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Survey of Timber Marks and Fabric Analysis on HMS *Victory*

Technical Report

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Survey of Timber Marks and Fabric Analysis on *HMS Victory*

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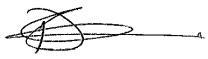
v01	E	*Graham Scott*	*Dan Atkinson*		31/05/13
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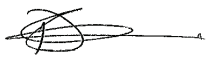
	F	*Dan Atkinson*	*Dan Atkinson*		05/06/14
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Survey of Timber Marks and Fabric Analysis on *HMS Victory*

Technical Report

1 BACKGROUND

1.1 Project background

1.1.1 This technical report presents the results of a survey of timber marks and fabric analysis on *HMS Victory*. The project arose in the context of on-going work by the National Museum of the Royal Navy (the Museum) to record *HMS Victory* and of previous archaeological work on arisings from the ship in 1998 (Atkinson 2007). This work resulted in an appreciation that a full archaeological survey of the timber marks on the *Victory* would be required in order to fully understand the chronology and character of the many repair and refit episodes that the ship has been subject to. This would in turn help the Museum to develop a robust Conservation Management Plan.

1.1.2 The project arose specifically from a scoping exercise carried out in August 2012 when a rapid survey was undertaken of the interior fabric of the ship. The survey involved a visual search for timber marks throughout the vessel and the recording of their location and characteristics, including the ship structure upon which they were located. The initial survey located almost 300 timber marks, approximately a third of which appeared to be decipherable and potentially dateable.

1.1.3 As a result of the findings of the scoping exercise, WA Coastal & Marine (WA) was commissioned to undertake the full recording of visible timber marks on the internal fabric of the vessel in February-March 2013. This report presents the results of the survey and subsequent data interpretation. In addition, a rapid assessment was made of the ship's internal fabric, primarily within the deck structure, deck support components and inner lining.

1.1.4 The interior fabric of *HMS Victory* has been recorded using laser scanning and the results of the timber mark survey have been superimposed onto drawings deriving from this data and this has allowed an 'as is' baseline on which to locate the marks. The plotting of timber marks and associated spatial and qualitative analysis was completed once the laser scan survey data was made available following the on-board survey.

2 BACKGROUND TO THE MARKING OF TIMBER IN THE ROYAL DOCKYARDS

2.1.1 The concept of timber marking in boat and shipbuilding contexts is not new, the earliest known evidence for which dates back to Ancient Egypt. The practice from this time until the early modern period is indicated in a number of varied archaeological ship assemblages, all of which highlight the use of marks which were used for the sole purpose of identifying and locating fabric components during the shipbuilding process. As ship technology developed so too did the scale and complexity of the organisations responsible for the building and maintenance of ships. By the late 17th and early 18th century the onset of the industrial revolution resulted in the development of large industrial complexes such as the Royal Dockyards in England; responsible for the building, repair, supply, maintenance and breaking up of all class of naval vessels. The vast quantities of materials required by the dockyards also necessitated the development of management systems able to control their procurement, storage and use - the primary article being timber. During the 18th and early 19th century therefore timber marking in the Royal Dockyards becomes much more prolific (becoming more complex over time), and for the first time we identify marks that not only relate to the building process but also the management of timber articles; from procurement in the forests and supply to the dockyards through timber purveyors and merchants, to the receipt, seasoning, storage, use and re-use within the dockyards themselves. While the scope of this report does not enable a full narrative for this development further reading on the subject can be found in a Ph.D. Thesis dedicated to the subject (Atkinson 2007) which can be accessed through the following link:

http://research-repository.st-andrews.ac.uk/handle/10023/472

2.1.2 The timber marks on *HMS Victory* have been the topic of minor observations in the past, primarily by the shipwrights who have worked on her restoration in the recent past and the Keeper and Curator of *Victory*, Peter Goodwin. Notes produced by Barlow (1986: 15) and McGowan (1999: 93) give a very brief account and rudimentary translation of some of the marks noted *in situ* on *HMS Victory*. Goodwin has highlighted the archaeological significance of the marks and their importance in helping us to understand their meaning and context (1998). The subsequent study of the timber marks from 1998, both *in situ* and from the study of the arisings has allowed an opportunity to develop a more in depth understanding of the meaning and purpose of the timber marks, adding to the initial comments and observations made by Barlow *et al*. The following report aims to expand upon these notes.

2.2 The types of timber marks found on *HMS Victory*

2.2.1 Let us first look at what types of marks are evident on the *Victory* timbers and how these marks are realised. The marks on the *Victory* timbers comprise carvings, stamps and rase marks. The largest percentage of marks belong in the rase mark category, followed by stamps and lastly carvings. Of particular note however is the high percentage of extensive marking sequences found amongst the *Victory* assemblage as a whole. The following gives a description of the different types of marks.

Carvings

2.2.2 This type of timber mark is made using a hammer and chisel and vary in size and style. In their simplest form they comprise numerals of the Arabic and Roman convention and simple letters (usually one or two). The use of these numerals and simple letters form the most common form of markings of this nature, simplistic in both form and content. The numerals and letters vary in style and are on the whole stylistically plain. It is the case

however that carving continues in use in conjunction with rase knife marks and die stamps (highlighted below).

Rase Knife

2.2.3 Rase marks form the most common type of marks represented in the *Victory* assemblage. These marks are made with a rase knife which is a hollow, hooked u-shaped blade which finishes with a point. A small wooden handle is attached to the shaft of the blade allowing the user to maintain a firm grip when scribing the wood. The average size of the rase knife is approximately 200mm long with a curved blade approximately 50mm in length. The knife is commonly used to form a wide range of letters, both upper and lower case (discussed further below), Roman and Arabic numerals as well as symbols, such as the 'broad arrow', and others related to the various working processes in the Royal Yards (see section 7.2). The size, style, content and complexity of the marks vary considerably. Although at first sight not easy to read, with practice they can be deciphered.

Die-Stamps

2.2.4 These types of timber marks provide the least frequent form of evidence and are produced with a die-stamp, punched into the respective timber. These stamps comprise of groups of letters (usually two or three) and occasionally numerals of the Arabic convention. Sizes and styles of the stamps also vary. The average dimensions of the letter groups are approximately 20mm by 20mm and appear in the Roman style of lettering, both with and without *serifs.* The Government mark or 'broad arrow' is also stamped on timber and comprises at least two forms. The exact nature of the die-stamps themselves is as yet uncertain as few examples have been recovered from the archaeological record that can be positively identified. Evidence of some letter and Arabic numerical stamps discovered in the Wheelwright's Shop at Chatham Historic Dockyard offer the only known examples to those discovered on *Victory*.

2.2.5 The different types of timber marks identified above all appear on timbers from *HMS Victory.*

3 OBJECTIVES

3.1.1 The project objectives for the on-board survey were as follows:

O1	To ascertain the extent, nature and characteristics of the timber marks present on the exposed fabric of HMS *Victory*
O2	To provide an extensive archaeological record of the timber marks and parent hull components
O3	To establish and assess the chronology of the visible hull fabric, both with and without timber marks, including relationships with historic paint coverage
O4	To provide a basis for future conservation and management of the timber marks and parent hull fabric
O5	To help decision makers guide the future conservation and management of the vessel
O6	To present recommendations for the continued archaeological recording and analysis of hidden timber marks and hull fabric during proposed remedial works

4 METHODOLOGY

4.1 General

4.1.1 As a detailed archaeological study of the *in situ* timber marks on the fabric of a preserved historic vessel, the project has very few precedents other than that carried out on *HMS Unicorn* in the preparation of a PhD Thesis, noted above (Atkinson 2007). Consequently there was no existing agreed standard upon which to base the project. The project methodology has instead been drawn from and developed the methodology of a small number of recent well regarded studies, including a survey of reused ship timbers at Chatham Historic Dockyard, the study of *in situ* timber marks on the preserved *HMS Unicorn* and of timber marks found on arisings from *HMS Victory* (Atkinson 2007). The methodology has also been informed by experience derived from the scoping study undertaken in August 2012. As a result the project methodology represents current best practice and is likely to form the basis of similar future surveys.

4.1.2 An outline of the methodology used is given in the original Project Design. The detail of the methodology was devised in advance and was subject to modification during the Primary Survey phase. It retained its three stage structure as follows.

4.2 Phase 1 – Collation of baseline information for survey

4.2.1 A set of baseline deck plans and elevations were obtained from reliable secondary source material. During Phase 2 these were used for controlling and recording the progress of the survey and for recording the locations of the timber marks. During Phase 3 they were used to assist with interpretation.

4.2.2 A number of small errors in the plans were noted during Phase 2. These were generally related to the position of composite beam configuration, lodging knees, and beam arms. They are not thought to have had any significant impact upon the survey but do give insight into the efficacy of archaeological survey and observation when using drawn documentary sources as points of reference.

4.3 Phase 2 – Primary Survey (recording of timber marks)

4.3.1 A rapid initial search of the internal fabric of the ship was undertaken and timber marks located were physically marked so that they could be relocated for recording. This search was undertaken by the Project Manager and Dr Robert Prescott, who had existing expertise in timber marks and who were familiar with the internal fabric of *HMS Victory*. The timber marks located were subsequently recorded by a team of two WA maritime archaeology specialists. Recording proceeded from the orlop deck into the hold and from there to the lower, middle and decks above.

4.3.2 Remarkably few access issues were encountered, given the complexity of the internal fabric of the ship. None of the timber marks located was completely inaccessible, although some, for example a number of those in the hold, could not be closely approached due to their height above the observer.

4.3.3 The process of recording resulted in significantly more timber marks being located. This does not indicate any inadequacy in the initial search but reflects the sheer complexity and scale of the internal fabric of *HMS Victory*, as well as the ephemeral nature of many of the marks obscured by excessive paint coverage. Experience during recording demonstrated that many of the marks covered by paint could be seen when a torch was shone on them from one direction but not from another.

4.3.4 Recording varied according the state of completeness and legibility of each timber mark. Every mark located was assigned a unique identifying number and its position marked on the relevant deck plan. A proprietary written *pro forma* sheet was then completed for each mark. In addition each mark was photographed. The more complete or legible marks were either sketched or traced using transparent OHP paper pinned to the timber.

4.3.5 Each timber mark was assigned a unique number. Blocks of numbers assigned to each deck were as follows:

1000-1999	Hold
2000-2999	Orlop Deck
3000-3999	Lower Deck
4000-4999	Middle Deck
5000-5999	Upper Deck
6000-6999	Quarter Deck

4.3.6 Most of the timber marks located were either incomplete and/or were at least partly illegible. As the number of timber marks located was so great, methodology was adapted due to reflect the pressure of time that this caused and fewer marks were traced than originally anticipated. This was only the case where marks were particularly fragmentary or obscured and where no 'meaningful' data could be obtained for interpretation.

4.3.7 Each *pro forma* recorded the following information:

- Unique number of the mark
- Description of location
- Description of host structural component
- Type of mark (rase/carved/stamp)
- Dimensions (length, width and depth)
- Sketch (as appropriate; marked with directional arrows and the orientation of the shipwright who realised the mark)
- Numbers of relevant OHP sheets
- Name of recorder and date

4.3.8 OHP projector tracings were at a 1:1 scale and of multiple sheets for the larger marks. Each sheet was individually numbered, with unique number set 8000-8999 assigned to them. The orientation of each mark was recorded and the orientation of the maker was also recorded if apparent. Some difficulty was experienced tracing accurately on the underside of deck timbers, particularly on the underside of the orlop deck due to its height above the deck below. In places the fixing of sheets to the timber was also rendered problematic due to obstructions such as electricity cables, but generally the accuracy of tracing was high. Approximately 13% of the timber marks were traced, including all of the stamped marks.

4.3.9 Sketches were recorded on the *pro forma* recording sheets. Some were subject to more detailed measurements and the orientation of the sketch and, where apparent, the maker of the mark was recorded. As the sketches were drawn on the *pro forma*, they were not assigned unique numbers. About 13% of marks were sketched.

4.3.10 At least one photograph was taken of each timber mark using either a DSLR or a high quality compact camera. A few marks were also videoed. It had originally been planned to take a shot of the general location of each mark but time constraints combined with the very large number of marks located meant that this was not achieved.

4.3.11 Due to access issues, the length of some of the timber marks, in-filling and covering by thick gloss paintcoat and the low light levels throughout much of the interior of the ship, photography proved to be challenging. Low light levels necessitated the use of artificial lighting but flash photography proved to be unsuitable for the great majority of marks covered in and often obscured by the ubiquitous and reflective white gloss paint. As a result a 500 watt halogen light mounted on a stand was used to provide light but this proved to be barely adequate. Bright light reduced contrast, meaning that if shot whilst directly lit from the front the mark was often difficult or impossible to see. As a result where access allowed the light was generally positioned to shine on the mark from the side, creating a shadow in the depth of the mark which could then be seen. Where the light could not be used, for example where its power cable caused a tripping hazard in high traffic areas or where there was limited access, a 12 volt LED torch was used instead.

4.3.12 Due to pressure of time only one timber mark could be recorded using photogrammetry. Although this did not prove to be successful due to difficulties with lighting and the fairly small numbers of individual photographs used, it is likely that a working methodology could be devised and opportunities could be utilised during future recording as part of the CMP process.

4.3.13 It was noticed that the width of each stroke could vary and it is assumed that this relates to the pressure applied. As a result maximum width was recorded.

4.4 Phase 2 – Primary Survey (fabric analysis)

4.4.1 The fabric analysis was undertaken primarily to ascertain the relationship between the timber marks and ship fabric associated with the location of marks and their immediate vicinity. As such, the survey concentrated primarily on deck structure, deck support, and the inner lining. Observations were also made where applicable to other major components, particularly sections of the keelson towards the stern and components comprising the main sternpost assemblage. To enable a rapid fabric survey the chronology has been established in two parts: Fabric that pre-dates 1922 associated with service afloat; and fabric that post-dates 1922 when *Victory* was moved to No.2 Dock and restoration work began. It is the intention to dovetail the findings from this survey with the development of our understanding of the ship fabric during the CMP process.

4.5 Phase 3 – Reporting

4.5.1 Following completion of the Primary Survey each digital still and HD video clip was assigned a unique identifying number and renamed as follows:

Sequential number beginning at 1_Victory_Original number assigned by the camera

4.5.2 All record and OHP sheets were scanned and stored as digital files in the project archive, together with all digital photographs and video. All hard copy records were also preserved in the archive.

4.5.3 The results of the Primary Survey were collated into a MS Excel spreadsheet. The spreadsheet is the main analytical tool and digital archive for the project. Due to the very large number of timber marks recorded, only those which had a readily identifiable date, progressive number or initials have been recorded in the spreadsheet in detail. Each detailed record has been hyperlinked to a representative photograph of the mark.

4.5.4 The survey and therefore analysis is confined to those timber marks that are located on outwardly visible component surfaces. Hidden surfaces, such as the outboard faces of

knees or the end faces of beams have not been surveyed. Previous survey of arisings from *HMS Victory* suggests that timber marks do occur on the hidden surfaces of ship fabric components (Atkinson 2007). The survey has therefore only been partial and this may affect the analysis. This is discussed further in section 6.

5 RESULTS OF THE 1998 SURVEY OF THE ARISINGS

5.1.1 The survey of the timber arisings in 1998 has endeavoured to form the basis upon which we begin to understand the nature, characteristics and meaning of the timber marks found on *HMS Victory*. The results of the initial survey are therefore presented first as much of what has resulted from the on-board survey relates directly to the arisings investigation. What is clear is that the review of the findings of the arisings survey has given further insight into the relationship between the dislocated components and the original location on-board *Victory*, adding to our understanding of the restoration history in recent years.

5.1.2 The on-going restoration and extensive repairs to the ship in recent years has resulted in much of the decayed or damaged timber being broken out of the ship and the resulting fragments, or arisings, were set aside in store. A large portion of these fragments were studied in 1998 as part of a Ship Timber Project funded by the Society for Nautical Research and carried out by the Scottish Institute of Maritime Studies from the University of St Andrews. It is the results of this study that formed the basis of our understanding of the timber marks on *HMS Victory* and the recognition of the need for a comprehensive on-board survey. Of course, in most cases, the extraction of many of the timbers from the ship, such as whole deck beams or futtocks, has resulted in these components being converted into smaller pieces to facilitate the removal from the vessel and to maximise space during storage. The relatively small size of many of the individual arisings means they were easier to work with than the timbers built into the ship. Furthermore, unlike those timbers *in situ* on board *HMS Victory*, all the surfaces of the timbers were available for inspection. The condition of the timbers was also generally good, although some evidence of rot and damage from death watch beetle was noted. In several instances this resulted in the loss of detail due to the friable and crumbly nature of some of the timbers.

5.1.3 The survey and recording of the ship timbers revealed a great deal of information concerning the various components used in the construction and subsequent repairs of the vessel. On the whole, the timber arisings form an assemblage of timber articles extracted from *Victory* during major phases of restoration - the majority of which were taken out of *Victory* during the restoration of the vessel from various locations from the bow to just aft of midships from the 1980s and ‘90s (Goodwin pers.com; McGowan 1999). One disadvantage however with the study of dislocated ship timbers is the high percentage of timber components that are not identified in connection with their original location on the ship and the purpose for which they were employed. In many cases during the inspection of the timbers, many fragments were simply set-aside. Out of the 490 timbers that revealed enough detail for useful study and analysis, 107 were not identified as to their original component type due to the fragmentary nature of the articles. Those that were positively identified however revealed a broad cross section of timber types and some interesting details. In some cases several component types were still joined together, such as two sections of a compound beam, a section of knee attached to a portion of beam end (Timber No. 267/267a), or fragments of planking still attached to a portion of futtock. Table 1 gives a quantitative representation of all the timber component types encountered during the investigation:

STRUCTURE TYPE	NO.	NUMBER OF INDIVIDUAL STRUCTURAL COMPONENTS
Hull Framing		Futtock 102; Top timber 5; Cant frame 3; Anchor piece 7; Gun port sill 2
Total	**119**	
Deck structure		QD beam 3; UD beam 9; MD beam 4; LD beam 4; Orlop 1; Unidentified 41; Beam shelf 8
Deck structure		UD carling 1; MD carling 5; LD carling 4; Orlop 7; Ledges 8; Unidentified 7
Total	**102**	
Knees	14	Hanging knee 14; Lodging knee 15; Dagger knee 2; Chock 1; Unidentified 24
Total	**56**	
Hull & Deck planking	2	Hull planking 2; Deck planking 26; Spirketting 6; Inner lining 68
Total	**102**	
Internal strengthening		Breasthook 4
Total	**4**	
Total Unidentified fragments	**107**	
Grand Total	**490**	

Table 1. The number of component types discovered among the *Victory* arisings

5.1.4 As is the case with many historic vessels that have enjoyed a long service life, the quantity and location of surviving ship timber marks tend towards the lower parts of the structure of the vessel, although marks do occur less frequently on timbers from the upper parts (particularly with marks found on hull framing). This can be explained due to a number of reasons; the more frequent repairs of many timber components from the upper works of the ship; the survival of marks on the lower works due to the lack of dressing off of timbers and excessive paint layers not subject to the aesthetic requirements of the upper decks, particularly in the stern.

5.1.5 Of the 490 timber fragments or arisings recorded during the survey, 158 contained evidence of timber marks, comprising approximately 32% of the total assemblage. Many of these were particularly fragmentary and as such contribute little towards subsequent analysis and interpretation. Despite this, the *corpus* of information gained has significantly increased our general understanding of timber marks and their place in the working practices of the Royal Dockyards and also within the history of *Victory* in particular. The main component types have been divided into deck timbers, hull timbers, internal structures and planking (both internal and external). Table 2 presents a quantitative rundown of those timber component types that reveal evidence of timber marks.

