British Admiralty Control and

Naval Power in the Indian Ocean

(1793-1815)

(Volume 1 of 2)

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Abstract

This thesis aims to explain how British naval power was sustained in the Indian Ocean during the French Revolutionary and Napoleonic Wars. To improve efficiency and economy, the Admiralty had to reorganise the management of shore support services, as well as to rationalise the bases available to the navy to meet the enemy it faced. The basic proposal of this thesis is that British naval power was projected overseas by the Admiralty's effective reconciliation of two competing demands, the naval demand for strategic deployment and the domestic demand for reform.

The thesis argues that British naval power in the Indian Ocean was increased by the acquisition of the Cape of Good Hope and Trincomalee and the naval bases built at these locations. The removal of the navy from complete dependence on the East India Company for support services was part of a long term policy of increasing Admiralty control of facilities in the east. In 1793 Bombay was the main naval base but Madras quickly became another hub supporting naval activities in the east. Other locations were considered. Calcutta was used and investigations were made into developing Penang as a navy base before Trincomalee became part of Britain's long-term naval infrastructure. At the Cape a separate naval command was given responsibility for part of the Indian Ocean. Following the capture of Mauritius in 1810 this island was used temporarily as a forward support base.

Admiralty control of the naval support services delivered to the squadrons at the Cape and in the East Indies was dramatically improved by the appointment overseas of resident commissioners from 1809. This resulted from the implementation of the recommendations of the Commission of Naval Revision, first suggested by the Commissioners on Fees in 1788. Resident commissioners ensured Admiralty instructions and policies were implemented and executed, resulting in improved efficiency and reduced costs.

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Abbreviations

ADM Admiralty

BL British Library

CinC Commander-in-Chief

Commission on Fees Reports of the Commissioners appointed by

an Act 25 Geo. III cap. 19 to enquire into the

Fees, Gratuities, Perquisites, and

Emoluments which are or have been lately received into the several Public Offices

1786-1788

Commission of Enquiry Reports of the commissioners appointed by

act 43 Geo. III. A bill [as amended by the committee] for appointing commissioners to enquire and examine into any irregularities, frauds, and abuses, which are or have been lately practised by persons employed in the

lately practised by persons employed in the several naval departments therein mentioned, and in the business of prize agents; and to report such observations as shall occur to them for preventing such irregularities, frauds, and abuses in future; and for the better conducting and managing

prize agents, 18th December 1801

Commission of Naval Revision Reports of the Commissioners appointed for

Revising and Digesting the Civil Affairs of

the business of the said departments, and of

the Navy, 15 reports, 1806 to 1809

DRO Devon Records Office

MM The Mariner's Mirror

NAS National Archive of Scotland

NMM National Maritime Museum, Caird Library

NRS Naval Records Society

ODNB Oxford Dictionary of National Biography

POW Prisoner of War

RMC Royal Military College of Canada

TNA The National Archive, Kew, UK

TNDS Transactions of the Naval Dockyards Society

UKHO United Kingdom Hydrographic Office

VOC Vereenigde Oost-Indische Compagnie

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Acknowledgements

In 1810 men were sent from Britain to serve at the overseas naval bases of Bombay and Madras. The artificers' duty was to improve the quality of cordage being manufactured at these locations. The British dockyard specialists arrived at Bombay with their families in January 1811. What was to happen to the wives of these workmen was to be repeated many times at overseas naval bases including 140 years later at Durban. Commissioner Dundas, resident commissioner at Bombay, reported to the Navy Board that an allowance was required for the artificers to pay for domestic help. Dundas stated that the climate prevented European women from performing domestic duties. At a stroke these families moved from the servant providing, to the servant employing, class.

In 1951 my mother and brother arrived in South Africa to join my father who was on detached duty from Devonport dockyard to Durban naval base. In common with the wives of the Bombay artificers our family was to employ servants. The time spent at Durban by my mother and father was to leave them with memories that they talked about for the rest of their lives. Being born at the Indian Ocean port of Durban, the stories of my father's naval service in that ocean, and his insight into the importance of logistics undoubtedly sparked my interest in this subject.

Many people have assisted me in the research and writing of this thesis and it brings me much pleasure in acknowledging their contribution. Chief amongst these individuals is my supervisor, Dr. Roger Morriss. His expert knowledge, insights, good humour, patience and guidance have all shaped this thesis.

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 $^{^{\}rm 1}$ Dundas to Navy Broad, TNA, ADM 106/2009, $14^{\rm th}$ March 1811.

Admiral Rainier when commander-in-chief of that force. Support from fellow students at Exeter University was most welcome, with Adrian Webb's contribution proving to be particularly valuable. My thanks also goes to Avery Burns, a student at the Royal Military College of Canada, for photographing a letter book of Sir Samuel Hood that is held at that institution's library.

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Introduction

'The race is not always to the swift nor the battle to the strong - but that's the way to bet'²

Runyon's play on a passage from the Bible encapsulates the importance of a numeric and qualitative advantage over an opponent. It was the purpose of the Admiralty to obtain, manage and maintain a navy that provided a competitive edge over enemy forces so that command at sea was won before a shot was fired. Following the victory at Trafalgar in 1805 the British had obtained this naval supremacy. The historian William Laird Clowes dismissed heroism stating: 'Let us not continue to cherish the incorrect belief that Englishmen are, or were, braver than Frenchmen or Spaniards and that we owe our naval successes to that cause'. If it was not to luck, or a superior national character, that gave Britain her naval pre-eminence then what advantages did Britain develop to achieve command at sea?

Nicholas Rodger concluded that financial and administrative advances were the most crucial developments for the British navy in the eighteenth century, with the Victualling Board transforming the reach and effectiveness of Britain's naval squadrons.⁴ Daniel Baugh in the 'Oxford Illustrated History of the Royal Navy' examined the navy's administration in the eighteenth century. His evaluation considered that Britain had many advantages compared to her enemies. The twin advantages of numerous facilities and skilled labour enhanced the building and repair potential of the royal dockyards and private shipyards; a third advantage was superior access to naval materials with overseas bases conferring a fourth great advantage.⁵

Traditionally naval historians have concentrated on the demands of operational commanders but this thesis demonstrates a coherent strategy by the Admiralty in the deployment of vessels to comply with conflicting campaign priorities. The ability of the British to retain and expand their trade and empire in war time lay in their capacity to isolate European rivals from overseas regions. This was mainly dependent on the exercise of maritime power in European waters, but also accomplished by the creation

² Runyon, D., Author of Guys and Dolls. The allusion is to Ecclesiastes 9:11: "The race is not to the swift, nor the battle to the strong, neither yet bread to the wise, nor yet riches to men of ..., Oxford Dictionary of American Quotations in Quotations, accessed 15th May 2011."

³ Clowes, W. L., The Royal Navy From the Earliest Times to the Present, Vol. 5, (London, 1900), vi.

⁴ Rodger, N., *The Command of the Ocean: A Naval History of Britain. Volume II 1649-1815*, (London, 2004), 583.

⁵ Baugh, D., 'The Eighteenth-century Navy as a National Institution, 1690-1815', Hill, J., (ed.), *The Oxford Illustrated History of the Royal Navy*, (Oxford, 1995), 130.

of local superiority of naval power in remote regions, without reducing the strength required in home waters. Among the factors that created this regional advantage was the use of local naval bases. This thesis shows the Admiralty increased its control of overseas naval bases in the Napoleonic War by appointing all shore civil officers. These appointments were previously delegated to the local commander-in-chief. However, with the introduction of the recommendations of the Commission of Naval Revision in 1808, Admiralty control was greatly increased with resident commissioners ensuring their policies and directions were executed and implemented.

The infrastructure and management of Britain's overseas naval bases during the Revolutionary and Napoleonic Wars has generally been ignored by historians. If one includes the shore support provided to the British naval squadrons in the Indian and South Atlantic Oceans then the topic has been almost disregarded. When attention has been paid to it, it has been in an 'á al carte' fashion with notice either being taken of individual locations such as Bombay dockyard or Trincomalee, or as a fringe factor to studies of campaigns or operational areas. This approach does not provide sufficient information to analyse when, where and why naval bases were necessary, what services were delivered, who provided the support and how the bases were managed and developed.

This thesis examines these questions, but has focused on the Admiralty's projection of naval power in the Indian Ocean by acquiring bases, and shifting its dependence from the East India Company to its own facilities. Two themes emerge in this thesis: firstly, how havens for hostile ships were removed from the hands of the enemy and developed to enhance Britain's naval power; and secondly, how the reforms demanded by Britain's parliament in the supply of naval support services were achieved at overseas locations. This thesis is especially concerned with the latter.

Mauritius, Trincomalee and the Cape of Good Hope had been naval bases for Britain's enemies in the American War of Independence enabling a French fleet to challenge for naval supremacy in the Indian Ocean. The latter two locations were under the sovereignty of the Dutch and were both captured by overwhelming British forces in 1795. Although Trincomalee was retained as a crown colony at the subsequent peace treaty in 1802, the Cape was returned to the Dutch resulting in a re-invasion in January 1806. Both these locations were initially occupied to deny an enemy from using them,

but this thesis shows that in the Napoleonic War the Admiralty exploited their strategic potential by laying plans to turn them into permanent naval bases.

The campaign to blockade and capture Mauritius was undertaken to prevent French warships from conducting naval operations from that island. Studies of this campaign have concentrated on the naval and military actions and have ignored or criticized the contribution of the naval support departments at the Cape. During the blockade the commander-in-chief and the resident commissioner had many disagreements on the latter's management of the naval yard, and the measures he was introducing at the victualling department and naval hospital. The argument between these individuals is examined to reveal the reasons for the Admiralty's support of the resident commissioner's actions and acceptance of the commander-in-chief's resignation. This thesis demonstrates that the priorities of the commander-in-chief at the Cape were subordinated to the Admiralty's campaign strategy and role for the local base, for which the civil commissioner was the primary agent. The Admiralty's strategy reconciled domestic demands for economy with the military demands for effectiveness.

This thesis shows that geopolitical considerations influenced by strategic naval factors determined the fate of captured French and Dutch colonies at peace treaties. Trincomalee, Mauritius and the Cape of Good Hope were retained but Bourbon and Java returned. The three retained bases were in strategic locations and all had safe anchorages. Bourbon was without a harbour and hence could never be a home for French warships. As part of Britain's foreign policy the new country of the United Kingdom of the Netherlands⁶ was to be an ally and would require the riches of Java to assist in its solvency.

Historiography

This thesis concerns naval bases not located in the British Isles with particular attention given to the naval yards, hospitals and victualling organisation supporting the Royal Navy in the Indian Ocean. However, to examine this subject many different strands of historical research have been pursued.

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⁶ The United Kingdom of the Netherlands was a very short lived entity. The country consisted of the Netherlands, Belgium, Luxembourg and the Duchy of Limburg, but with the Belgium Revolution of 1830 the kingdom broke up into the Netherlands, Belgium, Luxembourg with Limburg eventually again becoming part of the Netherlands.

The core research concerned civil naval administration and the reforms introduced following the end of the American War of Independence. Political, operational and campaign histories provided political, strategic and tactical context. This identified the bases established and provided another source of publication for research, that of individual locations. This latter exercise uncovered many histories of bases relating to North American, West Indian and Mediterranean but none in the period for the Cape of Good Hope, and few for the East Indies. This was the reason the Indian Ocean commands were selected for detailed examination. As this area involved the East India Company and the occupation of New South Wales and the Cape of Good Hope, a study of the political, strategic and operational landscape was required. Researching the reasons for the establishment of the penal colony in New South Wales uncovered the search for naval stores and Britain's dependence on Baltic supplies, particularly Russian hemp. This opened a final research topic, the exploitation of resources and the shipbuilding industry of the sub-continent.

Until the publication of Ehrman's *The Navy in the War of William III, 1689-1697* ⁷ in 1953 the civil administration of the navy had been almost ignored. This was followed in 1961 by Merriman's edited collection, *Queen Anne's navy: documents concerning the administration of the navy of Queen Anne, 1702-1714*. ⁸ However, it was with the publication of Baugh's *British Naval Administration in the Age of Walpole* ⁹ in 1965 and companion volume, *Naval Administration 1715-1750*, ¹⁰ that chapters on Britain's overseas naval yards first appeared. These books showed that yards at Jamaica and Port Mahon had become an enduring part of Britain's logistical organisation in peace and war, being equipped with standard facilities, and permanent management and workforce. Crewe's *Yellow Jack and the Worm - British Administration in the West Indies, 1739-1748* ¹¹ built on Baugh's work and showed how the naval yard locations had a victualling organisation and naval hospital presence, turning an anchorage with storehouses and careening wharf into a naval base. Overseas naval shore based hospitals were first established at Lisbon, Port Mahon and Jamaica during the War of Spanish

⁷ Ehrman, J., The Navy in the War of William III: 1689–1697, (London, 1953).

⁸ Merriman, R. D. (ed.), Queen Anne's navy: documents concerning the administration of the navy of Queen Anne, 1702-1714', NRS, (London, 1961).

⁹ Baugh, D. A., *British Naval Administration in the Age of Walpole*, (Princeton, N.J., 1965).

¹⁰ Baugh, D. (ed.), *Naval Administration 1715-1750*, NRS, (London, 1977).

¹¹ Crewe, D., *Yellow Jack and the Worm – British Administration in the West Indies, 1739-1748*, (Liverpool, 1993).

Succession as detailed in Harland's unpublished PhD thesis, 'The Establishment and Administration of the first Hospitals in the Royal Navy 1660-1745'. 12

The management and workforce at the overseas naval yards had a similar composition to Britain's home dockyards with these institutions receiving considerable attention from historians. Three - Roger Knight, Roger Morriss and James Haas were the principal builders on Baugh's earlier work. Roger Knight's PhD thesis 'The royal dockyards in England at the time of the American War of Independence' provided the first in-depth study of Admiralty controlled dockyards. Knight's companion book Portsmouth Dockyard Papers 1774-1783 14 shone even more light on dockyard organisation and functions with detailed examination of routine work. Roger Morriss extended the examination of state dockyards through to the end of the Napoleonic War in his book The Royal Dockyards during the Revolutionary and Napoleonic Wars. 15 The period covered by Morriss's book encompassed an era of considerable change with the author noting the Navy Office and dockyard officials were different public servants in 1815 to those in 1793. Haas in A Management Odyssev. The Royal Dockvards 1714-1914 17 disagreed with Morriss that a silent revolution 18 occurred in dockyard administration from 1793-1815, entitling his chapter on the period 'Tinkering with the System'. Chapter two of this thesis examines the same parliamentary sources as these authors, but with the emphasis on overseas naval yards, victualling and hospitals. A review of the extent of the re-organisation and cultural change shows the state was not tinkering.

The dockyards, under the Navy Board, were but one part of the civil naval departments that has been examined by historians. David Syrett's *Shipping and the American War* 1775-83,¹⁹ and Condon's PhD thesis, 'The Administration of the Transport Service during the war with Revolutionary France 1793-1802',²⁰ provided an excellent study of

¹² Harland, K., 'The Establishment and Administration of the first Hospitals in the Royal Navy 1660-1745', unpublished PhD thesis, (Exeter University, 2003).

¹³ Knight, R., 'The royal dockyards in England at the time of the American War of Independence', unpublished PhD Thesis, (London University College, 1972).

¹⁴ Knight, R., *Portsmouth Dockyard Papers 1774-1783*, (Portsmouth, 1987).

¹⁵ Morriss, R., *The Royal Dockyards during the Revolutionary and Napoleonic Wars*, (Leicester, 1982).

¹⁶ Morriss, R., The Royal Dockyards during the Revolutionary and Napoleonic Wars, 222.

¹⁷ Haas, J., A Management Odyssey, The Royal Dockyards 1714-1914, (London, 1994).

¹⁸ Morriss, R., The Royal Dockyards during the Revolutionary and Napoleonic Wars, 218.

¹⁹ Syrett, D., *Shipping and the American War 1775-83: A study of British Transport Organization*, (London, 1970).

²⁰ Condon, M., 'The Administration of the Transport Service during the war with Revolutionary France 1793-1802', unpublished PhD, (University of London, 1968).

the problems involved in the delivery arm of Britain's logistics and how they were overcome.

Victualling the British navy has received considerable academic interest in the last five years with three significant contributions to naval administration during the Revolutionary and Napoleonic Wars. These works cover all aspects of victualling the British fleet from central direction, contractual relationships between state and suppliers and a micro-study of supplying an important command. Macdonald has reviewed the controlling body, the Victualling Board, in her PhD thesis 'The Victualling Board 1793-1815: A Study in Management Competence'; ²¹ Davey has examined the victualling of the Baltic fleet in the critical years following the Treaty of Tilsit in his thesis, 'War, Naval Logistics and the British State: Supplying the Baltic Fleet 1808-1812;²² while Knight and Wilcox in Sustaining the Fleet 1793-1815: War, the British Navy and the Contractor State²³ and complementary research website²⁴ concentrated on the relationship between the public and private sectors in supplying the state. This latter publication contained a chapter on Basil Cochrane, the victualling contractor to the British Eastern squadron. Martin Wilcox the author of this chapter returned to the supply of provisions to this squadron in 'This Great and Complex Concern: Victualling the Royal Navy on the East Indies Station, 1780 to 1815'. 25 The findings of this thesis merely confirmed Wilcox's analysis and obviated the need to cover victualling of the Eastern squadron in any detail except to look at the effect of the work of resident commissioners from 1809.

How the Admiralty, its sub-boards and the Ordnance Board interacted to produce maritime supremacy has been recently explored by Roger Morriss in *The Foundations of British Maritime Ascendancy: Resources, Logistics and the State, 1755-1815.*²⁶ The focus of this book has been on logistics and how the state improved her administrative departments, invested in infrastructure and harnessed private enterprise. A single source

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²¹ Macdonald, J., 'The Victualling Board 1793-1815, A study of Management Competence', unpublished PhD, (King's College London, 2009).

²² Davey, J., 'War, Naval Logistics and the British State - Supplying the Baltic Fleet 1808-1812', unpublished PhD, (University of Greenwich, 2009).

²³ Knight, R., and Wilcox, M., *Sustaining the Fleet 1793-1815*, *War, the British Navy and the Contractor State*, (The Boydell Press, 2010).

²⁴ Sustaining the Empire, National Maritime Museum, http://www.rmg.co.uk/researchers/research-areas-and-projects/sustaining-the-empire/, date accessed July 2011.

²⁵ Wilcox, M., 'This Great Complex Concern: Victualling the Royal Navy on the East Indies Station, 1780-1815', *MM*, Vol. 97, No. 2, (May 2011), 32-48.

²⁶ Morriss. R., *The Foundations of British Maritime Ascendancy Resources, Logistics and the State*, 1755-1815, (Cambridge, 2011).

on the influence of bureaucratic developments in securing Britain's global empire by the end of the Napoleonic War is difficult to find.

The re-organisation of functions, redefining duties and providing clear role definitions and work instructions is the easier part of changing an enterprise. The more difficult part is changing the culture of the individuals within, and those interacting with, the organisation. Morriss recognises in Naval Power and British Culture, 1760-1850 -Public Trust and Government Ideology 27 the cultural changes that were required and the time needed for introduction and acceptance.

The political imperative to reform how government business was conducted resulted in many parliamentary commissions. Breihan's article 'William Pitt and the Commission on Fees, 1785-1801'²⁸ detailed the political background and work of this commission whose recommendations were to change the employment culture of public servants. An earlier publication into how the state was financed and organised is examined in Binney's British Public Finance and Administration 1774-92.²⁹ These works surveyed the political landscape but were supplemented for this thesis by biographies of William Pitt by Duffy's The Younger Pitt 30 and Ehrman's The Younger Pit: the years of acclaim.31

The use of biography assisted in an understanding of the politics of naval administration and the work of a first lord of the Admiralty and a comptroller of the Navy Board. Rodger's The Insatiable Earl: A life of John Montagu, 4th Earl of Sandwich 32 and Talbott's The Pen and Ink Sailor, Charles Middleton and the King's Navy, 1778 to 1813^{33} provide invaluable insight into naval administration.

Biography in its broadest terms also casts insight into other aspects of this thesis. Knight's study of Nelson, The Pursuit of Victory - The life and achievements of Horatio Nelson ³⁴ provides analysis of Nelson's career but much more including administrative, strategic and operational themes. Ward's recent PhD thesis concerning the East Indies

²⁷ Morriss, R., Naval Power and British Culture, 1760-1850 - Public Trust and Government Ideology, (Aldershot, 2004).

²⁸ Breihan, J. R., 'William Pitt and the Commission on Fees, 1785-1801', *The Historical Journal*, Vol. 27, No. 1, (1984), 59-81.

²⁹ Binney, J., *British Public Finance and Administration 1774-92*, (Oxford, 1958).

³⁰ Duffy, M., *The Younger Pitt*, (Harlow, 2000).

³¹ Ehrman, J., *The Younger Pitt: The years of acclaim*, (London, 1969).

³² Rodger, N., The Insatiable Earl: A life of John Mountagu 4th Earl of Sandwich, (London, 1993).

³³ Talbott, J., The Pen and Ink Sailor, Charles Middleton and the King's Navy, 1778 to 1813, (London,

³⁴ Knight, R., The Pursuit of Victory – The life and achievements of Horatio Nelson, (Penguin, 2006).

squadron commander-in-chief, 'Admiral Peter Rainier and the Command of the East Indies Station 1794-1805'³⁵ covers all aspects of Rainier's duties including the administration of shore support and his interaction with the East India Company.

The publications of Julian Gwyn provide considerable analysis of the British navy's presence in North American waters from the early eighteenth century. In *The Royal Navy and North America: The Warren Papers, 1736-1752,* ³⁶ Gwyn showed how informal use of colonial ports for refitting was supplemented by the provision of a purpose built careening yard at Louisbourg. Gwyn's *Ashore and Afloat, The British Navy and the Halifax Navy Yard,* ³⁷ surveys the yard from its establishment in the 1750s to it being placed in care and maintenance in 1819. This book has set the standard for such studies as it not only describes the history of supporting a naval squadron in the North America, but how bases were managed, the composition of the workforce and their influence on the local economy. Together with the companion volume concerning the squadron, *Frigates and Foremasts: The North American Squadron in Nova Scotia Waters 1745-1815,* ³⁸ the reader has a rounded understanding of the role of an overseas command and its logistic requirements in both peace and war.

Other books regarding naval bases in the North American region have been published with Kingston on Lake Ontario and Bermuda being particularly numerous. Arnell's article 'Bermuda as a Strategic Naval Base'³⁹ underlined the work done from 1783 in creating the base. Malcomson has been prolific on the Great Lakes detailing in books and articles the warships built and the campaigns during the War of 1812 with his book *Warships of the Great Lakes 1754-1834* ⁴⁰ bringing together much of his earlier work. These books and articles were useful as they demonstrated the Admiralty's strategy for war with the United States of America during the War of 1812, and the importance of naval bases with an attached squadron. In this war Bermuda did not have the facilities required to carry out refits but its location and anchorage made it a superb rendezvous

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³⁵ Ward, P., 'Admiral Peter Rainier and the Command of the East Indies Station 1794-1805', unpublished PhD, (Exeter University, 2010).

³⁶ Gywn, J. (ed.), *The Royal Navy and North America: The Warren Papers, 1736-152*, NRS, (London, 1973).

³⁷ Gwyn, J., Ashore and Afloat, The British Navy and the Halifax Navy Yard Before 1820, (Ottawa, 2004).

³⁸ Gwyn, J., Frigates and Foremasts: The North American Squadron in Nova Scotia Waters 1745-1815, (Toronto, 2003).

³⁹ Arnell, J., 'Bermuda as a Strategic Naval Base', *Bermuda Journal of Archaeology and Maritime History*, Vol. 5, (1993), 126-134.

⁴⁰ Malcomson, R., Warships of the Great Lakes 1754-1834, (London, 2001).

and supply base. The discussion on the development history of Bermuda lies in the decades following the end of the Napoleonic War.

Books and articles on the Mediterranean bases, Malta and Gibraltar, abound together with campaign and operational histories. The bases at Jamaica and Antigua have not received the same attention as those in North America or Mediterranean but Jonathon Coad's *The Royal Dockyards, 1690-1850: Architecture and Engineering Works of the Sailing Navy* ⁴¹ section on overseas yards was able to provide information on Antigua. Coad's book used the surviving architecture of naval hospitals, naval and victualling yards in Britain and abroad to illuminate his history. This may be, together with the budget required, why Halifax, Kingston (Ontario), Jamaica, Simon's Town, Bombay, Madras and Trincomalee are all missing from the overseas section. All these publications contributed to the selection of the Indian Ocean as the focus for this thesis, as there is little published information on the logistics required to support the British navy during the Revolutionary and Napoleonic Wars in the east.

During the Revolutionary and Napoleonic Wars the British navy used East Indian Company ports and facilities with the dockyard at Bombay being of particular importance. A history of this dockyard, *The Bombay Dockyard and the Wadia Master Shipbuilders* ⁴² was written by a descendant of the master builders at Bombay. Wadia's book provides details of the Bombay Marine, the ships built and dry docks constructed. Wadia also includes information on the organisation of the dockyard, but has continued errors from Low's book *The History of the Indian Navy* (1613-1863)⁴³ for dates and occupants of posts. An updated history of the Bombay Marine and the master attendant service at Company ports is much wanted. Richmond's study of the British navy in the east during the American War of Independence, *The Navy in India* 1763-1783,⁴⁴ showed the importance of Bombay, but also the problems incurred if Trincomalee was in the hands of the French. Colgate, in his master's thesis 'Trincomalee and the East Indies Squadron 1746-1844'⁴⁵ explored Britain's relationship with that port. This showed considerable use of the anchorage in peacetime and when the Dutch were neutral in wars with France. Colgate's thesis is superb as a study of Britain's use and

⁴¹ Coad, J., *The Royal Dockyards, 1690-1850: Architecture and Engineering Works of the Sailing Navy*, (Aldershot, 1989).

⁴² Wadia, R. A., The Bombay Dockyard and the Wadia Master Shipbuilders, (Bombay, 1955).

⁴³ Low, C., *The History of the Indian Navy (1613-1863)*, Volumes 1 and 2, (London, 1877).

⁴⁴ Richmond, H. W., *The Navy in India 1763-1783*, (London, 1931).

⁴⁵ Colgate, H.A., 'Trincomalee and the East Indies Squadron 1746 - 1844', unpublished MA thesis, (University of London, 1961).

development of Trincomalee. Unfortunately neither Madras nor Calcutta has received the same treatment.

Parkinson wrote two books on British maritime affairs in the East Indies: *Trade in the Eastern Seas* ⁴⁶ and *War in the Eastern Seas* 1793-1815.⁴⁷ Both works are invaluable, but in the case of the latter work benefitted from a re-examination of the source material concerning the shore departments. Parkinson's study of the operations leading to the capture of Mauritius and Bourbon in 1810 was reassessed in Stephen Taylor's book *Storm and Conquest: The Battle for the Indian Ocean,* 1809.⁴⁸ Unfortunately Taylor has not examined the shore naval departments, but raised the question of supplying and refitting the recently captured French frigate *Caroline* considered her a 'real plum, the finest frigate on the station'. Taylor states the resident commissioner at the Cape refused to supply the ship, re-named *Bourbonnaise*, resulting in her captain having to sail for England. This was not the case, stores had not been refused and the frigate required considerable repairs to merely allow her to sail for England. Chapter five examines the deployment strategy of the Admiralty and the work of the shore naval departments supplying the Cape squadron during the blockade of Mauritius.

The relationship between the British state and the East India Company has been explored in many books and articles, but the research for this thesis into this association was restricted to the interaction encountered from original source material and contemporary publications. The only exceptions to this have been Marshall's 'The British in Asia: Trade to Dominion', ⁴⁹ Bowen's 'British India, 1765-1813: The Metropolitan Context', ⁵⁰ and Keay's *The Honourable Company, A History of the English East India Company*. ⁵¹ These publications provided a general understanding of the Company and its relationship with the British state and complemented Parkinson's book on East Indies trade.

The Company monopoly on trade between Britain and the east had ensured its commercial survival and knowledge to exploit the resources of that vast region. The building of warships for the British navy by the Company was but one example of using

⁴⁶ Parkinson, C., *Trade in the Eastern Seas*, (Cambridge University Press, 2010).

⁴⁷ Parkinson, C. N., War in the Eastern Seas 1793-1815, (Allen and Unwin, 1954).

⁴⁸ Taylor, S., Storm and Conquest – The Battle for the Indian Ocean, 1809, (London, 2007).

⁴⁹ Marshall, P. J., 'The British in Asia: Trade to Dominion', Marshall, P. J., (ed.), *The Oxford History of the British Empire – Volume 2 The Eighteenth Century*, (Oxford, 2001), 487-507.

⁵⁰ Bowen, H., 'British India, 1765-1813: The Metropolitan Context', Marshall, P. J., (ed.), *The Oxford History of the British Empire – Volume 2 The Eighteenth Century*, (Oxford, 2001), 530-551.

local materials with teak proving to be a superior hull material than oak. The search for timber for the British navy has been investigated by many historians starting with Albion's *Forests and Seapower: The Timber Problem of the Royal Navy* ⁵² and extended by Knight and Crimmin. ⁵³ Ensuring there was no shortage of high quality timber resulted in considerable activity, but using fir or unseasoned wood as substitutes was acceptable in emergencies. However, finding a substitute for Russian hemp was an even more critical problem. Alan Frost's article 'The choice of Botany Bay: The scheme to supply the East Indies with naval stores', ⁵⁴ proposed the settlement of New South Wales was influenced by a plan to cultivate the indigenous flax to manufacture cordage. Frost extended his thesis on the colonisation of Australia in *Convicts and Empire: A Naval Question 1776-1811* ⁵⁵ and *The Global Reach of Empire. Britain's maritime expansion in the Indian and Pacific oceans 1764-1815* ⁵⁶ by showing how the search for naval stores and anchorages had influenced the British state.

Sources

The historian is dependent on the survival of archival records, constrained by what is available and to some extent the accessibility of the material. This latter factor made examination of overseas sources almost impossible and the exploration of East India Company records difficult.

The sources used for this thesis were of three types, parliamentary papers, printed collections of letters and contemporary publications, and manuscript records of individuals and the British government. The digitisation of parliamentary papers and books that are out of copyright and not readily available provided considerable assistance in researching this thesis.

The reports of parliamentary commissions and select committees have been frequently investigated by historians. The reports of the Commissions on Fees, of Naval Enquiry and Naval Revision and those of the Select Committee on Finance being particularly

⁵² Albion, R., Forests and Seapower: The Timber Problem of the Royal Navy, (Cambridge, Ma, 1926).

⁵³ Knight, R., 'New England forests and British seapower: Albion revisited', *American Neptune*, Vol. 46, (1986), 221-229; Crimmin, P., 'A great object with us to procure timber': The Royal Navy's search for ship timber in the Eastern Mediterranean and Southern Russia, 1803-1815, *Journal of International Maritime History*, Vol. 4, (1992), 83-115; Crimmin, P., 'The supply of timber for the Royal Navy, 1803-1830', *The Naval Miscellany Vol. VII*, NRS, (Aldershot, 2008), 191-234.

⁵⁴ Frost, A., 'The choice of Botany Bay: The scheme to supply the East Indies with naval stores', *Australian Economic History Review*, Vol. 15, (1975), 1-20.

⁵⁵ Frost, A., Convicts and Empire A Naval Question 1776-1811, (Melbourne, 1980).

⁵⁶ Frost, A., *The Global Reach of Empire. Britain's maritime expansion in the Indian and Pacific oceans 1764-1815*, (The Miegunyah Press, 2003).

important for the study of naval reform in the Revolutionary and Napoleonic Wars. This thesis differs from other research as the focus has been on overseas bases, or foreign yards as they are termed in the reports. This has required an understanding of the detail in the reports on the home organisations to complement those for the overseas yards, hospitals and victualling departments. Not all the reports of the Commission of Naval Revision were published by parliament, but a printed copy of the fourteenth report was found in The National Archive and manuscript copies of the unpublished eighth and fifteenth reports in the National Maritime Museum. Copies of the appendices of the fifth report of the Commission of Naval Revision have not been found. This was unfortunate as these appendices were forms and would have provided a further insight into the operations of the naval yards. Parliamentary papers also gave an insight into the use of Calcutta as a refitting yard, and the reasons for establishing an East India Company shipbuilding and refit yard at Penang on the same pattern as that at Bombay.

The ability to obtain Theal's edited collection of the *Records of the Cape Colony* 57 was useful as it not only provided material that was missing from Admiralty manuscript records, but also contemporary colonial information impacting on naval affairs. However, the core research material for this thesis has been the manuscript records of the Admiralty and individuals involved with overseas naval bases. The management responsibilities for those present at overseas naval bases gave the structure and focus for the research. A considerable number of letters from the commander-in-chief, resident commissioner or naval storekeeper to the Admiralty and Navy Board have survived, as have the letters of these boards to these officers. Letters to the Victualling or Transport Board by the commander-in-chief, resident commissioner or agent victualler and from the hospital are missing. This has made the investigation into routine activities of victualling and of medical care more difficult and reliant on correspondence of the commander-in-chief and resident commissioner. Researching the letters sent by resident commissioners at overseas bases to the Admiralty revealed that prior to 1809 very few have survived with none before 1803. The great increase in correspondence resulted from the implementation of the Commission of Naval Revision's recommendations extending the responsibilities of resident commissioners at overseas bases.

The records of individuals serving as resident commissioners were searched for with those for only two being found, William Shield and Peter Puget. Shield was resident

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⁵⁷ Theal, G. (ed.), *Records of the Cape Colony from February 1793 to April 1814*, Vols 1 to 9, (London, 1897 to 1901).

commissioner at the Cape of Good Hope from 1809 to 1813 and left in the Devon Record Office a personal journal and letter books between himself and the respective commanders-in-chief. Letters recording the survey and exploitation of timber at the Cape and the miscellaneous correspondence to local individuals have also survived in The National Archive. Although Peter Puget was resident commissioner at Madras from 1811 to 1817 the only letters from him that have been found, other than those in The National Archive, were those in the records of Sir Samuel Hood commander-in-chief from 1812 to December 1814.⁵⁸

The set of records left by Shield provided a day by day record of activity of the shore departments of the navy throughout his appointment. It is difficult to imagine a more comprehensive view of an overseas shore base coloured by the introduction of new responsibilities. As the period covered was during the operation to blockade Mauritius this gave a valuable insight to the role of shore support. Hood's records confirm the findings found in Shield's correspondence regarding the operation of shore establishments.

With the selection of the Indian Ocean naval bases the Admiralty records in The National Archive, UK Hydrographic Office and Admiralty library were also able to provide information on the construction of Simon's Town and Trincomalee naval bases.

The Admiralty's records for overseas bases included naval yard paylists. These were surveyed for a number of yards and for the victualling department at the Cape of Good Hope to determine organisational structure, changes in number, type and if crown or contracted employees. This analytical approach was extended, in the case of the naval yard and victualling organisation at the Cape. The naval yard paylists were examined to determine the amount of work performed onboard ship which confirmed the purpose of these yards and supported the commissioner's actions. Each agent victualler produced cash account books and these were analysed to uncover the various contracting activities performed.

To determine where naval and victualling stores were sent, in what quantities and what ships would require minor refits, a plan was required. The Admiralty recorded where it planned to deploy its ships. Its ship lists were used to show the Admiralty's strategic

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⁵⁸ Sir Samuel Hood's records for the period can be found in the National Maritime Museum, MKH/126-131; and in the Royal Military College of Canada, DA88.1.H66A4 1809 V2.

thinking, campaign priorities and how they reacted to changing circumstances. Analysis of these lists demonstrated that the non-European commands were structured primarily for trade protection.

Examination of National Archive records and contemporary publications revealed the shipbuilding potential of India, and the possibility of reducing dependence on Russian hemp by substituting East Indies materials. The burgeoning ship building industry of India was recorded by John Phipps, the head clerk of the Bengal Marine, and William Milburn.⁵⁹ These gentlemen recorded the increase in Indian commerce, but William Taylor Money, a former superintendent of the Bombay Marine, produced a book detailing the advantage to Britain of constructing a teak hulled fleet.⁶⁰ It is in the letters of St.Vincent, as first lord of the Admiralty, that the reason for commissioning the East India Company at Bombay to build warships for the British navy becomes apparent.⁶¹ The subsequent actions of the Admiralty can be traced in The National Archive in the reports on shipbuilding in Bombay and Cochin. To discover the background to cultivation of Indian hemp for export to Britain from the 1790s the records of the Board of Trade were consulted, but it was in the correspondence of the Navy Board, commanders-in-chief, resident commissioners and naval storekeepers in the East Indies that the story can be followed from optimism to disillusionment.

Chapter plan

This thesis contains an introduction, seven chapters with a postscript forming the main body of the work and a conclusion bringing together the themes explored. The thesis demonstrates the expansion of Admiralty control in the Indian Ocean. The seven chapters are in two parts. Part one is a general examination of overseas naval bases from their origins with the capture of Jamaica in 1655 to the end of the Napoleonic War in 1815. Part two is a detailed study of the shore support of the two naval commands that operated in the Indian Ocean in the Revolutionary and Napoleonic Wars.

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⁵⁹ Phipps, J., A guide to the commerce of Bengal, (Calcutta, 1823); Phipps, J., A collection of papers relative to Shipbuilding in India, (Calcutta, 1840); Milburn, W., Oriental Commerce, containing a geographical description of the principal places in the East Indies with their produce, manufactures and trade, Vol. 1, (London, 1813).

⁶⁰ Money, W., Observations on the Expediency of Shipbuilding at Bombay for the service of His Majesty, and the East India Company, (London, 1811).

⁶¹ Bonner Smith, D., Letters of Admiral of the Fleet Earl St. Vincent whilst First Lord Admiralty – Vol. 1, NRS, (London, 1922); Bonner Smith, D., Letters of Admiral of the Fleet Earl St. Vincent whilst First Lord Admiralty – Vol. 2, NRS, (London 1927).

Chapter one surveys the origins, development and expansion of Britain's overseas naval bases prior to 1793. The chapter is structured geographically and thematically. By analysing each region where bases were established an understanding of the political and strategic reasons for their existence is revealed. Uncovered by this survey was a number of common themes in the purposes of the bases in meeting the needs of ships' crews, and the needs of their vessels. The former were met by naval hospitals and victualling provisions, and the latter by naval yards with a dedicated workforce, careening facilities and attendant buildings.

The naval yard establishments at Halifax, Jamaica, Antigua and Gibraltar are examined in the last full year of peace, 1792, as a point of reference to enable developments in management and any increase in workforce numbers to be compared. By this year Britain's overseas naval bases had reached maturity after a century of development. From their establishment these bases had successfully maintained and supplied vessels and their crews, and were a permanent feature in the Admiralty's logistical strategy. However, a determination for economy and increased efficiency was to change how these bases were managed.

