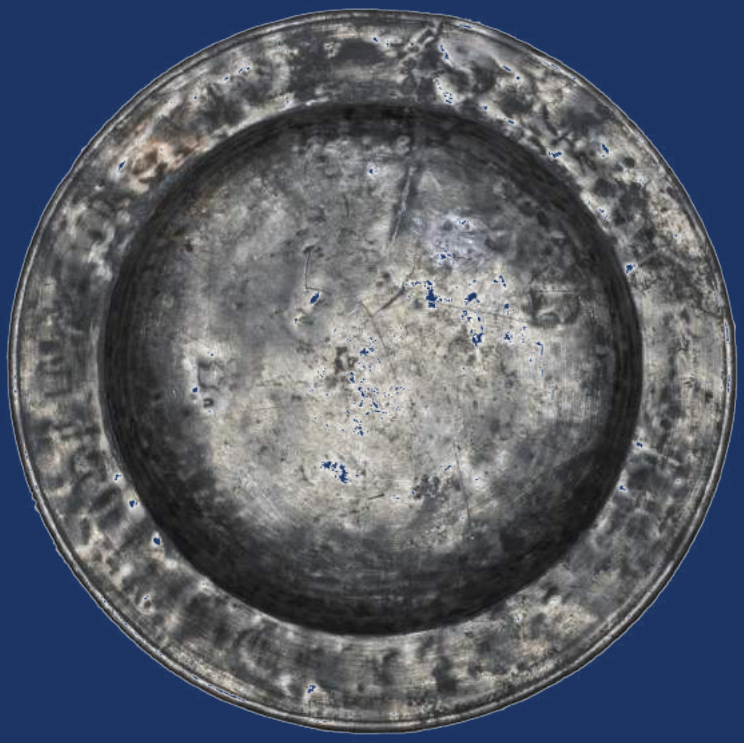
Maritime Archaeology Trust

The Future of the *Stirling Castle* Archive

Discussion Paper



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The Future of the *Stirling Castle* Archive

Discussion Paper

Prepared by

The Maritime Archaeology Trust

National Oceanography Centre, Southampton

On behalf of

English Heritage

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Contents

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1. Introduction

This discussion paper has been written as part of a wider staged project, commissioned by English Heritage, to allow the assessment, analysis and academic publication of the archive of archaeological material from the *Stirling Castle*, wrecked on the Goodwin Sands, Kent in the 'Great Storm' of 1703. The remains of the vessel were rediscovered in 1979 and archaeological work has continued on the site, subject to difficult on-site conditions, since then. The preservation of the vessel in 1979 was remarkable and a large number of artefacts were raised from the site. Subsequent work has concentrated mainly on surveying and recording the processes of degradation that seem to have impacted upon the site since its initial exposure, along with the recovery of artefacts threatened with loss as a result of such exposure.

Over the course of the thirty-five years during which work has taken place on the site a varied range of different institutions, organisations, groups and individuals have participated in archaeological fieldwork. The result of this has been that the ownership of the archive of material from the site, including artefacts, documentation, field records, photos, videos, geophysical data, etc is correspondingly diverse. This has resulted in the site archive become dispersed across a number of different locations and being curated and managed in an inconsistent way. As a result of this, access to the archive is difficult and certainly does not facilitate an overview of the entirety of the available material. Perhaps unsurprisingly, the resulting dissemination of the archaeological work and related archive from the site has been sporadic, piecemeal and lacking any overall direction and coherent strategy.

The present project, of which this discussion paper is one product, sets out to address some of these issues through a staged approach of assessment and analysis. In framing and forming the discussion presented here this paper has been frank in expressing opinion and proposing solutions. The purpose of this has been to encourage discussion, rather than to instigate confrontation or fan controversy and this should be borne in mind throughout. Similarly, this discussion paper is concerned solely with the future of the archive and so the future management of the site itself is not discussed.

The main aim of this paper is to set out the challenges posed to realising the full potential of the archive from the *Stirling Castle* and to outline recommendations for the future of the archive that will ensure that this potential is realised. In order to do this in a coherent way, the history and investigation of the site and the development of the archive is summarised. In doing this, the previous assessment phase of the project is built upon and readers are recommended to consult the reports that have been produced as part of that stage to gain the fullest picture. Following that, the significance and potential of the archive is outlined and discussed, along with the identifiable challenges faced in realising its potential; ownership, dispersal, access and dissemination. A number of options for the future management of the archive are then presented and discussed. The discussion concludes by recommending a process of proactive intervention that will result in the full digitisation of the archive and resultant open access free from geographical constraint. Doing this will allow the dissemination of the archive beyond the academic community, to the wider public, while ensuring the potential for future research is fulfilled.

2. The Stirling Castle: History and Context

2.1 Vessel History

The *Stirling Castle* was a 70-gun 3rd-rate ship originally built as part of the 'thirty ships' building programme between 1677 and 1685 overseen by Samuel Pepys in his role as Secretary of the Navy (Roger, 2004: 108). This work entailed the construction of a single 1st-rate ship, nine 2nd-rates and twenty 3rd-rate ships, the building of which to a standardised classification and tonnage, including the 'rating' of the armament helped to put in place the foundations of Royal Navy building practices for most of the rest of the age of the sailing warship (Fenwick and Gale, 1998: 95; Lavery, 2004: 16; Roger, 2004: 218-220). The *Stirling Castle* itself was built in the Royal Dockyard at Deptford by master shipwright John Shish and launched in 1679 (Figure 1). John Shish had also launched the first of all the 'thirty ships', the 3rd-rate *Lenox*, in 1678 (see Endsor, 2009). This group of 3rd-rate vessels were built in a way that would now be recognised as an individual class with efforts made to standardise the dimensions of their rigging, while their hull-form was still being used as the basis for two-decker ships of the line until 1755 (Roger, 2004: 218)