STRUCTURE TYPE	NO.	NUMBER OF INDIVIDUAL STRUCTURAL COMPONENTS
Hull Framing	50	Futtocks, anchor pieces & top timbers
Total	**50**	
Deck structure	8	Deck beams
Deck structure	17	Carlings &Ledges
Knees	19	Hanging knee & Lodging knee
Total	**50**	
Hull & Deck planking	2	Hull planking & deck planking
Total	**2**	
Internal strengthening	17	Inner lining
Total	**17**	
Unidentified fragments	39	
Total	**39**	
Grand Total	**158**	

Table 2. The number of component types on *Victory* containing timber marks

5.2 The arisings assemblage and the different types of marks

Carved marks

5.2.1 Only one timber revealed fragmentary evidence of carved marks (Timber No. 297). This mark comprised the capital letter **L** with *serifs*, and a further fragment of either a letter or a number. Despite the fragmentary nature of the mark, the carving was particularly well finished, indicating the skill of the shipwright. The mark was discovered on the end grain of a deck beam from the upper decks of the ship, possibly the quarter deck or forecastle, similar in nature to the carvings discovered on the end grain of a deck beam from the Wheelwright's Shop at Chatham (Plate 1).

Stamps

5.2.2 A number of stamps were noted on a total of six separate timber components. Of interest were the similarities with those stamps discovered on the ship timbers from the Wheelwright's Shop at Chatham Historic Dockyard (in particular the AS stamp noted below). The stamps appeared both on the end grain and side surfaces of timbers from the framing, deck structure and inner lining of the ship. The most common stamp type identified was the capital letters **RMD** – the **D** being placed below and in the middle of the **R** and **M**, forming a triangular arrangement. It is quite possible that the initials on this stamp refer to those of Richard Mosebury, the Timber Master at Portsmouth between 1801 and 1824. This is confirmed further with the discovery that his middle initial was D, thus supporting the presence of the D in the stamp. Other examples of similar stamps with letters include **RM** (possibly also Richard Mosebury), **YC** and **AS**. In addition, stamps also included a number of Arabic numerals and two forms of the broad arrow. In this instance, many of these marks appeared on the same timber accompanied by rase marks (Timber No. 99 – carling from the orlop deck; Timber No. 219 – inner lining; Timber No. 417 – futtock; Timber No. 405 – inner lining), of which more will be discussed below.

5.2.3 The most significant discovery in this respect was the stamps discovered on the end grain of a deck carling from the orlop deck (Timber No. 99). The stamped marks included **RMD**, **YC**, two styles of broad arrow, the numbers **1986**, **184**, and the mark **M5**. Also marked on the same end grain was the rase mark comprising a number 5 (**V**) in Roman numerals with a broad arrow. The orientation of the marks is also interesting, where the RMD and broad arrow appear on an axis at 180 degrees to the YC and the second broad arrow type, and at roughly 90 degrees to the suite of numerals and the rase mark. This clearly indicates that the marks represent different marking episodes within the working processes of the dockyard, the implications of which will be discussed below. What is apparent is that the same information provided on the end grain of the timber also appears as rase marks on the side face of the timber (eg. Part of the 1986, the full 1814, the YC and the V (5) with the broad arrow). This shows a clear example of the marking of the same information using two marking techniques (Plate 2).

5.2.4 The discovery of a suite (five in total) of **AS** stamps on a futtock (Timber No. 417) component is also interesting (Plate 3). This stamp shares the same initials and arrangement as the **AS** stamp discovered on a number of frame components among the ship timbers at the Wheelwright's Shop at Chatham. Differences observed in the style of the stamp however (the mark at Chatham has serifs while that on the *Victory* does not) indicate that the stamps do not share the same provenance. Indeed, the date at which the stamps were placed on the timbers may be decades apart. The implications of this discovery are perhaps crucial to the understanding of the purpose of the mark and how it relates to the working processes and the individuals involved (see discussion below). The orientations of the marks in relation to that of the paint drips on the timber suggest that the stamps were placed on the timber once the timber was *in situ* on the vessel. Similar examples were encountered on Timber No. 219 and 405. Both are sections of inner lining and illustrate several **RMD** stamps associated with rase marks, and in the case of Timber 405, a broad arrow. The size and style of these stamps seem to be the same as those noted on Timber No. 99, and are therefore probably marked by the same individual or at least from the same stamp and period of marking. It is also perhaps no coincidence that three of the four assemblages indicate a group of five stamps hammered in close proximity, and on the same axis, where the stamps on Timber No. 405 may be incomplete due to the fragmentary nature of the timber since the removal from the ship. This observation suggests that there is a pattern in relation to the way in which the stamps are applied to many timbers, either by an individual or in concordance with a directive regarding the way in which timbers are to be stamped.

Rase marks

5.2.5 Of the timber marks recorded during the survey of the arisings rase marks were by far the best represented in the assemblage of timber marks on *Victory*. A total of 155 marks were recorded, of which almost one third are comprehensive enough to help aid with analysis and interpretation. The range of marks is quite extensive, particularly in the arisings due to the study of all exposed surfaces of the timber components. The study has highlighted a number of mark types and styles ranging over a long period. Types of mark content include letters, both upper and lower case; numerals, both Roman and Arabic; sequences of plain language; and a number of symbols relating in most cases to marks connected with the shipbuilding process. In the following discussion a number of examples will be presented to best illustrate the nature of the marks as witnessed on different timber components, many of which are extensive and highlight a great deal of different types of information during different marking episodes.

The standard 'syntax'

5.2.6 The most common occurrence within the arisings rase marks is the 'syntax' or common marking format introduced with the new management measures and the Timber Masters Department in the Royal Dockyards at the beginning of the 19th century. It was noted that many of the more complete rases found during the survey followed this format and many of the fragments appeared to be sections of it. This standard syntax follows a format that was established through Navy Board Instructions in 1801, the information for which is well represented in the Admiralty and Dockyard correspondence from the period (Atkinson 2007). On the whole the information highlights the following:

- A distinguishing or progressive number assigned to the timber articles given in Arabic numerals
- The date at which the timber was received into the respective dockyard
- The contents in cubic feet of the parent or converted timber article given in Roman numerals
- The Admiralty Broad Arrow
- A set of initials usually relating to the person who received the timber article into the yard or a dockyard artisan involved in the working processes eg. timber conversion

5.2.7 Examples of the 'syntax' have been noted in a number of examples from elsewhere, in particular *HMS Unicorn*, another exemplar in the study of timber marks, and the dislocated re-used ship timber from the Wheelwright's Shop at Chatham. The form of the 'syntax' as noted on the timbers from *Victory* are essentially the same as those recorded on *HMS Unicorn* and from Chatham, although it is suggested that possible differences, albeit negligible, can be recognised, possibly as a consequence of diverse marking practices at different yards.

5.2.8 Complete or almost complete examples of the 'syntax' noted in the arisings are noted on a variety of ship components, including hull framing, deck structures, knees and a breast-hook. Further fragmentary examples were noted, along with those that had been altered or obscured during crossing out or the extraction of the timbers from the vessel. The best examples appear on deck carlings from the orlop deck (identified through the dimensions, and the details noted on the timbers eg. single bevelled margin). Let us begin with a complete example of the 'syntax' noted on Timber No. 113. The marks include the following:-

No 3351 x 1814 x ∧ ∧ (broad arrow) **YC ? G ?**

5.2.9 Unlike examples noted on *Unicorn* and at the Wheelwright's Shop at Chatham, there is no letter at the beginning of the sequence (Usually indicating the dockyard where the timber was received). The next three stages however are similar in that they convey a standard set of information. The **No. 3351** relates to the distinguishing or progressive number followed by a break - noted as a cross (similar to examples elsewhere). The **1814** relates to the date at which the timber article was received into the Yard, followed by another break. The inverted **V** (5) in Roman numerals relates to the contents (cubic content in feet) of the timber, followed by the usual broad arrow. This is followed by the capital letters **YC**, another undecipherable letter, the capital letter **G** and another unknown letter. The **YC** are almost certainly initials, although the remainder of the sequence is difficult to interpret. What is apparent is that numerous examples of the letters **YC** within the syntax (sometimes appearing alone) and the remainder of the sequence which is difficult to decipher appear on a number of examples within the assemblage. These letters within the syntax do not appear in assemblages from elsewhere and therefore suggests that these

marks relate to practices and information solely in connection with the system at Portsmouth.

5.2.10 The second carling (Timber No. 122) highlighting the complete 'syntax' sequence is very similar to the example above, both in content and the style of the markings. The mark illustrates the following:-

SW (57cm from the main syntax) **No 1096 x 1814 x GUN ∧** (broad arrow) **YC**

5.2.11 In this example, differences are noted in the number **1096**, which highlights a different distinguishing or progressive number for the timber article. The date of receipt is the same at **1814**. The letters **GUN** possibly relate to the abbreviated word for GUN deck, although the timber was employed within the orlop deck. This can possibly be explained due to the similar scantlings of gun deck and orlop deck carlings and may therefore have been used for this purpose as an afterthought whilst building the component into the vessel. The letters **YC** are similar again to those noted on the example above.

5.2.12 Perhaps the most important assemblage of marks in relation to the 'syntax' are those already introduced above that appear on Timber No. 99 which is also a deck carling from the orlop. The rase mark includes the following:-

Carling (partly cut out) **986** (partly cut out) **1814** (partly cut out) **YC ∧** (inverted 5) ∧ (broad arrow) **WC**

5.2.13 Although parts of these marks have been cut out during the cutting of the checks on the side faces of the timber, it is still possible to recognise the basic format of the 'syntax'. The discovery of the stamps on the end grain of this timber also helps to translate these reduced marks. Apart from the distinguishing number, the basic information is the same. The date for the timber is 1814 similar to the other two examples noted above, as is the inverted 5 in Roman numerals. This is particularly prevalent in supporting the interpretation of this mark as pertaining to the cubic contents in square feet of both timbers. This is also supported by the almost exact similarities in the dimensions or scantlings of the two components which are undoubtedly from the same area of the orlop deck. The letters **YC** are also represented and the further capital letters **SW**, more than likely the initials of an artisan. Also of interest is the presence of the word **Carling** in plain language, indicating the type of ship component the timber represents (Plate 2).

5.3 Component types indicated with plain language

5.3.1 The evidence for timber marks containing plain language within the assemblage is interesting as we perhaps witness an indication of increased literacy within the workforce. Plain language information is presented in a number of situations, indicating different forms of information. The example above indicated the type of ship timber component upon which it was marked, in this case a deck carling. Further examples of this nature were noted on several timbers throughout the assemblage. Of those marks that highlighted full words as opposed to abbreviations, these include Timber No. 215 that represents an anchor piece. The word **peice** (piece) was inscribed on a side surface of the timber. The lower case letters seem to form the second word for 'anchor **piece**'. The incorrect spelling of the word is perhaps indicative of the transitional nature of the increasing literacy within the workforce during this period, or alternatively just someone who was bad at spelling. Another fine example occurred on a piece of cant frame (Timber No. 316 - from the bow) and revealed the words **Victory Cantling post**. The words

'cantling post' clearly indicate the type of timber represented, while 'Victory' denotes the name of the vessel.

5.4 Marks connected with the shipbuilding process

5.4.1 A large part of the function of the rase marks on ship timbers is to help establish a chain of information that is readily disseminated to the workforce, particularly for those shipwrights at the building ways who need to know where particular components are destined in the vessel. Many marks therefore relate to the shipbuilding process, usually comprising the names of the components in question and the position they are to be placed on the vessel. This information is presented in a number of forms, either in full words, abbreviated words, or single letters, numerals or symbols. In many cases, the marks on any one timber article contain all of these forms of marks, and usually in connection with other forms of marks such as the standard 'syntax'. Of note is the apparent use of stamps as well as rase marks in such situations. An example of the use of stamps to indicate the location of a timber component on a vessel is illustrated among the suite of stamps noted on the end grain of Timber No. 99. The mark **M5**, noted above, perhaps indicates the position of the carling on the orlop deck, in this case the **M**iddle tier adjacent to beam number **5**. This suggestion is supported by the known location of this timber before being removed from *Victory* during restoration (Plate 2).

5.4.2 Examples of full, plain language marks relating to component types have been highlighted above. Further examples which also include the addition of abbreviated words include those noted on a frame timber from the bow area near the Grand Magazine. This mark was noted during the inspection of the hull after bomb damage during the Second World War. The mark includes the words **Double Futk S Bow Victory**. The mark is fairly crude, indicated by the use of the same mark type for the **b** and the **l** in the word 'double'. The letters **Futk** form the abbreviation for futtock, followed by the **S** for starboard and **Bow Victory**. The full mark therefore reads 'Double Futtock Starboard Bow Victory', giving clear instructions to the shipwrights where the timber is destined in the vessel.

5.4.3 An example of a mark that contains abbreviated words and letters in addition to full words was found on another piece of framing, this time a top timber (Timber No. 407). The mark reads **ory TT L Bow I Procter**. In this instance the end of the word Vict**ory** is followed by **TT**, the letters for Top Timber; the letter **L** and the word **Bow** for Larboard Bow; followed by the name of the shipwright who inscribed the mark, **I Procter**. The TT for top timber is also noted on a number of top timbers elsewhere within the assemblage (eg. Timber No. 443, 381, 231); and on examples elsewhere, such as the carved mark noted on a top timber on *HMS Unicorn*. A similar mark to that above was noted on Timber No. 443. The difference with this mark was the absence of any full words, and the presence of Roman numerals. The marks include **TT S** with an inverted **V** with an **x** inside, followed by the number **20**. The **TT** refers to the component type as above (top timber) and the **S** indicates the Starboard side; the inverted **V** with the cross inside denotes the number **15** in Roman numerals, probably indicating station or frame number 15 in the vessel. The number **20** refers to the date, 1820. Hence, the timber is a top timber from the starboard side at frame or station number 15 dating to 1820. Further examples of marks of this nature also appear on further frame components, in particular the use of Roman numerals to denote the position of the timber in the hull. Timber No. 231 contains the **TT** denoting a top timber and the mark **No. X**. This suggests that the timber is placed at station or frame position number ten. In addition, Timber No. 82 highlights a much shorter mark which reads **S XII**, suggesting that this futtock is positioned on the starboard side at frame or station twelve. Of interest is an additional mark that follows the S XII that gives the capital letters **FO**. This type of mark possibly indicates that the timber is located in the forward part of the vessel, supported by further examples from Timber No. 408. In some cases it is

also possible to identify the use of symbols to denote a particular timber component. An example of this includes a kind of 'hooked' symbol, almost like a fishing hook. This symbol appears before the word 'piece' on Timber No. 215. As this timber component represents an anchor piece from a frame it is possible that the symbol is used to identify the word 'anchor', hence 'anchor piece'.

5.4.4 The examples noted above have shown marks that indicate the position of the timber in the hull using Roman numerals. In addition to this technique of marking, a number of timbers also reveal the use of Arabic numerals that are also likely to indicate the position of the component in the ship. These marks appear on two frame components, in this case futtocks (Timber No. 383 and 448), and a lodging knee (Timber No. 206 – probably from the middle deck, given the single chamfer on moulded margin). Timber No. 383 reveals the mark **No. 13**; Timber No. 224 shows the mark **No.14**; and Timber No. 448 denotes **No. 16**. In this instance it is suggested that these timbers have come from position 13, 14, and 16 in the hull, possibly located close together and dismantled during the same phase of restoration. Timber No. 206 illustrates a mark that reads **No. 19**, again from position number 19 in the vessel. As this mark is found on a lodging knee, it is possible that the position number relates to a beam position ie. Beam number 19 and not that of a frame or station.

5.5 The location numbers and the position of the timber on the and the ship draughts

5.5.1 The marks discussed above indicate the use of both Roman numerals and Arabic numerals to denote the position of timber components within the hull. Further evidence however suggests that letters may also be linked to the position of the timber within the hull. The letter **S** appears on an anchor piece from the hull framing (Timber No. 363) and appears separate from the other marks noted on the timber. In addition, the letter **E** is also noted on a segment of futtock and a further anchor piece (Timber No. 216 and 215 respectively). What is interesting in this case is that the letter E is clearly of a similar style on both timbers. In this instance it could be the case that both timbers belong to a frame bend from station E as identified from the ship draught. The same can be suggested for the letter S, indicating that the anchor piece belongs to a frame at station S. If this is the case, then the timbers noted here and those above come from locations both towards the bow and just aft of midships.

5.6 Names, both of the vessel and of the shipwrights

5.6.1 With the exception of *HMS Unicorn* the rase marks among the assemblage, such as that noted above, indicate a rare occurrence where we see the name of a vessel (*Victory*) rased on a large percentage of ship timbers (Plate 4). The practice of marking the name of the vessel on the timber was to indicate to which vessel the timber article was destined. This was particularly important if there were a large number of vessels or works carrying on at the dockyard at the same time. The aim was to avoid confusion among the shipwrights when moving the timber from one location to another, for example from the storage berths to the requisite building way. In addition to the name of the vessel, names of individual shipwrights are also represented among the timber assemblage. While examples have already intimated the initials of individual shipwrights or officers, other instances present names written in full, plain language. Examples include the name 'I Procter' on Timber No. 407; the name 'Hill' on Timber No. 416; and the name 'R Sells' on Timber No. 443. Of interest is that all the marks appear on frame timbers and highlight similar styles of marking. It may be the case that the timbers may have all been marked during the same phase by different individuals. Timber No. 443 also gives a date of 1820, possibly indicating a repair episode to *Victory* some time shortly after this date. The question as to the identity of these names is often difficult to establish. In the case of 'R Sells' however, the identity of the individual is intimated in a letter from Portsmouth to the

Navy Board dated 19th April 1811. The letter gives reference to a Richard Sells employed as a Quarterman at the time. It is quite possible that he was still a Quarterman working under the Timber Master when the mark was made in 1820 (Atkinson 2007).

5.7 Date

5.7.1 We have already seen instances within the 'syntax' where dates are given, indicating the year that the timber articles were received into the yards. The primary date range represented on *Victory* spans the years 1811 to 1815. The possible presence of earlier marks is indicated by the date 1802, and perhaps the only indication of an 18th century timber from the arisings, with the date 1778. These marks are perhaps significant as they represent marks that pre-date the Battle of Trafalgar and were therefore part of the hull during the Battle. Later marks are also present within the assemblage such as 1820, as we have already seen, and 1833. The marks indicating date are important in helping to determine which timbers represent the various repair and refit episodes prior to the restoration programme in 1922 (see below). They also help to establish relationships between marks, such as content and style.

5.8 Dimensions

5.8.1 The rase marks on the arisings also show evidence for the marking of the dimensions of timber articles and these marks usually appear as Arabic numerals. In some cases the numerals also appear in brackets. An example of both instances with numerals and fractions and numerals in brackets appears on Timber No. 375. This fragment of inner lining revealed a **(7)** with the slightly obscured number **25 ½**. The number in brackets relates to the thickness of the timber in inches, and the 25 ½ relates to the length of the timber in feet (Atkinson 2007). Another example includes Timber Numbers 242, 373, 403 (sawn pieces of a knee joined together during the investigation) that highlighted a **13** in brackets, intimating that the thickest part of the component was 13 inches.