Chapter two investigates the proposals made to improve the support delivered to overseas naval squadrons. Following defeat in the American War of Independence the British government undertook a series of parliamentary commissions to improve its administrative departments. The civil departments of the navy were examined by the Commission on Fees in the 1780s, Select Committee on Finance from 1797, Commission of Naval Enquiry (1802-05) and finally the Commission of Naval Revision (1805-1809). The various reports of these commissions provide a snap-shot of how the home and overseas civil naval departments operated, and what the commissioners considered was needed to improve how they functioned. The most significant of these bodies were the Commissions on Fees and Naval Revision. The Fees Commissioners' recommendations changed the culture of employment of public servants and the Commission of Naval Revision ensured that their recommendations and procedures were implemented. This chapter also examines the fourteenth and fifteenth reports of the Commission of Naval Revision as they concerned the exploitation of overseas timber and hemp, and demonstrates the concern and efforts that were being made to reduce dependence on Baltic supplies that are investigated in chapter seven.

Amongst the improvements recommended by the Commission on Fees was the appointment at overseas bases of resident commissioners with management of the victualling and naval yard organisations. Chapter three examines the roles, duties and responsibilities of the resident commissioners since the post was created in 1664 and how the Commission of Naval Revision introduced an extension of their powers in 1808.

Chapter three surveys the increase in the number of bases acquired from 1793 to 1815 to support the increasing reach of Britain's navy. The British navy reached its zenith in number of ships and men in this period in 1809. The composition of the overseas naval yard, management and workforce in 1809, together with the refit work performed in one month of that year is examined for the four largest overseas establishments, Malta, Halifax, Jamaica and Antigua. These locations supported the Mediterranean, North America, Jamaica and Leeward Islands squadrons and thus provide a representative example of the work performed at overseas naval yards at a time of peak demand. It permits a comparison to be drawn with the work of the naval yard at the Cape of Good Hope.

Ships en route to the East Indies and on their subsequent return had only four places where shore support was available, St. Helena, the Cape of Good Hope, Madagascar, and Mauritius. Chapter four examines Britain's reasons for capturing the Cape of Good Hope in 1795 and 1806. Britain's strategic position following victory at Trafalgar is considered in this chapter to provide a context for the relative priority of the Cape and East Indies commands. This is done by reference to the deployment of Britain's army and navy from 1805. The organisation, management and work of the naval shore departments at the Cape are explored during both occupations to determine the changes introduced, particularly following the appointment of a resident commissioner in 1808.

The campaign to blockade Mauritius, leading to that island's capture by British forces from India, was mounted by the naval squadron at the Cape of Good Hope. Chapter five investigates the actions of the Admiralty, the commander-in-chief and the resident commissioner during this campaign. The actions of the Admiralty and these officials reveal the deployment and refit strategy of the Admiralty for overseas naval bases, and the effect of the appointment of a resident commissioner to manage the shore naval departments.

Following the capture of Mauritius in 1810 and Java in 1811, the French no longer had a base from which to operate in the Indian Ocean. This permitted the Admiralty to reduce the number of ships in the Cape of Good Hope and East Indies commands. Chapter six studies the impact of this reduction in refit work on the naval yard establishment at the Cape when it was operating in almost peacetime conditions. Here is considered the geopolitical factors for the retention by the British of the Cape of Good Hope and Mauritius, with the return of Bourbon to the French and of Java to the Dutch at subsequent peace treaties. Chapter six concludes by examining the temporary establishment of a forward replenishment base at Port Louis, Mauritius, together with the rationalisation of the naval shore facilities at the Cape of Good Hope. This resulted in Simon's Town becoming a home for the British navy until 1957.

By virtue of its geographical area, distance from Britain and the presence of the East India Company, the East Indies command was unique in the way ships of the British navy were supported. The Admiralty had less autonomy in its shore services than in other overseas commands and was dependent on the Company and merchants for support throughout the Revolutionary and Napoleonic Wars. Chapter seven examines the relationship of the British navy with the Company in its provision of facilities, management and a skilled workforce. However towards the end of the Napoleonic War the Admiralty moved towards independence from the Company. Crucial to this evolution was the arrival of resident commissioners at Bombay (1809) and Madras (1811).

Integral to this thesis is an examination of the locations of naval bases. They are surveyed to determine their respective strengths and weaknesses and this helps to explain why a base was built at Penang. Although Trincomalee was captured in 1795, plans were not initiated until 1810 to turn this anchorage into a naval yard. Only after the end of the Napoleonic War were the facilities at Madras transferred to Trincomalee, but chapter seven examines the options considered and the work done to prepare the future home of the Eastern squadron.

The dry docks at Bombay and Calcutta were very important to the British navy. They permitted ships to receive comprehensive repairs in the India Ocean and removed the need for them to return home. The economy of the East Indies provided other opportunities for Britain to utilise the resources of the east to contribute to her naval strength. The demand for vessels from eastern merchants resulted in a shipbuilding

boom in the first two decades of the nineteenth century with Calcutta, Rangoon and Chittagong each constructing more ships than Bombay. Chapter seven examines the origin of the Admiralty's orders for ships and the subsequent construction of naval vessels in the Company dockyard at Bombay. The availability of shipbuilding materials, particularly for ship's hulls also resulted in plans to obtain naval stores from the east.

The search for timber for hulls, masts and spars in the Indian Ocean region, the supply of hemp from India and the local manufacture of cordage and sails are also examined in chapter seven. The possibility of breaking the Russian hemp monopoly, especially following the Treaty of Tilsit in 1807, was to result in Admiralty controlled ropeyards being established at Bombay and at Madras and the import of Indian hemp to Britain.

With the end of the War of 1812 and the abdication of Napoleon, the Admiralty was in possession of a considerable number of naval bases around the globe. What was to be their future? The postscript to this thesis examines the thoughts of the deputy controller of the Navy Board and subsequent actions of the Admiralty until the death of Napoleon in 1821.

Part one

Britain's overseas naval bases to the end of the Napoleonic War

Chapter one British overseas⁶² naval bases prior to 1793

1.0 Introduction

This chapter surveys the status, how they came into existence and the development of Britain's overseas, or foreign bases prior to the commencement of the Revolutionary War. A geographic approach has been taken to provide an understanding of the scale and range of the British Navy's commitments together with recurring themes being summarised.

The deployment of British naval squadrons in this period during peace and war can be seen in the ship list books of the Admiralty. These ADM 8 books provide information on where ships were planned to be deployed and the change in overseas command areas.

	1720/1	1735/6	1744/5	1755	1760	1771	1781	1792
	(Jan)	(Jan)	(Jan)	(Dec)	(Dec)	(Sep)	(Jan)	(Jan)
ADM 8	14	19	24	30	35	47	57	68
Home ⁶³	6	51	52	0	73	0	53	0
Mediterranean	9	37 ⁶⁴	56	6	29	8	6	9
Jamaica	5	5	26	9	16	16	25	12
Leeward Is	3	5	14	5	18	12	67	5
N. America	7	6	7	7	17	27	74	0
Coast								
Nova Scotia	0	0	0	6	0	0	0	8
Newfoundland	2	2	1	2	2	7	6	2
East Indies	4	0	0	6	21	9	13	9
African Coast	3	1	0		7	0	0	0
Convoys and	6	6	50	58	50	34	59	44
Cruisers								
Other ⁶⁵	35	0	8	38	42	42	93	31
Totals	80	114	214	96	275	155	396	120

Table 1a: Sample deployments of British squadrons prior to 1793 in peace and war

The years 1745, 1760 and 1781 were war years when the British navy was fully committed. 1755 and 1792 were special peacetime years as they were on the cusp of major wars and while 1720, 1735 and 1771 occur in peacetime both 1735 and 1771 show a deterrent policy in place. The high figure for 1771 was a result of the Falkland

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⁶² The word foreign was the contemporary term used for Britain's naval yards and bases not on the British Isles. The author has used the term overseas to describe these bases but will occasionally use foreign if that terms appears more appropriate.

⁶³ Home consists of vessels in Western, Channel and Downs squadrons.

⁶⁴ The Mediterranean figure includes 31 ships at Lisbon.

⁶⁵ Other consists of vessels that are classified as being in port or in ordinary.

Island crisis of 1770 with the 1735 figure showing the support for the King of Portugal during his war with Spain. A feature of peacetime years was the composition of the squadrons with few line of battleships being in commission. The overseas commands tended to be mainly frigates and lesser unrated ships with a third rate, or more likely a fourth rate acting as the flagship.

1.1 The Mediterranean and neighbouring region

1.1.1 Introduction



Figure 1a: Map of the Mediterranean Sea in the seventeenth and eighteenth centuries showing bases and relative distances between them

This inland sea bordered by the Ottoman Empire, North Africa and the south coast of Europe was a key theatre during the wars of 1793 to 1815. This area highlights the move from formal and informal use of other nations' facilities to the dedicated provision of sovereign bases. Therefore for the purposes of this study Lisbon and Cadiz on the Atlantic coast have both been included in this section as Britain used both ports, when allowed, to support its operations in the western Mediterranean.

Protecting trade was the reason the British navy became involved in the region. Apart from seaborne trade with southern Europe that operated since the Middle Ages, a new venture commenced for Britain in the late sixteenth century. In 1581 the Levant Company was formed to trade with the eastern Mediterranean. This company grew in prosperity and drew on support from the English navy in the early seventeenth century. During the Protectorate a squadron was deployed in the Mediterranean to protect trade

from the Barbary States and the Dutch in the First Anglo Dutch War. To operate with any success a base was required for these naval operations. In 1656 the Commonwealth investigated the capture of Gibraltar but with the Restoration an alternative presented itself.

As part of the dowry of Catherine of Braganza's marriage to Charles II came Tangier, and it seemed an answer to the search for a naval base with nearby access to the Mediterranean had been found. Much effort and expenditure was invested at this port but it suffered from many problems, including a poor harbour with foul ground for mooring and lack of shelter to westerly gales. However, the chief cause for its abandonment in 1683 was the inability of the English to make it militarily secure.

The English squadrons still needed bases for trade protection in the 1680s and this was obtained by use of Gibraltar, Cadiz, Leghorn and Port Mahon. Not only did these locations provide immediate support but also afforded the opportunity to access the utility of the ports, and the strengths and weaknesses of their respective defences.⁶⁶

It was not just for operations against the Barbary States that other nations' ports were used, as during William III's Nine Years War support for his naval squadrons was provided by Cadiz in 1694.⁶⁷ This was the last time Britain fought in Mediterranean waters without a dedicated base of its own during a war. The first decade of the eighteenth century, in the War of Spanish Succession, provides one example of a formal treaty with a foreign power for access to national facilities and two examples of a permanent solution to Britain's search for a naval base.

Following an English victory off Vigo in 1702 Portugal abandoned its alliance with France and entered into the Methuen Treaty with England.⁶⁸ Subsequently Lisbon was used as a base by Queen Anne's navy and served as a refitting base for the British navy many times in the next one hundred and fifty years. However, it was with the capture of Gibraltar in 1704 and Port Mahon on Minorca in 1708 that provided politically secure sovereign bases for the British Navy.

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⁶⁶ Hornstein, S., The Restoration Navy and English Foreign Trade, (Aldershot, 1991).

⁶⁷ Ehrman, J., 'William III and the Emergence of a Mediterranean Naval Policy, 1692-4', *Cambridge Historical Journal*, Vol. 9, No. 3, (1949), 269-292.

⁶⁸ Francis, A.D., 'John Methuen and the Anglo-Portuguese Treaties of 1703', *The Historical Journal*, Vol. 3, No. 2, (1961), 103-124.

Gibraltar was at the junction of the Mediterranean and Atlantic, and provided intelligence of enemy maritime movements, plus it was also close to Spain's major dockyard at Cadiz enabling it to support a blockading squadron. Gibraltar could be used as a supply and minor refitting staging post into the Mediterranean direct from Britain or via Lisbon. Finally, Gibraltar was a toehold in the Mediterranean on which an offensive could be built when forced to withdraw from that sea. Minorca, when held, was close to the French naval base at Toulon, 240 miles, and hence was vital to support a blockading British fleet. The lack of Minorca in the early part of the Revolutionary and Napoleonic Wars caused Britain's naval commanders-in-chief to frequently call for its capture, or to look for a substitute. Nelson was to comment when commander-in-chief that Malta and Gibraltar met many needs, but not for operations against Toulon. To command the western Mediterranean Minorca was particularly well suited with Port Mahon being the best equipped British foreign naval base in the possession of the Admiralty.

1.1.2 The bases and refitting facilities

Lisbon

The Methuen Treaty continued a long association between the British navy and the use of Lisbon and the Tagus. Blake had used Lisbon in 1656-7 to refit his ships and naval stores were moved there when England abandoned Tangier. The British navy's formal involvement with Lisbon can be seen in its establishment of a naval base at that port from 1704 to 1725, 1795 to 1799 and finally from 1808 to 1814 as recorded in the National Archive. This shows a formal dockyard was in place in these years but the port was also used at other times during the eighteenth century.

Although Gibraltar was taken in 1704 it was unable to provide logistic support so Lisbon was used for repair and refit of Queen Anne's squadrons. The facilities and personnel appear to have been inadequate as Vice-Admiral Byng wrote to the Admiralty in September 1706 that if a squadron was to remain for the winter at Lisbon another hulk was needed together with technical dockyard officers. ⁶⁹ The Navy Board's reply to the Admiralty stated they did not know what staff, facilities and stores to send to Lisbon, as they did not know the number or type of ships in Byng's fleet. This letter

⁶⁹ Byng to Admiralty, 5th September 1706, Merriman, R. (ed.), *Queen Anne's Navy*, 126-127.

provides a good illustration of the teething troubles that came with equipping a new naval vard. 70

Lisbon was used by Britain's navy in war and peace throughout the eighteenth century, but at times Portugal was under pressure from Spain and France to withhold assistance making access to Gibraltar and Minorca essential.

Gibraltar and Minorca

Britain's problem of how to permanently support her naval squadrons in the Mediterranean seemed solved with the capture of Gibraltar in 1704 and Minorca in 1708. The superb harbour of Port Mahon, Minorca had a considerable capacity for a fleet of sailing ships with a fortress at the entrance to the anchorage for security, support facilities, and a local workforce for refitting and supply of vessels. However, Gibraltar's anchorage was poor and had been considered as such from its earliest occupation; Byng stated the roadstead was open to westerly gales and hampered by foul ground. Gibraltar was therefore more suited as an observation post and supply depot than a repair location. Work was undertaken to improve the anchorage at Gibraltar in the 1720s. Rocks in the harbour were removed by blowing them up, and the sides of the mole were improved so a greater depth of water was available. With occupation of Minorca and Gibraltar the British held an advantageous strategic position, but maintaining possession proved difficult.

Ensuring military security of Gibraltar required considerable effort in the eighteenth century, from its capture it came under siege in 1704-5, again in 1726-7 and more notably in the Great Siege of 1779-83. The strength of the land defences was gradually improved and the garrison on the Rock proved adequate to the task, together with the presence of ships in the bay to insure against seaborne assault. However, without resupply the garrison on Gibraltar could not be sustained. During the Great Siege three large supply convoys were sent, Rodney in 1780, Darby in 1781 and finally Howe in October 1782 ensuring the Rock was held.

⁷⁰ Navy Board to Admiralty, 10th October 1706, Merriman, R. (ed.), *Queen Anne's Navy*, 127.

⁷¹ Davies, J. D., 'Gibraltar in naval strategy c. 1600-1783', *Transactions of the Naval Dockyards Society*, Vol. 2, (Southsea, Hants, 2006), 12.

⁷² Harding, R. 'Gibraltar: A tale of two sieges 1726-7 & 1779-83', *Transactions of the Naval Dockyards Society*, Vol. 2, 31-46.

Minorca was to prove more difficult for Britain to hold as the defence of the island relied on a large garrison and command of the sea to ensure re-supply and to counter invasion. Minorca was lost twice in the three wars Britain had with the Bourbon powers from 1739. The first capture was in 1756, when Britain lost command of the Mediterranean, only for Minorca to be returned in 1763 following an exchange of captured islands. During the American War of Independence although Britain held Gibraltar she was unable to retain Minorca.

The question of political security can be seen in the return, retention and loss of these two bases. Minorca was of no use in the Seven Years War having been lost too early in the war. It was not used to its full potential in the next war as a naval force to counter the French Toulon fleet could not be sent. Without a bargaining position Minorca could not be regained. Gibraltar's political security was also open to question with the British government considering what could be exchanged with Spain for the colony. The sheer effort required to retain Gibraltar, together with its recent massive territorial losses, probably prevented any chance of a favourable exchange or being domestically acceptable.

Refitting facilities

Prior to its loss in 1782 Minorca had been provided with the finest overseas repair and naval storage facilities in the charge of the Navy Board. From Port Mahon's capture the existing wharf was improved and additional buildings erected for stores. This was augmented by other buildings on the north side of the harbour with a masthouse, smiths' shop and boat yard being established. These facilities were maintained so that when war commenced with Spain in 1739 they were able to satisfy the fleet's needs. The careening wharf was by this time able to service three 90 gun ships, that but by 1743 the Mediterranean fleet contained 34 ships of the line, seriously overloaded the yard. Subsequently by 1745 additional capacity had been created with temporary wharfs being built for unloading stores and guns, prior to ships being careened. The principal improvement was the construction of an additional careening wharf and workshops.

Britain's second occupation from 1763-1782 saw the final improvements made for the fleet at Port Mahon. This consisted of work done on Saffron Island to supplement the

⁷³ Baugh, D., British Naval Administration in the Age of Walpole, 359.

⁷⁴ Coad, J., *The Royal Dockyards 1690-1850: Architecture and Engineering Works of the Sailing Navy*, (Aldershot, 1989), 330.

existing facilities together with the building of a causeway to the existing yard. This project was nearing completion in 1774 when it was reported that the island had a wharf with eight sides, of which five had been equipped with careening pits and capstans, with one wharf equipped with shears for replacing ship's masts. The mainland yard contained the storehouses and lodgings for ship's crews while their ships were careened. These facilities were lost to the British following the capture of Minorca by Spain, but during the Revolutionary and Napoleon Wars the British navy was to return to make use of them. The layout of Saffron Island with its careening berths can still be seen today.



Figure 1b Port Mahon showing Saffron Island and the eight wharfs

Although Minorca had the finest overseas refitting facilities, Gibraltar was the poor relation of Britain's overseas yards until the late nineteenth century. From its capture, ships had their hulls cleaned at Gibraltar, but the existing moles were found to be inadequate for this task. The old mole had been built in the 1570s, but was of limited use with the new mole constructed between 1616 and 1665 giving shelter for four to five large ships. In 1724 the naval storekeeper reported the yard facilities were scattered about Gibraltar, with careening gear stored in the soldier's barracks near the new mole, a small store space in the White Convent in the town, and cables lodged in a hired store at the old mole. He also reported that it was impossible to secure masts, yards, timber

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⁷⁵ Coad, J., *The Royal Dockyards* 1690-1850, 332.

and anchors from damage or being stolen.⁷⁶ Although support buildings were available by 1756, with a smiths' shop, a masthouse, and a pitch house the yard could only carry out minor repairs. The careening capacity was limited, and while the Navy Board thought the new mole could service two ships at a time, Captain Crookshanks, in 1744, considered only one ship could careen at the mole.⁷⁷ Compared to Port Mahon the limited facilities of Gibraltar were irrelevant, but when the former was lost, Gibraltar was unable to fill the gap. Lisbon was again resorted to in the following wars with the search for support bases in the western Mediterranean.

1.2 The West Indies

1.2.1 Introduction

The Caribbean was of great importance to western European powers in the seventeenth and eighteenth centuries. Their economies and political actions were to some extent driven by the great profits that were made by the sugar producing plantations on their respective islands. The fear of losing these islands was to be a feature of eighteenth century conflicts between France and Britain. The great wealth of the Spanish mainland territories and islands also featured in British leaders' thoughts and war plans.

The British and French entry into this region came a hundred years after Spain and hence only occupied the smaller non-Spanish islands. By 1640 England⁷⁸ occupied a number of these islands, but in 1655 Jamaica was seized from Spain. Even this large island did not match the land acquired by France, with Saint Domingue being the largest area under their control. The islands were subject to attack and invasion resulting in exchange at subsequent peace treaties.

Michael Duffy described the West Indies as a precarious money-box in his book 'Soldiers, Sugar and Seapower' and illustrated the point in a chapter of that name. ⁷⁹ In 1784 Britain's West Indian colonies exported products to the value of £4.5 million with her domestic exports amounting to no greater than £14 million. France's more prosperous West Indian territories contributed even more to her economy. In 1787

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⁷⁶ Benady, T., 'The Role of Gibraltar as a base during the campaign against the French and Spanish fleets 1797-1808', Unpublished MA, (University of Greenwich, 2006), 9-10.

⁷⁷ Baugh, D., British Naval Administration in the Age of Walpole, 355.

⁷⁸ Until 1707 and the Union of England and Scotland, England will be used to describe occupations and Treaties.

⁷⁹ Duffy, M., Soldiers, Sugar and Seapower – The British Expedition to the West Indies and the War against Revolutionary France, (Oxford, 1987), 3-37.

domestic exports were calculated at £11.5 million with her colonies' exports being estimated at an average yearly amount of £8.25 million. How to defend their scattered and distant possessions with a large enslaved population created a problem for the European powers.

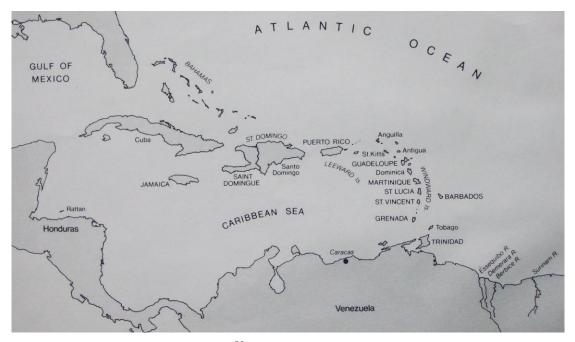


Figure 1c: Map of the Caribbean⁸⁰

Fortifications, local militias, stationing regular military units on the islands and limited arming of their black slaves, formed the common methods employed. Disease and the climate also formed a key factor in defence, as an invading force had to achieve the surrender of an island before fever decimated the attackers, or the hurricane season forced the supporting ships to be withdrawn. This latter factor contributed to the different method used by the British in defending their islands by the permanent stationing of naval vessels in the region. It was not only the positioning of ships that significantly contributed to the defence of her possessions and trade, but the creation of careening yards to refit and re-supply the vessels in these squadrons. This policy ensured that time lost in transit to and from Britain and the area of operations was significantly reduced. It also minimised the number of ships required by eliminating the need for their return home for minor refits.

To defend the regions the British Admiralty had two naval commands in the West Indies by 1792. A squadron at Jamaica had been in place since the days of Queen Anne,

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⁸⁰ Duffy, M., Soldiers, Sugar and Seapower – The British Expedition to the West Indies and the War against Revolutionary France, ii.

but a separate Leeward Islands station at Antigua had been created in 1743. The reason for two separate naval forces was due to the distance between the two areas and the prevailing wind direction. Jamaica is to the windward of the Leeward Islands and although a force from Antigua could rapidly sail to Jamaica to offer assistance the journey from Jamaica was against the prevailing wind. 81 As Jamaica was Britain's largest possession and was only a short distance to the windward of French Saint Domingue it was possible it could be overcome before a squadron from Antigua intercepted an invasion. The assemblies of both Jamaica and the Leeward Islands were aware of this and successfully lobbied the Admiralty for protection. The Antiguan authorities offered land and assistance in creating a careening yard at English Harbour, if the Admiralty stationed a squadron at Antigua. Barbados also illustrates the importance of the prevailing wind direction as a significant factor in defence in the age of sail. This island was the most windward of Britain's and France's islands and was not troubled by threat of invasion throughout the period.

1.2.2 The bases and refit facilities

Jamaica

Since its occupation Jamaica had been the principal British colony and base in the West Indies. In the reigns of William III and Queen Anne the naval facilities consisted of a small victualling depot with a hulk for naval stores and careening. 82 English Harbour, Antigua was also used in this period for shelter, provision of water and fuel, but only as an informal base for operations.

Following the Treaty of Utecht in 1713 the British continued stationing warships at its West Indian colonies. These warship squadrons were for enforcing British interests, treaties, laws and to carry out trade protection. To support the squadron at Jamaica a naval storekeeper was retained whose tasks were essentially administrative, to verify pay books and keep account of stores and refitting costs. Provision of medical services and fresh provisions were provided by local contractors, with naval stores being placed in a storehouse at Kingston. These naval stores were primarily supplied from Britain, being locally supplemented if available and at an acceptable cost.

⁸¹ Rodger, N., 'Weather, geography and naval power in the age of sail', *Journal of Strategic Studies*, Vol. 22, Nos 2-3 (1999), 191-193.

82 Merriman, R. D. (ed.), Queen Anne's navy, 103.

This arrangement was suitable for a small policing squadron, but when Britain went to war with Spain in the 1720s the facilities were found inadequate for the force dispatched. Improving and consolidating facilities at Jamaica was considered by the Navy Board in July 1726. This consisted of building a careening wharf at Port Royal and moving the store facilities at Kingston to new buildings situated at the wharf. This was not then carried out due to concerns over Port Royal's disaster prone record during the previous thirty years, with an earthquake, fire and hurricane having afflicted the town.

It was instead decided to build a completely new careening base at Port Antonio. ⁸⁴ By 1734 a wharf, hospital, mast-house, boathouse, storehouses and offices had been built at Port Antonio, a not inconsiderable investment in time and resources. ⁸⁵ It proved to be a white elephant, as the naval commanders-in-chief preferred Port Royal, and when repairs were required at Port Antonio they were not carried out causing the base to be run down. Port Antonio was on the windward side of the island causing difficulties for a vessel leaving the port and not having Port Royal's advantages of being close to local supplies and labour.

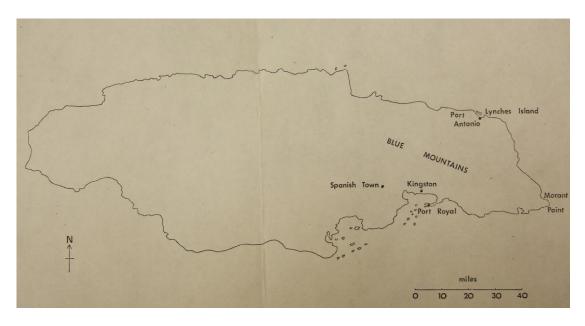


Figure 1d: Map showing the location of the two Jamaican yards in 1740^{86}

Sir Chaloner Ogle, the commander-in-chief, proposed that improvement was made to Port Royal in 1734, resulting in both Port Royal and Port Antonio being equipped as

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⁸³ Navy Board to Admiralty, 11th July 1726, Baugh, D. (ed.), Naval Administration 1715-1750, 335-337.

⁸⁴ Figure 1d shows the location of Port Antonio, Port Royal and Kingston on Jamaica.

⁸⁵ Baugh, D., British Naval Administration in the Age of Walpole, (Princeton, 1965), 348.

⁸⁶ Crewe, D., Yellow Jack and the Worm, Map 2.

careening yards.⁸⁷ The work at Port Royal was commenced in 1735 and included a careening wharf, capstan house, storehouses, and two brick offices with a wall around the yard.⁸⁸ As Ogle continued to use Port Royal as his preferred refitting base when the inevitable financial cutbacks were required this base was given priority over Port Antonia.

At first sight the decision and expenditure for the new base at Port Antonio looks unwise and ill thought out, but it showed trust in local authorities in recommending the base. Their plan had been to isolate seamen from the harms of rum and social diseases at Port Royal. However it should be noted that the error was not reinforced by more investment but instead the abandonment of Port Antonio and return to Port Royal.

In the 1740s as Port Antonio was being run down, the Kingston Bay area was increasing in importance. Permission to build a second careening wharf at Port Royal was given in August 1740 with its availability in 1744. Additional storage space was anticipated as being necessary and the Navy Board ordered two prefabricated buildings from suppliers at Boston, quickly followed up by ordering another building to serve as a masthouse. These buildings were erected at New Greenwich, but the need for additional storage space was still required, so the tactic of renting warehouses was re-adopted by hiring buildings at Kingston. This was still insufficient for Vernon's large squadron in the early 1740s who de-commissioned ships to act as hulks for stores and careening purposes. By the end of the wars of the 1740s the support facilities at Jamaica had been scattered around Kingston Bay. The two careening wharfs were at Port Royal, but naval stores were at Port Royal, Kingston and New Greenwich, with victualling stores and a hospital at New Greenwich and ordnance stores at Mosquito Point.

This inefficient arrangement was drawn to the Admiralty's attention by Rear-Admiral Charles Knowles, the commander-in-chief, in May 1748. Figure 1e illustrates the points he made in his letter with the distances between Port Royal and Kingston for stores being seven miles, five miles for provisions at New Greenwich, water at Rock Fort twelve miles, and five miles for ordnance stores at Mosquito Point. What was particularly revealing by this communication was the recognition that wooden buildings and wharfs required constant maintenance as the climate and insects could quickly

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⁸⁷ Navy Board to Admiralty, 20th December 1734, Baugh, D. (ed.), *Naval Administration 1715-1750*, 364-365.

⁸⁸ Baugh, D., British Naval Administration in the Age of Walpole, 350.

⁸⁹ Knowles to Navy Board, 8th May 1748, Baugh, D. (ed.), Naval Administration 1715-1750, 390-391.

reduce the facilities to dust. Knowles recommended concentrating resources in the Port Royal yard with the buildings at New Greenwich and Kingston being left to rot. By 1768 this had occurred with the hospital having been abandoned and a masthouse being built between the two careening wharfs at Port Royal. 90

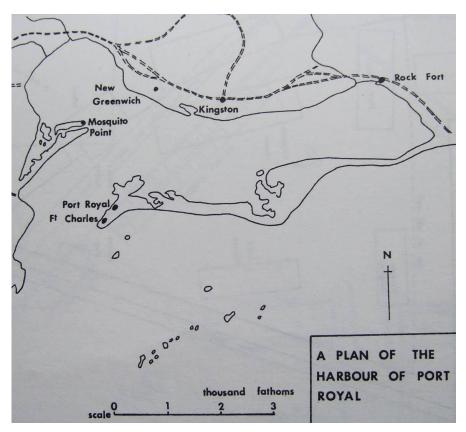


Figure 1e: Plan of Harbour of Port Royal - 1748⁹¹

English Harbour, Antigua

Initially the British defended their interests in the Caribbean by the squadron at Jamaica, but Antigua was over 1000 miles away. This was compounded by the practice during the summer months of moving naval vessels to North American waters to avoid hurricanes and sickness. This arrangement saved money and combined the ability of one squadron to protect two areas, but it caused the authorities in the Leeward Islands to lobby for a permanent naval presence.

The suitability of English Harbour as a repair base was brought to the attention of the Admiralty by Captain Robert Clarke, of *Adventure* (42), in January 1707/08. In a letter he described the entrance, depth of water and that although vessels had been cleaning

⁹⁰ Crewe, D., Yellow Jack and the Worm, 231.

⁹¹ Crewe, D., Yellow Jack and the Worm, Map 6.

there an advantage would be gained if careening gear was sent out and placed under the care of Mr. Collins, the agent at Antigua. 92

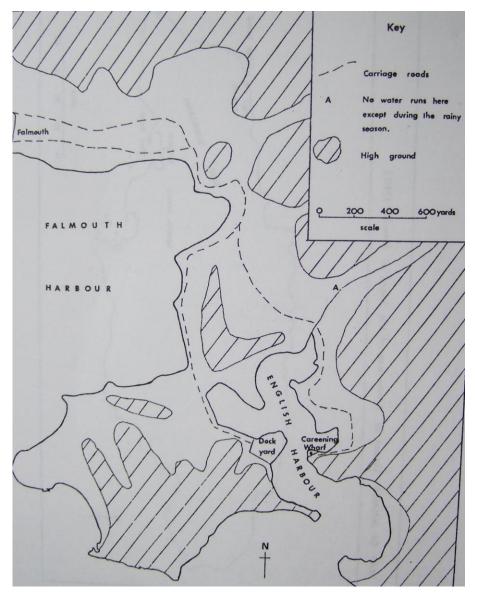


Figure 1f: Location of English Harbour Dockyard, Antigua⁹³

This harbour was considered a hurricane proof anchorage and it was decided to create a formal naval base there in 1728. The Navy Board recommended to the Admiralty in 1729 that the harbour was 'a proper place to fix a crab and a capstan on the careening wharf at the east side of the harbour, and erect two storehouses there [...] for cables, cordage, sails and other naval stores, and another [...] for lodging men and provisions ...'94 The appointment of Warner Tempest as the naval storekeeper and muster master occurred in the early 1730s and started what can be considered the first signs of being

⁹² Clarke to Admiralty, 2nd January 1707/8, Merriman, R. (ed.), *Queen Anne's Navy*, 129.
 ⁹³ Crewe, D., *Yellow Jack and the Worm*, Map 3.

94 Baugh, D. (ed.), Naval Administration 1715-1750, 349.

an official Navy Board establishment. Figure 1f shows the arrangement at English Harbour, Antigua.

The first part of the establishment created was a careening wharf with a building for the capstans and gear, together with a stone storehouse on the eastern side of the harbour. By 1733 a watering point was also provided with cisterns for collected water. Again the wooden buildings and wharf required repair with Tempest reporting the latter had been re-built three times by 1739. Captain Lisle, the senior officer in the Leeward Islands, recommended in 1741 that an additional careening wharf was required and considered a stone wharf should be built on the western side of the harbour. He again wrote to the Admiralty in October 1742 saying that having only one wharf meant his squadron of seven warships and two store vessels required four months to careen, but two wharfs could have completed the task in six weeks. The Admiralty agreed with the proposal, but Lisle commented he had not received the items required for the new wharf. The necessity of building in stone was again broached in the letter as wood had a very limited lifetime. 96

Improving the facilities was not in question, but Charles Knowles, in 1743, came to a different conclusion. He surveyed the anchorage and stated building a wharf where suggested was a mistake as there was an insufficient depth of water for a ship of more than 50 guns to reach the western side of the harbour. He proposed that the existing wharf on the eastern side was extended by 30 to 40 feet to enable an 80 gun ship to be careened. Approval for this work was given by the Admiralty in August 1743. These wharfs were wooden with one face of 180 ft. and the other of 150 ft. The old masthouse was to be moved to the western side of the harbour and a framed building from New England was to house the careening capstans.⁹⁷

By the end of the wars with France and Spain in 1748 the base was well established. A wharf capable of heaving down two 60 gun ships at one time on the eastern side of the harbour was available. On the western side were storehouses, a masthouse, a boathouse, pitchhouses and the naval storekeeper's accommodation. The provision of accommodation for yard workers also appears to have been provided at this point, showing a move to a fixed workforce to augment the crews of the ships.

⁹⁵ Coad, J. The Royal Dockyards 1690-1850, 356.

Lisle to Admiralty, 24th October 1742, Baugh, D. (ed.), *Naval Administration 1715-1750*, 368-369.
 Knowles to Admiralty, 26th February 1743/4, Baugh, D. (ed.), *Naval Administration 1715-1750*, 382-

^{386.}

A spurt in facility improvement occurred between 1775 and 1778. By 1778 the western yard boasted many buildings including storehouses, a double boathouse with a boat-slip, a large masthouse, armourer's and smiths' shops plus a saw pit. This was supplemented by purpose built houses for the commander-in-chief, storekeeper, and master shipwright. 98

1.3 North America

1.3.1 Introduction

In peace and war the British government stationed naval vessels in the north western Atlantic to protect her North American colonies and the great fisheries off the coasts of Newfoundland and Nova Scotia; table 1a shows the importance of the fisheries to Britain as a small naval force was always present. Until the removal of the French from British North America the colonies of New England, Nova Scotia and Newfoundland felt under potential threat from the French based in Canada, and their forces at Louisbourg. This fortress was thought to be the key to the invasion of Canada and had been subject to attack by the British during the Wars of 1702-1713, 1744-1748 and 1755-1763. In the latter two wars Louisbourg was captured, with Quebec being taken in 1759 resulting in the subsequent ceding of Canada to Britain at the Treaty of Paris in 1763.

The colonial economy of British North America offered an alternative solution to that of the West Indies for the repair of British warships. The vessels on the North American station could rely on the ports of Boston, New York, Philadelphia, Norfolk and Charleston. They were able to provide commercial careening wharfs, as well as naval and victualling stores from colonial suppliers who had contracts with the Admiralty. Competent artisans were also available at these ports, so they were particularly attractive as refitting and supply locations. Naval stores were deposited in warehouses rented by the Navy Board and obtained from the American colonies, or if too expensive, by items sent from Britain. This latter point was particularly illustrated in Nova Scotia were the local economy could provide masts, but very little else.

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⁹⁸ Coad, J., The Royal Dockyards 1690-1850, 357.

⁹⁹ Baugh, D., British Naval Administration in the Age of Walpole, 345.

¹⁰⁰ Goldenberg, J., Shipbuilding in Colonial America, (Newport News, Va, 1976).

Until 1745 the North American station was not a separate command, but in April of that year the Admiralty appointed Warren as commander-in-chief of all HM ships on the coast of North America north of Carolina. Warren had considerable knowledge of these waters and ports as he had been captain of ships stationed at New York, South Carolina and Boston in the 1730s and, hence, one can assume used these local facilities for supply and cleaning. The potential of these North American ports for repair and building of ships was frequently raised by Warren to the Admiralty in the early and middle 1740s. Warren suggested exploiting the potential of North America to build warships for the navy which resulted in two ships, a 44 gun and 24 gun vessels, being commissioned. Although this experiment was not continued by the Admiralty on cost, administrative and quality grounds, it confirmed the potential, skills and infrastructure available in colonial North America to support the British fleet.

Given that the wars with France, for North America, in the first half of the eighteenth century were concentrated in the St. Lawrence area, a local base to support a large squadron would appear to have been a necessity. However, with the exception of Louisbourg for a short time following its capture in 1745, a formal careening yard was not established in the region until 1758. This yard was established at Halifax, Nova Scotia a mere nine years after Halifax had been founded.

1.3.2 Refitting and supply bases

Commercial ports

The informal mechanism of using local commercial ports for careening, supply and repair was the most logical and economical method, for supporting the small number of ships stationed in these waters. However, with the war against France in the 1740s, and the creation of a separate naval command for North America, the establishment of an official naval base in the area would appear to have been inevitable. Costs may have increased, but control of resources was guaranteed ensuring the squadron's vessels were available when required. Warren with his experience of British North America wrote to the Admiralty with many suggestions for careening bases. If all his suggestions had been acted on the coastline would have been littered with such facilities, but it presents an insight into contemporary colonial infrastructure.