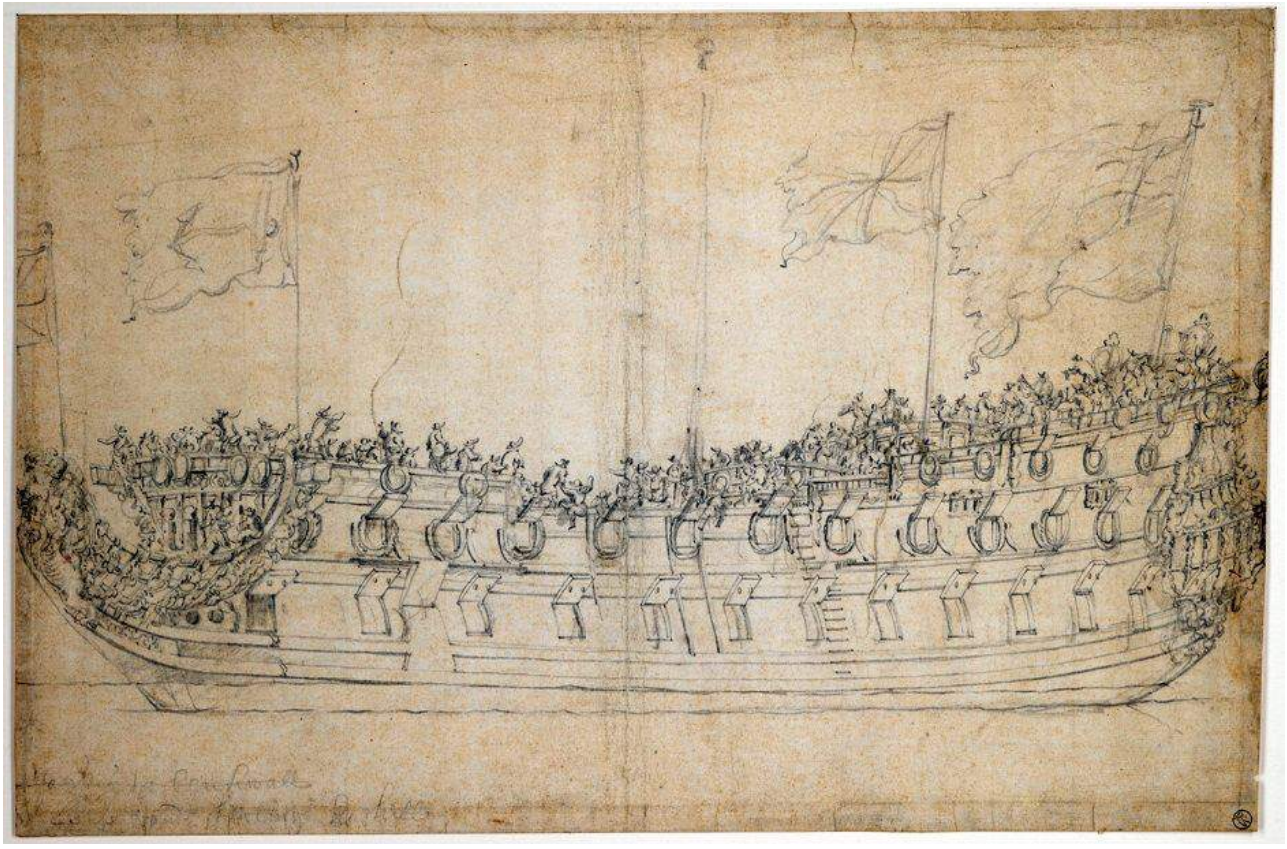

Figure 1. Drawing by Willem van de Velde of the launch of the Stirling Castle in 1679 (PAH3920, copyright: National Maritime Museum)[1].

Along with a large number of other vessels from the 'thirty ships' building programme the *Stirling Castle* was refitted at the end of the 17th century in the form of a major rebuild and was re-launched in 1701. On the 26th November 1703 the *Stirling Castle*

1 Accessible at http://collections.rmg.co.uk/collections/objects/143867.html

was at anchor in the Downs, off the Kent coast along with a large part of the Channel fleet, including the 3rd-rates *Northumberland* and *Restoration*, that had also been built as part of the 'thirty ships' building programme. The storm that struck the anchored fleet during the early morning of the 27th November has been remembered subsequently as the 'Great Storm' because of the immense loss of life from shipwreck that it caused along the English Channel. An example of the devastation can be seen in the anchorage at the Downs, where the 160 ships at anchor on the evening of the 26th had been reduced to around 70 by the morning of the 27th November (Endsor, 2004: 93). Overall, it has been estimated that in addition to three 3rd-rates (*Stirling Castle*, *Northumberland* and *Restoration*) and a 4th-rate (*Mary*) around 100 merchant ships were lost and a total of around 10,000 sailors perished (Roger, 2004: 168).

2.2 History of Archaeological Investigation

The history of archaeological investigation of the *Stirling Castle* spans a long period from 1979 to the present. Any account of the work undertaken during this period is inevitably lengthy and complicated due to the different individuals, organisations and objectives that have influenced the direction that archaeological activity on the site has taken. However, it is impossible to understand the archive from the site, without first having an appreciation of route by which that archive came into being.

1979-1991

The *Stirling Castle* was rediscovered in 1979 by divers associated with the Isle of Thanet Archaeological Unit during searches of areas of the Goodwin Sands where fishermen had snagged their nets (Perkins, 1980: 3). At the time of discovery, the vessel was reported as standing 6-8m clear of the seabed, orientated with the bow to the west and with much of the port side visible while the starboard side remained buried by a sandbank (Lyon, 1980: 339; Fenwick and Gale, 1998: 96-7). The archaeological activity on the site in 1979 consisted of establishing the basic dimensions and disposition of the vessel and the recovery of loose artefacts or those in danger from being washed away or salvaged (Lyon, 1980: 340; Perkins, 1980: 4). As a result of the 1979 discovery and investigation, the site was temporarily designated under the Protection of Wrecks Act 1973 and the designation came into force permanently on 6th June 1980. In 1980 the *Stirling Castle* was purchased from the Ministry of Defence by the Isle of Thanet Archaeological Unit for £200 (Peacock, 2008: 36), while items of personal property within the wreck were purchased by 1982 (Dunkley, 2008: 7).

A return to the site by the 1979 dive team was planned for 1980 in order to undertake more extensive and detailed survey but the vessel was found to have totally disappeared beneath the shifting sand of the area (Perkins, 1980: 7). As a result of this, the next archaeological work was carried out in 1983 and 1984 when a photographic and geophysical survey was undertaken by the 'Goodwins Archaeological Survey' that included the site of the *Stirling Castle* within a wider investigation of the maritime archaeology of the Goodwin Sands (see Redknap and Fleming, 1985). This was followed by an Archaeological Diving Unit (ADU) visit to the site in 1986 and 1987 when further deterioration and exposure of the wreck was reported (ADU, 1986; 1987).

There was no diving on the site by the licensee during 1985 or 1986 and the ADU did not visit the site again between 1988 and 1991.

1992-2002

The ADU visited the site for monitoring purposes in 1992 and found that archaeological material was exposed, including planks, guns and anchors. However, it was considered by the ADU that the site had reached an apparent state of short-term stability due to the overall similarity in sediment levels with the visit in 1987 (ADU, 1992). In contrast, a visit by the ADU in 1993 noted that no archaeological material was exposed because of higher sand levels on the site, indicating the ability of sediment levels to change dramatically in a short time period. The ADU noted further sedimentation in 1995, although they also noted a considerable amount of exposed material on top of the wreck mound about 3 metres high, timbers and an anchor were also identified (ADU, 1995).

SeaDive, under the direction of Robert Peacock as licensee of the site were involved in fieldwork from 1996 when they undertook investigation of the site. Diving on the site by the ADU and SeaDive revealed that the starboard side of the vessel was completely covered with sand, meanwhile the port side had been newly exposed, including the remains of a brick hearth. Geophysical surveys undertaken by the ADU in 1997 concluded that there had been a slight increase in sediment levels at the site that was providing some stability (ADU, 1997). Meanwhile, the UKHO surveyed the site and reported that sediment accretion had occurred around the wreck (UKHO, 1997). Despite this, a trend for the site to become increasingly exposed was noted by SeaDive's work in 1998 which indicated that significant sediment loss had left the site in a similar state of exposure as in 1979. The large-scale re-exposure of the site led to the development of a new phase of concerted work on the site, led by Peacock and called *Operation Man O'War*, it comprised members from SeaDive, The Nautical Archaeology Society (NAS), the ADU and a group of divers from the USA.

During *Operation Man O' War* (see Peacock, 2000a), a decision was made to protect any exposed artefacts *in-situ* or to recover significant artefacts at risk of loss or damage. As a result, fragments of a log reel, a brass candlestick and a probable traverse navigation board were recovered by the ADU (Peacock, 2000a: 9). Seadive also recorded extended video footage of the exposed structure as a means to ensure preservation by record of the seabed remains (Peacock, 2000a: 8). Meanwhile, the ADU undertook an acoustic and bathymetric survey (ADU, 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 and a decision to recover this gun was made by the licensed team with the recovery overseen by the ADU (ADU, 2000; Peacock, 2000b). Conservation of the gun and carriage was entrusted to the Mary Rose Trust. During this period the vessel was exposed to a height of around 2m at the bow and 4m at the stern, providing opportunity for the surviving wooden structure to be recorded. It was observed during the work that large quantities of fishing nets were being snagged on the vessel with the potential to cause

significance damage. Overall, the work undertaken in these two seasons served to complete the pre-disturbance plan of the site and to demonstrate that the vessel was still substantially intact, although at clear risk of rapid deterioration.

