Section E

SHORE SUPPORT
There are many different facets to the shore-based aspect of maritime activity, not all of which can be covered here. It is often difficult to define its boundaries, for the effects of it can stretch a long way from the sea – in homes, offices, counting houses, warehouses and so on. Many roads and railway lines only exist in their current form because of the connection with a port, but it would be straying too far from the subject to look at them in any detail.

Architecture of customs houses, dockyard buildings and so on is also slightly beyond the scope of this work but they were often buildings of great prestige in the case of royal dockyards, commercial docks and official premises such as harbour trust offices and harbourmaster’s houses. Eighteenth-century customs houses were often the main representative of government authority in the area and they too were distinctive and imposing buildings. Dry docks and building slips, on the other hand, are very definitely maritime and their preservation, after the original function is lost, is often a difficult issue. Dry docks can also hold preserved ships, as in the case of HMS Victory at Portsmouth and the ships in Chatham Historic Dockyard. Other ships can be kept afloat in wet docks, as in Merseyside Maritime Museum.

Cranes can be very evocative, especially for those with memories of the great shipbuilding rivers in their heyday when they dominated the horizon. They are found in shipyard and harbour sites, both for building ships and for loading and unloading them. They are of course far too big for indoor display and are usually kept on their original sites, but their height and distinctive shapes make them very attractive objects.

Maritime documents are a very different shore-based field, although many of them, such as log books, are not actually generated ashore. However the main reason why so many of them have survived and are to be found in archives and museum collections is that they were mostly produced for presentation to the authorities on land. These included certificates of registration, muster books, crew agreements and log books. A knowledge of these is useful in several ways. It might help to identify documents already in a museum collection, or brought in by visitors, and to assess their importance. It might help a curator to identify possible areas of research for cataloguing or exhibition of other objects such as ship models or personal items. Documents such as muster books and shipping lists tend to be rather arcane unless they are interpreted properly. Most museums have some kind of archive collection and many of these have a strong maritime element. In addition there are many relevant documents to be found in county records offices, the National Archives and the National Maritime Museum which can all aid research.
CRANES AND CARGO HANDLING

BY ANDY KING, SENIOR COLLECTIONS OFFICER – INDUSTRIAL AND MARITIME HISTORY, BRISTOL MUSEUMS AND GALLERIES

Jib cranes and derricks (the latter named after a 17th-century hangman) are devices for lifting heavy loads and depositing them at some distance from their original position. The two terms are relatively interchangeable, and to further confuse matters, a ‘derrick crane’ is one whose radius can be altered.

Cranes are poorly represented in maritime preservation because of the difficulties inherent in their size and because they are often modernised by flourishing ports, and quickly demolished by failing ones. Where large cranes survive, it is often their landscape value rather than their historical significance that wins the preservation case. Maritime museums care for relatively few cranes.

CARGO HANDLING CRANES

Lifting devices to move cargo to and from ships’ holds have always been indispensable aboard ship and in ports. Derricks could be fashioned relatively easily with booms and masts aboard ship, sufficing for most loading and unloading except the heaviest cargoes. To tackle these, larger ports provided treadwheel cranes from as early as Roman times. Once common, only two are known to survive today, in Harwich (originally used as a shipyard crane) and on the River Wey near Guildford.
Simple gallows cranes, sometimes with a stepped-down pulley arrangement to give mechanical advantage (known as whip cranes), were the most common type of crane to be found in ports of the time.

At the beginning of the 19th century, iron increasingly began to replace timber in some parts of the construction of cranes. The new material facilitated the construction of gearing and allowed parts to be produced in large numbers, making the machines cheaper. Geared hand cranes with iron-stayed wooden jibs, followed by all-iron hand cranes, were common by the mid century.
Alternatives to manpower were also sought. Although water power was applied to some inland cranes, a source was seldom available at ports. Similarly, although steam was earlier applied to heavy lift cranes in docks and locomotive steam cranes became a common sight at ports with railway sidings, steam did not offer the speed necessary for loading and unloading steam and motor ships. A heavy lift steam crane survives at Bristol.