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¹⁰¹ Admiralty to Warren, 8th April 1745, Gywn, J. (ed.), *The Royal Navy and North America*, 76-77.

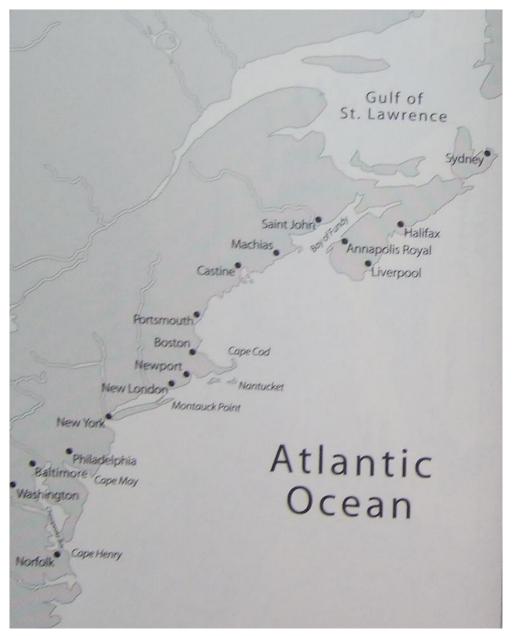


Figure 1g: Relative positions of North American ports and the St. Lawrence 102

Warren reported that New York was a suitable place for fitting ships and sent a plan of a harbour on Long Island showing the capacity for large ships. The admiral further remarked that ships of 50 to 60 guns had in the past careened at New York. His views on Boston were less encouraging as although the tides allowed ships up to 50 guns to be cleaned, ice formation restricted operations in the winter. 103 A formal base was not created at New York until Turtle Bay was utilised as such in the American War of Independence. 104

¹⁰⁴ Gywn, J., Frigates and Foremasts, 62.

Gywn, J., Frigates and Foremasts, 4.
 Warren to Admiralty, 8th September 1744, Gywn, J. (ed.), The Royal Navy and North America 36.

Louisbourg

Following the capture of Louisbourg in June 1745 Warren built a careening yard at that location. The admiral stated a wharf could be made suitable for heaving down two 70 gun ships for £2000. He asked for the Admiralty to direct the Navy Board to send out suitable careening gear. 105 Warren did not wait for this equipment to arrive as he wrote to the Navy Board in January 1746 stating he had sent for three crabs 106 from New England. By June 1746 a yard had been equipped and was capable of heaving down a vessel of up to 60 guns. Warren also expressed the persistent worry that captains and commanders had when their ships were under refit, that of desertion. He considered that, 'Louisbourg for some years will be the only place in America that his Majesty's ships can clean at with any dispatch and prevent desertion'. 107

This view was not shared by Charles Knowles who had been appointed governor of Louisbourg in 1746. He wrote to the Duke of Newcastle, secretary of state (Northern Department) in July 1746 advising him of the situation and of the potential of Louisbourg. His assessment was negative, considering the commercial potential poor, its fortifications badly designed and how the weather limited Louisbourg's usefulness. His opinion of its ship refitting facilities was particularly relevant for this study, 'There is but six weeks in the year that it [careening] can be done here [...] Nor are we sure of keeping seamen. Experience shows to the contrary, for New England sloops that come here with rum [and] secretly carry them away.'108 Knowles also had views on other refitting locations in the region, drawing on his knowledge of Boston where, at Nantasket Roads in 1747, he had cleaned a large ship. He considered the official careening yard should be based at Boston. 109

This brief venture into the establishment of official naval yards paused when Louisbourg was returned to France at the Treaty of Aix-la-Chapelle in 1749. It was a brief pause as the Admiralty recognised the importance of such a base when it commissioned the Navy Board to determine the location and facilities required for ships on the North American station, but by 1755 this had still not been decided. With the start of the Seven Years War the need to re-establish a base to defend Newfoundland

¹⁰⁵ Warren to Admiralty, 3rd October 1745, Gywn, J. (ed.), *The Royal Navy and North America*, 172.

¹⁰⁶ A mechanism to assist in hauling down a ship.

Warren to Admiralty, 2nd June 1746, Gywn, J. (ed.), *The Royal Navy and North America*, 262. Knowles to Newcastle, 9th July 1746, Gywn, J. (ed.), *The Royal Navy and North America*, 290-293.

¹⁰⁹ Gywn, J, Ashore and Afloat: The British Navy and the Halifax Naval Yard Before 1820, 5.

and Nova Scotia and capture Canada was urgently needed. In 1749 Halifax, Nova Scotia had been established where the British North American squadron was to find its first permanent naval base.

Halifax, Nova Scotia

Initially this location followed the normal practice of the local naval commander using the harbour for shelter and supply, but by 1757 Vice-Admiral Holburne had been armed with an Admiralty directive to find a suitable location for a careening wharf. In 1758 the Admiralty directed the Navy Board to construct at Halifax a naval yard at Gorham's point. This provided deep water close to the shore and was near to a fresh water supply. By the summer of 1759 ships had been careened and refitted at the yard and by 1763 two careening wharfs were available. Many buildings had also been constructed by this year such as a masthouse, boathouse, and capstan house together with many storehouses. Other facilities such as a smiths' shop, pitch house and a guardhouse were also built by 1760 surrounded by a perimeter fence.

With the end of the Seven Years War the future of the naval yard became open to question, but the Navy Board became an advocate for its retention. In December 1762 the board wrote to the Admiralty on their favourable view of retaining the yard in peacetime in the following way: 'The convenient situation of [the] yard at Halifax, its utility for heaving down ships stationed in North America, and supplying them with stores, and the preservation of the wharfs, storehouses, and other works erected there in the course of the war induce us to believe that the continuance of the naval officer and a very few artificers, will be of great advantage to his Majesty's service.' 110

By 1793 the base at Halifax had all the facilities and staff required of an overseas yard to support a peacetime squadron with the ability to support the majority of a wartime squadron's needs. The only facility absent compared to a home yard was a dry dock, although the need for such a facility had been anticipated in 1771 with Rear-Admiral James Gambier proposing a dry dock was built at Halifax.¹¹¹

The Halifax naval yard supported the ships stationed in Nova Scotia waters, with St. John's providing logistic support for the smaller Newfoundland station. These seas became a strategic backwater, but fishery protection, custom enforcement and

Gywn, J, Ashore and Afloat: The British Navy and the Halifax Naval Yard Before 1820, 16.

Gywn, J, Ashore and Afloat: The British Navy and the Halifax Naval Yard Before 1820, 10.

maintaining a diplomatic presence were important maritime tasks. An understanding of the role and tasks of these squadrons in the aftermath of the American War of Independence can be found by reading, *British Squadrons in North American Waters*, 1783-1793. This article also provides an insight into the composition and general role of peacetime squadrons, together with the settlement of loyalists from New York at the war's end.

Bermuda

Bermuda was available throughout the eighteenth century as a re-supply location and anchorage but it was following the loss of her North American colonies that the importance of Bermuda as a potential naval anchorage and base was understood. It required the surveying work of Thomas Hurd in the late 1780s and early 1790s to realise this potential.¹¹³

1.4 The East Indies

1.4.1 Introduction

The British presence in the East Indies was dominated by the English Honourable East India Company. 114 Any investigation of British naval presence and shore support in this vast area needs to be cognisant of that fact. The Company had been formed in 1600 and its chief competitors in its early lifetime were the Portuguese and Dutch, closely followed by the French. All these powers had possessions in the Indies with the French in the eighteenth century holding Pondicherry in India, and the islands of Mauritius and Bourbon 115 in the Indian Ocean. The Dutch held Ceylon, 116 some trading ports in India, the Spice Islands, Sumatra and Java. The Dutch were at times allies, neutral and enemies of Britain in the period. The Dutch therefore at times allowed Britain the use of the harbour of Trincomalee when they were either allied or neutral.

The consequence of the gift of Bombay to Charles II was to be of supreme importance to Britain, particularly for its influence on its support to the British navy. Bombay is an island and hence more easily defended during the early days of Britain's presence in

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Webb, P., 'British Squadrons in North American Waters, 1783-1793', *The Northern Mariner*, Vol. V, No. 2, (1995), 19-34.

¹¹³ See chapter three.

¹¹⁴ Hereafter referred to as the Company.

¹¹⁵ Now called Reunion.

¹¹⁶ Present day Sri Lanka but the colonial name will be used throughout the thesis as contemporary documents used that name.

India. By 1686 Bombay had become the headquarters of the Company and its potential as a shipyard had already caused the appointment of Warwick Pett as shipbuilder. 117

The Company formed its own navy as early as 1613 and became known as the Bombay Marine.¹¹⁸ Equipment for building ships at Bombay was sent from England and by 1716 the Bombay Marine consisted of a 32 gun flagship, four 28 gun ships and twenty vessels of between five and twelve guns, a not inconsiderable force.

Prior to the War of Austrian Succession in the 1740s, the East Indies was not an operational area for the navies of Britain and France, with instead, the respective national East India Companies defending their trade. It was with the dispatch of a naval squadron to the Indies that the British looked for locations to supply and refit its ships. The commander-in-chief of the British East Indies squadron had a vast area of operations to cover, but its principal concern was in the Bay of Bengal and the coasts of Malabar and Coromandel. To patrol these areas the south west (summer) and north east (winter) monsoon seasons were particularly important for ships on the western coast of India. During the north east monsoon, logic would indicate that sailing ships would look for a sheltered harbour on the west coast, or make for Bombay. This Company port become the place where considerable investment was made, creating a dockyard that turned Bombay into the major refitting location for the British navy.

Colgate, in his unpublished MA thesis, presents evidence that contradicts the view promoted by Parkinson¹²⁰ and Richmond¹²¹ of ships always retiring to Bombay. He states that of the forty winters the squadron was present in Indian Seas from 1746 to Trincomalee's capture in 1795, fifteen were spent at Trincomalee, fourteen at Bombay, five at Calcutta, with the remaining six in the Eastern Indies or Andamans. By 1762 Colgate noted that the navy had built a careening wharf at this Dutch harbour, indicating the importance of diplomacy.¹²² This need for permission was commented on by Admiral Griffin in 1748 for use of Trincomalee, 'this is still Permission. And I cannot help wishing that we had a port of our own, where any English Ship might shelter, in

¹¹⁷ Eldridge, F., The background to Eastern sea power, (London, 1948), 337.

Low, C., *The History of the Indian Navy (1613-1863)*, Volumes 1 and 2, (London, 1877); Deshpande, A., 'The Bombay Marine: aspects of maritime history 1650-1850', *Studies in History (New Delhi)*, Vol. 11, No. 2, (1995), 281-301.

Figure 7a in chapter seven provides a map of the East Indies station.

Parkinson, C., Trade in the Eastern Seas, (Cambridge, 1937).

¹²¹ Richmond, H.W., *The Navy in India* 1763-1783).

¹²² Colgate, H.A., 'Trincomalee and the East Indies Squadron 1746 – 1844', Unpublished MA thesis, (University of London, 1961), 15-18.

case of Necessity, and might have Magazines of stores and Provisions. In our present state we are Obliged to carry all the Stores and Provisions we have in the ships.' This statement provides an excellent summary of the advantage of sovereign bases compared with the use of other nation's ports.

From 1778 to 1784 British interests in India came under attack from the French, with them able to support the fleet they had sent from shore bases and harbours previously unavailable to that nation. As the Dutch became enemies of Britain in 1781 the Dutch harbours at the Cape of Good Hope, Trincomalee and Negapatam became available to the French. This was a severe blow to British interests in the region, as previously the Dutch were allies, or at least helpful neutrals, who allowed Britain to use the Cape and Trincomalee. However, the use of the Portuguese Royal Yard at Goa was obtained by Hughes' squadron in 1782, the only other yard in these waters that could undertake large repairs, indicating the importance of Britain's relationship with Portugal. 124

Other harbours and stores locations were open to the British navy in the East Indies before 1792 as the other presidencies in India offered limited facilities. Calcutta was Britain's commercial centre in the east with artificers, victualling and naval stores being available and although Madras lacked a harbour it was also able to provide victualling and naval stores. However, the dockyard at Bombay was the key asset supporting the British navy in the East Indies.

1.4.2 Administration of Bombay Dockyard

To support the Bombay Marine a refit yard was built with the shore organisation consisting of a marine storekeeper, Mr. William Minchen, appointed in 1670 and a master shipbuilder Mr. Pett. This organisation appears similar to a home royal dockyard where a naval storekeeper and master shipwright were key posts. The development in the administrative structure was notable for the combination of shore and ship establishments. By 1742 the post of superintendent of marine had been created with a commodore and seven commanders. The superintendent controlled the dockyard with the commodore reporting to him, a purser of marine being in charge of accounts, a

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¹²³ Griffin to Secretary of Admiralty, 12th Feb 1747/8, TNA, ADM 1/160; Quoted in Colgate, H.A., 'Trincomalee and the East Indies Squadron 1746-1844', 18.

¹²⁴ Richmond, H. W., *The Navy in India 1763-1783*, 303-304. Note: Portugal has been referred to as England's oldest ally with the first Anglo-Portuguese Treaty dated 1373. During the American War of Independence Portugal not only allowed access to her Goa yard but offered Britain timber from South America.

master builder, and storekeeper in charge of their departments. A Marine Board was formed to manage the dockyard consisting of the superintendent, the commodore and two senior captains as the facilities customers, and the superintendent's deputy, the master attendant.¹²⁵

1.4.3 The Dry Docks

The development and increase in dry docking facilities at Bombay occurred throughout the eighteenth century. The Bombay Council initially considered building a dry dock in 1687^{126} and again in 1723 but neither was commissioned. However, in July 1750 a dock capable of receiving 50 gun ships for the Company and other users was completed. Apart from the use by its own marine the Company thought of the facility as an income generator, with 150 rupees being charged for the first spring tide docking period, and 100 rupees for every subsequent spring tide the vessel remained in dock.

The dock proved an early success with the Company and they quickly indicated their intention to increase its capability. By 1762 a double dock had been completed allowing the inner dock to be dedicated for repairs and refits, leaving the outer dock for routine maintenance such as hull cleaning. This did not end the development on this site as the dock was again extended, resulting in the facility becoming a triple dock. Admiral Cornish lobbied for this extra dock, as the Bombay Council reported the matter to the Court of Directors in April 1762 as being essential for the Royal Navy. This extension was completed in 1773 and was large enough to accommodate a 74 gun ship. Collectively the facility was known as Bombay Dock, upper, middle and lower. These docks were the first of their type built outside of Europe.

Three docks built as a single unit limits their utility. A ship in the outermost dock prevents access or exit to and from the inner docks. Adverse tidal conditions could also restrain usage. This would seem to be the case as Admiral Hughes, commander-in-chief of the British East Indies squadron, wrote to Governor Hornby with suggestions to improve operations at Bombay. In April 1781 Hughes acknowledged that the facilities at the Bombay yard were, 'The only port in the East Indies where a ship of the line can

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¹²⁵ Wadia, R., The Bombay Dockyard and the Wadia Master Shipbuilders, (Bombay, 1955), 70.

¹²⁶ Wadia, R. A., The Bombay Dockyard and the Wadia Master Shipbuilders, 31-32.

¹²⁷ Wadia, R. A., The Bombay Dockyard and the Wadia Master Shipbuilders, 35.

¹²⁸ Appendix 7f provides dates and dimensions of this dock at Bombay.

¹²⁹ Wadia, R. A., The Bombay Dockyard and the Wadia Master Shipbuilders, 39.

¹³⁰ Appendix 7f provides dates and dimensions of this dock at Bombay.

¹³¹ Appendix 7f provides dates and dimensions of this dock at Bombay.

be docked and effectively repaired'. However, he pointed out that delays occurred in refitting that could be remedied by deepening the outer two docks by 18 inches. The problem was that three battleships were each delayed 14 days in dock as a result of tidal conditions. By deepening the docks two ships could be moved into and out of dock on the same tide. The two docks were deepened as requested to improve utilization.

In May 1784 Hughes communicated to the Select Committee of Bombay the importance of their dockyard to his command. Hughes had recently defended Britain's interests in the Indies against the strong French fleet under the command of Suffren and clearly considered Bombay as essential to Britain. The admiral indicated the Bombay Presidency needed to ensure military protection was provided at all times, in fact made impregnable so as to act as a base for offensive operations. Hughes also pointed out that there was no other port in the possession of Britain where his squadron could be refitted let alone repaired; at Bombay there were masts and other stores and 'a great number of expert native artificers'. He further reported that the ships' companies had been reduced by sickness, but after only three months the squadron had been completely refitted, re-supplied and the health of the crews restored. Hughes concluded, 'The constant exertions of the officers of the squadron, the use of the Docks, supplies of all kinds of timber and numerous artificers of Bombay effected this great end and without them, I am positive the squadron could not, in any other part of the East Indies have been put in a condition to face the enemy with even hopes of success.' 134

1.4.4 Shipbuilding and dockyard facilities

The dry docks were the essential difference in this yard compared with the other overseas bases and yards used by the British navy in the eighteenth century, but Bombay also had other essential facilities. Figure 1h shows the 1750 Grose Plan of Bombay Dockyard in which the first dock was shown together with a hospital, storehouses, offices and accommodation for the yard's officers. A later plan, figure 1j, shows the yard in 1803. From this the triple Bombay dock can be clearly seen together with the buildings shown in the 1750 plan. What is of note is the long ropewalk that has been shown. The walkway was 900 ft. long and had been roofed over in 1760 and provided a facility to produce cables and cordage for the Company.

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¹³² Wadia, R. A., The Bombay Dockyard and the Wadia Master Shipbuilders, 44-46.

¹³³ Letter from Admiral Hughes to Governor and Select Committee of Bombay, 13th May 1784, Richmond, H. W., *The Navy in India 1763-1783*, London, (1931), appendix VIII, 424-426.

¹³⁴ Letter from Admiral Hughes to Governor and Select Committee of Bombay, 13th May 1784, Richmond, H. W., *The Navy in India 1763-1783*, London, (1931), appendix VIII, 424-426.

The shipbuilding facilities at Bombay were considerable and as discussed above this had been recognised at an early date by the Company. As Hughes commented the artificers at Bombay were highly skilled. Amongst these were the Wadia family who had a distinguished record of providing shipbuilding expertise to the Company. 135 The availability of these artificers and the managers of the dockyard removed the need for an Admiralty organisation being present, or for British artificers being sent from Britain.

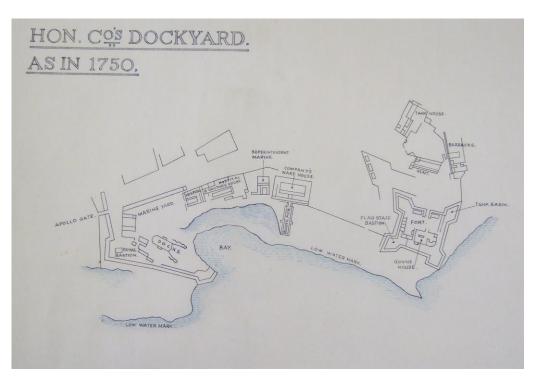


Figure 1h: Bombay Dockyard in 1750¹³⁶

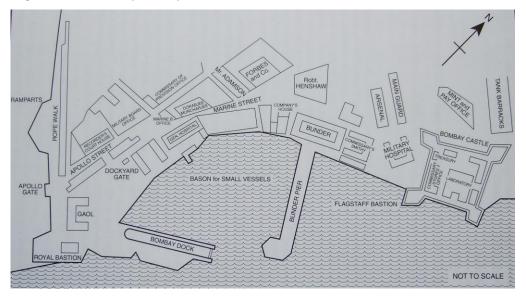


Figure 1j: Bombay Dockyard in 1803 (Prior to building of the Duncan Dry Dock)¹³⁷

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¹³⁵ Bulley, A., 'Wadia Family', *Dictionary of National Biography*, http://www.oxforddnb.com/ accessed 7th July 2011.

136 Plan of Bombay Dockyard in 1750, National Maritime Museum, RIN/82.

1.5 Management and manning of the naval yards

1.5.1 Management

The positioning of naval squadrons overseas resulted in the establishment of naval yards with careening facilities and store houses. From their formation the need for administration was recognised. The necessity to issue, maintain stock levels and securely house naval stores required accurate record keeping and timely re-ordering. Recording what refit work was performed, by whom, when and for how long, required a muster of the men and the hours they worked. This vital clerical function was invested in the naval storekeeper and muster master, also known as the naval officer. The Salary and Pension lists of the Admiralty first records the appointment of a naval storekeeper to Lisbon in 1703, Port Mahon in 1708 and Gibraltar in 1725. It was not until 1721 that the salary list records storekeepers being appointed to the West Indies, initially at Jamaica and with Antigua following in 1731. It was not until 1756 before a storekeeper was appointed to the North American station with the establishment of the naval yard at Halifax. From their first appointment the position of naval storekeeper was always filled at Port Mahon, Jamaica, Antigua and Halifax providing a constant management presence at the naval yards.

The necessity for technical expertise and management in a naval yard was also recognised with the appointment of a master shipwright and master attendant. Although these officers were not always present in peacetime, they were usually employed in wartime. During peacetime fewer vessels were stationed overseas, resulting in the role of the master attendant being carried out by a master of the ships in the harbour. In the absence of a master shipwright being appointed by the Admiralty the commander-inchief would usually choose a carpenter from his squadron to act in that capacity, if considerable refit or establishment work was required. Alternatively the carpenter of each ship managed their own refits and liaised with the storekeeper for their needs.

The master shipwright, master attendant and naval storekeeper were known as the principal yard officers, with the storekeeper being the senior post. The yard officers reported to the Navy Board and the naval commander-in-chief, who corresponded with the Admiralty and Navy Boards. Initially the need for a senior manager above the principal officers was not considered necessary, but in wartime the practice of

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¹³⁷ Plan of Bombay Dockyard in 1750, NMM, RIN/82.

¹³⁸ Index and Digest to the Salary and Pensions Books contained in ADM7/809-821, TNA, ADM 7/823

appointing a naval captain as a resident commissioner occasional occurred. It was not until the American War of Independence that the practice became systematic. Resident commissioners were appointed to Halifax in 1775, Antigua in 1779 and Jamaica in 1782. However, it was only at Halifax a commissioner remained in peacetime.

1.5.2 Manning the naval yards

As the naval bases grew out of the need for a ship's company to securely repair, resupply and refit their vessel, so did the issue of who was to perform the work. There were three choices with advantages and disadvantages in the method selected, using the squadron's crews, using local contracted artificers and labours, or to recruit dedicated artificers to serve at the shore establishment. In reality by mixing these alternatives the disadvantages of the individual solutions was avoided and the advantages maximised. This was to be the case at all the overseas yards, but the West Indian yards also became involved in the best way to utilise the local slave labour force.

The advantages of using the squadron's crews were many. The required skill groups of artificers, labours and managers (the commissioned and warrant officers) were present and on the spot. As the workforce had already been paid for normal duties, a bonus system could be provided with the costs being to a large extent predictable. There were also many disadvantages in using a vessel's crew, particularly in the tropics. Not only did the ships require refitting, but the crews required rest and recuperation. Similarly the effort required to un-load a ship, careen and clean the hull, and load a ship was considerable. At the West Indian yards the death of sailors may have been accelerated by too much refit work in addition to the hot climate and mosquito borne diseases.

British naval administrators had used the practice of contracting for many services since the seventeenth century, ranging from provision of health services, victualling and naval stores manufacture and delivery, to building ships and supplying labour. The use of contract labour at the overseas yards had the advantage of removing or supplementing the need to use the ship's crews. A further advantage to contract labour was it could be used to service the known and expected base load of refit activity with an option to be increased to meet peak loads. The main disadvantage of using contract labour was the potential high cost brought about by a high market rate caused by local demand outstripping supply. When this cost reached a level that was far in excess of using government employed artificers, than recruitment of a dedicated crown workforce was

the next logical step. The cost of labour in the West Indies was high due to the death rate of individuals who worked ashore. The hot climate, hard toil and yellow fever caused many deaths and hence the labour market was constantly dominated by the need for skilled and un-skilled labour. This problem had been solved since European occupation in the West Indies by the forced importation of Africans and their enslavement.

It would appear the cost of locally contracted skilled labour became high as artificers were sent from Britain. This solved the skilled labour problem, but recruiting labours from Britain was illogical as there was an alternative to the hire of local slaves, they could instead be purchased.

In February 1725 the Navy Board proposed to the Admiralty the additional pay rates to be paid to ship's artificers. This was brought about as the Navy Board had noticed that very high sums had been paid to contractors that were far in excess of rates in Britain, with eight shillings a day being quoted. Their proposed rates are shown in table 1b¹³⁹

Per Day Allowance	East Indies,	Barbados &	All other foreign
(Shillings & pence)	Jamaica & Virginia	Antigua	parts
Master carpenter	2s 6d	2s 3d	2s 0d
Carpenter's mate	2s 0d	1s 9d	1s 6d
Carpenter's crew	1s 6d	1s 3d	1s 0d

Table 1b: Proposed daily pay rates for warship artificers

These proposed wage rates were insufficient, as although crews were satisfied with working on their own ship they were reluctant to work on other ships in a squadron. The Navy Board's solution was to pay shipwrights and caulkers twice as much a day on other ships of the squadrons, for example one shillings per day on their ship and two shillings per day on another ship at Jamaica. This was a very economic approach as the price of a locally hired shipwright or caulker per day was ten shillings and five shillings per day for a slave. This not only encouraged crews to work on other vessels but indicates the market cost of skilled and unskilled labour at Jamaica. 140

¹³⁹ Navy Board to Admiralty, 22nd February 1724/5, Baugh, D. (ed.), Naval Administration 1715-1750,

¹⁴⁰ Navy Board to Admiralty, 13th February 1726/7, Baugh, D. (ed.), *Naval Administration 1715-1750*, 335-337.

Creating a dedicated labour force was the logical approach for the Admiralty. Admiral Stewart, commander-in-chief Jamaica, wrote to the Navy Board in 1729 with a proposal for purchasing and training government owned slaves. In this letter he suggested a workforce of thirty, with the young being apprenticed to the master caulker, carpenter or builder and to be brought up in that trade; ¹⁴¹ this idea was to reappear at Cape Town in 1809. ¹⁴² Examination of the paylists in the 1740s and the letters by Admiral Knowles, the Navy Board and the Admiralty in that period shows that slaves had been purchased and trained as King's Negros at Jamaica. ¹⁴³

Sending out artificers from Britain was also a tactic that the Navy Board used to staff the overseas yards, but such appointments were difficult to fill especially for the West Indies. Although the West Indies became known as the grave yard of the British Army during the campaigns of the 1790s, this was already known to potential dockyard recruits throughout the eighteenth century as a dangerous place to serve and work. Therefore to get shipwrights and other artificers to come to the West Indies, an element of including 'danger money' appears to have entered the thinking of officials, as higher rates of pay, compared to a home dockyard, and other inducements were proposed.

Persuading artificers in England to serve at an overseas yard was difficult but in the 1740s the Navy Board introduced measures to recruit British specialists. ¹⁴⁵ In 1740 the terms offered to shipwrights were, a pay rate of 32 shillings per month, known as home pay, and a daily pay rate of 2s 6d paid at Gibraltar and Port Mahon and 3s 6d at Jamaica. The outward and homeward passage was provided with free victualling. The initial service term was for three years with on return employment at a home dockyard an entitlement to an apprentice. These latter conditions were subject to satisfactory service. However, additional temptation was required to staff the West Indian yards as there were no volunteers for Jamaica. The situation must have been critical as the pay rate for Jamaica was raised in 1741 to 36 shillings for monthly home pay and a day rate of 5 shillings. Other sweeteners were the offer of double pay for apprentices, compared to that at home, and access to the Chatham Chest and Greenwich Hospital services in the event of need if incapacitated by their service at Jamaica. These inducements were

¹⁴¹ Admiral Stewart to Navy Board, 11th November 1729, Baugh, D. (ed.), *Naval Administration 1715-1750*, 351-52.

Day, J., 'The Role of the Commissioner at the Cape of Good Hope 1809-1813', Unpublished MA Dissertation, (Exeter University, 2007), 39-41.

¹⁴³ Baugh, D. (ed.), Naval Administration 1715-1750, 396-400.

¹⁴⁴ Baugh, D., British Naval Administration in the Age of Walpole, Note 101, 362.

¹⁴⁵ Baugh, D., British Naval Administration in the Age of Walpole, 362-364.

successful and were extended to Antigua in 1743 to attract men to work in the English Harbour yard.

The recruitment of British artificers to the overseas yards continued throughout the period with very similar conditions to those outlined above, for example, in 1808 the artificers sent to the Cape of Good Hope had the same employment conditions with the only difference being the daily pay rate. It was the creation of the Halifax naval yard that was to introduce another variation to the composition of the workforce, recruitment of residents of Nova Scotia. During the Seven Years War the artificers came from Britain returning at the end of the war, but by 1800 the labour force came predominately from the colony. 146

1.5.3 Foreign yard structure, composition and squadron's supported in 1792

By 1792 the management and composition of the workforce at Britain's overseas, or as referred to at the time, foreign, yards had formed a settled pattern. With the loss of Minorca Britain no longer had a naval base in the Mediterranean, with only Gibraltar able to provide local support. Table 1c below shows the posts occupied in 1788 and indicates Gibraltar was a very minor yard. Although table 1c shows the management organisation in 1788 this was still the structure at these yards in 1792.¹⁴⁷

Halifax was the only yard with a full technical and management structure. A master attendant is absent at all the other yards with presumably his duties being delegated by the commander-in-chief to a master of one of the ships of the squadron. The composition of the Gibraltar yard together with the absence of a master shipwright indicates its role was primarily for supply rather than one for refitting. However, the Gibraltar yard paylists indicate the master shipwright's supervisory role was undertaken by the foreman of shipwrights. This yard classified its workforce as garrison employees with no shipwrights being present.

Table 1d below shows the number of artificers and labourers in these yards in the last full year before the commencement of the Great Wars with France in 1793. The Jamaica yard paylists record those who received home pay and are thus the artificers, and their apprentices, who had come from Britain. The paylists recording the slaves that were

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¹⁴⁶ Gywn, J, Ashore and Afloat: The British Navy and the Halifax Naval Yard Before 1820, 106-107.

¹⁴⁷ Derived from 1792 paylists for Halifax Yard, TNA, ADM 42/2155; Derived from 1792 paylists for Jamaica Yard, TNA, ADM 42/2280; Derived from 1792 paylists for Antigua Yard, TNA, ADM 42/2090; Derived from 1792 paylists for Gibraltar Yard, TNA, ADM 42/2234.

Yard	Halifax	Jamaica	Antigua	Gibraltar
Resident	Yes	No	No	No
Commissioner	& two clerks			
Naval Storekeeper	Yes	Yes	Yes	Yes
	two clerks	three clerks	two clerks	one clerk
Master Shipwright	Yes	Yes	Yes	No
	one clerk	one clerk	one clerk	
Master Attendant	Yes	No	No	No
	one clerk			

*Table 1c: Management and clerical organisation – Foreign Yards 1788*¹⁴⁸

employed are missing. However, the paylists for the Antigua yard do record the use of slaves, particularly as labourers. Given the size of the squadrons supported, and the additional numbers of European artificers employed at Jamaica, a slave workforce was probably present especially as paylists in 1809 confirm their presence. From table 1d the number of workers in the overseas yards in 1792 was 319 consisting of Gibraltar with 46, Antigua with 106, Halifax with 111 and Jamaica with 56. If an allowance is made for the presence of labourers and slave artificers at Jamaica another 50 to 70 could be added with the total overseas workforce approaching 400.

The Antigua paylists revealed the existence of instructions for the government of Negroes as these documents recorded establishment Negroes being employed as watchmen, with a number being recorded as invalid caulkers and sawyers. The naval storekeeper headed these paylists thus, 'agreeable to Warrant of Commissioner Moutray dated 10th March 1785 and the 8th Article of Printed Instructions respecting Government of Negroes'. ¹⁵⁰

The management and workforce of the overseas yards were supporting the ships shown in table 1e and show the West Indian yards supported more ships than on the North American station. However, Halifax was the only yard with a resident commissioner while Jamaica and Antigua had a combined workforce that exceeded that at Nova Scotia, but they were without a commissioner. The Jamaican station was the largest

¹⁴⁸ Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 725, 727.

¹⁴⁹ Jamaica Dockyard paylists 1809, TNA, ADM 42/2286.

¹⁵⁰ Antigua Dockyard paylist, TNA, ADM 42/2090, 30th September 1792; Abstract of Standing Orders to Dockyards, Ropeyards and Foreign Yards to 1805, TNA, ADM 7/411.

	Halifax ¹⁵¹	Jamaica ¹⁵²	Antigua ¹⁵³	Gibraltar ¹⁵⁴
European				
Master sailmaker	1			
Foreman of	1	1	1	1
Shipwrights				
Foreman of Sailmakers	1			
Foreman of House	1	1		
Carpenters				
Foreman of Smiths	1	1	1	
Foreman of Sawyers		1		
Foreman of Labours	1		1	
Shipwrights and	21			
Caulkers (double				
handed men)				
Shipwrights	7	16	12	
House Carpenters	14	3	2	
Garrison Carpenter				19
Sailmaker	3	1	1	
Blacksmiths	6	1	4	
Blockmaker	1	1	1	
Caulkers				22
Sawyers	4			2
Armourers				2
Masons	9			
Other Yard (Watchmen	21	16	11	
etc)				
Labourers	65			
Apprentices	16	14	9	
Total European	111	56	43	46
Slaves				
Shipwrights		Unknown	1	
Caulkers		Unknown	6	
Masons		Unknown	4	
Sawyer		Unknown	1	
Labours		Unknown	51	
Total Slaves		Unknown	63	

Table 1d: Workforce at Foreign Yards – 1792

overseas command in both number of vessels and men and together with the Leeward Islands station accounted for 40 percent of the manpower, and 41 percent of the ships allocated to foreign stations. This would therefore have generated a greater expenditure on refitting and naval stores than at the Nova Scotia and Newfoundland commands, as only 15 percent of manpower and 26 percent of ships were allocated. It was not,

¹⁵¹ Derived from 1792 paylists for Halifax Yard, TNA, ADM 42/2155.

¹⁵² Derived from 1792 paylists for Jamaica Yard, TNA, ADM 42/2280.
153 Derived from 1792 paylists for Antigua Yard, TNA, ADM 42/2090.

¹⁵⁴ Derived from 1792 paylists for Gibraltar Yard, TNA, ADM 42/2234.

therefore, the number of ships or men on the North American station, or the size of the naval yard establishment, that dictated the presence of a resident commissioner at Halifax and a full complement of principal officers. It would seem there were additional reasons for this allocation of a senior manager. A reason possibly lies in the contribution the resident commissioner made as a representative of the British government; serving as a magistrate was an additional duty performed by resident commissioners.

	Number of Ships (Average) ¹⁵⁵	Number of Men (Average) ¹⁵⁶
East Indies	5	1095
Jamaica	11	1312
Leeward Islands	3	610
Newfoundland	5	448
Nova Scotia	4	367
Mediterranean	6	1005
Total	34	4837

Planned deployment of ships and men at overseas stations (Quarters 3 and Table 1e: 4 of 1792)¹⁵⁷

Victualling and care of sick and wounded 1.6

The naval yard provided the facilities and personnel to refit and supply vessels with naval stores, but access to fuel, water and food together with the care of the sick and wounded of the vessels, turned these locations into naval bases.

A ready source of clean, fresh water and fire-wood would seem to be relatively easily met, but supplying these basic requirements was particularly challenging for Gibraltar. Small tanks for collecting rain water near the new mole were the only local storage until 1804 when the Rosia Tanks were available. 158 Byng on returning to Gibraltar after his failed relief of Minorca in 1756 had to send half his fleet to Tetuan, North Africa for water, indicating this storage was inadequate or at least needed to be preserved. 159 On

¹⁵⁵ This average has been taken from the total number of ships on the individual stations from July 1792 to December 1792 and dividing by 6; Source: TNA, ADM 8/68.

¹⁵⁶ This average has been taken from the total number of men on the individual stations from July 1792 to December 1792 and dividing by 6; Source: TNA, ADM 8/68.

¹⁵⁷ Planned deployment of HM Ships and Men, TNA, ADM8/68, 1792.

¹⁵⁸ Coats, A., 'Rosia Water Tanks', Transactions of the Naval Dockyards Society, Vol. 2, 2006, Southsea, (Hants), 83. ¹⁵⁹ Coad, J., *The Royal Dockyards 1690-1850*, 317.

Minorca there were numerous springs for irrigation and hence a secure water supply was available. Timber for fuel was also available on the island, but the British occupation possibly caused deforestation. Such materials were non-existent on Gibraltar and hence when at war with Spain supplies came from North Africa, or from Britain as was the case during the siege of 1779-83. This illustrates the limited use of Gibraltar as a fleet operational base unless there was access to North Africa for fuel during a war with Spain.

When ships were on overseas duty obtaining provisions was achieved in a number of ways. ¹⁶³ To supplement the salt beef and pork supplied by the Victualling Board, food could be purchased by a ship's purser from local suppliers, or from an approved Victualling Board merchant, such as a console, but this method was for small scale requirements. Where squadrons congregated another method was used, that of a contractor delivering, at an agreed price, a full range of provisions at one or more ports. Examples of these methods appeared throughout the eighteenth century and were particularly suited to peace-time conditions, but in wartime the risk of a contractor being unable to remain solvent and to supply goods was recognised, resulting in the Victualling Board suspending contracts and providing its own local management. These managers were agent victuallers who either served afloat with a squadron or on shore at the main ports.

Whatever method was used it was successful as provisions were available and seldom restricted operations, but the overseas victualling arrangements provided many opportunities for fraud by agent victuallers, consuls, ship's captains and pursers. How to remove these abuses exercised the Commissioners on Fees and Naval Revision and are examined in chapter two.

Enabling the officers and crews of an overseas squadron to recover from wounds or sickness resulted in the early establishment of naval hospitals at foreign locations. The advantages of removing the sick from operational warships were many, if only to lessen

¹⁶⁰ Gilbert, E. W., 'Influences of the British occupation on the human geography of Menorca', *The Scottish Geographical Magazine*, Vol. 52, (1936), 380. ¹⁶¹ Gilbert, E. W., 'Influences of the British occupation on the human geography of Menorca', 378.

¹⁶¹ Gilbert, E. W., 'Influences of the British occupation on the human geography of Menorca', 378 Harding, R., 'Gibraltar: A tale of two sieges 1726-7 and 1779-83', *Transactions of the Naval Dockyards Society*, Vol. 2, (Southsea, Hants, 2006), 43.