5.9 Phases of marking episodes

5.9.1 Many marks noted on the timber arisings clearly indicate marks that differ in style, gauge of rase mark (width), and in some cases the content of the information given. In many cases it is also evident that earlier marks are 'marked over' during subsequent marking episodes. It is also possible to identify which direction the mark was inscribed, or the side of the timber at which the shipwright was standing when the mark was realised. Examples of this have already been highlighted with regard to separate marking episodes of stamps on the end grain of Timber No. 99 (Plate 2). This phenomenon is also evident among a number of rase marks within the assemblage. A simple example of this occurrence is found on Timber No. 215 (an anchor piece) which shows at least two marking episodes. The first episode includes most of the marks with the 'syntax' starting from the left, continuing with the 'anchor' symbol and the word 'piece'. The second minor marking episode appears with the letters **R**, **I** or **T** and the letter **M**. The first letter appears to be marked over the date (1811) of the syntax. It is also possible that the letter **E** to the right of the marking assemblage appears as a separate episode, maybe contemporary to the RM. This is recognised due to the different gauge or thickness of the mark left by the rase tool. A further example of separate marking episodes can also be seen from Timbers 242, 373 and 403 (3 segments of the same knee). What is clear in this case is that at least two episodes are evident. Both episodes face in opposite directions, suggesting that the shipwright who marked the timbers was facing in a different direction. One suite of marks also highlights a slight difference in the gauge of the rase tool used.

5.10 Crossing out of marks

5.10.1 Examples of the crossing out of rase marks have been observed on a number of timbers. Simple occasions when some marks within a sequence may be crossed out are noted on timbers such as Timber No. 102. This timber is a futtock, and the mark gives a clear indication of the standard 'syntax'. This reads **No 495 x 1811 x XIIIII** (crossed out) **∧** (broad arrow) **YC?G?**. The Roman numerals have clearly been crossed out and an amendment to the number (15) placed before the letter N at the beginning of the sequence. The additional mark appears as **XIIII ∧** (broad arrow) and represents the number 14 in Roman numerals. The difference in the gauge of this mark compared to the rest indicates that this mark is a correction to the initial contents of the timber, being marked during a separate episode and changed to the number 14 instead of 15. Timber No. 242, 373 and 403 (noted in the paragraph above) also highlights evidence for the crossing out of a number of marks. Similar to the example noted above on Timber No. 102, we see the crossing out of the 'contents' of the timber (possibly a 10 in Roman numerals) and the corrected number (11 in Roman numerals) placed above the former. In addition we also witness the crossing out of elements of the 'syntax', in this case the No 2451 and the date 1814. The reason for the crossing out of the elements of the 'syntax' is difficult to establish, although it is possible that the crossing out simply indicates errors in the original inscription made by the shipwright.

5.11 Location guidelines and the marking out of timbers

5.11.1 In many instances when investigating the timber arisings, inscribed lines were noted on the various faces of a number of timbers. The most common occurrence of this type included the presence of lines marked across the top surfaces of deck beams and the inner and outer surfaces of frame timbers. These marks provided location guidelines for the shipwrights when laying the deck planking over the deck beams and when planking up the interior and exterior of the hull. These guideline marks may also include evidence of the marking out of timbers (conversion indicators) for example, the cutting of scarph joints in beams and frames (Timber No. 243 – lower end of frame). Such modification may leave the original construction marks intact. Also location markers for the location of timbers attached to components such as planking on frames and deck beams. (eg. Timber 3 – section of frame (lower) with planking locators on the inner face, also Timber 21 – anchor piece with plank locator on outer face, planking location on top surface of beams eg. Timber 71 (similar to examples from the Wheelwright's), marking out lines on futtocks eg. Timber 415). Location marks were noted 13 frame components, one beam and four sections of inner lining.

5.12 Modern marks on the timbers

5.12.1 It is also the case that many timbers show evidence of modern marks made by the shipwrights working on the restoration; these include marks left with a black marker pen – shows continuation of timber marking in its modern form (eg. Timber 489 – beam shelf, mark is **No 10 GPT**).

6 RESULTS OF THE ON-BOARD SURVEY

6.1.1 The results and interpretation of the marks recorded during the survey of the arisings have been presented above and form the basis of our understanding of the nature, characteristics and interpretation of those marks recorded during the on-board survey. In many cases the interpretation of the marks remains very similar but a number of observations have been made that augment the findings of the arisings survey and allow the benefit of a more meaningful spatial analysis given that the marks are *in situ*. The following presents the results of the on-board survey and highlights in particular the extent and disposition of the marks throughout the ship.

6.2 Progress against objectives

6.2.1 Progress against objectives during the project can be summarised as follows:

Aim	Progress
O1	Achieved (see below)
O2	Achieved in respect of timber marks, partially achieved in respect of host timbers (see below)
O3	Partly achieved primarily in relation to deck structure; further analysis will form part of the CMP implementation and on-going monitoring
O4	Achieved, subject to recommendations (see below)
O5	Achieved
O6	Achieved (see below)

Table 3. The objectives for the on-board survey as set out in the Project Design

6.3 Fabric Analysis

6.3.1 The survey has identified fabric that either clearly pre-dates 1922 (evident in the location of timber marks) or implied as belonging to this period (evident in fabric characteristics); and those that form part of the on-going restoration program and date to between 1923 and the present. General observations were also made regarding elements of the hull framing and the external planking. It is hoped that this survey will form a solid grounding for integration into a fuller fabric chronology established through the CMP process.

6.3.2 It is already well established through previous research and on-going restoration that much of the primary hull structure such as the framing and internal and external planking is derived of modern repairs with little historic fabric present. The current survey has concentrated on visible fabric and therefore pending further research, a more full analysis will be required during the CMP process. The survey did however achieve a basic assessment of those elements of the hull fabric more closely related to the timber mark survey.

6.3.3 Perhaps not surprisingly, the fabric directly related to the timber marks comprises primarily of deck structure where the largest percentage of timber marks were noted. The survey identified a clear correlation between the concentration of timber marks and the deck fabric that dates to before 1922. This is noted most clearly when the results are presented on marked deck plans, the results of which have been highlighted in Figure 8. What is clear is that the largest concentration of historic fabric is found on the Lower Decks; particularly the Orlop, Lower Deck and Middle Deck. The Upper Deck, Forecastle, Quarter Deck and Poop Deck are comprised almost entirely of timber inserted during restoration work dating to the latter half of the 20th Century (Bugler 1966, McGowan 1999, Mensun Bound 1998).

6.4 Number and type of timber marks

6.4.1 A total of 673 timber marks were recorded during the survey. *HMS Victory* therefore represents by far the greatest single concentration of timber marks currently known to be found in a ship from the Age of Sail anywhere in the world.

6.4.2 The scoping survey detected only 300 marks across the same area. This discrepancy is undoubtedly a product of the relative speed of the surveys. The scoping survey was necessarily rapid and would only have detected those marks that were readily visible. The interior surfaces of *HMS Victory* are profoundly complex and many of the marks were fragmentary and very difficult to detect as a result of combinations of damage, infilling by multiple paintcoats and inaccessible locations. It is likely that the scoping survey detected most if not all of the more complete marks.

6.4.3 The location of only 669 marks appears to have been planned during the survey. The discrepancy occurs on the Orlop Deck and may require remedial recording to resolve. For the purposes of distribution analysis only those marks whose precise locations are known have been included. Otherwise the total number has been used.

6.4.4 Almost all of the timber marks detected were inscribed or 'rased'. Only three timbers with stamped marks were found and only five with marks that were carved. This represents just over 1% of the total. The width or 'gauge' of the rase strokes was 1-4mm. Almost all were in the 2-4mm range.

6.5 Distribution of timber marks

6.5.1 The positions of the timber marks located during the survey are shown in Figures 1-7. The distribution of timber marks can be broken down by deck and sector as presented in Table 4 below.

Deck	Sector A	Sector B	Sector C	Sector D	Sector E	Sector F	Total
Quarter	0	0	0	1	0	0	1
Upper	11	7	3	1	1	0	23
Middle	6	5	7	1	9	0	30
Lower	41	29	136	112	34	0	352
Orlop	32	48	53	97	9	0	239
Hold	7	8	0	9	2	0	26
Total	97	97	199	221	55	0	669

Table 4. The distribution of timber marks by deck and sector

6.5.2 The marks are vertically concentrated on the Lower and Orlop Decks. Just over half, 53%, are on Lower Deck timbers, with another 36% on Orlop timbers.

6.5.3 Less than 7% of the timber marks were found above the Lower Deck. Just under 4% were found in the hold.

6.5.4 There is a significant but less pronounced horizontal concentration amidships and just forward, with 63% of the marks in Sectors D and E. This may well be indicative of the nature and extent of the post 1922 restoration works.

6.5.5 Number of marks per type of structural component for fully recorded mark can be broken down as follows. This may not be representative of the full assemblage, as smaller

components such as ledges are less likely to contain the well preserved marks that are likely to have been fully recorded. However, it is probably representative of the distribution of the more complete marks:

Component	No.
Deck Beam	72
Carling	83
Ledge	67
Planking	8
Knee	19
Pillar/lintel	12
Lintel	4

6.6 Survival and legibility

6.6.1 It is clear that, unlike the arisings, the *in situ* nature of the marks presents issues when trying to capture a full and meaningful record and interpretation of the marks. About 85% of the timber marks are incomplete, in the sense that they cannot be read because part of the mark has been removed by subsequent working of the timber or damage, or alternatively or additionally because the marks are covered by thick paintcoat. These fragments vary from being almost complete syntaxes to small sections with single marks. A number of apparently extensive rase marks were rendered almost completely illegible due to paintcoat. Timber marks with complete syntaxes that are fully legible are therefore rare.

6.7 Content of the Timber Marks

6.7.1 In general the timber marks recorded during the on-board survey compare closely with those recorded during the arisings investigation. This is to be expected given the contemporaneity of the marks from both assemblages and the following highlights some of the characteristics and the nature of the content of the marks, similar to those from the arisings survey. What is very apparent however is the clear difference between the very broad types of timber marks noted in the arisings assemblage and those recorded in the on-board survey. This is purely down to the inaccessibility of many of the surfaces of the *in situ* timber components. The sheer volume of marks noted in the arisings gives a good indication of the potential for further discoveries during future remedial works.

Carved marks

6.7.2 The representation of carved marks noted on board were limited where only five examples were identified; these being timber marks 1109 - 1113. Unlike the examples from the arisings, these appear to relate to the position of adjoining timber components on elements of deck support noted in the hold at the stern. The marks were located next to vacant checks and seem to represent locating information for timbers since removed.

Stamps

6.7.3 One of the more exciting discoveries during the on-board survey was the presence of stamps noted on timber mark 1100, 1101, 2007 and 2043, located on lodging knees (2007 and 2043) and bulkhead planks (1100 and 1101) in the area of the Grand Magazine in the hold (Figure 9). Both stamps comprised the capital letters **RMD** and are likely to relate to the initials of Richard Mosebury, the Timber Master at Portsmouth between 1801 and 1824, as already indicated in the arisings survey described above. This discovery confirms the presence of such stamps on *in situ* components on-board *Victory* and offers tangible insights into the individuals responsible for the works in Portsmouth Dockyard in

the early 19th century. It also offers a tight dating timeline for the timbers themselves within their context; one example noted here was accompanied by rase marks bearing the date 1812.

Rase marks

6.7.4 Of the timber marks recorded during the on-board survey, rase marks, similar to the arisings survey, are by far the best represented in the assemblage (Plate 5). In excess of 650 marks were recorded, of which, and rather disappointingly, only 15% were comprehensive enough to allow for a full interpretation.

The standard 'syntax'

6.7.5 As is the case with the arisings the most common occurrence within the on-board rase marks is the 'syntax', the content and details of which have been summarised in section 5.2.6 above. Complete or almost complete examples of the 'syntax' noted in the on-board survey appear on a variety of ship components, including deck structures, knees, standards, planking, and pillars (Figure 10-12). As with the arisings the best examples appear on deck structure from the Orlop Deck for example timber mark 2928. Good examples were also noted on the Lower Deck, although the paintcoat coverage meant that the clarity of the marks were often diminished. Generally, observations made with regards the relationships between suites of rase marks were also established. In many cases the style of the marks and the information portrayed offered similar stylistic traits. On the Lower Deck, the Progressive Numbers noted in the syntax all appeared to be close in numerical range. For example Timber Mark 3319, 3321, 3326 and 3330 all revealed numbers between 1542 and 1715. This is interesting as it suggests that the timber used in the repairs to the deck was received into Portsmouth Dockyard during a similar period; the number relating to the consecutive timber consignment received in the year 1815 for that particular species of timber (Atkinson 2007).

6.7.6 Further interesting observations relate to the groups of letters, or initials, associated with the syntax. As outlined above, these almost certainly relate to the individuals who marked the timbers during the various working processes within the dockyard. What is clear is that a spatial analysis of the initials show dominant forms (also noted in the arisings survey); particular examples include **YC** or **YCC**, and **BA,** all of which are represented throughout the deck structure on the Orlop and Lower Deck in particular (Figure 12).

6.7.7 Like the survey of the arisings, many mark sequences also revealed evidence of crossing out; denoting evidence of information that has been corrected by the shipwright during the transfer of the information during one of the various working processes.

Component types indicated with plain language

6.7.8 The evidence for timber marks containing plain language within the on-board assemblage is well represented. The majority of the plain language relates to deck structure such as carlings and ledges (in addition to the abbreviated marks for elements such as deck beams). In addition to beams, carlings and ledges, examples were noted on other elements. A particularly nice example was noted on a beam arm (Fork) from the forward end of the Lower Deck which read **Victory Fork** (Figure 13).

Marks connected with the shipbuilding process

6.7.9 As with the evidence form the survey of the arisings many marks discovered during the on-board survey relate to component types, the most notable examples of which relate to carlings and ledges, and in some instances deck beams. Many marks include abbreviations, such as **CAR** for carling (eg. timber mark 2046 and 2055 from the Orlop Deck); in some cases showing stylistic traits such as the **A** with an **x** in place of the cross

mark. These stylistic similarities are indicative of the personal style of the marker and allow for a relative spatial analysis of the influence of individual shipwrights. Of note, is that in some cases components appear to be labelled with the component type incorrectly. An example was noted on a ledge (timber mark 3207) from the Lower Deck which had been marked **CAR**.

6.7.10 Examples of numbers were also noted on several components, for example on the Upper Deck beams in the Ward Room and timber mark 2001 form the Orlop Deck (Figure 14). These revealed the number **98** which are of particular interest in dating the timber to a specific period of the service life of *Victory*. The 98 almost certainly relates to the rate of the vessel to which the timber was consigned. It is interesting that *Victory* was reduced in rate in 1807 to a 98 gun second rate. Subsequent re-rating to a first rate in 1816 gives a clear period to which these examples relate. Comparative examples include the 46 noted on the 46 gun frigate *HMS Unicorn*, and a 74 noted on the ship timbers form the Wheelwright's Shop assemblage at Chatham; indicating a 74 gun third rate (Atkinson 2007).

Names, both of the vessel and of the shipwrights

6.7.11 The rase marks among the assemblage noted on board indicate the extensive use of the name **Victory** rased on a large percentage of the timbers. This practice indicates a desire to make sure that the shipwrights understood where the timber components were destined (Figure 12). Again, further examples were noted throughout *HMS Unicorn* and perhaps indicate a period in the early 19th century where efforts were made to increase the control of timber movement within the yards at that time; perhaps where several works were being carried on at the same time.

Date range

6.7.12 Of the 673 timber marks located, 128 or just fewer than 20% had a recognisable year or decade included in the mark (Appendix 1). About 60% of these had a clear year. For the remainder, either the decade or the century could be discerned. It is likely that a significant number of the more extensive marks that are currently illegible due to thick paintcoat contain dates.

6.7.13 About 95% of the dates are from the second decade of the 19th century. The earliest date recorded was either 1805 or 1809, with the latest being 1985. Just over 51% of the marks were dated or were probably dated 1815 (Figure 10-12).

6.7.14 Dated marks can be broken down by deck as follows. Distribution by date is also shown graphically in Figure 6:

Deck	Pre-1810	1814	1815	Total 1810's	Post-1819	1800's	20th century
Quarter							1
Upper		2	3	2			
Middle			1				
Lower	1	4	21	45		2	
Orlop		10	39	16	2	2	
Hold			2	3			2

Table 5. The dates by deck noted in the timber marks

6.8 Modern marks on the timbers

6.8.1 Although the examples of modern marks are limited it is interesting that the shipwright's employed during restoration work continued the practice of marking timbers. Particular examples include the date **1985** on a forecastle deck beam at the forward end of the waist, and the **1986** mark on a ledge in the forward platform structure in the Hold. It is quite possible that further marks will be encountered during remedial works in the future and may help in dating more modern timbers in the ship fabric.

7 THE MARKS AS AN ARCHAEOLOGICAL ANALYTICAL TOOL AND HOW THEY RELATE TO THE SERVICE HISTORY OF *HMS VICTORY*

7.1.1 The work carried out on the *Victory* arisings and on-board survey has proved particularly fruitful with respect to the number of marks discovered and the information retrieved. The marks themselves represent a broad cross-section of marking types and have proven invaluable in helping to date many of the *Victory* timbers and the subsequent refit and repair episodes to which they belong. The marks identified both on board *Victory* and on those arisings removed during restoration all relate to periods of repair and refit throughout the history of the ship. With the exception of just two marks dating to the modern era (noted above), all the marks relate to periods when *Victory* was still in service afloat, either in sea service (1778 – 1812) or during the period of harbour service (1812 – 1922). The following table gives the date and nature of the refits and repairs to *Victory* throughout her history.

DATE	LOCATION	NOTES
1778	Plymouth	After action of Ushant (repairs mainly to top hamper)
1779	Portsmouth	First short refit (Keppel replaced by Hardy)
1780	Portsmouth	Short refit, coppered for the first time
1782	Portsmouth	Howe takes over; action off Cape Spartel following relief of Gibraltar; slight damage to hull (1st mention of repairs to the hull)
1782-3	Portsmouth	Refit; ship afloat for 17 years, therefore requiring a fair degree of work to the hull
1782-87	Portsmouth	In ordinary; possible 'annual trimming' requiring some work to hull
1787-88	Portsmouth	Large repair; 22 years since launch therefore much of cost probably structural; returned to ordinary
1797	Chatham	Fitted as a hospital ship, remained so until 1799
1800-03	Chatham	Middling repair, became reconstruction. Built with 'closed' stern
1805	Gibraltar / Portsmouth	Short refit at Portsmouth; then Trafalgar; repairs at Gibraltar; then temporary repairs at Portsmouth
1808	Portsmouth	Docked on return from Baltic – repairs
1811	Portsmouth	Some repairs
1812	Portsmouth	Short refit
1814-16	Portsmouth	Middling repair leads to large reconstruction. This repair resulted in her current form
1823	Portsmouth	Docked and fitted as guard ship
1824	Portsmouth	Fitted as Port Admirals flagship
1830	Portsmouth	Placed in ordinary

1857	Portsmouth	Developed defects over a long period in harbour service – docked for repairs
1887	Portsmouth	Emergency repair to a leak

Table 6. The date and nature of the refits and repairs to *Victory*

(Information collated from Bugler 1966; McGowan 1999; McKay 1987)

18th century evidence

7.1.2 Although it is accepted that much of the timber from *Victory*, particularly that noted in the on-board survey dates to the 19th century and the later restoration, it is quite possible that one timber component within the arisings may well date to the early history of the vessel in the 18th century. The possible abbreviated 1778 (**78**) date mark on Timber No. 224 gives an interesting indication as to when the timber may have been built into the hull of *Victory;* the **No 14** marked on the timber may indicate frame number 14 near the bow. The capital letter **P**, before the number **78** may also indicate that the timber was received into Portsmouth Dockyard. If it is assumed that the date refers to the year that the timber article was delivered into Portsmouth Dockyard, then cross-referencing the date with a repair episode sometime after 1778 gives interesting results. It may be the case therefore that this top timber from the framing of *Victory* may represent the remains of one of the repairs and refit episodes noted above. The repairs to *Victory* after the action off Ushant at Portsmouth in 1778 required repairs to the upper works of the ship. This may well tally with the Timber No. 224 which represents a top timber from the top of the hull framing. It may also be the case that the timber was provided for the large repair that took place at Portsmouth in 1787-88. This is possible as many timber articles can remain in storage for several years after receipt into the dockyard.

