feature represented the site of 'axaparte', an area comprising four crenellated walls as recorded on a 1622 Map of Shoreham. In an attempt to ascertain whether the feature was of archaeological importance it was surveyed in 2008 and was found to be a maritime conglomerate rock feature.

DETAIL

MONUMENT NUMBER: 1509871

COUNTY: WEST SUSSEX

NMR NUMBER: TQ 20 SW 98

DISTRICT: ADUR

LAST UPDATED: 2009 PARISH: N/A

AREA: OFF SHOREHAM BY SEA

STREET: N/A

MARITIME LOCATION: OFFSHORE SHOREHAM BY SEA WEST SUSSEX

LOCATION: TQ 21494 02515

MONUMENT TYPES

UNCERTAIN NATURAL FEATURE

MONUMENT NO. 1450609**DESCRIPTION**

1257 wreck of French cargo vessel which was wrecked near Shoreham-by-Sea, on her passage from Bordeaux. Laden with wine, she was a wooden sailing vessel.

DETAIL

MONUMENT NUMBER: 1450609 COUNTY: WEST SUSSEX

NMR NUMBER: TQ 20 SW 91 DISTRICT: ADUR

LAST UPDATED: 2007 PARISH: N/A

AREA: NEAR SHOREHAM BY SEA

STREET: N/A

MARITIME LOCATION: SHOREHAM BY SEA WEST SUSSEX

LOCATION: TQ 2209 0340

MORE INFORMATION & SOURCES

'1257. Nov. 30. Westminster. Commission to John de Gatesden to enquire with the sheriff of Sussex touching a ship of Segwin Barbe and Ellis Barbe his brother, citizens of Bordeaux, laden with 116 tuns of wine, which suffered shipwreck near Shorham, so that the mariners as well as the wine came to port, and the said wines were seized by the neighbours and people of the country as wreck of sea, which ought not to be, because the captains (rectores) of the ship and others in her came safely to land, and find into whose hands the said wines have come; and make restitution thereof wherever they are found.' (1)

Owner: of cargo, Segwin and Ellis Barbe, Bordeaux (1)

Date of Loss Qualifier: Reporting date of loss

SOURCE TEXT

(1) Calendar of Patent Rolls

Henry III, 1241-58, membrane 16d, accessed via <http://www.uiowa.edu/~acadtech/patentrolls/> on 17-JAN-2007 IV Page(s)658

MONUMENT TYPES

MEDIEVAL CARGO VESSEL 1257

MEDIEVAL WRECK 1257

MONUMENT NO. 1448483

DESCRIPTION

1376 wreck of cargo vessel which stranded near Shoreham-by-Sea on her passage from Southampton to Calais with wool (one of three vessels lost under these circumstances). Constructed of wood, she was a sailing vessel.

DETAIL

MONUMENT NUMBER: 1448483

COUNTY: WEST SUSSEX

NMR NUMBER: TQ 20 SW 90

DISTRICT: ADUR

PARISH: N/A

AREA: NEAR SHOREHAM BY SEA

STREET: N/A

MARITIME LOCATION: SHOREHAM BY SEA WEST SUSSEX

LOCATION: TQ 2209 0340

MORE INFORMATION & SOURCES

The third of three wrecks in these circumstances:

'1376. Nov. 22. Westminster. Commission to Robert Bealknap, Peter de Brewes, Roger de Assheburnham, Nicholas de Wilcombe, Richard Halle and John Hyde, to find by inquisition in the county of Sussex the truth touching a petition of the king's merchants of London setting forth that, whereas they freighted certain ships in the port of Southampton with wools for the staple of Calais, and whereas three of the ships on the voyage were driven by the violence of the sea to the coast of Shoreham and there broken, (divers of the mariners of each ship escaping to land alive and great part of the wool being cast ashore and salved), the same has been carried away and unjustly detained from them by men of those parts, the king will aid them over the restitution of the wool to them; and if it prove that the wool should not belong to the king or others as wreck of sea, to have it restored to the said merchants, after reasonable satisfaction made to those who salved it.' (1)

Crew Lost: possibly some ["divers mariners" from each ship escaping alive] (1)

Owner: of cargo, merchants of London (1)

Date of Loss Qualifier: Reporting date of loss

SOURCE TEXT

(1) Calendar of Patent Rolls

Edward III, 1374-77, membrane 14d XVI Page(s)413

MONUMENT TYPES

MEDIEVAL CARGO VESSEL 1376

MEDIEVAL WRECK 1376

MONUMENT NO. 1448482**DESCRIPTION**

1376 wreck of cargo vessel which stranded near Shoreham-by-Sea on her passage from Southampton to Calais with wool (one of three vessels lost under these circumstances). Constructed of wood, she was a sailing vessel.

DETAIL

MONUMENT NUMBER: 1448482

COUNTY: WEST SUSSEX

NMR NUMBER: TQ 20 SW 89

DISTRICT: ADUR

LAST UPDATED: 2006 PARISH: N/A

AREA: NEAR SHOREHAM BY SEA

STREET: N/A

MARITIME LOCATION: SHOREHAM BY SEA WEST SUSSEX

LOCATION: TQ 2209 0340

MORE INFORMATION & SOURCES

The second of three wrecks in these circumstances:

'1376. Nov. 22. Westminster. Commission to Robert Bealknap, Peter de Brewes, Roger de Assheburnham, Nicholas de Wilcombe, Richard Halle and John Hyde, to find by inquisition in the county of Sussex the truth touching a petition of the king's merchants of London setting forth that, whereas they freighted certain ships in the port of Southampton with wools for the staple of Calais, and whereas three of the ships on the voyage were driven by the violence of the sea to the coast of Shoreham and there broken, (divers of the mariners of each ship escaping to land alive and great part of the wool being cast ashore and salvaged), the same has been carried away and unjustly detained from them by men of those parts, the king will aid them over the restitution of the wool to them; and if it prove that the wool should not belong to the king or others as wreck of sea, to have it restored to the said merchants, after reasonable satisfaction made to those who salvaged it.' (1)

Crew Lost: possibly some ["divers mariners" from each ship escaping alive] (1)

Owner: of cargo, merchants of London (1)

Date of Loss Qualifier: Reporting date of loss

SOURCE TEXT

(1) Calendar of Patent Rolls

Edward III, 1374-77, membrane 14d XVI Page(s)413

MONUMENT TYPES

MEDIEVAL CARGO VESSEL 1376

MEDIEVAL WRECK 1376

MONUMENT NO. 1448472

DESCRIPTION

1376 wreck of cargo vessel which stranded near Shoreham-by-Sea on her passage from Southampton to Calais with wool (one of three vessels lost under these circumstances). Constructed of wood, she was a sailing vessel.

DETAIL

COUNTY: WEST SUSSEX
NMR NUMBER: TQ 20 SW 88
DISTRICT: ADUR
LAST UPDATED: 2006 PARISH: N/A
AREA: NEAR SHOREHAM BY SEA
STREET: N/A
MARITIME LOCATION: SHOREHAM BY SEA WEST SUSSEX
LOCATION: TQ 2209 0340

MORE INFORMATION & SOURCES

The first of three wrecks in these circumstances:

'1376. Nov. 22. Westminster. Commission to Robert Bealknap, Peter de Brewes, Roger de Assheburnham, Nicholas de Wilcombe, Richard Halle and John Hyde, to find by inquisition in the county of Sussex the truth touching a petition of the king's merchants of London setting forth that, whereas they freighted certain ships in the port of Suthampton with wools for the staple of Calais, and whereas three of the ships on the voyage were driven by the violence of the sea to the coast of Shorham and there broken, (divers of the mariners of each ship escaping to land alive and great part of the wool being cast ashore and salved), the same has been carried away and unjustly detained from them by men of those parts, the king will aid them over the restitution of the woo to them; and if it prove that the wool should not belong to the king or others as wreck of sea, to have it restored to the said merchants, after reasonable satisfaction made to those who salved it.' (1)

Crew Lost: possibly some ["divers mariners" from each ship escaping alive] (1)

Owner: of cargo, merchants of London (1)

Date of Loss Qualifier: Reporting date of loss

SOURCE TEXT

(1) Calendar of Patent Rolls

Edward III, 1374-77, membrane 14d XVI Page(s)413

MONUMENT TYPES

MEDIEVAL CARGO VESSEL 1376

MEDIEVAL WRECK 1376

ST. MARY

DESCRIPTION

1311 wreck of Spanish cargo vessel which stranded near Alderton on her passage from Hondarribia, laden with wine, cloth, linen, wheat, bran, spices, armour, gold, silver and jewellery. Constructed of wood, she was a sailing vessel.

DETAIL

COUNTY: WEST SUSSEX
NMR NUMBER: TQ 20 SW 71
DISTRICT: ADUR
LAST UPDATED: 2006 PARISH: N/A
AREA: NEAR ALDERTON
STREET: N/A
MARITIME LOCATION: SHOREHAM BY SEA WEST SUSSEX
LOCATION: TQ 2209 0340

MORE INFORMATION & SOURCES

"1311. April 26. Berwick-on-Tweed. The like [commission of oyer and terminer] to John de Abernoun and Walter de Geddynges on complaint by Arnald de Bearriz [Biarritz?], master of the ship ST MARY of Fomarabie, and John de Sancto Egidio and their fellows, merchants of the town of Pampiloigne in Navarre, the freighters of a ship which was driven ashore by a gale at Alderton near Shorham, Co. Sussex, from which they escaped alive to the land, touching the persons who, as wreck of sea, stripped the ship of its gear and carried away the wine, cloth, linen, wheat, bran, spices and other wares, the armour, robes, couches, chests, gold, silver money, precious stones, gold rings and other jewels found on board her.

'(Inserted at a later date.) Commission associating John de Batesford with John de Abernoun in the place of Walter de Geddynges, 30 October." (1)

NB: "Fomarabie" is identified as Hondarribia in Spain, also known as Fuenterrabia in Spanish, Fontarabie in French, and close to Pamplona in Navarra, and Biarritz, the place-name suggested by the name of the master. The nationality of the ship is therefore given as Spanish, and a version of the name of the vessel in the modern Spanish language is suggested for retrievability, viz., SANTA MARIA.

Master: Arnald de Bearrix (1)

Owner: John de Sancto Egidio and others, merchants of Pamplona (1)

Date of Loss Qualifier: Reporting date of loss

SOURCE TEXT

(1) Calendar of Patent Rolls

Edward II, 1307-13, 26-APR-1311, membrane 15d I Page(s)367-8

MONUMENT TYPES

MEDIEVAL CARGO VESSEL 1311

MEDIEVAL WRECK 1311

VELINDRA**DESCRIPTION**

1894 wreck of English barge which was burnt following an explosion of her cargo at Thames Haven, on her departure for Shoreham-by-Sea with naphtha; a wooden sailing vessel built in 1889.

DETAIL

MONUMENT NUMBER: 896866

COUNTY: ESSEX

NMR NUMBER: TQ 78 SE 58

DISTRICT: CASTLE POINT

LAST UPDATED: 2003 PARISH: N/A

AREA: THAMES HAVEN

STREET: N/A

MARITIME LOCATION: HOLE HAVEN RIVER THAMES

LOCATION: TQ 7666 8176

MORE INFORMATION & SOURCES

Vessel caught fire following an explosion of her cargo, in wind conditions NW force 5. (1)(2)

Built: 1889 (1)(2)

Master: Peck (1)(2)

Crew: 3 (1)(2)

Passengers: 2 (1)(2)

Passengers Lost: 1 (1)(2)

Owner: T W Howard, London (1)(2)

Date of Loss Qualifier: A

Additional sources cited in United Kingdom Shipwreck Index:

BOT.Wk.Rtn.1894 Appx.C Table 1 p156

SOURCE TEXT

(1) United Kingdom shipwreck index [pre publication typescript]

(2) Richard and Bridget Larn 1995 Shipwreck index of the British Isles, volume 2 : Hampshire, Isle of Wight, Sussex, Kent (Mainland), Kent (Downs), Goodwin Sands, Thames
Section 7, Thames (BG)

MONUMENT TYPES

POST MEDIEVAL BARGE 1894

POST MEDIEVAL CARGO VESSEL 1894

POST MEDIEVAL WRECK 1894

APPENDIX 4 UK HYDROGRAPHIC OFFICE RECORDS

Wreck Number	Easting	Northing
20180	560935.8	97126.87
20274	559109.7	95277.46
20092	559647.6	93965.99
20179	558286	93679.73
20080	558013.8	91937.47
20187	558986.9	87701.49
20059	564522.4	89078.17
20056	549107.8	88337.79
20175	561707.7	88031.54
20038	561510.3	87504.3
20185	565409	87127.2
20174	562101.1	86441.33
20017	551236.4	85096.19
20014	551965.7	84994.91
20012	554853.5	85031.27
58306	549164.3	84697.39
20162	543626.8	84542.58
19998	565030.3	84179.31
20000	563249.4	84251.46
20001	556770.4	84023.86
20005	552794.7	83535.48
20238	563657.1	83770.86
20173	547318.3	83254.37
19996	564622.9	83708.39
19995	543938.4	82815.52
19991	563903.5	83437.31
19989	560895.6	83123.37
20172	546689.1	82558.03
20171	564244.3	82613.39
19977	543938.8	81769.71
19975	561012.2	82205.23
19961	554902.8	80012.71
19944	549594.4	78590.21
20063	547868.3	88832.96
20053	552492.3	88125.68
20050	555320.7	87843.57
20046	544844.7	87357.6
20045	563814.9	87850.44

20044	555561.8	87665.28
20043	550616	87520.56
20029	555311.4	86174.25
20025	550708.2	85668.8
20021	544789.6	85130.9
20018	556218.5	85366.72
19983	551583.3	82602.75
58365	561060.8	82546.11
19978	551601.1	81985.75
58367	549406.1	81056.72
19962	546348.2	79982.11
58368	550278.8	79383.05
58369	550473.5	78771.12

Latitude = 50 45'.050 N Longitude = 000 16'.900 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20180 Classification = Unclassified
 Symbol WK 11.7 Largest Scale Chart = 1652
 Charting Comments

Old Number 013605045
 Category Dangerous wreck

WGS84 Position Latitude = 50 45'.085 N Longitude = 000 16'.992 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System
 Position Quality Surveyed
 Position Accuracy
 Area at Largest Scale No

Depth 11.7 metres
 Drying Height
 Height
 General Depth 13 metres
 Vertical Datum Lowest astronomical tide
 Depth Method Found by echo-sounder
 Depth Quality Least depth known
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 06/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = 27.3 metres Width = 3.6 metres Shadow Height = 1.0 metres

Orientation 081/261

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments ALMOST COMPLETELY BURIED

Circumstances of Loss

Surveying Details

**H1965/76 5.12.80 WK EXAM'D 10.2.80 IN 504503N, 001654W [OGB] USING TRISPONDER. DECCA USED. LEAST E/S DEPTH 11.7 IN GEN DEPTH 13 MTRS. NO SCOUR. HYDROSEARCH LENGTH 27.3MTRS, BEAM 3.6MTRS, HT 1MTR. ALMOST COMPLETELY BURIED, LYING 081/261 DEGS. (HMS BULLDOG HI 37A/77). CHART AS WK 11.7MTRS. R/P.

**H1310/82/18 12.7.82 SEARCHED FOR ON 28.3.82, USING E/S. NOT FOUND. NOW POSSIBLY COVERED COMPLETELY. (D M DILLINGHAM, 5.7.82). NCA.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 44'.075 N Longitude = 000 15'.298 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20274

Classification = Unclassified

Symbol WK SW 14.2

Largest Scale Chart = 1652

Charting Comments

Old Number 013606074

Category Dangerous wreck

WGS84 Position Latitude = 50 44'.110 N Longitude = 000 15'.390 W

WGS84 Origin Original

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Differential Global Positioning System

Position Quality Surveyed

Position Accuracy 13.0

Area at Largest Scale No

Depth 14.2 metres

Drying Height

Height

General Depth 17 metres

Vertical Datum Lowest astronomical tide

Depth Method Swept by wire-drag

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 24/11/1999

Position Last Amended 24/11/1999

Position Last Latitude = 50 44'.083 N Longitude = 000 15'.300 W

Name ARROGANT

Type YACHT

Flag

Dimensions Length = 27.4 metres Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = 30.0 metres Width = 10.0 metres Shadow Height = 2.0 metres

Orientation 000/180

Magnetic Anomaly

Debris Field NIL

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

**HH232/680/05 8.9.95 WK, 3MTRS HIGH IN GENERAL DEPTH 17MTRS, IN 504403N, 001518.5W. (P HOLLYWOOD, 6.9.95). CHART AS USC 13MTRS. - NM 3282/95.