¹⁶³ The Eight Report of the Commission on Fees discussed in chapter two provides an examination of victualling at overseas stations.

the spread of infection, but it also benefitted the patients with an unquantifiable effect on moral.

The first instance of an overseas hospital being formed was in 1701. Admiral Benbow, before departure to Jamaica, asked for a hospital ship for isolation of infectious cases, a house on shore to receive other patients, and a physician with medical supplies. What the Admiralty provided instead resulted in the formation of an overseas hospital with an organisational structure that was to be repeated throughout the century. This was for a dedicated building to serve as a hospital, an agent for administration, medical staff and medicines with fresh food for the patients being supplied by local contract. ¹⁶⁴

The Jamaican hospital was quickly followed by the establishment of a similar institution at Lisbon in 1705 and at Minorca in 1709.¹⁶⁵ The hospital at Minorca was initially housed in temporary premises when the newly arrived agent rented a part of the priory with this in use till 1712, when patients were moved into purpose built accommodation.¹⁶⁶ Of these three hospitals only the establishment at Minorca was retained with the staff of the Sick and Wounded Board at Jamaica and Lisbon being called home in 1712.¹⁶⁷

The site chosen for the Minorca hospital was on an island in Port Mahon harbour and on completion had 16 wards with a capacity for at least 336 patients. This single story hospital continued in operation until the 1770s when it was re-built as a two story building providing 1200 beds in 40 wards. The care of the patients came under different arrangements in this century and was affected by the presence, or lack of presence, of the Sick and Wounded Board. This organisation was only in place during the eighteenth century in wartime, so the hospital was managed and care provided by a contractor. The arrangement did not deliver the standard of care expected by commanders-in-chief in wartime with the re-formulated Sick and Wounded Board resuming responsibility. ¹⁶⁸ The crews of the Mediterranean squadron were also provided with shore health care at Gibraltar. Initially this was provided by contracting private homes to house the sick but

¹⁶⁴ Harland, K., 'The Establishment and Administration of the First Hospitals in the Royal Navy, 1660-1745', Unpublished PhD, Exeter University, (2003), 136-142.

¹⁶⁵ Harland, K., 'The Establishment and Administration of the First Hospitals', 224-232.

¹⁶⁶ Harland, K., 'The Establishment and Administration of the First Hospitals', 263

Watson, P., 'The Commission for victualling the navy, the Commission for sick and wounded seamen and prisoners of war and the Commission for Transport, 1704-1714', Unpublished PhD, University of London, (1965), 381.

¹⁶⁸ Coad, J., The Royal Dockyards 1690-1850, 333-339.

by the 1730s a purpose built hospital was being considered. This hospital was completed in 1746 as a two story building capable of holding up to 1000 patients. 169

The Minorca and Gibraltar naval hospitals provided the Mediterranean squadron with considerable capacity, but the West Indies was a different story. Following the return of the Sick and Wounded staff from Jamaica hospital in 1712 the temporary wooden hospital disappeared. The navy resorted to use of hiring houses and contract care, but with war in 1739 and the stationing of a fleet in the West Indies, the building of a naval hospital at Jamaica was again considered. This resulted in a hospital being built, but it was not ready until 1745 unfortunately its location at New Greenwich proved unsatisfactory so that by 1749 it was concluded the hospital was "rather a hurt to the Service than a relief". The need for health care in the West Indians was undoubtedly needed and currently under examination. 171

Although Halifax was equipped with a naval yard in the 1750s it was not until the 1780s that a satisfactory hospital was built at that base. Initially a small naval hospital was provided in 1750, but this was easily overwhelmed, and was not supplemented until 1776 when a military barracks was temporarily converted into a hospital. This was superseded in 1779 by a storehouse conversion, but following a report by Commissioner Hamond in 1781 a purpose built hospital was constructed and ready to receive patients in 1783. The plans sent from England indicate this hospital had a capacity for up to 127 men and 20 officers. This hospital was staffed by a surgeon, dispenser, a purveyor, a matron, hospital mates, nurses, a cook, a porter and labourers. Although this facility at Halifax did not have the capacity of Gibraltar's hospital, or the recently lost Minorca hospital, all three hospitals demonstrate the developments in shore medical care at overseas bases since the opening of the hospital at Jamaica in 1702.

1.7 Summary

Britain's overseas naval bases in 1792 are marked as 1, 3, 4 and 5 on figure 1k with 2 showing Port Mahon, which was lost on the fall of Minorca during the America War of Independence. The British navy also had access to the East India Company port and facilities of Bombay in the Indian Ocean. Although these bases were on British

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¹⁶⁹ Coad, J., The Royal Dockyards 1690-1850, 320.

¹⁷⁰ Baugh, D., British Naval Administration in the Age of Walpole, 217-218.

¹⁷¹ Convertito-Farrar, C., 'The Health of British Seamen in the West Indies, 1770-1806', ongoing PhD, Exeter University.

¹⁷² Gwyn, J., Ashore and Afloat – The British Navy and he Halifax Naval Yard, 43-45

sovereign territory, by the use of diplomacy, access was gained to other ports. A notable example of this was Lisbon as it was frequently used as a repair and re-supply base throughout the eighteenth century.

Figure 1k below and table 1a show Britain's bases and ship deployment prior to 1792 and illustrate the development of Britain's strategy for the defence of its commercial and colonial assets. This defence consisted of stationing small overseas squadrons with local logistical support. In peacetime the squadrons carried out Navigation Act and customs compliance, fishery protection and diplomatic duties. On war being declared the squadrons provided instant defence and opportunities to close enemy maritime trade in their area. A further benefit was the ability to support larger squadrons by increasing the storage capacity and workforce. This was possible because the basic infrastructure required was already present.

Common themes operated in the establishment of this network of overseas bases in terms of strategy, with those in the West Indies being essentially defensive. However, the establishment of naval bases at Louisbourg, and later at Halifax, was initially offensive so operations could be mounted to capture Canada. The role of Gibraltar and Port Mahon were also offensive in nature, but only if they could be defended and hence provide a home for an aggressive fleet. These forces could pin down enemy fleets and thus leave other areas free from their interference. The Company's presidencies supplied the necessary ports for both a defensive and offensive policy, with Bombay's facilities being particularly valuable.

These naval bases required government funding and were capital intensive. If an ally's port or British colonial commercial port's facilities could be hired, and was also in a relevant operational location, then a cheaper option was available. This was the case in Britain's initial operations in the late seventeenth century and was to continue throughout the period, but in the case of an ally's port, it relied on diplomacy and hence was not politically reliable. The maturity of Britain's colonial North American ports allowed the limited number of ships on that station to be supported, but with the area becoming a major theatre in the mid eighteenth century, a purpose built base was established at Halifax.

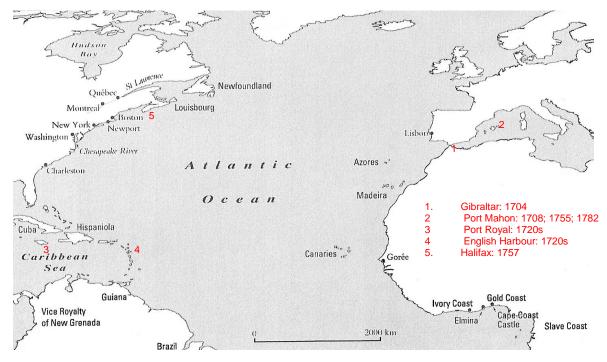


Figure 1k: British Overseas Bases prior to 1792

Economic considerations were indicated in the approach taken in the operation and development of the Admiralty's bases. A naval yard was established, followed by victualling arrangements and naval hospitals being considered. Naval yard development followed a similar path with, at first, provision of a careening wharf, hire of local storage space and the appointment of a storekeeper to administer the yard. This was followed by building and expanding government owned storage buildings, mast, smith and boat houses and additional careening capacity. The provision of a mast pond was frequently made and during wartime, a master attendant and master shipwright were appointed. The requirement for security from theft was accounted for by the building of walls around the developing yard. All these factors indicate that investment in facilities or management was only made when a benefit could be anticipated.

The workforce used to refit and repair the navy's ships also shows a consideration for cost and benefit. Initially the artificers and crew of a ship would only repair their own ship, but by financial inducements this was extended to other ships of a squadron. This was followed by hiring from local sources skills that the crews did not possess, or to supplement or increase the capacity of the yard. Using contract labour was a resource that was frequently used, but the day rate charges could become excessive, resulting in the recruitment of a dedicated civilian workforce. Frequently artificers from Britain were encouraged to serve at the overseas naval bases. An additional strategy used in the West Indies was the purchase of slaves with this source providing a significant

contribution to a yard's workforce. The mix of ship's crews, hired artificers and employed civilians was a developing practice and when perfected provided a flexible, economic and effective way of refitting the overseas squadrons.

Hiring labour was not the only use of local resources. The North American colonies were rich in agriculture produce, timber and the materials to manufacture naval stores, accompanied by a growing capacity for shipbuilding. An experiment was tried to explore this capacity, but the Admiralty halted further exploitation on the Navy Board's advice. India also had a great resource of food, timber and skilled workmen at all of the Company's presidencies, but a special mention must be made of Bombay. At this port the Bombay presidency was to build a yard, with all the facilities that could be found at a British royal dockyard including dry docks.

The refitting and re-supply of naval stores was only one aspect of these naval bases as the two other civilian naval departments were also represented. Agent victuallers were appointed by the Victualling Board to arrange for local purchase of fresh and preserved food. Storehouses for the preserved food were also to be a feature of these bases. Caring for the sick and injured of the navy was also carried out at these locations, with the building of purpose-built hospitals becoming another feature at these overseas locations.

At the end of the American War of Independence the surviving British naval yards, with attendant hospitals and victualling organisations, had reached maturity. The investigations of the Commission for Fees in the 1780s recognised the benefits of these bases, but they made recommendations for improvements in both management and financial control. Chapter two examines their recommendations and the background to initiating the Commission.

Chapter two: Proposals for reform in the management of overseas naval yards, hospitals and victualling organisations

2.0 Introduction

The war with France, Spain, the Netherlands and the newly formed United States of America created significant political turmoil in Britain. The catastrophic loss of thirteen of Britain's North American colonies, Florida, Minorca and some West Indian islands, created a crisis in national confidence and reforms in government and management of Britain's affairs were brought forward.

These reforms were precipitated by the appointment of commissioners to examine public accounts by Lord North in 1779. 173 1782 was a watershed year with reform of the Treasury and the introduction of the Foreign and Home Departments from the existing secretaries of state for the Northern and Southern Departments. This was to be the case until 1794, when an additional secretary of state for War and Colonial affairs was created. 174 This was followed in 1783 by the Public Offices Bill. In 1784 bills for the better regulation of the East India Company were enacted with 1785 bringing the Fees Commission Act. This chapter concentrates on the findings and recommendations of the Commission on Fees and the subsequent actions of the Select Committee on Finance, Commission of Naval Enquiry and Commission of Naval Revision. The reports of these commissions not only provide key sources into the contemporary management of Britain's overseas naval bases, but also the cultural changes that were being proposed for administrating and manning her civil departments both at home and abroad.

Charles Middleton's, later Lord Barham, influence on Pitt and the findings and recommendations of the Fees Commissioners was considerable. As comptroller of the Navy Board from 1778-1790 Middleton provided input to the Commission on Fees that was to be of critical importance to the Fees reports on the navy. This can be particularly seen in the letters from Middleton to Pitt and Baring in 1785 and 1786. In 'Mr. Pitt's Queries' Middleton, provided answers to questions of naval administration and preparations required to maintain a suitable fleet at the start of a war and the subsequent enlargement of that fleet. However, it is in answer to the tenth question that he

¹⁷³ The Commissioners Appointed to Examine, Take and State, The Public Accounts of the Kingdom, (20 Geo III c54).

¹⁷⁴ Sainty, J., *Office Holders in Modern Britain: Volumes 2, 5 and 6,* (1972-76), http://www.british-history.ac.uk/catalogue.aspx?gid=42&type=1.

¹⁷⁵ Laughton, C., Letters and Papers of Lord Barham – Vol. 2, NRS, (1910), 198-208.

suggested restructuring the Navy Board into committees with the comptroller at its head. This was to be a recommendation of the fifth report of the Fees Commissioners, but had to wait until 1796 before its introduction.

The lobbying of Baring can be seen in the letters Middleton sent in which he provided a summary of the duties and workings of the Navy Board and Navy Office. ¹⁷⁶ In these letters can be seen the origins of the recommendations for a Transport Board, a Civil Engineer of dockyard facilities and the re-structuring of the Navy Board. In the absence of interviews with overseas yard officials the Fees Commissioners appear to have used the instructions provided for home and foreign dockyards. Middleton was collecting these instructions with a view to their rationalisation whilst comptroller. ¹⁷⁷ Middleton's direct influence on naval reform will be seen again as chairman of the Commission of Naval Revision.

Figure 2a provides a brief chronological record of the significant activities and events that affected the administrative departments of the navy, with particular relevance to the implementation of the recommendations of the Commission on Fees. The period shown, 1793 to 1817, contains considerable management reorganisation and underlying cultural change. Considering this period encompassed the great wars with France it could be considered remarkable that the underlying management structure and employment system was changed to such a degree. However, the pressure engendered by financial crises and for national survival probably had an influence on the scale and breath of change. Amongst the initiatives for these changes were the various parliamentary committees and commissions with the thirty-first report of the Select Committee on Finance, the Commissions of Naval Enquiry and of Revision, being particularly important. The reports by the Commission of Naval Revision have the greatest relevance to the study of the overseas, or foreign, yards as this commission implemented many of the recommendations of the ninth report of the Commission on Fees.

¹⁷⁶ Laughton, C., Letters and Papers of Lord Barham – Vol. 2, 232-249.

Laughton, C., Letters and Papers of Lord Barham – Vol. 2, 250, 287.

	Organisation	1793 1794 1795	1796 1797 1798 1799 1800	1801 1802 1803 1804 1805	1806 1807 1808 1809 1810	1811 1812 1813 1814 1815	1816 1
			all crisis Income T	ax Peace	Grenville	Peace	Peace
Prime Minister			Pitt the Younger	Addington Pitt	Portland	rceval Liverpo	1
First Lord of Admiralty		Chatham	Spencer	St. Vincent 1st Melville Barham	Grey Mulgrave T. Grenville	Yorke 2nd Melv	<u> </u>
Treasury agrees to Fees commissions recommendations	Treasury	★ Order in Counc	(Jun)				
Deputy Comptroller appointed	Navy Board	*	 	 	 		
Transport Board - Established (4th July 1794)	Transport Board	* *	Care and custody of prisoners of war to and Wounded Board	ansfer from Sick	★ Duties of Sick and Wounded B moved to Transport Board	oard Transport Board dis	solved ★
Agreement to recommendations of Commission on Fees with exception of permanent Under Secretary (Feb).	Secretaries of State	*					
Hydrographic Office	Admiralty	*	Dalrymple appointed	 	★ Replaced by Hur	d	
Inspector of Telegraphs appointed	Admiralty	*	i ! !	 	 	Post remove	d ★
Civil Engineering Office	Admiralty / Navy Boards	Order in Council	Appointment of Inspector Gene Centre of excellence for civil v consultant	ral of Naval Works (Bentham). orks and 'in-house' management	★ Move to Navy B Civil Architect a Engineer Depart	nd surveyor	
Deliberation and action on Commission on Fees	Admiralty						; ; ; ; ; ; ;
Committee structure, removal of fees etc; enhanced salaries (May)	Navy Board		★ Order in Council (Jun)				+
Increase in Sea Service Estimate.	Admiralty, Dockyards and Victualling		★ Sea Service funding ra ★ £7 per person per luna	sed to month			
Thirty-first report of Select Committee on Finance.	Admiralty, Dockyards and Victualling		Provides an upo Commission on	ate on implementation of Fees			
First Lord of Admiralty commissions Samuel Bentham to prepare plan on dockyard reform.	Dockyards		*				
Admiralty and Victualling Departments. Removal of Fees etc from Admiralty office and Victualling Board staff	Admiralty and Victualling Office		★ Orde	r in Council (Jan)			
Dockyard reforms	Dockyards			 ★ Apprentice indentures t Departments ★ Subsistar 		★ School of Naval Architecture S ★ dentures transferred to Resident Communings) ★ Weekly paym workforce in	nissioner ent to
Implementation of Bentham's revision of Commission on Fees recommendations	Dockyards		Fees removed	★ Order in Council (May) 1. Chips replaced by allowance, Appre	ntice	WORLDACE III	
Commission of Naval Enquiry	Various		T				
Commission of Naval Revision	Various		T		'' 		T
Fifth Report of Naval Revision	Foreign yards			Completed (Aug) ★ ★ Order in Coun Resident Com Cape and East	nissioners appointed to	†
Twelth Report of Naval Revision	Victualling Abroard		 		-1.4.1 (D. 1) *	ˈrˈr	! ! !
Thirteenth Report of Naval Revision Instructions for Agents, Surgeons etc Abroad)	Transport Board (Abroad)			Con	ppleted (Dec)★ ★ Order in Cou	cil (Sep).	

Figure 2a: Chart showing principal milestones and activities in the reform of civil naval departments, 1793-1817

Historians of the civil naval departments and particularly the royal dockyards have all used to considerable effect the reports of the Commissions on Fees and of Naval Revision. The reports on the Admiralty Board, Navy Board, Dockyards, Sick and Hurt Office and the Victualling Office have been their main sources, but the ninth report of the Commission on Fees, the fifth, twelfth and thirteenth reports of the Commission of Naval Revision have been generally ignored.

2.1 Commission on Fees, Gratuities, Perquisites and Emoluments²

In 1783 the Public Offices Bill was introduced and although not passed by parliament this formed the basis of the Commissioners' Act into fees. Pitt introduced three significant changes to the Fees Bill. The new commission was set up independent of the existing Commissioners on Public Accounts; the Commission on Fees was composed of only three members, of whom two were already in government employment. The most significant change was that the Fees Commissioners would report directly to the Privy Council rather than to parliament. If the recommendations of the reports were to be carried out, then only an Order in Council would be needed. These three changes ensured the commission was low in cost and acted as a consultancy body for the executive. This allowed for reflection on its recommendations and hence was a subtle political tool rather than providing a stick for parliament to punish the executive.

The Fees Commissioners were John Dick, William Molleson and Francis Baring. Dick and Molleson were comptrollers of army accounts with Molleson having been secretary to the Commission of Public Accounts; hence they both had knowledge of the reward systems of public employees with Molleson being familiar with commissions. Baring was a successful merchant and banker, who was to become an individual, on whom the government was to rely. Baring was employed as a government contractor and consultant in the early 1780s. He became a director of the East India Company from 1779 until his death in 1810, and was Pitts's preferred candidate as chairman of the East India Company in the 1790s. Consequently he was influential in both governmental and quasi-governmental organisations.

¹ Haas, J., A Management Odyssey, The Royal Dockyards 1714-1914; Knight, R., 'The Royal Dockyards in England at the time of the American War of Independence'; Morriss, R., The Royal Dockyards during the Revolutionary and Napoleonic War; Morriss, R., Naval Power and British Culture, 1760-1850.

² Commission to enquire into the Fees, Gratuities, Perquisites and Emoluments which are or have been lately in several Public Offices, (25 Geo III 19).

³ The Commission into Public Accounts consisted of eight members.

⁴ Breihan, J., 'William Pitt and the Commission on Fees, 1785-1801', 63.

Date	Activity	Remarks and Government area		
		investigated		
1785 (26 th Aug)	Commission started	Order in Council		
1786 (11 th Apr)	First report complete	Secretary of State Departments		
1786 (20 th Jun)	Second report complete	Treasury		
1787	Commission's life extended	Act of Parliament required		
	by an additional two years			
1787 (27 th Dec)	Third report complete	Admiralty		
1788 (10 th Jan)	Fourth report complete	Treasurer of Navy		
1788 (14 th Feb)	Fifth report complete	Commissioners of Navy (Navy		
		Office)		
1788 (10 th Mar)	Sixth report complete	Dockyards		
1788 (20 th Mar)	Seventh report complete	Sick and Hurt Office		
1788 (17 th Apr)	Eighth report complete	Victualling Office		
1788 (1 st May)	Ninth report complete	Naval and Victualling Departments		
		at Foreign or distant ports		
1788 (30 th Jun)	Tenth report complete	Post Office		
1789 (14 th Oct)	All reports submitted to the	Referred reports to a special		
	Privy Council	committee		
1792 (12 th Jan)	First meeting of special	Reports referred to the departments		
	committee	for comment		
1792 – 1801	Meetings of a special Privy			
	Council committee			
1793	Reports (ex. Appendices)	The reports were again published		
	published by the House of	together with the appendices in 1806		
	Commons			

Table 2a: Commission on Fees - Table of events prior to start of Revolutionary War

Landmarks in the work of the Commission on Fees are shown in table 2a. They indicate the areas investigated by the commission and show the delay in acting on their recommendations. Pitt waited over a year from the completion of the tenth report before presenting the reports to the Privy Council. It took a further two years for the Privy Council to refer them to the individual departments for comment. Historians have suggested various reasons for the delay in presenting the reports to the Privy Council. The regency crisis in 1789 and the fear that public business would be disrupted by

implementing the Fees Commissioner's recommendations being the chief reasons cited. These are likely reasons, but perhaps the state of foreign affairs was also a factor. Pitt was attempting his "Grand Design" for a balance of powers in Europe to preserve peace. However, Britain was to become distracted by her dispute with Spain over Nootka Sound in 1790. Russia was at war with Turkey and Sweden and Britain's foreign policy was to fail over the Ochakov crisis regarding Russia. With France in a state of revolution, there appears to have been considerable uncertainty in foreign affairs. If remaining in power after the 1790 general election is included, it is not so surprising that the Privy Council delayed implementation of the commission's recommendations. Maybe the prospect of civil departments being distracted with their own affairs, rather than providing a known level of service, caused Pitt to pause his reforms; this also seems to be confirmed by Pitt's pragmatic character. Possibly this was a case of allowing the departments involved to be part of the implementation process, rather than just being imposed upon.

The report that chiefly concerns the support of the British navy at overseas locations was the ninth report, but to fully appreciate the findings and recommendations in this report the sixth and eighth reports have to be considered. The ninth report examined the function of the civil naval departments at foreign ports and how they should be managed. As this replicated the function of the home dockyard and victualling organisations, the commissioners frequently referred to their sixth and eighth reports.

2.2 Structure of the reports⁷

The structure of the commission's reports provides an understanding of the process used by the commissioners in their examination of the respective departments. Those familiar with modern management consultant's reports on an organisation's departments and structure will find themselves on recognizable ground.

The first report on the Secretaries of State departments provided the legal justification for the commission's duties and the objectives of the commission for all the areas investigated. The commission stated it was tasked to, "examine and report what Officers and Clerks were employed in the [departments studied]; what was the nature of their

⁵ Breihan, J., 'William Pitt and the Commission on Fees, 1785-1801', 68-69; Morriss, R., *Naval Power and British Culture*, 1760-1850, 136-140.

⁶ Duffy, M., The Younger Pitt, 166-178.

⁷ The reports were originally printed in 1793 but they did not include the appendices hence the chapter refers to the reports printed in 1806 that included the evidence to which the reports referred.

duty, services, and attendance; what were the Salaries, Fees, Gratuities, Perquisites and Emoluments, received by each of them, or their Substitutes; what they might and ought lawfully to have and receive; adding such observations, as might occur to us therein."

The reports followed the same basic layout. The purpose of the department studied was detailed. The people in the department were examined with their evidence being presented in appendices. These appendices detailed their roles and duties with the payment they received being listed in separate categories. The individual's examined received an annual income that consisted of a small basic salary, with additions that were identified as fees, gratuities, perquisites and emoluments. The commissioners evaluated the work performed, made recommendations for improvements in management, and proposed new salary levels without fees, gratuities, perquisites and emoluments.

The key recommendation of the commissioners was the enhancement of salaries to a level approximately equal to that received by the combined salary and additional income streams. The need to provide pensions was also recognised. To ensure security in their old age individuals had either to work until they died, or to sell their posts to their juniors. By removing payment of premiums for posts, a mechanism to encourage retirement was essential. In essence, the measures proposed would promote a cultural change in the way business was conducted by promoting departmental, rather than individual priorities. Significantly, the commissioners were concerned on how these enhanced salaries were to be implemented. Hence, they provided suggestions on how they could be funded without increasing overall expenditure, or penalising any particular group or individuals.

2.3 The Sixth (Home Dockyards)⁹ and Eighth (Victualling Organisation)¹⁰ Reports (1788)

For historians of the royal dockyards the sixth report of the Commission on Fees provides a key text on the organisation and management of these complex entities.¹¹ In

⁸ Reports of the commissioners appointed by act 25 Geo. III. cap. 19. to enquire into the fees, gratuities, perquisites, and emoluments, which are or have been lately received in the several public offices therein mentioned, House of Commons Parliamentary Papers, Printed 15th July 1806, 3.

⁹ Sixth report of Commission on Fees - Dockyards, House of Commons Parliamentary Papers, Printed 15th July 1806, 277-505.

¹⁰ Eighth report of Commission on Fees – Victualling Office, House of Commons Parliamentary Papers, Printed 15th July 1806, 507-547.

¹¹ Chief among these historians have been Haas, Knight and Morriss.

terms of size and complexity they were unique industrial enterprises and presented management problems that deserve study by students of management theory. The report not only documented the duties, payment and department structures, but also provided the interactions in place between the departments and individuals. The importance of stores and contracting practice becomes quickly apparent from studying the report.

The observations and recommendations of the sixth report reflected the general tenor of all the reports. Significantly this report suggests the spreading of existing good practices, strong local management and reforming the system of apprenticeship. All of these measures were reflected in the ninth report with particular relevance for strong local management.

The abolition of fees, premiums, gratuities and emoluments, together with informal gifts, was the starting point for the commission's recommendations. Their thoughts on spreading good practice can be seen in their recommendation to use the stores management system perfected at Portsmouth. 12 Their recommendation for the centralisation of the tasks regarding transports and store ships, anticipated the setting up of a separate Transport Board. The London dockyards currently fulfilling this role, was to be allowed to concentrate on their core function. ¹³ The recommendation to change the system of attaching apprentices from the yard officers to deserving artificers included a compensation system for the former to aid its introduction. ¹⁴ The Fees Commissioners also had faith in the existing system of yard management, as their recommendations were a case of enforcement of existing instructions rather than radical change in process or instructions. The role of the dockyard resident commissioner was seen by the commissioners as economic and effective.

Although the resident commissioner had been part of the dockyard organisation since 1664. 15 the Fees Commissioners' observed that, 'The Commissioners of the Dockyards have not any instructions for their government'. 16 Hence they recommended that this be rectified by the issue of full and detailed instructions. They also indicated that the post was not to be one restricted to reporting and advising. The resident commissioner was to have full authority over everything and everyone in the dockyard. This was to include the power of suspension or dismissal of clerks on proof of their misconduct, a

Sixth report of Commission on Fees - Dockyards, 310.
 Sixth report of Commission on Fees - Dockyards, 305.

¹⁴ Sixth report of Commission on Fees - Dockyards, 307-308.

¹⁵ Rodger, N., The Command of the Ocean, 103.

¹⁶ Sixth report of Commission on Fees - Dockyards 306.

significant increase in resident commissioners existing powers. All communication to and from the yard was to go via his office, so that he was responsible for all affairs under his superintendence in the management of the yard. The intention of the commissioners was to put the resident commissioner at the heart of affairs at the yard and to have them drawn from sea officers of great experience in both military and civil matters. What was also recognised was the need for resident commissioners to concentrate on the core dockyard activity. This was indicated by the recommendation of the removal, in war time, of the task of attending the payment of ships afloat at the naval yard by either the commissioner or master attendant. This task would instead be allocated to a dedicated officer supplied by the Navy Board.¹⁷

It was also proposed in the sixth report that civil engineering contracts for the design, maintenance and building of yard facilities were removed from the yard officers. Instead a new post was recommended, that of surveyor of civil architecture to the Navy Office. This was to ensure the expertise of the yard officers would be concentrated on their primary function, and that a specialist was responsible for yard facilities.

Dockyard artificers also received additions to their wages. This supplement to their pay consisted of allowing artificers to remove off-cuts of wood, or chips, from the dockyard. The commissioners were concerned that abuses had arisen from this practice and, in common with the Navy Board and dockyard officers, recommended a pay rise of 5d per day for shipwrights and 2d per day for house carpenters in lieu of chips. The commissioners again showed a consistency of purpose regarding perquisites together with a mechanism for their removal.¹⁹

The eighth report concerned the Victualling Office. It described the purpose, structure and management of the organisation that supplied the British navy with food and alcohol. Again the commissioners made observations on the department, with recommendations for improving performance and reported on the income, from all sources, of the individuals concerned with victualling.

The report stated the business of the victualling organisation was to obtain provisions by contract, for finished articles or raw materials, manufacture and pack items at its victualling yards. These provisions were then distributed to ports at home and abroad at

¹⁷ Sixth report of Commission on Fees – Dockyards, 306-317.

¹⁸ Sixth report of Commission on Fees – Dockyards, 314-315.

¹⁹ Sixth report of Commission on Fees – Dockyards, 316.

which HM Ships assembled. The commissioners highlighted the importance of ensuring the agents, storekeepers and ship's pursers, who were issued with these items, recorded their receipt and issue so that an audit trail could be maintained and costs correctly allocated.20

At the four overseas bases remaining after the American War of Independence the only location with a permanent victualling establishment was at Gibraltar. This victualling yard was not examined in the eighth report, but it stated that an agent victualler, a clerk and a store clerk were present with duties similar to those at Portsmouth and Plymouth. However, the other overseas stations were recorded as being managed by agent victuallers in the West Indies and America. Where agent victuallers, or British consuls, were not located then the pursers of naval ships were to make their own contractual arrangements.²¹

This was amplified by the Fees Commissioners who described the process that commanders of naval ships operated at a port without an agent victualler, or contractor. Commanders had delegated authority to purchase what was required and to ensure that their purser drew a bill against the Victualling Board. The process also required certificates to be signed by the captain, master and boatswain for the quantity and type of provisions received. Further checks confirmed that the market price was not exceeded, together with local exchange rates at the time of purchase, receipts from the suppliers and items supplied were of good quality. It was emphasized that this was not to be standard practice, as agents or consuls on the spot would be the normal avenue of supply. The appointment of an agent would be made by the Victualling Board, or the local commander-in-chief, if the size of squadron operating in the area deemed it appropriate.²²

The observations of the Fees Commissioners are telling regarding the overall organisation of the Victualling Board. They considered the commissioners of that board lacked the skill and knowledge required to carry out duties, 'which few, if any gentlemen in their habits of life can be expected to possess'. 23 It was no better regarding the superintendence of the areas the commissioners had responsibility for, commenting '[superintendence] is rather nominal than real'.

²⁰ Eighth report of Commission on Fees – Victualling Office, 554.

²¹ Eighth report of Commission on Fees – Victualling Office, 554.

²² Eighth report of Commission on Fees – Victualling Office, 565-566. ²³ Eighth report of Commission on Fees – Victualling Office, 567.

The Fees Commissioners' comments on supply from overseas ports are also instructive and indicate why the separate report for foreign and distant ports included victualling in its scope. The commissioners considered it was difficult to obtain value for money, even with the checks in place, because frequently an unavoidable reliance on one contractor provided opportunities for abuse.²⁴ They considered the confidence commanding officers had in their pursers ensured a lack of adequate checking and, consequentially, the potential for considerable fraud existed at overseas locations. Their recommendations to increase effectiveness and counter fraud at these locations were included in the ninth report.

As with the other reports, the removal of premiums, fees and emoluments were recommended with a corresponding increase in the basic salary, but a considerable number of organisational recommendations were also made. Other suggestions concerned the composition of the Victualling Board, operation by the use of committees and the location and frequency of meetings. The reform of the purser's system of remuneration was also recommended. Essentially this was to increase the amount paid. The desire to remove opportunities for abuses at overseas stations, gave rise to the commissioners recommending an increased role and responsibility for the captain's clerk in the purser system. They also suggested that before pursers were appointed they had to have at least three years experience as a captain's or admiral's clerk.²⁵

The Fees Commissioners' reports on the dock and victualling yards provide a picture of their management in Britain up to 1792. By using the ninth report a view can be formed on the support given at overseas ports and how the commission thought that the service could be improved.

2.4 Ninth Report on naval and victualling departments at overseas ports (1788)²⁶

In the preamble to the ninth report the commissioners gave their reasons for devoting a separate document on the support provided overseas. It was during their initial investigations into the naval and victualling departments, that it appeared to the commissioners that overseas provision was 'replete with fraud and abuse, as to require

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²⁴ Eighth report of Commission on Fees – Victualling Office, 567.

²⁵ Eighth report of Commission on Fees – Victualling Office, 579-581.

²⁶ Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign and Distant Ports, House of Commons Parliamentary Papers, Printed 15th July 1806, 723-754.

the adoption of the most decisive measures which may be suggested for their prevention in future '27

The Fees Commissioners' examination of the departments in Britain was carried out by interviewing people employed in the departments. This, together with documentary evidence, enabled them to form a coherent view of the departments. However, a complete examination of all the overseas bases could not be done in that manner as they were only able to interview one individual who had recently worked at such a base. Their method of assessment therefore followed a different path, which consisted of the examination of the Admiralty, Navy and Victualling Boards records. In spite of this limitation the commissioners provided a "snapshot" of the existing establishments. This included the current management of the overseas base, the duties performed, the underlying reasons why fraud had occurred, and recommendations for the better regulation of the civil departments.

In common with the previous reports, the operation of the departments was obtained by reference to the duties of the employees. By researching the duties and roles of the commander-in-chief or resident commissioner, naval storekeeper and master attendant, the underlying operation of the overseas yard was revealed.²⁹ From this examination, five interacting areas were identified between the commissioner and principal officers, consisting of the management of the yard, stores provision, management of the workforce, work done by the workforce and finally reporting to the Navy Board.³⁰

2.4.1 Management of the naval yard

All activity in the yard required an element of management, ranging from, discussion with the commander-in-chief for refitting priorities within the capacity of the available workforce and stores availability, to commercial activities, such as contract management and financial control. Ensuring all control mechanisms were in place and all tasks were performed correctly was an essential activity to maintain a naval squadron. This management activity formed the major role of the resident commissioner and naval storekeeper at overseas yards.

²⁷ Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 725.

²⁸ Anthony Munton, ex Naval Storekeeper, Antigua, Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, Appendix 1, 739-740.

²⁹ Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 725-727.

³⁰ Appendix 2a shows a map of these processes for a naval yard.

2.4.2 Stores provision

Providing a place where naval and victualling stores could be supplied to naval ships was a primary purpose of Britain's overseas bases. The provision of secure accommodation and the maintenance of serviceable items were fundamental to providing this service. Maintaining accurate records of items issued to ships, disposed of and the quantity remaining in store, spawned the requirement to obtain replacement items. This was achieved by ordering stores from Britain or, if available and at an acceptable cost, by purchase from local suppliers. Therefore knowledge of the local economy, the changing size and composition of the attached squadron and the capacity of existing storehouses, all made considerable intellectual demands on the managers of the yard for the timely re-order of stores.

2.4.3 Management of the workforce

Other than the supply of stores the purpose of an overseas naval yard was to refit naval vessels. For this a skilled workforce was required together with specialist facilities and buildings that also required maintenance. Recording what work was done, the consequent payments, and maintaining the required number of artificers with the optimum mixture of skills, were all essential to providing a motivated and effective workforce. These activities generated the requirement for rules for the supply or recruitment of artificers and labourers. These individuals were obtained by local recruitment or by requesting the Navy Board for specialists from Britain. As the workforce also included clerks and the principal officers, rules were in place for temporary appointments until confirmed by the Navy Board or Admiralty. Significantly, the recommendation of the commander-in-chief was required for the posts of master shipwright and master attendant.

Although recruitment was detailed in the ninth report the rules for dismissal or suspension of individuals were not included. Also missing were rules for the care, training and treatment of the black slave workforce at Jamaica and Antigua.³¹ These were in existence but not examined in this report.

³¹ The absence of rules for dismissal, suspension and management of the slave workforce became evident in the construction of the diagrams in appendix 2a.

2.4.4 Work done by the workforce

The work performed by the master shipwright and master attendant, apart from supervision, was their specialist input in their respective areas. This ranged from surveys of ships and buildings to determining the work, stores and individuals required. When ships were absent and the yard workforce would be otherwise idle, they either maintained the establishment's facilities or manufactured items such as masts, spars and cordage to re-stock the storehouses. A further activity by the master shipwright and master attendant was the advice given to the commander-in-chief on the suitability of purchasing vessels for the service.

2.4.5 Reporting status and requirements³²

These reports not only provided an important tool for the resident commissioner and principal officers in their management of the naval yard, but also gave essential information to the Navy and Admiralty Boards for monitoring, controlling and planning purposes.

The reports the resident commissioner and principal officers of the yard were required to send to the Navy Board are detailed in appendix 2b and show that monthly, quarterly and annual reports were requested. The monthly report recorded all the work that had been undertaken in the yard and what ships had called at that port in the past month. The latter aspect of this report contributed to a picture of actual deployments for the Admiralty. The muster lists provided an estimate of the number of people available in the yard and in the squadron. To ensure stores issued and purchases made could be continually audited the cash accounts and vouchers issued were reported. Providing a monthly list of what letters had not been answered, or warrants not executed, provided not only a check on the yard, but also indicated if a warrant or letter had not yet arrived or had been lost. The quarterly and annual reports provided information on personnel numbers, stores status and usage to assist the Navy Board in the following year's estimates.

2.4.6 Salaries and other payments at overseas bases

In common with the previous Fees Commissioners' reports the payment of fees, premiums and emoluments were investigated with the recommendation that they were

³² Appendix 2b shows the reports to be provided to the Navy Board.

replaced by an increased basic salary and pension arrangements. Their greatest concern in this area was the payment of commission, known as poundage, to the naval storekeeper at these overseas bases. The naval storekeeper's salary although small was enhanced by the payment of a percentage charge on every purchase made by that officer. The percentage rate allowed was $1^{1}/_{4}$ percent, equating to 3d in every pound spent. In time of war the commission paid had amounted to very large sums. This was shown in appendix 3 of the ninth report where the sums granted to naval storekeepers since 1755 were listed.³³ In the case of the naval storekeeper interviewed, Mr. Munton, this had totalled to over £4200 from 1779 to 1783. Munton's annual salary was only £200. The commissioners concluded there was evidence that items had been purchased at inflated prices with the commission payment system acting as an incentive to this practice.

