

Stirling Castle: Archive Summary Report

Final Report

July 2009

Stirling Castle Archive Summary Report

Final Report

Prepared by Hampshire & Wight Trust for Maritime Archaeology National Oceanography Centre, Southampton

> On behalf of English Heritage Fort Cumberland, Portsmouth

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This project has been undertaken by Virginia Dellino-Musgrave, Julie Satchell and Mark James with contributions from Alison Hamer and Christin Heamagi. Preparatory work and initial contributions to the Project Design were undertaken by Douglas McElvogue.

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ii. Project Summary

English Heritage commissioned the Hampshire and Wight Trust for Maritime Archaeology (HWTMA) to audit and appraise the archive for the Protected Wreck Site of the *Stirling Castle*. The ship was lost in the Great Storm of 1703. It is located towards the north-west side of the Goodwin Sands, *c.* 8.5 kilometres north-east of Deal, Kent.

The project involved locating, visiting and appraising site archive material including site records, surveys, images, videos and artefacts. The relevance of this work is to provide an archive audit and appraisal as an initial step in helping to enable public access to an archive of local, regional, national and international importance. Making the archive available will allow further research on this protected site to enhance understanding about the wreck's history, its significance and its environment. It will also enable public enjoyment of a common, unique, finite and non-renewable heritage asset.

For this study, a wide range of national, regional and local bodies and organisations and several private individuals were consulted. The data was managed within a MS Access database which conforms to the Archaeological Service (ADS) policy and quidelines for digital records Data (http://ads.ahds.ac.uk/project/userinfo/digitalTextArchiving.html). The database is also compliant with MIDAS Heritage, the data standard for information about the historic environment (MIDAS heritage 2007).

This report sets out the process followed to assess and audit the archive of the Protected Wreck Site of the *Stirling Castle*. It includes an account of the background and history of the site before presenting the results by archive type and location. The source database is included on a CD-ROM provided with this report.

The results of the archive audit by type and location have shown that cross referencing, cataloguing, ordering and indexing will be required to enable a comprehensive assessment and analysis of the *Stirling Castle* archive. This will allow a wider understanding of the *Stirling Castle* and its relevance local, regional, national and international levels.

Comparison with other vessels of that time would be useful to further contextualise the *Stirling Castle* wreck site as well as enabling further assessment of its significance. This will also provide a more comprehensive understanding of the people who worked and travelled on the *Stirling Castle* and their history. More importantly, it will enable to understand the *Stirling Castle* as a social product of its time.

1. Project Background

1.1. INTRODUCTION

English Heritage commissioned the Hampshire and Wight Trust for Maritime Archaeology (HWTMA) to audit and appraise the archive for the Protected Wreck Site of the *Stirling Castle*. The site is located off the south east coast of England, off Kent, towards the north-west side of the Goodwin Sands, *c.* 8.5 kilometres north-east of Deal, Kent.

The project involved locating, visiting and appraising site archive material including site records, surveys, images, videos and artefacts. The relevance of this work is to provide an archive audit and appraisal to help develop future project phases which will include assessment, analysis and dissemination activities to enable public access to this archive of local, regional, national and international importance. This work is required to build on the significant work undertaken by a range of licensees on the site which has resulted in a large but dispersed archive material. This material has remained largely unpublished and inaccessible due to lack of funding and support.

For this study, a number of national, regional and local bodies and organisations and several private individuals were consulted. The data was managed within a MS Access database which conforms to the Archaeological Data Service (ADS) policy and guidelines for digital records (<u>http://ads.ahds.ac.uk/project/userinfo/digitalTextArchiving.html</u>). The database is also compliant with MIDAS Heritage (MIDAS heritage 2007).

1.2. SITE LOCATION

The *Stirling Castle* is located off the south east coast of England, off Kent, towards the north-west side of the Goodwin Sands, *c*. 8.5 kilometres north-east of Deal, Kent (NGR 644689 158640, WGS84 51° 16.46 N 01° 30.41 E) (**Figure 1**). The wreck was discovered in 1979 by local divers undertaking a survey of wrecks off Ramsgate and is charted as lying 12.1 metres below chart datum (Admiralty Chart 1828). It should be noted that chart datum at Deal is 3.40 metres below Ordnance Datum (Newlyn).

Earlier work had suggested that there is an overall stability of the Goodwin Sands, where the *Stirling Castle* lies, contributing to the preservation of this

wreck site (Cloet 1954). However, more recent work suggests that the *Stirling Castle* lies in a very dynamic environment with significant sediment movement (Bates et al 2007; Elderfield 2001; Peacock 2006, 2007). This is now a cause for concern regarding the future survival of the site.

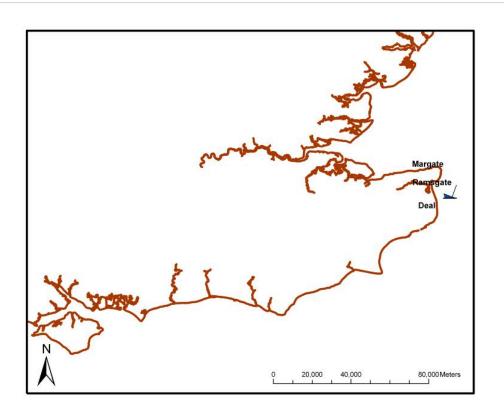


Figure 1. Location of the *Stirling Castle* Designated Wreck Site.

1.3. PHASES OF WORK

A phased approach to the project has been adopted and will consist of four phases:

- Phase One archaeological archive audit and appraisal;
- Phase Two archival assessment and analysis;
- Phase Three targeted archaeological recording and interpretation; and
- Phase Four publication and dissemination.

This summary report focuses on Phase One. The archaeological archive audit and appraisal consisted of:

- Collation and appraisal of the known archaeological and historical archive pertaining to the *Stirling Castle*;
- Collation and appraisal of known survey data on the site;
- Creation of a database (Microsoft Access) of all known records pertaining to the *Stirling Castle* and accompanying summary report; and
- Development of requirements for Phase Two work.

Consequently, this report details the known archive for the *Stirling Castle* Protected Wreck Site, the archive type and the location. Recommendations for future analysis, assessment and research have been identified. This report serves as a summary for Phase One of the scheme of work and provides the basis for Phase Two work.

2. *Stirling Castle* Background and History

2.1. SITE DESCRIPTION

The archaeological components of the *Stirling Castle* consist of a partially exposed hull and internal structure (Wessex Archaeology 2007a). The site is unstable and the structure of the vessel has been collapsing through the years due to changes to the environmental dynamics of the area (Bates et al 2007; Peacock 2006, 2007; Wessex Archaeology 2007a). Therefore, a natural degradation affecting the physical integrity of some areas of the *Stirling Castle* site is occurring, with an increased sediment reduction from midships to the starboard side (Peacock 2006, 2007).

2.2. THE ENVIRONMENT

The wreck lies in a very dynamic environment responsible for the original burying of the site, preserving it for the past 300 years. This dynamic environment is now causing the burial and exposure of the site affecting its stabilisation and preservation.

After the initial discovery in 1979, the wreck was rapidly re-buried by the shifting sands. In 1998, the wreck became exposed again. This trend of burial and re-burial has become continuous and has been accentuated by the scouring effect of the sea (see Bates et al 2007; Elderfield 2001). As observed by Bates et al (2007) and Elderfield (2001), the significant sediment movement in the designated area has affected the stabilisation of the site (also see Peacock 2006, 2007).

2.3. THE LOSS OF THE STIRLING CASTLE

The *Stirling Castle* is one of sixteen pre-establishment Third Rates of 70 guns rebuilt between 1697 and 1702 (Lavery 1983). In the early hours of 27th November during the Great Storm of 1703 the *Stirling Castle* wrecked on the Goodwin Sands, loosing four fifths of the crew. The dynamic environment of the Goodwin Sands buried the vessel, preserving it until the sand shifted and the wreck was discovered by the local Ramsgate Dive Club in 1979. The storm also claimed two other third rates of the same fleet, *Northumberland* and *Restoration*. The current licensee for the *Stirling Castle*, Robert Peacock, is also undertaking work on these two sites.