**11.9.96 VESSEL IS A YACHT, NAMED 'ARROGANT'. (I JOHNSTONE, TELECON 11.9.96).

**HH090/752/01 22.9.97 EXAM'D 11.9.97 IN 504406.6N, 001523.4W [WGD] USING DGPS. SWEEP CLEAR 14.2, FOUL 14.4MTRS. LEAST E/S DEPTH 14.4 IN GEN DEPTH 17MTRS. NO SCOUR. DCS3 HT 2MTRS. LENGTH 30MTRS, WIDTH 10MTRS. LIES 000/180 DEGS. IN ONE PIECE WITH NO EVIDENCE OF SCATTERED DEBRIS. NO SCOUR BUT DEPOSITION EXTENDS 100MTRS TOWARDS 080 DEGS. (NP 1016, HI 752). BR STD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 43'.367 N Longitude = 000 15'.717 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20092

Classification = Unclassified

Symbol WK SW 9.1

Largest Scale Chart = 1652

Charting Comments

Old Number 013604065

Category Dangerous wreck

WGS84 Position Latitude = 50 43'.402 N Longitude = 000 15'.809 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System
 Position Quality Surveyed
 Position Accuracy 25.0
 Area at Largest Scale No
 Depth 9.1 metres
 Drying Height
 Height
 General Depth 19 metres
 Vertical Datum Lowest astronomical tide
 Depth Method Swept by wire-drag
 Depth Quality Least depth known
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 08/03/2000
 Position Last Amended 08/03/2000
 Position Last Latitude = 50 43'.367 N Longitude = 000 15'.723 W

Name PENTYRCH
 Type SS
 Flag BRITISH
 Dimensions Length = 103.3 metres Beam = 14.0 metres Draught = 7.6 metres
 Tonnage 3312 Gross
 Cargo COAL
 Date Sunk 18/04/1918

Sonar Dimensions Length = 111.4 metres Width = 21.4 metres Shadow Height = 9.9 metres
 Orientation 099/279

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments VERY BROKEN UP

Circumstances of Loss

**TORPEDOED & SUNK BY GERMAN SUBMARINE UB 40. (WW1SL & DER KRIEG ZUR SEE).

Surveying Details

**H2283/18 1.5.18 WK 2.75FMS IN APPROX 504300N, 001600W. (ADMIRALTY). - NM 550/18.

**19.4.18 WK IN POSN 5M WNW OF BRIGHTON LTV. (IDSA MASTER, DOCKET M19770, BMVS & UB TEL MOVE). NCA.

**H5267/21 25.8.21 WK NOT LOCATED. (TH EX 3116/21). DELETED. - NM 1547/21.

**H2699/76 18.7.78 LOCATED 23.6.75 IN 504322N, 001543.4W USING HIFIX [2 LOP]. SONAR HT 5.3MTRS IN GEN DEPTH 18.9MTRS. (HMS FAWN, HI 41/75). CHART AS WK 12.5MTRS IN REVISED POSN. NE 1652 & NE 2450.

**H1309/79 21.9.79 LIES E/W. BROKEN IN 2 PLACES. APPEARS TO HAVE BEEN BLOWN. 10FT HIGH MAX, IN SAND & SILT. WINCH ON E SECTION. UPSIDE DOWN. (J SALSURY, SEAFORD, 7.8.79). NCA.

**H1270/79 29.2.80 REPD TO HAVE LEAST E/S DEPTH OF 9.9MTRS. TO BE WIRE SWEPT. (HMS BULLDOG, SIG DTD 25.2.80). - NM 597(P)/80.

**H1270/79 16.4.80 DRIFT SWEPT - CLEAR AT 9.1, FOUL AT 9.4MTRS. LEAST E/S DEPTH 9.4MTRS. (HMS BULLDOG, TELECON 15.4.80). TH INFORMED. AMENDED TO SW 9.1MTRS. - NM 929/80.

**H1310/80 15.10.80 WK IN 504303N, 001434W USING DECCA. LEAST E/S DEPTH 44FT IN GEN DEPTH 72FT. (J SALSURY, 4.9.80). NCA YET. AWAIT HMS BULLDOG SURVEY RESULTS.

**25.8.76 UPRIGHT WITH HIGHEST PTS AT BOW & STERN. HEADING ESE. LEAST DEPTH 40FT IN GEN DEPTH 60FT. THOUGHT POSSIBLY TO BE THE 'VASCO' [SEE WK [20078] IN 504220N, 000059W]. (D PECKHAM, TELECON, 25.8.76). NCA.

**H1965/76 2.12.80 EXAM'D 13.5.80 IN 504322N, 001543W [OGB] USING TRISPONDER. DECCA USED. SWEPT CLEAR AT 9.1, FOUL AT 9.4MTRS. LEAST E/S DEPTH 9.3 IN GEN DEPTH 19MTRS. NO SCOUR. HYDROSEARCH, LENGTH 111.4MTRS, BEAM 21.4MTRS, HT 9.9MTRS. LYING 099/279 DEGS. VERY BROKEN UP. SHOALEST AT W END. (HMS BULLDOG, HI 37A/77). NFA.

H1310/83/41 22.6.84 WK IN 504316N, 001542W [OGB] USING DECCA. (VULCAN DIVING SERVICES, 19.6.84). NCA.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 43'.200 N Longitude = 000 14'.467 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20179 Classification = Unclassified
 Symbol WK 16.0 Largest Scale Chart = 1652
 Charting Comments

Old Number 013605033
 Category Dangerous wreck

WGS84 Position Latitude = 50 43'.235 N Longitude = 000 14'.559 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 16.0 metres

Drying Height

Height

General Depth 19 metres

Vertical Datum Lowest astronomical tide

Depth Method Found by echo-sounder

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 08/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name MAASLUST

Type MV

Flag BRITISH

Dimensions Length = 13.4 metres Beam = 4.0 metres Draught =

Tonnage 17 Net

Cargo

Date Sunk

Sonar Dimensions Length = 32.9 metres Width = Shadow Height = 3.0 metres

Orientation 135/315

Magnetic Anomaly

Debris Field 2 OFFLYING PIECES OF WKGE TO THE E

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments INTACT,BUT WITHOUT SUPERSTRUCTURE,HALF SUNK IN SILT

Circumstances of Loss

Surveying Details

H1965/76 5.12.80 WK EXAM'D 25.2.80 IN 504312N, 001428W [OGB] USING TRISPONDER. DECCA USED. LEAST E/S DEPTH 16.4 IN GEN DEPTH 19MTRS. NO SCOUR. HYDROSEARCH, LENGTH 32.9MTRS, HT 3MTRS. LYING NW/SE, WITH 2 OFFLYING PIECES OF WKGE TO THE E. MAST USED FOR HEIGHTING. (HMS BULLDOG HI 37A/77). CHART AS WK 16.0MTRS. R/P.

**H1310/82/18 9.7.82 DIVED ON 28.3.82. SMALL MOTORISED BARGE OR TUG, APPROX 60FT LONG. NO SUPERSTRUCTURE. LIES UPRIGHT. BRASS ENGINE CONTROL RECOVERED, MARKED TELEFLEX, WHICH SUGGESTS A RECENT LOSS, ALTHOUGH WK APPEARS QUITE OLD. (D M DILLINGHAM, 5.7.82). NCA.

**H1310/83/4 19.1.83 IDENTIFIED BY BELL AS THE 'MAASLUST', A STEEL BARGE-SHAPED VESSEL. LIES INTACT, BUT WITHOUT SUPERSTRUCTURE, HALF SUNK IN THE SILT. COVERED FOREDECK STANDS ABOUT 2MTRS ABOVE SEABED. (T W BENNETTO, 4.1.83). NCA.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 42'.300 N Longitude = 000 14'.283 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20080 Classification = Unclassified

Symbol WK 16.5 Largest Scale Chart = 1652

Charting Comments

Old Number 013603929

Category Dangerous wreck

WGS84 Position Latitude = 50 42'.336 N Longitude = 000 14'.376 W

WGS84 Origin 3-D Cartesian Shift (BW)

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 16.5 metres

Drying Height

Height

General Depth 23 metres

Vertical Datum Lowest astronomical tide

Depth Method Found by echo-sounder

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 09/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name IKEDA (POSSIBLY)

Type SS

Flag BRITISH

Dimensions Length = 125.0 metres Beam = 16.2 metres Draught = 11.3 metres

Tonnage 6311 Gross

Cargo BALLAST

Date Sunk 21/03/1918

Sonar Dimensions Length = 123.6 metres Width = 22.6 metres Shadow Height = 6.2 metres

Orientation 080/260

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments

Circumstances of Loss

**TORPEDOED & SUNK BY GERMAN SUBMARINE UB40, WHILST EN-ROUTE LONDON TO GALVESTON.
(DER KRIEG ZUR SEE).

Surveying Details

**H3538/18 2.7.18 WK IN 504214N, 001422W WITH G BUOY 60YDS S. (ADMIRALTY). CHART AS WK
[OLD SYMBOL]. - NM 801/18.

**H5542/21 7.9.21 CLEAR DEPTH OF 50FT AT LWST OVER WRECK, SUNK APPROX 7.75M TO SW OF
BRIGHTON IN 504220N, 001420W. BUOY WITHDRAWN. (TH EX3566/21). AMEND TO WK 8FMS OFT &
DELETE BUOY. - NM 1579/21.

**H632/31 10.2.31 NOW CHARTED AS WK 8FMS 2FT. SQ. DATE.

**H7789/35 3.12.35 LOCATED IN 504218N, 001415W. DRIFT SWEEPED CLEAR AT 52FT. (HMS FLINDERS,
15.11.35). AMEND TO REVISED POSN. - NM 2138/35.

**H3273/53 3.6.53 NOW CHARTED AS WK 8FMS 4FT. NC 2450.

**H1245/70 10.12.70 WRECK DIVED ON BY BRIGHTON BSAC DURING 1970 REPD TO BE WELL BROKEN
UP & ALMOST UNRECOGNISABLE. STATED BY LOCAL LIFEBOAT MEN AT SHOREHAM TO BE THE 'CITY OF
WATERFORD' BUT IS THOUGHT TO BE UNTRUE AS SHE WAS SUNK 14.4.49 & THIS WK WAS FIRST
LOCATED IN 1921 BY TH. (R P WATTS, 8.12.70).

**23.7.71 NOW CHARTED AS SW 15.2MTRS. NC 1652.

**28.1.74 NOW CHARTED AS SW 14.6MTRS [LAT]. NC 1652.

**H3823/78 21.8.79 SMALL COASTER, PROBABLY LESS THAN 1000GRT. LYING ON ONE SIDE, 10FT HIGH. (E GILES, 16.8.79). NCA.

**H1965/76 1.12.80 EXAM'D 9.2.80 IN 504218N, 001417W [OGB] USING TRISPONDER. DECCA USED. LEAST E/S DEPTH 17 IN GEN DEPTH 23MTRS. NO SCOUR. HYDROSEARCH LENGTH 123.6MTRS, BEAM 22.6MTRS, HT 6.2MTRS. LYING 080/260DEGS, BOWS E. (HMS BULLDOG, HI 37A/77). CHART AS WK 16.5MTRS IN REVISED POSN. [POSSIBILITY OF 2 WRECKS IN THIS VICINITY].

**H1310/82/18 9.7.82 POSN DIVED ON 2.4.82. NOT LARGE ENOUGH TO BE THE 'IKEDA'. ONLY FOUND A MOSTLY UPSIDE DOWN SECTION OF A SMALL WK, WITH WKGE TO THE SIDES. (D M DILLINGHAM, 5.7.82).

**H1310/86/10 3.4.86 WK LOCATED USING DECCA. THOUGHT POSSIBLY TO BE WK OF 'CITY OF LONDON'. (SOUTHERN MARINE SERVICES, WK NO 155). NCA. [NO RECORD OF OF THIS WK HELD IN WKS].

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 40'.967 N Longitude = 000 14'.467 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20187 Classification = Unclassified
Symbol WK 21.0 Largest Scale Chart = 1652
Charting Comments

Old Number 013605112
Category Dangerous wreck

WGS84 Position Latitude = 50 41'.002 N Longitude = 000 14'.559 W
WGS84 Origin 3-D Cartesian Shift (BW)
Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method DECCA navigator
Position Quality Precisely known
Position Accuracy
Area at Largest Scale No

Depth 21.0 metres
Drying Height
Height
General Depth 26 metres
Vertical Datum Lowest astronomical tide
Depth Method Found by diver
Depth Quality Least depth known
Depth Accuracy
Conspic Visual NO Conspic Radar NO
Historic NO Military NO Existence Doubtful NO
Non Sub Contact NO

Last Amended 07/12/1983
Position Last Amended 07/12/1983
Position Last Latitude = 50 40'.000 N Longitude = 000 15'.000 W

Name INGO
Type STEEL FV
Flag BRITISH
Dimensions Length = 14.9 metres Beam = 4.3 metres Draught = 1.2 metres

Tonnage

Cargo

Date Sunk 13/12/1980

Sonar Dimensions Length = Width = Shadow Height =
Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments UPRIGHT & INTACT

Circumstances of Loss

**REPORTED AS DRIFTING AWASH ON BEING ABANDONED IN WATERLOGGED CONDITION BY CREW.
(LL, 15.12.80).

Surveying Details

**H4121/76 23.12.80 ABANDONED IN WATERLOGGED CONDITION 10 MILES S OF SHOREHAM. POSSIBLY NOW SUNK. ESTIMATED HEIGHT 35FT KEEL TO TRUCK. (SHOREHAM CG MRSC SIG DTD 13.12.80). NCA YET. POSN TOO VAGUE TO CHART.

**H1310/83/41 24.11.83 LOCATED IN 504058N, 001428W [OGB] USING DECCA. STANDS 5MTRS HIGH [MAXIMUM] IN GEN DEPTH 26MTRS. STILL INTACT AND COVERED BY A TRAWL. (P A VAN DER BOON, 29.10.83). CHART AS WK 21.0MTRS. R/P.

**H1310/86/29 14.11.86 DIVED ON 16.9.84. LIES ACROSS TIDE WITH SCOUR 1MTR DEEP. STILL INTACT AND UPRIGHT BUT MAST HAS COLLAPSED ACROSS WK, AS HAS THE WHEELHOUSE. TRAWL NET CAUGHT AROUND STERN. STANDS ABT 3MTRS HIGH BY E/S. (T W BENNETTO, 28.10.86). NCA.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 40'.697 N Longitude = 000 19'.838 W [WGD] Square Number = 136 State = LIVE

Wreck Number 20059 Classification = Unclassified
Symbol WK SW 18.0 Largest Scale Chart = 1652
Charting Comments

Old Number 013603681
Category Dangerous wreck

WGS84 Position Latitude = 50 40'.697 N Longitude = 000 19'.838 W
WGS84 Origin Original
Horizontal Datum WGD WGS (1984)

Position Method Differential Global Positioning System
Position Quality Surveyed
Position Accuracy 7.0
Area at Largest Scale No
Depth 18.0 metres
Drying Height
Height
General Depth 22 metres
Vertical Datum Lowest astronomical tide

Depth Method Swept by wire-drag
 Depth Quality Least depth known
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 14/11/2002
 Position Last Amended 14/11/2002
 Position Last Latitude = 50 40'.650 N Longitude = 000 19'.733 W
 Name
 Type TRAWLER
 Flag
 Dimensions Length = Beam = Draught =
 Tonnage
 Cargo
 Date Sunk

Sonar Dimensions Length = 42.1 metres Width = 17.5 metres Shadow Height = 4.4 metres
 Orientation 000/180

Magnetic Anomaly Strong
 Debris Field
 Scour Depth = 0.0 metres Length = Orientation =
 Markers
 General Comments INTACT

Circumstances of Loss

Surveying Details

**H4121/76 14.1.77 WK LOCATED 5.9.76 IN 504039N, 001944W [OGB] USING HIFIX [2 LOP]. LEAST E/S DEPTH 18.8MTRS IN GEN DEPTH 24MTRS. LENGTH 55MTRS. ORIENTATION N/S. (HMS FOX, HI 52/76). CHART AS WK 18.8MTRS. - NM 492/77.

**H1285/77/214 9.6.77 DIVED 30.5.77. SMALL WK, ABOUT 75-100FT LONG. BOWS NW, STERN SE, LYING ON STBD SIDE AT ABOUT 45DEGS. APPEARS TO BE A VERY OLD TRAWLER. IRON PROP 6-8FT DIAMETER. LARGE WINCH AFT OF MIDSHIPS. SMALL AMOUNT OF SUPERSTRUCTURE AFT OF WINCH. (D DILLINGHAM, 31.5.77).

**H1965/76 4.12.80 EXAM'D 25.2.80 IN 504039N, 001944W [OGB] USING TRISPONDER. SWEEP CLEAR AT 17.6, FOUL AT 18.2MTRS. LEAST E/S DEPTH 18.1MTRS IN GEN DEPTH 23MTRS. NO SCOUR. HYDROSEARCH LENGTH 42.1MTRS, BEAM 17.5MTRS, HT 4.4MTRS. LYING 145/325DEGS. (HMS BULLDOG, HI 37A/77). AMEND TO SW 17.6MTRS. - NM 2795/80.

**H1310/83/4 19.1.83 CONFIRMED AS A TRAWLER ABOUT 120FT LONG. NOW LIES COMPLETELY ON STBD SIDE WITH DECK VERTICAL. SHE IS SILTED UP TO MID-BEAM, HALF THE FUNNEL BEING EXPOSED. (T W BENNETTO, 4.1.83).

**H1310/83/41 22.6.84 WK IS VERY OPEN IN MANY PLACES - THE PLATES CORRODED AWAY LEAVING ONLY RIBS. POSSIBLE TO DIVE INTO FOR'D HOLDS AND BACK TO ENGINE ROOM, WHICH CAN ALSO BE ENTERED OFF THE FUNNEL. PORTHOLES HAVE BEEN RECOVERED BUT GIVE NO CLUE AS TO IDENTITY. (VULCAN DIVING SERVICES, 19.6.84).

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

**HH091/002/01 14.11.02 EXAM'D 6.8.02 IN 5040.697N, 0019.838W [WGD] USING DGPS. SWEEP CLEAR 18.0, FOUL 18.3MTRS. LEAST E/S DEPTH 18.6 IN GEN DEPTH 22MTRS. NO SCOUR. LIES 000/180 DEGS. STRONG MAGNETIC ANOMALY. (NP 1016, HI 1002). BR STD.