In 2001, work undertaken by Seadive reported that the bow area of the port side of the ship was covered with sand. In contrast, the mid-ships to stern port side of the vessel had been subject to further sediment loss and exposure of material, this included the keelson, garboard and associated outer hull planking. During this year, another geophysical survey was undertaken by the ADU (ADU, 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, 2002). Seadive continued to work on the site and conducted 27 hours of survey work between May and September 2003. Although diver survey was limited by poor visibility, gradual reburial of previously exposed material was observed across 70% of the site, but with further structural deterioration of the aft port side and stern area (reported in WA, 2006: 6).

2002-present

In 2003 Wessex Archaeology (WA) took over as the archaeological contractor for the Protection of Wrecks Act and conducted a desk-based assessment of the *Stirling Castle*, one recommendation of which was the extension of the protected area from a radius of 50m to 300m. This had originally been a recommendation of the ADU in 1999 (ADU, 1999: 99/37) and this revision of the designated areas was duly implemented in 2004. WA also made a number of other recommendations (WA, 2003: i-ii) that have shaped the subsequent management of the site and are relevant to the present project, including;

- Publication of material becoming a statutory responsibility of the licensee.
- An assessment of all archive components.
- Evaluation of all artefacts recovered thus far.
- Enhancement of public understanding and appreciation of the wreck site.

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).

In April 2005, the *Stirling Castle s*ite was surveyed as part of year one of the *Rapid Archaeological Site Surveying and Evaluation* (RASSE) project survey project (Bates *et al*., 2005: 23-28) and this work suggested that the site had been subject to sediment accretion around the stern of the vessel and to the north-east of the vessel since 2002 (Bates *et al*., 2005: 27).

Further significant fieldwork was undertaken by WA in 2006 in their role as the PWA contractor (see WA, 2006). Diving was conducted on site with the intention of

combining the detailed multi-beam survey undertaken in 2005 with direct diver observations to create a revised and updated site plan. As part of this process, much of the observable seabed features were rationalised with those historically reported and previously recorded on the site (see WA, 2006: 11-19). A large number of barrel staves were also recovered during the course of fieldwork on the site. The work undertaken by WA was in addition to the diving undertaken by the licensee (reported in WA, 2007: 3). The process of integrating multi-beam survey with direct diver observation was continued during 2007 with further work undertaken on the site by WA in relation to the PWA (see WA, 2007). During the course of this work it was also noted that the sedimentation was occurring on the site, particularly in the area of the stern, which had previously been subject to deep scour but that was observed to have been largely filled-in by 2007 (WA, 2007: 5).

Fieldwork in 2008 by WA as the PWA contractor was undertaken with the aim of completing dendrochronological sampling in addition to further work on the integration of multi-beam and diver observation across the site. Dendrochronological sampling was ultimately not undertaken because of the level of disturbance this would have required. On-going condition monitoring of the site as part of this work observed that significant degradation had occurred at the stern of the vessel between August 2007 and August 2008 resulting in the loss of one of the transom timbers and probably the rudder (WA, 2009a: 7-8)

Shortly after this work, a high resolution side-scan and magnetometer survey of the site was carried out by WA on behalf of EH as part of the South East of England Designated Wrecks Project (WA, 2009b), in conjunction with continued work on refining the site plan (WA, 2010a). As in previous years, on-site conditions meant that several objectives, notably the use of sector-scanning sonar, had to be abandoned (WA, 2010a:5). The overall condition survey undertaken in 2010 indicated that the stern post had been subjected to further degradation and scour, but that the sides of the vessel towards the stern were now buried as were the majority of features in the bow area of the vessel. In general exposed timbers were subject to extensive biological and mechanical erosion, but it was also observed that there was some indication of sedimentation occurring on the site (WA, 2010a: 7). At this juncture in the history of the site, it was noted by WA that the site itself is not stable, but that it is currently buried with little potential for any non-intrusive fieldwork (WA, 2010a: 8). In 2009, the licensee went on record as noting the destruction of the site over the previous ten years and expressed the opinion that the management of the *Stirling Castle* site amounted to a policy of 'staged and managed neglect' rather than *in-situ* preservation (Peacock, 2009: 5).

Following this, work has been undertaken on the site by WA as the PWA contractor under an overarching project addressing designated vessels in the wider south-east of England. This has resulted in further geophysical investigation and archaeological diving on a number of sites in the Goodwin Sands, including the *Stirling Castle*. Information on this work contained in a number of WA reports (2010b; 2010c; 2011; 2012) was unavailable to the present project at the time of writing via WA because the

results of the work are considered confidential by English Heritage. Work on the site has also been continued by the licensee and in 2013 it was reported (Pascoe, 2013) that a number of framing scarph chocks had been identified and recovered from the sites of the *Stirling Castle* and the *Northumberland*.

2.3 Archive History

Having outlined the history of the investigation of the site of the *Stirling Castle* it is of use in the context of the present discussion to briefly outline the development of the archive that resulted from that work. At the outset of archaeological work undertaken by Wessex Archaeology as the diving contractor for the PWA, concerns were expressed regarding the status of the archive from the site and the lack of publication and dissemination of material contained within that archive. A number of recommendations were made to address these concerns (WA, 2003: i-ii).

As a result of this, a staged approach to addressing the *Stirling Castle* archive was developed and a full assessment of the archive was undertaken as part of Stage 2 of the present project. Consequently, the following section draws heavily upon the Stage 2 report (HWTMA, 2012) that was produced as part of the archive assessment process and briefly summarises the nature, ownership and location of the archive (Table 1). This summary is intended to inform the discussion of the future of the archive carried out in Section 3 and 4.

Period	Organisation	Activity	Archive Ownership	Archive Location
1979-1991	Isle of Thanet Archaeological Society	Survey, excavation and artefact recovery as PWA licensee	Isle of Thanet Archaeological Society. Bryan & Ann Smith	Ramsgate Maritime Museum. Isle of Thanet Archaeological Society. National Maritime Museum. Bryan & Ann Smith
	Archaeological Diving Unit	Field investigation and survey in accordance with PWA	Subsequently English Heritage	NRHE, Swindon DCMS (correspondence)
	Marine Archaeological Surveys	Geophysical survey	Marine Archaeological Surveys	Unclear
1992-2002	SeaDive	Survey, excavation and artefact recovery as PWA licensee	SeaDive Robert Peacock	SeaDive Robert Peacock Mary Rose Trust
	Archaeological Diving Unit	Field investigation and survey in accordance with PWA	Subsequently English Heritage	NRHE, Swindon DCMS (correspondence)
2002-Present	SeaDive	Survey, excavation and artefact recovery as PWA licensee	SeaDive Robert Peacock	SeaDive Robert Peacock
	Wessex Archaeology	Field investigation, including geophysical/archaeological survey and artefact recovery in accordance with PWA	English Heritage	English Heritage Wessex Archaeology
	ADUS/University of St Andrews	Geophysical Survey	ADUS/University of St Andrews	ADUS/University of St Andrews

Table 1. Summary of activity, archive ownership and archive location deriving from work undertaken on the Stirling Castle between 1979 and the present.