The hydraulic crane was the principal solution to quick cargo handling in the mid 19th century, and remained the main type until the early 20th century. Armstrong first produced them in 1847 and had made 1200 by 1855. Their installation could be combined with the control of bridges, lock gates and other machinery and contrivances on a port-wide system. Very few survive.

The successor to hydraulic power was electricity. Electric cranes were first introduced at Southampton in 1893, but their almost universal adoption after the 1920s followed the development of the level-luffing variety. These cranes allow the load to remain at the same height when the jib is moved in and out, significantly increasing their speed of operation. Two common types evolved; the Toplis version has a mast behind the jib from which the hoist rope extends.
The Babcock & Wilcox design has a short articulated section at the end of the jib which mirrors the movement of the main jib (in Bristol, these are known as ‘flip-flop’ cranes).

Where dockside cranes are still employed, both remain the common designs.
Similar designs of crane were used in both shipyard and cargo applications until the 1850s. The types diverged after this as dockside cranes developed for speed of loading, usually with quite low weight capacity. Shipyards needed heavy load ranges and height, resulting in designs such as the hammerhead or giant cranes, of which good examples survive in Glasgow.

Other similar types survive elsewhere, still in use. Fairbairn cranes, like the Bristol example, were commonly supplied to fitting-out berths and to naval gun installation wharves, powered by steam or later by electricity.

**CRANES AND DERRICKS ABOARD SHIP**

For cargo vessels, shipboard cranes allowed freight to be loaded or removed at will rather than being dependent upon port authorities. Freight derricks on steam and motor vessels were a development of masts and booms used for these purposes on sailing ships. Powered winches close by provided the lift. The type and arrangement of the derricks aboard a vessel can give additional clues to its age and intended cargo. See Mike Stammers’ article ‘Deck Fittings & Deckhouses’ in this publication for a fuller explanation.

**HANDLING EQUIPMENT**

Although cranes will be outside the scope of most museums to collect, there remains a wide range of cargo handling equipment used with them. Simple endless rope slings served to handle sacks and similar loads which could be bundled together. Nets were a development of this and could cope with a wider range of goods, particularly articles that would not compress slightly to make them secure inside a simple sling; frozen meat carcasses are an example. Tea or net boards were used where boxed or paper-sacked goods were common. Special slings and chains were developed to handle barrels, timber
and other commodities. Colourful and occasionally distinctly local names were often given to these bits of tackle; a ‘snotter’, for instance, is a rope sling with an eye at each end.

Once landed on the quay, a whole variety of wheeled trucks was used to move cargo onward. Sack trucks in a bewildering variety of styles and sizes, trolleys, special purpose carts and, in some ports, sledges, all played their part. Other tools of note include the universally-used hook, in all its varieties, and special shovels for grain and powdered bulk ores. Each port will have its own range.

The almost ubiquitous adoption of palletisation, containers and the fork-lift truck has seen the demise and disappearance of the older forms of handling gear. These smaller items of gear are a fruitful area for collecting.
BIBLIOGRAPHY

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HJ Sheryn, An Illustrated History of Cranes, Ian Allan 2000

Admiralty, Manual of Seamanship, many editions

Trade catalogues for suppliers of slings, trucks and tools, such as Slingsby and Davey
Old port sites may contain a variety of artefacts, but much of their engineering is either too large to remove or buried deep in the ground. This thumbnail guide in the form of a glossary is intended to help identify and to an extent appraise, the fixed structures of such sites. Ports, however, fall into a number of different categories and the nature of their structures will vary accordingly. Fishing ports, for example, do not need great depths of water for deep vessels, but do need maximum freedom for vessels to come and go regardless of the state of the tide, which may in fact only be achievable by building quite deep. Some trades, such as oil or bulk grain importing, can make do with surprisingly modest structures because the weight of their cargo or of machinery to handle it never bears on the quayside. What follows, therefore, is intended to relate to a 'highest common factor' in ports that were designed for general trading in a variety of inward and outward goods. This is not just a matter of size: in relation to its objectives in 1880, the modest canal port of Ellesmere Port, bankrolled by the London & North Western Railway Company, was probably better designed and equipped than the Port of Bristol.
The port of Bristol has always been constrained by its site up a river which is not navigable at low tide. This shows the 19th-century Cumberland Basin which forms the main entrance to the Floating Harbour.