Latitude = 50 40'.517 N Longitude = 000 06'.600 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20056 Classification = Unclassified
 Symbol WK SW 14.6 Largest Scale Chart = 1652
 Charting Comments

Old Number 013603644
 Category Dangerous wreck

WGS84 Position Latitude = 50 40'.553 N Longitude = 000 06'.693 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 14.6 metres

Drying Height

Height

General Depth 28 metres

Vertical Datum Lowest astronomical tide

Depth Method Swept by wire-drag

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 13/03/2000

Position Last Amended 13/03/2000

Position Last Latitude = 50 40'.500 N Longitude = 000 06'.633 W

Name CITY OF WATERFORD

Type SS

Flag BRITISH

Dimensions Length = 82.3 metres Beam = 11.0 metres Draught = 4.9 metres

Tonnage 1334 Gross

Cargo 1000 TONS GENERAL

Date Sunk 14/04/1949

Sonar Dimensions Length = 96.5 metres Width = 14.4 metres Shadow Height = 10.6 metres

Orientation 102/282

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments APPEARS UPRIGHT, MIDSHIPS COLLASPED

Circumstances of Loss

**IN COLLISION WITH GREEK VESSEL 'MARPEA' IN FOG APPROX 12M OFF BEACHY HEAD. SINGLE SCREW VESSEL, BUILT 1921, WAS ON PASSAGE ANTWERP TO CORK. (LLOYDS, TELECON, 9.9.75).
 **BUILT BY CALDON SHIP & ENGINEERING, DUNDEE, WITH 3 CYLINDER TRIPLE EXPANSION ENGINE OF 196HP & 2 BOILERS. EX- SKERRIES II. PURCHASED IN 1946 BY PALGRAVE, MURPHY & CO, DUBLIN AND RENAMED CITY OF WATERFORD. VESSEL SANK QUICKLY FOLLOWING COLLISION WITH 'MARPEA'. CREW RESCUED. (K MCDONALD, DIVER MAGAZINE FEB'04)

Surveying Details

**H2411/49 11.11.59 SANK 21M E OF OWERS LTV. NOT LOCATED BY TH. (TH, 18.5.49).
 **H1287/75 9.9.75 & H2318/75 21.11.75 WK LOCATED BY DIVERS, FROM INFORMATION SUPPLIED BY FISHERMAN, IN 504020.5N, 000639.5W [OGB] USING DECCA. VESSEL IS UPRIGHT, HEADING WEST. A SINGLE SCREW STEAMSHIP WITH FOUR LARGE HOLDS - TWO EITHER SIDE OF BRIDGE. NO CARGO SEEN. HULL INTACT AND TWO DERRICKS STANDING UP TO WITHIN 10MTRS OF THE SURFACE AT LOW WATER. WHEELHOUSE INTACT. (R P WATTS, SUB-AQUA DIVER, BRIGHTON, LTRS DTD 11.8.75 & 1.9.75). [THIS MAY BE THE 'CITY OF WATERFORD' SUNK 14.4.49 IN 503900N,000750W]. RNW INFORMED AND NAVEAM 288/75 ISSUED. HMS FAWN [WITHIN SURVEY AREA] INFORMED. CHART AS USC 10MTRS. - NM 2431/75.
 **H2318/74 26.9.75 REPLY FROM HMS FAWN - WRECK NOT LOCATED ON SONAR SEARCH OF AREA, NOT INVESTIGATED FURTHER DUE TO POOR WEATHER CONDITIONS. SUGGEST WIRE SWEEP. (HMS FAWN, SIG DTD 26.9.75).
 **H2318/74 20.11.75 WRECK LOCATED IN 504025N, 000655W [OGB] USING DECCA. LEAST E/S DEPTH 16.5MTRS. NOT INVESTIGATED FURTHER DUE TO POOR WEATHER CONDITIONS. (HMS FAWN, SIG DTD 6.10.75). CHART AS WK 16.5MTRS [9FMS OFT] IN REVISED POSN. - NM 2431/75. RNW INFORMED - NAVEAM 311/75 ISSUED.
 **H3051/75 22.4.76 LOCATED IN 504031N, 000639W [OGB], CONFIRMED BY SHORE ANGLES. CHAIN SWEPT - FOUL AT 50FT, CLEAR AT 48FT [LAT] IN GEN DEPTHS 92 TO 95FT. WK APPEARS UPRIGHT, HEADING E/W. SONAR SEARCH 2 SQ. MILES AROUND POSN FAILED TO LOCATE FURTHER OBSTN. (TH HN & TELEX DTD 29/12/75). AMEND TO SW 14.6MTRS [8.0FMS] IN REVISED POSN. - NM 851/76.
 **H3051/75 12.5.76 REPORTED LOCATED & IDENTIFIED BY LOCAL DIVER IN 504030N, 000638W [OGB] USING HIFIX. NO OTHER OBSTNS WITHIN HALF MILE RADIUS. (SOISS, SIG DTD 11.5.76). NCA. AWAIT FULL REPORT.
 **H4121/76 24.8.76 WK IN 504030N, 000637W [OGB] USING HIFIX [2 LOP]. DECCA USED. DCS3 INVESTIGATION & DISPROVING SEARCH CARRIED OUT APPROX HALF MILE RADIUS AROUND POSNS 504025N, 000655W & 503900N 000750W. LOCAL DIVER AND FISHERMAN BOTH CONFIRM WK IS THE 'CITY OF WATERFORD' & THAT THIS IS THE ONLY WRECK IN THE NEAR VICINITY. ACCEPT THE THV SWEEP [14.6MTRS - SEE SOISS SIG DTD 11.5.76]. LEAST E/S DEPTH 18.7MTRS IN GEN DEPTH 27-28MTRS [BUMPY]. SCOUR 30MTRS. WK SITS UPRIGHT SOME 9.3MTRS HIGH, LYING E/W. SURVEYED 6.5.76. (HMS ECHO, REPORT FOR HI 41/76). NCA.
 **H1309/79 24.9.79 LIES ON EVEN KEEL, SLIGHT LIST TO PORT. BOWS TO W. SUPERSTRUCTURE PARTLY COLLAPSED. PROP SALVED. MUCH FISHING TACKLE. (J SALSURY, 7.8.79).
 **H1965/76 1.12.80 EXAM'D 26.2.80 IN 504031N, 000636W [OGB] USING TRISPONDER. DECCA USED. LEAST E/S DEPTH 20.9 IN GEN DEPTH 28MTRS. NO SCOUR. HYDROSEARCH LENGTH 96.5MTRS, BEAM 14.4MTRS, HT 10.6MTRS. APPEARS UPRIGHT, LYING 102/282DEGS, WITH BOWS W. SUPERSTRUCTURE AMIDSHIPS, HATCHES FOR'D & AFT. SCOUR EXTENDS W. (HMS BULLDOG, HI 37A/77). RETAIN SWEPT DEPTH IN REVISED POSN. BR STD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

**25.2.05 LIES IN 36MTRS AT HW. BOW INTACT, BOTH ANCHORS IN PLACE. ROTATING CRANE BASES IN PLACE EITHER SIDE OF DECK AFT OF FORWARD HOLD. 2ND HOLD COLLAPSED ALMOST TO SEABED LEVEL, WITH A FEW RIBS STANDING. PORT BOILER BURIED IN DEBRIS, STARBOARD BOILER BROKEN OPEN BY LARGE ADMIRALTY PATTERN ANCHOR WHICH IS OF AN OLDER DESIGN THAN THE WK, POSSIBLY DUMPED BY FV WHICH HAD TRAWLED IT UP. TRIPLE EXPANSION ENGINE STANDS INTACT.

SAND BUILT UP ALONG PORT SIDE TOWARDS STERN AND FISHING NET ALSO SNAGGED. STERN INTACT & UPRIGHT. PROPELLER SALVAGED AND RUDDER MISSING. LARGE WINCH ON STERN. PHOTOS & DIAGRAM. (DIVER MAGAZINE FEB'05).

Latitude = 50 40'.133 N Longitude = 000 17'.317 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20175 Classification = Unclassified
 Symbol OB 25.0 Largest Scale Chart = 1652
 Charting Comments

Old Number 013604983
 Category Undefined

WGS84 Position Latitude = 50 40'.169 N Longitude = 000 17'.409 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 25.0 metres

Drying Height

Height

General Depth 27 metres

Vertical Datum Lowest astronomical tide

Depth Method Found by echo-sounder

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 13/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type OBSTRUCTION

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = Width = Shadow Height =

Orientation

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

**H1965/76 4.12.80 VERY SMALL CONTACT EXAM'D 2.5.80 IN 504008N, 001719W [OGB] USING TRISPONDER. DECCA USED. LEAST E/S DEPTH 25.4 IN GEN DEPTH 27MTRS. NO SCOUR. PROPOSE CLASSIFY AS OBSTN. (HMS BULLDOG, HI 37A/77). CHART AS OB 25.0MTRS. R/P.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 39'.817 N Longitude = 000 17'.050 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20038 Classification = Unclassified
 Symbol WK 25.5 Largest Scale Chart = 1652
 Charting Comments

Old Number 013603450
 Category Dangerous wreck

WGS84 Position Latitude = 50 39'.852 N Longitude = 000 17'.142 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 25.5 metres

Drying Height

Height

General Depth 28 metres

Vertical Datum Lowest astronomical tide

Depth Method Found by echo-sounder

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 14/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name LULONGA (POSSIBLY)

Type SS

Flag BRITISH

Dimensions Length = 59.4 metres Beam = 9.9 metres Draught = 3.5 metres

Tonnage 821 Gross

Cargo BALLAST

Date Sunk 26/07/1940

Sonar Dimensions Length = 38.0 metres Width = 5.0 metres Shadow Height = 1.8 metres

Orientation 065/245

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments

Circumstances of Loss

****EX-BRABO, EX-KNOTTINGLY. BUILT IN 1907 BY J CROWN & SONS LTD, SUNDERLAND. OWNED AT TIME OF LOSS BY HOOK SS CO LTD. TWO BOILERS, TRIPLE EXPANSION ENGINE OF 99 NHP, SINGLE SHAFT. PASSAGE GOOLE FOR SHOREHAM-BY-SEA. TORPEDOED BY E-BOAT. 1 MAN LOST. (SIBI, WW2SL & LL WW2).**

Surveying Details

****H01001/40 SUNK 10MILES S OF SHOREHAM. (MERCHANT AND FISHING VESSELS LISTS OF LOSSES, 26.7.40).**

****H01001/40 9.1.41 REPD POSN 503945N, 001115W. (ADMIRALTY). NCA.**

****7.8.53 NOW CHARTED AS NDW PA IN 503945N, 001115W ON NC F6841.**

****23.7.71 NOW CHARTED AS USC PA 18MTRS. (TONNAGE KNOWN). NC 1652.**

****H1965/76 1.12.80 NOTHING FOUND DURING INTENSIVE SEARCH, WITHIN 400MTRS OF 503945N, 001115W. WK LOCATED IN 503949N, 001703W [OGB] USING TRISPONDER & EXAM'D 12.2.80. LEAST E/S DEPTH 26.4 IN GEN DEPTH 27.5MTRS. NO SCOUR. HYDROSEARCH LENGTH 38MTRS, BEAM 5MTRS, HT 1.8MTRS. LYING, ALMOST ENTIRELY COVERED BY SAND, 065/245DEGS. (HMS BULLDOG, HI 37A/77). CHART AS WK 25.5MTRS IN REVISED POSN. BR STD.**

Latitude = 50 39'.583 N Longitude = 000 20'.433 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20185 Classification = Unclassified

Symbol F Largest Scale Chart = 1652

Charting Comments

Old Number 013605094

Category Foul ground

WGS84 Position Latitude = 50 39'.619 N Longitude = 000 20'.525 W

WGS84 Origin 3-D Cartesian Shift (BW)

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth

Drying Height

Height

General Depth 28 metres

Vertical Datum Lowest astronomical tide

Depth Method

Depth Quality Depth unknown

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 14/11/2002

Position Last Amended

Position Last Latitude = Longitude =

Name

Type

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
Orientation

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

**H1965/76 4.12.80 TWO LONG GIRDERS, OR OTHER WRECKAGE ON SEABED, EXAM'D 1.12.79 IN 503935N, 002026W [OGB] USING TRISPONDER [2 LOP]. LEAST E/S DEPTH 24.4 IN GEN DEPTH 29MTRS. NO SCOUR. POOR E/S TRACE. HYDROSEARCH LENGTH 44.4MTRS, HT 0.6MTRS. (HMS BULLDOG HI 37A/77). CHART AS WK 24.0MTRS. BR STD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

**HH091/002/01 14.11.02 NOT LOCATED, DISPROVED. (NP 1016, HI 1002). AMEND TO FOUL. BR STD.

Latitude = 50 39'.233 N Longitude = 000 17'.517 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20174 Classification = Unclassified

Symbol OB 28.5 Largest Scale Chart = 1652

Charting Comments

Old Number 013604971

Category Undefined

WGS84 Position Latitude = 50 39'.269 N Longitude = 000 17'.609 W

WGS84 Origin 3-D Cartesian Shift (BW)

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 28.5 metres

Drying Height

Height

General Depth 30 metres

Vertical Datum Lowest astronomical tide

Depth Method Found by echo-sounder

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 15/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type AIRCRAFT

Flag ?GERMAN

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = Width = Shadow Height = 2.0 metres

Orientation

Magnetic Anomaly

Debris Field

Scour Depth = 1.0 metres Length = Orientation =

Markers

General Comments

Circumstances of Loss

**PRESUMABLY A WW2 LOSS.

Surveying Details

**H1965/76 4.12.80 SMALL UNDEFINED CONTACT EXAM'D 2.5.80 IN 503914N, 001731W [OGB] USING TRISPONDER. DECCA USED. LEAST E/S DEPTH 28.5 IN GEN DEPTH 30MTRS. NO SCOUR. HYDROSEARCH HT 1MTR. POSSIBLY A BURIED WK. (HMS BULLDOG, HI 37A/77). CHART AS OB 28.5MTRS. R/P.

**HH100/351/04 12.11.91 DIVED ON. REMAINS OF AN ALUMINIUM AIRCRAFT. BROKEN UP AND ALMOST BURIED. SINGLE V-12 ENGINE. PANEL INSTRUMENT WITH GERMAN WRITING. STANDS 2MTRS HIGH. SCOUR 1MTR DEEP. (T W BENNETTO, 2.11.91). NCA.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 38'.683 N Longitude = 000 08'.267 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20017 Classification = Unclassified

Symbol WK 38.0 Largest Scale Chart = 1652

Charting Comments

Old Number 013603231

Category Non-dangerous wreck

WGS84 Position Latitude = 50 38'.719 N Longitude = 000 08'.360 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 38.0 metres

Drying Height

Height

General Depth 45 metres

Vertical Datum Lowest astronomical tide

Depth Method Found by echo-sounder

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 15/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type TRAWLER

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = 30.4 metres Width = 12.2 metres Shadow Height = 6.6 metres

Orientation 010/190

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments UPRIGHT

Circumstances of Loss

Surveying Details

**30.12.74 LARGE WK REPD IN 503848N, 000830W [OGB] USING DECCA. (E GILES, 1974).

**H1965/76 9.7.79 DCS3 CONTACT, CLASSIFIED WK, LOCATED IN 503841N, 000818W [OGB]. LIES NE/SW. LENGTH 50MTRS. NOT EXAM'D. (HMS BULLDOG, HI 37A/77). CHART AS NDW. R/P.

**H1965/76 11.12.79 EXAM'D 17.10.79 IN 503841.8N, 000811.5W [OGB] USING TRISPONDER [2 LOP]. DECCA USED. LEAST E/S DEPTH 41.4 IN GEN DEPTHS 43-50MTRS. SCOUR 1.5MTRS DEEP. DCS3 HT

5.5MTRS, LENGTH 35MTRS, BEAM 8.5MTRS. LYING N/S. SMALL WK WITH BROKEN BACK. (HMS BULLDOG, HI 37A/77). AMEND TO WK 41MTRS IN 503842N, 000812W. R/P.

**H1965/76 28.11.80 EXAM'D 24.2.80 IN 503841N, 000816W [OGB] USING TRISPONDER. LEAST E/S DEPTH 42 IN GEN DEPTH 45MTRS. NO SCOUR. HYDROSEARCH LENGTH 30.4MTRS, BEAM 12.2MTRS, HT 6.6MTRS. UPRIGHT, LYING IN SANDWAVES, 010/190DEGS, BOWS S. NO MASTS, 1 LARGE, OR 2 SMALL HOLDS FOR'D OF SUPERSTRUCTURE. (HMS BULLDOG, HI 37A/77). AMEND TO WK 38MTRS IN REVISED POSN. R/P.

**4.11.91 DIVED ON. WK OF 30MTRS LONG TRAWLER. LIES UPRIGHT ON A BANK WITH STERN IN 48MTRS AND BOW IN 35MTRS. AN ELECTRICAL SIGNAL LAMP RECOVERED FROM WK INDICATING THAT IT IS PROBABLY WW2 VICTIM. (N BLAKE, TELECON).