Pre-Trafalgar markings

7.1.3 It is possible that one mark recorded from the arisings (1802 – Timber No. 363 – anchor piece from frame) dates to the 1800-03 reconstruction at Chatham. This perhaps provides rare evidence of surviving hull components from the 18th century and the pre-Trafalgar campaign. Indeed, the scale of the work undertaken and the large number of timber components likely to have been replaced make the possibility for the survival of timbers from the 1800-03 reconstruction more likely. The work, originally costed at £25,500 was increased to £70,000 in light of the work required and the introduction of new features, such as the 'closed' stern, replacing the original stern galleries (McGowan 1999: 20).

Post-Trafalgar markings

7.1.4 A number of marks reveal the dates 1805, 1807 and 1809, possibly indicating timber components connected with the minor repairs carried out in 1809 and 1811. However, the majority of the marks that survive on *Victory* and the dislocated arisings during the on-going restoration relate to the 1814-16 reconstruction. Nearly all the marks are located on deck structures and deck support components from the lower decks, in particular the orlop (also referred to in Goodwin 1998: 120). Further dates on the timbers may well relate to repairs and refits after the 1814-16 reconstruction, such as the date 1820 noted in examples from the arisings and relating to the fitting out of *Victory* as a Guardship in 1823. Subsequent dates such as 1830 and 1854 have also been noted and probably relate to a more recent repair.

7.2 The meanings of the timber marks and their relationship with the management of timber and dockyard working practices

7.2.1 The general characteristics of the marks and the types of information that they convey have been highlighted above. What seems apparent is that the function of the marks

relate to different stages of timber management – supported by a number of marking episodes on many timbers - and the movement of the timber articles through the dockyard. The marks are therefore created during the different working processes inherent in each stage of management. In some instances, it is also clear that many marks while comprising information that contain reference to the building process, are likely to have been placed on the timber articles prior to the building of a vessel during a management stage (highlighted din the syntax). The following highlights the various episodes in which timber might be marked within the several stages of timber management and working practices within the dockyard, cross referenced with specific examples from the arisings and on-board survey.

Survey/viewing of timber

7.2.2 Evidence for marks of this nature among the arisings and on-board survey appears to be scarce, probably due to the subsequent conversion of timber articles and the cutting or dubbing out of marks during later processes. It is also possible that many of the stamps placed on timbers relate to this phase. Timber Number 99 perhaps provides several phases of marking, implied in the reference to the stamping and rasing of logs by the Purveyor in the initial stages and later marking episodes by officers such as the Timber Master (Atkinson 2007). Of interest is the contemporaneity of this reference and archaeological evidence, being very close together in date. It is probably the case however, in the case of rase marks, that many marks from this stage of the process will probably have been cut or dubbed out at the receipt, or later during the conversion process.

Receipt

7.2.3 Evidence for the marking of timber within this process can be identified on many of the timbers from the arisings (and to a degree, the marks on-board), for example Timber Number 99. Indeed, one reference to the marking of timber by the Timber Master at Chatham shows striking similarities to the marks noted on this timber (Atkinson 2007). Furthermore, the date of this reference is only two years after the 1814 date witnessed on this carling. The directive continues:

"with reference to our general warrant dated the 9th instant, we acquaint you for your guidance in receiving the goods belonging to Messrs Jolly, that the TM who have surveyed the same have reported that they have marked the ends of each piece of oak thickstuff, plank and deck deal with the initials IWD by means of a hammer, and rased out the middle of each piece similar letters, together with the length, breadth, thickness, progressive number, and contents, as described on the other side, by which every piece may be identified…"

I W D end	**No 224 Length 36¼**	**IWD X**	**11½ breadth (6) thickness Contents XIII**	**I W D** end

(As copied from the manuscript drawing)

Measurement

7.2.4 Some of the dimensions placed on the timbers during measurement may survive, for example the contents of the timber article indicated by the Roman numerals towards the end of the standard 'syntax' (some crossing out of contents noted on the timbers may indicate a mistake or re-measurement by one of the measurers during this stage of the process). It is noted that a large number of such marks was apparent throughout the on-board evidence. Some stamps may be indicative of marks left on the timbers by Quartermen or Measurers who inspected the shipwrights work done by the piece (job

work). This is usually indicated by the marks placed on the timbers when *in situ* during construction (eg. Timber Number 219 & 405).

Storage and selection

7.2.5 Evidence for the marking of timber during this stage is not always easily identified, although at least one example among the arisings does seem to relate to this process. The stamps noted on the end grain of Timber No. 99 in the arisings appear to offer such an example, indicating the 'syntax' details requisite for the accounting of the article and the component type represented. The placing of these marks on the end grain also makes it possible for shipwrights when collecting the timber from the storage piles to easily identify the correct piece for use.

Moulding & conversion

7.2.6 Cutting out marks evident on a number of timbers from the arisings, particularly frame components. These marks were originally applied by the converters preparing futtocks from moulds received from the lofting floor. These futtocks were then sent to the current use cabins and building ways for assembly in the ship, where they were finally fitted by a new team of shipwrights who may have to modify the scarphs somewhat to suit the immediate circumstances of the task in hand.

Use, return and re-use

7.2.7 This stage of the process is signified by marks that relate to the building process in helping shipwrights understand where particular components are placed in the vessel. Also, some evidence where timber components such as deck timbers have had checks cut into the side faces while at the building ways have resulted in the cutting out of marks, highlight marks that relate to working stages preceding the point at which timbers are delivered to the slips (eg. Timber No. 99). Further evidence for marks that relate to this stage include the marking of timbers with location guidelines to show where adjoining timbers such as planking are to join other components such as deck beams and frame components (planking lines on beams and futtocks). Evidence for the return and re-use of timber components is perhaps highlighted in some examples of the crossing out of timber marks noted among the arisings and those marks on-board.

8 DISCUSSION

8.1.1 There is no question that the survey of the timber marks on *HMS Victory* has been an important and worthwhile exercise. The combined surveys have recorded in excess of 800 timber marks, a phenomenal archaeological record, and one that to date represents the largest *corpus* of evidence from an extant historic ship context from the Age of Sail anywhere in the world. This fact alone should encourage the use of the study of timber marks to pave the way in the development of approaches and methodologies to help in the understanding of the history and development of similar historic ship and dockyard contexts; showing quite readily the efficacy of archaeological investigation as a useful research tool.

8.1.2 The survey has been of immense importance, highlighted in the sheer volume of marks and more importantly the understanding of the fabric history of *Victory* throughout her service life and restoration to the present day. The survey should not be seen as the end result but more appropriately as a starting point in gleaning as much archaeological

evidence from *Victory* as possible to inform the preparation of the Conservation Management Plan and the future management of the ship. The implications for future survey and research opportunities are not underestimated and it is well understood that much more information can be gained through further survey and research as and when opportunities arise. It is hoped that the survey of the arisings and that undertaken during the on-board survey offers an important contribution in putting together the pieces in the *Victory* 'jigsaw'.

8.1.3 Also of importance are the ways in which the survey of the marks contributes to our understanding of the vessel history and the non-tangible relationships with the shipwrights who worked on *Victory* and the Dockyard at Portsmouth, and also elsewhere such as the other Royal Dockyards. As we know, *HMS Victory* enjoyed a long service life afloat, from the middle of the 18th century to the early 20th century. Thus, *HMS Victory* represents a unique research tool from which to illustrate the changing nature of timber marking and subsequently the changes in the management of timber and working practices of the Royal Dockyards. The study of the timber arisings and the marks recorded during the on board survey has revealed much information about the range, nature and significance of timber marks. They provide us with yet more insights into the work of the dockyard craftsmen and the original building and subsequent refit history of the ship complementing and confirming the information identified in the documentary records.

8.1.4 An interesting outcome of the survey of the timber marks is the ability to use the information to help clarify or otherwise the many thoughts and theories about the aspects of the fabric history of *Victory*. While the marks alone do not offer definitive proof in many cases, the information gleaned does succeed in helping develop our overall understanding of the ship and the context of the many aspects of fabric whose provenance until now have remained partly or wholly speculative as a result of a strong oral tradition.

8.1.5 The story is not all positive however and there continue to be clear gaps in our knowledge and understanding of the full extent of the timber marks on board *Victory*. This is particularly the case when we consider the amount of potential marks that are currently obscured or inaccessible (in addition to the information that is now lost to posterity), the extent of which has been intimated in the survey of the arisings. It is crucial therefore that mechanisms are put in place to ensure appropriate archaeological intervention as and when required.

8.1.6 It is therefore the intention to ensure that the findings of the survey, and future work, allows full integration into the Conservation Management Plan (Understanding the Vessel and the Significance Statement; and follow up strategies as part of the Conservation Policies and Action Plan) as a key element, along with the laser scan survey and paint analysis. This report will therefore provide the spring board upon which all aspects of the laser scan and paint analysis, and future research can be based.

9 RECOMMENDATIONS

9.1.1 The following recommendations provide a basis for further discussion with the NMRN and HMS Victory Preservation Company.

1. Where possible there should be provision for further research as part of the Conservation Management Plan and the full integration into the Plan utilising the laser scan data and results of the paint analysis (and dendrochronology if pursued).

2. The development of an appropriate programme of archaeological intervention should be developed as part of the CMP Policies and 10 year Action Plan – to ensure that all non-visible marks and historic fabric are recorded appropriately, and retained if necessary.

3. Any forthcoming information gathered should be reported on appropriately and the central database (as part of the CMP) updated as required.

10 PROJECT ARCHIVE

10.1.1 The project archive consisting of a hard copy file and computer records including digital photographs and video is currently stored at WA Coastal & Marine under project code 88310.

11 REFERENCES

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APPENDIX 1: DATED TIMBER MARKS

Timber Mark	Date	Deck	Sector	Port/Starboard	Timber
2171	1810	OD	D	S	DB
3097	1811	LD	C	S	Carling
3125	1811	LD	A	P	Carling
2048	1811	OD	D	S	Carling
2075	1811	OD	D	S	Carling
2239	1811	OD	A	P	Carling
3070	1812	LD	C	S	Carling
3132	1812	LD	A	S	DB
3151	1812	LD	C	S	Carling
2058	1812	OD	D	S	Carling
2219	1812	OD	A	S	LK
3048	1814	LD	D	P	Carling
3131	1814	LD	A	S	Carling
3338	1814	LD	A	P	DB
2047	1814	OD	D	S	Carling
2153	1814	OD	B	S	Carling
2183	1814	OD	D	P	SK
2203	1814	OD	C	S	DB
2215	1814	OD	B	S	Carling
2255	1814	OD	A	P	Carling
5010	1814	UD	A	S	DB
5014	1814	UD	A	P	Carling
1109	1815	H	A	C	Pillar
1110	1815	H	A	C	Sternson Knee
3002	1815	LD	D	S	DB
3049	1815	LD	D	C	Ledge
3063	1815	LD	C	S	DB
3087	1815	LD	C	S	Carling
3103	1815	LD	A	P	Carling
3159	1815	LD	C	S	DB
3176	1815	LD	C	S	Carling
3299	1815	LD	D	P	DB
3312	1815	LD	C	P	Carling
3319	1815	LD	C	P	Carling
3321	1815	LD	C	P	Carling
3326	1815	LD	C	P	Ledge
3509	1815	LD	D	P	DB
3905	1815	LD	C	C	DB
3114	1815	LD	A	C	Carling
4024	1815	MD	E	S	Bowsprit step'
2002	1815	OD	D	P	Carling
2023	1815	OD	D	P	Carling

Timber Mark	Date	Deck	Sector	Port/Starboard	Timber
2038	1815	OD	D?	P	DB
2045	1815	OD	D	S	DB
2055	1815	OD	D	P	Carling
2080	1815	OD	D	P	Carling
2082	1815	OD	D	P	DB
2087	1815	OD	C	P	DB
2090	1815	OD	C	P	DB
2103	1815	OD	C	P	DB
2156	1815	OD	C	S	Carling
2165	1815	OD	D	S	DB`
2168	1815	OD	D	S	DB
2180	1815	OD	D	P	SK
2201	1815	OD	C	S	DB
2202	1815	OD	C	S	DB
2204	1815	OD	B	S	DB
2205	1815	OD	B	S	LK
2206	1815	OD	B	S	DB
2208	1815	OD	B	S	Carling
2226	1815	OD	A	S	Carling
2231	1815	OD	B	P	Carling
2232	1815	OD	B	P	DB
2240	1815	OD	A	P	DB
2242	1815	OD	A	P	DB
2248	1815	OD	A	P	DB
2253	1815	OD	B	P	Carling
2256	1815	OD	A	P	Carling
5008	1815	UD	B	S	DB
5009	1815	UD	A	P	DB
5011	1815	UD	A	S	Carling
3008	1816	LD	D	S	Carling
3903	1817	LD	C	P	Carling
3078	1819	LD	C	S	DB
1106	1854	OD	B	C	Pillar
6000	1985	QD	D	C	DB
2040	18(15?)	OD	D	P	Carling
2228	18(15?)	OD	A	S	DB
3266	1800s	LD	D	S	Carling
3218	1800s	LD	E	S	Ledge
2084	1800s	OD	D	P	DB
2122	1800s	OD	C	P	Ledge
3281	1805/9	LD	D	S	Carling
2147	1810/15	OD	C	P	Carling
3289	1810/16	LD	D	S	Carling

Timber Mark	Date	Deck	Sector	Port/Starboard	Timber
2175	1810s	LD	D	S	SK
3325	1810s	LD	C	P	Carling
3000	1810s	LD	D	S	DB
3267	1810s	LD	D	S	Carling
2207	1810s	OD	B	S	LK
2254	1810s	OD	B	P	Carling
5015	1810s	UD	A	P	DB
2155	1810s				
2241	1811/14	OD	A	P	Carling
1108	1811?	H	A	C	Pillar
3313	1811?	LD	C	P	Ledge
3080	1811?	LD	C	S	Carling
5012	1811?	UD	A	S	DB
3134	1812?	LD	A	S	Carling
3232	1812?	LD	E	S	Ledge
3526	1812?	LD	B	S	Ledge
2160	1812?	OD	C	S	Carling
2096	1812?	OD	C	P	LK
2109	1812?	OD	C	P	DP
2141	1813?	OD	B	P	DB
3222	1814?	LD	D	C	Carling
2050	1814?	OD	D	P	DB
2085	1814?	OD	D	P	Carling
1111	1814?	OD	A	C	Pillar
2095	1814?	OD	C	P	Carling
3162	1815 (CT)	LD	C	S	Fork
3167	1815?	LD	C	S	Ledge
3279	1815?	LD	D	S	Carling
3520	1815?	LD	D	P	Carling
3241	1815?	LD	E	P	Carling
3330	1815?	LD	C	P	Carling
2133	1815?	OD	B	P	Carling
2001	1815?	OD	D	P	DB
2004	1815?	OD	D	P	LK
2051	1815?	OD	D	P	Carling
2053	1815?	OD	D	P	Carling
2181	1815?	OD	D	P	SK
2217	1815?	OD	B	S	Carling
2222	1815?	OD	A	S	DB
2249	1815?	OD	A	P	DB
2111	1818?	OD	C	P	DB
3160	1818?				
2052	1820?	OD	D	P	Carling

APPENDIX 2: SUMMARY OF PRIMARY SURVEY DATA (FULLY RECORDED MARKS)

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
1108	R	H	A	C	Pillar	S	F	W	8251-4	1631 Victory DSCF1481.JPG	No_26(3/5?)_x_181(1?)_?_(gap)_XIII
1109	R	H	A	C	Pillar	S	F	W	8255-9	1636 Victory DSCF1486.JPG	No_402_x_1815_Rio?_XII_BA_PC/SC?
1110	R	H	A	C	Sternson Knee	F	F	W; Worn?	8260-70	1638 Victory DSCF1488.JPG	?_?_?_No_2(3?081_1815_YCC_(other side/way up)_tory_Victory_?_?_?
1111	R	OD	A	C	Pillar	S	F	W		1576 Victory DSCF1426.JPG	No_3121?(CT)_?_1814?_x_III?BA?_YC?(SS/GG?)_?_BA?_III(CT)_?_?_?_No?_?_?
1112	C	H	A	C	Lintel	S					FVII_(gap)_FVII
1113	C	H	A	C	Lintel	P				1604 Victory DSCF1454.JPG	FVII_(gap)_II VII
1114	C	H	A	C	Lintel	S				1623 Victory DSCF1473.JPG	HVII_(gap)_AVI
1115	C	H	A	C	Lintel	P					FVII_(gap)_RVII
2219	R	OD	A	S	LK	US	F	W	8275-9	1549 Victory DSCF1399.JPG	No_9052_x_1812_BA_BA/III?_(gap)_R(K?)
2222	R	OD	A	S	DB	F	F	W		1557 Victory DSCF1407.JPG	No_2215_(18?)15_IIIIII_BA_SCD?
2223	R	OD	A	S	Carling	US	F?	W		1564 Victory DSCF1414.JPG	II(CT)_BA(CT)_YC(CT)_CAR
2224	R	OD	A	S	Carling	US				1569 Victory DSCF1419.JPG	RC

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
2225	R	OD	A	S	Carling	S	F?	W	8282-3	1571_Victory_DSCF1421.JPG	CARLING
2226	R	OD	A	S	Carling	US	F?	W; Damage		1573_Victory_DSCF1423.JPG	(1/7?)9_x_1815_x_IIII_BA_Y(C?)(GG/SS?)_CAR
2228	R	OD	A	S	DB	US	F	W; PC		1574_Victory_DSCF1424.JPG	?_Victory_(gap)_No_2931_x_18(15?)_B_?_?_III(CT)_II_BA_WC
2239	R	OD	A	P	Carling	US			8295-7	2925_Victory_DSCF2959.JPG	No_3092_x_1811_^_BA_YCG(G/C?)
2240	R	OD	A	P	DB	Aft	F	W	8400-8	2928_Victory_DSCF2962.JPG	Orlop_D_?_N(o)_(?)2(??)_1815_III(CT)_II_BA_SC
2241	R	OD	A	P	Carling	US	F	W		2929_Victory_DSCF2963.JPG	x_181(1/4?)_?_?_^_BA_SC
2242	R	OD	A	P	DB	US	F	W	8409-14	2924_Victory_DSCF2958.JPG	No_2916_1815_III(CT)_IV_BA_SC_(other side/way up)_D?_Vic(t?)(o?)(r?)(y?)
2248	R	OD	A	P	DB	US	F	W	8415-8	2914_Victory_DSCF2948.JPG	N(o?)_(4/12?)02_x_1815_x_III(CT)I_BA_SC
2249	R	OD	A	P	DB	F	F	W	8419-25	2912_Victory_DSCF2946.JPG	IV(CT)_No_219(9?)_x_1(?)1(5?)_II(CT)_BA_(Y?)(C/P?)_Or(l?)op_D_Vi(c?)(t?)o(?)(y?)
2255	R	OD	A	P	Carling	P	F	W		2931_Victory_DSCF2965.JPG	?_4(??)_1814_(Y?)(C?)_^II_BA
2256	R	OD	A	P	Carling	US				2933_Victory_DSCF2967.JPG	No_2223_x_1815_x_?_IIII_BA_?_WC

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
2261	R	OD	A	P	DP	TS	F	Wear?		624_Victory_DSCF2415.JPG	IIII_IIII_?
3102	R	LD	A	P	Ledge	Aft	F	W; PC		616_Victory_DSCF2407.JPG	?_XIX_?
3103	R	LD	A	P	Carling	S	F	W; PC	8426-8	622_Victory_DSCF2413.JPG	No_1191?_x_1815_x_?_Y?_?
3106	R	LD	A	P	Ledger	F	F	PC		625_Victory_DSCF2416.JPG	PR
3110	R	LD	A	P	DB	F	F	W		595_Victory_DSCF2386.JPG	?_IIIIII_BA_WC(P?)
3113	R	LD	A	P/C	DB	F	F	W; PC		597_Victory_DSCF2388.JPG	?_BP?_Victory
3114	R	LD	A	C	Carling	F	F	W; PC	8429-33	602_Victory_DSCF2393.JPG	..2?_x_1815_?_^III (all crossed through)_?_?_?
3121	R	LD	A	S	Ledge	F	F	W; PC	8434-5	650_Victory_DSCF2441.JPG	?_BA_x_T
3125	R	LD	A	P	Carling	US	F	W; PC		641_Victory_DSCF2432.JPG	1(?)4_1811_YCC?_^_BA_PC?
3131	R	LD	A	S	Carling	US	F	W; PC; Obstruction		671_Victory_DSCF2462.JPG	No?_1418?_?_1814_YC?_IIII_BA
3132	R	LD	A	S	DB	F	F	W; PC		666_Victory_DSCF2457.JPG	Victory_No_566?_x_1812_?_?