2.4. THE SHIP AND ITS SIGNIFICANCE

The *Stirling Castle* was one of 30 great ships of the line built as part of Samuel Pepys 1677 shipbuilding programme. The programme consisted of 1 first rate, 9 second rates and 20 third rates. The initial design of the new ships agreed by Parliament was found lacking so the King himself, Charles II, proclaimed that he would pay for the needed alterations to the size of each vessel from his own purse. To simplify maintenance the King insisted the masts, spars, rigging and fittings of each rate be standardised, whilst Pepys ensured the ordnance was also standardised. This marked the first steps in the control of naval architecture by the naval administration. The size of the building programme strained the resources of the Royal Dockyards and meant

that the new ships were ordered in two instalments. The first instalment consisted of 3 second rates and 12 third rates, and the second instalment of 1 first rate, 6 second rates and 8 more third rates (Chamberlain 2002; Larn 1977, Larn & Larn 1995).

The *Stirling Castle* was a third rate laid down as part of the first instalment of ships in 1677. It was built by John Shish and completed in two years, being launched at Deptford on the south bank of the river Thames in 1679 (Colledge 1987). At 1,114 tons the *Stirling Castle* was slightly larger than the average 3rd rate as laid down in the specifications of the 1677 programme (Colledge 1987).

The *Stirling Castle* was amongst the third rates listed in the Revolution Fleet of 1688. During 1699 the ship was rebuilt, and in 1701 was refitted and commissioned back into the Navy (Colledge 1987).

Until the Second Dutch War (c.1665-1667) fleets engaged each other in a general melee. Each vessel sought out its own adversary, with Admirals seeking their opposite number and visa versa down the line of hierarchy (Israel 1998; Lambert 2000). By the Second Dutch War, fleets were being organised in squadrons and line ahead formations became the standard tactic (Chamberlain 2002). This appears to have been initiated first in the English Navy in their standing orders.

All the ships of the 1677 ship building programme (1st, 2nd and 3rd rates) were vessels powerful enough to form up in the line of battle. As such the *Stirling Castle* represents a vessel designed and built from the earliest period of the 'Line of Battle', a period that would continue till the advent of steam propulsion, as seen in *HMS Warrior*, and the period in which the Royal Navy established itself as the premier Naval power in the world (Chamberlain 2002; Larn 1977, Larn & Larn 1995).

English maritime power expanded beyond local waters during the period after the Dutch wars. This became the period of the continental navy, which saw developments in ship design, build and rig to deal with the new environment. The *Stirling Castle* represents a ship wrecked during this pivotal period with high potential for understanding the developments in ship design, build and rig of this period (Chamberlain 2002; Larn 1977, Larn & Larn 1995). For example, due to the good preservation within the site environment observed to date, the *Stirling Castle* archaeological potential is deemed to be high (Wessex Archaeology 2003b, 2007a). The surviving material from this site will help to answer significant questions about daily living, not only on board a pre-Georgian ship but also about the 17th and early 18th century society, shedding new light on the development of the Modern World.

2.5. SITE OWNERSHIP

In December 1980, the wreck was purchased outright from the Ministry of Defence by the Isle of Thanet Archaeological Unit (now the Isle of Thanet Archaeological Society). Items of personal property remaining within the wreck were possibly purchased in 1982 (Isle of Thanet Archaeological Society)

archive). In this year, as a fundraising event, the Society sold 64 shares in the *Stirling Castle.* A list of assignees is available from the Society.

2.6. LICENSING HISTORY AND PAST ARCHAEOLOGICAL INVESTIGATIONS

Following the discovery of the site in 1979, and prior to designation in 1980, extensive work on the site was undertaken, including photo and video surveys and the recovery of several artefacts (Lyon 1980). The work was undertaken by local amateur divers who joined the Isle of Thanet Archaeological Unit to form an underwater research group. This work was carried out in association with local fishermen, providing an example of collaborative work amongst various interested parties. These activities were undertaken to the best of the team's ability but with scarce support.

In May 1980, the United Kingdom Hydrographic Office (UKHO) confirmed the position of the wreck. By June 1980, the *Stirling Castle* was designated under the Protection of Wrecks Act 1973 (Statutory Instrument (SI) 1980/645). Following a survey undertaken by the UKHO, the designation was amended in September 1980 to redefine the centre of the site (SI 1980/1306). The centre of the site is given within the SI as 51° 16.426' N 01° 30.516' E (OSGB36). The site was re-designated in 2004 to increase the size of the restricted area (Dunkley, 2008:30).

By August 1980, while the remains of two similar vessels located nearby were being investigated (*Restoration* and *Northumberland*), it was noted that the wreck was disappearing beneath the Goodwin Sands (Perkins 1979). Perkins (1979) stated that the wreck was thoroughly examined and many 'easily found' artefacts were recovered with the intention to exhibit the material at both local and national levels.

Unfavourable weather conditions prevented work on site until 1983 when a photographic survey began. This survey continued during 1984. High levels of sand across the wreck were reported and some artefacts were raised.

During 1983, additional investigations – including assessment of fishermen's fastenings and geophysical survey – were carried out in the locality by the Goodwins Archaeological Survey (Redknap and Fleming 1985).

In 1986, the first field assessment of the *Stirling Castle* was undertaken by the Archaeological Diving Unit (ADU). This assessment confirmed the deterioration of the wreck after its first exposure (ADU site report 003, 1986). Another visit was undertaken by the ADU in 1987, reporting further exposure of the wreck with quantities of rope and netting caught around the exposed structure (ADU site report 023, 1987).

Apparently, during 1985 and 1986 there were no licensed investigations and the ADU did not visit the site between 1988 and 1991.

In 1992, another field assessment was undertaken by the ADU noting that sand levels around the site remained relatively similar to those observed in

1987, concluding that the site had some short term stability (ADU site report 92/23, 1992).

Since 1993, the Licensee has been Robert Peacock (RP). Robert has provided continuity in the work and contributed to the development of archaeological best practice undertaken on the site. Licences have been provided for survey and for the recovery of surface artefacts which are under direct threat of destruction or loss. Robert also leads and supports a team of volunteer divers known as 'Seadive' and maintains links with the Trust for Thanet Archaeology, the Isle of Thanet Archaeological Society and the Ramsgate Maritime Museum. Due to further accretion of sand and high levels of sedimentation, there was no fieldwork undertaken by Seadive or the ADU during 1993 and 1994.

In 1995, the ADU reported further sedimentation. Although sediment was noted to be slowly accumulating on the site, the rate of accumulation was not quantifiable because of a lack of baseline data on which to make comparisons (ADU site report 95/08, 1995).

In 1996, Seadive undertook investigations on the site. These investigations revealed that the starboard side of the wreck was completely covered with sand. In 1997, the ADU undertook magnetometer and bathymetric surveys across the site, concluding that a slight increase in sediment cover over the wreck provided some stability to the site (ADU site report 97/26, 1997). In 1997, the UKHO surveyed the site, reporting that considerable sedimentary deposition had occurred around the wreck (UKHO 1997).

The wreck remained largely covered by sand until 1998. Successive UKHO surveys identified elements of the vessel as local shifts in sand allowed (Wessex Archaeology 2003b). During this period, the local interest was reflected through the media coverage and the publication of several articles (e.g. Lyon 1980; Perkins 1983; Slade 1998).

In 1998, a brief video survey undertaken by Seadive indicating that significant quantities of sand moved away from the site leaving it as exposed as when found in 1979. This resulted in the identification of an area of hull that may have been sheathed in copper. It is important to note that copper sheathing was introduced into the Royal Navy in 1761 (Lavery 1987). It is known that the Royal Navy experimented on copper sheathing prior to 1761, therefore, the remains of the *Stirling Castle* may represent the earliest recorded incidence of this. Furthermore, a geophysical survey undertaken by the ADU identified seabed anomalies to the east and southeast of the *Stirling Castle* within the protected area (ADU site report 98/23, 1998).

In 1999, due to further monitoring by Seadive, an appeal for a Nominated Archaeologist to offer professional advice came forward. This voluntary post was filled in 1999 with the appointment of Simon Adey-Davies. This coincided with *Operation Man O' War* undertaken by Seadive.