Details of the range of materials held within the archive are included in the Archive Assessment report (HWTMA, 2012). Overall, the range of material included within the *Stirling Castle* archive falls within six broad classes and encompasses;

- Material, both structural and artefactual still *in-situ* on the seabed at the site.
- Records of seabed material in the form of photos, videos, survey drawings, etc. some of which are the only records of *in-situ* material that has subsequently been lost.
- Records from geophysical surveys of the site.
- Substantial numbers of artefacts (in excess of 600) raised during investigative activity and archaeological work, representing seventeen artefact classes. Records of recovered artefacts, such as photographs or drawings (Figure 2).
- Records relating to the work on the site such as dive logs, diver observation, general correspondence, etc.

Figure 2. A pewter plate raised from the Stirling Castle *and held by the Trust for Thanet Archaeology. The artefact was photographed in 2010 during the archive assessment. No information is held as part of the storage of the artefact regarding its origin on the site or year of retrieval.*

In addition, a number of historical sources were identified during the Stage 2 archive assessment that relate to the vessel and can inform any subsequent interpretation of archaeological material. This material is primarily held by the National Archives (Kew), the National Maritime Museum (Greenwich) and the British Library (London).

It is clear that the history of the archive from the site of the Stirling Castle is complicated and involves a large number of institutions, organisations and private individuals. The various involvement of these different parties has been underpinned by different funding processes ranging from private investment, through public grants (e.g. the ALSF), to funding streams associated with statutory legislation (the PWA). By extension, the differences in personnel and funding have meant that the motives of those working on the site have also varied over time. The same variation can be observed in the requirement of groups/individuals to undertake the formal archiving of material. As a consequence of such factors, the archive of the Stirling Castle is widely dispersed through a range of owners, who have undertaken a varied approach to recording, archiving and publication. In this regard, it is worth noting WA's report on the PWA fieldwork in 2009 which highlights (WA, 2010: 8-9) continuing concerns over the status of the archive of material from the site, especially from the early stages of archaeological investigation and in general for work undertaken prior to 2002. The challenges posed by these factors are discussed further below in Section 3.3. Despite this, the archive from the site has clear potential and undoubted significance that should be fulfilled through analysis, public dissemination and provision for future access. This potential and significance, along with the challenges faced in achieving the long-term future of material from the site are now discussed in Sections 3 and 4.

3. The Stirling Castle Archive: Significance, Potential and Challenges

3.1 Significance

The Archive Assessment conducted as part of Stage 2 of the present project identified that the archive of material resulting from archaeological work on the site of the *Stirling Castle* can be considered to be of high value in all areas; evidential, historical, aesthetic and communal (HWTMA, 2012: 75-79). Corresponding overall significance was also considered to be high. In addition to this a number of other elements relating to the site and related archive can also be explored that further enhance the already high level of significance of this material and these are now considered.

The significance of the 'thirty ships' building program within the wider history of the development of the Royal Navy has been well established through a number of existing academic publications (e.g. Roger, 2004: 95-111; Endsor, 2009: 7-8). Within this overall theme, the 3rd-rate, 70-gun class of ships that included vessels such as the *Stirling Castle* has been noted as providing the archetype for the two-decked line of battle ship that was to remain in use until the end of the Napoleonic Wars in 1815. Our current understanding of these vessels is based largely upon historical sources that draw upon the extensive documentary material that has been preserved from the era of the 'thirty ships'. The unusual completeness and preservation of this historical documentation has been noted by Endsor (2009: 7) in his extended account of the design, construction and career of the *Lenox*, one of the other 3rd-rate vessels built by Jon Shish at Deptford. It is clear from Endsor's work that the shipbuilding processes of the Restoration Navy are relatively well served by such historical sources.

However, it has been noted in the context of the Maritime Archaeological Framework for England that our broad understanding of the construction and use of shipping in the early-modern period, merchant, naval or otherwise, is based largely upon historical accounts (Dellino-Musgrave & Ransley, 2013: 171-176). As such, the richness of the archaeological record relating to such a critical part of our maritime past is under-utilised, but carries huge potential. It has been critically noted elsewhere (e.g. Martin, 2013: 462) that the fullest appreciation of the maritime elements of this period can only be reached by combining the historical and archaeological record together, in conjunction with other available sources such as iconography and contemporary models to produce a holistic view of such vessels and activity.

In this regard, the archive of archaeological material from the *Stirling Castle* offers an opportunity to provide a high level of physical detail to compliment the historical account developed by Endsor for one of the sister-ships of the *Stirling Castle*. Indeed, Endsor provides glimpses of the potential effectiveness of this approach in his use of archaeological material from the *Stirling Castle* as a means to illustrate elements of the *Lenox* for which there is no surviving historical material (see Endsor, 2009: 63-64). In particular, the artefactual assemblage that has been recovered from the *Stirling Castle* should be seen as highly significant in this regard because it represents many of the personal possessions and small items that are often not documented in official

sources. This class of artefacts often strike a special resonance with the public because they represent a clear way to relate to the people who lived, served and died upon the vessel. The archaeological record can provide this tangible understanding in a way that is difficult with historical sources; most notably within England via the huge collection of archaeological material from the *Mary Rose*. While it is clear that the archive from the *Stirling Castle* is not on the scale of that from the *Mary Rose*, it still has similar potential to provide an insight into life on-board and at sea in the late 17th and early 18th century.

3.2 Potential

It will be clear from the discussion of the history of the archaeological investigations of the site described in Section 2.2 that the archive from the *Stirling Castle* encompasses a wide range of material. As such, this material has a correspondingly broad potential to engage with different audiences and to be utilised for different purposes ranging from straightforward public interest through to ongoing academic research. Many of these elements were addressed during the Archive Assessment conducted in Stage 2 of the present project (HWTMA, 2012: 73-5) and they are summarised again here in broad terms;

- Potential to inform upon the processes of ship design and building in a critical formative period in the development of Royal Navy ships, the Naval administration and the social structure on board such vessels.
- Potential to highlight the development and adoption of technologies relating to ship design, arming and manning during the late 17th century.
- Potential to investigate and elucidate the shipboard life on board Royal Navy vessels beyond that of the officers.
- Potential to emphasise how studies of material culture and material relations between people and goods can contribute to, compliment and challenge accounts founded upon maritime historical sources.

Additionally, as noted above in Section 3.1, much of this potential ties in with research questions noted in the recently published Maritime Archaeological Research Framework for England relating to the seafaring during the early-modern period (Dellino-Musgrave & Ransley, 2013: 171-176). It is also possible to envisage the potential impact that the *Stirling Castle* archive can have beyond purely academic research. In this sense, there is potential for the archive to engage the public with maritime archaeology and to;

- Facilitate the personal investigation and understanding of the practice and processes that comprised naval life at sea during the late 17th and early 18th century through the collection of shipboard and personal artefacts preserved from the site.
- Provide a means for the public to understand the issues and complexities of conducting maritime archaeological investigation in a dynamic environment such as the Goodwin Sands through the material records relating to work on the site.
- Present and promote an informed account of the site formation processes that archaeological sites are subject to through the archive of geophysical and video

imagery of the site. This can also serve to provide education relating to management decisions and the overall protection of underwater cultural heritage.
- Set the agenda and provide guidance for the future of maritime archaeological archives by setting out clearly how a dispersed archive can be brought together as a single corpus of material in order to realise its full potential.