The report listed many examples of suspect contracting practice in both the areas of victualling and naval stores. The commissioners considered the purser system had potential for fraud as the auditing and control systems in place could be easily circumvented. The Fees Commissioners' disturbing conclusion was, 'that abuses of the most alarming nature had prevailed at foreign stations during the last war; and [...] that those abuses had arisen from the want of a general system'. This was amplified by stating that the effect of an increase in the number of checks in the system would be nugatory, so long as the individuals whose duty it was to detect fraud participated in them. The commissioners' solution was to introduce a system that prevented, rather than detected, embezzlement.

2.4.7 Recommended improvements, organisation and responsibilities of resident commissioner at overseas bases

The key conclusion of the Fees Commissioners was that the overseas stations should be superintended by a person responsible for the whole business of shore support at these locations.³⁵ Their recommendations were that resident commissioners should reside at one of the West Indian islands, Bombay, Halifax and during war at any port where a large fleet would rendezvous. Resident commissioners should be a sea officer, a post captain, and selected from those who had also been commissioners of the Navy or

³³ Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 744.

Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 734.
 Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 729-730, 734.

Victualling Board. The resident commissioners were to be responsible for the conduct of every officer and person employed, and for every part of business in both the naval and victualling departments. The instructions for resident commissioners at home yards were to be complied with, plus the superintendence, control and execution of contracts by the Commissioners of Victualling. With these duties the resident commissioners were to be representatives of both the Victualling and Navy Boards.

The Fees Commissioners also recommended improvements in obtaining, issuing, reporting and accounting for both naval and victualling stores. These ideas consisted of reporting what stores had been used and what remained for issue; estimates of items required, how many and when they would be needed; ensuring that contractors delivered, or kept in their stores, the quantities and type as detailed in the contract; and if valid accounts and bills had not been approved by the resident commissioner that payment shall not be allowed.³⁶

The composition of the management required at an overseas establishment was also recommended by the Fees Commissioners. In the absence of a resident commissioner the naval storekeeper was to remain the senior yard officer, with a master shipwright to manage the skilled workforce. Where a resident commissioner was appointed, the Fees Commissioners considered a master shipwright, master attendant, and naval storekeeper were required. All these officers were to be supported by clerks. The Fees Commissioners' recommendations also extended to the salary and accommodation to be provided. The resident commissioner was to receive £1200, the naval officer £400, master shipwright £350 and the master attendant £300, with all these individuals being provided with official accommodation. The salaries for the overseas clerks were also recommended and were to receive the same remuneration as those at Portsmouth. The commissioners also recognised the expense of living in India and that the above salaries were doubled for service at Bombay or Madras. Pensions were also recommended and granted on grounds of age or infirmity.³⁷

Having proposed the salaries and accommodation to be provided, the Fees Commissioners turned their attention to the conditions the officers and clerks were to obey. These consisted of an oath of fidelity; providing a bond of three times their annual salary; to not to receive any fee, gratuity, perquisite or emolument; and if found

³⁶ Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 735.

³⁷ Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 735.

guilty of fraud that the bond was confiscated, they were dismissed from their post and barred from future employment in government service.³⁸

In the summing up of their suggestions the Fees Commissioners believed the nation had not received the full benefit of her overseas naval bases in the American War of Independence. In their opinion this occurred because the bases had either not been formed before the war began, or that the bases had been neglected. They stated: 'The system which we have recommended is the best which hath suggested itself to our minds; and if the Commissioner who may be appointed to superintend the Foreign Establishments are properly selected and execute their trust with zeal and integrity we are satisfied that the Public will be most amply compensated for the additional expence [sic] which may be incurred during the continuance of peace.' The Fees Commissioners considered that the expenses they had recommended would bring about savings and enhance the service delivered.

The instructions uncovered by the Fees Commissioners suggest a sound system of management was in place. It only required that individuals work to their directions, and for the checking systems to function correctly, for an effective and economic overseas base to be in place. Summarising their enquiry into naval establishments, the commissioners noted that most of the abuses of considerable magnitude originated at sea, or at a foreign port. This caused them to comment that the boards in London put too much reliance on vouchers, certificates and affidavits. Providing the paper work was satisfactory, fraud could not be detected even though collusion between the parties involved could easily occur. The measures they recommended indicated that they saw a need to change the culture of the individuals involved to one of public service. By placing the whole enterprise in the hands of a resident commissioner they indicated a move to an individual being given responsibility for delivering shore naval services.

³⁸ Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 735-6.

³⁹ Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 737.

⁴⁰ Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 736.

⁴¹ Ninth report of Commission on Fees - Naval and Victualling Departments at Foreign Ports, 736.

2.5 Financial crisis, the Select Committee on Finance (1797) and the Thirty-first report⁴²

The parliamentary Select Committee on Finance was appointed to examine and state the public debt as it stood on 5th January 1797 and how it had changed since 5th January 1793. They were also tasked with ascertaining the total amount of expected public expenses for the year ending 5th January 1798.⁴³ Charles Abbot, the half brother of Jeremy and Samuel Bentham, chaired this committee which produced thirty-six reports of which the thirty-first report concerned the Admiralty, dockyards and transports. In this latter report, the committee detailed an interview with the comptroller of the Navy Board, Sir Andrew Snape Hamond, on the progress of implementing the recommendations of the Commission on Fees, for both home dockyards and foreign establishments. They also took evidence from Admiral Lord Keith, Vice-Admiral Pasley and Sir Samuel Bentham regarding their thoughts on the dockyards.

The evidence examined for this thesis focused on the progress made concerning the recommendations of the ninth report of the Commission on Fees, and the opinion of the admirals on the post of resident commissioner. However, it is worth noting the progress that had been made on implementing the recommendations of the Commission on Fees in their sixth report on dockyards. What becomes evident was that the removal of fees and gratuities and their replacement by enhanced salaries had not yet occurred. Nor had the resident commissioners been issued with instructions, correspondence sent via their office, or been relieved from paying ships afloat. What had been introduced were the measures regarding principal officers being present to check the quality of stores delivered; the Portsmouth stores system had been adopted at all yards; and the establishment of the Transport Board had removed from the dockyard officers any tasks concerning the arrangement of transports.⁴⁴ The subsequent work of the Transport Board was considered to have been so well administered that it was subsequently rewarded with additional management responsibility. Initially, this occurred in 1795 for the responsibility of prisoners of war. This was followed in 1806 by absorption of the Sick and Wounded Board into the Transport Board.

⁴² Eighteenth Parliament of Great Britain: First Session (27 September 1796 – 20 July 1797), Thirty-first report of the Select Committee on Finance - Admiralty, Dockyards and Transports, House of Commons Reports, 26th June 1798.

⁴³ First Report from the Select Committee on Finance, ordered to be printed 31st March 1797, 3.

⁴⁴ Condon, M., 'The Establishment of the Transport Board – a subdivision of the Admiralty – 4th July 1794', *MM*, Vol. 58, No. 1, (1972), 69-84.

The replies by Hamond concerning the implementation of the recommendations of the Commission on Fees are revealing as they illustrate the power of the Navy Board. His answers indicate that only one of the recommendations had been introduced, but that the recommendations were sound, for example he commented, 'very proper to be established', 'very proper', 'proper to be adopted'. 45 However, he considered the Navy Board did not have the power or right to bring about the changes.

The only recommendations that had been implemented concerned the removal of servants⁴⁶ from yard officers at overseas yards, together with a compensation payment to these individuals. The servants themselves instead were allocated to ships on the overseas station; this looks to have been in the power of the Navy Board, as it related to payment of their staff. The other recommendations made by the Commission of Fees focused on the appointment of resident commissioners, with a complete allocation of principal officers. Hamond, by his comments, conveyed his view that this was a good idea, but that it was not in place. As a resident commissioner was an appointment of the Admiralty, it was their decision to decide where they would be placed, together with the size of management present at an overseas establishment. It would seem the comptroller considered the Navy Board's role was to advise and the Admiralty's role to decide and direct.

The appointment and powers of resident commissioners had featured strongly in the recommendations of the Fees Commissioners, but the select committee discovered, from the evidence of Hamond, that the position had not changed. Instructions to resident commissioners had not been issued, or all communication routed via his office. Likewise, the selection of a resident commissioner was still that of a senior captain, but without previous experience as a commissioner at the Navy Board. The select committee also asked Admiral Lord Keith and Vice-Admiral Pasley their opinions regarding resident commissioners, with both replying that these officers should have complete authority over their dockyard. ⁴⁷ The findings of the select committee seem to indicate that very little had changed at the yards at home or overseas, but the setting up of the Transport Board in 1794 had been a major step forward.

The select committee had been established in response to the financial crisis in 1797, arising from a crisis in liquidity and government credit. The government not only

⁴⁵ Thirty-first report of the Select Committee on Finance, Appendix D1, 493.

Servants were apprentices.
 Thirty-first report of the Select Committee on Finance, Appendix D3 and D4, 494.

needed more income from taxation, but realistic naval estimates. Pitt's government increased taxation in a number of areas and eventually introduced income-tax for the first time in 1799. Prior to this crisis, the navy had been funded by navy estimates that consisted of three elements; the Ordinary, the Extra and the Sea Service. The Ordinary estimate contained the baseline costs of fixed infrastructure, civil boards, victualling, dockyards, ships in reserve, pensions and the salaries of half-pay officers. The Extra estimate consisted of the costs of exceptional and non-recurring items, for example, changes to fixed infrastructure, new ships and major refits. The Sea Service estimate was the expected cost of maintaining men and ships in service at a rate of £4 per sailor per lunar month. This was allocated at 30 shillings for wages, 27 shillings for wear and tear (maintenance of ship and equipment), 19 shillings for victualling and, finally, 4 shillings going to the Ordnance Board.

The estimate requiring a substantial increase was for the Sea Service, as it had remained at the same level since Cromwell's time and had resulted in chronic underfunding causing a naval debt to be an everlasting feature of government finance in both peace and war. The Admiralty overcame this by resorting to innovative, but costly methods to obtain naval items and services from suppliers. Essentially, the navy purchased items and services on credit and delayed payment till additional funds were available. The suppliers would provide their goods and services and on presenting their bills would be provided with a promise that they would be paid in due course. These navy bills became a financial commodity, with those who needed their money selling their bills at considerable discounts. When one considers the navy's creditors also included its dockyard personnel, who obtained loans on the strength of their expected pay, it can be of no surprise that it proved difficult to remove their rights to take home "waste" timber, known as chips, from the yards – a ready source of cash.

Following the Great Mutinies at Spithead and the Nore in 1797, sailors' pay was increased and influenced a rise in the Sea Service allowance to £7 per man per lunar month. This was allocated as follows: 37 shillings for wages, 60 shillings for wear and tear, 38 shillings for victualling and finally 5 shillings going to the Ordnance Board. As the allocated split was heavily biased to the "wear and tear" and "victualling" categories it suggests the government used the financial crisis and naval mutinies to more accurately match expenditure to income. Binney comments, 'Had the customary

⁴⁸ Twenty-Fourth Report From The Select Committee On Finance, &c. The Public Funded Debt And The Public Expenditure For The Year 1797, House of Commons Reports, 28th June 1798, 6-7.

procedures of the Admiralty Board been the same as that of the Secretary of War, there would have been virtually no Navy Debt, no heavy fundings of Navy Bills during or after war, little or no interest charge, and no enhancement of contract prices to cover discount in the market'. Binney further concluded, 'The reform of the estimating in 1797 included a reform in estimating for contingencies, and was so effective that thereafter in Course Bills were uniformly payable 90 days after date. The interest charge disappeared, and no material Navy Debt oppressed the market nor harassed the ministry.'50

The recommendations of the Fees Commissioners for overseas yards had not been introduced by 1797 but fundamental reorganisation had occurred in the navy. The Transport Board had been established, the Navy Board had been re-organised, Dalrymple had been appointed as Hydrographer and Bentham was the Inspector General of Naval Works.

The more realistic funding of the naval service, by an increase of 175 percent in the Sea Service estimate, created financial room for the creeping adoption into naval civil departments of higher salaries. This was with the corresponding removal of other methods of payment, thus shaping a new culture of service. This fundamental cultural change was therefore introduced first in the Navy Office, followed by the Victualling Board in 1800 and the home dockyards in 1801, but it was not until 1811 that this reward system was fully introduced at the overseas bases.⁵¹

2.6 St. Vincent, Reform and the Commission of Naval Enquiry, (1802-1804)

The background to the Commission of Naval Enquiry⁵² is implicitly tied to the administration of Earl St. Vincent as first lord of the Admiralty.⁵³ Much has been written concerning his tenure in charge of the British navy, but maybe the best judge is the prime minister whose ministry had to deal with the consequences of St. Vincent's actions. Pitt stated of St. Vincent, in March 1804, that his leadership as first lord consisted of, 'That blind and false confidence which exposes the safety of our country' and considered him 'less brilliant and less able in a civil capacity than in that of a

⁵⁰ Binney, J., *British Public Finance and Administration 1774-92*, 143, note 3.

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⁴⁹ Binney, J., British Public Finance and Administration 1774-92, 143.

⁵¹ The naval officer at Madras and his agents at Calcutta and Penang received a fee on expenditure until removed in 1811. See chapter seven for details.

⁵² Commission of Naval Enquiry, 43 Geo III.

⁵³ Morriss, R., 'St Vincent and Reform, 1801-04', MM, Vol. 69, No. 3, 269-290.

warlike one.'54 This reflected what Middleton had predicted in 1801, 'Sea officers [probably referring to St. Vincent] are very seldom judges of the civil branches of the navy [...] They imbibe prejudices against the civil boards and overturn in ignorance what has cost ages and long experience to establish.'55

For this thesis only the first report of the Commission of Naval Enquiry needs to be considered.⁵⁶ This was the only report of that commission that investigated any aspect of an overseas naval yard's operation. What it examined was the conduct of naval storekeepers at Jamaica. Considerable evidence of fraud by the storekeepers was detailed in this report, together with the opinion that the Navy Board had not acted on information to prevent this from occurring, or of obtaining reparation. The complete report consisted of 114 pages containing 55 appendices of supporting evidence. It was a very comprehensive report of the poor management and checking by the Navy Board on the fraud of the various storekeepers, but it was very insubstantial regarding recommendations for improvement. It was more about rebuking the Navy Board than about improving the performance of the yards. The recommendations emphasised the need to operate to the existing regulations, trust to oaths by the storekeeper and ensure the Navy Board promptly checked the returns of the overseas officers. Surprisingly, the commissioners did not recommend the solution that the Commission on Fees suggested, that of an empowered resident commissioner. However, there is evidence that resident commissioners had their authority strengthened by St. Vincent.⁵⁷ This is evident in the proposed instructions written in 1803 for resident commissioners at Jamaica and Antigua.⁵⁸

These proposed instructions to Charles Stirling and Charles Lane, the recently appointed Jamaica and Antigua resident commissioners, contained detailed instructions from the Admiralty for the superintendence of naval business. These officers were the first resident commissioners to be appointed in these ports since the War of American Independence and show a close alignment with the recommendations of the Fees Commissioners. Prior to these appointments, resident commissioners had only been appointed to the overseas yards at Halifax, Gibraltar and Lisbon, in the Revolutionary

⁵⁴ Morriss, R., Royal Dockyards, 197-8.

⁵⁵ Morriss, R., Royal Dockyards, 196.

⁵⁶ First report of the Commission of Naval Enquiry – Naval Storekeepers at Jamaica, House of Commons Reports, printed 12th May 1803, Paper 78, Vol. IV, 163.

⁵⁷ Morriss, R., 'St Vincent and Reform, 1801-04', 286.

⁵⁸ Letters from commissioners to Admiralty – 1803, TNA, ADM1/3368, 31st December 1803.

⁵⁹ A transcript of these instructions can be seen in appendix 2c.

War.⁶⁰ The instructions totalled twenty-nine separate articles and collectively illustrate the responsibilities of an overseas resident commissioner considered necessary at that time. These instructions confirmed the role of the overseas yards, as described in chapter one and the duties of the civil officers found in the ninth report of the Commission on Fees. Significantly, these instructions only detailed the role and responsibilities for a manager of the naval repair and supply yard, as superintendence of the victualling or medical departments, as recommended by the Fees Commissioners, was missing. It was to be the Commission for Naval Revision that addressed changes in the management of these departments at overseas bases. This commission was also to provide a comprehensive reform, or change, programme for the civil departments of the British navy.

2.7 Commission for Revising and Digesting the Civil Affairs of His Majesty's Navy, (1805-1809)

William Pitt returned as prime minister in 1804, with Henry Dundas, now Lord Melville, as the first lord of the Admiralty, and realised the Commission of Naval Enquiry had raised expectations in parliament for the reform of the dockyards. Pitt and Melville considered that a commission for revising the management of the civil naval departments was needed and approached Middleton for his views and to be chairman of the commission. Middleton now had the chance to complete the work that he initiated via the recommendations of the Commission on Fees, and agreed to be chairman of the new commission. The commission was established on 8th January 1805 with Middleton as chairman and contained two admirals, Roger Curtis and William Domett, plus two administrators, John Fordyce and Ambrose Serle, with the latter being a member of the Transport Board. 61 The brief of the commission was to revise the instructions for the civil naval departments, a rationalisation exercise, and produce a digest of instructions for each department.⁶² It was not to end there, as they were also to review the unadopted suggestions of the Commission on Fees, of Naval Enquiry and the 1797 Select Committee on Finance. If they found these suggestions practical they were to find ways of bringing them into being. This was to be a commission to execute change.

⁶⁰ The Salary and Pension lists of the Admiralty and its sub-boards provide evidence of the individuals who occupied civil posts, TNA, ADM7/823.

⁶¹ Copy of a Commission lately issued by the Crown, appointing Sir Charles Middleton and others, Commissioners for acting in the Naval Department, House of Lords Sessional Papers 1714-1805, Vol. 4, 28th January 1805.

⁶² Evidence of the initial work carried out can be found in the collection of papers recording all the instructions sent to the officers of the home and overseas establishment by the Navy Board; Abstract of Standing Orders as to Superior Officers at Yards. Accounts, Foreign Yards, &c, TNA, ADM 7/411.

A table of reports produced by the commission are shown in appendix 2d and it can be seen that, while the majority concentrated on the home civil organisation, the fifth, twelfth and thirteenth reports concerned the organisation overseas. These are the documents that are examined below with the sixth report also providing a valuable insight into the operation of supply bases. The sixth report concerned the operation of the British naval out-ports of Deal, Harwich, Leith, Falmouth and Kinsale which were essentially supply bases for naval stores with a very minor refitting capability. The only post expected to be filled was that of the naval storekeeper whose duties were detailed in the report. Their role was similar to the British overseas yards and has echoes of the bases described in chapter one.

Fifth report of the Commissioners of Naval Revision (Foreign Yards)⁶³ 2.7.1

This report consisted of an introductory section, dated and signed by the commissioners, followed by the instructions for the resident commissioner, general instructions for all officers and finally individual directions for the principal officers. The report was completed with blank copies of the appendices that had been referred to in the main text.64

In the introductory section the commission reviewed the existing digest book of instructions for foreign yards that had been revised in January 1800. They found defects in the layout of the instructions and felt that would prevent them being clearly understood. They also noted there was a lack of understanding concerning which records to keep and send to the Navy Board, leading to a lack of uniformity in returns between the yards. The opportunity was also taken to redraft and issue instructions to improve the checking systems and reduce expenditure in obtaining stores. The commissioners also undertook to ensure that the instructions which had been issued to the officers of the home yards were reflected in those for overseas yards.

The influence of the ninth report of the Commission on Fees was shown in the agreement for the need for resident commissioners at overseas yards to have responsibility for other civil naval departments. This they expanded beyond the responsibility for the victualling department to include that of overseas naval hospitals. It was also recommended that commanders-in-chief on foreign stations were to be

⁶³ The Fifth Report of the Commissioners for Revising and Digesting the Civil Affairs of His Majesty's Navy (Foreign Yards), House of Commons, 11th April 1809. ⁶⁴ Copies of these appendices have not been found.

provided with the instructions of the officers of the Navy, Victualling and Transport Boards. This was an extension of the recommendation of the Commissioners of Naval Enquiry that the instructions of Navy Board officers were sent to the commander-inchief.

The commissioners then turned their attention to the locations at which resident commissioners should be located. They noted that these officers had now been posted to Jamaica, Antigua and Malta, in addition to Halifax and Gibraltar, and proposed that an additional two commissioners were appointed to the East Indies. This was a reiteration of the recommendations of the Commission on Fees in 1788, with the addition of an extra commissioner in the East Indies. This suggestion was urged as a result of the financial expenditure in the east and after consultation with Admiral Rainier, the recently returned commander-in-chief. This additional commissioner was to be stationed at Madras, but also to have responsibility for the yard at Penang and facilities at Calcutta. If the squadron was to re-locate to Trincomalee then the commissioner was also to assume responsibility for that location. The commissioners also proposed that a resident commissioner was appointed to the Cape of Good Hope. With the complement of senior managers having been advocated, the report went on to set out the number of officers to be appointed at each establishment with their current and recommended salaries; this can be seen in appendix 2e.⁶⁵

A number of interesting features are evident in the structure and salaries proposed. The salaries were dependant on location, with an equalising of salary of the master attendant and master shipwright posts. The resident commissioner was provided with a number of staff to assist him. By reference to the Salary and Pension lists of the Navy and Admiralty⁶⁶ it will be seen these salaries were broadly introduced, but some took time to be fully instituted. These documents also provide an indication of the career progression of individuals at the Navy Board and overseas yards.⁶⁷ Career progression was recommended in the Commission of Naval Revision with the overseas yard postings for resident commissioners, principal officers and clerks as a training ground for posts in Britain. The only officer excluded from this proposal was the master shipwright due to the following reason: '[these] officers are usually selected from among the Carpenters of Ships, to appoint them to any of the situations, in their line, in the Dock Yards at

⁶⁵ Fifth Report Commission of Naval Revision, 6-7.

⁶⁶ Salary and Pension Lists, TNA, ADM 7/819.

⁶⁷ This is examined in chapter three to determine if the recommendation by the Commission of Naval Revision was implemented.

home, would interfere with the Regulations contained in our Third Report;⁶⁸ by which it is prescribed that those Officers should be filled by persons educated as apprentices of the superior class, in the manner we have proposed.⁶⁹

Chapters three, four, five, six and seven examine the resident commissioner post at the overseas yards, where the instructions they were given, will be assessed.

Description	Number of instructions or articles
Resident commissioner	19
General Instructions	162
Naval storekeeper	40
Master attendant	19
Master shipwright	18

Table 2b: Number of instructions detailed in fifth report of Commission of Naval Revision

Table 2b provides an indication of the intricacy of the management and tasks of the commissioner and his principal officers by the number of separate articles. Briefly the instructions to the principal officers adhere to the following layout. They were answerable for the conduct of their staff and that those they recruited had the skills and experience to perform their duties. Specialism specific instructions concerning their role were provided together with details on the interaction expected between the storekeeper, master shipwright and master attendant.

An example of the interacting instructions between the master attendant and master shipwright can be seen in directions for careening ships. The eleventh article of the master attendant's instructions and the tenth article of the master shipwright's instructions both relate to careening vessels. They stated these officers should render assistance to each other, attend the ship during heaving down and ensure the careening gear was kept ready for service.⁷⁰

The Commission of Naval Revision incorporated the regulations introduced for dockyards by the Order in Council in May 1801 into their instructions for the overseas naval yards. Included in these regulations were the terms of employment and conditions

⁶⁸ Third Report – Dockyard (Home) – Instructions and duties for Surveyors and Assistants; Education of shipwrights; Construction of ships; Payment of workforce, Commission of Naval Revision, 183-187.

⁶⁹ Fifth Report Commission of Naval Revision, 7.

of service for yard personnel. Those familiar with employment in the public service will find it comforting to see cardinal principles in place. Employees were to work for the public with no private employment. This included not working in any private capacity for dockyard officers, or in the case of the clerks as agents for other government employees. The taking of fees, premiums, emoluments, gratuities or presents of any kind was banned, with suspension and eventual dismissal if proved. To reinforce these instructions, clerks and officers swore written oaths not to receive any unauthorised rewards and to provide a bond of three times their salaries. The principle of confidentiality was also detailed stating information was not to be divulged to those not entitled to receive the information.

Injured or sick officers, clerks and established workmen were to receive free treatment from the surgeon of the hospital, with hired workmen to be treated if they received injury while in the execution of their duty. Compensation was in place if a workman was injured performing his work. Superannuation terms were in place for officers and clerks, but workmen were dependant on the resident commissioner's recommendation for such treatment. Care of establishment employees' families who became sick was subsequently introduced.

Outlined in the general instructions were the duties of the porter who was responsible for all aspects of security and fire prevention in the yard. He supervised the wardens and watchmen who acted as the police and fire prevention staff in the dockyard. Their collective jobs were to maintain a secure boundary and only allow entrance and exit to the yard by authorised personnel. They were the precursors of the modern Ministry of Defence police and guard service.

Holidays, leave and working hours were also detailed in the instructions, with salaries and wages being paid monthly to all employees at the local yard. The only exceptions to this local payment practice were the resident commissioner and naval storekeeper who were paid in London.

The terms and conditions of employment detailed in the instructions have many of the features of modern employment practice with regular pay, sick leave, welfare, pensions, holidays and leave. The yard employee was to only work for the public, not to receive bribes, in the case of officers and clerks to swear oaths concerning their accounts and

actions and not to divulge information to unauthorised people. The latter point provides similarity to modern public servants signing the Official Secret Act.

2.7.2 Twelfth report of Commissioners of Naval Revision (Victualling department abroad).⁷¹

In the introduction to their twelfth report, the Commissioners of Naval Revision recorded that the existing instructions for agent victuallers abroad had been in existence for over 100 years and were ill-suited for current requirements. They redrafted the instructions to conform as much as possible to those for the home victualling organisation. A system of accounts and vouchers was also instituted to prevent a reoccurrence of the abuses recorded in the Commission on Fees report. The Commissioners of Naval Revision pointed out the main difference between the role of the agent victualler at home and abroad being the checks that naturally occurred in Britain. The commissioners considered that the appointment of a resident commissioner with a superintending role over the victualling department would provide the checks required. In framing the instructions for the agent victualler abroad, the commissioners provided details on how the resident commissioner and agent victualler were to interact together with their respective duties.

The instructions for the agent victualler amounted to 100 in number, with the resident commissioner having direct interaction with nineteen of these instructions. In the second instruction, the overall responsibility of the victualling establishment was vested with the commander-in-chief, who had full authority over every person in the establishment. The agent's role was very similar to that of the naval storekeeper, as his duties consisted of, stores management and security; financial and contract management; supervision of the victualling staff consisting of clerks, artificers (coopers), labours, and wardens; and reporting to the London board on current status and future requirements.

What to pay the staff overseas and future employment was also considered in the report. Appendix 2e shows the recommendation the commissioners made in reply to the request by the Victualling Board to increase the salaries of its overseas staff at Gibraltar, Malta and the Cape. Only increases for Malta staff were agreed and then to a lower level to that proposed. As with the naval yard officers a career path for the overseas

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⁷¹ The Twelfth Report of the Commissioners for Revising and Digesting the Civil Affairs of His Majesty's Navy, Houses of Commons, 11th April 1809.

victualling agents was proposed, with appointment to a home department on satisfactory completion of five years service abroad.

The overseas resident commissioner's primary function concerning the victualling establishment was one of financial and contract management, with the addition as an auditor together with a reporting line to the Victualling Board.

2.7.3 Thirteenth report of Commissioners of Naval Revision (Transport department abroad: Naval Hospitals)⁷²

The thirteenth report referenced the ninth and seventh reports of the Commissioners of Naval Revision, that of the transport organisation and hospitals in Britain. The report contained instructions for the officers of the three sections of the transport organisation abroad: the agents of transports; the officers of the hospital; and the agent for prisoners of war abroad. Particular effort was made to make the instructions for the overseas locations as similar as possible to those in Britain, and was particularly evident in the instructions given to the officers of the overseas hospitals. Although the hospital staff were superintended by the commander-in-chief, superintendence of financial and contract management was to be carried out by the resident commissioner.

The instructions, which provided for a surgeon, an agent of the hospital and the dispenser at each of the overseas hospitals, were comprehensive and provide an illuminating insight into these institutions. The surgeon was the first officer of the hospital who was to obey the instructions of the commander-in-chief unless it contradicted his medical opinion. With the agent of the hospital being the financial, contract and storekeeping officer and the dispenser acting as the keeper and supplier of medical stores, the management of the hospital was complete. A matron, nurses, dispenser's assistant, hospital mates (also known as servants), and labourers completed the staffing of the hospital. Rules for running the hospital and caring for the patients covered the following procedures: admission; cleanliness and sterilisation; infectious disease precautions; treatment procedures including individual patient record in hospital care book; diet control of patients; vaccination programme for smallpox; discharge procedure to return to work or sending patient home to Britain; and finally reporting to the Transport Board (Sick and Hurt).

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⁷² The Thirteenth Report of the Commissioners for Revising and Digesting the Civil Affairs of His Majesty's Navy, Houses of Commons, 11th April 1809.

As described above the agent of the hospital worked in partnership with the surgeon to provide the logistical support required. He found himself in a confused situation regarding his management as, while the commander-in-chief had full power over him, the new instructions gave the resident commissioner control over the financial and contract aspects of his role.

In common with the other civil naval posts the surgeon, agent and dispenser were banned from receiving fees, premiums and emoluments. They all had to provide oaths and bonds equal to three times their salaries, but in the case of the agent he also had to provide two additional sureties of £1000. Additional restrictions were set on the surgeon consisting of having no interest in firms providing medicines, or having a private practice.

The instructions of the Commissioners of Naval Revision were comprehensive and provided a sound set of instructions, which if complied with would produce an economical and effective logistics organisation. How the fifth, twelfth and thirteenth reports worked in practice will be examined in chapters third, four, five, six, and seven to determine if they were effective and whether problems arose. The key difference before and after the implementation of the Commission of Naval Revision was the introduction of a resident commissioner with his superintending role extended to include the victualling and hospital departments. The relationship he was to have with the commander-in-chief and the agents of the victualling and hospital overseas departments was to be the crucial factor in delivering financial savings and improvements in service.

2.7.4 Fourteenth and fifteenth reports of the Commission of Naval Revision

These reports were not published and remained with the Admiralty and Navy Boards as their content was considered secret. The fourteenth report considered in detail the subject of supply and use of the most vital strategic material required by the navy, that of timber. The fifteenth report was more diverse as it not only covered supply and use of other strategic naval materials, but also major improvement projects. Amongst these projects was the building of Northfleet dockyard, improving access for vessels to Woolwich and Deptford and the proposed building of the massive breakwater in Plymouth Sound. It is not difficult therefore to understand the reasons for declaring the content of the reports as secret.

The relevance of these reports to this thesis lies in the overseas areas that were considered as sources of strategic materials. In the introduction of the timber report it stated its purpose was to consider future supplies and usage with an update of the report of 1792 on timber resources on crown lands. Although the fourteenth report considered all potential timber resources in Britain, it also looked overseas to its colonial lands, European sources and to the potential of other areas. Parts one and two of the report evaluated British's timber resource, with part three reporting on foreign sources. The supply of timber was not the only concern of the document, as methods of reducing consumption by eliminating waste, or substitution of other materials, were covered in part four.

Part three of the timber report was itself divided into four geographical sections, North America, East Indies, Trinidad and near coasts of Central America, and finally other potential sources.⁷⁴ This final section included such diverse geographical locations as the shores of the Mediterranean, New South Wales, New Zealand, Cape of Good Hope, the Brazils and the west coast of South America. The investigation and exploitation of the East Indies is examined in chapter seven.

Another strategic naval material, hemp, was of considerable importance to Britain and the fifteenth report illustrates this with a number of appendices being devoted to the subject. Obtaining hemp from North America was considered, as was encouragement for growing hemp in Ireland with an Act of Parliament for the cultivation of that plant being considered. However, appendix 147 of the report shows the quantities of hemp imported into Britain in the year from 1797 to 1806. This illustrated the overwhelming dependence on Russian sources.⁷⁵

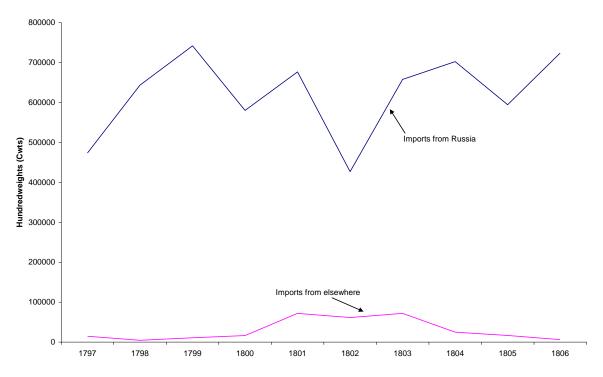
This dependence on Russia can be seen in figure 2b with an average of 95 per cent of the total quantity imported to Britain coming from that country. Only during the year of peace, following the Treaty of Amiens did this percentage fall below 90 per cent. What could be considered of greatest concern for Britain was the limited amount of hemp being provided from British controlled territory, or Asian areas.

⁷³ Commission appointed to enquire into the state and condition of the Woods, Forests and Land Revenues of the Crown; Reports of the Commissioners on the Woods, Forests, and Land Revenues of The Crown: 1787-1793, House of Commons Papers, Vol. No. 76.

⁷⁴ Fourteenth Report of the Commissioners for Revising the Civil Affairs of the Navy, TNA, ADM 106/3110, 89-172.

⁷⁵ Fifteenth Report of the Commissioners for Revising the Civil Affairs of the Navy, NMM, CAD/A/10.

The necessity for a secure source of hemp for the manufacture of cordage was essential to Britain to ensure its merchant and naval fleets could continue sailing. This is shown in the fifteenth report of the Commission of Naval Revision by the methods that were proposed to mitigate the dependence on Russia. With the Treaty of Tilsit in 1807 and Russia being at war with Britain, obtaining this strategic material was at grave risk. Stockpiling, alternative sources, re-use, new methods of cordage manufacture and diplomatic action were investigated and are examined in chapter seven.



Imports of hemp to Britain (1797-1806)⁷⁶ Figure 2b:

2.8 Summary

The decade prior to the start of the wars with France in 1793 was one when a remarkable interest in the civil departments of the British navy was shown by her parliament and government. A climate of reform was engendered as a result of the disastrous American war. This reform initially consisted of the government proposing methods for more economic and effective management of the country's affairs. Parliamentary commissions were raised and bills produced that resulted not only in changes in financial governance but also in how the East India Company was to be regulated.⁷⁷ What was to become significant was how government employees should be

⁷⁶ Fifteenth Report of the Commission for Revising the Civil Affairs of the Navy, Appendix 147, 9th November 1807; Appendix 3f provides a copy of appendix 147. ⁷⁷ See chapter seven pages 257-259.

financially rewarded. The new climate of reform and regulation challenged the culture that had been in place since the restoration of Charles II.

The investigations of the Commission to enquire into the Fees, Gratuities, Perquisites, and Emoluments in the naval departments of the British navy provided many insights into contemporary management and prevailing attitudes. The view of the financial rewards of employees is instructive. Officers and clerks considered their posts as personal property which particularly affected their recruitment, promotion and retirement. The system of fees can be thought of as an incentive system, directly related to work done, yet it encouraged the clerks to make the priorities. It also caused individuals to hold on to high fee-paying posts which caused stagnation in promotions. The Fees Commissioners recommended an increase in basic salaries to a level approximately equal to the total earnings being legally made and suggested methods of ensuring it was cost neutral to the State.

Although the Fees Commissioners' reports concerning the home dockyards, victualling and foreign yard organisations collected and recommended changes in the payment of individuals, its observations and recommendations also provide insights into contemporary methods of management. Strong and meaningful local managers in the person of resident commissioners, experienced in both sea-going and civil naval organisation, was a key recommendation. They also believed the systems of checks on fraud were insufficient and that existing documentation reflected more on the people operating the procedures, than the existence of embezzlement. They believed that increasing the basic salaries, removing other payment methods and stifling fraud at its birth by better management, abuses would be greatly reduced if not eliminated.

Following the reports of the Commission on Fees being considered by the Privy Council, with their subsequent decision to pass them to the relevant departments for comment, it was not until 1793 before any of the Fee Commissioner's recommendations were introduced. Figure 2a provides a diagram of the changes that were made to the civil departments of the navy showing the implementation of the Commission on Fees recommendations and those of the subsequent Commissions of Naval Enquiry and Revision.

The Select Committee on Finance in 1797 discovered that the Fees Commissioners' recommendations for resident commissioners had not been introduced and that these

officers had not been appointed to the East and West Indies bases. Subsequently, it was not until the start of the Napoleonic War that resident commissioners were appointed to Jamaica and Antigua. Although these officers were provided with comprehensive written instructions, they only concerned the naval yard aspects of refit and supply of naval ships, with no responsibility for the victualling and transport departments.

It was to be the Commission of Naval Revision that introduced resident commissioners into the East Indies and the Cape of Good Hope. This commission also recommended that resident commissioners were given full authority over naval yard functions, and superintendence of financial and commercial affairs of the victualling department, together with the naval hospital at overseas locations. Career paths were envisioned for overseas commissioners, principal officers and clerks in home naval departments. The Commission of Naval Revision also rationalised the instructions for officers and clerks, provided common forms to be used throughout the overseas bases and hence promoted standardisation.

The Commission of Naval Revision not only recommended and introduced rationalised processes and reward systems at both home and abroad by 1809, but also improvements in infrastructure and production techniques. This is most easily seen in the fourteenth and fifteenth reports of the commission and although these reports were never published their contents is instructive. Obtaining and use of strategic materials occupied considerable thought, with timber and hemp being most noticeable. The overseas bases were to become a focus from which timber and hemp investigations could be made.

Thirteen years elapsed from the completion of the Commission on Fees reports on the Navy Office, dockyards and overseas naval yards in 1788, to the introduction of the commissioners' recommendations into the dockyards in 1801. Organisational restructuring was completed relatively quickly but changing the reward system required cultural transformation. The removal of fees, changes in apprentice allocation and substitution of an allowance for chips to artificers by 1801 could be considered an impressive timescale.

Alternatively it could be considered that the Commission on Fees was irrelevant as its recommendations took 23 years before they were introduced at Madras.⁷⁸ However, historians have examined other British governmental organisational changes and have

⁷⁸ See chapter seven.

discovered delivering such modifications require considerable time. Harold Laski in his study of British parliamentary government found that an average of 19 years elapsed for the recommendations of a unanimous Royal Commission to come into effect, and 30 years if the Commission was divided.⁷⁹ Peter Hennessy in his examination of the post war government of Britain from 1945 to 1951 found himself in agreement with Laski on examining the establishment of the National Health Service.⁸⁰

In the light of Laski's and Hennessy's findings the time required to reorganise the civil naval departments was normal rather than unusual. Considering the cultural change required and the nation being at war for almost the entire period, the reorganisation was achieved in a creditable timescale.