Operation Man O' War comprised Seadive, Nautical Archaeology Society (NAS) divers, the ADU and a team of US divers participating in further survey work (Peacock 2000a). During *Operation Man O' War*, a decision was made to protect *in situ* or recover significant exposed artefacts at risk of loss or damage. Fragments of a log reel, a brass candlestick and a probable traverse navigation board were recovered by the ADU (Peacock 2000a). During *Operation Man O'War*, the ADU undertook an acoustic and bathymetric survey (ADU site report 99/15, 1999). In 2000, the fieldwork continued with some indications that there had been, once again, significant movement of sands surrounding the site (Peacock 2000b). During this time, an intact gun carriage with cannon and truck wheels attached was exposed (Peacock 2000b). In consultation with the Nominated Archaeologist, the decision of recovering this gun was made by the licensed team. The recovery was overseen by the ADU (ADU site report 00/17, 2000).

In 2001, work was undertaken by Seadive, reporting that the bow area of the port side of the ship was covered with sand. During this year, another geophysical survey was undertaken by the ADU (ADU site report 01/12, 2001). In 2002, the ADU undertook a multibeam bathymetric, sidescan and magnetometer surveys. Fieldwork was supplemented by the presence of RDF Media filming for Channel 4 'Wreck Detectives' series (ADU site report 02/15, 2002).

Although in practice, the National Monuments Record (NMR) has been undertaking maritime recording responsibilities since 1992, in 2002, the National Heritage Act enabled English Heritage to assume responsibilities for maritime archaeology in England, modifying its functions to include securing the preservation of ancient monuments, promoting the public's enjoyment of, and advancing their knowledge of ancient monuments, in, on, or under seabed. Initial duties include those formerly undertaken by the Government's Department of Culture, Media and Sport (DCMS), regarding the administrative functions of the Secretary of State (e.g. those arising from the Protection of Wrecks Act 1973). Subsequently, Wessex Archaeology was contracted to undertake the diving services and currently continues doing so.

Since 2003, the work undertaken by Wessex Archaeology as PWA and geophysical survey contractor comprised undertaking several archaeological activities on the site (e.g. archaeological monitoring including visual inspections and geophysical surveys, amongst others) (Wessex Archaeology 2003a, b, c, 2004, 2006, 2007a, b, c). Wessex Archaeology has also been progressing on a new site plan. In 2006, a methodology was trialled which involved ground-truthing upstanding features identified in multibeam swath bathymetry surveys of the site undertaken by At Andrews University (2005), and then undertaking detailed baseline offset surveys of smaller archaeological features between them (Wessex Archaeology 2007a). This drawn and measured survey data was then combined with the absolute and relative 3D positional data obtained from the bathymetry to produce a detailed archaeological site plan. Surface recovery of vulnerable artefacts has also taken place (Wessex Archaeology 2007a).

Between 2003 and 2007, Seadive undertook diving activities on the site observing a natural degradation affecting the physical integrity of some areas of the Stirling Castle. Seadive also observed an increased sediment reduction from midships to the stern port side. The sediment reduction resulted in the exposure of artefacts, which were at immediate risk of loss or damage from tidal movement (Peacock 2003, 2004, 2005, 2006, 2007).

During 2005, ADUS and St Andrews University through the Aggregates Levy Sustainability Fund (ALSF) Rapid Archaeological Site Survey and Evaluation (RASSE) project undertook a geophysical survey on the site. Sediment level reduction with gradual increase in some areas was observed when comparing both 2002 and 2005 datasets. Another geophysical survey was undertaken during 2006 through the ALSF RASSE project and the same conclusions were reached when comparing 2005 and 2006 geophysical data (Bates et al 2007).

A summary of the work undertaken on the site since its discovery is presented in Appendix 1.

Site work and licensing	g information	on the	site since	its	designation	are
summarised as follows						

Date	Type of Licence	Licensee	Activity
1979			Discovery of the site
1980			Designation under the PWA 1973
			Purchase of wreck by Isle of Thanet
1000			Archaeological Unit
1980-	Survey	P.Wall and T.Brown/	
1982		J.Chamberlain	
1983	Survey	P.Wall and T.Brown/	Goodwins Archaeological Survey /
4004	0	J.Chamberlain	Photographic survey
1984	Survey	P.Wall and T.Brown/	Photographic survey
1985	Excavation	J.Chamberlain Ann Folwell	
1985	Excavation	Unknown	
1986	EXCAVALION	ADU	ADU field investigation
1987		ADU	ADU field investigation
1987	Survey	Dr M. Redknap, Marine	ADD field investigation
1989	Survey	Archaeological Surveys	
1992		ADU	ADU field investigation
1993		ADU	ADU field investigation
1993-	Survey	Bob Peacock, Seadive	
1999		,	
1995	Survey	Bob Peacock, Seadive/ ADU	ADU field investigation
1996	Survey	Bob Peacock, Seadive	Seadive survey
1997	Survey	Bob Peacock, Seadive	ADU field investigation / UKHO survey
1998	Survey	Bob Peacock, Seadive	ADU field investigation / Seadive video
			survey
1999	Survey	Bob Peacock, Seadive	Seadive – Operation Man O'War
2000	Survey	Bob Peacock, Seadive	ADU field investigation / Seadive survey
2001	Survey	Bob Peacock, Seadive	ADU field investigation / Seadive survey
2002	Survey	Bob Peacock, Seadive	ADU field investigation / Seadive survey + RDF Media
2003	Surface	Bob Peacock, Seadive	Seadive – surface recovery

Date	Type of Licence	Licensee	Activity
	recovery		
2004	Survey / Surface recovery	Bob Peacock, Seadive	Seadive – survey and surface recovery
2005	Surface recovery	Bob Peacock, Seadive	Seadive – surface recovery
2006	Surface recovery	Bob Peacock, Seadive	Seadive – surface recovery
2007	Surface recovery	Bob Peacock, Seadive	Seadive – surface recovery
2008	Survey / Surface recovery	Bob Peacock, Seadive	Seadive – survey and surface recovery
2009	Visit / Survey	Bob Peacock, Seadive	Seadive – survey

2.7. CURRENT ARCHAEOLOGICAL INVESTIGATIONS

Robert Peacock is the current licensee for the *Stirling Castle* and he continues his work on the site with Seadive.

Wessex Archaeology is currently the PWA and geophysical survey contractor on the *Stirling Castle*. Wessex Archaeology dived the site in the summer of 2008 as part of their PWA contract and a geophysical survey was undertaken on that year (Wessex Archaeology 2009a, b).

Recent activities on the site have addressed that the wreck is still actively deteriorating and shows no sign of stabilising (Peacock pers comm. 2008; also see Bates et al 2007; Wessex Archaeology 2007a).

Bryan and Ann Smith, who have been involved in the site as researchers and site divers, are continuing their research about the *Stirling Castle* site and the archaeological recording of the artefacts recovered, including artefacts sheets and drawings.

In 2008, Bryan Smith was compiling a detailed specialist report on the navigation equipment from the *Stirling Castle* aiming for forthcoming publication (Bryan Smith pers comm. 2008).

The *Stirling Castle* gun, after being requested by the Ramsgate Maritime Museum, has been returned to the Mary Rose Trust to finalise its conservation. The Mary Rose Trust has written a report regarding the conservation and remedial treatment of the *Stirling Castle* gun. Furthermore, there are approximately 400 digital images registering the conservation procedures that have been undertaken on the gun. At the time of writing this report, HWTMA understands that the gun carriage is awaiting conservation at the Nucleart Centre in Grenoble (France).

The Trust for Thanet Archaeology currently holds the Society's archive, which includes paper and photographic records in addition to boxes of artefacts. A large number of artefacts are on loan to Ramsgate Maritime Museum which is

the primary display of material from the site. However, the future of this material is now uncertain since there is a possibility that the museum will close in the near future. Therefore, the future of a significant number of the *Stirling Castle* artefacts is currently under review.

3. Methodology

3.1. APPROACH

As previously noted, this first phase of work has completed an audit of the current archive material related to the *Stirling Castle*. This audit will allow the assessment of future work required to determine the *Stirling Castle* full research potential. Therefore, this section presents:

- the archive material located and visited
- the type of archive material appraised
- the creation of a database to provide an index to the archive

3.2. RESEARCHING AND VISITING ARCHIVES AND COLLECTIONS

An initial web based, email and phone survey was carried out to determine all known repositories, and individuals with information or archive pertaining to the *Stirling Castle* and environmental data relating to the site location. The locations and contact details of all known persons were collated, and the relevant holders of archive were contacted or visited, which are summarised on the table below.