All of these have the additional added potential of increasing overall public engagement with maritime archaeology and serve to raise public awareness of its value and importance to society as well as the management considerations. However, the history of the site and its archive as outline above dictate that there are a number of challenges that must be taken into account before the potential of the site and archive can be fully realised.

3.3 Challenges

Based on the summary of the archive history presented in Section 2.3 and the archive assessment conducted as Stage 2 of the present project, a number of challenges can be identified that must be overcome before the archive of the *Stirling Castle* can realise its full potential. To a large extent these are inter-related and as a consequence, one problem tends to lead into, and/or contribute to, subsequent identifiable problems. These problems can be summarised as follows;

- Archive ownership and dispersal.
- Archive access.
- Archive dissemination.

Archive Ownership and Dispersal

The Stage 2 archive assessment highlighted the fact that the archive of material from the Stirling Castle has been, and continues to be, owned, curated and managed by a number of different individuals, groups or organisations. This has resulted in the archive of material, including artefacts, relating to the site and work undertaken upon it being widely dispersed (HWTMA, 2012: 81). Material from the *Stirling Castle* has been, or continues to be, owned/held by the following;

- National Record of the Historic Environment Swindon.
- Department for Culture Media and Sport.
- National Maritime Museum (NMM), Greenwich.
- Wessex Archaeology.
- ADUS/St Andrews University.
- SeaDive (Robert Peacock).
- Isle of Thanet Archaeological Society (formerly the Isle of Thanet Archaeological Unit).
- Trust for Thanet Archaeology.
- Ramsgate Maritime Museum.
- Shipwreck Museum (Hastings).
- Ann Smith.
- Private, unknown ownership.

Within this diversity of holdings, there are a number of differing ownership situations. For example, the wreck itself and material recovered from it during work in the 1980s is owned by the Isle of Thanet Archaeological Society who purchased the wreck and its contents from the Ministry of Defence, but that material is now held by the Trust for Thanet Archaeology. Material from the earliest phases of work is also held by and has indeed been published by some private individuals such as the Ann Smith and the late Bryan Smith. Meanwhile, work undertaken by the ADU under the PWA prior to 2002 is owned and held at the NRHE. Work conducted by WA under the same statutory instrument since 2002 is held by English Heritage who commissioned that work. At the same time, recent work has been undertaken by the SeaDive organisation, through Robert Peacock as PWA licensee, who maintains a separate archive of material relating to such work.

As indicated in Section 2.3, the varied ownership of the archive has resulted in the archive becoming physically dispersed over time. Material from early investigation is lodged with the National Maritime Museum in London, the Ramsgate Maritime Museum in Kent and also with the Shipwreck Museum in Hastings. More recent material is held in the NRHE in Swindon, by SeaDive in Kent or by Wessex Archaeology on behalf of English Heritage in Salisbury. Related historical documentation is primarily held in London, but across three different national institutions. Added to all of this, it should be remembered that a significant corpus of material remains *in-situ* on the seabed. As long ago as 1989, the dispersal and splitting up of site archives was noted (McGrail, 1989: 10) as being a problem for maritime archaeology and this situation has been reiterated recently (HWTMA, 2009a; 2009b; 2009c, Satchell, forthcoming). The *Stirling Castle* archive represents a clear example of this, dating from its discovery and continuing to the present day. This wide dispersal of material has clear issues for public access to material, which is discussed below. Additionally, it dictates that it is virtually impossible to comprehend the scope of the archive as a single corpus of material. This greatly limits both its interpretation and the realisation of the potential that the archive has, as outlined in Section 3.2.

At a more practical level, such diversity of ownership and related dispersal of material has inevitably resulted in considerable variation in how material is managed by its various owners and/or holders and the extent to which archive material has been formally deposited. This problem was noted in the Stage 2 Assessment report (HWTMA, 2012: 80) in relation to the currently accepted best practice for archaeological archives (see Brown, 2007). In this regard the status of the *Stirling Castle* archive perhaps epitomises the general crisis currently facing maritime archaeological archives within England.

Archive Access.
As a result the dispersal of the *Stirling Castle*, public access for interest, enjoyment and research is reduced and difficult. The archive assessment highlighted (HWTMA, 2012: 81) the fact that currently only the material held by the NRHE in Swindon and by the National Maritime Museum (NMM) in Greenwich is publicly accessible. The material held by the NMM is now accessible in a digital format via the NMM website and includes images and descriptive interpretations of artefacts as well as some related

historical documentation. The collection of material formerly held by the Trust for Thanet Archaeology is now held by the Shipwreck Museum at Hastings, meanwhile, the Ramsgate Maritime Museum was closed for a period but has now reopened, further remaining material is held in private ownership.

Clearly, this situation is not suitable for allowing effective and full public access to the archive. The archive assessment conducted in Stage 2 of this project illustrated many of the difficulties of gaining access to all elements of the site archive. As such, a powerful element of any future management of the archive must therefore be to identify a way to allow public access to the entire archive, either in a physical or digital (virtual) form. Such access should allow members of the public to experience the material from the site for the purpose of simple interest, to allow material from the site to be effectively used for outreach and education purposes (see also dissemination below) and finally to allow elements of the archive to be used in future academic research. This discussion paper identifies and sets out some possible options for the future management of the archive in Section 4 below.

Archive Dissemination

The challenge surrounding the dissemination of the *Stirling Castle* archive, stems to a large extent from the challenges just discussed relating to ownership, dispersal and access. In particular, dissemination of material for public engagement for the purposes of education and outreach is extremely difficult without full access to material. At least part of the value of the site and the material from it lies in the high levels of preservation associated with it and the range of well-preserved material that has been raised over the years. Existing maritime museums, such as the Mary Rose, have illustrated the high level of public interest in archaeological material comprised of artefacts representing the everyday life and work of people on board such sailing vessels.

Dissemination to the archaeological community, much smaller in audience than the general public, has thus far been more limited and piecemeal in nature. Published work has reflected the research interests of individuals, addressing subjects such as the potential steering mechanism of the vessel (Endsor, 2004), elements of the vessel's navigational equipment (Smith, 2010) or the application of geophysical methods for recording the site (e.g. Bates *et al*., 2011). In addition to this, material from the site has been included within wider historical work (Endsor, 2009) covering one of the *Stirling Castle's* sisterships, the *Lenox*, as a means to provide artefact based context to the historical narrative of the latter vessel. Finally, summary accounts of the site have appeared in general works (e.g. Fenwick and Gale), while some aspects of the current work have been published more informally in newsletters (e.g. Peacock, 2000a; 2000b; Pascoe, 2013).

From this summary alone it is clear that the academic publication of material has not been developed in a coherent manner, following a wider research and dissemination plan. This problem is partially mitigated by the analysis stage of the present project, which will result in the publication of an academic monograph incorporating a number of pieces of specialist research. In this sense, the challenge of dissemination is one that should really focus more on the wider public, rather than the academic community. Returning to the challenge of archive access highlighted above, overcoming that challenge is crucial to ensuring that future access can result in

dissemination of the archive to the public and allow access for future research to continue the process of academic dissemination as new material is discovered, recorded and raised from the site, as it surely will be.

3.4 Threats and Vulnerabilities

Largely as a result of the challenges just outlined, the Archive Assessment identified a number of threats and vulnerabilities that are facing the *Stirling Castle* archive with respect to the established criteria of archive deposition, conservation and access (see HWTMA, 2012: 79-82). These criteria and the threat to each them were assessed during the Archive Assessment and can be summarised as follows;

- Archive Deposition: Threat = HIGH
- Archive Conservation and Curation: Threat = HIGH
- Archive Accessibility: Threat = VERY HIGH

The overall combined threat to *Stirling Castle* archive was considered to be HIGH.