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 38'.617 N Longitude = 000 13'.883 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20014 Classification = Unclassified
Symbol WK 35.0 Largest Scale Chart = 1652
Charting Comments

Old Number 013603188
Category Non-dangerous wreck

WGS84 Position Latitude = 50 38'.653 N Longitude = 000 13'.976 W
WGS84 Origin 3-D Cartesian Shift (BW)
Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 35.0 metres

Drying Height

Height

General Depth 43 metres

Vertical Datum Lowest astronomical tide

Depth Method Swept by vertical acoustic system

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 15/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name HMS MINION

Type DESTROYER

Flag BRITISH

Dimensions Length = 84.1 metres Beam = 8.2 metres Draught = 3.0 metres

Tonnage 1042 Displacement

Cargo

Date Sunk ??/??/1921

Sonar Dimensions Length = 89.0 metres Width = 10.0 metres Shadow Height = 7.8 metres
 Orientation 072/252

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments BROKEN ACROOS AMIDSHIPS

Circumstances of Loss

**SOLD FOR BREAKING IN GERMANY BUT SANK EN ROUTE. (THE NAUTICAL MAGAZINE, VOL.246, NO.6, PP.401/402).

Surveying Details

**30.12.74 FF/WK REP'D IN 503845N, 001348W USING DECCA. (E GILES, 1974).

**H1965/76 9.7.79 DCS3 CONTACT, CLASSIFIED WK, LOCATED IN 503838N, 001347W [OGB]. LYING NE/SW, 100MTRS LONG. NOT EXAM'D. (HMS BULLDOG HI 37A/77). WK LOCATED 7.6.75 IN 503834N, 001352W [OGB] USING HIFIX [2 LOP]. LEAST E/S DEPTH 30.6 IN GEN DEPTH 43.6MTRS. DCS3 HT 9.6MTRS. SCOUR LYING NE/SW. (HMS FAWN, HI 41/75). ACCEPT HMS FAWN'S DEPTH IN HMS BULLDOG'S POSN. CHART AS WK 30MTRS IN 503838N, 001347W [OGB]. R/P.

**H3823/78 21.8.79 WK LOCATED USING DECCA. NOT DIVED ON YET. (E GILES, 16.8.79).

**H1965/76 11.12.79 EXAM'D 16/17.10.79 IN 503837N, 001353W [OGB] USING TRISPONDER [2 LOP]. DECCA USED. LEAST E/S DEPTH 37.9 IN GEN DEPTH 45MTRS. SCOUR 0.5MTRS DEEP. DCS3 HT 6.6MTRS, LENGTH 92MTRS, BEAM 14.5MTRS. LYING 090/270DEGS. LARGE INTACT WK WHICH APPEARS TO BE ON ITS SIDE. (HMS BULLDOG, HI 37A/77). AMEND TO WK 37MTRS IN REVISED POSN. R/P.

**H1965/76 28.11.80 EXAM'D 17.2.80 IN 503837N, 001354W [OGB] USING TRISPONDER. LEAST DEPTH 36 IN GEN DEPTH 43MTRS. NO SCOUR. HYDROSEARCH LENGTH 89MTRS, BEAM 10MTRS, HT 7.8MTRS. LARGE WK, WITH CONSPIC FUNNEL ON CENTRAL SUPERSTRUCTURE. (HMS BULLDOG HI 37A/77). AMEND TO WK 35MTRS. R/P.

**H1310/83/4 19.1.82 DIVED ON AND FOUND TO BE WK OF WW1 TORPEDO BOAT DESTROYER, SIMILAR TO 'L CLASS'. HULL IS INTACT & LYING ON EVEN KEEL. BEAM ABT 30FT WIDE. BRIDGE COLLAPSED ONTO FOREDECK. NO SIGNS OF FUNNELS, BUT 3 HOLES WHERE THEY USED TO BE. 2 TORPEDO TUBES FARTHER AFT. (T W BENNETTO, 4.1.83). NCA.

**H1310/84/32 7.9.84 AFTER FURTHER DIVES IN 1984, CAN CONFIRM AS A BRITISH DESTROYER, BRIDGE TELEGRAPH MADE BY CHADBURNS, LIVERPOOL; AND TALLIES FOR 'WARD ROOM' & 'DEPTH CHARGE TELEGRAPH' HAVE BEEN LIFTED. STERN OF VESSEL HAS BEEN BLOWN OFF (T W BENNETTO, 4.9.84). [COULD POSSIBLY BE HMS LAFOREY - SEE [21090] IN 505530N, 012730E]. NCA.

**H1310/86/10 3.4.86 EXAM'D 1983. KNOWN LOCALLY AS THE 'NORTH WESTER'. (SOUTHERN MARINE SERVICES, WK NO 047). NCA.

**H1310/29/86 25.11.86 DIVED AGAIN 11.9.85. HOLES PREVIOUSLY THOUGHT TO BE WHERE FUNNELS HAD STOOD NOW THOUGHT TO BE EITHER FOR GUN MOUNTINGS OR TORPEDO TUBES. NO GUNS HAVE BEEN FOUND. (T W BENNETTO). NCA.

**H1310/88/30 29.6.88 WK IS BROKEN ACROSS AMIDSHIPS. GUNS HAVE BEEN REMOVED AND BRIDGE HAS COLLAPSED. LEAST DEPTH AT LW - 42MTRS IN GEN DEPTH 46MTRS. STERN ALMOST BURIED BY SANDWAVE. APPEARS TO MATCH 'L CLASS' DESTROYER AND, IF SO, CAN ONLY BE HMS LAFOREY. NO CONCLUSIVE EVIDENCE YET. (P A VAN DER BOON). NCA.

**15.1.92 SHIP BUILDERS PLATE RECOVERED INDICATING THAT THIS IS REMAINS OF HMS MINION. (THE NAUTICAL MAGAZINE, VOL 246, NO 6). NCA.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 38'.583 N Longitude = 000 11'.333 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20012 Classification = Unclassified
 Symbol WK 36.0 Largest Scale Chart = 1652
 Charting Comments

Old Number 013603164
 Category Non-dangerous wreck

WGS84 Position Latitude = 50 38'.619 N Longitude = 000 11'.426 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 13.0

Area at Largest Scale No

Depth 36.0 metres

Drying Height

Height

General Depth 46 metres

Vertical Datum Lowest astronomical tide

Depth Method Found by echo-sounder

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 18/06/2007

Position Last Amended

Position Last Latitude = Longitude =

Name GLENARM HEAD (POSSIBLY)

Type SS

Flag BRITISH

Dimensions Length = 109.7 metres Beam = 14.0 metres Draught = 6.1 metres

Tonnage 3908 Gross

Cargo AMMUNITION

Date Sunk 04/01/1918

Sonar Dimensions Length = 90.0 metres Width = 22.0 metres Shadow Height = 7.6 metres

Orientation 045/225

Magnetic Anomaly

Debris Field

Scour Depth = 4.0 metres Length = Orientation =

Markers

General Comments INTACT & UPRIGHT

Circumstances of Loss

**TORPEDOED AND SUNK 4.1.18 5M SW BY S FROM BRIGHTON LTV WHILST EN ROUTE FROM SOUTHAMPTON TO BOULOGNE. (WW1SL & LL WW1).

**TORPEDOED AND SUNK BY GERMAN SUBMARINE UB-30 ON 5.1.18. (DER KRIEG ZUR SEE).

Surveying Details

**SUNK 5 MILES SW BY S FROM BRIGHTON LTV. (WW1SL).

**H1965/76 9.7.79 DCS3 CONTACT, CLASSIFIED WK, LOCATED IN 503835N, 001120W [OGB]. LYING N/S, LENGTH 100MTRS. NOT EXAM'D. (HMS BULLDOG, HI 37A/77). WK LOCATED 24.6.75 IN 503838N, 001122W [OGB] USING HIFIX [2 LOP]. LEAST E/S DEPTH 44MTRS. DCS3 HT 7.8MTRS. (HMS FAWN, HI 41/75). CHART AS WK 36MTRS IN HMS BULLDOG'S POSN.

**H1965/76 11.12.79 EXAM'D 17.10.79 IN 503836.7N, 001122.3W [OGB] USING TRISPONDER. LEAST E/S DEPTH 36.9 IN GEN DEPTH 46MTRS. SCOUR 4MTRS DEEP. DCS3 HT 7.6MTRS, LENGTH 90MTRS, BEAM 22MTRS. LYING 060/240DEGS. LARGE WK. (HMS BULLDOG, HI 37A/79). NCA.

**H1965/76 27.11.80 EXAM'D 24.10.80 IN 503838N, 001121W [OGB]. REPD AS UPRIGHT, NO SIGN OF MASTS 4 HOLDS - 2 EITHER SIDE OF 'MIDSHIPS' SUPERSTRUCTURE. LYING WITH BOWS SW. (HMS BULLDOG, HI 37A/77). NCA.

**H1310/84/32 6.9.84 DIVED ON IN 1984. INTACT & UPRIGHT. ABT 90MTRS LONG. LYING WITH BOWS SW. 2 HOLDS FOR'D & AFT OF CENTRAL SUPERSTRUCTURE, WHICH HAS COLLAPSED. GUN MOUNT ON STERN, BUT NO GUN. BOXES OF LIVE READY-USE AMMUNITION BELOW MOUNTING. PART OF BINNACLE GIVING MAKERS NAME LIFTED. (T W BENNETTO, 4.9.84). NCA.

**H1310/86/10 3.4.86 EXAM'D JUN '85. KNOWN LOCALLY AS THE 'NORTH EASTER'. (SOUTHERN MARINE SERVICES, WK NO 045).

**H1310/88/30 28.6.88 WK OF 'PORTHKERRY' [PREVIOUSLY THOUGHT TO BE THIS WK] HAS BEEN POSITIVELY IDENTIFIED BY BELL IN 503746N, 001846W [SEE 20238]. THIS WK IS LARGE AND MUST HAVE BEEN ARMED. BRASS AMMUNITION ROUNDS HAVE BEEN FOUND, INCLUDING ONE WHICH HAD BEEN EXPENDED, MARKED '18 PDR. 1916'. GUN NOT FOUND. A DIVER WAS LOST WHEN DIVING THIS WK IN 1986 AND WAS NEVER FOUND. (P A VAN DER BOON).

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 38'.500 N Longitude = 000 06'.500 W [OGB] Square Number = 136 State = LIVE

Wreck Number	58306	Classification	= Unclassified
Symbol	F	Largest Scale Chart	= 1652
Charting Comments			
Old Number			
Category	Foul ground		

WGS84 Position	Latitude = 50 38'.536 N Longitude = 000 06'.593 W
WGS84 Origin	3-D Cartesian Shift (BW)
Horizontal Datum	OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method	DECCA navigator
Position Quality	Precisely known
Position Accuracy	
Area at Largest Scale	No

Depth	
Drying Height	
Height	
General Depth	51 metres
Vertical Datum	Lowest astronomical tide
Depth Method	
Depth Quality	Depth unknown

Depth Accuracy

Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 20/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type FISHERMENS FASTENER

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

**30.12.74 FF REPD IN 503830N, 000630W [OGB] USING DECCA. (E GILES, 1974).

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 38'.500 N Longitude = 000 01'.800 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20162 Classification = Unclassified

Symbol WK 29.0 Largest Scale Chart = 1652

Charting Comments

Old Number 013604843

Category Non-dangerous wreck

WGS84 Position Latitude = 50 38'.536 N Longitude = 000 01'.893 W

WGS84 Origin 3-D Cartesian Shift (BW)

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 13.0

Area at Largest Scale No

Depth 29.0 metres

Drying Height

Height

General Depth 34 metres

Vertical Datum Lowest astronomical tide

Depth Method Found by echo-sounder

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 22/11/1999

Position Last Amended

Position Last Latitude = Longitude =

Name

Type

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = 147.0 metres Width = 7.0 metres Shadow Height = 4.4 metres

Orientation 090/270

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

**H1965/76 28.11.80 EXAM'D 24.4.80 IN 503830N, 000148W [OGB] USING TRISPONDER. LEAST E/S DEPTH 29.6 IN GEN DEPTH 33.5MTRS. NO SCOUR. HYDROSEARCH - LENGTH 147 MTRS, BEAM 7MTRS, HT 4.4MTRS. LYING, ACROSS SAND WAVES, 090/270 DEGS. W END SOLID, E END BROKEN UP. POSSIBLY SECTION OF BOOM. (HMS BULLDOG HI 37A/77). PROBABLY BOMBARDON OR PONTOON SECTIONS LOST WHEN BEING TOWED TO MULBERRY HARBOUR SITES DURING WWII. INS AS WK 29MTRS. BR STD.

Latitude = 50 38'.036 N Longitude = 000 20'.125 W [WGD] Square Number = 136 State = LIVE

Wreck Number 19998

Classification = Unclassified

Symbol WK SW 26.0

Largest Scale Chart = 1652

Charting Comments

Old Number 013603012

Category Dangerous wreck

WGS84 Position Latitude = 50 38'.036 N Longitude = 000 20'.125 W

WGS84 Origin Original

Horizontal Datum WGD WGS (1984)

Position Method Differential Global Positioning System
 Position Quality Surveyed
 Position Accuracy 7.0
 Area at Largest Scale No
 Depth 26.0 metres
 Drying Height
 Height
 General Depth 34 metres
 Vertical Datum Lowest astronomical tide
 Depth Method Swept by wire-drag
 Depth Quality Least depth known
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 14/11/2002
 Position Last Amended 14/11/2002
 Position Last Latitude = 50 38'.000 N Longitude = 000 20'.033 W

Name STANWOLD
 Type SS
 Flag BRITISH
 Dimensions Length = 64.0 metres Beam = 10.1 metres Draught = 4.3 metres
 Tonnage 1020 Gross
 Cargo COAL
 Date Sunk 27/02/1941

Sonar Dimensions Length = 80.0 metres Width = 40.0 metres Shadow Height = 6.0 metres
 Orientation 040/220

Magnetic Anomaly Moderate
 Debris Field
 Scour Depth = 0.0 metres Length = Orientation =
 Markers
 General Comments NEARLY UPSIDE DOWN

Circumstances of Loss

**EX-EASINGWOLD '29, EX-ALFRED KREGLINGER, EX-PERVYSE. BUILT IN 1909 BY OSBOURNE, GRAHAM & CO, SUNDERLAND. OWNED AT TIME OF LOSS BY STANHOPE SS CO LTD. TWO BOILERS, TRIPLE EXPANSION ENGINE OF 106HP, SINGLE SHAFT. PASSAGE SOUTHERN FOR COWES IN CONVOY. CARGO COAL. WAS SEEN TO HAVE LIST TO PORT AND LATER REPORTED TO BE STEERING BADLY. LAST SIGHTED 4.20AM 27.2.41 LISTING TO STARBOARD. NOTHING MORE HEARD, BUT BODIES OF SOME OF CREW WERE LATER WASHED UP IN PEVENSEY BAY.

Surveying Details

**H1283/75 2.5.75 WK LOCATED IN 503800N, 002005W [OGB] USING DECCA. HULL UPRIGHT & INTACT. IDENTIFIED AS 'EASINGWOLD' FROM BELL. (D M DILLINGHAM, 25.4.75). CHART AS USC 15MTRS [8FMS]. - NM 1031/75.

**H4121/76 14.1.77 WRECK LOCATED 6.9.76 IN 503800N, 002002W [OGB] USING HI-FIX [2 LOP]. LEAST E/S DEPTH 25.8MTRS IN GEN DEPTH 34MTRS. SCOUR DEPTH 1MTR. SEABED, SAND WAVES & RIPPLES. DCS3 HEIGHT 7.8 & 10.2MTRS, LENGTH 80MTRS. ORIENTATION SW/NE. HIGHEST POINT AT SW END. LOCATED 6.9.76. (HMS FOX, HI 52/76). CHART AS WK 24MTRS IN REVISED POSN. NC 2450.

**H1309/76 2.8.77 LARGE FREIGHTER LAYING ON ITS SIDE IN 503806N, 002002W [OGB] USING DECCA. BOWS SW, APPROX 2-3000 TONS. LEAST DEPTH OVER WK 120FT. NO OBSTRUCTION ABOVE 90FT. (D W PECKHAM, SALVAGE CONTRACTOR, 21.11.76).

**H1965/76 6.7.79 WK LOCATED IN 503759N, 002003W [OGB]. DCS3 LENGTH APPROX 80MTRS. NOT EXAMINED. (HMS BULLDOG, HI 37A/77). NCA.

**H1965/76 11.12.79 EXAM'D 17.10.79 IN 503800.4N, 002002.4W [OGB] USING TRISPONDER [2 LOP]. LEAST E/S DEPTH 26.6 IN GEN DEPTH 35MTRS. NO SCOUR. DCS3 HT 9MTRS, LENGTH 77MTRS, BEAM 13.6MTRS. LYING 020/200DEGS APPARENTLY ON ITS SIDE OR UPSIDE DOWN. (HMS BULLDOG, HI 37A/77). NCA.

**H1965/76 27.11.80 EXAM'D USING HYDROSEARCH ON 23.4.80 IN 503757N, 002004W [OGB] USING TRISPONDER. NO OTHER DIFFERENCES. (HMS BULLDOG, HI 37A/77). NCA.

**H1310/81/30 16.11.81 REPD TO BE LYING ON ITS PORT BEAM END AND ALMOST TURNED OVER. HULL INTACT. IRON PROPELLER STILL IN POSN. (T W BENNETTO, 10.11.81).

**H1310/83/29 20.6.83 LIES UPSIDE DOWN. (M SNELLING, SOUTHERN MARINE SERVICES, 14.6.83).

**H1310/83/41 22.6.84 THOUGH NEARLY UPSIDE DOWN IT IS POSSIBLE TO DIVE INSIDE WK UNDER OVERHANG OF THE HULL, WHICH IS FAIRLY INTACT. PILES OF COAL ON SEABED NEARBY. (VULCAN DIVING SERVICES, 19.6.84).

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

**HH091/002/01 14.11.02 EXAM'D 21.8.02 IN 5038.036N, 0020.125W [WGD] USING DGPS. SWEEP CLEAR 26.3, FOUL 26.6MTRS. LEAST E/S DEPTH 26.9 IN GEN DEPTH 34MTRS. NO SCOUR. LENGTH 80MTRS, WIDTH 40MTRS. DCS3 HT 6MTRS LIES 040/220 DEGS. MODERATE MAGNETIC ANOMALY. LARGE, WELL DEFINED WK. (NP 1016, HI 1002). AMEND TO SW 26MTRS. BR STD.