© Brian Lavery
Southampton is a very mixed port, with facilities for general cargo, containers, cruise ships and oil, as well as ferries.

Dock estates often had walls about 16ft high to control thieves and smugglers, but some, like this example at Sandon Dock in Liverpool, added a sense of mystery too.
Albert Dock in Liverpool was derelict from 1972 to 1983. The site had many interesting features including the cast iron double leaf swing bridge in the middle ground, which needed subtlety in its restoration.
© Adrian Jarvis

SAFETY NOTE:
It is important to remember that old port sites often have machinery pits dotted about them. Investigation or recording requires caution: for example, never walk through puddles or over old bits of plywood lying on the ground, which might conceal a 40ft deep penstock shaft or similar. Other obvious hazards include entering buildings with unsound floors or roofs (a hard hat is not sufficient protection, although it helps) and puncture injuries from walking on sharp bits of metal – always wear safety boots.

Just as the best advice for avoiding an accident is to be somewhere else, remember that most dock structures belong or have belonged to some large bureaucratic organisation, be it a single-purpose port authority, a railway company or a local authority. Most of these bodies leave extensive archives and it is worth spending time checking that it really is necessary to get cold and wet to recover/record the object of your attention.
THE WATER REGIME

DRY DOCK

Strictly, this is a basin with retaining walls but no means of impounding water, and which therefore dries out at low water. In numerical terms, these were much the commonest type, but they were generally small. For the modern use of the term, see graving dock.

GRAVING DOCK

A dock with outward facing gates, and which can be drained for ship painting or repair: the oldest surviving commercial example (1765) is in Liverpool. They became very numerous in the late 19th century. Early examples drained by gravity; steam pumps were added at sites with low tidal range and elsewhere as depths increased. Other essential features were: a line of blocks of adjustable height and sufficient strength to support the keel of the vessel or vessels; numerous bollards to hold the vessel(s) in position during docking; stepped sides (‘altar courses’) to rest the shores on; penstocks.
Herculaneum Dock, Liverpool. There are four graving docks to the left, while in the middle is a lifting dock with heavy lift cranes for fitting engines, propeller shafts, etc. Just visible in the left background is the pump house.
© Adrian Jarvis

HALF TIDE DOCK

A basin with one pair of inward facing gates, and storm gates facing outwards. Such docks worked by levelling with the tide and opening the gates about half way up the flow tide, closing them when the ebb reaches the same point. (The timing depends on the depth of the dock and the height of the tide.) Half tide docks could also be used as giant entrance locks for fully impounded docks within a second pair of single gates.

WET DOCK

Also known as fully impounded, this is a dock which has two pairs of inward facing gates between itself and tidal waters. This may be achieved by an entrance lock or by having a passage gate leading from a half tide dock, which is closed when the half tide gates are open. Earliest examples date from the late 18th century, and they were virtually universal after 1900 for docks in major ports, though many old installations served into the 1960s or even longer. In exceptional cases all three types may be found side by side at the same entrance/passage to optimise the use of the passage by a variety of types of vessel.

LOCK

This is a masonry chamber with inward facing gates at each end, allowing vessels to come and go at a wider range of states of the tide than would otherwise be possible. Fully locked entrances first appeared in canal ports, but by the early 19th century were found in major ports.
A typical river or canal lock at Stratford upon Avon. In this case the gates are operated by hand. The ones nearest the observer are open, the others are closed. © Brian Lavery

ARTIFICIAL IMPOUNDING

As the tides dropped from spring to neap, the level in wet docks gradually fell, and pumping in tidal water helped maintain the dock’s capacity. There are occasional examples of these powered by waterwheels in the early 19th century, and steam from 1860s. During the late 19th century some huge examples were installed, lifting hundreds of tons of water per minute through each pump. Some modern ones (e.g. Birkenhead) are still in use: they are normally only found in large ports.