It is useful to reiterate the conclusions of the assessment report here, before moving onto outlining the possible future options for the *Stirling Castle* archive in Section 4. With this information in place, any proposed future options can be assessed for the extent to which they can potentially reduce the current threat to each of the areas noted above.

4. The Future of the Stirling Castle Archive

The following section describes three options for the future of the *Stirling Castle* archive. In each case, the challenges to realising the potential of the archive that were outlined in Section 3.3 are considered alongside the extent to which the threats to the archive outlined in Section 3.4 are reduced, stabilised or increased.

The purpose of this paper is to generate and set out discussion, therefore it is not considered appropriate for detailed tasks, outcomes or budgets, as might be expected in a full project design, to be included here. A summary of the outcomes of each option, in relation to the main challenges to realising the potential of the archive outlined in Section 3.3 is shown in Table 2.

Future Option	Identified Challenge to realisation of archive potential				Realisation of Potential
	Ownership	Dispersal	Access	Dissemination	
1: No Intervention	**Not Resolved**	**Not Resolved**	**Partially Resolved**	**Partially Resolved**	**Academic only**
2: Partial Intervention	**Not Resolved**	**Resolved**	**Partially Resolved**	**Partially Resolved**	**Academic and limited public**
3: Developed Intervention	**Not Resolved**	**Resolved**	**Resolved**	**Resolved**	**Academic and full public**

Table 2. Summary of the possible future options for the Stirling Castle *archive and the extent to which these options will allow the potential of the archive to be fully realised.*

4.1 Future Option 1: No Intervention

Summary of required action

Future Option 1 represents the acceptance of the current status quo in relation to the challenges of archive ownership, dispersal, access and dissemination outlined in Section 3.3. This option requires no further implementation of any measures to address any of the challenges faced by the *Stirling Castle* archive.

Summary of future outcome

The tacit assumption implied by this option is that the current management of the archive is adequate and acceptable and can continue. When, in reality, it needs to follow the most recent guidance issued on this matter (EH, 2012: 6) regarding the deposition of all material from a site in accordance with recognised best practice practice for archaeological archives (see Brown, 2007). A number of potential outcomes can be envisaged if this option is adopted for the future management of the *Stirling Castle* archive;

- **Ownership** of material will continue to be spread across a range of institutions, organisations, groups and individuals. This is probably inevitable given the cost implications associated with a single institution, organisation or individual acquiring all material from the archive, including artefacts.
- **Dispersal** of material will continue across the currently wide range of geographically separate locations.
- **Access** to material will continue to be variable and in many cases difficult. Although some material is publicly accessible, a great deal of material will continue remain inaccessible. Material digitised through the current project will

be deposited with the Archaeological Data Service, thus partially fulfilling a previous management policy for the site that highlighted the suitability of web-based initiatives for improving access (see Dunkley, 2008: 18).

- **Dissemination** of material is likely to continue to be unfulfilled. Stage 3 of the present project will result in an academic monograph publication, but this should not be considered as full dissemination of the archive because it is has little potential to encourage public engagement beyond the academic community.
- **Threat** to the *Stirling Castle* archive as outlined in Section 3.4 will be reduced as a result of adopting option 1. This will primarily occur as a result of the present project and its outcomes; notably the publication of a site monograph and the deposition of digital material with the ADS and subsequent accessibility.
  - Archive deposition Threat = Medium.
  - Archive conservation and curation = Medium.
  - Archive accessibility = Medium.
  - Overall threat to archive = Medium.

Realisation of archive potential

The option described above can realise some of the potential of the archive, as described in Section 3.2. Notably, the formal deposition (with the ADS) of some elements of the archive that have been digitised as part of the present project will widen public access to this material and ensure that it is more inclusive in the future. Additionally, the academic monograph that will result from Stage 3 of the project will address some of the research potential of the archive.

Adoption of this option will not however realise the full potential of the archive. Public engagement and access to the material is likely to continue to be limited to specialists, rather than the wider public. Likewise, the potential of the archive to engage the public more widely with maritime archaeology is unlikely to be realised. Issues of ownership and dispersal will be left largely unaddressed, dictating that a similar project to the present one will have to be implemented in the future in order to take account of work done in the interim. More widely, the potential to use the *Stirling Castle* archive as a means to set the future standard for how to deal with maritime archaeological archives will remain unfulfilled. As a consequence, the processes that the present project has been through are likely to have to be repeated on other sites

Option 1 should be considered as an unsatisfactory future outcome for the *Stirling Castle* archive. It will result in some of the potential of the archive being fulfilled, but it is likely to largely fail in facilitating wider public access to material or dissemination of such material. Furthermore, although the option is financially neutral at the present time, it seems inevitable that future financial resources will have to be expended on the *Stirling Castle* archive in the future.

Recommendation: Option 1 is not recommended, but it will result in a reduction of the threat to the site archive.

4.2 Future Option 2: Partial Intervention

Summary of required action

As noted above, the dispersal of archive material, resulting largely from a diversity of ownership is potentially the biggest obstacle to the realisation of the potential of the *Stirling Castle* archive. The problems associated with accessing the archive of the *Stirling Castle* are well illustrated by Stage 2 of the present project. This entailed visiting the various locations where material was held by a number of different owners; for example private individual, museum or commercial organisation. Where material was deposited in a museum, the museum was no longer open to the public and access to the archive had to be specially organised. One of the aims of that stage of the project was to document all of the elements of the archive and to record them in a database, with accompanying digital images where applicable. As a result of this, the extent of the archive is relatively well understood and data appertaining to each element has been captured in a consistent way that is suitable for future use.

It is probably not feasible to attempt to redress or redistribute the ownership of material entirely. However, diverse ownership should not prevent archive material from remaining dispersed. Future Option 2 therefore envisages proactive measures as a means to facilitate the majority of the archive being contained at a single geographical venue. In addition to artefacts raised from the site, successful implementation of this option would require copies, either digital or physical, of the supporting archive to be located at the same venue and to be stored in a consistent format to encourage public access. This process has been partially completed as a result of the digitisation of material undertaken through the present project.

Gathering material together in a single place in this way, would also reinforce EH's guidance notes regarding *Accessing England Protected Wreck Sites* which recommends that all information about a site should be kept in one place and stored in an orderly way. It is clearly apparent that this has not happened with the Stirling Castle at any phases within the history of the archaeological intervention on the site. Uptake of this option also has the potential to encourage a similar procedure to be implemented on other sites and to demonstrate that such an outcome is possible and should be standard practice, rather than the result of exceptional, one-off projects.

Summary of outcome

A number of potential outcomes can be envisaged if this option is adopted for the future management of the *Stirling Castle* archive;

- **Ownership** of material will continue to be spread across a range of institutions, organisations, groups and individuals. This is probably inevitable given the cost implications associated with a single institution, organisation or individual acquiring all material from the archive, including artefacts.
- **Dispersal** of material will be resolved through proactive measures to bring artefacts together in a single location/venue, along with original or duplicate supporting material/documentation. The unification of material under a ‘shared ownership’ ownership regime is in keeping with a previously identified management policy for the site (Dunkley, 2008: 18). Ideally, the chosen

location/venue would be in the geographic vicinity of the wreck site. Previous work has highlighted the potential of Deal Castle as a venue for interpretative material relating to the Great Storm and the *Stirling Castle* site (see Dunkley, 2008: I, 14, 18, 21-22).