Latitude = 50 38'.033 N Longitude = 000 18'.433 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20000 Classification = Unclassified
 Symbol WK 29.5 Largest Scale Chart = 1652
 Charting Comments

Old Number 013603036
 Category Non-dangerous wreck

WGS84 Position Latitude = 50 38'.069 N Longitude = 000 18'.525 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 29.5 metres

Drying Height

Height

General Depth 36 metres

Vertical Datum Lowest astronomical tide

Depth Method Swept by vertical acoustic system

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 20/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name QUAIL

Type SS

Flag BRITISH

Dimensions Length = 68.3 metres Beam = 8.5 metres Draught = 5.2 metres

Tonnage 924 Gross

Cargo WOOL

Date Sunk 27/08/1886

Sonar Dimensions Length = 79.8 metres Width = 9.1 metres Shadow Height = 6.5 metres

Orientation 080/260

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments SMALL FWD PART ON SIDE, AFTER PART UPRIGHT

Circumstances of Loss

**SANK FOLLOWING A COLLISION WITH FRENCH SS 'SAN MARTIN'.

Surveying Details

**H1965/76 6.7.79 DCS3 CONTACT, CLASSIFIED WK, LOCATED IN 503802N, 001821W [OGB]. LENGTH APPROX 70MTRS. NOT EXAMINED. (HMS BULLDOG, HI 37A/77). WK LOCATED 25.6.75 IN 503804N, 001819W [OGB] USING HIFIX [2 LOP]. ESTIMATED SONAR HT 11MTRS IN GEN DEPTH 32MTRS. (HMS FAWN, HI 41/75). CHART AS WK 21MTRS IN HMS BULLDOG'S POSN. - NM 1725/79.

**21.6.79 VERY OLD STEAMSHIP. TRIPLE EXPANSION ENGINE. LARGE COUNTER STERN. SITTING UPRIGHT WITH NO MASTS OR UPPER WORKS. ORIENTATION NE/SW, BOWS SW. NO SCOUR. AT LEAST 95FT CLEAR OVER WK. (D PECKHAM, BRIGHTON, TELECON). NCA.

**H1965/79 11.12.79 EXAM'D 16.10.79 IN 503802.5N, 001821.5W [OGB] USING TRISPONDER [2 LOP]. LEAST E/S DEPTH 32.6 IN GEN DEPTHS 30-43MTRS. NO SCOUR. DCS3 HT 5.4MTRS, LENGTH 60MTRS, BEAM 20MTRS. LYING 030/210DEGS. LARGE INTACT WK, PARTIALLY BURIED IN SAND, BUT GIVING STRONG SONAR RETURN. (HMS BULLDOG, HI 37A/77). AMEND TO WK 32MTRS. BR STD.

**H1965/76 4.12.80 EXAM'D 3.5.80 IN 503802N, 001826W [OGB] USING TRISPONDER. LEAST E/S DEPTH 29.6 IN GEN DEPTH 36MTRS. NO SCOUR. HYDROSEARCH LENGTH 79.8MTRS, BEAM 9.1MTRS, HT 6.5MTRS. ALMOST INTACT, BUT WITH POSSIBLE DAMAGE AT BOWS, LYING 080/260DEGS, BOWS W. (HMS BULLDOG, HI 37A/77). AMEND TO WK 29.5MTRS IN REVISED POSN. BR STD.

**H1310/81/30 16.11.81 DIVED ON IN 40MTRS AT LW NEAPS. NUMEROUS WOODEN DEADEYES AND A SOUNDING LEAD FOUND. (T W BENNETTO, 10.11.81).

**H1310/29/86 25.11.86 DIVED EXTENSIVELY IN 1985. POSITIVELY IDENTIFIED AS THE 'QUAIL' - BELL RECOVERED. FO'C'SLE HAS BEEN CUT OFF ABOUT 12MTRS FROM STEM AND IS LYING ON PORT SIDE ABOUT 10MTRS FROM REMAINDER OF WK. REMAINDER OF HULL IS INTACT AND ON EVEN KEEL IN GEN DEPTH 42MTRS. (T W BENNETTO, 28.10.86).

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 38'.017 N Longitude = 000 12'.933 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20001 Classification = Unclassified

Symbol WK 23.0 Largest Scale Chart = 1652
Charting Comments

Old Number 013603048
Category Dangerous wreck

WGS84 Position Latitude = 50 38'.053 N Longitude = 000 13'.026 W
WGS84 Origin 3-D Cartesian Shift (BW)
Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 23.0 metres

Drying Height

Height

General Depth 44 metres

Vertical Datum Lowest astronomical tide

Depth Method Found by echo-sounder

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 17/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name PAGENTURM

Type SS

Flag BRITISH

Dimensions Length = 122.2 metres Beam = 15.8 metres Draught = 8.5 metres

Tonnage 5000 Gross

Cargo MILITARY STORES

Date Sunk 16/05/1917

Sonar Dimensions Length = 110.5 metres Width = 25.3 metres Shadow Height = 20.5 metres

Orientation 015/195

Magnetic Anomaly

Debris Field

Scour Depth = 5.0 metres Length = Orientation =

Markers

General Comments

Circumstances of Loss

**EX GERMAN, REQUISITIONED & ARMED FOR DEFENSIVE PURPOSES BY ADMIRALTY. TORPEDOED BY GERMAN UB-40 16M W OF BEACHY HEAD.

**TORPEDOED BY GERMAN SUBMARINE 16M W OF BEACHY HEAD WHILST EN ROUTE FROM LONDON TO BARRY. (LL WW1).

Surveying Details

**H1283/75 & H3051/75 1.5.75 WK LOCATED IN 503801N, 001302W [OGB] USING DECCA. LYING NE/SW & STANDS APPROX 65FT [20MTRS] HIGH. SUSPECT THAT THIS IS WK OF 'MOLDAVIA'. (D M DILLINGHAM, SUBSERVS, 25.4.75). [SEE WK [19852] IN 502308N, 002843W]. CHART AS WK 22MTRS [12FMS]. - NM 1031/75.

**29.9.75 THIS IS A LARGE CARGO VESSEL, APPROX 5-6000 TONS. CERTAINLY NOT THE WK OF 'MOLDAVIA'. (LONDON BSAC, TELECON, 29.9.75 - WK RECENTLY DIVED UPON). NCA.

**H2326/75 11.8.75 WK FIXED IN 503801.8N, 001257.3W [OGB] USING DECCA. (E GILES). NCA.

**H1965/76 9.7.79 LOCATED IN 503801N, 001251W [OGB]. LENGTH FROM DCS3 APPROX 60MTRS. (HMS BULLDOG, HI 37A/77). AMEND TO REVISED POSN. R/P.

**H1965/76 11.12.79 EXAM'D 17.10.79 IN 503804N, 001256W [OGB] USING TRISPONDER [2 LOP]. LEAST E/S DEPTH 31.2 IN GEN DEPTH 52MTRS. NO SCOUR. DCS3 HT 16MTRS, LENGTH 136MTRS, BEAM 24MTRS. LYING N/S. (HMS BULLDOG, HI 37A/77). AMEND TO WK 31MTRS IN REVISED POSN. R/P.

**H1965/76 27.11.80 EXAM'D 4.5.80 IN 503801N, 001256W [OGB] USING TRISPONDER. LEAST E/S DEPTH 30.5 IN GEN DEPTH 44MTRS. SCOUR, RUNNING WHOLE LENGTH OF WK, 5MTRS DEEP. HYDROSEARCH LENGTH 110.5MTRS, BEAM 25.3MTRS, HT 20.5MTRS. LYING ON ITS SIDE. SUPERSTRUCTURE & POOP DECKS REMAIN. LYING 015/195DEGS. (HMS BULLDOG, HI 37A/77). AMEND TO WK 23MTRS IN REVISED POSN. R/P.

**H1310/81/30 21.9.82 POSITIVELY IDENTIFIED AS 'PAGENTURM' BY A PLATE. LIES ON STBD BEAM, DECK ALMOST VERTICAL, BOWS NORTH. DEEP SCOUR ON W SIDE. MANY NETS & FISHING LINES. (T W BENETTO, 17.9.82). NCA.

**H1310/83/29 20.6.83 LIES BOWS N WITH UP TO 10MTRS DEEP SCOUR ON E SIDE. THREE GUNS, PROBABLY 4INCH CALIBRE, FITTED ON DECK AFT & ON PORT & STBD QUARTERS. WK HAS TRANSVERSE FRACTURE APPROX AMIDSHIPS. (M SNELLING, SOUTHERN MARINE SERVICES, 14.6.83). NCA.

**H1310/86/10 3.4.86 EXAM'D JUN '85. (SOUTHERN MARINE SERVICES, WK NO 040). NCA.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 37'.817 N Longitude = 000 09'.550 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20005 Classification = Unclassified
Symbol WK 46.0 Largest Scale Chart = 1652
Charting Comments

Old Number 013603097
Category Non-dangerous wreck

WGS84 Position Latitude = 50 37'.853 N Longitude = 000 09'.643 W
WGS84 Origin 3-D Cartesian Shift (BW)
Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System
Position Quality Surveyed
Position Accuracy 25.0
Area at Largest Scale No
Depth 46.0 metres
Drying Height
Height
General Depth 50 metres
Vertical Datum Lowest astronomical tide
Depth Method Swept by vertical acoustic system
Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 20/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name GERLEN (POSSIBLY)

Type M.V

Flag WEST GERMAN

Dimensions Length = 38.7 metres Beam = 7.0 metres Draught = 2.4 metres

Tonnage 299 Gross

Cargo

Date Sunk 19/07/1972

Sonar Dimensions Length = 38.6 metres Width = 6.2 metres Shadow Height = 3.7 metres

Orientation 135/315

Magnetic Anomaly

Debris Field

Scour Depth = 1.5 metres Length = Orientation =

Markers

General Comments

Circumstances of Loss

****SANK FOLLOWING COLLISION WITH CYPRIOT MV 'GOTLAND' WHILST EN-ROUTE PAR TO UTERSEN.
 (LLOYDS 209).**

Surveying Details

****H3950/70 21.7.72 WK IN 503818N, 000642W. (LLOYDS 209). CHART AS USC PA 15MTRS [8FMS]. - NM
 1487/72. NAVEAM 295/72 ISSUED.**

****30.12.74 WRECK REPD IN 503809N, 000654W USING DECCA. (E GILES, 1974). NCA.**

****H1965/76 27.11.80 NOTHING FOUND IN CHARTED POSN. SANDWAVE AREA. WK EXAM'D 15.5.80 IN
 503749N, 000933W [OGB] USING TRISponder. LEAST E/S DEPTH 47.2 IN GEN DEPTH 50MTRS. SCOUR
 1.5MTRS DEEP. HYDROSEARCH LENGTH 38.6MTRS, BEAM 6.2MTRS, HT 3.7MTRS. LYING NW/SE, BOWS
 NW, IN AREA OF SANDWAVES. (HMS BULLDOG, HI 37A/77). AMEND TO WK 46MTRS IN REVISED POSN.
 R/P.**

****H1310/86/10 3.4.86 EXAM'D IN 1983. (SOUTHERN MARINE SERVICES, WK NO 037).**

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 37'.767 N Longitude = 000 18'.767 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20238

Classification = Unclassified

Symbol WK USC 35.0

Largest Scale Chart = 1652

Charting Comments

Old Number 013605677

Category Non-dangerous wreck

WGS84 Position Latitude = 50 37'.803 N Longitude = 000 18'.858 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method DECCA navigator
 Position Quality Precisely known
 Position Accuracy
 Area at Largest Scale No

Depth 35.0 metres
 Drying Height
 Height
 General Depth 45 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Least depth unknown, safe clearance at value shown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 28/06/1988
 Position Last Amended
 Position Last Latitude = Longitude =

Name PORTHKERRY
 Type SS
 Flag BRITISH
 Dimensions Length = 85.3 metres Beam = 12.2 metres Draught = 5.5 metres
 Tonnage 1920 Gross
 Cargo COAL
 Date Sunk 20/05/1917

Sonar Dimensions Length = Width = Shadow Height = 8.0 metres
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers
 General Comments ON PORT SIDE, HT BY DIVER

Circumstances of Loss
 **BUILT IN 1911 BY J CROWN & SONS LTD, SUNDERLAND. OWNED AT TIME OF LOSS BY PORTHCAWL SS CO LTD. TWO BOILERS, TRIPLE EXPANSION ENGINE OF 220 NHP, SINGLE SHAFT. PASSAGE PORTLAND FOR SHEERNESS. TORPEDOED BY UB-40 WHILE PICKING UP THE CREW OF SS TYCHO, WHOSE BOATS WERE ALONGSIDE. 7 MEN LOST, PLUS 15 FROM TYCHO. (SIBI).

Surveying Details
 **H1310/88/30 28.6.88 WK LOCATED IN 503746N, 001846W [OGB] USING DECCA. LIES ON SIDE IN 45-50MTRS AND STANDS ABOUT 8MTRS HIGH. BELL RECOVERED WHICH IDENTIFIES WK AS THE 'PORTHKERRY'. (P A VAN DER BOON). CHART AS USC 35MTRS. NE 1652.

**HH100/351/09 16.5.95 NOT LOCATED USING DGPS AND E/S. (SOUTHERN MARINE SERVICES). NCA.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 37'.750 N Longitude = 000 04'.900 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20173 Classification = Unclassified
 Symbol WK 27.5 Largest Scale Chart = 1652
 Charting Comments

Old Number 013604958
 Category Dangerous wreck

WGS84 Position Latitude = 50 37'.786 N Longitude = 000 04'.993 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 27.5 metres

Drying Height

Height

General Depth 34 metres

Vertical Datum Lowest astronomical tide

Depth Method Swept by vertical acoustic system

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 20/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name HMS KERYADO (PROBABLY)

Type HM TRAWLER

Flag BRITISH

Dimensions Length = 39.6 metres Beam = 7.6 metres Draught =

Tonnage 252 Gross

Cargo

Date Sunk 06/03/1941

Sonar Dimensions Length = 40.5 metres Width = 6.9 metres Shadow Height = 6.8 metres

Orientation 050/230

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments IN TWO PARTS IN AREA OF SANDWAVES. BOW NE

Circumstances of Loss

**EX-FRENCH MINESWEEPER. REQUISITIONED 5.7.40. MINED 6.3.41.

**MINED 6.3.41 8M S OF NEWHAVEN WHILST EN ROUTE FROM DOVER & PORTSMOUTH TO SWANSEA. (LL WW2).

Surveying Details

**H423/41 18.3.41 SUNK IN 503930N, 000748E. (MINESWEEPING DIV, ADMIRALTY, 12.3.41).

**6.3.41 SANK ABOUT 160 DEG, 8 MILES FROM NEWHAVEN. (C-IN-C PORTSMOUTH, 6.3.41).

**15.3.45 SONAR CONTACT IN 503754N, 000418W. LENGTH 220FT, HT 15FT. OIL AND WRECKAGE. (ESCORT GROUP 6).

**H1965/76 4.12.80 WK EXAM'D 3.5.80 IN 503745N, 000454W [OGB] USING TRISponder. LEAST E/S DEPTH 31.3 IN GEN DEPTH 34.5MTRS. NO SCOUR. HYDROSEARCH LENGTH 40.5MTRS, BEAM 6.9MTRS. IN TWO PARTS, LYING 050/230 DEGS, BOWS NE. HT OF STERN SECTION 6.8MTRS. IN AREA OF SANDWAVES ABOUT 1.5MTRS HIGH. (HMS BULLDOG, HI 37A/77). CHART AS WK 27.5MTRS. BR STD.

**4.11.91 DIVED ON. WK OF ARMED TRAWLER LYING UPRIGHT WITH BOW AND STERN INTACT. PORT SIDE AMIDSHIPS COLLAPSED TO SEABED. LENGTH 130FT, BEAM 25FT. GUNSIGHT, MARKED 1918, RECOVERED FROM 12 PDR GUN. THOUGHT PROBABLY TO BE THE 'KERYADO'. (N BLAKE, TELECON).

**HH100/351/04 13.11.91 INTACT WK OF APPARENTLY AN ADMIRALTY PATROL VESSEL, MINESWEEPER OR CONVERTED TRAWLER WITH 4 INCH GUN ON BOW. 45MTRS LONG. LIES ON EVEN KEEL BUT COLLAPSED TO SEABED ON PORT SIDE. POSSIBLY SWEEP GEAR ON SEABED. DEPTH TO DECK 36MTRS AT LW. COULD BE THE KERYADO. PART GUNSIGHT DATED 1918 RECOVERED. (T W BENNETTO, 2.11.91).

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 37'.717 N Longitude = 000 19'.583 W [OGB] Square Number = 136 State = LIVE

Wreck Number 19996 Classification = Unclassified
 Symbol WK 21.5 Largest Scale Chart = 1652
 Charting Comments

Old Number 013602998
 Category Dangerous wreck

WGS84 Position Latitude = 50 37'.753 N Longitude = 000 19'.675 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 21.5 metres

Drying Height

Height

General Depth 30 metres

Vertical Datum Lowest astronomical tide

Depth Method Swept by vertical acoustic system

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 20/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type FREIGHTER

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = 113.0 metres Width = 23.9 metres Shadow Height = 8.0 metres

Orientation 115/295

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments VERY BROKEN UP & DISPERSED

Circumstances of Loss

Surveying Details

**H1283/75 2.5.75 WK LOCATED IN 503748N, 001935W [OGB] USING DECCA. APPROX 260FT LONG, LYING NW/SE. IDENTIFIED AS CARGO VESSEL. (D M DILLINGHAM, SUBSERVS, 25.4.75). CHART AS USC 15MTRS. - NM 1031/75.