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
3134	R	LD	A	S	Carling	P	F	W; PC		681_Victory_DSCF2472.JPG	?_1812?_?
3338	R	LD	A	P	DB	US	F	W; PC		635_Victory_DSCF2426.JPG	?_x_1814_x_VIIII (CT)_BA_R?
5009	R	UD	A	P	DB	F	F	W		2838_Victory_DSCF2872.JPG	No_227_x_1815_R_XII_BA
5010	R	UD	A	S	DB	F	F	W	8496-9	2803_Victory_DSCF2837.JPG	(B/R?)(Y/P?)_98_No_244_x_1814_R(?)_BA(I?)BA_(J?)C
5012	R	UD	A	S	DB	F	F	PC		2793_Victory_DSCF2827.JPG	No_100(?)_1811?_?_BA_?
5014	R	UD	A	P	Carling	US	F	W		2835_Victory_DSCF2869.JPG	_1814_^_BA
5015	R	UD	A	P	DB	US	F	W; PC		2833_Victory_DSCF2867.JPG	No_194_181(?)
5019	R	UD	A	P	DB	F				2846_Victory_DSCF2880.JPG	U_Deck_Victory
5011	R	UD	A	S	Carling	P	F	W		2789_Victory_DSCF2823.JPG	1815_x_^_BA_YC(G?)(G?)
1106	R	OD	B	C	Pillar	Aft	F	W	8246-8	1587_Victory_DSCF1437.JPG	No_1(?)14_x_1854_?_XXIII_BA
2011	R	OD	B	S	Ledge	US		W; PC		1326_Victory_DSCF1161.JPG	CAR_I_?_BA

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
2133	R	OD	B	P	Carling	US	F	W; PC	8304-6	1276 Victory DSCF1108.JPG	?80_x_181(5?)_x_IIII_BA_YC(S?)(I?)(A?)
2141	R	OD	B	P	DB	US	F	W; PC	8313-6	1291 Victory DSCF1125.JPG	No_954_x_181(3?)_x_III_BA_?_YC(C?)(Y?)
2143	R	OD	B	P	DB	Aft	F	W; PC	8317-23	1293 Victory DSCF1127.JPG	No_1084_?_III(CT)_BA_YC(??)
2153	R	OD	B	S	Carling	US	F	W; PC		1332 Victory DSCF1167.JPG	(1?)256_x_1814_x_IIII_BA_?_Y
2204	R	OD	B	S	DB	Aft	F	W			No_475_x_1815_BA-CG?
2205	R	OD	B	S	LK	US	F	W; PC		1358 Victory DSCF1193.JPG	N(o)_(3/9?)50_x_1815_x_XII_BA_YC(GG/SS?)
2206	R	OD	B	S	DB	US	F	W; PC		1361 Victory DSCF1196.JPG	Victory_Orlop_B_x_P_(gap)_No_701_x_1815_x_III(CT)_II_BA_Y
2207	R	OD	B	S	LK	US	F	W; PC		1309 Victory DSCF1144.JPG	Vic(y?)_No_1126_x_181(?)
2208	R	OD	B	S	Carling	US	F	W; PC		1311 Victory DSCF1146.JPG	No_841_x_1815_x_^III_BA_YC(GG/SS?)
2209	R	OD	B	S	DB	F	F	W; PC		1316 Victory DSCF1151.JPG	?_x_?_(gap)_Victory_Orlop_B_x_P
2214	R	OD	B	S	Ledge	F	?	W	8273-4	1539 Victory DSCF1389.JPG	Ledge_?_I_BA

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
2215	R	OD	B	S	Carling	US	F	W; PC; Damage		1521_Victory_DSCF1371.JPG	Car?_No_(?)55(?)_1814_YC(?)_^_BA
2216	R	OD	B	S	Ledge	F	?	W	8273-4	1532_Victory_DSCF1382.JPG	Ledge_?_I_BA
2217	R	OD	B	S	Carling	S	F	W; Damage		1534_Victory_DSCF1384.JPG	Ca(r?)_?_(?)(7?)(?)(?)_181(5?)_^?_x_IIII_BA
2231	R	OD	B	P	Carling	US	F	W	8284-6	2938_Victory_DSCF2972.JPG	No_100_x?_1815_(?)C_IIII_BA
2232	R	OD	B	P	DB	US	F	W	8287-91	2937_Victory_DSCF2971.JPG	No_220(2?)_1815_IIII(CT)_BA_SCD
2234	R	OD	B	P	Carling	US	F	W		2946_Victory_DSCF2980.JPG	No_186(0?)_?_(gap)_?_?
2253	R	OD	B	P	Carling	US	F	W; Damage		2963_Victory_DSCF2997.JPG	No_1147_x_1815_x_IIII_BA_YC(?)
2254	R	OD	B	P	Carling	US	F	W; Damage			?_x_181(?)_?_II_BA_?_W
2265	R	OD	B	C	Post	F				714_Victory_DSCF2505.JPG	P?10?
2266	R	OD	B	C	Post	S				715_Victory_DSCF2506.JPG	P?10?_BA

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
3137	R	LD	B	S	Ledge	Aft	F	W; PC		695_Victory_DSCF2486.JPG	R_I/V?
3184	R	LD	B	P	Ledge	Aft	F	PC; W?		732_Victory_DSCF2523.JPG	Ledge?_?
3332	R	LD	B	P/C	DB	Aft	F	W; PC		756_Victory_DSCF2547.JPG	?_Victory
3526	R	LD	B	S	Ledge	Aft	F	W; PC		656_Victory_DSCF2447.JPG	81(2?)_x_^_BA_?_IIII
5008	R	UD	B	S	DB	US	F	W; PC		2862_Victory_DSCF2896.JPG	N(o)_??0_x_1815_R/K?
5017	R	UD	B	S	DB	US	F	W; PC			XI_BA_SC?_?_?_?
2087	R	OD	C	P	DB	F	F	W	8121-4	994	No_1668_x_1815_x_II(CT)_IIII_BA_YC (S/G?)(S/G?)
2090	R	OD	C	P	DB	F	F	W	8127-31	1005	(?)2(?)_x?_x_1815_III(CT)_IIII_BA_SC ?
2095	R	OD	C	P	Carling	S	F	W	8137-41	1021	(?)(SGY?)_?_No_174(8?)_(18?)14_x_I II_BA
2096	R	OD	C	P	LK	S	F	W; Worn	8142-5	1023	No_?_1812?_x?_^?_BA_?_?
2102	R	OD	C	P	DB	US	F	W	8156-7	1046_Victory_DSCF0864.JPG	?_Y_x_ORLOP_x?_BP/BD?
2103	R	OD	C	P	DB	US			8152-5	1040_Victory_DSCF0858.JPG	No_1560_x_1815_x_IIII(CT)I_BA_IH?
2109	R	OD	C	P	DP	US	F	W	8164	1058_Victory_DSCF0881.JPG	I(?)(2?)_(^/X?)I_BA

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
2111	R	OD	C	P	DB	Aft	F	W	8166-70	1062 Victory DSCF0885.JPG	No_5955_x_181(8?)_?_III(CT) or II^_BA_WC_CC/PP?
2120	R	OD	C	P	Carling	P	F	W	8179-80	1208 Victory DSCF1036.JPG	?_P(A/15?)II_A/15?_v_VD?_x?_BP?
2122	R	OD	C	P	Ledge	P	F	W	8184-6	1214 Victory DSCF1042.JPG	No_8(???)_18(??)
2129	R	OD	C	P	DB	Aft	F	W; PC	8196-200	1230 Victory DSCF1058.JPG	No_5(???)_?_BA_WC
2147	R	OD	C	P	Carling	S	F	W; PC		1258 Victory DSCF1090.JPG	No_1325_x?_181(5/0?)_IIII_BA_YC?_?
2156	R	OD	C	S	Carling	US	F	W; PC		1391 Victory DSCF1226.JPG	No_99_1815_x_BA(CT)_II^_BA_YC(SS/GG?)_CAR
2160	R	OD	C	S	Carling	S	F	W; PC		1398 Victory DSCF1233.JPG	CAR?_No_122_x_181(2?)_IIII?_BA_YC_?_?
2167	R	OD	C								
2201	R	OD	C	S	DB	US				1346 Victory DSCF1181.JPG	No_1306_x_1815_III(CT)_I_BA_0/O?_SC_Orlop_PP?
2202	R	OD	C	S	DB	Aft	F	PC?		1352 Victory DSCF1187.JPG	No_1605_x_1815_BA_1H?
2203	R	OD	C	S	DB	US				1357 Victory DSCF1192.JPG	No_2657_x_1814_BP_IIII(CT)_BA_WC
3033	R	LD	C	P	Carling	S		W; PC		1685 Victory DSCF1542.JPG	No_(1?)5(8?)5_5_x_?_^_BA_YC(S/G?)

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
3063	R	LD	C	S	DB	US	F	W; PC		1780_Victory_DSCF1637.JPG	No_8980?_x_?_BA_?
3067	R	LD	C	S	DB	Aft	F	W	8357-63	1796_Victory_DSCF1654.JPG	H_?_N?_V_IIIIINVIN(?)?_XXX_IIIIII_WN
3068	R	LD	C	S	Ledge	Aft	F	PC		1803_Victory_DSCF1661.JPG	Ledge_S?_?_BA
3070	R	LD	C	S	Carling	P	F	W; PC	8364-8	1811_Victory_DSCF1669.JPG	Carling?_No_IIIII_x?_1812_YCS?_IIII_BA
3078	R	LD	C	S	DB	Aft	F	W; PC	8369-75	1847_Victory_DSCF1746.JPG	No_472_x_1819_x_III(CT)/IIIII?_BA_?_?_?S
3080	R	LD	C	S	Carling	P	F	W; PC		1853_Victory_DSCF1752.JPG	C?_W?_No_2280_1811?_x/S?_IIII_BA
3087	R	LD	C	S	Carling	US	F	PC	8376-80	1874_Victory_DSCF1773.JPG	No_109_x_1815_IIII_BA_?^R_Y(?)_?_?
3091	R	LD	C	S	DB	US	F	W; PC		1888_Victory_DSCF1787.JPG	Victory_No_2845_/
3093	R	LD	C	S	Ledge	F	F	W		1892_Victory_DSCF1791.JPG	I_BA_CR?
3096	R	LD	C	S	Ledge	US	F	W?; PC		1894_Victory_DSCF1793.JPG	CR_I_BA
3097	R	LD	C	S	Carling	US	F	W	8381-4	1897_Victory_DSCF1796.JPG	No_2366_x_1811_x__IIII_^(or BA?)_S?(?)

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
3151	R	LD	C	S	Carling	S	F	W		2683_Victory_DSCF2717.JPG	No_1(8?)91_1812_x_?
3152	R	LD	C	S	Ledge	F		W; PC	8434-5	2681_Victory_DSCF2715.JPG	Ledge_(H?)(D?)_BA
3159	R	LD	C	S	DB	US	F	W; PC; split	8436-43	2646_Victory_DSCF2680.JPG	?_BA_No_9(??)_x_1815_XX_BA_(J?)C
3162	R	LD	C	S	Fork	Aft	F	W; PC		2653_Victory_DSCF2687.JPG	No_923?_x_1815_x_II_BA_II(diagonal CT)
3167	R	LD	C	S	Ledge	Aft	F	W; PC	8444-8447	2663_Victory_DSCF2697.JPG	No_1816_x_181(5?)_x_XI-BA_?_?
3176	R	LD	C	S	Carling	S	F	W	8450-6	847_Victory_DSCF2638.JPG	CAR_?_N(o)_1590_x_1815_x_^II_BA_YC(S/G?)(S/G?)
3180	R	LD	C	S	Fork	F			8457-9	861_Victory_DSCF2652.JPG	Victory Fork
3180	R	LD	C	S	Fork	F	W			1974_Victory_DSCF1888.JPG	Victory Fork
3196	R	LD	C	P	Ledge	US	F	W; PC		822_Victory_DSCF2613.JPG	CAR_III_BA_YC
3301	R	LD	C	P	Ledge	F	F?	W	8460-1	814_Victory_DSCF2605.JPG	LED_I_BA_YC?
3305	R	LD	C	P	Ledge	Aft	F	W; PC?	8462-3	808_Victory_DSCF2599.JPG	I_BA_LED

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
3309	R	LD	C	P	Fork	F	F	W; PC	8464-9	803_Victory_DSCF2594.JPG	No_378_(date cut out)_II?_II_BA_III_?_A?
3311	R	LD	C	P	Fork	US	F	PC		825_Victory_DSCF2616.JPG	Victory_?
3312	R	LD	C	P	Carling	US	F	W; PC	8470-8472	785_Victory_DSCF2576.JPG	No_38(95?)_x_1815_x_X_BA_YC_?
3313	R	LD	C	P	Ledge	US	F	W		789_Victory_DSCF2580.JPG	No_?_x_181(1?)_^I_BA_?D?_X
3319	R	LD	C	P	Carling	US			8473-6	838_Victory_DSCF2629.JPG	CAR_No_1622_x_1815_^II_BA_YC(S/G?)(S/G?)
3321	R	LD	C	P	Carling	US	F	W; PC	8477-81	833_Victory_DSCF2624.JPG	N(o?)_?555_1815_^I_BA_YC(S/G?)(S/G?)_(gap)_CAR
3325	R	LD	C	P	Carling	P	F	W; PC		777_Victory_DSCF2568.JPG	CAR_No(?)_257_x_18(10?)_x_X_BA_Y(C?)_?
3326	R	LD	C	P	Ledge	US	F	W; PC		773_Victory_DSCF2564.JPG	(N?)o_(1?)542_x_1815_x_II
3328	R	LD	C	P	Ledge	F	F	W; PC		776_Victory_DSCF2567.JPG	LED…
3330	R	LD	C	P	Carling	P	F	W; PC	8482-8	765_Victory_DSCF2556.JPG	No_17(15?)_x_181(5?)_x_^IIII_BA_C?_R?
3525	R	LD	C	S	Carling	P	F	W; PC		587_Victory_DSCF2378.JPG	

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
3903	R	LD	C	P	Carling	S	F	W; PC		2982 Victory DSCF3017.JPG	N(o?)_?_x_1817_?_IIII_BA
3905	R	LD	C	C	DB	US	F	W; PC		2984 Victory DSCF3019.JPG	?_?_x_1815_?_?_?
1000	R	Hold	D	C	Bulkhead	Aft	F	W	8171	1091 Victory DSCF0914.JPG	
1100	S	H	D	P	BP	F	F	W	8059	1096 Victory DSCF0922.JPG	RMD
1101	R;S	Hold	D	P	Bulkhead	Fwd	F	W	8056-8	1101 Victory DSCF0927.JPG	RMD
2001	R	OD	D	P	DB	US	F	W	8004-6	871	?_(18?)15_BP?_98?_III(CT)_I_BA_WC
2002	R	OD	D	P	Carling	S	F	W; PC; Dmg	8007-12	Victory 007.JPG	No_6(??)_x_1815_x_?_?_BA_WC
2004	R	OD	D	P	LK	S	F	W; Dmg	8015-18	Victory 045.JPG	?_?_No_12(??)_(1815?)_?_?_?_?
2007	S	OD	D	P	LK	S end	F	W	8021	Victory 052.JPG	RMD
2023	R	OD	D	P	Carling	US	F	W; PC	8035-9	1072 Victory DSCF0895.JPG	?_(gap)_No_(1/3?)839_x_1815_?C
2027	R	OD	D	S	Carling	US	F	W; PC	8044-6	1074 Victory DSCF0897.JPG	III_BA_CAR_YC
2033	R	OD	D	P	HK	P	F	W	8051	1106 Victory DSCF0932.JPG	?_BA_WC

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
2039	R	OD	D	P	LK	US	F	W; PC	8064-8	1110_Victory_DSCF0936.JPG	?_Victory_?
2043	S	OD	D	P	Wedge between LK and ceiling planking	US	F	Dmg	8076	1116_Victory_DSCF0942.JPG	RMD
2045	R	OD	D	S	DB	F	F	W; PC	8077-9	1161_Victory_DSCF0987.JPG	(?)87_x_1815_III(CT)IIII_BA_?
2046	R	OD	D	S	Carling	US					CAR
2047	R	OD	D	S	Carling	US	F	W; Dmg	8201-2	1153_Victory_DSCF0979.JPG	No_1068_x_1814_x
2048	R	OD	D	S	Carling	US	F	W; PC	8203-5	1158_Victory_DSCF0984.JPG	No_115_1811_IIII_BA_CA(^?)
2050	R	OD	D	P	DB	F	F	W; PC	8208-17	1137_Victory_DSCF0963.JPG	No_11(9?)(?)_x_181(4?)_x_II^I_BA_SC?_?_V/U?_Victory
2051	R	OD	D	P	Carling	S	F	W; PC	8218-20	1141_Victory_DSCF0967.JPG	Victory?_BA_x_Pla(t?)(?)_?(15?)_III?
2052	R	OD	D	P	Carling	US	F	W; PC	8221-5	1138_Victory_DSCF0964.JPG	No_4899_x?_182(0?)_YC?_IIII_BA_WC?_?
2053	R	OD	D	P	Carling	US	F	W; PC	8226-30		?_?_No_(?)6(0?)_(?)815_?_IIII_BA_(?)C
2055	R	OD	D	P	Carling	US	F	W; PC	8231	1144_Victory_DSCF0970.JPG	No_1339_x_1815_x_^_BA_YC_CAR_I(H?)