Archive Type	Organisation/ Individual	Location
Primary	Isle of Thanet Archaeological Society	Kent
archaeological		
	Trust for Thanet Archaeology	Kent
	National Maritime Museum	London
	East Kent Maritime Trust / Ramsgate Maritime	Kent
	Museum (RMM)	
	Seadive	Kent
	English Heritage	Portsmouth
	National Archives, Kew (on line search only)	London
	Wessex Archaeology	Salisbury
	National Maritime Museum	London
	National Monuments Record	Swindon
	Receiver of Wreck	Southampton
	Mary Rose Trust	Portsmouth
Personal	Robert Peacock (current licensee)	Kent
Archives		
	Bryan and Ann Smith (researches and site	Kent
	divers)	
	David Perkins (original archaeologist)	Kent
	Michel Hunt (Curator RMM)	Kent
	Norman Temple (director of Seadive)	Kent

3.3. COLLATION AND APPRAISAL OF ARCHIVE AND COLLECTIONS DATA

Once the archive material was located and visited, the archive was categorised by type. The identified archive types and sub-types are as follows:

Туре	Sub-type
Paper record	Correspondence
	Dive logs
	Diver reports
	Survey records
	Artefact records
	Conservation records
	Drawings
	Report
	Other
Artefacts	Туре
	Class
	Material
Samples	
Photographic record	
Video	
Geophysical survey	Multibeam
	Side scan sonar
	Magnetometer

For each archive type, the following information was recorded:

- Format
- Picture
- Size
- Condition
- Quantity
- Ownership
- Access arrangement
- Description
- Indication of whether material had been photocopied or photographed

The archive holders were contacted and asked whether they were willing to make the archive material available for a specialist study as part of the second phase of this work. Overall, the responses obtained were positive. The archive material accessibility was registered on the project database. With each archive categorised and appraised, the results were presented by both their location and archive type. Organising the archive by location and type allows a rapid identification and assessment of who holds what type of archive material as well as its research potential. Where an archive was known to exist but access could not be gained the contact details and the potential archive type were noted.

Where considered beneficial for further research, and prior to discussions with archive holders, relevant sections of the archives, including digital archive, were copied for inclusion in the HWTMA project archive. Digital photographs of artefacts were obtained where possible.

3.4. DATABASE CREATION

A Microsoft Access database was designed and created to provide an index to the archive, with all known records being entered into it. A form was set up to allow easy data entry and subsequent viewing. The data entered into the database is MIDAS compliant (MIDAS heritage 2007) and also conforms to the ADS policy and guidelines for digital records (http://ads.ahds.ac.uk/project/userinfo/digitalTextArchiving.html). The database was designed to be interrogated for future work. Where possible a photograph of the relevant elements of the archive has been incorporated into the database via adding a link to the relevant photograph file.

The database records all key elements of the archive including the archive type and sub-type, format, size, condition, ownership, access, and a brief archive description. It is recommended that the database is used in conjunction with this report. Further details about the database metadata and field descriptions are included in **Appendix 4**. The database is included on a CD with this summary report.

4. Archive Audit by Location

There are a number of archive types being held by different archive holders. A brief description per archive holder is presented below. A summary table providing further detail on the different archive types being held at each location is presented in **Appendix 2**.

4.1. RAMSGATE MARITIME MUSEUM (RMM)

The archive held by the Ramsgate Maritime Museum consists largely of artefacts from the wreck, with associated photographic records. All of the artefacts are on loan to the museum from the Isle of Thanet Archaeological Society.

4.2. ISLE OF THANET ARCHAEOLOGICAL SOCIETY (ITAS)

The Isle of Thanet Archaeological Society holds a large archive including artefacts, drawings and photographs. The paper archive was temporarily loaned to the HWTMA for this project and the artefacts are housed at the Trust for Thanet Archaeology. After reviewing all the archive material, a sizable amount of archive appears to be missing and unaccounted for. It was also noted that conservation would be beneficial for some artefacts to ensure their long term preservation.

4.3. NATIONAL MONUMENTS RECORDS (NMR)

The National Monuments Records (NMR) at Swindon has recently acquired the ADU archive which contains information until 2003. The archive contains the work that ADU undertook regarding the protected wreck sites, including the *Stirling Castle*. Copyright of the ADU archive was transferred to the NMR when it was deposited. The archive has not been catalogued yet (Martin Newman pers. comm. 2008). Due to the research and diving work undertaken by the ADU, there is potential for finding useful information within this archive material once the cataloguing process commences.

4.4. ROBERT PEACOCK (RP)

Robert Peacock, current licensee of the *Stirling Castle*, holds an archive for the site which includes the following:

- Paper records: correspondence, dive logs, diver reports, survey records, artefact records (which are duplicates from Ann and Bryan Smith), drawings and some miscellaneous records
- Samples: grape seeds
- Photographic records: hard copy and slides
- Digital files: licensee reports, digital photographs, some site plans, drawings and sketches.
- Videos: Mini DV tapes.

All this material needs ordering, indexing, cataloguing and referencing.

4.5. ANN AND BRYAN SMITH (A&BS)

Ann and Bryan Smith archive is mainly composed by:

• Paper records: dive logs, diver reports, artefact records (original), drawings and conservation records

They also hold a wooden artefact which has been identified as a nautical instrument.

4.6. WESSEX ARCHAEOLOGY (WA)

Wessex Archaeology (WA) were commissioned to carry out a DBA for the wreck site of the *Stirling Castle* in 2003 (Wessex Archaeology 2003b). Since then, WA has been commissioned by English Heritage to undertake a designated site assessment of the *Stirling Castle* site as part of the Contract for Archaeological Services in Relation to the Protection of Wrecks Act. Therefore, since 2003, WA holds an archive for the site. The information contained prior to 2003 has been obtained from other sources. At the time of writing this report, WA produced 10 reports which are fully referenced in **Section 7**. WA is currently in the process of reporting on the work undertaken on the site during 2009. Both confidential management and open archaeological reports are being produced. A basic condition survey was undertaken on the *Stirling Castle* and a geophysical survey was also carried out for English Heritage, which will be reported separately.

WA has kindly provided a summary of their activities between 2003 and 2008 and the material they hold. These include the following:

- Underwater and dry surface photographs
- Video snatch shots
- DV tapes
- Documentary research catalogue
- Context register derived from ground-truthing
- Context register derived from other sources such as drawings and videos
- Finds register
- Drawing register
- Site plan
- Digital data: multibeam data (2002, 2005 and 2006) and Channel 4 Wreck Detectives (2003) and DVD (2005)
- Dive register (DIVA)
- Geographical Information Systems (GIS) platform

WA dive records, photographs, videos, drawings and geophysical records are indexed.

Some artefacts were raised by Wessex Archaeology in 2004 and 2006. This material is currently stored at English Heritage Fort Cumberland and it is summarised as follows:

Object			Drawing	X-Ray		Laser	
No.	Description	Photo	1:1	Plate	FTIR	Scanning	Conservation
2242	Head Piece	Yes	Yes				
2243	Barrel Stave	Yes					
2244	Barrel Stave	Yes			Yes		
2245	Barrel Stave	Yes					
2246	Head Piece	Yes	Yes				

Object			Drawing	X-Ray		Laser	
No.	Description	Photo	1:1	Plate	FTIR	Scanning	Conservation
2247	Barrel Stave	Yes	Yes				
2248	Barrel Stave	Yes					
2249	Barrel Stave	Yes					
2250	Barrel Stave	Yes	Yes				
2251	Head Piece	Yes	Yes				
2252	Head Piece	Yes	Yes				
2253	Head Piece	Yes	Yes				
2254	Barrel Stave	Yes					
		Yes					Currently
2255	Head Piece		Yes	Yes		Yes	undergoing
2256	Barrel Stave	Yes					
2257	Barrel Stave	Yes					
2258	Barrel Stave	Yes	Yes		Yes		
2259	Barrel Stave	Yes	Yes	Yes			
2260	Barrel Stave	Yes		Yes			
	Fixed Double	Yes		Yes			
1050	Block				Yes		Planned

For clarification purposes, FTIR (Fourier Transformation Infrared Spectroscopy) is an analytical technique that provides something like a "chemical fingerprint" of the organic object. It shows characteristic peaks for various components and is used for identification of unknown substances or monitoring of the chemical change of components.

4.7. NATIONAL MARITIME MUSEUM (NMM)

The National Maritime Museum holds artefacts from the wreck of the *Stirling Castle*, mainly related to navigation equipment. A contemporary painting of the ship is on display in the gallery. Photos of the artefacts exist but are subject to copyright.