**H4121/76 20.1.77 OUTSIDE AREA OF HI BUT PROBABLY CONTACT [DEF. WK] OBTAINED BETWEEN LINES 4 CABLES SE OF ABOVE POSN. (HMS FOX, HI 52/76). NCA.

**H1309/76 2.8.77 WRECK OF UNKNOWN FREIGHTER IN 503754N, 001930W [OGB] USING DECCA. BROKEN UP. NO SCOUR. MAX HEIGHT 35FT IN MIN DEPTH 120FT. (D W PECKHAM, SALVAGE CONTRACTOR, 21.11.76). CHART AS WK 26MTRS IN REVISED POSN. NC 2450.

**H1965/76 6.7.79 DCS3 CONTACT, CLASSIFIED WK, LOCATED IN 503747N, 001934W. SECOND CONTACT, CLASSIFIED GOOD, POSSIBLE WK, LOCATED IN 503744N, 001922W - POSSIBLY TWO PARTS OF SAME WK. (HMS BULLDOG, HI 37A/77). AMEND POSN TO 503747N, 001934W [OGB]. BR STD.

**8.7.79 REPD THAT DEPTH CHARGES, STILL ARMED, LIE IN VICINITY OF THIS WK. (D PECKHAM, SHOREHAM). NCA.

**H1965/79 11.12.79 EXAM'D 17.10.79 IN 503746N, 001931W [OGB] USING TRISPONDER [2 LOP]. LEAST E/S DEPTH 23.3 IN GEN DEPTH 30MTRS. SCOUR 2MTRS DEEP. DCS3 HT 6.3MTRS, LENGTH 72.7MTRS, BEAM 11.5MTRS. LYING 130/310DEGS. LARGE WK, WELL BROKEN UP & IN TWO MAIN PARTS. (HMS BULLDOG, HI 37A/77). AMEND TO WK 23.3MTRS IN REVISED POSN. - NM 30/80.

**H1965/76 27.11.80 EXAM'D 23.4.80 IN 503743N, 001935W [OGB] USING TRISPONDER. LEAST E/S DEPTH 23.6 IN GEN DEPTH 29.5MTRS. NO SCOUR. HYDROSEARCH LENGTH 113MTRS, BEAM 23.9MTRS, HT 8MTRS. VERY BROKEN UP & DISPERSED. IN AREA OF SANDWAVES, LYING 115/295DEGS, BOWS SE. (HMS BULLDOG, HI 37A/77). [AS POSN DIFFERS FROM EARLIER REPORT IN 1979, AS DO DIMENSIONS AND DESCRIPTION, THERE IS POSSIBILITY OF TWO WRECKS IN OR NEAR THIS POSN]. AMEND TO WK 21.5MTRS IN REVISED POSN. - NM 2795/80.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 37'.608 N Longitude = 000 02'.108 W [OGB] Square Number = 136 State = LIVE

Wreck Number 19995 Classification = Unclassified
 Symbol NDW Largest Scale Chart = 1652
 Charting Comments

Old Number 013602986
 Category Non-dangerous wreck

WGS84 Position Latitude = 50 37'.645 N Longitude = 000 02'.202 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method DECCA navigator
 Position Quality Precisely known
 Position Accuracy
 Area at Largest Scale No

Depth
 Drying Height
 Height
 General Depth 52 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Depth unknown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 11/11/1998
 Position Last Amended 22/06/1992
 Position Last Latitude = 50 37'.600 N Longitude = 000 02'.117 W
 Name
 Type
 Flag
 Dimensions Length = Beam = Draught =
 Tonnage
 Cargo
 Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers
 General Comments

Circumstances of Loss

Surveying Details

**H121/45 23.4.45 GOOD SONAR CONTACT IN 503742N, 000306W. (PORTSMOUTH LIST, 22.3.45).
 **23.7.71 NOW CHARTED AS USC 18MTRS. (AUTHORITY NOT STATED). NC 1652.
 **H1965/76 27.11.80 NOTHING FOUND. AREA OF SANDWAVES. (HMS BULLDOG, HI 37A/77). DELETE.
 BR STD.
 **HH100/351/05 22.6.92 WK IN 503736.5N, 000206.5W [OGB] USING DECCA. (C MARTIN, 13.4.92).
 **11.11.98 AMENDED TO NDW AS FIX QUALITY WAS DECCA. BR STD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 37'.583 N Longitude = 000 18'.967 W [OGB] Square Number = 136 State = LIVE

Wreck Number 19991 Classification = Unclassified
 Symbol WK SW 23.7 Largest Scale Chart = 1652
 Charting Comments

Old Number 013602937
 Category Dangerous wreck

WGS84 Position Latitude = 50 37'.619 N Longitude = 000 19'.058 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 23.7 metres

Drying Height

Height

General Depth 37 metres

Vertical Datum Lowest astronomical tide

Depth Method Swept by wire-drag

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 20/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type SS

Flag

Dimensions Length = Beam = Draught =

Tonnage 2000 Gross

Cargo BALLAST

Date Sunk

Sonar Dimensions Length = 89.7 metres Width = 9.9 metres Shadow Height = 9.5 metres

Orientation 102/282

Magnetic Anomaly

Debris Field

Scour Depth = 3.0 metres Length = Orientation =

Markers

General Comments ON PORT SIDE, BOWS W, BROKEN DOWN MIDSHIPS, TONNAGE BY DIVER

Circumstances of Loss

Surveying Details

**H1309/76 27.9.77 WK IN 503739N, 001857W [OGB] USING DECCA. FREIGHTER, UNKNOWN STEAMSHIP, BROKEN UP IN A GEN DEPTH OF 130FT WITH A MAXIMUM HEIGHT OF 30FT. LIES IN DEEP HOLE, GROUND VARIES IN VICINITY VERY QUICKLY. (D W PECKHAM, SALVAGE CONTRACTOR, 21.11.76). CHART AS WK 30MTRS. BR STD.

**H1965/76 6.7.79 DCS3 CONTACT, CLASSIFIED WK, LOCATED IN 503734N, 001856W [OGB]. NOT EXAM'D. (HMS BULLDOG, HI 37A/77). NCA.

**H1965/76 11.12.79 EXAM'D 18.10.79 IN 503735N, 001858W [OGB] USING TRISponder [2 LOP]. LEAST E/S DEPTH 27.9MTRS IN GEN DEPTH 36-45MTRS. SCOUR 1MTR DEEP. DCS3 HT 8.2MTRS, LENGTH 95MTRS, BEAM 15.6MTRS. LYING E/W. BROKEN IN AT LEAST TWO PARTS, WHICH LIE CLOSE TOGETHER WITH HIGH POINTS AT EACH END OF THE WK. (HMS BULLDOG HI 37A/77). AMEND TO WK 27.5MTRS IN REVISED POSN. BR STD.

**H1965/76 29.5.80 LEAST DEPTH FOUND SO FAR BY HYDROSEARCH VERTICAL MODE-15.4MTRS. (HMS BULLDOG, SIG DTD 4.5.80). NOT YET SWEEPED. MAST OUT OF VERTICAL, SHOWED CLEARLY ON SONAR STANDING UP ABOUT 20MTRS. (HMS BULLDOG, TELECON, 29.5.80). AMENDED TO WK 15.4MTRS. - NM 1264/80.

**H1965/76 18.6.80 CHAIN & BAR SWEEP BY THV 'STELLA'. CLEAR AT 27.2, FOUL AT 28MTRS [LAT]. UNABLE TO LOCATE SUSPECTED MAST. (TH, TELEX 13.6.80). NCA YET.

**H1965/76 4.12.80 DRIFT SWEEP 24.10.80. CLEAR AT 23.7MTRS. NOT FOULED. LEAST E/S DEPTH 26.6 IN GEN DEPTH 37MTRS. HYDROSEARCH LENGTH 89.7MTRS, BEAM 9.9MTRS, HT 9.5MTRS. LYING 102/282DEGS, BOWS E, ON STEEP SLOPE, WITH 3MTR DEEP SCOUR TO NE & WITH LARGE SANDWAVE WITH LEAST DEPTH 24.8MTRS CLOSE BY. MAST SEEN LYING HORIZONTALLY ACROSS WK. (HMS BULLDOG, HI 37A/77). AMEND TO SW 23.7MTRS. BR STD.

**H1310/83/41 22.6.84 DIVED ON TWICE - ONLY COVERING FOR'D SECTION ALONG TO BROKEN MID-SECTION. BOW INTACT LYING ON PORT SIDE. LARGE STEAM ENGINE. PORTHOLE RECOVERED BUT GIVES NO CLUE TO IDENTITY. WK LIES IN STEEP-SIDED VALLEY. (VULCAN DIVING SERVICES, 19.6.84). NCA.

**H1310/86/10 3.4.86 EXAM'D IN 1982. (SOUTHERN MARINE SERVICES, WK NO 031). NCA.

**H1310/88/30 28.6.88 WK IN 503730N, 001902W [OGB] USING DECCA. DIVED ON IN 1986 TO RECOVER TRAWLERS NETS. LIES ON PORT SIDE ON S SIDE OF SLOPE WITH BOW WSW. LEAST DEPTH AT LW APPROX WAS ABOUT 34MTRS. BROKEN AMIDSHIPS. BOWS INTACT AND HOLD CAN BE ENTERED - NO CARGO. ENGINE UPRIGHT. IRON PROPELLER. APPROX 200FT LONG AND ABOUT 2000 TONS. NO CLUE AS TO ITS IDENTITY. (P A VAN DER BOON). NCA.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 37'.500 N Longitude = 000 16'.500 W [OGB] Square Number = 136 State = LIVE

Wreck Number 19989 Classification = Unclassified
Symbol Largest Scale Chart = 1652
Charting Comments

Old Number 013602901
Category Undefined

WGS84 Position Latitude = 50 37'.536 N Longitude = 000 16'.592 W

WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method
 Position Quality
 Position Accuracy
 Area at Largest Scale No

Depth
 Drying Height
 Height
 General Depth 43 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Depth unknown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact YES

Last Amended 17/04/2000
 Position Last Amended 17/04/2000
 Position Last Latitude = 50 37'.500 N Longitude = 000 16'.500 W
 Name
 Type NON-SUB CONTACT
 Flag
 Dimensions Length = Beam = Draught =
 Tonnage
 Cargo
 Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers
 General Comments

Circumstances of Loss

Surveying Details
 **H(W)0202/50 10.6.55 NSC, POSSIBLE WK, ON REEF IN 503730N, 001630W [OGB]. STRONG ECHO
 EXTENT 15DEGS. (HMS SAINTES).

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 37'.383 N Longitude = 000 04'.350 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20172 Classification = Unclassified
 Symbol WK 49.0 Largest Scale Chart = 1652

Charting Comments

Old Number 013604946

Category Non-dangerous wreck

WGS84 Position Latitude = 50 37'.420 N Longitude = 000 04'.443 W

WGS84 Origin 3-D Cartesian Shift (BW)

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 49.0 metres

Drying Height

Height

General Depth 54 metres

Vertical Datum Lowest astronomical tide

Depth Method Swept by vertical acoustic system

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 20/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = 26.9 metres Width = 8.7 metres Shadow Height = 5.2 metres

Orientation 060/240

Magnetic Anomaly

Debris Field

Scour Depth = 0.0 metres Length = Orientation =

Markers

General Comments REASONABLY INTACT

Circumstances of Loss

Surveying Details

**H1965/76 4.12.80 EXAM'D 3.5.80 IN 503723N, 000421W [OGB] USING TRISPONDER. LEAST E/S DEPTH 49 IN GEN DEPTH 54.5MTRS. NO SCOUR. HYDROSEARCH LENGTH 26.9MTRS, BEAM 8.7MTRS, HT

5.2MTRS. LYING 060/240DEGS, IN HEAVY SANDWAVE AREA. REASONABLY INTACT. (HMS BULLDOG, HI 37A/77). CHART AS WK 49MTRS. BR STD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 37'.133 N Longitude = 000 19'.233 W [OGB] Square Number = 136 State = LIVE

Wreck Number 20171 Classification = Unclassified
 Symbol F Largest Scale Chart = 1652
 Charting Comments

Old Number 013604934
 Category Foul ground

WGS84 Position Latitude = 50 37'.169 N Longitude = 000 19'.325 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth

Drying Height

Height

General Depth 45 metres

Vertical Datum Lowest astronomical tide

Depth Method

Depth Quality Depth unknown

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 21/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = 90.0 metres Width = 14.0 metres Shadow Height =
 Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments LINEAR CONTACT, ?INVERTED, BURIED WK, NOT SEEN ON E/S
Circumstances of Loss

Surveying Details

**H1965/76 4.12.80 LONG THIN SONAR CONTACT EXAM'D 17.5.80 IN 503708N, 001914W [OGB] USING TRISPONDER. NOT FOUND BY E/S. GEN DEPTH 45MTRS. HYDROSEARCH LENGTH 90MTRS, BEAM 14MTRS. POSSIBLY UPSIDE DOWN BURIED WK. (HMS BULLDOG, HI 37A/77). CHART AS FOUL. BR STD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 37'.000 N Longitude = 000 02'.000 W [OGB] Square Number = 136 State = LIVE

Wreck Number 19977 Classification = Unclassified
Symbol Largest Scale Chart = 1652
Charting Comments

Old Number 013602755
Category Undefined

WGS84 Position Latitude = 50 37'.036 N Longitude = 000 02'.093 W
WGS84 Origin 3-D Cartesian Shift (BW)
Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method
Position Quality
Position Accuracy
Area at Largest Scale No

Depth
Drying Height
Height
General Depth 51 metres
Vertical Datum Lowest astronomical tide
Depth Method
Depth Quality Depth unknown
Depth Accuracy
Conspic Visual NO Conspic Radar NO
Historic NO Military NO Existence Doubtful NO
Non Sub Contact YES

Last Amended 17/04/2000
Position Last Amended 17/04/2000
Position Last Latitude = 50 37'.000 N Longitude = 000 02'.000 W
Name
Type NON-SUB CONTACT
Flag
Dimensions Length = Beam = Draught =
Tonnage
Cargo
Date Sunk

Sonar Dimensions Length = Width = Shadow Height =

Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

H095/39 NSC REPD IN 503700N, 000200W [OGB] ON 15.1.41. (C-IN-C WESTERN APPROACHES, APPENDIX A).

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 36'.967 N Longitude = 000 16'.483 W [OGB] Square Number = 136 State = LIVE

Wreck Number 19975 Classification = Unclassified

Symbol WK 40.0 Largest Scale Chart = 1652

Charting Comments

Old Number 013602731

Category Non-dangerous wreck

WGS84 Position Latitude = 50 37'.003 N Longitude = 000 16'.575 W

WGS84 Origin 3-D Cartesian Shift (BW)

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 40.0 metres

Drying Height

Height

General Depth 52 metres

Vertical Datum Lowest astronomical tide

Depth Method Found by side scan sonar

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 02/11/2004

Position Last Amended

Position Last Latitude = Longitude =

Name

Type SS

Flag

Dimensions Length = Beam = Draught =
 Tonnage
 Cargo ?COAL
 Date Sunk

Sonar Dimensions Length = 69.6 metres Width = 21.7 metres Shadow Height = 10.3 metres
 Orientation 042/222

Magnetic Anomaly

Debris Field

Scour Depth = 4.0 metres Length = Orientation =

Markers

General Comments ON PORT BEAM WITH DECK VERTICAL, BOWS SW

Circumstances of Loss

Surveying Details

**H1965/76 6.7.79 2 DCS3 CONTACTS, CLASSIFIED GOOD - POSSIBLE WK, LOCATED IN 503702N, 001626W [OGB]. LENGTH APPROX 40MTRS. NOT EXAMINED. (HMS BULLDOG, HI 37A/77). CHART AS NDW. BR STD.

**H1965/76 11.12.79 EXAM'D 16.10.79 IN 503658N, 001629W [OGB] USING TRISPONDER [2 LOP]. LEAST E/S DEPTH 43 IN GEN DEPTH 50.5MTRS. SCOUR 4MTRS DEEP. DCS3 HT 9.7MTRS, LENGTH 60MTRS, BEAM 15MTRS. LYING NE/SW. INTACT WK. (HMS BULLDOG, HI 37A/77). CHART AS WK 40MTRS IN REVISED POSN. BR STD.

**H1965/76 4.12.80 EXAM'D AGAIN 22.2.80 IN 503658N, 001634W [OGB], OTHERWISE DETAILS SIMILAR. HYDROSEARCH LENGTH 69.6MTRS, BEAM 21.7MTRS, HT 10.3MTRS. (HMS BULLDOG, HI 37A/77). NCA.

**H1310/84/32 6.9.84 LOCATED BY E/S. LEAST DEPTH 43 IN GEN DEPTH 50MTRS. NOT DIVED ON. (T W BENNETTO, 4.9.84). NCA.

**H1310/29/86 24.11.86 DIVED 8.9.85. LIES ON PORT SIDE WITH DECK VERTICAL AND BOWS SW. STANDS 12MTRS HIGH. LARGE COAL MOUND AMIDSHIPS - SPILLED OUT FROM BUNKER/HOLD. DEGAUSSING WIRE COIL RUNNING AROUND GUNWHALE INDICATES THAT THIS IS A WW II WK. (T W BENNETTO, 28.10.86).