- **Access** to material will continue to be uneven because of the concentration of material at a single location. Provision of a public display, education and outreach in addition to access for academic research will allow a wide cross-section of the public to engage with the material. Additionally, limited non-geographically specific access will be facilitated via material digitised through the current project that is destined to be deposited with the Archaeological Data Service. This latter feature will partially fulfilling a noted management policy for the site that highlights the suitability of web-based initiatives for improving access (see Dunkley, 2008: 18).
- **Dissemination** of material is likely to continue to be partial. Stage 3 of the present project will result in an academic monograph publication, but this should not be considered as full dissemination of the archive because it is has little potential to encourage public engagement beyond the academic community. This may be partly redressed at a localised level through the provision of public displays of all available suitable material and through wider efforts to publicise the available access to material.
- **Threat** to the *Stirling Castle* archive as outlined in Section 3.4 will be reduced as a result of adopting option 2. This will primarily because of the proactive measures taken to gather the archive in a single location and as a result of the present project; notably the publication of a site monograph and the deposition of digital material with the ADS and subsequent accessibility.
  - Archive deposition Threat = Medium.
  - Archive conservation and curation = Low.
  - Archive accessibility = Medium.
  - Overall threat to archive = Medium/Low.

Realisation of archive potential

Implementation of option 2 would largely overcome the current dispersal of archive material that is a significant challenge in realising the potential of the *Stirling* Castle archive. Bringing material together in a single location would allow the archive to be considered in its entirety and encourage the potential inter-relationships between different elements of the archive to be fully realised. From the perspective of academic engagement with the archive, this option will allow future research to occur, over and above that facilitated by the present project and the resulting monograph. As a counter to this, future wider public access to material will be inherently more limited through geographical location and the requirements for the maintenance of a formal display/interpretation of material at a suitable location.

Clearly there are likely to be some cost implications in adopting this option. Such expenditure can however be seen as proactive, in that a location for future archive material from the site will be established. Resulting, hopefully, in a commensurate

reduction/removal of future financial expenditure such as those identified in relation to Option 1, because future repetition of the present project should not be required.

At a wider scale, considering the future management of other designated sites, uptake of Option 2 will establish the viability of bringing archive material together. Furthermore, it will demonstrate that this can occur despite the challenges posed by shared ownership and a long history of investigation by a range of different parties, with different motives operating in response to varied funding streams. In that sense, uptake of Option 2 will serve to realise some of the additional potential of the *Stirling Castle* archive as representing a model of how archaeological archives from designated sites can be managed in the future, rather than perpetuating past approaches.

Recommendation: Option 2 is recommended as the minimum appropriate course of action to ensure that the potential of the site is partially realised and the threat to it reduced to more acceptable levels.

4.3 Future Option 3: Developed Intervention

Summary of action

Future Option 3 recognises that the archaeological archive of material originating from past and ongoing work on the wreck of the Stirling Castle is of national importance. Accordingly, it takes measures, as outlined in Option 2 above, to reunite the dispersed elements of the archive at a single location, while maintaining the current situation of shared ownership. As noted for Option 2, achieving this will help allow the full potential of the archive to be realised, while facilitating much greater ease of public access.

Additionally, Option 3 takes the view that fullest dissemination is represented by public appreciation of the archive with as few barriers to access as possible. The most cost-effective and proven option for achieving access to the entire archive of material is via some form of digital resource. This was proposed for Option 2, but without an element of online access, other than in a limited form via the ADS. Expansion of archive access to incorporate online access, based upon the digitisation of all archive material has the potential to remove all barriers to access, for the purposes of research, interest, education, outreach and simple enjoyment. An example of the suitability of this approach can be seen with the archaeological archive from the site of HMS *Invincible*, a 74-gun 3rd-rate ship of the line that was lost in the Solent in 1758. The Digital Invincible Project[2] therefore provides a starting point for understanding the challenges involved in the implementation of such a far-sighted measure.

Additionally, it should be highlighted that the provision of a dedicated online access method to the archive opens up the possibility for the archive to an extended and proactive education and outreach programme as a means to engage the public with maritime archaeology. An example of the suitability of basing such processes on an online resource is demonstrated by the HWTMA 'Identifying a Mystery Shipwreck'

2 See http://www.maritimearchaeologytrust.org/mapguide/invincible/main.php

teaching resource created in conjunction with the academic publication of the *Flower of Ugie* (see Bowens, 2011: 94-96).

Uptake of Option 3 in the manner described also establishes another possibility; here termed Option 3b, of a further means to solve the challenge of the dispersed nature of the archive. Namely that the digitisation of the archive from the archaeological work on the site, together with the creation of a bespoke website would allow the archive to be accessed by members of the public, students or academic researchers, without the need to gather the physical material together in a single location. Current approaches to 3D recording and presentation (e.g. laser scanning) mean that it is possible to create a digital record of complex material, such as artefacts, that moves beyond simple photographs while retaining high potential for full interpretation. This has clear implications for a reduction in the ongoing costs associated with housing and maintaining material at a single location, with public access, as described in Option 2. Set against this, must be the fact that the *Stirling Castle* archive would continue to be physically dispersed, which is clearly contrary to accepted best practice.

Uptake of either variant of Option 3 also has the potential to encourage similar procedures to be implemented on other sites and to demonstrate that such an outcome is possible and should be standard practice, rather than the result of exceptional, one-off projects. There are inevitable implications regarding the requirement of financial resources being allocated to the project. However, these are perhaps better seen as investment that will ensure expenditure and time similar to the present project is not required in the future and which will set a standard for how the problems associated with the archives of designated historic wrecks are addressed. It is beyond the scope of this discussion paper to identify methods for funding such work, but future partnership projects with charitable trusts or the university sector offer possibilities.

Summary of outcome

- **Ownership** of material will continue to be spread across a range of institutions, organisations, groups and individuals. This is probably inevitable given the cost implications associated with a single institution, organisation or individual acquiring all material from the archive, including artefacts.
- **Dispersal** of material will be resolved through proactive measures to bring artefacts together in a single location/venue, along with original or duplicate supporting material/documentation. The unification of material under a ‘shared ownership’ ownership regime is in keeping with a previously identified management policy for the site (Dunkley, 2008: 18). Ideally, the chosen location/venue would be in the geographic vicinity of the wreck site. Previous work has highlighted the potential of Deal Castle as a venue for interpretative material relating to the Great Storm and the Stirling Castle site (see Dunkley, 2008: I, 14, 18, 21-22). A variant based on the digitisation of material could allow the challenge of dispersal to be mitigated without the need to physically reunite the material archive on a permanent basis.

- **Access** to material will be universal in most cases. Provision of a public display, education and outreach in addition to access for academic research will allow a wide cross-section of the public to physically engage with the material. Additionally, full non-geographically specific access will be facilitated through the comprehensive digitising of material and provision of access through a dedicated online interface. This latter feature will also fulfilling a noted management policy for the site that highlights the suitability of web-based initiatives for improving access (see Dunkley, 2008: 18)
- **Dissemination** of the archive has the potential to be as complete as might be expected. An academic monograph will be published as a product of the present project. In addition, the use of online access to the archive opens up a wide range of available options for public engagement far beyond those of the academic community. These can include virtual exhibitions on specific aspects of the vessel, or its wider context, for the purposes of general interest. Further dissemination via proactive education and outreach to school groups, etc is also readily facilitated through the use of online material.
- **Threat** to the *Stirling Castle* archive as outlined in Section 3.4 will be reduced as a result of adopting option 3. This will primarily because of the proactive measures taken to gather the entire archive in a single location and to ensure that public access and dissemination is as full as possible, via traditional and virtual/online methods. This is helped further as a result of the present project; notably the publication of a site monograph. and the deposition of digital material with the ADS and subsequent accessibility.
    - Archive deposition = Low.
    - Archive conservation and curation = Low.
    - Archive accessibility = Low.
    - Overall threat to archive = Low.