4.8. BRITISH LIBRARY (BL)

The British Library holds original newspaper articles relating to the Great Storm in 1703 and the Goodwin Sands. These articles refer to the *Stirling Castle* as the *Sterling Castle*.

4.9. RICHARD BATES (RB)

Dr Richard Bates at the University of St Andrews holds geophysical data from surveys carried out in conjunction with the Advanced Underwater Surveys (ADUS) as part of the Aggregates Levy Sustainability Fund (ALSF) Rapid Archaeological Site Survey and Evaluation project (<u>http://www.st-andrews.ac.uk/rasse/</u>). The full report is also freely available from <u>http://ads.ahds.ac.uk/catalogue/projArch/alsf/</u>.

Dr Richard Bates also holds the data obtained from the environmental samples undertaken during the ADU 2002 and the RASSE 2005 seasons.

4.10. DEPARTMENT FOR CULTURE, MEDIA AND SPORT (DCMS)

The DCMS archive consists largely of correspondence between them and the licensee of the site, as well as ADU and licensee reports.

4.11. Advanced Underwater Surveys (ADUS)

The ADUS have been involved with the geophysical survey of the site since their inception. Therefore, ADUS holds some geophysical data from the site and they are contactable through Martin Dean (ADUS, St Andrews University, Scotland).

4.12 MARY ROSE TRUST (MRT)

At the time of writing this report, HWTMA was informed that the *Stirling Castle* cannon is currently at the Mary Rose Trust to finalise its conservation. The Mary Rose Trust has written a report regarding the conservation and remedial treatment of the *Stirling Castle* gun. Furthermore, there are approximately 400 digital images registering the conservation procedures that have been undertaken on the gun.

4.13. NORMAN TEMPLE (NT)

Norman Temple archive holdings are mainly composed by a large video collection including High 8 video tapes, Mini DVs, BBC Treasure Islands raw underwater video and Wreck Detectives RDF Media. Norman Temple also holds a small amount of correspondence related to droits and the raising of the cannon.

4.14. BOURNEMOUTH UNIVERSITY (BU)

Bournemouth University currently holds 9 of the 25 wood samples taken by Robert Peacock. These 9 samples will enable a one year monitoring period. Only x-ray has been undertaken on the samples showing extensive degradation due to wood borers' action.

4.15. MISSING ARCHIVE

From the different visits undertaken by HWTMA staff and contacting different team members, the following archives are known to exist but are either incomplete or missing:

- Bleak House Museum: It is likely that this collection is now at the ITAS (Peacock pers comm. February 2009). However, this is unclear at the time of writing this report.
- Isle of Thanet Archaeological Society (part of)

5. Archive Audit by Type

5.1 PAPER RECORD

The paper records on the site includes correspondence, dive logs, diver reports, survey records, conservation record sheets, drawings (site plans, sections, interpretive drawings, finds drawings) and site reports. There are several paper records under the category 'other' since these include: licenses, excavation index data entry sheet, and correspondence and documentation

relating to the sale of the *Stirling Castle*, shares in the Stirling Castle, the artefacts and droits.

From 1996, there is a marked increase in the level of work undertaken, probably due to the decreasing level of the sands exposing the ship and therefore making more viable detailed investigations. This increase in the level of work undertaken has generated a considerable amount of paper records many of which require cataloguing, ordering and indexing (see **Appendix 1**).

The following table summarises the number of paper records from the *Stirling Castle*.

Archive type	Number	Held By
Correspondence	330+	NMR, DCMS, ITAS, RP, NT
Dive logs	380+	NMR, WA, RP, A&BS
Diver reports	250+	NMR, WA, RP, A&BS
Survey records	220+	NMR, WA, RP, ADUS
Artefact records	480+	ITAS, NMR, DCMS, WA, A&BS, RP (copies)
Conservation record sheets	10+	ITAS, A&BS, MRT, EH
Drawings	240+	NMR, ITAS, WA, RP, A&BS, EH
Site reports	114	RP, NMR, DCMS, NMR, WA, RB
Other	450+	NMR, DCMS, ITAS, RP, EH

5.2 ARTEFACTS

Based on the information gathered within this phase of the project, artefacts are known to have been recovered by the original dive team in 1979 and 1984. Robert Peacock and the ADU recovered artefacts considered to be at risk of loss or damage during the 1999-2002 seasons. The artefacts recovered have been detailed and are included in the relevant ADU and licensee reports.

In the original purchase agreement, the Ministry of Defence stated that all finds of historical nature must be donated to the National Maritime Museum or a local museum. Furthermore, as per standard practice, all recoveries from the site should be declared to the Receiver of Wreck (Isle of Thanet Archaeological Society archive). Therefore, a number of artefacts are held at the National Maritime Museum as well as at Ramsgate Maritime Museum and the Isle of Thanet Archaeological Society.

The majority of the artefacts whose whereabouts are known are held at the Ramsgate Maritime Museum. Those on display are considered in a stable condition. With the impending closure of the museum, access to the collection can not be guaranteed. Therefore, the future of the *Stirling Castle* artefact collection is currently uncertain.

The Isle of Thanet Archaeological Society holds a number of artefacts. These are currently stored at the Trust for Thanet Archaeology's headquarters at

Quex Park (Kent). Many artefacts would benefit of conservation treatment to ensure their long term preservation.

A number of artefacts were recovered during the 1979 season. In 1982, as a fundraising event, several items were auctioned. A list of assignees is available from the Isle of Thanet Archaeological Society. The exact number of artefacts released from the collection is unknown.

A number of artefacts were raised by Wessex Archaeology in 2004 and 2006. These are currently stored at English Heritage Fort Cumberland (Conservation Team). Details of this material have been presented in **Section 4.6**.

Despite its protection, as detailed in both the licensee and ADU reports, the site has been constantly under threat from looters and unfortunately some items have been discovered for sale on the online auction site eBay during 2008. Some of these artefacts are on sale in North America and although it seems unclear their provenance, they are marketed as from the *Stirling Castle* (Peacock pers comm. February 2009).

The collection identified at Bleak House Museum was mainly comprised by incomplete and/or fragmented artefacts. It is likely that these artefacts are now at the ITAS (Peacock pers comm. February 2009). However, this is unclear at the time of writing this report.

The following table summarises the number of artefacts per class from the *Stirling Castle* which are currently held in accessible archives:

Artefact Class	No. of	Held By
	Artefacts	
Crew	2	ITAS
Clothing	43	RMM / ITAS
Concretion	5	RMM
Furnishings	12	RMM
Galley	70	RMM / NMM
Masonry	10	RMM
Medical	1	RMM
Miscellaneous	1	RMM
Navigation	37	RMM / NMM / A&BS
Ordnance	7	RMM
Personal	39	RMM / ITAS
Rigging	7	RMM / EH
Ship Structure	7	RMM
Arms	35	RMM
Storage	62	RMM / ITAS / EH
Tool	5	RMM
Ship Equipment	25	RMM / ITAS / EH
Various	50+	RMM / ITAS
Unidentified	39	RMM / ITAS
Other	1	RMM

For further information artefacts per type are included in **Appendix 3**.

Consequently, this project has identified that the material archive is dispersed between four principal collections: 1) private ownership, 2) Trust for Thanet Archaeology, 3) Ramsgate Maritime Museum, and 4) National Maritime Museum (Greenwich).

5.3 SAMPLES

Environmental samples were collected by the ADU in 2002 and during 2005 as part of the RASSE project. The data collected from these samples are held by Richard Bates at St Andrews University (Scotland).

The Isle of Thanet Archaeological Society also holds a box of samples that requires cataloguing, ordering and indexing. At the time of writing this report, it is unclear as to the context from which these samples were taken or the season.

Bournemouth University currently holds 9 wood samples. Only x-ray has been undertaken on the samples showing extensive degradation due to wood borers' action.

Robert Peacock holds some wood samples and grape seeds from the *Stirling Castle* site. A specimen was offered to the Millenium Seed Bank for analysis but they seemed to show no interest (Peacock pers comm. 2009). Therefore, these seeds will need assessing and analysing as part of Phase Two of this project.

5.4 GRAPHIC RECORD

The graphic record comprises photos and video. These are being held by the licensee, Norman Temple, NMR, the Isle of Thanet Archaeological Society and Wessex Archaeology.