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 35'.883 N Longitude = 000 11'.250 W [OGB] Square Number = 136 State = LIVE

Wreck Number 19961 Classification = Unclassified
 Symbol WK 46.0 Largest Scale Chart = 1652
 Charting Comments

Old Number 013602573
 Category Non-dangerous wreck

WGS84 Position Latitude = 50 35'.920 N Longitude = 000 11'.342 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System
 Position Quality Surveyed
 Position Accuracy 25.0

Area at Largest Scale No

Depth 46.0 metres

Drying Height

Height

General Depth 57 metres

Vertical Datum Lowest astronomical tide

Depth Method Found by echo-sounder

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 21/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = 50.0 metres Width = 11.4 metres Shadow Height = 11.0 metres

Orientation 045/225

Magnetic Anomaly

Debris Field

Scour Depth = 4.0 metres Length = Orientation =

Markers

General Comments IN TWO PARTS AT RIGHT ANGLES, QUOTED LENGTH IS TOTAL

Circumstances of Loss

Surveying Details

**30.12.74 LARGE WK REPD IN 503612N, 001030W [OGB] USING DECCA. (E GILES, 1974).

**H1965/76 6.7.79 DCS3 CONTACT, CLASSIFIED WK, LOCATED IN 503552N, 001117W [OGB]. LENGTH 45MTRS. LYING NE/SW. NOT EXAMINED. (HMS BULLDOG, HI 37A/77). CHART AS NDW. BR STD.

**H1965/76 11.12.79 EXAM'D 17.10.79 IN 503553N, 001115W [OGB] USING TRISponder [2 LOP].

LEAST E/S DEPTH 49 IN GEN DEPTH 57MTRS. SCOUR 4MTRS DEEP. DCS3 HT 11MTRS. WK IS BROKEN IN TWO, & APPARENTLY LYING AT 90DEGS TO EACH OTHER. SMALLER PART HT 11MTRS, LENGTH 12MTRS, BEAM 11.4MTRS, LYING 140/320DEGS. LARGER PART HT 6.6MTRS, LENGTH 38MTRS, LYING 050/230DEGS. (HMS BULLDOG, HI 37A/77). CHART AS WK 46MTRS IN REVISED POSN. BR STD.

**H1965/76 27.11.80 EXAM'D AGAIN 24.2.80. NO GREAT DIFFERENCE FROM PREVIOUS REPORT. (HMS BULLDOG, HI 37A/77). NCA.

**H1310/86 2.4.86 EXAM'D IN 1983. (SOUTHERN MARINE SERVICES). NCA.

Latitude = 50 35'.200 N Longitude = 000 06'.717 W [OGB] Square Number = 136 State = LIVE

Wreck Number 19944

Classification = Unclassified

Symbol WK 58.0

Largest Scale Chart = 1652

Charting Comments

Old Number 013602354

Category Non-dangerous wreck

WGS84 Position Latitude = 50 35'.236 N Longitude = 000 06'.810 W

WGS84 Origin 3-D Cartesian Shift (BW)

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method Electronic Distance Measuring System

Position Quality Surveyed

Position Accuracy 25.0

Area at Largest Scale No

Depth 58.0 metres

Drying Height

Height

General Depth 61 metres

Vertical Datum Lowest astronomical tide

Depth Method Swept by vertical acoustic system

Depth Quality Least depth known

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 22/03/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = 15.6 metres Width = 2.7 metres Shadow Height = 1.4 metres

Orientation 000/180

Magnetic Anomaly

Debris Field

Scour Depth = 1.0 metres Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

**H3135/44 19.9.44 WK IN 503500N, 000748W. (PORTSMOUTH NAVIGATIONAL ORDERS NO.306).

**H1965/76 26.11.80 EXAM'D 15.5.80 IN 503512N, 000643W [OGB] USING TRISPONDER. SMALL METALLIC CONTACT WITH NO SHAPE AND DIFFICULT TO MEASURE. LEAST E/S DEPTH 58.9 IN GEN

DEPTH 61MTRS. DEPTH OF SCOUR 1MTR. HYDROSEARCH LENGTH 15.6MTRS, BEAM 2.7MTRS, HT 1.4MTRS. LYING N/S. (HMS BULLDOG, HI 37A/77). CHART AS WK 58MTRS. BR STD.

**H1310/86/28 10.11.86 SMALL WK, STANDING 3MTRS HIGH. (C MARTIN, 18.10.81). NCA.

**H2350/85 17.2.87 LOCATED 28.7.86 & POSN CONFIRMED. NFS. (NP 1008, HI 317B).

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 40'.750 N Longitude = 000 05'.500 W [OGB] Square Number = 136 State = DEAD

Wreck Number 20063 Classification = Unclassified
 Symbol Largest Scale Chart = 1652
 Charting Comments POSN FOR FILING ONLY

Old Number 013603735
 Category Undefined

WGS84 Position Latitude = 50 40'.786 N Longitude = 000 05'.593 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method DECCA navigator
 Position Quality Unreliable
 Position Accuracy
 Area at Largest Scale No

Depth
 Drying Height
 Height
 General Depth 26 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Depth unknown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 16/07/2007
 Position Last Amended
 Position Last Latitude = Longitude =

Name
 Type
 Flag
 Dimensions Length = Beam = Draught =
 Tonnage
 Cargo
 Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

**H1283/75 30.4.75 WK LOCATED IN 504045N, 000530W [OGB] BY DIVERS FROM BRIGHTON BSAC. APPROX 200-300FT IN LENGTH AND APPROX 2,500TONS. (R P WATTS, 25.4.75). FOR FILING ONLY.

**H1965/76 2.12.80 NOTHING FOUND DURING INTENSIVE SEARCH WITHIN 400MTRS OF POSN. (HMS BULLDOG, HI 37A/77). AMENDED TO DEAD.

Latitude = 50 40'.333 N Longitude = 000 09'.500 W [OGB] Square Number = 136 State = DEAD

Wreck Number 20053 Classification = Unclassified

Symbol F Largest Scale Chart = 1652

Charting Comments

Old Number 013603619

Category Foul ground

WGS84 Position Latitude = 50 40'.369 N Longitude = 000 09'.593 W

WGS84 Origin 3-D Cartesian Shift (BW)

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method DECCA navigator

Position Quality Precisely known

Position Accuracy

Area at Largest Scale No

Depth

Drying Height

Height

General Depth 30 metres

Vertical Datum Lowest astronomical tide

Depth Method

Depth Quality Depth unknown

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 10/04/2000

Position Last Amended 10/04/2000

Position Last Latitude = 50 40'.333 N Longitude = 000 09'.500 W

Name

Type FISHERMENS FASTENER

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

**30.12.75 FF IN 504020N, 000930W [OGB] USING DECCA. (E GILES, 1974).

**H1965/76 2.12.80 NOTHING FOUND IN REPD POSN IN AREA OF SANDWAVES. (HMS BULLDOG, HI 37A/77). AMENDED TO DEAD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 40'.100 N Longitude = 000 11'.800 W [OGB] Square Number = 136 State = DEAD

Wreck Number 20050 Classification = Unclassified
Symbol WK USC 18.0 Largest Scale Chart = 1652
Charting Comments SEE ALSO WK [20001]

Old Number 013603589
Category Undefined

WGS84 Position Latitude = 50 40'.136 N Longitude = 000 11'.893 W
WGS84 Origin 3-D Cartesian Shift (BW)
Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method

Position Quality

Position Accuracy

Area at Largest Scale No

Depth 18.0 metres
Drying Height
Height
General Depth 28 metres
Vertical Datum Lowest astronomical tide
Depth Method
Depth Quality Least depth unknown, safe clearance at value shown
Depth Accuracy
Conspic Visual NO Conspic Radar NO
Historic NO Military NO Existence Doubtful NO
Non Sub Contact NO

Last Amended 10/04/2000

Position Last Amended

Position Last Latitude = Longitude =

Name PAGENTURM

Type SS

Flag BRITISH

Dimensions Length = 122.2 metres Beam = 15.8 metres Draught = 8.5 metres

Tonnage 5000 Gross

Cargo

Date Sunk 16/05/1917

Sonar Dimensions Length = Width = Shadow Height =
Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

**EX GERMAN, REQUISITIONED & ARMED FOR DEFENSIVE PURPOSES BY ADMIRALTY. TORPEDOED BY GERMAN UB-40 16M W OF BEACHY HEAD.

**TORPEDOED BY GERMAN SUBMARINE 16M W OF BEACHY HEAD WHILST EN ROUTE FROM LONDON TO BARRY. (LL WW1).

Surveying Details

**H7476/17 18.1.18 SUNK IN 504008N, 001150W. (AUTHORITY NOT STATED). CHART AS WK [OLD SYMBOL]. - NM 95/18.

**H6391/19 POSN AMENDED TO 504006N, 001148W. (AUTHORITY NOT STATED).

**H1656/24 5.3.24 NOW CHARTED AS DW. (AUTHORITY NOT STATED). BR STD.

**H7789/35 3.12.35 NOT LOCATED, BUT AREA 1M SQUARE AROUND 504006N, 001148W SWEEPED CLEAR TO A DEPTH OF 10FMS BY OROPESA. TRACING HELD. (HMS FLINDERS, 15.11.35). AMENDED TO NDW. - NM.

**23.7.71 NOW CHARTED AS USC 18.0MTRS. (TONNAGE KNOWN). NC 1652.

**30.12.74 FF REPD IN 504024N, 001148W [OGB] USING DECCA. (E GILES, 1974). NCA.

**H1310/80 15.10.80 SEARCHED FOR BUT NOT FOUND. (J SALSURY, 4.9.80). NCA.

**H1965/76 1.12.80 NOTHING FOUND DURING INTENSIVE SEARCH WITHIN 400MTRS OF CHARTED POSN, OR DURING AREA SEARCH WITHIN 1.5M. (HMS BULLDOG, HI 37A/77). DELETED. AMENDED TO DEAD. R/P.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 40'.000 N Longitude = 000 20'.900 W [OGB] Square Number = 136 State = DEAD

Wreck Number 20046 Classification = Unclassified

Symbol Largest Scale Chart = 1652

Charting Comments POSN FOR FILING ONLY

Old Number 013603541

Category Undefined

WGS84 Position Latitude = 50 40'.036 N Longitude = 000 20'.992 W

WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method
 Position Quality Unreliable
 Position Accuracy
 Area at Largest Scale No

Depth
 Drying Height
 Height
 General Depth 24 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Depth unknown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 14/11/2002
 Position Last Amended 03/01/2001
 Position Last Latitude = 50 40'.000 N Longitude = 000 20'.900 W
 Name
 Type
 Flag
 Dimensions Length = Beam = Draught =
 Tonnage
 Cargo
 Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers
 General Comments

Circumstances of Loss

Surveying Details
 **H2351/17 16.4.17 WK WITH 2 MASTS VISIBLE IN 504000N, 002100W. (ADMIRALTY). CHART AS WK [OLD SYMBOL] (2 MASTS VISIBLE). - FNM 223/17. [LATER BY NM 101/18].
 **H3211/17 24.1.18 WK IN 504000N, 002100W TO BE DISPERSED. TWO MASTS VISIBLE. (AUTHORITY NOT STATED).
 **H1656/24 5.3.24 WK SYMBOL AMENDED TO DW. (AUTHORITY NOT STATED). SQ. DATE.
 **H632/31 10.2.31 NOW CHARTED AS DW PA.
 **H7789/35 SWEEPED TO 10FMS BY OROPESA. POSN 504000N, 002100W. (HMS FLINDERS, 15.11.35). AMEND TO NDWPA. - NM 2138/35.
 **23.7.71 NOW CHARTED AS USCPA 18.0MTRS. NC 1652.

**H3958/73 15.8.73 NOT FOUND DURING TRANSIT SONAR AND E/S SURVEY. ON EDGE OF THE SURVEY. (KELVIN HUGHES SURVEY K6719/3). NCA.

**H4121/76 19.1.77 NOT FOUND DURING SONAR SEARCH. (HMS FOX, HI 52/76). DELETE. - NM 492/77.

**2.8.82 THOUGHT TO HAVE BEEN LOCATED BY SUB-AQUA DIVERS. MORE DETAILS TO FOLLOW. (MR SALSURY, TELECON 2.8.82). RETAIN POSN FOR FILING ONLY.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

**HH091/002/01 14.11.02 NOT LOCATED, DISPROVED. SURROUNDING SEABED IS FLAT WITH NO EVIDENCE OF SCOURING OR WRECKAGE. (NP 1016, HI 1002). AMENDED DEAD. NCA.

Latitude = 50 40'.000 N Longitude = 000 19'.100 W [UND] Square Number = 136 State = DEAD

Wreck Number 20045 Classification = Unclassified
 Symbol WK USC PA 18.0 Largest Scale Chart = 1652
 Charting Comments

Old Number 013603528
 Category Undefined

WGS84 Position Latitude = 50 40'.000 N Longitude = 000 19'.100 W
 WGS84 Origin Undefined
 Horizontal Datum UND UNDETERMINED

Position Method
 Position Quality Approximate
 Position Accuracy
 Area at Largest Scale No

Depth 18.0 metres
 Drying Height
 Height
 General Depth 25 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Least depth unknown, safe clearance at value shown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 10/04/2000
 Position Last Amended
 Position Last Latitude = Longitude =

Name IKEDA
 Type STEEL
 Flag BRITISH
 Dimensions Length = 125.0 metres Beam = 16.2 metres Draught = 11.3 metres
 Tonnage 6311 Gross
 Cargo BALLAST
 Date Sunk 21/03/1918

Sonar Dimensions Length = Width = Shadow Height =

Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

**TORPEDOED & SUNK BY GERMAN SUBMARINE UB40, WHILST EN-ROUTE LONDON TO GALVESTON. (DER KRIEG ZUR SEE).

Surveying Details

**H1717/18 & H2425/18 25.3.18 SUNK 7M W [MAG] OF BRIGHTON LTV IN ABOUT 15FMS. (CUSTOM HOUSE, NEWHAVEN, RECORDER OF WRECKS). GIVES APPROX POSN 504000N, 001906W.

**25.3.18 SUNK 7M W [MAG] OF BRIGHTON LTV. NO DANGER TO SURFACE NAVIGATION. (AUTHORITY NOT STATED).

**1.4.18 SUNK 3M NW OF BRIGHTON LTV. REPD BY HMT JOHN FELTON. (AP PORTSMOUTH, DOCKET M08180).

**1.4.18 SUNK 8M OFF BRIGHTON LTV. (SNO NEWHAVEN, DOCKET M08180).

**H6391/19 CHART AS WK [OLD SYMBOL] PA IN 504000N, 001906W. (AUTHORITY NOT STATED).

**H1656/24 5.3.24 NOW CHARTED AS DW. (AUTHORITY NOT STATED). BR STD.

**H632/31 10.2.31 NOW CHARTED AS DW PA. (AUTHORITY NOT STATED). NE 2451.

**H7789/35 3.12.35 NOT FOUND. CHARTED POSN SWEEP CLEAR TO 10FMS. (HMS FLINDERS, 15.11.35). AMEND TO NDW PA. BR STD.

**23.7.71 NOW CHARTED AS USC PA 18.0MTRS. (TONNAGE KNOWN). NC 1652.

**H4121/76 19.1.77 WRECK NOT FOUND DURING AREA SONAR SEARCH. MAY BE THE NEW WK [20059] LOCATED IN 504039N, 001944W, BUT DIMENSIONS DO NOT AGREE. (HMS FOX, HI 52/76). DELETE. - NM 492/77.

**H1965/76 2.12.80 NOTHING FOUND AROUND 504000N, 001906W IN FEATURELESS AREA. (HMS BULLDOG, HI 37A/77). AMENDED TO DEAD. [SEE WK [20080] IN 504218N, 001417W].

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 40'.000 N Longitude = 000 12'.000 W [OGB] Square Number = 136 State = DEAD

Wreck Number 20044 Classification = Unclassified

Symbol Largest Scale Chart = 1652

Charting Comments POSN FOR FILING ONLY

Old Number 013603516

Category Undefined

WGS84 Position Latitude = 50 40'.036 N Longitude = 000 12'.093 W

WGS84 Origin 3-D Cartesian Shift (BW)

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method

Position Quality Unreliable

Position Accuracy

Area at Largest Scale No

Depth

Drying Height
 Height
 General Depth 30 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Depth unknown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 19/06/2007
 Position Last Amended
 Position Last Latitude = Longitude =

Name ST ANNE
 Type SS
 Flag FRENCH
 Dimensions Length = Beam = Draught =
 Tonnage 2247 Gross
 Cargo
 Date Sunk 07/04/1924

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers
 General Comments

Circumstances of Loss

Surveying Details
 **H2617/24 SANK IN APPROX 504000N, 001200W. SEARCHED FOR BUT NOT LOCATED. (TH, 14.4.24).
 NCA. POSN FOR FILING ONLY.
 **H1965/76 1.12.80 NOTHING FOUND DURING INTENSIVE SEARCH WITHIN 400MTRS OF POSN. (HMS
 BULLDOG, HI 37A/77). DELETE. NCA.