This chapter has provided the background to the reform of Britain's civil naval departments with particular relevance to overseas naval bases. With the appointment of resident commissioners to the East Indies and the Cape of Good Hope in 1808/9, a prime recommendation of the Commission on Fees had been adopted. How this worked in practice, how the problems encountered were overcome, and how the building of new facilities and exploitation of resources was achieved is explored in the remainder of this thesis.

⁷⁹ Laski, H., *Parliamentary Government in England, A Commentary*, Allen and Unwin, (1938), 117. ⁸⁰ Hennessy, P., *Never Again, Britain 1945-51*, Penguin, (2006), 132-134; Hennessy references Beatrice Webb's minority opinion on the Poor Law Royal Commission on 1909 where she urged the combining of public health and poor law health services into a Public Medical Service as an example of the delay involved in introducing significant re-organisation.

Chapter three The management of British overseas bases in the Revolutionary and Napoleonic Wars

3.0 Introduction

This chapter surveys the location of the various naval and forward replenishment bases that were established, however temporarily, in the Revolutionary and Napoleonic Wars. The size and composition of the squadrons deployed at overseas commands is reviewed. This shows the British navy reached its peak numbers in 1809 when Britain's overseas commands also attained their maximum numbers.

Chapters one and two have shown the overseas naval yards were primarily for the resupply of ships with naval stores, but with the capability to perform limited refits. As the number of vessels deployed by the Admiralty reached its maximum in 1809, the principal overseas bases have been examined for that year to determine if ship repairs were still of a limited nature at the naval yards. To reveal the core establishment of management and support personnel, artificers and labourers involved in refit work the organisation of the naval yards and the composition of the workforce is studied.

The rationale for the range and quantity of naval stores to be placed at overseas yards is examined, together with a discussion on the limitations different policies on stores would make on the type of refits that could be performed at these yards.

The Commissions on Fees and Naval Revision placed considerable faith in the civil departments of Britain's overseas naval bases being superintended by resident commissioners. This chapter examines the history and developing role of this post and the introduction of extended powers to resident commissioners when serving overseas.

3.1 Survey and location of Britain's naval refitting and supply bases

At the commencement of the Revolutionary War with France in 1793, Britain had four overseas naval yards at Halifax, Jamaica, Antigua and Gibraltar, with only Halifax having a commissioner in residence. By the close of the Napoleonic War in 1815 the number of bases had grown to fourteen with ten of them being managed by a resident commissioner.

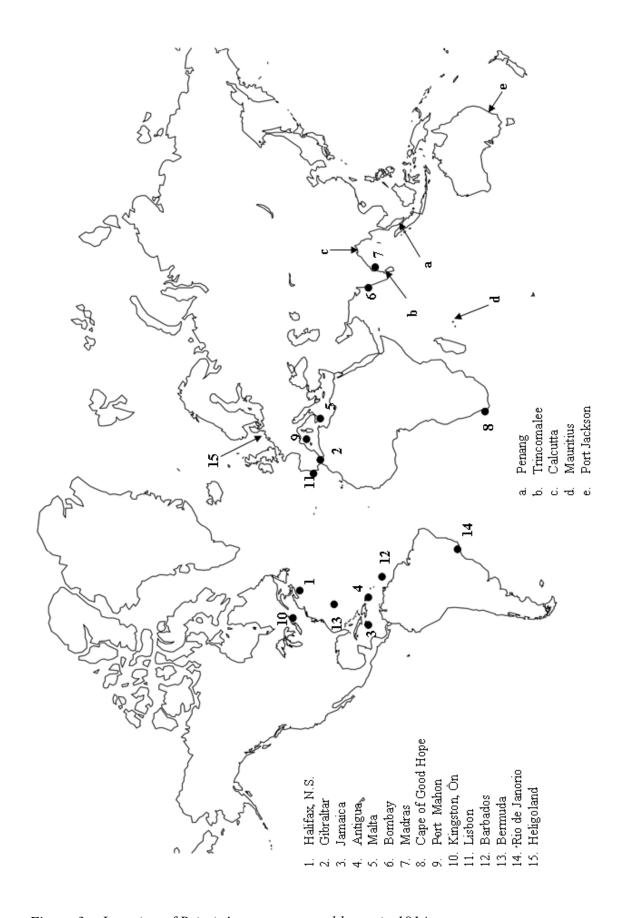


Figure 3a: Location of Britain's overseas naval bases in 1814



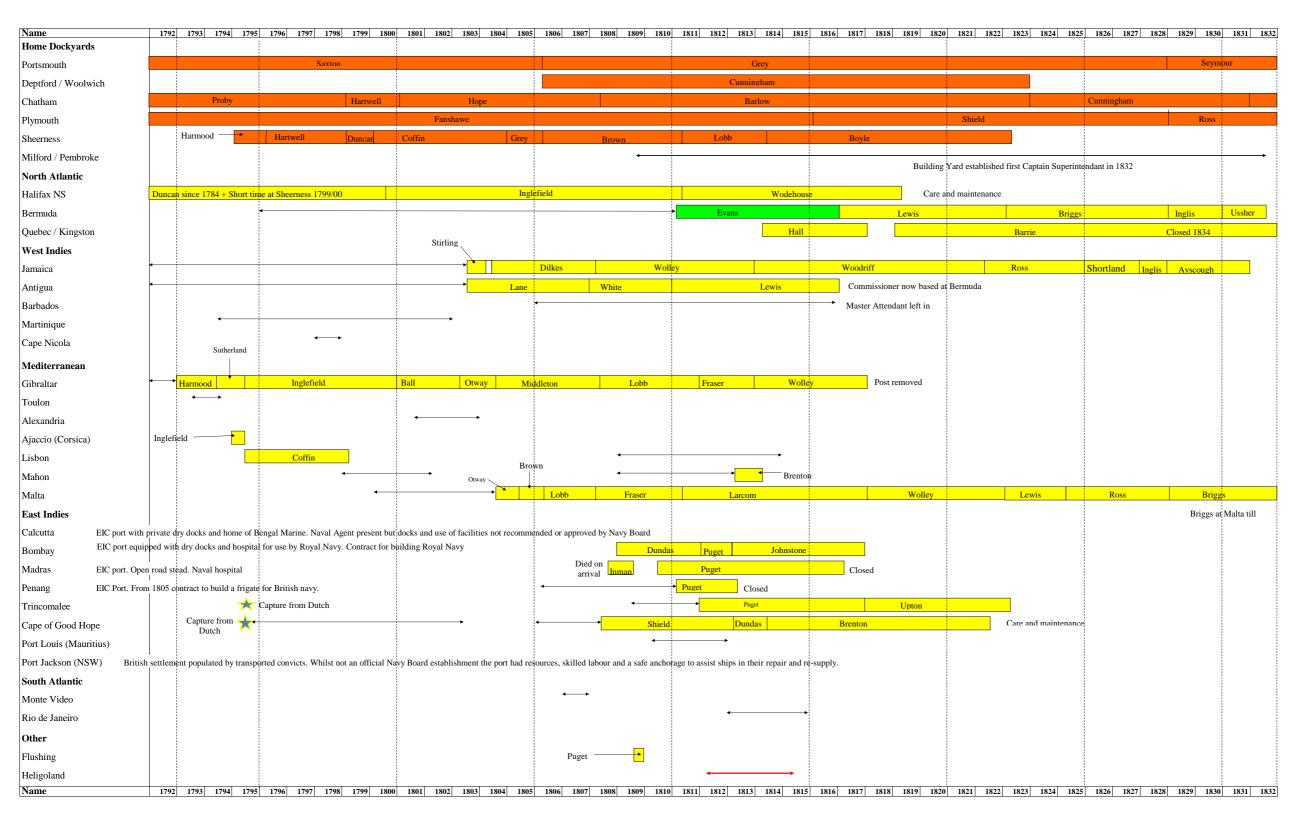


Figure3b: Dockyards and naval bases 1792-1832

Figure 3a shows the location of Britain's overseas naval bases when Napoleon abdicated in 1814. Numbers 1 to 14 were official bases, with letters a to e indicating the locations where ports had recently made a contribution to supporting the navy. Heligoland, number 15, only had a harbour master after capture in 1807 and was used to circumvent Napoleon's Continental blockade and as a centre for espionage and smuggling. The building of the naval yard at Trincomalee was underway, with the naval shore services slowly re-locating from Madras. Port Jackson, while of very little value as a repair base, is included to show the support network that had been built. Figure 3b complements figure 3a as it provides a chart of the naval yards, including the home dockyards, which operated in these wars. The timescale used for this chart was extended to 1832 to follow the careers of resident commissioners.

Many of the naval bases were of a temporary nature, usually a result of a transitory operational need, being returned to the sovereign power or simply abandoned because they could not be defended. Amongst such bases were Toulon in 1793, Ajaccio on Corsica (1794-1796),² Cape Nicola on Saint Domingue in 1798 and Monte Video (Montevideo) in 1807. Although these locations were untenable, the operational need for bases in these areas was still required. Cape Nicola was only briefly occupied and, with Jamaica close by, its abandonment was not logistically important. The River Plate operation in 1807 resulted in the need for a local base to support the invading squadron, with Monte Video being chosen, but was soon evacuated after the defeat of the British army. However, in 1808 following the evacuation of the Portuguese Royal Family to Brazil, South America became a separate naval command. The British naval squadron attached to this station was subsequently supported by a formal Navy Board base at Rio de Janeiro and became part of the web of British naval logistics.³

Chapter one demonstrated the search for a base in the western Mediterranean which resulted in Gibraltar and Minorca being secured, one as a sentry box and the other as a fleet base to cover Toulon. At the start of the Revolutionary War the scene was very promising with Royalists in Toulon and access available to Minorca, Genoa and Leghorn for Lord Hood's fleet. Very quickly, however all were lost, with Britain attempting to remain in the Toulon area by using Leghorn, and the placing of a naval

¹ Laughton, J., (ed.), 'Seizure of Helgoland 1807', *The Naval Miscellany Volume 1*, NRS, (London, 1902), 375-386.

² Carrillo, E., 'The Corsican Kingdom of George III', *Journal of Modern History*, Vol. 34, No. 3, Sep. (1962), 254-274.

³ Bauss, R., 'Rio de Janeiro, Strategic Base for Global Designs of the British Royal Navy, 1777-1815,' Symonds, C., (ed.), *New Aspects of Naval History*, (Annapolis, 1981), 75-89.

base at Ajaccio following the British occupation of Corsica. The subsequent entry of Spain into the war as an ally of France and the loss of access to north Italian ports in 1796, led to the abandonment of Corsica and withdrawal of the British fleet from the Mediterranean. This left Gibraltar as being the only base available to the British in the Mediterranean, with her fleet being stationed at Lisbon. On Britain's return to the Mediterranean, bases were again required, resulting in the capture of Minorca in 1798. The acquisition of Malta in 1800 provided a secure location to station ships in the central Mediterranean, with Alexandria providing a base in the east, following the French surrender of that port in September 1801. The British soon departed from Alexandria in March 1803, possibly in compliance with the Eleventh Article of the Treaty of Amiens. The Tenth Article of that Treaty concerned Malta, with Britain agreeing to return the island to the Knights of St. John, with Malta's independence being guaranteed by the European powers. The refusal of the British to leave Malta, and the general distrust of the French by the British leadership, resulted in the recommencement of hostilities in 1803 with the Mediterranean a critical theatre.

Gibraltar and Malta were once again essential bases, with the latter being able to provide considerable capacity to service the fleet, but an additional supply base and anchorage for the squadron blockading Toulon was required. Nelson had considered such a base in March 1796 by suggesting that a bay on Sardinia be examined.⁵ However, it was only the result of his flagship being dismasted in May 1798 that provided an opportunity to gauge local acceptance of using Sardinia's bays. Not only did the *Vanguard* use the San Pietro anchorage, but Nelson and Saumarez charmed the local commandant into providing food.⁶ Although the potential of these anchorages had been recognised it was not until late 1803 that these Sardinian bays were used more frequently as a replenishing rendezvous.⁷

An informal refuge, or forward support base, was important in Britain's logistics network as it supplemented the naval bases and allied ports. Figure 1a in chapter one provided a map of the Mediterranean showing the principal ports and the proximity of Sardinia to Toulon, hence its value to Nelson in the absence of access to Minorca. Also

⁴ Treaty of Amiens, 1802, http://www.napoleon-series.org/research/government/diplomatic/c amiens.html, accessed 11th September 2010.

⁵ Knight, R., *The Pursuit of Victory – The life and achievements of Horatio Nelson*, Penguin, (2006), 443 note.

⁶ Knight, R., The Pursuit of Victory, 274-5.

⁷ Knight, R., *The Pursuit of Victory*, 444, 460-461; see page 462 for map of Nelson's Sardinian anchorages; White, C. (ed.), *Nelson The New Letters*, The Boydell Press, (2005), 381-397.

to be seen was how the British countered a French threat to the eastern Mediterranean. The British feared Napoleon would launch another adventure to Egypt with a possible onward thrust to India. This offensive would have been launched via the Adriatic, so a British squadron was placed at the Strait of Otranto to block the French. Britain resorted to the occupation of the Ionian Islands⁸ to provide a forward replenishment base to supplement Malta.⁹ As with ships going to Sardinia there was no need for vessels to return to Malta for anything other than repair, thus maximising a ship's time on station.

These Mediterranean replenishment bases were reflected in other seas. For example, Britain's Baltic fleet obtained support from Swedish ports, even when at war with that country. 10 The vessels using the trading routes in the Atlantic called at Madeira, Cape Verde Islands and St. Helena, with Madeira becoming a particular favourite calling place for British ships. A consequence of France threatening Portugal in 1807 caused Britain to occupy and garrison the island to ensure its availability. The invasion of the Iberian Peninsular, together with the uprising of the Spanish, gave the opportunity for Britain to intervene with an army into the Peninsular. To support the defence of Portugal and the British army, the creation of a separate naval command, Coast of Portugal, came into existence with, Lisbon again becoming a naval base. The defence of home waters, holding a ring around Europe and maintaining access to naval supplies from the Baltic region, was to be the primary role of the navy. However, defence of Britain's colonies and her seaborne trade was the main purpose of her naval squadrons on non-European stations, with Britain's back door being her Caribbean and North American colonies. The maintenance of the security of these North Atlantic areas was to some extent invested in naval bases.

The Caribbean¹¹ was a major theatre in the Revolutionary War and spawned a number of temporary naval bases for the British alongside the existing bases at Jamaica and Antigua. With the occupation of Martinique in 1794, the British established a naval base on the island to support operations in the Leeward and Windward Islands. At the end of

⁸ The Ionian Islands together with Cofu became the United States of the Ionian Islands a protectorate of Great Britain following the Congress of Vienna. They remained as such until 1864 when they became united with Greece. Only an echo of this occupation remains with cricket still being played on Corfu by local Greeks.

⁹ Mackesy, P., The war in the Mediterranean 1803-1810, (London, 1957), 351-355.

¹⁰ Voelcker, T., *Admiral Saumarez versus Napoleon, The Baltic 1807-12*, The Boydell Press, (2008); Ryan, A., 'An Ambassador Afloat: Vice Admiral Sir James Saumarez and the Swedish court 1808-1812', Black, J., and Woodfine, P., (eds), *The British Navy and the Use of Naval Power in the Eighteenth Century*, Leicester University Press, (1988), 237-258

¹¹ A map of this area of operations is provided in chapter one as figure 1c.

that war Martinique was returned to France and was not re-captured in the Napoleonic War until 1809. A base in the region was established at Barbados in 1806 with a naval storekeeper and master shipwright. The establishment was placed under the supervision of the resident commissioner at Antigua. The mopping up of the French colonies in the West Indies in early 1810 would seem to have removed any threat from the Caribbean and western Atlantic, but this had been after considerable attention in this theatre. Although the region appeared to be entering a period of inactivity Britain was investigating the upgrade of its facilities at Bermuda and building a new naval base. A map of the western North Atlantic, figure 3c, provides a reason for this development.

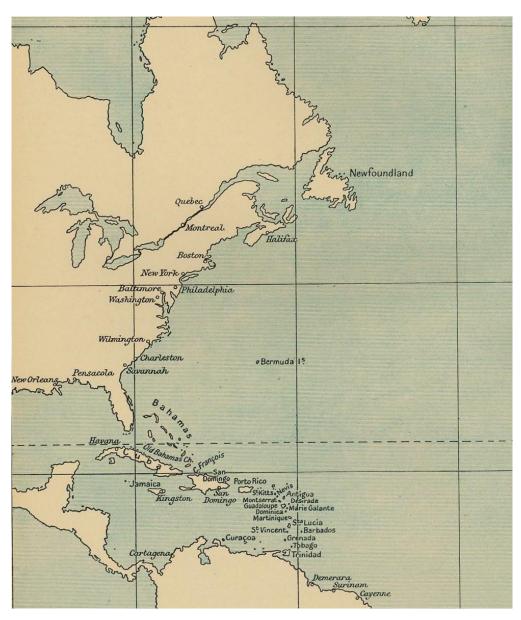


Figure 3c: Western North Atlantic in 1810

Bermuda was a seemingly insignificant island perched over 600 miles from the coast of the United States, surrounded by a treacherous coral reef that made it a difficult destination to approach, or use as shelter. With the loss of her American colonies the possession of Bermuda became important. Britain was left with North American bases, but these were at Halifax and St. Johns, Newfoundland in the north east. Both these ports were almost unusable due to sea ice in the winter months, limiting refitting opportunities and leaving them in an inconvenient position to support squadrons called upon to blockade the United States coast. Bermuda was ideally situated for an enemy to interdict British trade with the West Indies, so garrisoning Bermuda could be considered a defensive measure, but it was turned into a base for offensive operations. This naval headquarters, together with a strong squadron, was to be a key tool in Britain's plans for any war with the United States for the next half century.¹²

The template for this strategy resulted from the United States declaration of war on Britain in June 1812. Britain's war aims turned on the question of how to make the Americans sue for peace while retaining Canada. Blockading ports, raiding the coast and terminating the seaborne trade of the United States were the offensive measures that Britain took, whilst continuing defensive measures required for trade protection. Defending Canada from invasion was to turn on the command of the Great Lakes and the choke points between them. Both the offensive and defensive measures resided on naval command and the naval bases that supported them, Halifax, Bermuda and Kingston on Lake Ontario

The work of turning Bermuda into a naval anchorage, with the building of the naval dockyard has been extensively covered elsewhere and will not be detailed in this thesis. ¹⁴ A naval surveyor's work, Thomas Hurd, a future hydrographer to the Admiralty Board, was to be the key that unlocked Bermuda as Britain's Gibraltar of the West. ¹⁵ However, its pre-naval base capacity to support naval operations should not be underestimated.

¹² Arnell, J., 'Bermuda as a Strategic Naval Base', *Bermuda Journal of Archaeology and Maritime History*, Vol. 5, 1993, 126-134; Gough, B., 'Bermuda Naval Base of the early Pax Britannica', *Bermuda Journal of Archaeology and Maritime History*, Vol. 5, (1993), 135-148.

¹³ Gardiner, R. (ed), *The Naval War of 1812*, Chatham Publishing, (1998); Morriss, R., *Cockburn and the British Navy in Transition – Admiral Sir George Cockburn 1774-1853*, (Exeter, 1997), 83-120.

¹⁴ Wilkinson, H., *Bermuda from Sail to Steam*, London, 1973; Stranack, I., *The Andrew and the Onions – The story of the Royal Navy in Bermuda 1795-1975*, Bermuda, 2nd Edition, (1990); Brockman, W., *Bermuda: Growth of a Naval Base*, Bermuda, 2009; Willock, R., *Bulwark of Empire – Bermuda's Fortified Naval Base 1860-1920*, Bermuda, 2nd Edition, (1988).

¹⁵ My thanks to Dr. Webb for a view of an early draft of a book in preparation for Bermuda Maritime Museum concerning Thomas Hurd's survey of Bermuda.

Similarly, many Canadian historians have written about the Great Lakes campaign, the role and development of Kingston dockyard and the ship building contest that took place. ¹⁶ Prior to naval command coming under Admiralty control, the British facilities and ships were a colonial force, the Provincial Marine, and came under the command of the British Army at Quebec. James Yeo was appointed commodore and commander-inchief for the Great Lakes in March 1813, arriving in May, with full Admiralty control taking place in January 1814. ¹⁷

Figure 3d provides a map of the military and naval establishments on the lakes. Although the lakes are connected by water they had to be treated as separate entities as navigation between them was almost impossible. Lake Ontario could be negotiated seventy miles down the St. Lawrence until rapids blocked navigation, while Niagara Falls separated Lake Erie from Lake Ontario. Materials could be transported over the rapids on the St. Lawrence via bateaux, ¹⁸ thus the Navy Board could transport goods from England to Kingston dockyard that were difficult to obtain in Canada, such as copper and iron ship building items. ¹⁹

The impossibility of moving vessels from the ocean to the Great Lakes made Kingston a unique Navy Board overseas yard in being the only one that built major warships. Halifax built two small ships, a sloop and a gun brig, and small gun boats for a Leeward Island's operation, but this was the limit of overseas Navy Board yards' shipbuilding.²⁰ Vessels for the Royal Navy were built overseas, with Bermuda providing 41 minor vessels in the Revolutionary and Napoleonic Wars, but these were commercial contracted vessels, as were the Bombay dockyard built warships, the Penang built frigate and the later Calcutta built 74 gun ship.²¹ Kingston's time in the sun as a shipbuilding centre and naval yard was short lived with the War of 1812 ending in

¹⁶ Winton-Clare, C., 'A Shipbuilder's War', *Mariner's Mirror*, Vol. 29, No. 3, (1943), 139-148; Malcomson, R., 'War on the Great Lakes', Gardiner, R. (ed), *The Naval War of 1812*, Chatham Publishing, (1998), 98-131; Malcomson, R., 'HMS *St. Lawrence*: The Freshwater First Rate', *Mariner's Mirror*, Vol. 83, No. 4, (1997), 419-433.

¹⁷ Malcomson, R., 'War on the Great Lakes', Gardiner, R. (ed), *The Naval War of 1812*, 122.

¹⁸ Flat bottomed vessel about 20 and 30 feet long as reported in Commander Drury's letter to Lord Melville. Drury to 2nd Lord Melville, 1st January 1814, National Archive of Scotland, GD 51/2/491. ¹⁹ Commander A. V. Drury (Captain of HMS *Dover*) to Lord Melville, 1st January 1814, NAS, GD 51/2/401

Gwyn, J., 'The Halifax Naval Yard before 1820', *Transactions of the Naval Dockyard Society*, Vol. 5, (September 2009), 22.
 Knight, R., 'Devil bolts and deception? Wartime naval warship building in private shipyards, 1739-

²¹ Knight, R., 'Devil bolts and deception? Wartime naval warship building in private shipyards, 1739-1815', *Journal of Maritime Research*, (April 2003), Note: Rif Winfield' *British Warships in the Age of Sail 1792-1817*, indicates 10 ship sloops and 37 cutters / schooners making a total of 47 vessels being built for the Royal Navy at Bermuda.

January 1815.²² The shipbuilding already in place was suspended and was followed by the Rush-Bagot agreement in 1817 to demilitarise the Great Lakes, by reducing the number of warships on the lakes.

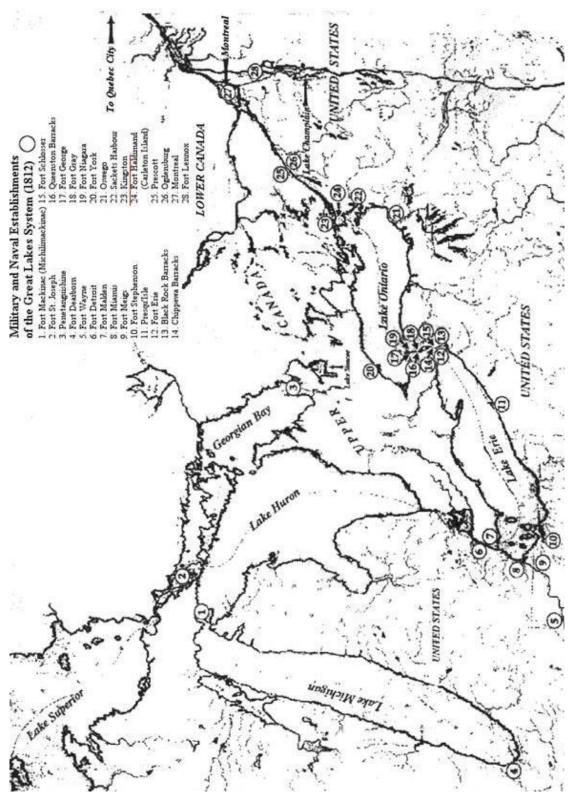


Figure 3d: Military and Naval Establishment on the Great Lakes System 1812

 $^{^{\}rm 22}$ Appendix 3a contains illustrations of Kingston dockyard including a plan from the UK Hydrographic Office.

Although Kingston was a building, refitting and supply yard, the other overseas yards were only for repairs and re-supply of the squadrons in their area. This made them logistics centres that were dovetailed into the major home dockyard and victualling organisations, connected by the vessels of the Transport Board.

3.2 The extent of the refit work at overseas yards: the size and composition of the squadrons and the naval yard workforce

	Number of Ships Deployed						
Station	Quarter 1	Quarter 2	Quarter 3	Quarter 4			
East Indies	31	36	32	29			
Cape of Good Hope	12	13	15	15			
South America	14	16	13	11			
Jamaica	40	38	39	32			
Leeward Is	64	71	73	65			
North America	33	31	35	35			
Newfoundland	5	10	12	11			
Mediterranean	72	80	78	77			
Coast of Portugal	9	11	21	16			
Channel Fleet	68	65	30	34			
The Downs	32	29	28	27			
Off Texel and							
Scheldt	35	34	32	80			
Baltic	31	52	62	55			
Home Ports	87	77	75	70			
Convoys and							
Cruisers	21	30	34	23			
Unassigned	122	103	142	152			
Totals	676	696	721	732			

Table 3a: Planned deployment of British ships in 1809²³

Figure 3b and the foregoing discussion have provided a survey of the established naval yards, during the Revolutionary and Napoleonic Wars. The discussion has excluded those yards and bases in the East Indies and Cape of Good Hope which form the subject of chapters four, five, six and seven. The great naval battles of these wars ended with Trafalgar in 1805 and although this gave naval supremacy to the British, to maintain that status required the navy and its logistics to be further enlarged in scale. The peak in the number of ships and men employed by the British occurred in 1809, with 732 ships and over 146000 men being shown in the Admiralty's ship deployment lists. ²⁴ Table 3a

²³ TNA, ADM 8/97-98.

²⁴ Appendix 3b shows graphs of the Admiralty's planned ship deployment from 1792 to 1813.

shows where the ships were deployed during this peak year and indicates that the West Indies and North America were the major overseas stations outside of Europe.

Table 3a only shows the total number of ships on each station and does not truly convey the relative strengths of these squadrons. Those in Home Waters, the Baltic and the Mediterranean contained the vast majority of the battleships. Appendix 3b provides a graphical representation of the station deployments, by vessel classification for January and June 1809 and January 1810. What all three graphs show is that the non-European overseas squadrons were based on frigates, sloops and gun brigs, which emphasize their role as one of trade protection. The Home and Baltic based squadrons had close access to the highly capable royal dockyards, while those in all the other theatres, apart from the East Indies, only had access to naval yards with limited refitting capability.

The major overseas squadrons in 1809 were based in the Mediterranean, West Indies and North America supported by their local naval yards at Malta, Jamaica, Antigua and Halifax. These yards had a considerable workforce for undertaking repairs, with the minor yard at Gibraltar also providing limited refit facilities. The type of work carried out at these locations was detailed in the reports the resident commissioners sent to the Admiralty. These dispatches notified when ships arrived, left their port and itemised the work that was performed. Examples of these reports for Malta, Halifax and Jamaica have survived from mid 1809 and when compared with the establishment paylists, not only specify the type of work performed, but also indicate the capabilities of the respective yards. Table 3b shows the workforce at these key yards together with the yard at Antigua.

A mere glance at the table below confirms the workforce was divided into two types, permanent (established) and temporarily hired (extra) personnel. This continued earlier practice and ensured that when demand decreased, the extra men could be the first to be dismissed. The labour force can also be considered in two further categories, firstly, management with support staff and secondly, artificers with supporting labourers.

The management and support staff at all four yards had the same structure, consisting of a resident commissioner, three principal yard officers, clerks, plus security of the yard and stores being maintained by the gate and store porters together with watchmen. Included in the management and support structure were foremen of the key trades and

²⁵ These reports were in accordance with the seventeenth Article of the Resident Commissioner's Instructions contained in the Fifth Report of the Commission of Naval Revision.

labourers. These individuals ensured that the artificers and labourers were adequately supervised.

Role	Jamaica		Antigua		Halifax		Malta	
	Estab.	Extra	Estab.	Extra	Estab.	Extra	Estab.	Extra
Commissioner	1		1		1		1	
Naval Storekeeper	1		1		1		1	
Master Shipwright	1		1		1		1	
Master Attendant	1		1		1		1	
Boatswain	1		1		1			
Clerks	5	4	6	2	8	5	6	4
Commissioner's coxswain			1		1		1	
Gate porter	1		1		1		1	
Watchman	15		7	1	15		7	
Store porter	1		2	1	1			
Cabin keeper					1		1	
Boatmen	19				10		3	9
Foreman of Shipwrights	1		1		1		1	
Foreman of Sailmakers	1		1		1		1	
Foreman of House carpenters	1		1		1		1	
Foreman of Smiths	1		1		1		1	
Foreman of Labourers	1		1		1		1	
Foreman of Caulkers		1					1	
Foreman of Ropemakers							1	
Foreman of Masons								1
Quarterman		2						
Building Assistant		1						
Masters of watering schooners		3						
Managers & support staff (Total)	51	11	27	4	47	5	30	14

Table 3b: Establishment of major overseas naval yards in 1809²⁶

 $^{^{26}}$ Paylists, TNA, ADM 42/2286, Jamaica, May 1809, ADM 42/2100, Antigua, July 1809, ADM 42/2161, Halifax, July 1809, ADM 42/2319 Malta, May 1809.

Role	Jamaica		Antigua		Halifax		Malta	
Role	Estab.	Extra	Estab.	Extra	Estab.	Extra	Estab.	Extra
Shipwright	24	8	16	78			29	43
Shipwright / Caulkers					26	31		
House carpenter	4	3	1	32	4	20	3	
Blockmaker	1		1		1		1	
Smiths	3	3	4	10	4	3	5	4
Sawyer	1	8		3	2	4	3	1
Sailmaker		16		17		13		19
Caulkers	11	41	6	25			7	16
Masons		3	1	32	1	1		29
Pavior		1						
Ropemaker		1	1		1		37	45
Hemp preparer							7	
Painter							2	
Cooper	1							
Servants to Artificers (apprentices)	5	4	9	3	16			
Labourer	29	101	40	108	30	1	34	13
Ropemaker Labourer								30
Pitch heater		2						
Artificers and labourers (Total)	79	191	79	308	85	73	128	200
Total	130	202	106	312	132	78	158	214
Grand Total 332		418		210		372		

Table 3b: Establishment of major overseas naval yards in 1809 (continued)

The skilled workforce, although small compared to a home dockyard, had representatives of all the main trades including at each yard a single blockmaker. Presumably even in the time of the mass production of blocks, recently introduced at Portsmouth, the necessity for the repair or manufacture of blocks was essential. The capacity for building repairs can also be seen at all the yards via the employment of house carpenters and masons, with Antigua and Malta having particularly large numbers of masons.

What is not separately identified in table 3b is the black workforce, both slaves and freemen, at Jamaica and Antigua. They constituted over two thirds of the labour force

and 100 percent of the labourers. The skills represented in the workforce in 1809 were almost identical to that in 1792.²⁷

Malta was unique amongst these yards in having a significant number of rope-making personnel and a legacy facility for making cordage created by the Knights of St. John. The Maltese State's naval yard at Valetta had been equipped with all the facilities required to build, refit and supply its vessels.²⁸ Apart from the absence of a dry dock, Britain found on capturing the island in 1800, a naval yard that had been built and recently supported two 64 gun ships, two frigates and four galleys for the Knights of St. John.²⁹ The local workforce who had serviced this force is evident in the 1809 paylists for all the trades. Considerable investment was also made in a ropeyard, with completion in April 1808 following considerable lobbying from the resident commissioner and master shipwright.³⁰ It was unfortunate that the ropery was destroyed by fire in July 1809,³¹ but it was rebuilt and continued in use until the end of the wars in 1815.

Yard	No. of Ships received in Port	No. of Transports	No. of ships upon work performed	Type of work
Jamaica	19	0	13	Upper works repair; spars made; decks and weather works caulked; sails repaired; careened ship.
Halifax	29	0	25	Caulking upper decks; masts, spars and yards made; repair of cabins and timber shot away; pump made and other iron work; repair to copper sheathing; sails repaired and manufactured.
Gibraltar	32	17	5	Caulking; spars and masts made.
Malta	29	8	4	Caulking; spars and masts made; sails repaired.
Antigua	N/A	N/A	N/A	No reports found

Table 3c: Refit work of selected naval yards in July 1809³²

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²⁷ See table 1d

²⁸ Quintano, A., The Maltese-Hospitaller Sailing Ship Squadron 1701 – 1798, (Malta, 2003).

²⁹ Winfield, R., British Warships in the Age of Sail, 1792-1817, (London, 2005), 108.

³⁰ MacDougall, P., 'The Formative Years: Malta Dockyard, 1800-1815', *MM*, Vol. 76, No. 3, (1990), 205-213.

³¹ Commissioner Fraser to Admiralty, ADM 1/3441, TNA, 10th July 1809.

³² Reports from commissioners to Admiralty for July 1809, TNA, ADM 1/3441, August 1809

The refit work performed by the labour force at Jamaica, Halifax and Malta in 1809 is detailed in the commissioner's reports to the Admiralty. These reports, represented in table 3c above, show particular dependence on shipwrights, caulkers, sailmakers and to a lesser extent smiths. Although only providing a snap-shot of activity in July 1809, the figures in table 3c appears representative, as they are confirmed in similar reports for the Jamaica yard from July to October 1813.³³ The reports for the Cape of Good Hope and the correspondence of the commissioners, commanders-in-chief and the Admiralty, Navy, Transport and Victualling Boards in chapters four, five and six over a six year period reinforce this view.

3.3 Refit and stores policy for overseas yards

From the reports on the refits performed, it would appear the overseas yards were equipped and manned to carry out minor repairs and maintenance tasks on naval vessels. This was the main refitting role of the overseas yards, but what was the policy regarding the fitting out of captured prizes and vessels requiring major repairs? Undoubtedly, the skills required existed in the workforce, so the critical factor would have been in the availability and use of suitable stores, without unduly affecting the existing squadron.

The answer to this question can be considered theoretically and examined by what occurred. To answer in the abstract some assumptions have to be stated. A primary consideration would be Cicero's dictum on war 'Nervos belli, pecuniam infinitam' (The sinews of war, unlimited money), remembering that money is never unlimited and that spending effectively is probably a more accurate dictum. Unfortunately judging what constitutes effective spending is subjective and open to many interpretations.

Maintaining a squadron on an overseas station reduces transit times to a theatre of operations and hence maximises a ship's time in the operational area. Consumable stores such as victualling items would be placed in local storehouses and supplemented by regional contracts for fresh supplies. Conceptually, this was simple if the number of people to be fed, the ration to be allocated and what the local area can provide was known. Recent scholarship has provided an excellent examination of the victualling

³³ Henry Pinkcombe (Naval Officer) Jamaica to Admiralty, TNA, ADM 1/3442, 18th December 1813.

organisation in these wars and shows how effective they were in supplying Britain's fleet.³⁴

These studies show there were many variables involved in obtaining and processing the victualling items, but the total amount needed, where to send the supplies and when the items would be required could be predicted with some confidence. The victualling organisation had many foreseeable problems such as, shipping losses, or the processed food being found inedible on opening. This latter problem was mitigated by strict quality and control standards being operated, with the loss of ships being merely an inconvenience, as local stockpiling and emergency purchase usually prevented temporary shortages. The answer to supplying victualling stores to world-wide squadrons could therefore be determined by simple arithmetic, in modern terminology a deterministic model.³⁵ Supplying the optimum naval stores required to an overseas squadron presents a slightly more difficult calculation, when there was no uniformity of design even among ships of the same rate, and especially if unexpected vessels were to be locally commissioned, or major refits were to be undertaken.

Although the overseas yards can be considered as one group, for stores supply from England, the East Indies yards must be considered a special case for ship refit and repair as they had access to East India Company resources and the highly developed economy of India. Consequently this will be considered separately in chapter seven.

The items required to enable a warship of the sailing age to function were many and varied, ranging from anchors to nails, bolts of canvas to masts and shipwright tools to barrels of turpentine. To provide the scale of different stores required, to ensure a squadron remained operational, reference can be made to the stores shipping form used by the Navy Board. ³⁶ Examples of this form can be found in the National Maritime Museum for items being shipped from Woolwich to Madras in 1812. The descriptions of the stores being sent on the form were listed alphabetically, with units of measure

³⁴ Knight, R., and Wilcox, M., *Sustaining the Fleet 1793-1815, War, the British Navy and the Contractor State*, The Boydell Press, (2010); Macdonald, J., 'The Victualling Board 1793-1815, A study of Management Competence', Unpublished PhD, (King's College London, 2009), Davey, J., 'War, Naval Logistics and the British State – Supplying the Baltic Fleet 1808-1812', Unpublished PhD, (University of Greenwich, 2009).

³⁵ Deterministic model definition: Mathematical model in which outcomes are precisely determined through known relationships among states and events, without any room for random variation. In such models a given input will always produce the same output. *Business Dictionary.com*, www.businessdictionary.com, accessed 8th October 2010.

www.businessdictionary.com, accessed 8th October 2010.

36 An Account of Stores Shipped for Madras from Woolwich for Madras in the various East Indiaman, 14th January 1812, NMM, MKH/126.

and amount issued, and consisted of 17 pages of pre-defined items. This list by item description, indicates a standardisation process had been established, complementing the vessel classification in the British navy. At the highest level within this system was the rate or unrated vessel identification, with this being further sub-divided into classes. Each vessel class now had a list of items that applied to that type of ship. It would seem attempts were made to maximise the use of common items between vessels, but made masts, mast gear and attendant sails tended to be establishment specific.³⁷

The above has, to some extent, defined the question of what store items were required to support a ship. However, it does not explain what had been carried on board ship as ready stores, or what quantities had to be allocated to overseas yards. The Navy Board laid down guidance for what ships should carry as spares, together with the tonnage to be allocated for stowage. For equipping ships with stores the Navy Board divided vessels into two categories. Ships were either equipped for foreign or home service, with an allocation of stores for a set number of months, for example, four or eight months. This indicates that knowledge had been accumulated on the expected turnover of broken, lost or simply unserviceable anchors, spars, masts, sails and cordage. What could not be anticipated, with any certainty, would be when battle or storm damage would take place, what stores would be required or in what quantity. This would be exacerbated if captured ships also received naval stores.