The following table summarises the graphic record from the Stirling Castle.

Archive type	Number	Held By
Photos	3100+	RMM, NMR, MRT, ITAS, WA,
		RP, A&BS, EH
Video	150+	NMR, WA, RP, NT

It is important to note that due to the dynamic nature of the site, videos often are the one means which allow the recording of certain artefacts or features. Therefore, it is proposed to undertake a thorough assessment of the video records from the site as part of Phase Two of this project to allow adding significant information to the interpretation of the site as well as shedding new light to site formation processes.

5.5 GEOPHYSICAL SURVEY

Geophysical surveys of the site have been undertaken by the licensee, the ADU, the ADUS and Wessex Archaeology, largely between 1996 and 2006. These include side scan sonar, swath bathymetry and magnetometer surveys (see **Appendix 1**).

Wessex Archaeology undertook two major geophysical surveys in 2008 and 2009 and they hold this data. However, the total amount of magnetometer surveys and the data location is unknown at the time of writing this report.

The following table summarises the geophysical survey record from the *Stirling Castle*.

Archive type	Number	Held By
Side scan sonar	60+	ADU, ADUS, RB,
		NMR, RP, WA
Swath bathymetry	15+	ADUS, RB, NMR, WA
Magnetometer	1+	ADU (Unknown), WA
-		(1)

5.8 SITE REPORTS

The following eleven ADU site reports have been identified:

Year	Report Reference
1986	003
1987	023
1992	92/23
1993	93/23
1995	95/08
1997	97/26
1998	98/23
1999	99/15
2000	00/17
2001	01/12
2002	02/15

The following licensee reports held at DCMS and English Heritage have been identified:

Year	Report Reference
1999	Licensee Survey report for DCMS
2001	Licensee Survey report for DCMS
2002	Licensee Survey report for DCMS
2003	Licensee report for ACHWS
2004	Licensee report for ACHWS
2005	Licensee report for ACHWS
2006	Licensee report for ACHWS
2007	Licensee report for ACHWS
2008	Licensee report for ACHWS

At time of writing this summary report, Wessex Archaeology produced a deskbased assessment report (Wessex Archaeology 2003b) and an archaeological report (Wessex Archaeology 2007a).

5.9 SPECIALIST REPORTS

The following specialist reports have been identified:

• Stirling Castle's Unique Gun Carriage Rescued (Peacock 2000b)

• The 'Masttrosses' Swords from HMS Stirling Castle (Slade 1998)

6. Recommendations for Assessment, Analysis and Research

6.1 ASSESSMENT AND ANALYSIS

The assessment, analysis and further work required of *Stirling Castle* archive is summarised on the following table:

Archive	Record type	Held by	Status	Work Required
Class Paper record	Correspondence	NMR, DCMS, ITAS, RP	Chronological entry. Some may be confidential	Ordering & indexing
	Dive logs	NMR, WA, RP, A&BS	Filed chronologically	Cross referencing to finds records, ordering & indexing
	Diver reports	NMR, WA, RP, A&BS	Chronological entry	Cross referencing to finds records, ordering & indexing
	Survey records	NMR, RP	There is no survey records index	Cataloguing, ordering and indexing
	Artefact records	NMR, DCMS, ITAS, RP, A&BS	Filed in order (artefacts have number sequence)	Cross referencing to dive logs, ordering and indexing
	Conservation records	ITAS, A&BS, EH	Mostly hand written in table form	Data should be digitised
	Drawings	NMR, ITAS, WA, RP, A&BS, EH	There is no drawing index Held in a variety of storage mediums	A drawing index should be created and digitised. Drawings should be catalogued, ordered and indexed. Plans & drawings should be scanned/digitised
	Other	NMR, DCMS, ITAS, EH	Various type of paper work with no consistent entry	Cataloguing, ordering and indexing
Artefacts		RMM, ITAS, NMM, A&BS, EH	Inconsistencies on data register and entry	Cataloguing, ordering and indexing. Photographic record of all artefacts and specialist analysis by each class of material is required
Samples	Environmental	ITAS, Richard Bates (St Andrews Uni)	Sample archive is not indexed	Cataloguing, ordering and indexing
	Wood	BU	Not indexed	Indexing, assessing & analysing
	Other	RP	Not indexed	Indexing, assessing & analysing
Graphic record	Photographs	NMR, ADU, WA, RP, A&BS, EH	Photographic archive is not catalogued or indexed	Cataloguing, ordering and indexing

Archive Class	Record type	Held by	Status	Work Required
	Video - VHS & digital	NMR, ADU, WA, RP, NT	Site video is not logged, indexed or catalogued	Logging, indexing and cataloguing
Geophysical survey	Side scan sonar survey	ADUS, RB, NMR, RP	Data held in several places. A full index has been produced as part of this project. Further information on each dataset is require to determine possible analysis work	Ordering and indexing
	Swath bathymetric survey	ADUS, RB, NMR, WA	As above	Ordering and indexing
	Magnetometer	WA (2008)	Magnetometer data was previously acquired but location is unknown.	Indexing Locating previous Magnetometer data
Site reports	Annual project reports	RP, NMR, DCMS	Chronological entry	Indexing
	Diving contractor reports	NMR, WA	Some of these records may be confidential	Indexing
Specialist reports	Stirling Castle's Unique Gun Carriage Rescued	RP	Not indexed	Indexing
	'Masttrosses' Swords from HMS Stirling Castle	Archaeologia Cantiana CXVIII	Published paper. Needs indexing	Indexing

A number of paper records and uncatalogued slides from the *Stirling Castle* have been identified at the NMR Offices (Swindon). A further visit will be required to Swindon to quantify these items and enable further investigation of this archive as part of the assessment work proposed for Phase Two.

HWTMA have all the detail on available artefacts for specialist assessment and analysis. At the suggestion of Mark Dunkley, the HWTMA have contacted Sarah Jennings, Polydora Baker and David Dungworth (English Heritage) for advice on the assessment required for each class of material. The following table summarises the number of artefacts per material:

Artefact Material	No. of Artefacts	Held By
Antler	1	RMM
Bamboo	1	RMM
Bone	15	RMM / ITAS
Brass	57	RMM / NMM
Bronze	7	RMM
Carbon	1	RMM
Ceramic	27+	RMM / ITAS
Clay	17	RMM / ITAS

Artefact Material	No. of Artefacts	Held By
Copper	8	RMM / NMM
Glass	51	RMM / ITAS / NMM
Gourd	3	RMM
Hemp	1	RMM
Iron	5	RMM
Lead	27	RMM / ITAS
lvory	1	RMM
Leather	13	RMM / ITAS
Metal	37	ITAS
Pewter	37	RMM / ITAS
Porcelain	1	RMM
Sand	1	NMM
Silk	2	RMM
Silver	1	RMM
Slate	4	RMM / NMM
Stone	4	RMM
Tar	2	RMM
Tin	1	RMM
Organic	2	RMM
Wood	98	RMM / ITAS / NMM / A&BS / EH
Wool	1	RMM
Various	20+	RMM / ITAS
Unidentified	13	ITAS

Consequently, to achieve a comprehensive assessment and analysis of the *Stirling Castle* archive, the following is proposed:

- Cataloguing, ordering and indexing in a consistent manner all archive types
- the full assessment and analysis of all archive types
- the full photographic recording and updating of any relevant information of finds recovered from the site and their incorporation onto the database;
- assessment of all available plans produced from site survey. It should be noted that in the long term all plans from the site will need scanning or digitising to ensure the long term preservation of the archive material as well as identifying any new information and discoveries added per year;
- artefact specialist assessment and analysis;
- assessment of Seadive and Norman Temple video and photographic material;
- location of documentary sources at the National Maritime Museum and British Library, which will then be added to the site archive database
- examination of documentary records located by RDF Media.

6.2 RESEARCH

Documentary sources have been identified at the National Maritime Museum and the British Library. Research should also include documentary sources at the National Archives since they posses a very comprehensive collection of naval ships documents and cartography. A brief online search was undertaken and some sources should include the Records of the Admiralty, Naval Forces, Royal Marines, Coastguard, and related bodies (ADM). For example, the Ship's Pay Books (ADM 33/118, 210 & 230), Logs (ADM 51/4355 & 52/291) and Muster Lists (ADM 36/3605 & 3606) have been identified. All these sources should be looked at in further detail and incorporate into the project archive database as appropriate. Other resources should be looked at in further detail such as the RDF Television documentary research and the documentary research catalogue held by Wessex Archaeology, both of which HWTMA already obtained a copy.