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
2058	R	OD	D	S	Carling	S	F	W; PC	8234-6	1180_Victory_DSCF1007.JPG	No_5144_x_1812_x_IXI(10?)2X^_BA_?_?
2064	R	OD	D	P	Carling	P	F	W	8082	912	^_BA_WC_?
2071	R	OD	D	P	Carling	P	F	W; PC	8092	947	?_IIII_BA_YCG(Y?)
2075	R	OD	D	S	Carling	P	F	W; PC; Dmg	8097-100		CAR_No_622(1?)_1811_IIII_BA_YC(??)
2080	R	OD	D	P	Carling	P	F	W	8104-5	895	?_x_1815_x_^_BA_YC(G?)(G/Y?)_?
2082	R	OD	D	P	DB	Aft	F?	W	8107-10	964	No_3(88?)_x_1815_x_III(CT)II_BA_YC(S/Y/G?)(S/Y/G?)
2084	R	OD	D	P	DB	F	F	W	8112-6	979	No_661(1?)_(18?)(??)_PP_II(CT)_III_BA_?_?
2085	R	OD	D	P	Carling	S	F	W	8117-9	984	1719_x_181(4?)_x_YC(S?)_IIII_BA
2165	R	OD	D	S	DB`	Aft	F	W		1426_Victory_DSCF1261.JPG	No_475_1815_IIII(CT)_?
2168	R	OD	D	S	DB	F	F	W		1431_Victory_DSCF1266.JPG	I_x_1815_III_?_?
2171	R	OD	D	S	DB	Aft	F	W; PC		1442_Victory_DSCF1277.JPG	No_1(3?)19_x_1810_x_^I_BA_Y
2172	R	OD	D	S	Carling	S				1444_Victory_DSCF1279.JPG	BM
2175	R	LD	D	S	SK	F	F	PC	8500-2	1976_Victory_DSCF1890.JPG	No_5(?)_x_18(1?)(1?)
2180	R	OD	D	P	SK	Aft	?	W	8506-8	338_Victory_DSCF2085.JPG	No_1498_x_1815

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
2181	R	OD	D	P	SK	F	F	W; PC		341_Victory_DSCF2091.JPG	No_10(72?)_x_18(15?)
2183	R	OD	D	P	SK	Aft	?	?		362_Victory_DSCF2112.MOV	No(?)_?_x_1814_^III_BA_III
2184	?	OD	D	S	DB	TS				460_Victory_DSCF2210.JPG	XI
2185	?	OD	D	S	DB	TS				462_Victory_DSCF2212.JPG	XII
3000	R	LD	D	S	DB	Aft	F	W; PC	8328-31	1448_Victory_DSCF1286.JPG	No_2(???)_x_181(?)_?_XIII_BA_WC_x
3002	R	LD	D	S	DB	F	F	W; PC	8332-6	1455_Victory_DSCF1293.JPG	No_2(?)69_x_1815_(??)BP_III(CT)_II_BA_(gap)_?_YV?(above rase)_BA(above rase)
3008	R	LD	D	S	Carling	S	F	W; PC	8338-41	1471_Victory_DSCF1309.JPG	?_(1?)816_x?_III_I(?)_??
3048	R	LD	D	P	Carling	US	F	PC	8346-8	1728_Victory_DSCF1585.JPG	No_786_x_1814_I^(I?)_BA_SC(A?)_W?
3049	R	LD	D	C	Ledge	US	F	W; PC	8349-53	1729_Victory_DSCF1586.JPG	?_No_1468_x_1815_YCC?_^III_BA_?
3056	R	LD	D	S	Carling	S	F	W	8356	1762_Victory_DSCF1619.JPG	15_R_III(CT)_BA(CT)
3207	R	LD	D	S	Ledge	F	F	W		1969_Victory_DSCF1883.JPG	112_BA_YC/YP?_PAR/CAR?

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
3222	R	LD	D	C	Carling	US	W?		8503-5	259_Victory_DSCF2006.JPG	No1368(?)_x_1814(?)_IIII_BA
3252	R	LD	D	P	Ledge	US	F	W; PC		344_Victory_DSCF2094.JPG	P/C?_?_BA
3259	R	LD	D	C	DB	F	F?	W?; PC?		369_Victory_DSCF2119.JPG	BA
3260	R	LD	D	S	Ledge	US	F	W; PC		374_Victory_DSCF2124.JPG	?_T?_15_?
3261	R	LD	D	S	Ledge	US	F	PC		456_Victory_DSCF2206.JPG	?_?_BA
3266	R	LD	D	S	Carling	S	F	W; PC		378_Victory_DSCF2128.JPG	No?_?_18(??)_?_?_15_?
3267	R	LD	D	S	Carling	US	F	W; PC		377_Victory_DSCF2127.JPG	No_(??)47_x_181(?)
3270	R	LD	D	S	DB	US	F	W; PC		398_Victory_DSCF2148.JPG	?_Victory_No_99(9?)
3271	R	LD	D	S	Ledge	US	F	W; PC		403_Victory_DSCF2153.JPG	15_?_?_BA?
3272	R	LD	D	S	Ledge	US	F	W		404_Victory_DSCF2154.JPG	15/BA?
3274	R	LD	D	S	DB	F	F	W; PC	8509-11	408_Victory_DSCF2158.JPG	?_?_BA/V?_Victory_?_BA_8619?

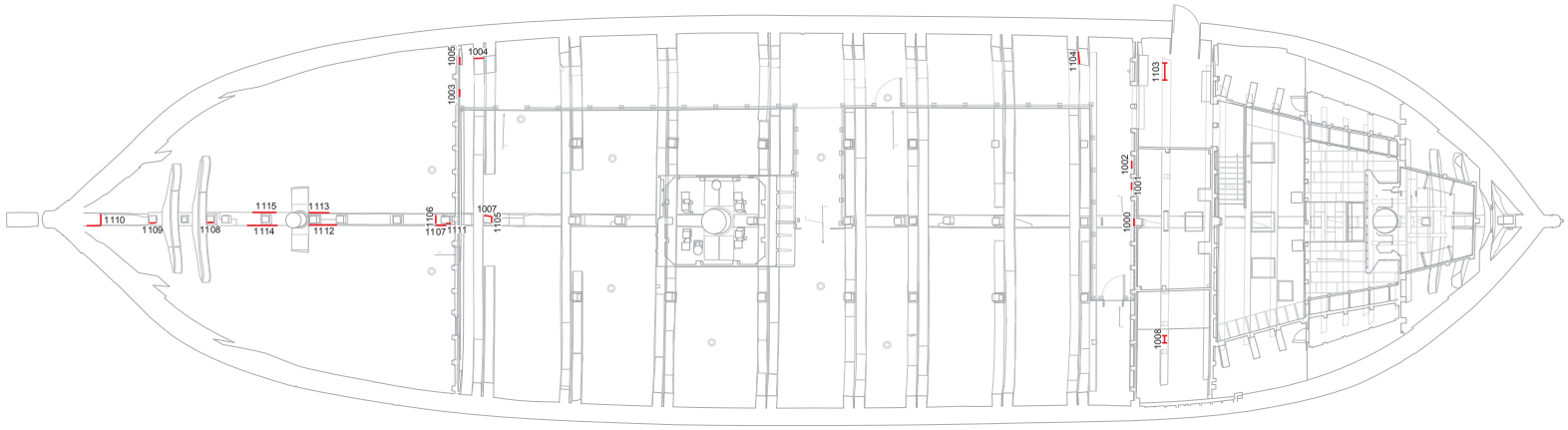
Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
3275	R	LD	D	S	Ledge	F	F	P		412_Victory_DSCF2162.JPG	S?_o?_v?_Y?_C?
3276	R	LD	D	S	Ledge	F	F	W; PC		411_Victory_DSCF2161.JPG	S?_?_BA
3277	R	LD	D	S	Ledge	Aft	F	W; PC		413_Victory_DSCF2163.JPG	?_BA
3279	R	LD	D	S	Carling	S	F	W; PC		427_Victory_DSCF2177.MOV	No_??(2?)0_x_181(5?)_IIIII_BA_C?_K?_Y_?
3281	R	LD	D	S	Carling	S	F	W; PC		436_Victory_DSCF2186.MOV	No_?_180(5/9?)_^_?_BA_WC?_?
3284	R	LD	D	S	Ledge	Aft	F	W; PC		442_Victory_DSCF2192.JPG	?_BA_?
3285	R	LD	D	S	Ledge	US	F?	W; PC?		443_Victory_DSCF2193.JPG	BA
3289	R	LD	D	S	Carling	US	F	PC		448_Victory_DSCF2198.JPG	No_?_x_1810/16?_?_BA_?
3290	R	LD	D	S	Ledge	US	F	PC		447_Victory_DSCF2197.JPG	S_I/1?_BA?_R?_?
3291	R	LD	D	P	Ledge	Aft	F	PC		466_Victory_DSCF2257.JPG	I (crossed through)_BA (crossed through)_?_?_15_?
3292	R	LD	D	P	DB	US	F	Cladding; PC		471_Victory_DSCF2262.JPG	?_Victory

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
3293	R	LD	D	P	Ledge	US	F?	PC?		465_Victory_DSCF2256.JPG	II (crossed out)_BA (crossed out)_YC_?_7?_15_N
3294	R	LD	D	P	Carling	P	F	W		474_Victory_DSCF2265.JPG	III_BA
3295	R	LD	D	P	Ledge	Aft	F	W; PC		475_Victory_DSCF2266.JPG	III?_BA
3297	R	LD	D	P	Ledge	Aft	F	PC		489_Victory_DSCF2280.JPG	S?_II_BA
3299	R	LD	D	P	DB	US	F	W; PC	8512-3	487_Victory_DSCF2278.MOV	?_?_Victory_No_99_?_1815_?_IIIIIII_BA_SC?
3502	R	LD	D	P	Wooden rack attached to DB	Aft				479_Victory_DSCF2270.JPG	R_P?_2?_I_C?_BA
3507	R	LD	D	P	Ledge	US	F	W; PC		504_Victory_DSCF2295.JPG	?_BA
3509	R	LD	D	P	DB	Aft	F	W; PC		518_Victory_DSCF2309.MOV	?_1815_x_III(crossed through)?_BA_?
3520	R	LD	D	P	Carling	US	F	W?; PC		557_Victory_DSCF2348.JPG	No_200(8?)_x_181(5?)_x_?
3523	R	LD	D	P	Ledge	F	F	PC		503_Victory_DSCF2294.JPG	BA_?_?

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
6000	R	QD	D	C	DB	Aft				2879_Victory_DSCF2913.JPG	1985_1985
2040	R	OD	D	P	Carling	S	F	W; PC	8069-73	1120_Victory_DSCF0946.JPG	CAR?_No_1125_x_18(15?)_x_IIII_BA_Y(?)
2038	R	OD	D?	P	DB	US	F	W	8060-3	1117_Victory_DSCF0943.JPG	No_1954_x_1815_x_III(CT)II_BA_YC(S/G?)(S/G?)
3218	R	LD	E	S	Ledge	Aft	F	PC		250_Victory_DSCF1996.JPG	?18?BA
3219	R	LD	E	S	DP	US	F	PC?; W?; H		252_Victory_DSCF1998.JPG	815?
3224	R	LD	E	S	Ledge	Aft	F	W; PC		270_Victory_DSCF2017.JPG	Ledge_(Date?)_BA
3227	R	LD	E	S	DB	Aft	?	?		281_Victory_DSCF2028.JPG	No 29
3228	R	LD	E	S	Ledge	Fwd	F	W; PC		284_Victory_DSCF2031.JPG	BA…
3232	R	LD	E	S	Ledge	US	F	W; PC		291_Victory_DSCF2038.JPG	?812_?_1?_BA_YP?
3233	R	LD	E	C	Ledge	Aft	F	W; PC		292_Victory_DSCF2039.JPG	?_1?_BA
3234	R	LD	E	C	Ledge	Aft	F	W; PC		293_Victory_DSCF2040.JPG	8?_BA_1?

Timber Mark	Type	Deck	Sector	Port / Starboard	Timber type	Face	Complete	Reason for	OHP numbers	Hyperlink	Mark Content
3235	R	LD	E	C	Ledge	US	F	W; PC		297_Victory_DSCF2044.JPG	1?_BA?_?_BA_?_BA
3238	R	LD	E	P	Ledge	US	F	W; PC		307_Victory_DSCF2054.JPG	R?_I?_BA
3240	R	LD	E	P	Ledge	Aft	F	W; PC		311_Victory_DSCF2058.JPG	8?_I_BA
3241	R	LD	E	P	Carling	P	F	W; PC		314_Victory_DSCF2061.JPG	No?_14?_x_1815?_x_^BA_IP/YP?
3242	R	LD	E	P	LK	S	F	W; PC		318_Victory_DSCF2065.JPG	?_X_BA
3245	R	LD	E	P	Ledge	US	F	PC		320_Victory_DSCF2067.JPG	?_?_BA
3247	R	LD	E	P	Ledge	US	F	W; PC		325_Victory_DSCF2072.JPG	II_BA
3521	R	LD	E	S	Carling	US	F	PC; W?		246_Victory_DSCF1992.JPG	?III?BA
4024	R	MD	E	S	Bowsprit step	Aft	F?				No_4643_1815_YC?_II(CT)_III_BA_W

Acronyms	
(CT)	Crossed through
BP	Bulkhead Plank
C	Carved Mark
DB	Deck Beam
DP	Deck plank
Fork	Beam Arm
HK	Hanging Knee
H	Hidden
LK	Lodging knee
LD	Lower Deck
MD	Middle Deck
OD	Orlop Deck
P	Port
PC	Paintcoat
QD	Quarter Deck
R	Rase Mark
S	Stamped Mark / Starboard
SK	Standing Knee
TS	Topside
UD	Upper Deck
US	Underside
W	Worked after mark applied



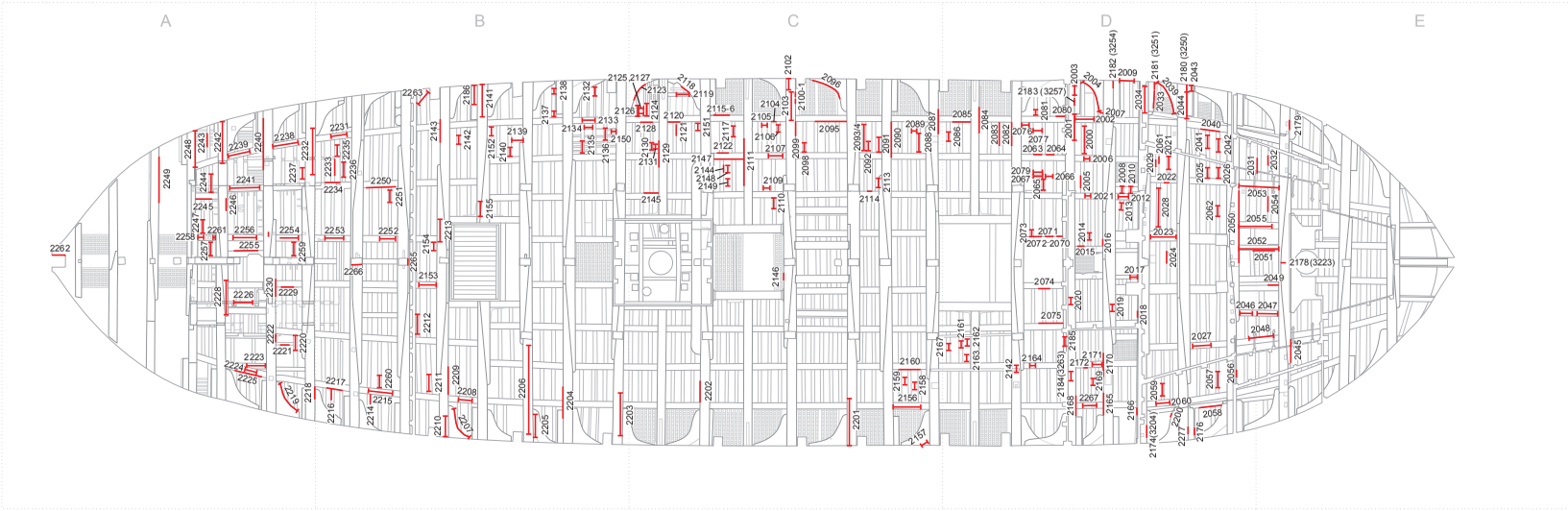
Timber mark location (side of timber)
Timber mark location (underside of timber)

0 10 m

Date:	22/10/13	Revision Number:	0
Scale:	1:200	Illustrator:	KJF
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\13-09-04		

Hold deck plan

Figure 1



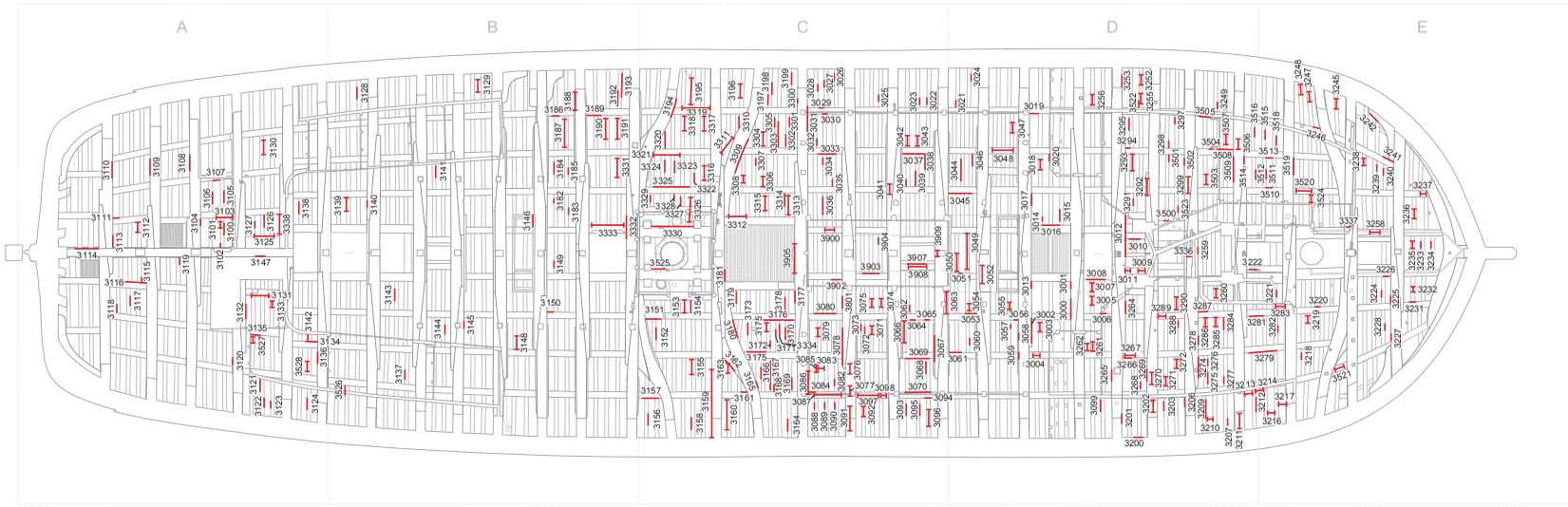
Timber mark location (side of timber)
Timber mark location (underside of timber)

0 10 m

Date:	28/03/13	Revision Number:	0
Scale:	1:200	Illustrator:	KJF
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\13-09-04		

Orlop Deck plan

Figure 2



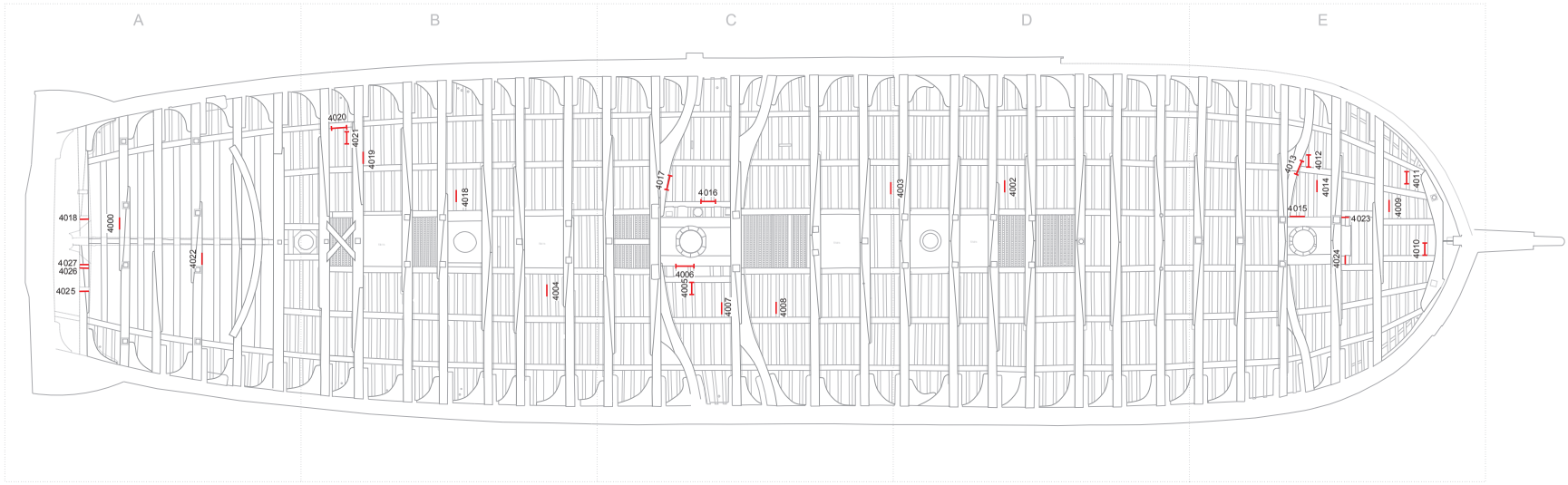
Timber mark location (side of timber)
Timber mark location (underside of timber)