Once the ships had arrived on their foreign station the question of re-supply of naval stores and repair was the responsibility of the local naval yard, which helps to answer the question of what items would be needed at the overseas yard. The minimum holdings would be items that supported all the ships allocated to its area, with the quantity required at least equal to the expected operational turnover. This could prove to be a serious under-estimate of the amount required, as the ships were expected to be in action and some items had a limited shelf life. The expected loss due to this is by its very nature, unpredictable, but reasonable allowance could be made. What could not be anticipated, would be the stores required for captured vessels. The stores requirements for refitting and commissioning prizes and those required for major refits at overseas bases, fall into the same category, that of being unpredictable. If stores were excessively issued for commissioning prizes, and major refits on ships of the squadron,

³⁷ Made masts: A wooden mast formed of several shapes and longitudinal pieces joined together. Mast gear: Wooden yards, spars and booms.

³⁸ Lavery, B., *The 74 Gun Ship Bellona*, (London, 1985), 18; Winfield, R., *The 50-Gun Ship*, (London, 1997), 116.

then the expensive stores shipped out from Britain would be unavailable for their prime purpose, the maintenance of the local squadron.

Many enemy vessels were captured by the British in the Revolutionary and Napoleonic Wars, particularly in the earlier conflict, making a considerable contribution to the strength of the fleet.³⁹ Considerable numbers of these prizes were captured on overseas stations, with a high percentage being commissioned at local ports, which suggests a refit and stores issue policy at odds with the previous discussion. More work is required in this area to determine if refitting and supplying these prizes with naval stores unduly affected the existing squadron. It is unlikely that a definitive answer can be found as too many variables have to be determined, for example, what was the condition of the captured vessel and what stores were required? However, what has survived is evidence of an Admiralty policy to not commission and refit prizes at foreign stations, confirming the view that the main purpose of overseas yards was for maintenance of vessels.⁴⁰ This provides an indication of the range and quantity of naval stores required, which allowed the number of storehouses and their capacity to be calculated to accommodate a squadron's requirements.⁴¹

The stores process fell broadly into two main groups. Firstly, issuing items to refit, or for later use by ships at sea and secondly, ensuring a relevant ready stock of serviceable items was always available. This ready stock was to be obtained from the most economic source either from Britain, or from local resources. The ability to locally obtain naval stores provided considerable flexibility for naval yard operations.

Accurate record keeping was fundamental to operating this process, together with regular communication to the Navy Board on current holdings and future needs. The reports on store holdings, requests for new items and what stores were issued were sent monthly, quarterly and annually, together with the purchase vouchers for locally obtained items.

The above has provided in general terms the role, location and range of activities of the overseas naval bases, but has not evaluated their in-depth activities, or how they were

³⁹ Roger Morriss states 43 ships of the line, 109 frigates and 65 smaller vessels were added to the strength of the navy between 1793 and 1801 and calculated in 1797 that this method of acquisition amounted to more than a third of a million pounds, Morriss, R., *Naval Power and British Culture*, 90.

⁴⁰ Admiralty to Admiral Bertie, TNA, ADM 2/937, 12th September 1809, 13th February 1810.

⁴¹ Appendices 2a and 2f provide diagrams of the stores process that was operated at overseas stations. Appendix 2a shows what the Commission on Fees found in place and appendix 2f the process the Commission of Naval Revision mandated.

managed. Chapters four, five, six and seven provide an answer to how the naval bases at the Cape of Good Hope and the East Indies were rationalized, operated and managed. Particular attention has been given to the change in their management introduced by an Order-in-Council in September 1808. This adopted the recommendations of the Commission of Naval Revision's fifth, twelfth and thirteenth reports and the appointment of resident commissioners to the Cape, Bombay and Madras.

3.4 Resident commissioner – history and developing role

The evaluation of the role and activities of the resident commissioners of Britain's dockyards by historians has produced mixed reviews, but one is left with the overall impression they were considered ineffective. As their appointment to overseas bases, and increase in their responsibilities, was a key recommendation of the Commissions on Fees and Naval Revision, a review of the office of resident commissioner provides a clearer understanding of their role and how it developed.

On the Restoration of the monarchy in 1660, James, Duke of York, resumed the position of Lord High Admiral and reconstituted the Navy Board in a new format. This consisted of the appointment of three extra sea-officer commissioners to sit with the existing four principal officers. In 1662 James followed this up by providing detailed instructions to the principal officers of their duties, with the subsequent issue of instructions to the principal dockyard officers. It soon became obvious that the control of the out-ports, Portsmouth and Harwich, would be enhanced if a Navy Board commissioner was resident at these locations, resulting in 1664 with resident commissioners being appointed, shortly followed by a third at Chatham. At the end of the Second Dutch War, the commissioner at Harwich was removed leaving two permanent officers at Portsmouth and Chatham. Significantly, these out-port commissioners were not issued with instructions, subsequently resulting in the role being one dependent on the individual appointed.

The framing of the Duke of York's instructions to the principal officers of the Navy Board and dockyards promoted collective responsibility by demanding their agreement and countersigning of orders. This resulted in the Portsmouth commissioner requesting

⁴² Rodger, N., The Command of the Ocean, 95-96; A book containing the Duty of the Lord High Admiral of England. And the Instructions settled by His Royal Highness the Duke of York for the Commissioners and Subordinate Officers of the Royal Navy, Admiralty Library, 730.17070 1994/294.

⁴³ Rodger, N., The Command of the Ocean, 103.

clarification in the event of an urgent decision being required. James replied in a letter empowering the out-port commissioners to act with as much power as the whole Navy Board: 'Power to do whatsoever might or ought to have been done by the whole Board'.⁴⁴ In principal this provided the detached commissioner with more individual power than any other Navy Board official.

John Ehrman in his study of William III's navy, states that naval commissioners were at Portsmouth, Chatham and Plymouth, but suggests they either submitted to demands from sea-officers for their ships, or quarrelled with them until they left harbour. Daniel Baugh noted the attendance of commissioners at the dockyards and the informal position they held relative to the Navy Board. Baugh also records the 1749 Admiralty inspection of Plymouth dockyard with the recommendation that the Navy Board draw up explicit instructions for dockyard commissioners. This was not done, nor was it, until the first decade of the nineteenth century, and then it was not drafted or issued by the Navy Board. Baugh records a remark by Commissioner Hughes in 1747. Hughes stated, for every ship that goes out of harbour, I think, two others come in 1747. This indicates that the task of arranging the repair and supply of these vessels with their commanders, the port admiral and the officers of the yard, was one of considerable importance and delicacy, not one where credit for good negotiating would necessarily be recorded.

The most comprehensive studies of Britain's dockyards in the late eighteenth and early nineteenth centuries are those by Knight and Morriss. Both historians outline the duties of the dockyard commissioners for whom the priority and scheduling of refits was only one of many tasks. Resident commissioners were meant to be the eyes and voice of the Navy Board; ensure rules and warrants were followed; report on operations, potential and actual problems, presumably with recommendations for their solution; and to make local contractual arrangements. They also acted for the local civil authorities as magistrates and were involved in the payment of men on vessels in harbour.

⁴⁴ Letter from James, Duke of York to Navy Board, 15th March 1669, Empowering the Commissioners at Out-ports to act with as much power as the whole Board, *A book containing the Duty of the Lord High Admiral of England. And the Instructions settled by His Royal Highness the Duke of York for the Commissioners and Subordinate Officers of the Royal Navy*, 103-104.

⁴⁵ Ehrman, J., *The Navy in the War of William III* – 1689 – 1697, 101.

⁴⁶ Baugh, D., British Naval Administration in the Age of Walpole, note 132, 289.

⁴⁷ Baugh, D., British Naval Administration in the Age of Walpole, 273.

⁴⁸ Knight, R., 'The Royal Dockyards in England at the time of the American War of Independence', Unpublished PhD; Knight, R., *Portsmouth Dockyard Papers 1774-1783*, (Portsmouth, 1987); Morriss, R., *The Royal Dockyards in the Revolutionary and Napoleonic Wars*.

Historians have focused on the lack of hiring and firing powers of the resident commissioners, tending to consider this central to their perceived ineffectiveness. Knight, in his examination of the dockyards in the American War of Independence provides an in-depth survey of the actions of resident commissioners. He confirms that the effectiveness of the post was dependant on the personality and determination of the commissioner, not specifically their ability to hire and fire.

Even with the limitations outlined above, Knight considered the navy was served well by its out-port commissioners, with the exception of James Gambier at Portsmouth. Gambier, Samuel Hood and Henry Martin were studied, with Hood replacing Gambier in 1778, Martin following Hood in 1781 with the latter's return to the fleet. Gambier had distaste for his non-combatant role, but does not seem to have been a success as a commissioner or senior naval officer. Hood had already been at Halifax as commodore in the late 1760s during major renovations of that naval yard, making recommendations for improvements, hence becoming familiar with such facilities. Knight remarks that Hood took the Portsmouth post, as he saw it as a step to promotion and was a success in the role. Hood gained the respect of the yard officers, the Navy Board and of the port admiral. Knight summed up Hood's contribution thus – '[he] made [the role of commissioner] into an effective post. A forceful personality and intelligence capable of adapting to a situation very unlike that of a quarterdeck could make his period in office an exceptional one of great value for the navy'. S1

Henry Martin continued where Hood left off and remained as commissioner at Portsmouth until 1790 when he replaced Middleton as comptroller at the Navy Board; this example of experience and expertise being retained in civil naval administration was to become the norm in the next thirty years. Martin's successor, on his death in 1794, was Hamond, a previous commissioner at Halifax, later to be followed by Martin's son, Thomas Byam Martin, as comptroller from 1816 to 1832. Maybe, Thomas's familiarity and understanding of civil administration, dates from time spent in his formative years with his father at Portsmouth in the 1780s. ⁵³

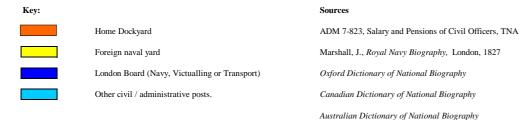
⁴⁹ Knight, R., James Gambier, *ODNB*, accessed 7th November 2010

⁵⁰ Gwyn, J., Ashore and Afloat, 13-16

⁵¹ Knight, R., Portsmouth Dockyard Papers 1774-1783, xxvi

⁵² See figure 3e for a list of resident commissioners from 1792 to 1832 showing their employment from their first appointment.

⁵³ Laughton, J., and revision by Lambert, A., Thomas Byam Martin, *ODNB*, accessed 7th November 2010. Thomas was born in 1773 and was entered into the Royal Naval Academy at Portsmouth, of which his father was governor, in August 1785.



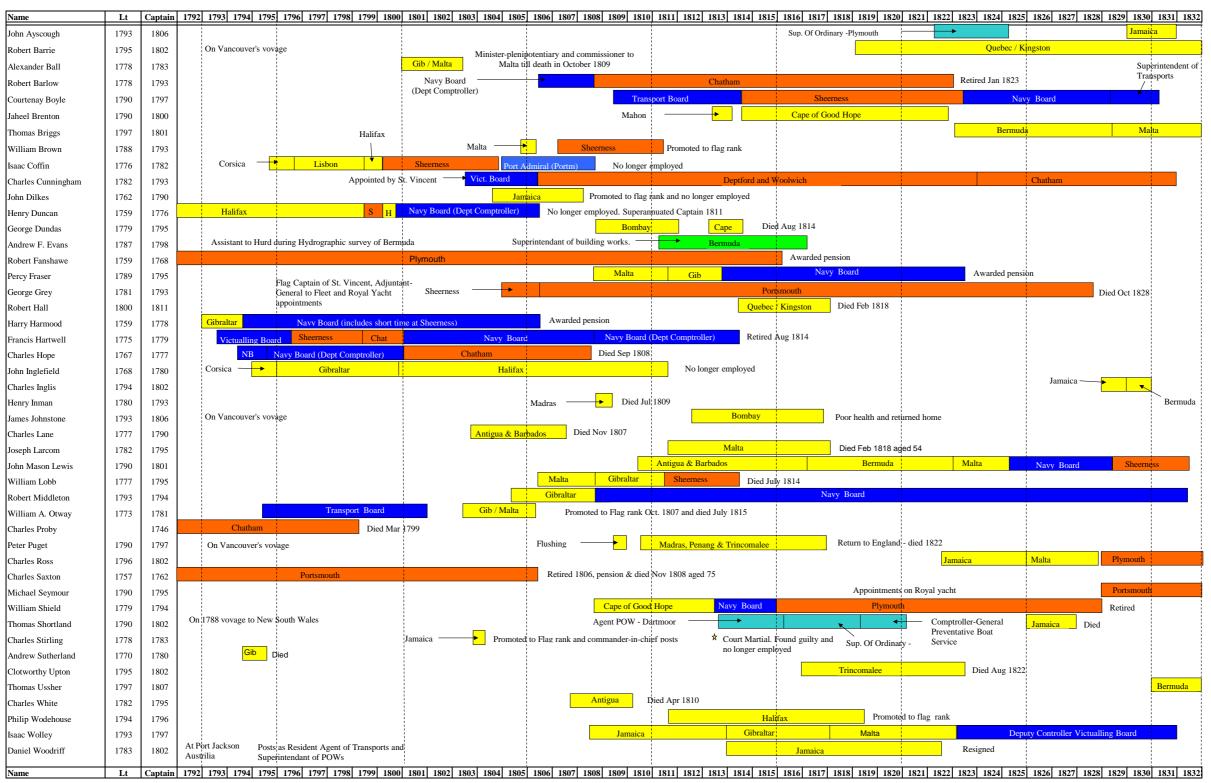


Figure 3e: Resident Commissioners of the British Navy, 1792 - 1832

The formation and retention of a professional class of sea-officer naval administrators was coming into existence and possibly can be traced to Charles Middleton. Middleton had suggested in 1784, that resident commissioners should serve for one year on the Navy Board before taking up their posts at a dockyard, so they could be properly trained and made ready to co-operate with their partners in London. Although this did not become immediate practice, his idea was adopted by the Commissions on Fees and Naval Revision who recommended that commissioners at overseas yards subsequently serve on the Navy Board, or at a home dockyard.

Figure 3e provides a list of the resident commissioners who served at overseas and home dockyards from 1792 to 1832, on the abolition of the Navy Board. What becomes apparent is all the commissioners were senior captains with at least ten years in that rank, the only exception being Robert Hall at Kingston. Also evident is the developing nature of the subsequent careers of commissioners who first held a post at an overseas yard. Provided these commissioners did not die whilst serving overseas, or retire because of ill health, they were either appointed to flag rank, served on the Navy Board, appointed to a major home yard, or were moved to another overseas yard. This clearly demonstrates a continuity of appointment, re-use of skills obtained and implementation of the recommendations of the Commissions on Fees and Naval Revision. The Admiralty had created a group of professional managers for its large industrial concerns and its governing sub-boards.

From 1664 to 1832 resident commissioners were permanent fixtures of naval administration with the role evolving into captain / admiral superintendant of a dockyard, a post that was retained into the 1960s. The Admiralty placed considerable faith in the post. The Admiralty visitations of the dockyards, the Commissions on Fees, Naval Enquiry and Naval Revision together with the Select Committees on Finance in 1797/8, all approved of the role of resident commissioner, requiring the post to be at the centre of dockyard activities. Maybe their understanding and expectation of resident commissioners were more realistic than those expected of some historians. This compares favourably with Roger Knight's observation on resident commissioners, 'overworked, usually unappreciated by their brother sea officers and the Board in

¹ James Gambier had been a Navy Board commissioner prior to his appointment at Portsmouth hence showing a precedent.

² Knight, R., 'The Royal Dockyard in the American War of Independence', 56.

London, he set the tone of his yard; the out-port commissioner was the key position in the administration of the dockyard'.³

Appendix 3c contains the full set of instructions for overseas commissioners, which indicate they had considerable autonomy compared to their equivalents in Britain. They had hire and dismissal powers of artificers and other workmen; and could suspend principal officers, clerks and foremen pending an enquiry by the Navy Board. Resident commissioners also had authority to hire clerical officers and, with the commander-in-chief's agreement, to appoint technical officers such as master shipwright, master attendant and foremen. The partnership with the commander-in-chief was recognised as the key relationship in the instructions and this is examined in the next four chapters.

In the instructions, issued to the overseas commissioners in the fifth report, was a most significant addition to a commissioner's duties. This was the nineteenth article and from its length and sweeping scope indicated an element of the experimental. The nineteenth article gave the overseas commissioners superintendence of the victualling department and parts of the transport department, particularly the naval hospital. What superintendence was to mean in practice was to cause considerable dispute between the commissioner, commander-in-chief, agent of victualling and the staff of the hospital. Chapters four to seven have concentrated on the period following the appointment of resident commissioners armed with these new powers.

The Revolutionary War period made necessary new bases, such as Malta, Trincomalee, the Cape of Good Hope and the development of Bermuda into a secure anchorage. In terms of management, this period repeated the practice of previous wars, with additional resident commissioners only being appointed to the yards supporting the main overseas fleets, in this war, the Mediterranean. In all the other yards the senior yard officer was the storekeeper, with the commander-in-chief providing direction. With the re-opening of hostilities with France in 1803, there was a considerable expansion in the number of British naval bases to support its far flung squadrons, including those on the Great Lakes of America. The Admiralty appointed resident commissioners to the West Indian yards in 1803, but this was only with responsibility for the naval yard; this is illustrated in appendix 2c. With Commissioner Otway's appointment to Malta in 1804, all major yards in Europe and the New World had a senior officer. The naval bases at Bombay, Madras and the Cape of Good Hope by mid 1809 also had a resident commissioner. The

³ Knight, R., Portsmouth Dockyard Papers 1774-1782, xxvii.

management of Britain's overseas bases was from 1809 to experience a significant change in scope and responsibility.

3.5 Summary

By the end of the Napoleonic War Britain had fourteen naval yards and the base at Heligoland supporting her overseas squadrons, with a naval storekeeper at each and ten resident commissioners at the major bases. The navy now possessed a comprehensive network of naval bases, a network that with a few additions was to serve Britain into the twentieth century.

The acquisition of bases mirrored Britain's strategic needs, but had not been without reverses such as, Cape Nicola, Corsica, Alexandria, and Monte Video. This confirmed that while these bases were close to the area of operations, they were not politically or militarily secure. Significantly, replacement bases, with the exception of Alexandria, were obtained in the operational area by a combination of using existing bases, capture of new locations, or diplomacy to ensure political and military security.

Possibly the most obscure base possessed by Britain was that of Heligoland being captured from the Danes in 1807. This location was used as an instrument to circumvent Napoleon's Continental blockade and as a centre for espionage. Assisting the small ships involved in this activity was a harbour master stationed there by the Admiralty.

It was not only the salt-water seas the British navy sailed as the Great Lakes of North America were patrolled. The naval yard supporting the largest British squadron on the lakes of Canada was at Kingston, Ontario. This yard was unique amongst Britain's overseas naval bases as major warships were built, including a first rate ship. The defence of Canada depended on command of Lake Ontario with Kingston yard remaining an important tool in the defence of British North America until the 1830s. The Bermuda naval base was another of these tools used to ensure any war with the United States could have been pursued with the hope of a successful peace treaty.

The primary duty of Britain's naval squadrons stationed at non-European commands was one of trade protection. The make-up of the commands, with frigates, sloops and gun-brigs forming the majority of the squadron reflect this role. To some extent this also dictated the role of the naval yard and the type of repair work to be carried out, that of maintenance activities.

From their earliest times the overseas bases were established as supply centres for naval and victualling stores, with an ability to perform limited refits at secure anchorages. At the beginning of these wars in 1793, the naval yards had reached maturity, with the composition of the workforce consisting of management and clerical staff, plus representatives of all the trades required to refit ships. The chief change that occurred during these wars, to the labour force, was one of an increase in numbers of artificers and labourers by the employment of temporary workers. This provided additional capacity to perform refits on the enlarged wartime squadrons.

It was the management of the overseas bases which experienced the most change in this period. Initially, this was only in the increase in numbers of resident commissioners being appointed to the Mediterranean yards, in addition to the permanent fixture at Halifax, followed by appointments to Jamaica and Antigua at the start of the Napoleonic War. However, it was with the introduction of the recommendations of the Commission of Naval Revision, in 1808, that significant change occurred. Resident commissioners were appointed to the Cape of Good Hope, Madras and Bombay, with an extension of their powers at all overseas bases to superintend the victualling and medical parts of the transport departments. The effect of this change is examined in chapters four, five, six and seven.

Part two

The Cape of Good Hope and East Indies bases.

Chapter four The development of the naval base at the Cape of Good Hope

4.0 Introduction

This chapter examines Britain's reasons for involvement at the Cape of Good Hope and the organisation of the civil departments during the Cape's first and second occupations. By investigating this overseas command, an understanding of the strategic importance of the region is obtained, with examination of this isolated naval outpost revealing the logistics required to maintain the squadron based at the Cape.

The Cape of Good Hope was remote in distance and time from Britain. The voyage from Portsmouth to Cape Town was over 8400 miles⁴ and the fastest transit time was at least two months. A response to an urgent request for information, advice or orders could not therefore be expected for at least four months, with five to six months being a more realistic time span. Therefore, requests for stores, ships and personnel could take as much as a year to arrive. This remoteness gave the local officers considerable autonomy, but they were required to work to a predictable system.

Chapters two and three have shown that such a system had been created for overseas bases and comprised a fixed series of regulations, regular feedback of work done, stores used, remaining, and unserviceable together with those demanded. This gave the Admiralty and its sub-boards a picture of what was needed to support the planned squadrons.

Competent clerical officers were needed merely to record this detail and expenditure, with technical officers available to ensure that work was planned, surveyed and executed correctly. The Cape was the base furthest from a dry dock with the nearest such facility being at Bombay, but this was earmarked for the East Indies squadron, with ships stationed at the Cape directed to return to Britain.⁵ This factor made this the most remotely supported squadron in the service.

A further feature required to support the Cape squadron was the necessity to have two naval refitting locations at the Cape of Good Hope, figure 4a illustrates the reason. These locations were at Cape Town and Simon's Town. The main facilities were at

⁴ Volvo Ocean Race 2001-2002, <u>www.nationalgeographic.com/volvooceanrace/background.html</u>, accessed 24th May 2009.

⁵ Appendix 7b details the dry docks that were available in the Indian Ocean during the Revolutionary and Napoleonic Wars.

Cape Town, but during the winter months, ships in Table Bay were on a lee shore and were moved to Simon's Bay. The latter was partially sheltered, even during the summer when False Bay was subjected to the prevailing south-easterly winds. The map also shows the potential of Saldanha Bay, which was used during the first occupation for refitting and prompted the Navy Board, in 1808, to direct the newly appointed resident commissioner to report on the suitability of this bay as a location for refitting facilities.

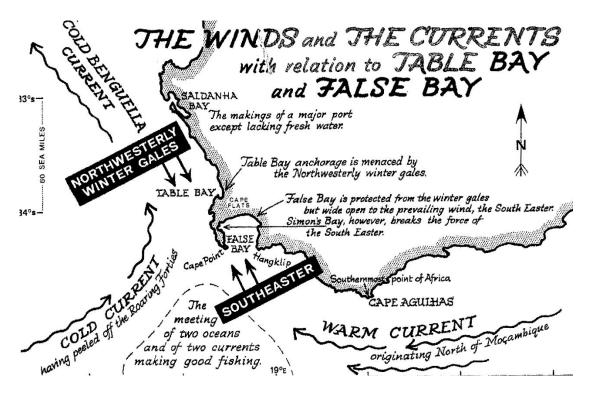


Figure 4a: Winds and currents at the Cape of Good Hope⁷

Studying the methods and organisation of the shore naval services during the first and second occupations reveals a change in Admiralty policy to one of increased central control. The most significant of these changes was the implementation of the Commission of Naval Revision reports on foreign yards, and the appointment of William Shield as resident commissioner to the Cape in late 1808.

Prior to the introduction of the Commission of Naval Revision's recommendations, the Admiralty had already altered its stance concerning the appointment of individuals to the civil naval departments' posts at the Cape. This development can be seen in figure 4b. This shows the holders of the senior positions at the naval yard and victualling organisation during the first occupation; they had been selected and appointed by the

⁶ See chapter six for the rationalisation of these two establishments.

⁷ Brock, B.B. & Brock, B.G, (eds), *Historical Simon's Town Book*, (Cape Town, 1977), 3.

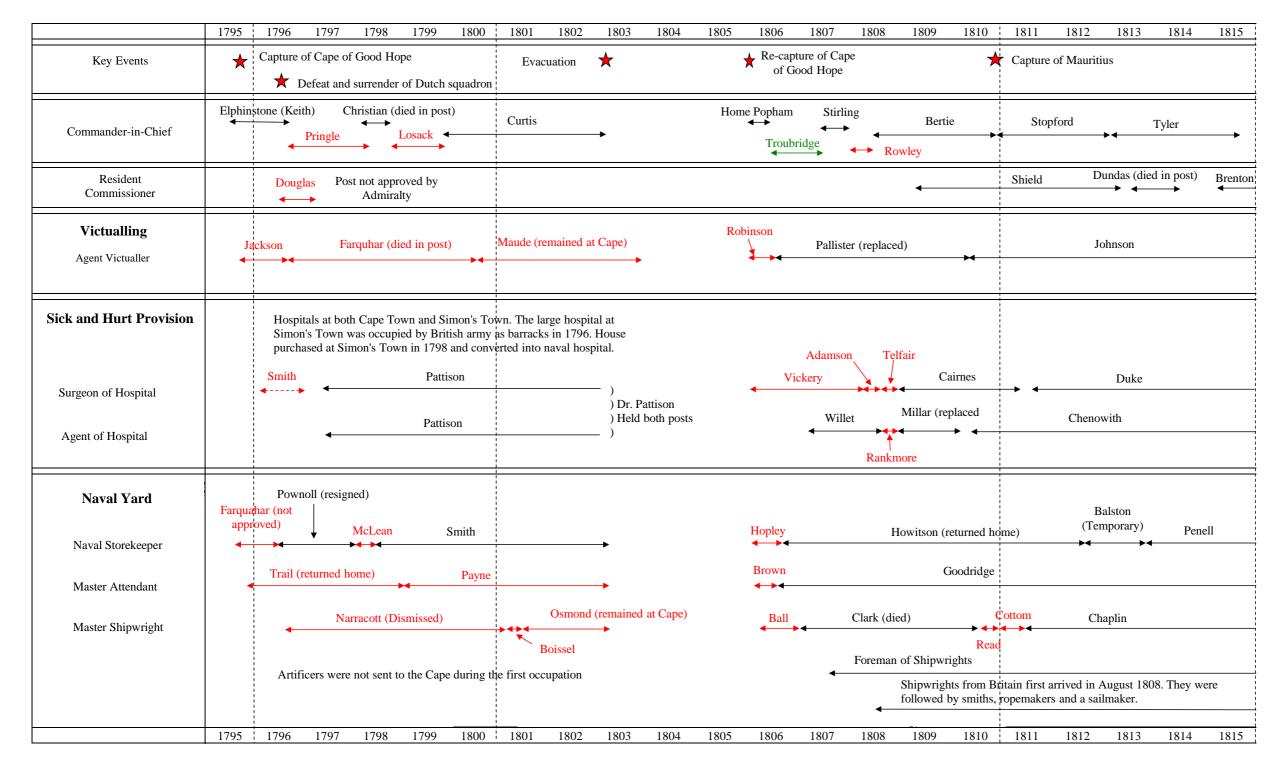






Figure 4b: Civil Naval Department Organisation and Post Holders on the Cape of Good Hope Station, 1795 - 1815

commander-in-chief. The only exception to this was the replacement of the naval commander's selection for naval storekeeper by an officer appointed by the Admiralty.

On re-capturing the Cape in 1806 the commander-in-chief again appointed the principal officers of the naval yard and victualling organisation. Whereas previously, the Admiralty only replaced the naval storekeeper, they now not only replaced that individual but also appointed a master shipwright, master attendant, agent victualler and an agent for the hospital. This policy was eventually extended to the appointment of a surgeon to the hospital. The Admiralty's shift to appointing the senior officers of the civil naval departments rather than, relying on chance and the selections of the commander-in-chief, shows an acceptance of central responsibility and faith that the correct individual would make a difference in service.

It was not only in the appointment of these senior civil naval posts, that a different approach was taken by the Admiralty, as dependence on squadron and local artificers was reduced, by the recruitment and sending of artificers from the home dockyards to the Cape.

4.1 The first occupation: 1795-1803

4.1.1 Strategic position

Britain's involvement with the Cape of Good Hope arose as a result of the English East India Company and its trade with India and the east. Although the Portuguese and Dutch were early pioneers in the east and southern Africa, the English also had an early knowledge of the Cape area. This included an unsuccessful early settlement in 1615 by English convicts. However, it was not until 1652 that a permanent colony by the Dutch was established at Cape Town.¹

The necessity for replenishment on the outward and homeward voyage to India provided only four potential places, St. Helena, Madagascar, Mauritius, and the Cape of Good Hope. By the late eighteenth century the British had relied on St. Helena, in the South Atlantic, and in peace or war, when allied or neutral, the Dutch settlement of Cape Town for this service. The French occupied Mauritius in the Indian Ocean, with

¹ Keay, J., *The Honourable Company, A History of the English East India Company*, (London, 1991), 90-93.

Madagascar remaining unused as its climate was considered unhealthy for Europeans.² This arrangement served Britain well in the eighteenth century until the War of American Independence, when her enemies included the Dutch. Without access to the Cape, the journey to and from India was not greatly impeded if access to St. Helena was maintained, but if held by an enemy the trip could be made untenable. As St. Helena could be threatened by the power holding the Cape, the key to Britain's access to the East Indies was in their hands.³

On declaring war on the Dutch in December 1780, Britain took immediate steps to capture the Cape. This expedition was prepared and left England in March 1781, but knowledge of its mission leaked to the Dutch and French. In response, the French also prepared an expedition in that month to strengthen the Dutch at the Cape. The French and British forces met at the Cape Verde Islands in mid April, but following an inconclusive action the French force reached the Cape of Good Hope first, resulting in the British abandoning attempts to land. The position of St. Helena was also under threat, as not only did it rely on food supplies from the Cape, but an attack could have been mounted from the Dutch colony. In October 1781 the Directors of the East India Company pressed for another expedition to occupy the Cape. However, this was not mounted, leaving the Dutch in possession at the end of the American War of Independence in 1783.

With the opening of the Revolutionary War in 1793, the security of Britain's communications with India again became of concern. While the Dutch remained an ally then the situation was acceptable, but when Britain became concerned that the French would obtain the Cape a more active policy was undertaken. In the winter of 1794/5 Holland was successfully invaded by France. This caused Sir Francis Baring, the chairman of the East India Company, to write to Dundas, secretary of state for war, on the 4th January. In his letter he called for the occupation of the Cape for the strategic reasons discussed above, but also expressed the contemporary value of that area to Britain. Baring observed that occupation would not provide any commercial gain to Britain but would protect her interests which would be harmed if the Cape was in the

² Richmond, H., *The Navy in India*, 1793-1783, Appendix VI, 416.

³ Richmond, H., *The Navy in India*, 1793-1783, Appendix VI, 415.

⁴ Richmond, H., *The Navy in India, 1793-1783*, 117-153.

⁵ Richmond, H., *The Navy in India, 1793-1783*, Appendix VI, 414-419.

hands of the French. He advised Dundas that the colony was governed very lightly leaving local laws, customs and internal trade alone.⁶

Britain now prepared an expedition to take and hold the Cape of Good Hope having also obtained the exiled Stadtholder's⁷ approval for occupation. This approval was based on a promise by Britain to return the Cape to Dutch control at a future date. The Stadholder provided letters to the Cape colony's Dutch governor requesting his cooperation with the British commanders.⁸ The British, again worried that the French would get there first, rushed an invasion force to the Cape under the command of George Elphinstone, later Lord Keith. It arrived in June 1795 and protracted negotiations resulted in British forces landing to bolster the defences. However, with the arrival of a Dutch newspaper absolving the Cape governor from all allegiance to the Stadtholder, a military solution was inevitable. These operations resulted in the capitulation of the Dutch at the Cape on 16th September. Yet this was not to be the end of the operation for the Dutch sent a force to expel the British, resulting in the surrender of a Dutch squadron to Elphinstone in Saldanha Bay in August 1796.⁹

This occupation ended in 1803 with the return of the colony to the Batavian Republic as part of the terms of the Treaty of Amiens. It is worth noting the reasons given for abandoning this colony, while retaining Ceylon, also captured from the Dutch in 1795. Lord Macartney whilst governor of the Cape, 1797-1798, claimed that possession by a powerful enemy would threaten Britain's position in India. Even so, he saw little chance of the colony ever becoming a profitable base for the economic exploitation of the interior, or a market for British goods. Macartney also considered that possession would always be at a great cost to the Exchequer, 11 predicting that having to choose between the Cape and Ceylon at the peace table, the latter was of greater strategic importance. 12

During the first occupation the British established shore naval services at Cape Town and Simon's Town, with naval storage facilities and hospitals being provided at both

⁶ Perrin, W. (ed.), The Keith Papers, Vol. 1, Navy Record Society, (London, 1927), 209-210.

⁷ Stadtholder, Principal state official of United Provinces of the Netherlands – similar to Head of State, *Encyclopaedia Britannica*, (2009), accessed 31st March 2009, http://www.britannica.com/EBchecked/topic/562306/stadtholder.

⁸ Perrin, W. (ed.), The Keith Papers, Vol. 1, 213.

⁹ Perrin, W. (ed.), *The Keith Papers, Vol. 1*, 226-229.

¹⁰ Macartney to Henry Dundas, NAS, GD 51/1/530/12, 25th April 1801.

¹¹ Macartney to Henry Dundas, NAS, GD 51/1/530, 24th October 1797.

¹² Macartney to Henry Dundas, NAS, GD 51/1/530/12, 25th April 1801.

locations. Figure 4c shows the organisation set-up by Admiral Elphinstone in 1795, which with the exception of the agent for transports and prisoners of war was to remain in place until the British withdrew in 1803. This arrangement of the shore support followed the practice developed over the last century and was the usual organisation under the control of the commander-in-chief. Elphinstone also saw a role for a senior captain to assist him in managing the shore departments and appointed Captain Billy Douglas in August 1796 as resident commissioner. 13 The Admiralty did not agree, and immediately on receipt of the admiral's letter, informed Douglas that the appointment was refused and that on receipt of their letter he was to return to his ship. 14

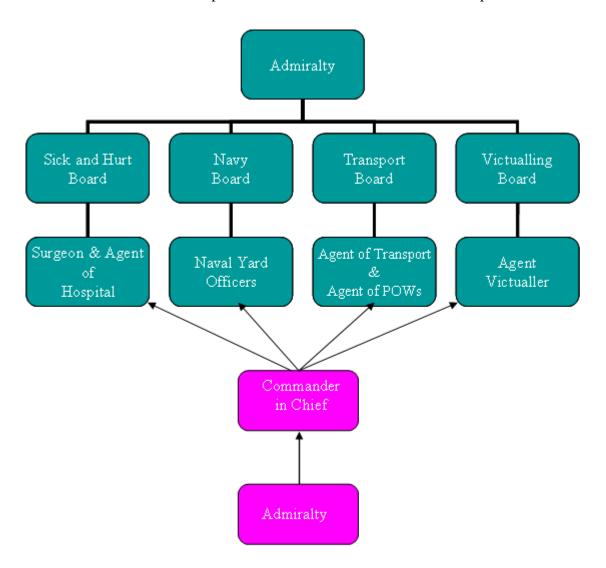


Figure 4c: Relationships, accountability and organisation of civil naval departments at Cape during the first occupation

The Cape of Good Hope squadron was not separately identified from the East Indies command until late in 1797 and was never planned to exceed 18 vessels during the first

¹³ Elphinstone to Admiralty, TNA, ADM 1/55, 19th August 1796.

¹⁴ Admiralty to Elphinstone, TNA, ADM 2/937, 15th November 1796.

occupation.¹⁵ In reality, the planned figure was rarely met, but a letter from the Pownoll, the naval storekeeper gives a picture of the stores supply problem. He reported that the storehouses and holdings were adequate for two third rates, three fifth rates plus a sloop, making a total of 6 ships, but 14 ships were in the squadron.¹⁶ The composition of the naval force during the first occupation was based around 64 and 50 gun ships, with a few sloops and brigs as support vessels, indicating it was a local defence force rather than one of trade protection.

The necessity for victualling and medical shore support was particularly important to the commander-in-chief in maintaining the effectiveness of his ships' crews, but the requirement to re-supply with naval stores and to repair vessels also required facilities and management.

4.1.2 The naval yard

Amongst the first actions of Admiral Elphinstone on capturing the Cape was to report to the Admiralty the urgent need for naval stores of all types to be sent out to form a depot. Such stores could be locally obtained, but were limited in quantity and at a very high price with gold or silver the only currency accepted. This latter factor caused the admiral to state the sending out of silver dollars was absolutely necessary. The need to transport stores and people between the two anchorages in Table and Simon's Bays highlighted Elphinstone's logistical problems, as he requested that two small transport vessels were sent out.¹⁷

Having reasoned that a naval depot was required the commander-in-chief had already assigned Alexander Farquhar as naval storekeeper at Simon's Town in July 1795.¹⁸ The admiral informed the Admiralty in October he had formed a stores depot and had appointed Farquhar as naval storekeeper with Donald Trail, the master of *Monarch*, as master attendant.¹⁹ These two officers formed the management of the naval stores depot with the composition of the workforce revealing the commander-in-chief's intentions for the naval yard's role.

¹⁷ Elphinstone to Admiralty, TNA, ADM 1/55, 23rd September 1795.

¹⁵ Figure 7c in chapter seven shows the combined planned deployment in the East Indies and Cape of Good Hope squadrons.

¹⁶ Pownoll to Navy Board, TNA, ADM 106/2003, 2nd April 1797.

¹⁸ Farquhar to Navy Board, TNA, ADM 106/2003, 11th October 1795.

¹⁹ Elphinstone to Admiralty, TNA, ADM 1/55, 12th October 1795.