In depth material culture studies will be necessary to enable a wider understanding of patterns of production and consumption during late 17th and early 18th centuries, since the *Stirling Castle* cargo has relevance not only at a local level but also at regional, national and international levels. Therefore, specialist assessment and analysis by each class of artefact material should be undertaken as part of the second phase of this project. Material culture was transported to remote areas by sea and used in the acquired territories and also in Britain. Therefore, it is important to understand ships and their cargoes as 'mobile' material culture. People's selection of material culture went hand in hand with a social projection of who we are and where we come from. This has multi-varied and complex impacts on the society, and further material culture studies on the *Stirling Castle* will contribute to shed new light on these impacts.

Comparison with other vessels of that time would be useful to further contextualise the *Stirling Castle* wreck site as well as enabling further assessment of its significance. This will also provide a more comprehensive understanding of the people who travel on the *Stirling Castle* and their history. More importantly, it will enable to understand the *Stirling Castle* as a social product of its time.

7. References

- Bates R, Dean M, Lawrence M, Robertson P, Tempera F. 2007. Innovative approaches to Rapid Archaeological Site Surveying and Evaluation (RASSE) Final Report, St. Andrews University on behalf of English Heritage, St. Andrews
- Chamberlain D. 2002. The Goodwin Sands Man-of-War 1703-2003: David Chamberlain
- Cloet R. 1954. Hydrographic Analysis of the Goodwin Sands and the Brake Bank. *Geographical Journal* CXX: part 2
- Colledge J. 1987. Ships of the Royal Navy. London: Greenhill books
- Elderfield P. 2001. Sheltering Effects of the Goodwin Sands (Masters Dissertation). University of Southampton, Southampton
- Israel J. 1998. *The Dutch Republic. Its Rice, Greatness, and Fall 1477-1806.* Oxford: Clarendon Press
- Lambert A. 2000. *War at Sea in the Age of Sail 1650-1850*. London: Cassell & Co.

Larn R. 1977. Goodwin Sands Shipwrecks. London: David & Charles PLC

Larn R, Larn B. 1995. *Shipwreck Index of the British Isles*. London: Tor Mark Press

Lavery B. 1983. The Ship of the Line. London: Conway Maritime Press

- Lavery B. 1987. *The Arming and Fitting of English Ships of War 1600-1815.* London: Conway Maritime Press
- Lyon D. 1980. The Goodwins Wreck. *The International Journal of Nautical* Archaeology and Underwater Exploration 9: 339-50
- MIDAS heritage. 2007. *MIDAS Heritage. The UK Historic Environment Data Standard*. <u>http://www.english-heritage.org.uk/server/show/nav.19944:</u> English Heritage
- Peacock R. 2000a. Operation Man O'War. Nautical Archaeology 2: 8-9
- Peacock R. 2000b. Stirling Castle's Unique Gun Carriage Rescued. Nautical Archaeology 4: 5
- Peacock R. 2003. Licensee Report 2003. Unpublished report for ACHWS

Peacock R. 2004. Licensee Report 2004. Unpublished report for ACHWS

- Peacock R. 2005. Licensee Report 2005. Unpublished report for ACHWS
- Peacock R. 2006. Licensee Report 2006. Unpublished report for ACHWS
- Peacock R. 2007. Licensee Report 2007. Unpublished report for ACHWS
- Perkins D. 1979. Wreck of a British Man-of-War discovered on the
- Goodwin Sands Interim Report, The Isle of Thanet Archaeological Unit
- Perkins D. 1983. An Analysis of Lead Musket Shot From the Wreck of
- an Early 18th century Man-Of-War. The International Journal of Nautical Archaeology and Underwater Exploration 12: 339-42
- Slade G. 1998. The 'Masttrosses' Swords from HMS Stirling Castle. Archaeologia Cantiana CXVIII: 357-60
- UKHO. 1997. Report on Wreck Examination or Sweeping: Goodwin Sands and Gull Stream. Unpublished Report, UKHO, Taunton
- Wessex Archaeology. 2003a. Stirling Castle. Designated Historic Wreck Site. Archaeological Services in Relation to the Protection
- of Wrecks Act (1973): Recording Methodologies. Unpublished Report, Wessex Archaeology on behalf of English Heritage, Salisbury
- Wessex Archaeology. 2003b. Stirling Castle. Designated Historic Wreck Site. Desk-based Assessment. Unpublished Report, Wessex Archaeology on behalf of English Heritage, Salisbury
- Wessex Archaeology. 2003c. Stirling Castle. Designated Historic Wreck Site. Investigations June-September 2003. Unpublished Report, Wessex Archaeology on behalf of English Heritage, Salisbury
- Wessex Archaeology. 2004. Stirling Castle. Designated Assessment. Final Report. Unpublished Report, Wessex Archaeology on behalf of English Heritage, Salisbury
- Wessex Archaeology. 2006. Stirling Castle. Designated Assessment. Management Report. Unpublished Report (confidential), Wessex Archaeology on behalf of English Heritage, Salisbury
- Wessex Archaeology. 2007a. Stirling Castle, Goodwin Sands, Kent. Designated Site Assessment. Archaeological Report. Unpublished Report, Wessex Archaeology on behalf of English Heritage, Salisbury
- Wessex Archaeology. 2007b. Stirling Castle. Designated Assessment. Archaeological Report. Unpublished Report, Wessex Archaeology on behalf of English Heritage, Salisbury
- Wessex Archaeology. 2007c. Stirling Castle. Designated Assessment. Management Report. Unpublished Report (confidential), Wessex Archaeology on behalf of English Heritage, Salisbury

Wessex Archaeology. 2009a. South East of England Designated Wrecks: Marine Geophysical Survey and Interpretation. Unpublished Report, Wessex Archaeology on behalf of English Heritage, Salisbury

Wessex Archaeology. 2009b. Stirling Castle. Designated Assessment. Archaeological Report. Unpublished Report, Wessex Archaeology on behalf of English Heritage, Salisbury

Organisation	Diving	Site	Site plan	Artefacts	Photographic	Video			urvey	Environmental
		report		recovered	recording	recording	Side scan	Swath bathymetry	Magnetometer	samples
Local amateur divers	1979			1979	1979	1979				
Licensee	1983 1984 1996 1998 2000 2001 2003 2005 2006	1980 1981 1983 1984 1988 1989 1993 1994 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007	1999 2001	2000 2001 2002	1983 1984 2004 (AS+BS) 2006	1984 1997 1998 1999 2001 2002 2003 2004 2006	1980 1996 2000	2000	2000	2002
ADU	1986 1987 1992 1995 1997 1998 1999 2000 2001 2001 2002	1986 1987 1992 1993 1995 1997 1998 1999 2000 2001 2001 2002	1987 1993 1997		1997 1998 1999 2000 2001 2002	1997 1998 1999 2000 2001 2002	1998 2000 2001 2002	1997 1998 1999 2002	1997 1998 2000 2001 2002	2002
ADUS / St Andrews University		2007	2006				2005	2005 2006		2005
WA	2003 2006 2007 2008	2003 2006	2002	2004 2006	2003 2006 2007 2008	2003 2006 2007 2008	2008-9	2002 2005 2006 2008-9	2008-9	

9. Appendix 2: Archive types per location

	Ramsgate Maritime Museum	Isle of Thanet Archaeological Society	National Monuments Record	Robert Peacock	Ann & Brian Smith	Wessex Archaeology	National Maritime Museum	Richard Bates	DCMS	ADUS	Mary Rose Trust	Norman Temple	English Heritage, Fort Cumberland	Bournemouth University
Paper record														
Correspondence		222	8	20					71			10+		
Dive logs			70	200	44	66+								
Diver reports			40	200	10+	20+								
Survey records			89	70		57+ (digital)				6				
Artefact records		58	30	20+	310	18			30					
Conservation records		5			3						2 reports		2	
Drawings		54	50	20	75+	26	1 (painting)							
Site Reports		4	62	15		10			21					
Other		58	250	50		100+			1					
Artefacts	323	95+			1	20 (at FC)	21						20	
Samples		1 box		16 1 (seeds)				?(processed data only)						9
Photographic record	300+	14	220	350	187+	1466+					400+		20+	
Video			20	20		104+						23+		
Geophysical survey														
Side scan sonar			3	50		3+		2		2				
Multibeam			4			2+		2		7				
Magnetometer			?			1				?				