0 10 m

Date:	04/09/13	Revision Number:	0
Scale:	1:200	Illustrator:	KJF
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\13-09-04		

Lower Deck plan

Figure 3



Timber mark location (side of timber)
Timber mark location (underside of timber)

0 10 m

Date:	04/09/13	Revision Number:	0
Scale:	1:200	Illustrator:	KJF
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\13-09-04		

Middle Deck plan

Figure 4

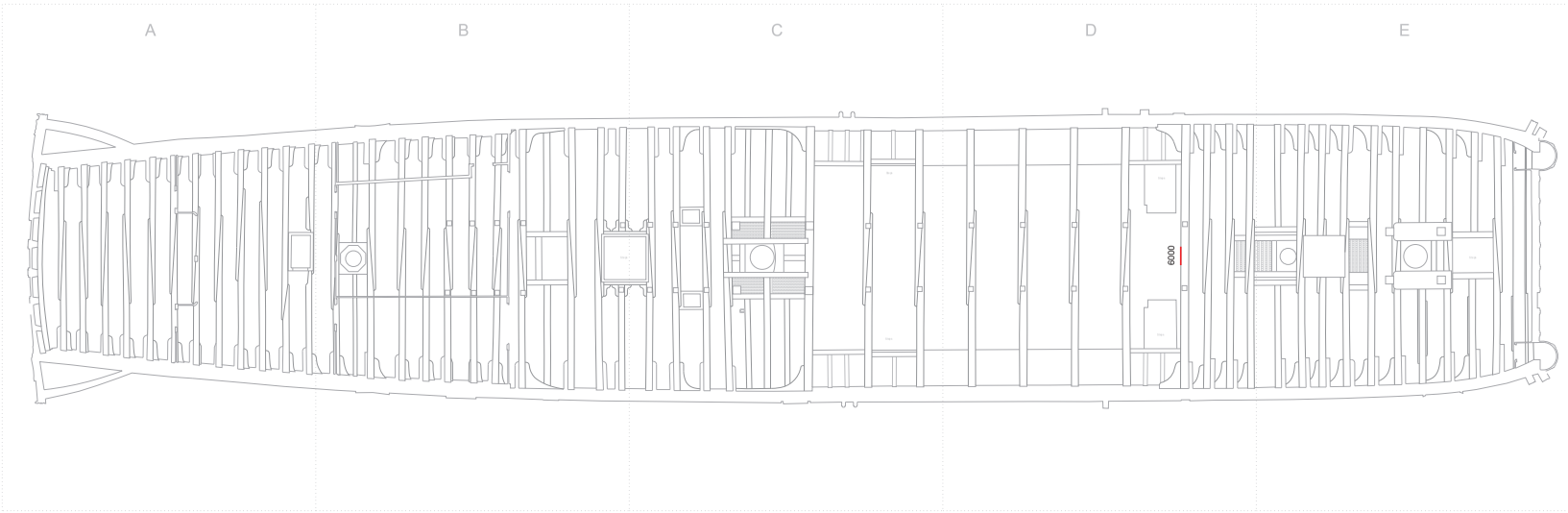
Timber mark location (side of timber)
Timber mark location (underside of timber)

0 10 m

Date:	04/09/13	Revision Number:	0
Scale:	1:200	Illustrator:	KJF
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\04-09-19		

Upper Deck plan

Figure 5



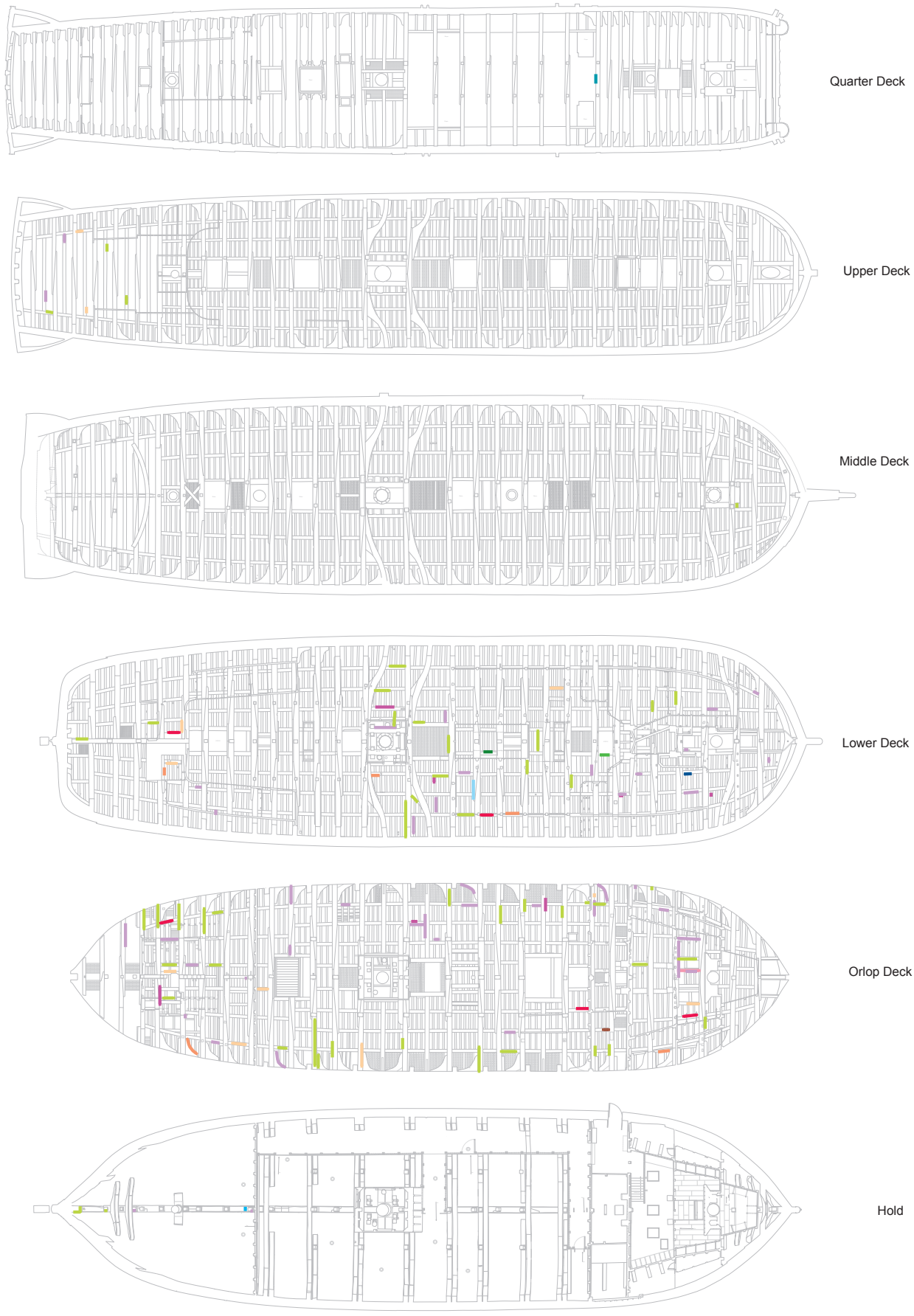
Timber mark location (side of timber)

0 10 m

Date:	04/09/13	Revision Number:	0
Scale:	1:200	Illustrator:	KJF
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\13-04-09		

Quarter Deck plan

Figure 6



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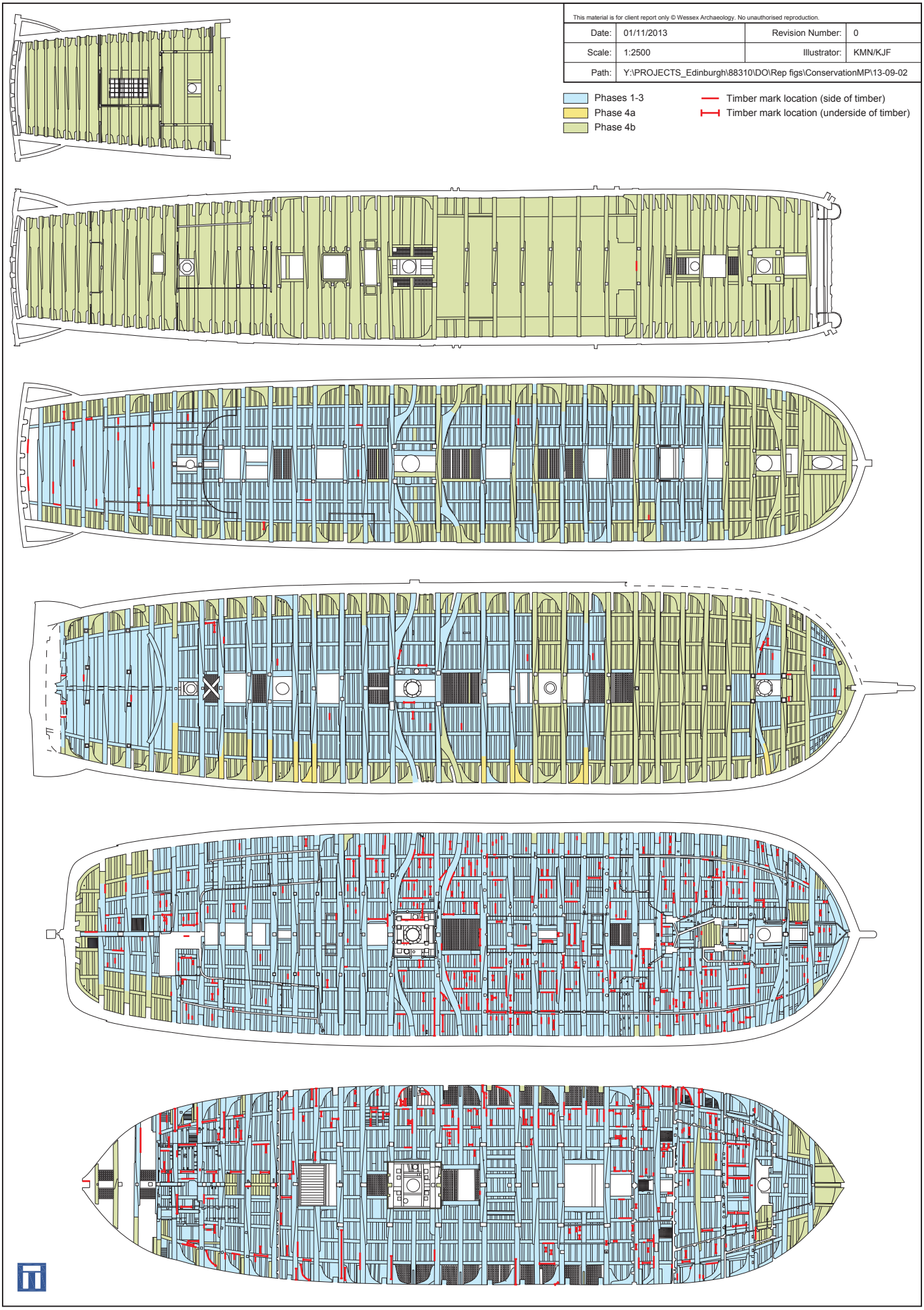
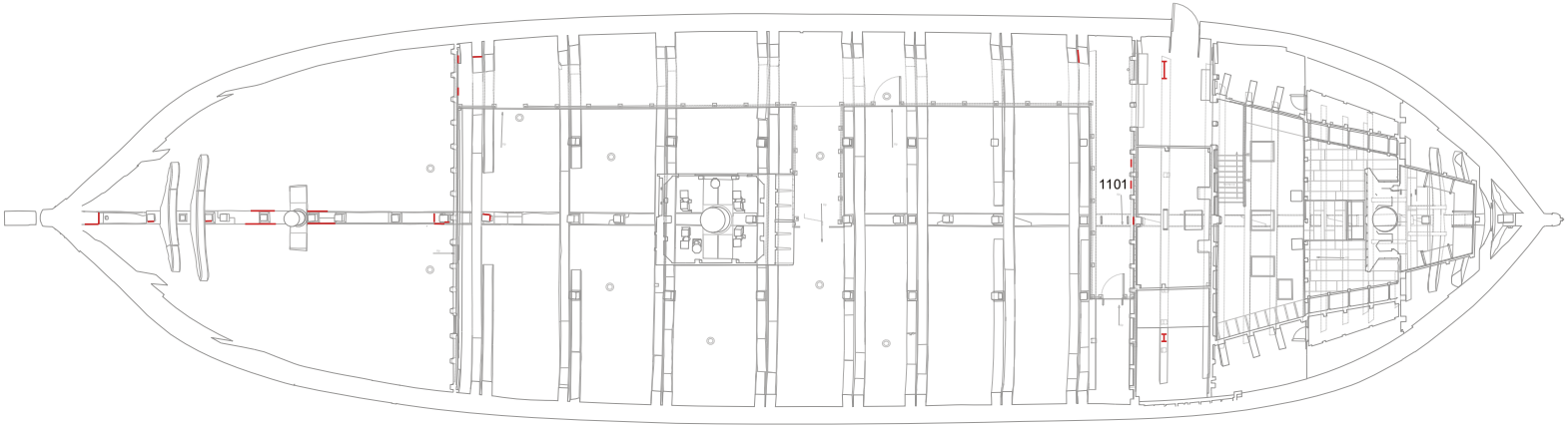
Distribution of timber marks by date

Figure 7

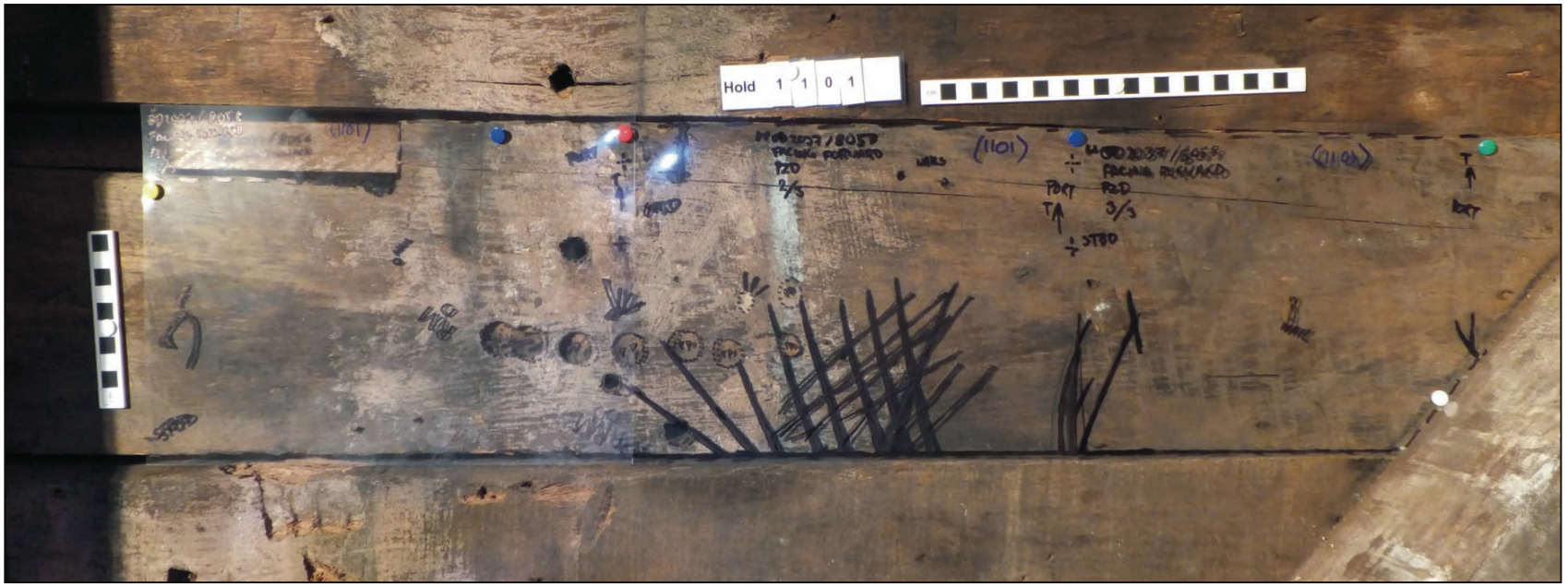


Deck plan showing phasing identifying modern replacement timbers

Figure 8



OHP tracing of 1101



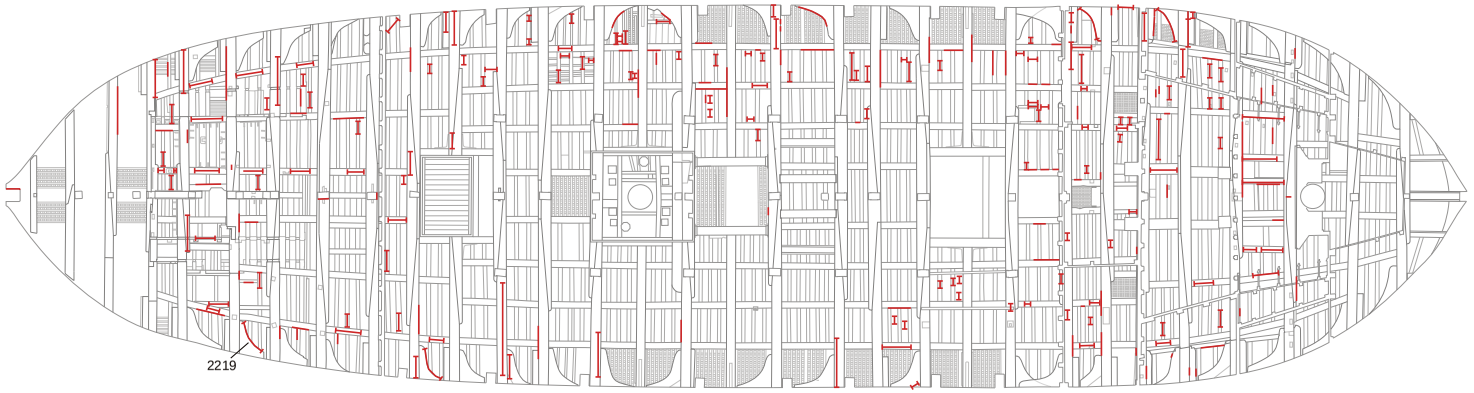
Timber mark location (side of timber)
Timber mark location (underside of timber)

0 10 m

Date:	27/05/2014	Revision Number:	1
Scale:	Hold deck plan 1:200	Illustrator:	KMN
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\14-05-27\1HoldD		

Rase marks and stamps on bulkhead planking - 'RMD', probably Richard Mosebury, Timber Master, 1801-24