PENSTOCKS

These are control ‘valves’ for use in gates or culverts to allow water to pass through or not, as desired. Typically they consisted of a flat iron casting with brass facing strips, which bore down on a hard wooden seating around the hole that they controlled, sealed there when in the closed position by the differential water pressure. Various lifting methods were used, but the most common type used large square form screw threads, turned with a giant ‘key’ by up to four men. Increased size in later years led to the adoption of direct coupled hydraulic rams.

SLUICES

Sluices are culverts designed to release impounded water at low tide, hopefully removing silt from around entrances in the process. They may be fed from working docks or from backwater reservoirs – non navigable docks, which fill at high water. The latter were fairly common in small ports, especially at tidal docks. Sluicing culverts may be huge, with cross-sectional areas of 100 square foot or more.
MASONRY

RETAINING WALLS

A hole in the ground with vertical sides will have its sides fall in until they reach their angle of repose: preventing that is the role of the retaining wall. The first docks had timber ‘walls’ with ground ties behind them, but Liverpool’s first dock (opened 1715) had brick ‘gravity’ walls with a slight batter (a slope that recedes from bottom to top) and with stone copings. At the beginning of the 19th century both Jessop and Rennie adopted the stone ‘banana wall’, with a very pronounced curved batter but from the 1830s onwards, straight stone walls with a small batter predominated, though cast iron sheet piling with ground anchors was occasionally used. In the 1860s concrete, both as mass concrete and laid in large pre cast blocks, came back into favour (the ancient Romans had used mass concrete), but these were gravity structures, not to be confused with the first of the modern ferro concrete ‘strength structures’ which did not appear until the beginning of the 20th century.

GROUND SURFACES

Long runner stones for wheeled vehicles have been used since ancient times and continued to be laid until the age of the motor vehicle. Setts (small rectangular stone paving blocks) were used to provide grip for the back edge of draughthorses’ shoes. Where neither attribute was necessary (for vehicles or horses) it was not uncommon to use beach cobbles, which were cheaper. If, of course, they were someone else’s unwanted ballast they were cheaper still. Wood blocks were laid where the sound of cart horse shoes and cart wheels might disturb the deliberations of important people. Hot rolled asphalt and similar surfaces were originally confined to sheds, where they provided low rolling resistance for porters’ trucks, only becoming widespread outdoors in the twentieth century.
A note on types of stone

The general rule was the pragmatic one of using whatever was cheap at the time and reasonably suitable. Good quality sandstone was often favoured for its ease of working, but it was easily damaged by abrasion, so granite copings might be used even where granite was expensive. Almost anything went in the ‘backing’ or rubble fill in the retaining walls, sometimes stone from the excavation of the dock itself. Setts were sometimes of granite, but igneous inclusions from limestone areas were also favoured. Common bricks were used, particularly in canal or railway ports where they might be available as a cheap back cargo but high grade engineering bricks such as ‘Dudley Blues’ were preferred, and brick paviors may be found for the same reason. Rubble fill was also a useful way of getting rid of stray boulders from the arisings (waste products from the excavations): now they were dignified by the name of ‘plums’ because they went in the rubble fill ‘pudding’.

INFRASTRUCTURE

HYDRAULIC PUMPING STATIONS

Initially, hydraulic power for cranes was provided by static head, whether natural (as at Liverpool) or artificial (as at Grimsby). The invention of the accumulator (automobile storage battery) enabled the building, from the early 1850s onwards, of high pressure (usually about 750 lb/in2) pumping systems. Whatever their architectural style, they are normally recognisable by their squat accumulator towers. By 1900 all medium and large size ports, and even a few small ones, had hydraulic systems working – among other things – cranes, capstans, gate engines, penstocks and movable bridges.