Latitude = 50 40'.000 N Longitude = 000 07'.800 W [OGB] Square Number = 136 State = DEAD

Wreck Number 20043 Classification = Unclassified
 Symbol F Largest Scale Chart = 1652
 Charting Comments

Old Number 013603504
 Category Foul ground

WGS84 Position Latitude = 50 40'.036 N Longitude = 000 07'.893 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method DECCA navigator
 Position Quality Precisely known
 Position Accuracy
 Area at Largest Scale No

Depth
 Drying Height
 Height
 General Depth 50 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Depth unknown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 10/04/2000
 Position Last Amended 10/04/2000
 Position Last Latitude = 50 40'.000 N Longitude = 000 07'.800 W
 Name
 Type FISHERMENS FASTENER
 Flag
 Dimensions Length = Beam = Draught =
 Tonnage
 Cargo
 Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers
 General Comments

Circumstances of Loss

Surveying Details
 **30.12.74 FF IN 504000N, 000748W [OGB] USING DECCA. (E GILES, 1974).
 **H1965/76 1.12.80 NOTHING FOUND IN AREA OF SANDWAVES. (HMS BULLDOG, HI 37A/77).
 AMENDED TO DEAD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 39'.200 N Longitude = 000 11'.750 W [OGB] Square Number = 136 State = DEAD

Wreck Number 20029 Classification = Unclassified
 Symbol F Largest Scale Chart = 1652
 Charting Comments

Old Number 013603358
 Category Foul ground

WGS84 Position Latitude = 50 39'.236 N Longitude = 000 11'.843 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method DECCA navigator
 Position Quality Precisely known
 Position Accuracy
 Area at Largest Scale No

Depth
 Drying Height
 Height
 General Depth 50 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Depth unknown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 19/06/2007
 Position Last Amended
 Position Last Latitude = Longitude =

Name
 Type FISHERMENS FASTENER
 Flag
 Dimensions Length = Beam = Draught =
 Tonnage
 Cargo
 Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers
 General Comments

Circumstances of Loss

Surveying Details
 **30.12.74 FF IN 503912N, 001145W [OGB] USING DECCA. (E GILES, 1974). NCA.
 **H1965/76 28.11.80 NOTHING FOUND DURING INTENSIVE SEARCH WITHIN 400MTRS OF POSN. (HMS BULLDOG, HI 37A/77). DELETE. NCA.

Latitude = 50 39'.000 N Longitude = 000 07'.833 W [OGB] Square Number = 136 State = DEAD

Wreck Number 20025 Classification = Unclassified
 Symbol WK 43.0 Largest Scale Chart = 1652
 Charting Comments SEE ALSO WK [20056]

Old Number 013603310
 Category Non-dangerous wreck

WGS84 Position Latitude = 50 39'.036 N Longitude = 000 07'.926 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method
 Position Quality Precisely known
 Position Accuracy
 Area at Largest Scale No

Depth 43.0 metres
 Drying Height
 Height
 General Depth 47 metres
 Vertical Datum Lowest astronomical tide
 Depth Method Found by echo-sounder
 Depth Quality Least depth known
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 11/04/2000
 Position Last Amended
 Position Last Latitude = Longitude =

Name
 Type
 Flag
 Dimensions Length = Beam = Draught =
 Tonnage
 Cargo
 Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers
 General Comments

Circumstances of Loss

Surveying Details

**H2411/49 26.4.49 REPD TO HAVE SUNK IN 503900N, 000750W [OGB], 21M E OF OWERS LTV. (DOCG, NEWHAVEN, 14.4.49). CHART AS NDW. BR STD.

**H2411/49 SEARCH CARRIED OUT IN 503900N, 000750W. NO RUN OBSERVED BUT E/S GAVE LEAST DEPTH OF 145FT OVER AN INDICATED DEPTH OF 156FT. ON CHART IT IS PRESUMED THAT THIS DEPTH OF 11FT IS WK LYING ON ITS SIDE. (TH, 18.5.49). [SEE ALSO WK [20056], 'CITY OF WATERFORD', IN 504030N, 000636W].

**23.7.71 NOW CHARTED AS WK 44MTRS. NC 1652.

**7.4.72 NOW CHARTED AS WK 43MTRS [LAT]. NC 1652.

**30.12.74 FF IN 503900N, 000750W [OGB] USING DECCA. (E GILES, 1974). NCA.

*-H1965/76 9.12.80 NOTHING FOUND DURING INTENSIVE SEARCH WITHIN 400MTRS OF POSN. (HMS BULLDOG, HI 37A/77). DELETED. AMENDED TO DEAD. R/S.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 38'.800 N Longitude = 000 02'.800 W [OGB] Square Number = 136 State = DEAD

Wreck Number 20021 Classification = Unclassified
 Symbol Largest Scale Chart = 1652
 Charting Comments POSN FOR FILING ONLY

Old Number 013603279
 Category Undefined

WGS84 Position Latitude = 50 38'.836 N Longitude = 000 02'.893 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method
 Position Quality Unreliable
 Position Accuracy
 Area at Largest Scale No

Depth
 Drying Height
 Height
 General Depth 48 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Depth unknown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 16/07/2007
 Position Last Amended 11/04/2000
 Position Last Latitude = 50 38'.800 N Longitude = 000 02'.800 W

Name LEACHS ROMANCE
 Type FISHING VESSEL

Flag BRITISH
 Dimensions Length = Beam = Draught =
 Tonnage 44 Gross
 Cargo
 Date Sunk 29/07/1940

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

**MINED 10.5M DUE S OF KEMP TOWN. 4 LIVES LOST. (LL WW1 & WW1SL).

Surveying Details

**SUNK 50DEGS, 38.8M, 0DEGS 02.8M 10.5M S OF KEMP TOWN. (WKS OFFICERS RECORD CARDS)

**H01001/40 POSN 10.5M S OF KEMP TOWN. (TD LIST DW 6353/41 P34).

**H01001/40 REPORTED 10.5M S OF KEMP TOWN. (MSL 29.7.40). POSN 503848N, 000248W FOR FILING ONLY.

**H1965/76 28.11.80 NOTHING FOUND DURING INTENSIVE SEARCH WITHIN 400MTRS OF POSN. (HMS BULLDOG, HI 37A/77). AMENDED TO DEAD. NCA.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 38'.750 N Longitude = 000 12'.500 W [OGB] Square Number = 136 State = DEAD

Wreck Number 20018 Classification = Unclassified
 Symbol F Largest Scale Chart = 1652
 Charting Comments

Old Number 013603243
 Category Foul ground

WGS84 Position Latitude = 50 38'.786 N Longitude = 000 12'.592 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method DECCA navigator
 Position Quality Precisely known
 Position Accuracy
 Area at Largest Scale No

Depth
 Drying Height
 Height
 General Depth 50 metres
 Vertical Datum Lowest astronomical tide
 Depth Method

Depth Quality Depth unknown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 16/07/2007
 Position Last Amended
 Position Last Latitude = Longitude =

Name
 Type FISHERMENS FASTENER
 Flag
 Dimensions Length = Beam = Draught =
 Tonnage
 Cargo
 Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers
 General Comments

Circumstances of Loss

Surveying Details

****30.12.74 FF IN 503845N, 001230W [OGB] USING DECCA. (E GILES, 1974). NCA.**
****H1289/76/351 26.10.76 A WK THAT IS ONLY A SMALL CARGO VESSEL OF APPROX 36TONS. MR R TODD HAS PURCHASED THIS VESSEL AND KNOWS THE NAME. (R D SOTHERN, EAST MOLESEY, SURREY, 18.10.76). NCA.**
****H1965/76 27.11.80 NOTHING FOUND IN INTENSIVE SEARCH USING HYDROSEARCH WITH 400MTRS OF THIS POSN. (HMS BULLDOG, HI 37A/77). AMEND DEAD. NCA.**

Latitude = 50 37'.333 N Longitude = 000 08'.500 W [OGB] Square Number = 136 State = DEAD

Wreck Number 19983 Classification = Unclassified
 Symbol WK USC PA 18.0 Largest Scale Chart = 1652
 Charting Comments

Old Number 013602834
 Category Dangerous wreck

WGS84 Position Latitude = 50 37'.369 N Longitude = 000 08'.593 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method
 Position Quality Approximate

Position Accuracy

Area at Largest Scale No

Depth 18.0 metres

Drying Height

Height

General Depth 45 metres

Vertical Datum Lowest astronomical tide

Depth Method

Depth Quality Least depth unknown, safe clearance at value shown

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 19/06/2007

Position Last Amended

Position Last Latitude = Longitude =

Name TYCHO

Type SS

Flag BRITISH

Dimensions Length = 102.1 metres Beam = 14.3 metres Draught = 7.0 metres

Tonnage 3216 Gross

Cargo GENERAL

Date Sunk 20/05/1917

Sonar Dimensions Length = Width = Shadow Height =

Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

**BUILT IN 1904 BY EARLE'S SHIPBUILDING & ENGINEERING CO. OWNED AT THE TIME OF LOSS BY ELLERMAN'S WILSON LINE. TRIPLE EXPANSION ENGINE, SINGLE SHAFT. PASSAGE FALMOUTH FOR HULL. TORPEDOED BY UB-40. 15 MEN LOST. (DODS & SIBI).

Surveying Details

**WRECK IN POSN 16M W 0.5 S FROM BEACHY HEAD. (WW1SL).

**23.7.71 NOW CHARTED AS USC PA 18MTRS IN 503720N, 000830W [OGB]. (AUTHORITY NOT STATED). NC1652.

**H1965/76 9.7.79 DCS3 CONTACT, CLASSIFIED GOOD, POSSIBLE WK, LOCATED IN 503758N, 000821W [OGB]. NOT EXAM'D. (HMS BULLDOG, HI 37A/77). AMEND TO USC 35MTRS IN REVISED POSN. R/P.

**H1965/76 14.12.79 CONTACT IN 503758N, 000821W EXAM'D AND CONFIRMED AS BOTTOM RETURN. (HMS BULLDOG, HI 37A/77). ALSO NOTHING LOCATED IN ORIGINAL CHARTED POSN. DELETE. BR STD.

Latitude = 50 37'.150 N Longitude = 000 16'.533 W [OGB] Square Number = 136 State = DEAD

Wreck Number 58365 Classification = Unclassified

Symbol WK Largest Scale Chart = 1652
 Charting Comments
 Old Number
 Category Undefined

WGS84 Position Latitude = 50 37'.186 N Longitude = 000 16'.625 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method
 Position Quality Unreliable
 Position Accuracy
 Area at Largest Scale No

Depth
 Drying Height
 Height
 General Depth 50 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Depth unknown
 Depth Accuracy

Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 11/04/2000
 Position Last Amended
 Position Last Latitude = Longitude =

Name
 Type
 Flag
 Dimensions Length = Beam = Draught =
 Tonnage
 Cargo
 Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers
 General Comments

Circumstances of Loss

Surveying Details
 **H1965/76 6.7.79 DCS3 CONTACT, CLASSIFIED GOOD POSSIBLE WRECK, LOCATED IN 503709N,
 001632W [OGB]. NOT EXAMINED. (HMS BULLDOG, HI 37A/77). NCA YET. POSN FOR FILING ONLY.

****H1965/76 14.12.79 POSITION EXAMINED AND FOUND TO BE BOTTOM CONTACT. (HMS BULLDOG, HI 37A/77). AMENDED TO DEAD.**

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 37'.000 N Longitude = 000 08'.500 W [OGB] Square Number = 136 State = DEAD

Wreck Number 19978 Classification = Unclassified
 Symbol WK USC PA 25.0 Largest Scale Chart = 1652
 Charting Comments

Old Number 013602767
 Category Dangerous wreck

WGS84 Position Latitude = 50 37'.036 N Longitude = 000 08'.593 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method
 Position Quality Approximate
 Position Accuracy
 Area at Largest Scale No

Depth 25.0 metres
 Drying Height
 Height
 General Depth 40 metres
 Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Least depth unknown, safe clearance at value shown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 16/12/1980
 Position Last Amended
 Position Last Latitude = Longitude =

Name PORTHKERRY
 Type STEAMSHIP
 Flag BRITISH
 Dimensions Length = 85.3 metres Beam = 12.2 metres Draught = 5.5 metres
 Tonnage 1920 Gross
 Cargo
 Date Sunk 20/05/1917

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

**VESSEL, BUILT 1911 BY J CROWN & SONS AND OWNED AT THE TIME OF LOSS BY PORTHCAWL STEAMSHIP CO., WAS TORPEDOED AND SUNK BY GERMAN SUBMARINE 16M W BY S OF BEACHY HEAD. CAPTAIN & 6 CREW KILLED. (DODS).

Surveying Details

**SUNK 16M W BY S FROM BEACHY HEAD IN APPROX 503700N, 000830W. (WW1SL).

**H2537/28 18.8.18 WRECK NOT CHARTED.

**23.7.71 NOW CHARTED AS USC PA 18 MTRS. (AUTHORITY NOT STATED). NC 1652.

**4.4.78 AMENDED TO USC PA 25.0MTRS. (AUTHORITY NOT STATED).

**H1965/76 27.11.80 NOTHING FOUND IN AN AREA OF SANDWAVES. (HMS BULLDOG, HI 37A/77). DELETED. AMENDED TO DEAD. R/P.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 36'.533 N Longitude = 000 06'.617 W [OGB] Square Number = 136 State = DEAD

Wreck Number 58367 Classification = Unclassified
 Symbol F Largest Scale Chart = 1652
 Charting Comments
 Old Number
 Category Foul ground

WGS84 Position Latitude = 50 36'.569 N Longitude = 000 06'.710 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method DECCA navigator
 Position Quality Precisely known
 Position Accuracy
 Area at Largest Scale No

Depth

Drying Height

Height

General Depth 56 metres

Vertical Datum Lowest astronomical tide

Depth Method

Depth Quality Depth unknown

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 12/04/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type FISHERMENS FASTENER

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = Width = Shadow Height =

Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

**H2979/74 11.5.76 FF IN 503632N, 000637W [OGB] USING DECCA. (E GILES, 1976). NCA.

**H1965/76 27.11.80 NOTHING FOUND. (HMS BULLDOG, HI 37A/77). AMENDED TO DEAD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 36'.000 N Longitude = 000 04'.000 W [OGB] Square Number = 136 State = DEAD

Wreck Number 19962 Classification = Unclassified

Symbol Largest Scale Chart = 1652

Charting Comments

Old Number 013602585

Category Undefined

WGS84 Position Latitude = 50 36'.036 N Longitude = 000 04'.093 W

WGS84 Origin 3-D Cartesian Shift (BW)

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method

Position Quality

Position Accuracy

Area at Largest Scale No

Depth

Drying Height

Height

General Depth 50 metres

Vertical Datum Lowest astronomical tide

Depth Method

Depth Quality Depth unknown

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact YES

Last Amended 18/04/2000
 Position Last Amended 18/04/2000
 Position Last Latitude = 50 36'.000 N Longitude = 000 04'.000 W

Name

Type NON-SUB CONTACT

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

**H03135/44 NSC REPD IN 503600N, 000400W [OGB] ON 24.8.44. (PORTSMOUTH LIST NAV ORDERS 51).

**H2330/84 24.7.85 NOTHING FOUND DURING INTENSIVE SEARCH EXCEPT AN 8MTR HIGH ROCK RIDGE WITH SHEER FACE. DISPROVED. (HMS BULLDOG, HI 240A). AMENDED TO DEAD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 35'.617 N Longitude = 000 07'.317 W [OGB] Square Number = 136 State = DEAD

Wreck Number 58368 Classification = Unclassified

Symbol F Largest Scale Chart = 1652

Charting Comments

Old Number

Category Foul ground

WGS84 Position Latitude = 50 35'.653 N Longitude = 000 07'.409 W

WGS84 Origin 3-D Cartesian Shift (BW)

Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method DECCA navigator

Position Quality Precisely known

Position Accuracy

Area at Largest Scale No

Depth

Drying Height

Height

General Depth 56 metres

Vertical Datum Lowest astronomical tide
 Depth Method
 Depth Quality Depth unknown
 Depth Accuracy
 Conspic Visual NO Conspic Radar NO
 Historic NO Military NO Existence Doubtful NO
 Non Sub Contact NO

Last Amended 11/04/2000
 Position Last Amended
 Position Last Latitude = Longitude =

Name
 Type FISHERMENS FASTENER
 Flag
 Dimensions Length = Beam = Draught =
 Tonnage
 Cargo
 Date Sunk

Sonar Dimensions Length = Width = Shadow Height =
 Orientation

Magnetic Anomaly
 Debris Field
 Scour Depth = Length = Orientation =

Markers
 General Comments

Circumstances of Loss

Surveying Details
 **H2979/74 11.5.76 FF IN 503537N, 000719W [OGB] USING DECCA. (E GILES, 13.4.76). NCA.
 **H1965/76 26.11.80 NOTHING FOUND IN AREA OF SAND RIPPLES. (HMS BULLDOG, HI 37A/77).
 AMENDED TO DEAD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

Latitude = 50 35'.283 N Longitude = 000 07'.467 W [OGB] Square Number = 136 State = DEAD

Wreck Number 58369 Classification = Unclassified
 Symbol F Largest Scale Chart = 1652
 Charting Comments
 Old Number
 Category Foul ground

WGS84 Position Latitude = 50 35'.320 N Longitude = 000 07'.559 W
 WGS84 Origin 3-D Cartesian Shift (BW)
 Horizontal Datum OGB ORDNANCE SURVEY OF GREAT BRITAIN (1936)

Position Method DECCA navigator
 Position Quality Precisely known

Position Accuracy

Area at Largest Scale No

Depth

Drying Height

Height

General Depth 56 metres

Vertical Datum Lowest astronomical tide

Depth Method

Depth Quality Depth unknown

Depth Accuracy

Conspic Visual NO Conspic Radar NO

Historic NO Military NO Existence Doubtful NO

Non Sub Contact NO

Last Amended 11/04/2000

Position Last Amended

Position Last Latitude = Longitude =

Name

Type FISHERMENS FASTENER

Flag

Dimensions Length = Beam = Draught =

Tonnage

Cargo

Date Sunk

Sonar Dimensions Length = Width = Shadow Height =

Orientation

Magnetic Anomaly

Debris Field

Scour Depth = Length = Orientation =

Markers

General Comments

Circumstances of Loss

Surveying Details

**H2979/74 11.5.76 FF IN 503517N, 000728W [OGB] USING DECCA. (E GILES, 13.4.76). NCA.

**H1965/76 26.11.80 NOTHING FOUND IN AREA OF SAND RIPPLES. (HMS BULLDOG, HI 37A/77).

AMENDED TO DEAD.

POSITIONS BELOW THIS POINT ARE IN DEGREES, MINUTES AND DECIMALS OF A MINUTE