Figure 9



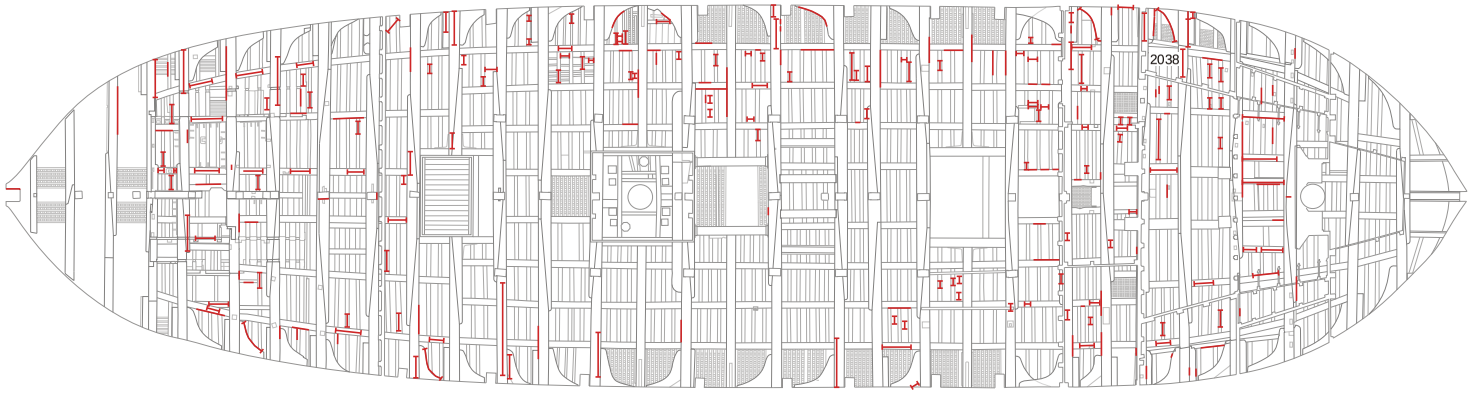
Timber mark location (side of timber)
Timber mark location (underside of timber)

0 10 m

Date:	27/05/2014	Revision Number:	1
Scale:	Orlop Deck plan 1:200	Illustrator:	KMN
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\14-05-27\2Hold		

Rase mark on a lodging knee from the Orlop Deck - No. 9052, 1812 date; shown with OHP tracing in place

Figure 10



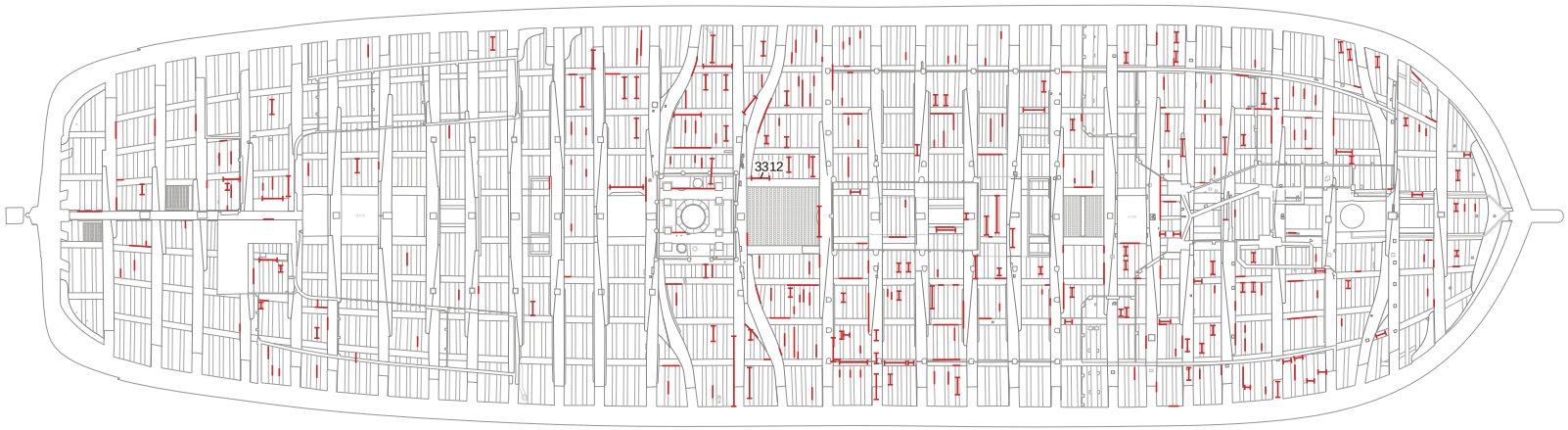
Timber mark location (side of timber)
Timber mark location (underside of timber)

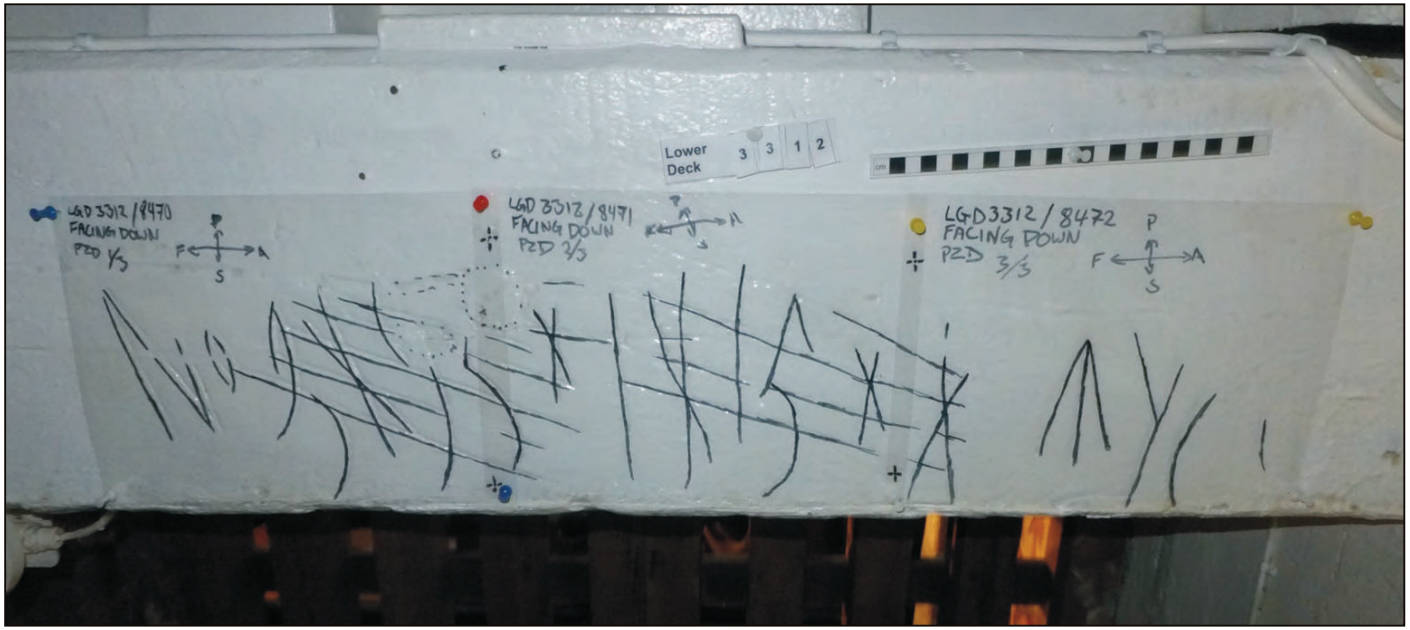
0 10 m

Date:	27/05/2014	Revision Number:	1
Scale:	Orlop Deck plan 1:200	Illustrator:	KMN
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\14-05-27\2Hold		

Underside of deck beam from the Orlop Deck - syntax reads 'No 1954 x 1815 x XXIII Broad Arrow YC'

Figure 11





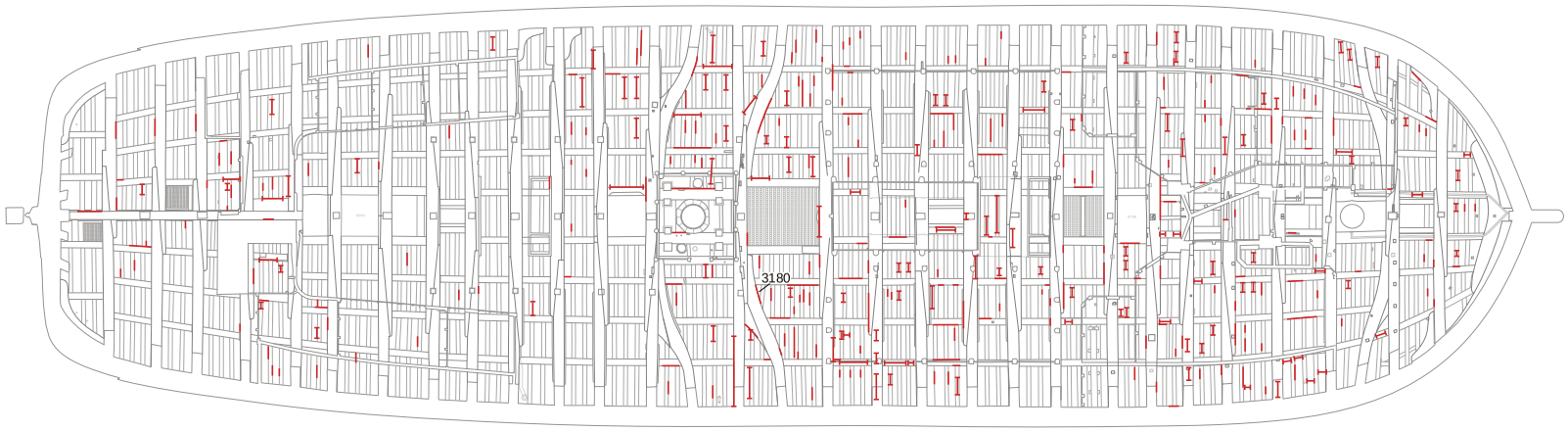
Timber mark location (side of timber)
Timber mark location (underside of timber)

0 10 m

Date:	27/05/2014	Revision Number:	1
Scale:	Lower Deck plan 1:200	Illustrator:	KMN
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\14-05-27\3Orlop		

Underside of carling from the Lower Gun Deck showing the standard syntax including the 1815 date and the common letters YC.
The syntax has been struck through, indicating that the information given was perhaps incorrect at the time the timber was received into the dockyard.

Figure 12



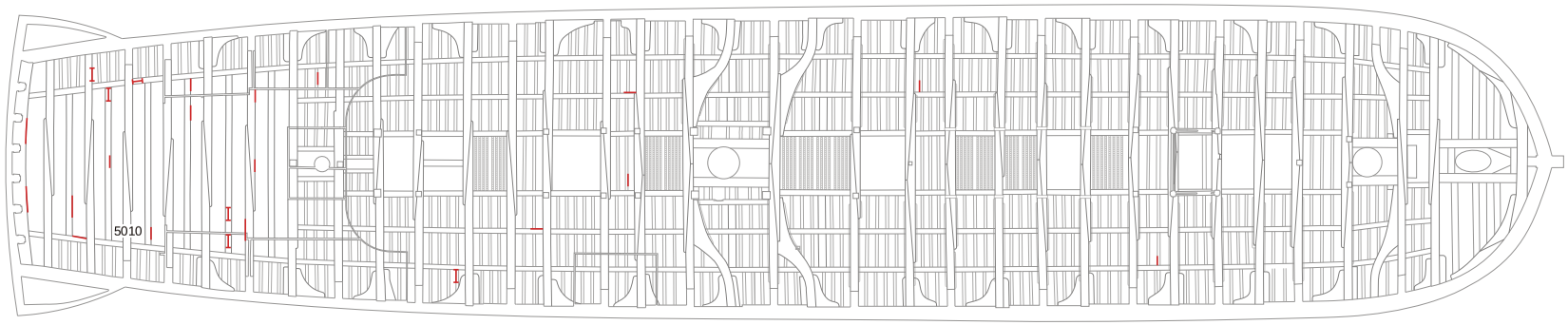
Timber mark location (side of timber)
Timber mark location (underside of timber)

0 10 m

Date:	27/05/2014	Revision Number:	1
Scale:	Lower Deck plan 1:200	Illustrator:	KMN
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\14-05-27\3Orlop		

Lower deck rase mark on a beam arm - 'Victory Fork'

Figure 13



Timber mark location (side of timber)
Timber mark location (underside of timber)

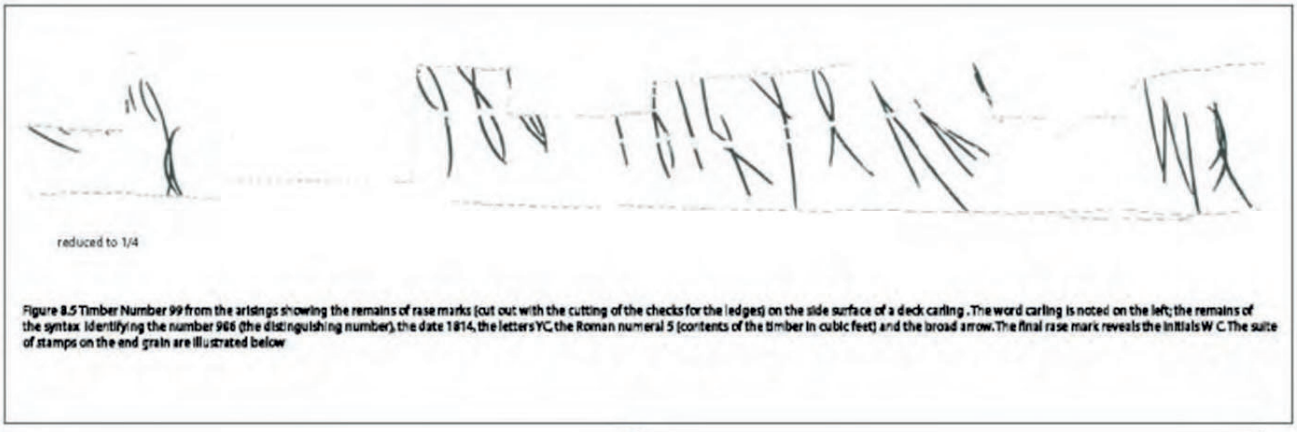
0 10 m

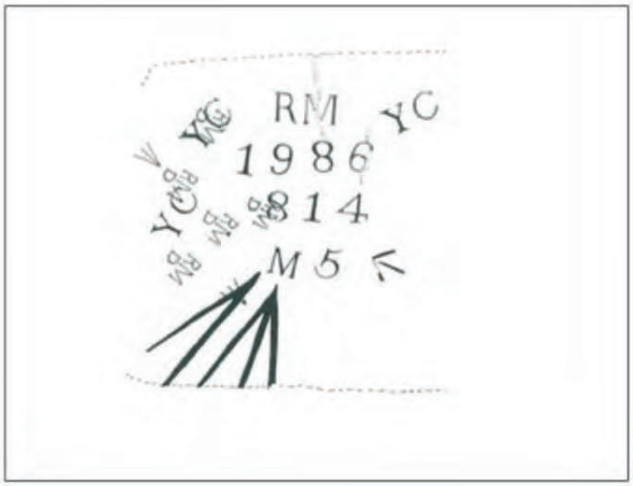
Date:	27/05/2014	Revision Number:	0
Scale:	1:200	Illustrator:	KMN
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\14-05-27\5MGD		

Complete rase mark on the forward face of an Upper Deck beam – BP 98 No 244 x 1814 xR? BA BA YC. The mark shows the number 98 which indicates the rate of ship for which the component was originally converted – consistent with the Rate of Victory at the time in 1814. Similar 'Rate' markings were also noted on HMS Unicorn (46) and the Wheelwright's Shop Ship Timbers (74) in Chatham Historic Dockyard.

Figure 14

Plate 1: A carved mark on the end of a deck beam denoting the position of the beam in the ship





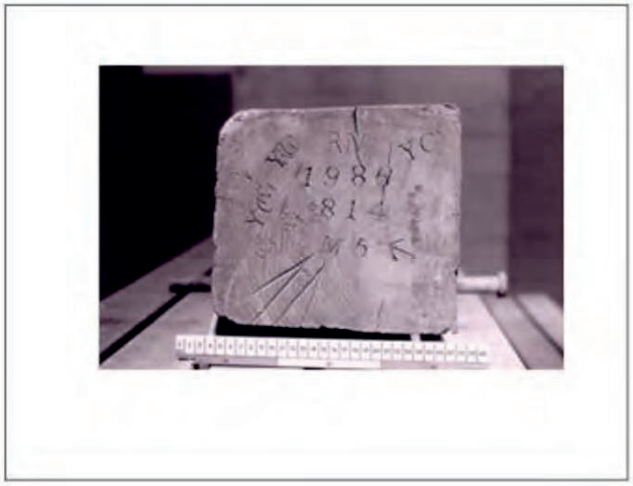


Plate 2: Examples of the rase marks and carvings on the end grain of Timber Number 99

Date:	03/05/13	Revision Number:	0
Scale:	N/A	Illustrator:	KJF
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\13-03-19\		

Plate 3: Examples of the AS stamp noted on a futtock from the arisings

Plate 4: An example of the name Victory rased on a a section of futtock from the arisings

Date:	03/05/13	Revision Number:	0
Scale:	N/A	Illustrator:	KJF
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\13-03-19\		

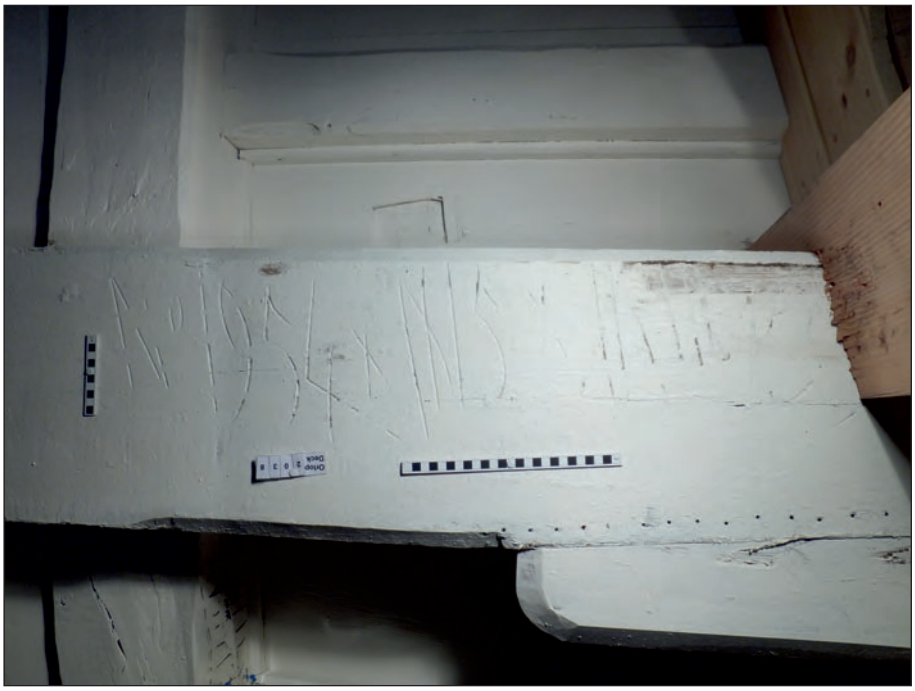


Plate 5: Typical 1815 rase mark syntax, Timber Mark 2038

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Scale:	N/A	Illustrator:	KJF
Path:	Y:\PROJECTS_Edinburgh\88310\Drawing Office\Report figs\Report\13-03-19\		

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