Horizontal hydraulic supply pump. This Armstrong design appears in a huge variety of shapes and sizes from about 1870. © Adrian Jarvis

The distinctive keyhole-shaped fit of a hydraulic capstan of c 1880. Note the excellent granite masonry. © Adrian Jarvis

A dockside capstan in Liverpool © Brian Lavery
HYDRAULIC MAINS

These distributed water to the appliances, and can normally be recognised by their distinctive joints, with oval flanges and two square headed bolts. Some systems used return mains, often with ordinary threaded joints, to recycle the water; others let it run to waste.

DOCK GATES

Most docks have mitre gates, invented in the late fifteenth century, and used from the earliest English docks to the present day. They are fitted ‘mitre inwards’ to retain water, but because they drift open if the level outside exceeds that inside, in half tide entrances they normally have a pair of ‘storm gates’ outside them, facing outwards. Other forms of gate, including rising flap, rolling caisson and radial sector have the advantage of not requiring storm gates but have rarely proved successful in the long term. Iron gates appeared in the 1840s, but never completely superseded wood (especially greenheart) before being themselves superseded by steel.

GATE ENGINES

Early examples of these tend to be reversible, with one engine per gate, often operating in the vertical plane worked by handspikes. (The word engine was used in its archaic sense meaning the outcome of ingenuity. It does not necessarily mean a prime mover.) Later practice was to use horizontal drums with four engines, one to open and one to close each gate. In the 1850s the size and weight of gates rocketed, making hand operation both slow and expensive and hence hydraulic power desirable. At first these worked with rotative hydraulic motors pulling on chains much like those of handgear, but giant versions of a warehouse ‘jigger’ (two per gate) laid on their sides in a pit gradually supplanted them. In the 1880s we find the first direct acting hydraulic engines, with a double-acting hydraulic cylinder coupled to the gate. Many modern gates still work in this manner, using dedicated hydraulic ‘power packs’ instead of mains power.
SHIP CAISSONS

These are buoyant structures constructed to fit precisely in a ‘groove’ at a dock entrance when placed in position and sunk: the entrance is opened by pumping out the caisson and moving it aside. They were more favoured for graving docks than others.
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Brysson Cunningham, Dock Engineering, London, 1906

F. M. G. Du Plat Taylor, Docks, Wharves and Piers, London, 1928

L. F. Vernon Harcourt, Harbours and Docks, London 1885

For some useful printed papers and extensive further references, see:

A. Jarvis (editor), Port & Harbour Engineering (Volume 6 in Studies in the History of Civil Engineering), Aldershot, 1998
Ship operation has always needed a good deal of paperwork in modern times, indeed one essential qualification of an officer or a naval warrant officer was the ability to read and write and keep accounts. Around 1800 a naval captain had to produce 25 different books and forms before he could claim his pay. Some were quite simple such as the ‘Certificate of no. backstays shifted or top-masts lost’. Others, such as the log book and muster books which had to be kept up during the voyage, were far more complex and informative.

Merchant ship masters and officers had to keep log books for navigational purposes, and to let the owners know what they were doing. There was increasing safety regulation throughout the 19th century, which led to certificates, surveys and so on. But not all maritime documentation was retained. Some, such as naval logs and muster books, were regarded as highly important and were stored through the centuries. Minor or personal documents were often thrown away when they were no longer needed, and only rare examples survive. These are the kinds of items which might be found in small museum collections, or brought in by members of the public.

This chapter deals with documents which are specific to ship operation and shipboard life. There are many others in maritime collections related to naval strategy and administration, biography, commercial operations, port history and so on.

ROYAL NAVY DOCUMENTS

The Royal Navy had a central administration – the Admiralty in Whitehall – until 1964, when it was taken over by the Ministry of Defence, so unlike the merchant marine most of its important records were left to a single source, and many have been preserved. The main body is in the National Archives at Kew, with other collections, including lieutenants’ logs, in the Caird Library and Archive at the National Maritime Museum.