Realisation of archive potential

As with Option 2, uptake of Option 3 would largely overcome the challenge to realising the potential of the *Stirling Castle* archive posed by the currently dispersed nature of the archive. In contrast to Option 2, subsequent access to the material would be largely free of geographic impediment due to the majority of access being provided online. The suitability of this form of access is increasingly demonstrated in the context of cultural heritage through the on-going expansion of online catalogue access by institutions such as the British Museum and National Maritime Museum. While it acknowledged, that virtual access can never replicate a fully hands-on experience, either for enjoyment or research, it can serve to fulfil the major requirements of access in great majority of cases.

The wide ranging access to material that will result from the implementation of Option 3 means that there would be few barriers to the full dissemination of material from the site to the widest spectrum of the public. Furthermore, the use of a virtual repository for the archive opens up a wide range of education and outreach possibilities that are much harder, if not impossible, to realise through the use of a solely physical venue.

Finally, the uptake of Option 3, or 3b, would establish a clear pathway by which comparable archives of material, facing similar problems of ownership, dispersal, access and dissemination can be addressed. This can serve to set a proactive agenda for dealing with the acknowledged problems of maritime archaeological archives within England and serve as a model for subsequent projects. Although there are clear costs associated with Option 3, in the longer-term, this option should provide a basis through which other suitable archives can be treated in the same way, but at a reduced cost as a result of the procedures established in fulfilling the potential of the *Stirling Castle*.

Recommendation: Option 3 is recommended as the most appropriate course of action to ensure the potential of the site and archive is fully realised and the identified threat to it reduced to the lowest level.

5. Conclusion

This discussion paper has been produced as a product of the current English Heritage funded staged approach to assessing, analysing and ultimately publishing archaeological material recovered during the course of over thirty years of work on the *Stirling Castle*, a designated historic wreck site. As intimated by the status of the site, it is of national importance within the wider archaeological record of England and as such, is considered to be highly significant. Furthermore, the site has demonstrable potential for understanding range of elements of past seafaring activity, the development of the Royal Navy and to inform on the interaction between society and shipbuilding practices during the late 17th century.

However, although its significance has long been recognised, the archive of material from the *Stirling Castle* faces a number of significance challenges that must be overcome before its potential can be fully realised. These challenges stem from the ownership of material from the site resting with a large number of different institutions, organisations and individuals, which has resulted in material from the site becoming widely dispersed. This in turn has meant that access to material is limited, fragmentary or simply impossible. As a result, dissemination of material is incomplete with little prospect of moving beyond the academic monograph that is part of the present project. It also seems likely that the current archiving process for the site will result in a similar project to the present one being instigated in the future, for a range of broadly similar reasons.

On a wider note, it is clear that some of the current challenges to the realisation of the potential of the *Stirling Castle* archive stem from the absence of a centrally defined process for the archiving of maritime archaeological material. In the case of designated historic wreck sites this appears to have been a product of the licensing system that is one of the key management mechanisms of the *Protection of Wrecks Act 1973* (PWA). It is hoped that this will be resolved as a result of recently issued guidelines (see EH, 2012). Moreover, as the organisation currently responsible for administering the licenses to work on designated sites, English Heritage have a responsibility to monitor the archiving of all material from every site to ensure that the problems associated with the *Stirling Castle* do not continue to be compounded on other designated sites. As demonstrated by the *Stirling Castle* this must go beyond simply cataloguing reports and ensure that every aspect of the archaeological activity is archived and publicly accessible. In particular, work undertaken on sites using public money, such as PWA contract work, should be publicly available as soon as possible once reports and data have been submitted to English Heritage by the PWA contarctor.

In addressing the challenges posed to the *Stirling Castle* archive, this paper formulated three options for the future of the archive that were presented and discussed in an outline form. These ranged from accepting the status quo, intervening in a limited fashion or implementing a full process of intervention. In each case, as the level and breadth of intervention increases, so does the extent to which the challenges outlined in Section 3.3 are overcome and the full potential of the archive realised. Set against this, perhaps inevitably, are increases in financial resources required to successfully

complete each option. Finally, as proactive intervention increases, the methods applied serve to act as an ever more effective model for how the noted problems of maritime archaeological archives can be addressed and satisfactorily mitigated. In this sense the *Stirling Castle* can realise additional potential by establishing a methodology for the wide-ranging and far-reaching dissemination of all of England's designated historic wreck sites.

In all of the three options outlined in Section 4, it is accepted that resolving the issues of multiple ownership of material is impossible in the sense of establishing a single owner. However, as noted in previous discussion of the site, shared ownership is not seen as a barrier to realisation of potential, providing that the challenge of archive dispersal is addressed. In doing this and addressing related challenges it is inconceivable that Option 1 (do nothing) is adopted. This would only achieve a limited outcome in terms of realising the potential of the site and it would set an unwelcome precedent in suggesting that the current practice for curating maritime archaeological archives is acceptable. Uptake of Option 2 (partial intervention) is more desirable and would go a long way to overcoming the challenges posed by the dispersal of the archive. Access to material would be complete, although still geographically limited and limiting to effective future research. Likewise, dissemination over and above and academic output would inevitably be limited and tied to a single location. In contrast, Option 3 (developed intervention) represents the best means to fully realise the potential of the *Stirling Castle* archive and in doing so overcome the challenges of dispersal while establishing wide access that is unconfined by geographical location. This in turn will allow the site to be disseminated in the fullest way, to the widest range of the public.

As a consequence of the discussion set out over the previous pages, this paper would like to conclude by highlighting the undoubted significance and related potential of the *Stirling Castle* archive. This potential is currently unfulfilled in part because of the lack of curatorial rigour relating to archaeological work conducted on the site since 1979. This has resulted in work from all periods and by all parties, when taken as a potentially cohesive corpus of archaeological material being subject to dispersal, restrictive access and little or no dissemination. Although these represent significant challenges, it is recommended that uptake of Option 3, outlined above, would serve to overcome these challenges, while at the same time establishing a method for dealing with similar challenges on other historic wreck sites within England's territorial waters.

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Maritime Archaeology Trust

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The Maritime Archaeology Trust will promote interest, research and knowledge of maritime archaeology and heritage.

The Maritime Archaeology Trust Policy Statement:

- Carry out maritime archaeological surveys, investigations and research in accordance with professional and museum codes of conduct and practice, the Institute for Archaeologists and the UNESCO Convention on the Protection of Underwater Cultural Heritage.
- Promote archaeological awareness and competence.
- Promote public awareness, enjoyment, education and participation in the maritime archaeological heritage.
- Support the publication of the results of maritime archaeological investigations, surveys and research.
- Liaise with other regional, national and international organisations involved in maritime archaeology and related disciplines.
- Provide maritime archaeological services to heritage agencies, local authorities and a wide range of marine operators.
- Support regional, national and international initiatives for improvements to the legislation regarding the preservation and management of the maritime archaeological heritage.
- Ensure that maritime archaeology plays an important role in coastal planning, management and policies.

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Images (top to bottom): Inspecting a gun on the stern section of the SS *Serrana*, disseminating maritime archaeology to the next generation, augering to recover samples of Bronze Age palaeochannels in Langstone harbour, representing the Trust at the INTERREG annual event in Rotterdam.