10. Appendix 3: Table summarising number of artefacts per type

Artefact Type	No. of Artefacts	Held By
Antler	1	RMM
Back staff	3	NMM
Barrel	2	RMM
Barrel stave	14	ITAS, EH
Bell	3	RMM
Belt	1	RMM
Book	6	RMM
Bottle	37	RMM, ITAS
Bowl	5	RMM
Box	2	RMM
Brick	9	RMM
Brush	1	RMM
Buckle	7	RMM
Button	30	RMM
Candle snuffer	2	RMM
Candlestick	5	RMM
Cannon	1	RMM (currently at MRT
		for conservation)
Case	1	RMM
Cauldron	2	RMM
Chape	1	RMM
Coal	1	RMM
Comb	1	RMM
Concretion	5	RMM
Container	3	RMM
Cross staff	2	NMM
Cup	7	RMM
Deck log	3	NMM
Disk	1	RMM

Artefact Type	No. of	Held by
	Artefacts	
Drumstick	1	RMM
Epaulette	1	RMM
Fairlead	1	RMM
Flagon	2	RMM
Furnace	1	NMM
Gameboard	1	RMM
Glassware	4	RMM
Handle	7	RMM
Hat	2	RMM, ITAS
Hazelnut	1	RMM
Head piece	6	EH
Hilt	10	RMM
Inkwell	3	RMM
Jar	9	RMM
Kettle	3	RMM
Key	1	RMM
Knife	2	RMM
Lamp base	1	RMM
Lamp reservoir	1	RMM
Lens	1	RMM
Lid	1	RMM
Lumbar vertebrae	1	RMM
Microscope	1	RMM
Musket	4	RMM
Nail	2	RMM
Navigation	1	A&BS
Pine cone	1	RMM
Pipe	9	RMM, ITAS

Artefact Type	No. of Artefacts	Held By	
Dividers	9	RMM	
Plate	12	RMM	
Pommel	1	RMM	
Porringer	1	RMM	
Pot	7	RMM	
Pouch	1	RMM	
Powder horn	1	RMM	
Pricker	1	RMM	
Pulley	1	ITAS	
Purse	1	RMM	
Razor	3	RMM	
Rib	1	RMM	
Rope	1	RMM	
Rule	3	RMM, NMM	
Sand	1	NMM	
Sand glass	8	RMM, NMM	
Shot	1	RMM	
Slate	16	RMM	
Smoke hood	1	RMM	
Spoon	4	RMM	
Square	2	RMM	
Staff	1	RMM	
Stock	5	RMM, ITAS	
Syringe	1	RMM	
Tankard	4	RMM	
Тар	1	RMM	
Tar	2	RMM	
Thimble	1	RMM	
Thoracic vertebrae	1	RMM	
Tile	1	RMM	

Artefact Type	No. of	Held by
Alteraot Type	Artefacts	Tield by
Pistol	2	RMM
Timber	1	RMM
Toothbrush	1	RMM
Treenail	4	RMM
Trigger guard	1	RMM
Unidentified	45	RMM, ITAS, NMM
Various	53+	RMM, ITAS
Vessel	2	RMM
Wedge	1	RMM
Weight	7	RMM
Wheel	1	RMM
Wetstone	2	RMM

11. Appendix 4: MS Access Database Metadata

Title:	Stirling Castle Primary Archaeological Archive
Data Type:	Microsoft Access Database (.mdb)
Created by:	Hampshire and with Trust for Maritime Archaeology
Description:	This database is MIDAS compliant. It contains Primary Archaeological Archive table and Contact List table. The latter is to be used internally by English Heritage due to some individual contact details are subject to Data Protection Act and hence cannot be publicly released.
Latest date revised:	27 th July 2009
Metadata:	Metadata is included consisting of best practice list and thesaurus
Data collection:	Data collected from Ramsgate Maritime Museum, Isle of Thanet Archaeological Society, National Monuments Record, Robert Peacock, Ann & Bryan Smith, Wessex Archaeology, National Maritime Museum, British Library, Richard Bates, DCMS, Advanced Underwater Surveys, Mary Rose Trust, Norman Temple and Bournemouth University

Best Practice Guidelines

o Definitions:

See the recommended thesaurus

• Singular or plural

Use singular in text fields

o Punctuation

Punctuation should be kept to a minimum. In fields used for retrieval NO punctuation, commas, apostrophes, full stops or hyphens should be used.

o Case

Use only initial capitals. Consistency of use must be maintained for clarity and coherence

• Compound words

Compound words should generally be split into individual concepts.

• Synonyms and quasi-synonyms

Use the preferred word stated in the thesaurus and the word list.

o Free text

The order of words should follow natural language. Slang should not be used where the proper name is widely used. Loan words should no be used where there is a well- understood translation. Spelling should follow accepted rules.

• Preferred World List

When entering new data the words should be spelled exactly like the preferred words in the word list. If the word describing the artefact is not on the list enter it in the database but keep the consistency.

Class: (Describing the artefact class. Enter only one class using singular and split words.)

Arms (Preferred term)	Rigging
Clothing	Ship Equipment
Furnishing	Ship Structure
Galley	Small Arms (Not preferred use
Masonry	Arms)
Navigation	Storage
Ordnance	Tool
Personal	Unidentified
Personal	Unidentified

Material: (Describing the main material of the artefact, if the artefacts consist of more then one material, enter the option *several* and describe in detail in the archive description free-text box).

Type: (describing the type of artefact. Enter only one type using singular and split words. Description of the type in details should be entered in the archive description free-text box.)

Examples:

Antler Book Cover Bottle Bowl Button Dish Hat Jar Key Navigation Slate Plate Sand Glass Shred Tile

Thesaurus

Information scheme	Type term	Class term	Description
HWTMA archive no.			Sequential
			Year of publication/
Season			excavation
Archive Type			Describing type of record
	Paper record		Records on paper
		Correspondence	Mail or other contact regarding the site
		Dive logs	Records of logged dives
		Diver report	Summary and report of dives on site
		Survey records	Summary and report of survey on site
			Describing and summarizing an
		Artefact records	artefact Describing
		Conservation records	conservation undertaken
		Drawings	Drawings and sketches
		Report	Produced site reports
		Other	Other paper records not included in the above categories
	Artefact		Recovered artefacts from site
		Class	see word list
		Туре	see word list
		Material	see word list
	Samples		Records and results of taken samples
			Photographs of the
	Photographic		site and artefacts
	Video		Videos taken on site
	Geophysical survey		Indicates whether geophysical survey has been undertaken
		Mulibeam	Indicates whether

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Information scheme	Type term	Class term	Description
			multibeam survey has been undertaken
		Side scan	Indicates whether side scan survey has been undertaken
		Magnetometer	Indicates whether magnetometer survey has been undertaken
Archive Format			Describing format of record
	Paper		Paper form
	Image		Image on paper
	Digital		Digital record or photograph
		Digital format	Type of digital format
Archive size			Describing size of file
	A1		Size of paper
	A2		Size of paper
	A3		Size of paper
	A4		Size of paper
	A0		Size of paper
	Size of file		Size of digital file
Picture notes			Notes describing the picture and who took them
Archive condition			Describing the quantity/condition of the record
	Quantity		The known <u>number</u> of records/ artefacts
	Condition		Describing the condition of the record/artefact
		Very good	100% preserved
		Good	>50% preserved
		Poor	<50% preserved
	Unindexed		No Index number
	Catalogued		Have been catalogued
	Catalogue reference		Catalogue reference number
Ownership			Describes where the record/artefact can be found

Information scheme	Type term	Class term	Description
	Who holds it		Name of responsible organisation
	Location		Location of above
			Museums,
	Organisation		archaeological companies etc.
	Individual		Yes/No
	Name Address		Name of individual Contact details of responsible person
Access	Address		Describes who have access to the records and how to get access
	Public access		Accessible for everyone
	By arrangement		Access must be arranged with responsible person
	Copy obtained		The record/artefact is a copy
	Original		The record/artefact is original
Archive description	Detail		Description and detail of the record, free text should follow best practice guidelines.





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