NAVY LISTS

Lists of naval officers were published occasionally from 1719 onwards. Steel’s Navy List began in 1782 and in 1814 it was superseded by the official Navy List. This included a list of officers according to seniority, indices, and lists of ships and their officers, including warrant officers such as pursers and boatswains. Unofficial lists included Lean’s, which was published from 1881 onwards, and which gave a few details of officers’ careers.
### Pages from the Navy List of 1884

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<tr>
<td>Tonnage: 1634. H.P.</td>
<td>Entrance: (See page 252.)</td>
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### The June 1939 Navy List, including the officers of the ill-fated battlecruiser Hood

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A page from Lean’s Navy List and Naval Recorder of 1905. It includes an entry for David Beatty, later to gain fame as commander of the battlecruiser fleet at Jutland in 1916.

LOG BOOKS

The main purpose of a log book is navigational, to record the data used to calculate the position of the ship. It may also contain other information, for example stores and important passengers taken on board, punishments in naval ships, etc. It is divided into columns recording different aspects of the navigation. Until about 1805 the ship’s day usually began at noon when the officers took a sight of the sun at noon; this can often cause confusion when reading logbooks, as a land-based day goes from midnight to midnight, but afloat, from noon to noon.

Adjacent pages from the log book of HMS Surprise, 1799
Remarks page

Weighing anchor

Flogging

Burial at sea

Ship sighted

Weather conditions

Ship sighted

Another death

Weighing anchor

Flogging

Burial at sea

Ship sighted

Weather conditions

Ship sighted

Another death
The log of HMS Thunderer during the annual naval manoeuvres of 1913

Details of the column headings

Position at Noon

Battle practice
SAILING REPORTS

Sailing reports were compiled for individual ships during the 18th century and are mostly held in the National Archives. This one is for the Invincible, captured from the French in 1747.

© The National Archives
MUSTER BOOKS

The purser of each Royal Navy ship had to keep a record of the men on board, including their date of entry to the ship, their rating, the amount paid to them, clothing and tobacco issued and even in some periods treatment for venereal diseases. The Navy Board also kept more or less the same information in the ships’ pay books. Each muster or pay book contains several lists. The first and by far the largest is the general one of the officers and crew. There are separate lists for boys of different classes, for marines and for supernumeraries of different types, according to whether they are borne for victuals only, for reduced victuals, or for wages and victuals. The general section usually starts with the first officers appointed to the ship, and also the ‘widows’ men’, fictitious seaman who were borne at the rate of one per hundred man with their wages going to relief funds for naval widows. Seamen gradually begin to appear in greater numbers, often drafted in from receiving ships or other vessels. After that every officer and man is recorded from the time of joining the ship.

The book consists of a series of double-page spreads divided into columns. The first one has the man’s number from the date of entry – he would keep this for his whole time on board, apart from any time he might have served as a supernumerary or boy. The next column contains the date of entry, and ‘appearance’ means the date on which he actually appeared on board. This was often left blank as being identical to the previous column. Then came the man’s name, usually forename followed by surname. The next column was to indicate whether he was ‘prest or not’ or similar form of words – the actual information given here varied in nature and quality and was not always reliable. The next column, from 1764 onwards, gave the man’s age on joining the ship, followed by the date and place of birth. The column on ‘quality’ referred to his rating and might record changes, either up or down, during the period of that muster. The column on discharges usually included D if discharged to another ship; Ds if sent to sick quarters; R if he was believed to have deserted; and the callous DD for discharged dead. The date of discharge was in the next column, and the reason was given. It might be promotion, ‘unserviceable’ on medical survey, or turning over to another, named, ship. The opposite page of the muster book includes details of various deductions from the man’s wages including slop clothes, trusses for ruptures, buying of dead men’s clothes, hammocks and wages remitted to family ashore.
A double page from the muster book of HMS Surprise
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<th>Name</th>
<th>Rank</th>
<th>Married</th>
<th>Service</th>
<th>Wages</th>
<th>Sick</th>
<th>Quarters</th>
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<th>Supplied by</th>
<th>Bed</th>
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<td>£10</td>
<td>1 month</td>
<td>£10</td>
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<tr>
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<td>Yes</td>
<td>1 year</td>
<td>£10</td>
<td>1 month</td>
<td>£10</td>
<td>10 May 1810</td>
<td>Navy Board</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Robert Jones</td>
<td>Midshipman</td>
<td>Yes</td>
<td>1 year</td>
<td>£10</td>
<td>1 month</td>
<td>£10</td>
<td>10 May 1810</td>
<td>Navy Board</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Table continues with similar entries.*
SERVICE RECORDS

From 1853 onwards, seamen normally entered the navy as boys and signed on to serve ten or later twelve years after the age of 18. The service records of individuals are held in the National Archives and can mostly be accessed online. Stokers entered as adults, also for twelve years in normal times. During times of expansion, for example in the years before the First World War, men might be entered for five years with the fleet and seven in the reserve.

The entry for Richard Gates, 1854
© The National Archives
CAPTAINS’ ORDER BOOKS

There was no obligation for a captain to produce a set of standing orders for his officers and crew, but many did around 1800; though only limited numbers have survived, as they were not sent in to any official body. Often they give much detail on how the crew lived, or was supposed to live.

A page from Captain Riou’s order book for the frigate Amazon. He was killed in the ship at the Battle of Copenhagen under Nelson in 1801. RUSI/NM/235/ER/3/11
MIDSHIPMEN’S JOURNALS

From the 18th century until the 1950s, midshipmen were expected to keep illustrated journals of their sea time and often they produced works of considerable artistic skill, or with intimate detail of shipboard life. Many of these are still in private hands.

Herbert Richmond’s journal on board HMS Winchester in 1886 is more personal than most.

RIC/1/1 © National Maritime Museum, Greenwich, London
The journal of Midshipman W S Mann on the battlecruiser Invincible from 1911–12 includes a diagram of the fleet review at Portland.

JOD/193/1 © National Maritime Museum, Greenwich, London

From the engineering notes kept by R A P Mountfield, a special entry cadet, c 1928.

© Brian Lavery
HMS Surprise as Royal Yacht before the Britannia was completed. 41 is the Queen’s cabin, 45 is the Duke of Edinburgh’s. From the journal kept by Midshipman J H P Allen, 1953–55.

JOD/243/1 © National Maritime Museum, Greenwich, London
WARRANT OFFICERS’ ACCOUNTS

All warrant officers – the gunner, carpenter and boatswain in the days of sail – were expected to keep detailed accounts of the stores under their charge and send them to the Navy Board. Sometimes these give valuable information on life on the ship.

The carpenter’s accounts of the 74-gun Revenge in 1805, including lists of stores thrown overboard and damage done during the Battle of Trafalgar.

COMMISSIONS

Every lieutenant, commander, captain or admiral was issued with a commission signed by some of the Lords of the Admiralty, or by the commander-in-chief if he was promoted to fill a vacancy on a foreign station. A separate commission was issued for each promotion, even including promotion, for example, from third to second lieutenant on the same ship.

A manuscript commission of 1703

This one was issued by Admiral Sir Charles Knowles on the Jamaica Station in 1748.
PLA/19/9 © National Maritime Museum, Greenwich, London
The standard form of a commission around 1800, with the official seal protected by blue paper.

THE PRESS GANG

Contrary to popular myth, the press gang was only expected to take experienced sailors into the navy, finding them both afloat and ashore. The officer in charge of the gang needed an official press warrant signed by the Lords of the Admiralty.

The first and last pages of 13-page instructions to an officer for pressing in 1813.


A ‘protection’ issued to a dockyard worker to prevent his being pressed into the navy. As usual it includes a description of the man to prevent it being transferred to another.

OTHER DOCUMENTS

This ‘smart ticket’ was issued to seaman James Pool who was suffering from wounds after Trafalgar.

ADL/7/16 © National Maritime Museum, Greenwich, London
MERCHANT NAVY

Strictly speaking the term ‘merchant navy’ should not be used before 1918, when it was conferred as a result of services in the First World War. Before that it was usually known as the merchant marine or the merchant service. It is naturally a much more disjointed service than the Royal Navy, consisting of hundreds of different companies.

Until the middle of the 19th century merchant shipping was regulated by the Navigation Acts, which decreed that British goods should be carried in British ships. After that regulation was increasingly about safety, with major Acts of Parliament in 1854 and 1894.

MERCHANT NAVY LISTS

Lloyd’s Register has been produced since 1760 and gives details of all the ships registered with them as A1 – sound in hull and fittings.
The details of the passenger liner Olympic from Lloyd’s Register

The registry of a more commonplace vessel, the collier Stanwell

The layout of a welldecker, one of many types described in the Register
A double page from the 1802 New Register Book of Shipping

Lloyd’s List was published weekly from 1734. Later published daily, it has now passed 60,000 editions and is one of the oldest newspapers in the world. It gives details of shipping movements, as well as general shipping news.

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CERTIFICATES OF REGISTRY

British ships had to be registered by a customs officer at a particular port, initially to conform with the Navigation Acts. They usually bore the name of the port on the stern.

This is the certificate of the Hibernia of 1899, showing details of the ship.

AML/L/1 © National Maritime Museum, Greenwich, London
LOG BOOKS

Merchant ship masters usually kept navigational log books, but their survival is a matter of chance as they were not collected centrally.

This log book was kept by John Newton, then a slave ship captain and later a leading campaigner for the abolition of slavery, off the coast of Africa in 1750.


The 'Official' log book was decreed by law and had to be produced for the Board of Trade. It was more concerned with the welfare of the crew than with navigation.
In this example, the captain of the Cutty Sark records the finding of a stowaway on board and his failure to fulfil his promise to work his passage.
Crew lists are occasionally found attached to the logs of ships, like this example from the East Indiaman Bombay in 1815.


These documents were introduced in 1835, and were basically a standardized employment contract.
between a ship's master and his crew. By the middle of the 19th century these documents became more detailed and included details on the vessel, the planned voyage, amount and standards of victuals for the crew, as well as a list of all the crew members who had 'signed on' for that particular voyage. Details listed for each person included names, age, place of birth, that person's job on board the ship, the previous vessel served in, date and place of joining and leaving the ship, and details of wages.
This crew agreement is from the Cromdale in 1902, and gives some information on the intended voyage as well as the crew.

AML/S/6/1 © National Maritime Museum, Greenwich, London
ACCOUNTS

Account books were usually kept by the pursers of ships, or by the captain if no purser was appointed. Often they used printed books supplied by chandlers, as in this example. Again, their survival is largely a matter of chance.

INDENTURES

Apprentices were theoretically exempt from the press gang, so apprenticeships were quite common in those days. By the late 19th century, an apprentice was usually learning to be a ship’s officer rather than an ordinary seaman.

The indenture says a good deal about the boy’s conditions of employment, and more details are often noted on the back.

DRE/1 © National Maritime Museum, Greenwich, London
CERTIFICATES OF COMPETENCE

From 1854, officers had to have a certain amount of experience at sea and pass stiff oral examinations to qualify in various grades for certificates of competence – an experience which is described by Joseph Conrad (who underwent such exams to become an officer).

This certificate for a second mate dates from 1895
DISCHARGE CERTIFICATES

Certificates of Discharge were issued to merchant seamen on the completion of each voyage.

Certificate of Discharge for John Jones on the SS Great Britain
© ss Great Britain Trust

The certificates earned by seaman John Scandrett, kept in a special folder

The captain marked his comments on the back of the certificate. The term 'Decline to Report' was likely to end any prospect of employment on a reputable ship.
CHARTER AGREEMENTS

A merchant might charter a whole ship for a specific cargo, in which case an agreement like this one of 1803 was signed.

HNL/77/41 © National Maritime Museum, Greenwich
CARGO DOCUMENTS

A bill of loading was a legal document giving an account of the cargo and as such, under British law, it had to bear an official stamp.

This one was agreed in Archangel and has a Russian stamp.

The cargo manifest is a list of the goods carried.

PASSENGER TICKETS

In the 19th century passenger tickets were usually large printed sheets. They might be issued by the shipping company itself, or a travel agent.

A ticket to Australia for a family of nine on the Great Britain in 1862. © ss Great Britain Trust
A ticket for the Titanic, 1912