Table 4a shows the composition of the naval yard during the first occupation. This indicates that Elphinstone intended the organisation to manage, house, issue and deliver naval stores. It can be seen in the establishment's paylist that Elphinstone's successors as commander-in-chief agreed this role for the naval yard. The delivery of stores to ships, and between the arsenals at Cape Town and Simon's Town, is most clearly seen in the number of sailors on the establishment's paylists. The most notable difference in the composition of the Cape's naval yard compared to those at other overseas yards, described in table 1d, was the lack of artificers such as, shipwrights, caulkers, smiths, sailmakers and sawyers. The only craftsmen on the yard's books were carpenters who maintained the establishment buildings.

Role	Dec 1795	Jan 1797	May 1798	Dec 1799	Dec 1801
Commissioner	0	1	0	2.77	0
Naval Storekeeper	1	1	1	1	1
Master Attendant	1	1	1	1	1
Master Shipwright	0	1	1	1	1
Clerks	2	6	7	7	7
Boatswain	1	1	1	1	1
Boatswain's Mate	1	1	1	1	1
Foreman of Shipwrights	0		1	1	1
Quartermasters	7	7	7	7	7
Warehouse men	2	5	5	4	5
Storehouse men	4	3	0		0
Gatekeeper	0	0	2	2	2
Office men	0	2	3	2	3
Boat Crew	10	0	0		0
Seamen	25	50	20	22	20
Carpenters	4	4	5	4	5
Sailmakers	2	0	0		0
Signalmen	4	0	0		0
Total	64	83	55	54	55

Table 4a: Composition of naval yard establishment during first occupation²⁰

Although the core naval yard establishment did not contain ship repair artificers, the need for a master shipwright was recognised in mid 1796 with the appointment of *Monarch's* carpenter, John Narrocote, to that post. The management of the naval yard was now complete with the master shipwright and master attendant carrying out their normal duties which included, ship surveys and supervision of hired artificers and those of the Cape squadron's ships engaged in vessel repairs. These officers were assisted by

²⁰ The sources for this table came from ADM 42/2203 and 42/2204 Cape of Good Hope naval yard paylists and ADM 106/2003 letters from naval storekeeper to Navy Board.

a boatswain and later by a foreman of shipwrights, with the latter being an inhabitant of the Cape colony.

The refit work undertaken consisted of the manufacture of yards, spars and sails, repair of hull damage and the ever present caulking activity. Significantly, the necessity to careen vessels to effect underwater repairs during the first occupation was rare, as this operation was only mentioned twice in naval yard and Navy Board correspondence. Rattlesnake, a sloop, was hauled down in Saldanha Bay with the assistance of a squadron brig in early 1800 to effect repairs. 21 The larger 50 gun Jupiter was also hauled down later in that year in Simon's Bay, but the hire of a sizeable vessel was required to assist in the operation and to provide accommodation for the fourth rate's crew.²² The repairs undertaken by the naval yard and the two careening operations performed, illustrate the limited nature of the Cape's facilities but also that Saldanha Bay was thought of as an alternative refit location. However, the composition of the workforce also indicates limitations were imposed on refits by reliance on artificers from the squadron.

The October 1795 yard paylists show that initially local Dutch artificers, two sailmakers and ten carpenters, were hired as the ship refitting workforce, but by late in the following year the squadron was supplying a considerable workforce. The October to December 1796 quarter shows the hired element was large, with 46 carpenters and 31 labourers, but the squadron was now supplying 22 carpenters, ten caulkers, two sawyers and nine smiths.²³ Large elements of the hired workforce were slaves and the naval storekeeper suggested purchasing slaves to reduce costs and provide a core yard workforce, but the Navy Board rejected this idea. 24 The year 1796 seems to be when the peak in hired artificer employment occurred, as the paylists for the last quarter of 1799 show a shift to dependence on squadron artificers with 56 carpenters and shipwrights being employed.²⁵

This shift from hired personnel to squadron artificers may have been driven by the low wages offered and the lack of hard currency. Trail, the master attendant, reported in December 1795 that Dutch workers were leaving the yard as their pay rate was too

²¹ Curtis to Admiralty, TNA, ADM 1/57, 5th March 1800.

²² Smith to Navy Board, TNA, ADM 106/2003, 6th October 1800.

²³ Cape of Good Hope naval yard paylists, TNA, ADM 42/2203; Note: the hired workforce contained slaves with 13 carpenters and 21 labourers being shown.

24 Navy Board to Pownoll, TNA, ADM 106/2474, 27th June 1797.

²⁵ Cape of Good Hope naval yard paylists, TNA, ADM 42/2204.

low. 26 The cost of living at the Cape was very high and it was requested that cash was sent from Britain to lower local interest rates.²⁷ The ability of the local workforce to move to the highest payer suggests the labour market was volatile in availability and cost.

It was not only labour that was in short supply, as buildings of all types were limited in number, with those available required by a number of competing agencies. The navy required accommodation for the commander-in-chief, the principal officers of the naval yard, victualling and hospital departments, but housing was also needed for officials of the colonial government, together with officers and men of the British army. As storehouses for naval and victualling items were also required together with hospitals at both Cape Town and Simon's Town, the number of buildings needed was considerable. The classic supply and demand equation merely resulted in high rents being charged by the local inhabitants.

Shortly after the capture of the colony, Elphinstone provided the Admiralty with a description of the buildings available for the shore naval purposes at both Simon's Town and Cape Town.²⁸ The dwelling houses were soon lost as accommodation for the yard officers, leading to the naval storekeeper and master attendant requesting and obtaining a rent allowance in lieu of official accommodation. The obvious answer to this problem was the construction of additional buildings, but materials and labour were expensive and as the colony was likely to be abandoned at the subsequent peace treaty, the expenditure was considered wasteful and not approved. Obtaining approval to maintain the dilapidated buildings that were already in the possession of the navy was difficult.²⁹

This situation became even more critical in November 1798 when a fire occurred at Cape Town causing many buildings to be destroyed. The stores within the naval warehouses were saved by moving them to the safety of the beach, but the stores records were lost and items were stolen. The theft of these items explains why the practice of building a wall to isolate a naval yard was now employed at the Cape. The need for a night shift of watchmen as security guards with a supervisor had already been

Trail to Navy Board, TNA, ADM 106/2003, 23rd December 1795.

The state of the sta 106/2003, 2nd April 1797; Smith to Navy Board, TNA, ADM 106/2003, 1st June 1799; Curtis to Admiralty, TNA, ADM 1/57, 11th and 28th December 1799, 5th March 1800.

authorised by Admiral Christian shortly before the fire,³⁰ but it was Admiral Curtis who ordered the building of a wooden palisade along the beach to secure the naval yard.³¹ Curtis also overcame potential storage problems at Simon's Town by beaching the condemned brig, *Hope*, and using her as a combined store and accommodation ship.

The hand to mouth existence concerning accommodation and storage space extended to the quantity and type of naval items available with numerous requests for goods of many kinds, with reports notifying the dispatch of them by the Navy Board. Admiral Pringle was driven by necessity to take items from storeship *Chichester* to maintain his squadron, even though these stores were not destined for his command.³² Naval stores were available at the Cape, although they were expensive, and it was recognised at an early date that Plettenberg forest offered considerable potential for ship building and repair timber.³³ Admiral Christian dispatched a sloop to Plettenberg Bay with the master shipwright and 18 shipwrights to obtain timber and examine the nature of the wood.³⁴ This resulted in a report from John Narracott, the master shipwright, on the timber available, that was to be re-examined by the Navy Board following the Cape's recapture in 1806.³⁵ However, the lack of naval stores did not impede naval operations to the extent that food shortages were to cause concern to the naval commanders-in-chief.

4.1.3 Victualling and naval hospital

Seven days after the capture of the Cape of Good Hope, Elphinstone was able to determine the immediate capacity of the local economy to supply food. He requested that considerable quantities of salt provisions, butter and pease were sent without delay.³⁶ The Victualling Board continued to send quantities of salted beef and pork plus dried provisions such as biscuit, but alcohol together with fresh and preserved food could be obtained from Cape suppliers. However, a local failure in the wheat harvest, reported by Major General Craig in February 1797, was to have profound consequences.

 $^{^{30}}$ Christian to Smith, TNA, ADM 106/2003, 9^{th} October1798.

³¹ Curtis to Admiralty, TNA, ADM 1/57, 28th December 1799.

³² Pringle to Admiralty, TNA. ADM 1/56, 17th August 1797.

³³ Elphinstone to Admiralty, TNA, ADM 1/55, 12th October 1795; Trail to Navy Board, TNA, ADM 106/2003, 23rd December 1795.

³⁴ Christian to Admiralty, TNA, ADM 1/56, 11th July 1798.

Remarks made by John Narracott, Master Shipwright, at Plettenberg Bay forest Cape of Good Hope during the months of July, August and September 1798, TNA, ADM 1/56.

³⁶ Elphinstone to Admiralty, TNA, ADM 1/55, 23rd September 1795.

Admiral Pringle informed the Admiralty of the likely scarcity of flour and biscuit for his squadron and requested a supply of these articles from Britain.³⁷ Four months later in August, Pringle reported the situation was now critical as bread, flour and biscuit were unattainable at the Cape and the squadron only had enough biscuit for one month. Pringle concluded if biscuit sufficient for four months was not received he would not be able to send the whole squadron to sea.³⁸

On the 7th October 1797 a general mutiny broke out onboard all the ships anchored in Table and Simon's Bays. This occurred about a month after news of the mutinies at Spithead and The Nore had arrived at the Cape. Although the demands of the ships' crews included the removal of some commissioned and warrant officers, the poor quality of the provisions, especially of bread and biscuit, provided a common grievance. The mutiny was undoubtedly sparked by the news from Britain, but the failure of the Cape wheat harvest in 1797 and the lack of requested supplies from the Victualling Board, gave a focus for dissatisfaction. Significantly, the mutiny was ended by the commander-in-chief's dialogue on the reasons for poor quality of provisions and the measures he was taking to improve matters, together with an agreement to examine all cases concerning alleged abuses by commissioned and warrant officers. Pringle issued a general pardon on the 12th October and the squadron returned to duty.³⁹

The impact of the failure of the Cape wheat harvest and the inability of the Victualling Board to respond with timely supplies had a severe effect on deploying the squadron in 1797, but the local economy, plus supplies from India and Britain, had removed this problem within months. Successive commanders-in-chief no longer reported provisioning as an impediment to operations, but advised on improvements required to enhance performance and reduce costs.

An example of the improvement made in the robustness of victualling for the Cape squadron occurred in November 1798. On the evening of the 22nd November a catastrophic fire in Cape Town destroyed a number of buildings that contained victualling stores. The quantity and description of the losses was reported by the agent victualler and is shown in table 4b. The report indicates the loss was considerable and was across a complete range of stores. Possibly the most interesting aspect of this report

³⁷ Pringle to Admiralty, TNA, ADM 1/55, 20th February 1797.

³⁸ Pringle to Admiralty, TNA, ADM 1/55, 17th August 1797.

³⁹ Theal, G (ed.). Records of the Cape Colony from December 1796 to December 1799, Vol. 2, (London, 1898), 161-187.

was the presence of local supplies of preserved meat and large quantities of wine. Although this was a drastic loss, the amount saved from the fire, together with the provisions at the Simon's Town warehouse and local production, ensured the squadron was not inconvenienced.

Description	Unit of Measure	Amount	Notes
_			Each hoghead contains 66
English Beef (Salted)	Hoghead	165	in number 8 lbs pieces
			Each hoghead contains 84
English Beef (Salted)	Hoghead	8.5	in number 4 lbs pieces
Cape Bacon	Hoghead	12	
Cape Bacon	Leaguer (half)	14	
Cape Meat (Salted)	Leaguer (half)	65	
Biscuit	Pounds (lb)	57512	
Flour	Pounds (lb)	10767	
Raisins	Pounds (lb)	6300	
Rice	Pounds (lb)	65663	
Sugar	Pounds (lb)	17896	
Wheat	Bushel	59	Approximately 3304 lbs
Peas	Bushel	270	Approximately 15120 lbs
Wine	Gallons	19266	
Brandy	Gallons	1140	
Vinegar	Gallons	589	
Lemon Juice	Leaguer	2	Local Dutch unit of capacity
Oil	Pots	14	
Lemon Juice	Chest	16	Empty Bottles
Wood fuel	Ton	21	
Storage			
Cask	Number	31	Leaguer (3.5)
Cask	Number	66	Leaguer (1)
Cask	Number	18	Butt
Cask	Number	154	Puncheon
Cask	Number	73	Hoghead
Cask	Number	66	Hoghead (half)
Bread Bags	Number	2963	

Table 4b: Losses of victualling stores from Cape Town fire of November 1798⁴⁰ Shortly after the arrival of the new commander-in-chief, Roger Curtis, in December 1799, he provided a status report on provisioning the squadron to the Victualling Board. Curtis informed the board his squadron only numbered 3500 out of an establishment

⁴⁰ Locack to Admiralty, TNA, ADM 1/56, 30th November 1798.

size of 4000. The admiral's observations on what to send from Britain give an insight into victualling and local conditions at an overseas base. Curtis stated raisins could not be locally obtained, as Cape residents turned all their grapes into wine and it was impossible to obtain bags to pack bread at the colony. It was however the lack of warehouses owned by the Victualling Board that gave him his greatest concern as this space was hired, at great expense, but more alarmingly the notice of eviction was only one month.⁴¹

Obtaining secure warehouse space was but one task of the agent victualler. Figure 4d has been derived from the examination of Alexander Farquhar's accounts as agent victualler from September 1795 to September 1800. The tasks revealed in these accounts fell into four main categories, obtaining the provisions from Britain or by local contracts (Provisions); hiring mechanisms to hold and move provisions from store to ships plus artificers to supplement the departmental workforce (Rent, hire and material costs); managing financial affairs to fund contracts and workforce (Financial); finally managing and paying the department workforce (Salary costs). The number of rented buildings occupied by the department in January 1800 was 15 at Cape Town and one at Simon's Town.

The workforce of the victualling department consisted of two parts, administrative and cask maintenance and manufacture. Table 4c illustrates the change in composition of the department from Farquhar's appointment as sole agent victualler in 1796 to his death in September 1800. The department size in January 1800 corresponds with the victualling report requested by Admiral Curtis on his arrival. Throughout the period, the department had a number of sailors employed to supplement the squadron and locally hired boat crews, but the greatest change was the increase in administrative workload and hiring of clerks. The number of coopers employed fluctuated during the first occupation and, as with the clerks, were normally obtained from the local population. However, unlike the naval yard, Farquhar requested three coopers from the Victualling Board who were sent out to the Cape. 42

⁴¹ Curtis to Victualling Board, TNA, ADM 1/57, 9th January 1800.

⁴² Farquhar to Curtis, TNA, ADM 1/57, undated report but concerned the rented accommodation and workforce of the victualling department in January 1800.

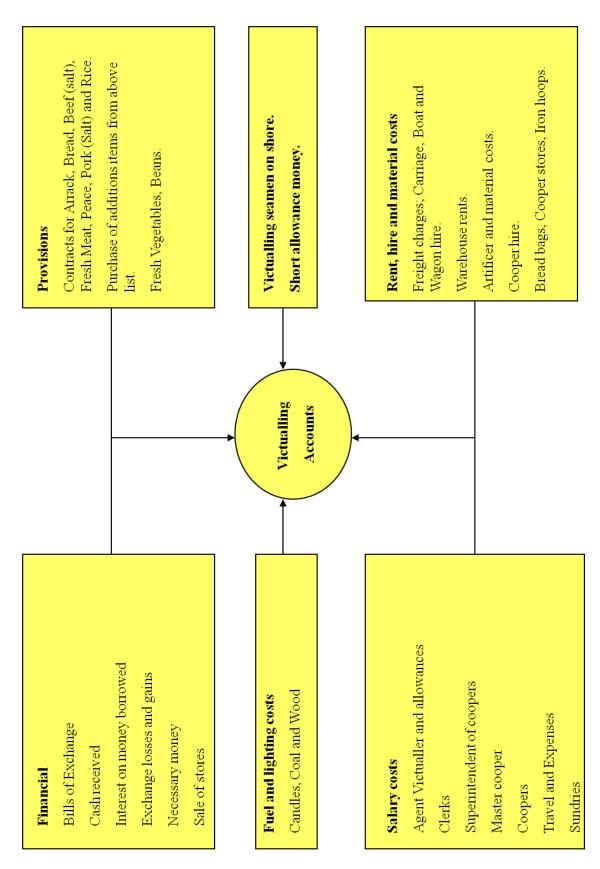


Figure 4d: Agent victualler's accounts⁴³

 $^{^{\}rm 43}$ Alexander Farquhar Agent Victualler at Cape of Good Hope (Accounts), TNA, ADM 112/14.

	Sep 1796	Jan 1800	Oct 1800
Agent Victualler	1	1	1
Clerks	3	6	5
Superintendent of			
Coopers	1	1	1
Master Cooper		1	1
Coopers	5	10	4
Boat crew / sailors	7	2	2
Extra coopers (slaves)	0	7	0
Total	17	28	14

Table 4c: Victualling department at the Cape of Good Hope under Farquhar's management

Following Farquhar's death the commander-in-chief appointed William Maude, the purser of *Tremendous*, as agent victualler. Curtis states he had known Maude for 20 years and vouched for his suitability in that post. Maude continued in post after the first occupation ended in February 1803, at the request of Curtis, with 1500 casks of salted provisions under his care. ⁴⁴ His accounts for this period were not to be examined and countersigned until 1810 following the arrival of a resident commissioner at the Cape.

The victualling organisation had struggled to supply the Cape squadron, but with the exception of 1797, this had not restrained naval operations. By May 1802 Curtis was able to report he had a minimum of over two years supply of all preserved provisions for 2000 men and that he was sending beef to New South Wales as he had heard that the settlement was in need of victualling stores.⁴⁵

From Elphinstone's arrival at the Cape of Good Hope in June 1795, to Britain's evacuation in 1803, the sailors and marines of the naval squadron made use of shore hospitals at Cape Town and Simon's Town. Before diplomacy failed and military operations took place in September 1795, the large Dutch naval hospital at Simon's Town was used by Elphinstone to enable the sick of his crews to recover. This care was provided by contract, at 6 shillings per man per day, for which accommodation and fresh food was given, with surgeons of the squadron attending the sick.⁴⁶

⁴⁴ Curtis to Admiralty, 28th May 1803, Theal, G. (ed.), *The Records of the Cape Colony February 1803 to July 1806*, Vol. 5, (London, 1899), 186-190.

⁴⁵ Curtis to Admiralty, TNA, ADM 1/57, 24th April 1802; Curtis also reported to the Admiralty in May 1803 that he had sent a considerable quantity of salted provisions to New South Wales rather than leave them at the Cape, Theal, G. (ed.), *The Records of the Cape Colony February 1803 to July 1806*, Vol. 5, 186-190.

⁴⁶ Elphinstone to Admiralty, TNA, ADM 1/55, 4th July 1795.

With the capture of the Cape, the navy initially took possession of the hospital at Simon's Town, but in May 1796 Commodore Blankett, senior naval officer in Elphinstone's absence, agreed to temporarily give up the building to the army to serve as a barracks. Elphinstone had arranged for contracted care of the sick at Cape Town and Simon's Town, at 33 Stivers per man per day, for quarters and all requirements. This situation appears to have continued until the arrival of Lord Macartney, colonial governor, in May 1797, when Dr. Pattison also landed and became both surgeon and agent of the naval hospitals. The navy was not able to recover the large hospital at Simon's Town causing Dr. Pattison in February 1798 to report on the alarming conditions the seamen suffered in hospital. The surgeon reported the men would be better off on board ship, as isolation in the existing building was not possible.⁴⁷ Pattison continued to lobby for another building before the squadron arrived back at the Cape and achieved success, being instructed to purchase a house at Simon's Town for 65000 Guilders. Pattison remained in post until February 1803, then on the orders of Sick and Wounded Board of September 1802, sold the building housing the naval hospital at Simon's Town.⁴⁸ Unfortunately obtaining any of the agreed purchase price of 40000 Guilders from the buyer became mired in legal argument.

4.2 Strategic position following the Battle of Trafalgar and re-capture of the Cape in 1806

The remainder of this chapter and chapters five and six of this thesis examine the naval base at the Cape of Good Hope and the support given to the ships and men making up the attached squadron. To ensure the actions of the Admiralty, the respective naval commanders-in-chief and resident commissioners are viewed within the overall strategic context of the Napoleonic War, a brief examination of the calls on naval resources is required.

Napoleon saw Britain as his chief obstacle to domination of Europe and subsequent success in the east. His initial plan was to gain temporary control of the English Channel to enable his army to invade Britain. This plan failed before Nelson's victory at the Battle of Trafalgar in October 1805 and with it any real threat of invasion. However, this is not the picture provided by the War Office and Admiralty deployment figures in

⁴⁷ Christian to Pringle, TNA, ADM 1/56, 23rd February 1798; Note: Pattison's report was attached to this letter.

⁴⁸ Curtis to Admiralty, 28th May 1803, Theal, G. (ed.), *The Records of the Cape Colony February 1803 to July 1806*, Vol. 5, 186-190.

this period, or in a number of studies covering the post-Trafalgar period.⁴⁹ Napoleon's strategy now turned on the isolation of Europe from Britain and the creation of a large fleet to challenge British seapower and threaten invasion from the Low Countries.

Following the signing by France, Russia and Prussia of the Treaty of Tilsit in July 1807, Britain no longer had a significant ally in Europe. Britain held Sicily for the Kingdom of Naples but was in a state of isolation, concerned about maintaining its naval dominance in numbers and about access to vital naval stores in the Baltic region. The pre-emptive attack on Copenhagen from August to September 1807, to neutralise the Danish fleet and prevent it joining the French, was a prime example of concern for the maintenance of naval dominance. Therefore from 1808 a strong Baltic command was created, together with the operation of diplomacy and trading links, to ensure naval supplies were maintained.

Figure 4e shows the deployment of the British Army in the post-Trafalgar period and indicates that until mid 1809 over fifty percent of the army's strength was stationed in the British Isles. It was not until mid 1810 that the home percentage fell below forty percent and even at the beginning of 1814 was as much as twenty-four percent. When the militia is also taken into account, Britain had the majority of its land forces engaged in home defence throughout the period, or paused for intervention in the Low Countries. To garrison Britain's overseas possessions, shown as Other on diagram, and provide a striking force outside of Europe, the secretary of state for war deployed at least a third of the army for this purpose.

Figure 4e also shows the opportunity that arrived in 1808 for a military return to Europe via the Spanish revolt and protection of the Portuguese Crown. These events provided the means of effective military intervention on the continent, where sea power could provide meaningful support.⁵⁰ In 1809 the largest sea-borne force assembled by Britain in these wars, 40000 men, was launched against the Low Countries to support Britain's Austrian allies and destroy enemy dockyards and ships.⁵¹ The Walcheren expedition was a disaster, but it illustrates the British concerns about a growing French fleet in a critical region.

⁴⁹ Hall, C. D., *British strategy in the Napoleonic War, 1803-15*, Manchester, (1992); Mackesy, P., *The war in the Mediterranean 1803-1810*, (London, 1957).

⁵⁰ Hall, C. D. Wellington's Navy Sea Power and the Peninsular War 1807-1814, (London, 2004).

⁵¹ Cookson, J., The British Armed Nation 1793-1815, (Oxford, 1997), 39.

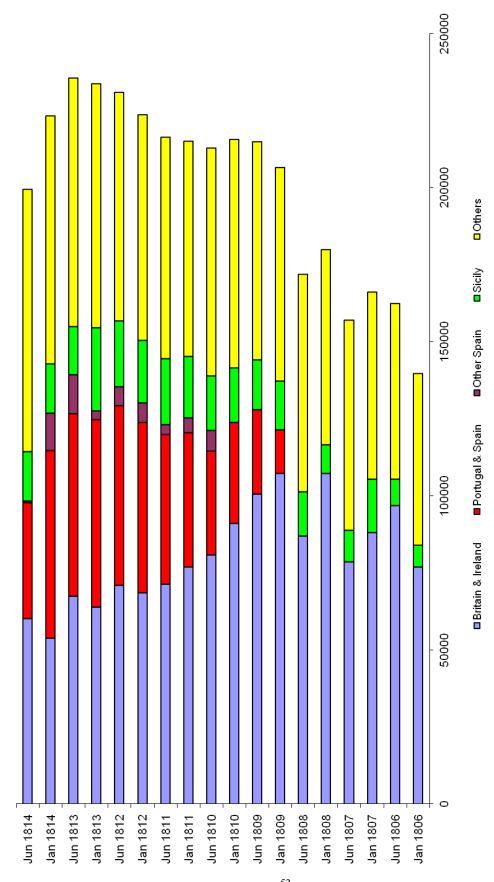


Figure 4e: British Army Deployments 1806-1814⁵²

⁵² WO 17/2814, TNA. This document contains a monthly list of British Army effectives, deaths and discharges for both British and Foreign Corps. These corps have been concatenated for simplicity with only effectives shown.

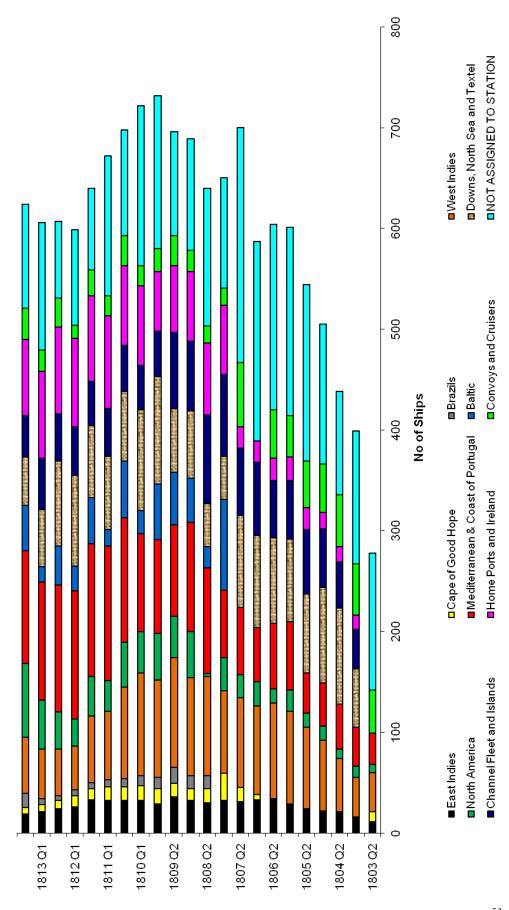


Figure 4f: The British Navy – planned deployment of ships in the Napoleonic Wars⁵³

 $^{^{53}}$ Ship List Books, TNA, ADM 8/85-100.

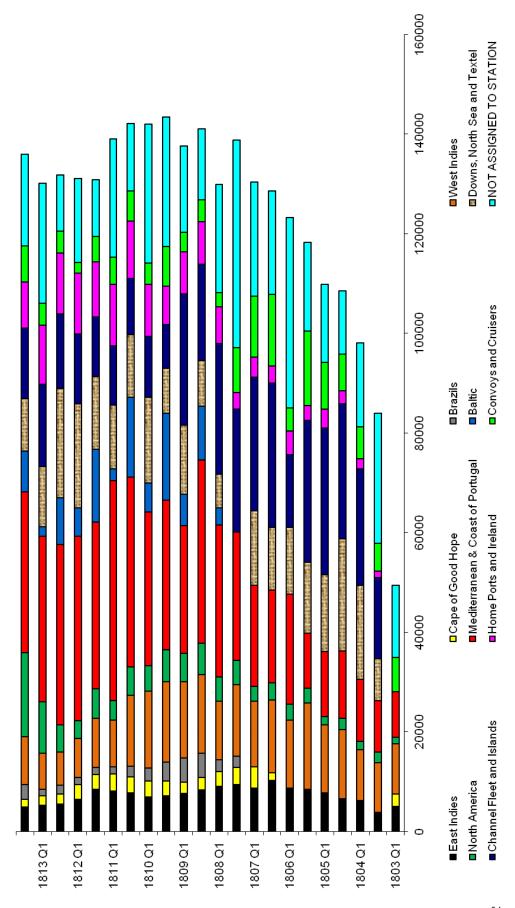


Figure 4g: The British Navy – Planned deployment of men in the Napoleonic Wars⁵⁴

 $^{^{54}}$ Ship List Books, TNA, ADM 8/85-100.

To complete the picture of the relative campaign priorities, figures 4f and 4g show the planned deployments of the British fleet in the Napoleonic War. Some naval stations have been combined to simplify the picture. The West Indies section contains Jamaica and the Leeward Islands stations whilst the North American section includes Newfoundland, Nova Scotia and North America. These graphs show the peak number of ships and men appeared in 1809-10 and that the Cape of Good Hope and East Indies stations were very small in these years. These two stations combined only once reached seven percent of the total in deployed ships with the Cape naval base supporting only two percent of the navy's vessels.

The size of the squadrons deployed at the Cape and East Indies were small, as the French naval forces were contained in Europe, with only the occasional force evading the British blockade. This allowed all the overseas naval squadrons to be kept to a minimum. Yet the presence of the distant British squadrons had to be a factor in French strategy when defending their interests in the Indian Ocean. To be of any use, the French detachments had to be of sufficient strength to allow a measure of parity in engagements. Once the Admiralty obtained intelligence of these detachments it was only a matter of time before re-enforcements, if required, were sent resulting in the French being overwhelmed. The British therefore only needed to expend resources on these distant stations when absolutely necessary and hence obtained maximum effectiveness at the minimum cost.

To maximise the number of ships available and the time the squadron could remain at sea was the role of the civil naval departments at the overseas bases. In the jargon of modern warfare, they were "force multipliers". They worked within parameters set by the Board of Admiralty in terms of the number of ships released for duty overseas. The collective views, orders and actions of the civil naval departments were not always agreed by the commanders-in-chief on the foreign stations and sometimes caused considerable friction.

The re-opening of hostilities with Napoleon in May 1803 occurred just three months after the return of the Cape to the Dutch. The re-capture of the Cape was expected by both the Dutch and the British, although it was not until June 1805 that plans were enacted to send an expedition.⁵⁵ The naval force was under Commodore Home Popham

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⁵⁵ Castlereagh to Admiralty, 25th June 1805, Perrin, W. (ed.), *The Naval Miscellany Volume III*, NRS, (London, 1928), 205-207.

with the troops commanded by Lieutenant-General Baird. The invasion fleet arrived in early January and, following the Battle of Blauberg on the 8th January 1806, the Dutch capitulated.

Following the capture of the Cape of Good Hope, Home Popham and Baird turned their attention westward across the Atlantic Ocean to operations in the River Plate region. ⁵⁶ The South American adventure not only occupied the Cape squadron from March 1806 to January 1808 it left the civil naval departments at the Cape with little direction from a commander-in-chief.

4.2.1 The civil departments of the navy at the Cape of Good Hope following recapture

Until April 1809 and the arrival of William Shield as resident commissioner to superintend the civil naval departments, the commander-in-chief was the directing manager as had been the case during the first occupation. Within a week of the Dutch surrendering, Home Popham reported the situation at the Cape, requesting storeships were sent with naval stores, biscuit and other provisions.⁵⁷ Home Popham now appointed a naval storekeeper,⁵⁸ an agent victualler,⁵⁹ a master attendant,⁶⁰ master shipwright,⁶¹ a boatswain of the naval yard⁶² and a surgeon of the naval hospital.⁶³ All these appointments were from ships of his squadron so that on his departure to South America he left behind at the Cape a re-established shore organisation.

However, unlike under the previous occupation, the Admiralty took control of all appointments to the naval yard. In April the temporary naval storekeeper, Hopley, and master attendant, Brown, were told by the Admiralty that they were replacing them with John Howitson and John Goodridge. ⁶⁴ The master shipwright selected by the Admiralty was John Clark, with the Navy Board informing Clark that passage for himself and his

⁵⁶ Grainger, J., (ed.), *The Royal Navy in the River Plate*, NRS, Vol. 135, (Aldershot, 1996); Fletcher, I., *The Waters of Oblivion – The British Invasion of the Rio De La Plata 1806-7*, (Stroud, 2006).

⁵⁷ Home Popham to Admiralty, TNA, ADM 1/58, 13th January 1806.

⁵⁸ William Hopley, probably in January 1806 as Navy Board wrote to him in March 1806 as acting storekeeper, TNA, ADM 106/2478, 21st March 1806.

⁵⁹ William Robinson (ex. secretary to Home Popham), Home Popham to Admiralty, TNA, ADM 1/58, 25th January 1806.

⁶⁰ Mr. Brown, probably in January 1806 as the commodore issued memo to clear Table Bay of lost anchors, Master Attendant's Letter book from Cape of Good Hope (1806-1809), Admiralty Library, 2008.154, 24th January 1806.

⁶¹ William Ball (ex. carpenter of *Diadem*), TNA, ADM 1/58, 9th February 1806.

⁶² William Saunders (from *Diadem*) TNA, ADM 1/58, 18th January 1806.

⁶³ Dr. Caver Vickery (ex. surgeon of *Diadem*), TNA, ADM 1/58, 25th February 1806.

⁶⁴ Navy Board to Messrs Hopley and Brown, TNA, ADM 106/2478, 28th April 1806.

family had passage on a storeship for the Cape.⁶⁵ In 1806 the Admiralty also replaced Home Popham's appointment of William Robinson as agent victualler with Henry Pallister.

The Admiralty appointed Troubridge as commander-in-chief of the Cape station and as in the past expected him to be their key advisor and manager of the civil departments. This expectation was shown in Admiralty's letters to Troubridge and the Navy Board's letters to the yard officers in August 1806.⁶⁶ Although the Admiralty had decided on the number of clerks for the naval yard, together with the appointment of a boatswain and a foreman of shipwrights, the necessity, type and number of artificers was to await the advice of Troubridge.

Unfortunately Troubridge was never to arrive. This left decisions on the repairs needed to establishment buildings, the composition and number of artificers required, the pay rates of hired employees and accommodation arrangements in abeyance. Admiral Murray, bound for the River Plate, informed the Admiralty on his arrival at the Cape in March 1807, that Troubridge was probably dead.⁶⁷ Nevertheless the Admiralty were still addressing letters to Troubridge on command allocation in June 1807.⁶⁸ The lack of a commander-in-chief had frozen decisions and investigations on the shore establishments and into the accounts of Maude, Hopley and Robinson.⁶⁹ This was only temporarily improved when Admiral Stirling arrived from the River Plate operation in September 1807. He left in January 1808 on health grounds but he did provide guidance to officers of the naval yard. The admiral handed over to Captain Rowley who remained in command until Admiral Bertie arrived as commander-in-chief in August 1808.

The shore naval departments that had been re-established in 1806 were fundamentally the same as in the first occupation. The only difference was that the naval hospital and its staff were now part of the Transport Board. Figure 4h shows the organisation of these departments following the implementation of the Commission of Naval Revision's fifth, twelve, and thirteenth reports. Privy Council approval for implementation occurred on the 14th September 1808, with William Shield being subsequently appointed as resident commissioner to the Cape of Good Hope.

⁶⁵ Navy Board to Clark, TNA, ADM 106/2478, 24th July 1806.

⁶⁶ Admiralty to Troubridge, TNA, ADM 2/937, 18th August 1806; Navy Board to Howitson, Clark and Goodridge, TNA, ADM 106/2478, 26th August 1806.

⁶⁷ Murray to Admiralty, TNA, ADM 1/59, 15th March 1807.

⁶⁸ Admiralty to Troubridge, TNA, ADM 2/937, 4th June 1807.

⁶⁹ Hopley was a past naval storekeeper with Maude and Robinson being past agent victuallers.

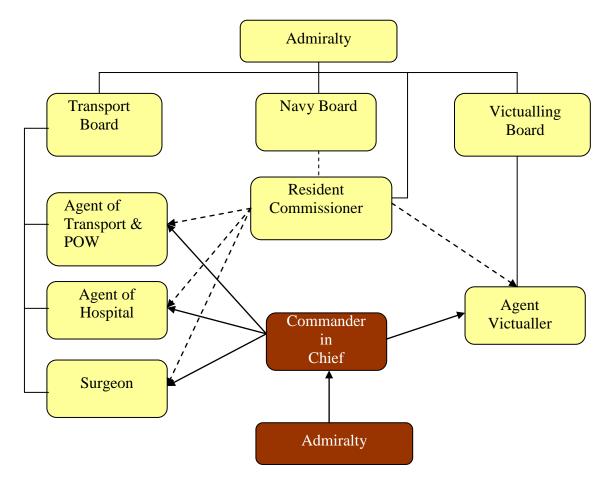


Figure 4h: Relationships, accountability and organisation of civil naval departments at Cape from April 1809 (dotted lines only show influence)

Figure 4h shows the resident commissioner had full management control over the Navy Board department, as he was a member of that board, and a superintending role of the Victualling and Transport Board departments. As discussed in chapter three, his instructions from the Admiralty consisted of nineteen articles with eighteen referring to his management of the naval yards, with the last article detailing the superintendence of victualling and transport departments. How the nineteenth instruction was to operate in practice was to become the subject of considerable dispute between the commissioner, commander-in-chief and agents of the victualling and transport departments. This, on reflection, was not surprising as the introduction of any new system, particularly one where an organisational change was brought about, depended on the personality of the key players. If the instructions were unclear or open to interpretation, then a mechanism was needed to evolve, change and clarify them. Disputes and points of clarification were referred back to Britain and this gradually removed the main points of contention. However delays in this process of clarification ensured that disputes could become very heated. How this process worked is examined in chapters five, six and seven.

The key relationship to enable the overseas bases to work well was that between the resident commissioner and the commander-in-chief. In particular this would require a commander-in-chief to be content to give up the power he had exercised to further the squadron's objectives and hence his reputation. In modern terminology, the commander-in-chief was the customer, with the resident commissioner and agents of the victualling and transport departments the suppliers. However, in this case, the commander-in-chief retained a management role over the suppliers as he had power of appointment over the agents of the transport and victualling departments and the technical officers⁷⁰ of the naval yard. This created a potential conflict of interest. The resident commissioner was independently appointed and had instructions to operate the overseas departments economically and efficiently, hence would tend to think globally as well as locally. The commander-in-chief had operational objectives and could argue that he needed more resources and local cooperation, especially as the boards in London did not understand the local circumstances. The agents were in a classic middle management dilemma, one of trying to satisfy the customer whilst under pressure to operate effectively and economically by the resident commissioner. As the commanderin-chief had power of appointment and influence in promotions, his opinion was of great value and the satisfaction of his desires was important to these middle managers.

4.2.2 Resident commissioner and commander-in-chief interaction: a statistical view

A key source for chapters four, five, six has been the correspondence between William Shield and the commanders-in-chief while he was resident commissioner. These letters uncovered the affairs of all the civil departments at the Cape, with the correspondence providing considerable insight into the routine affairs of the naval, victualling and hospital departments.

Figure 4j shows the cumulative total of letters between the resident commissioner and commander-in-chief from the arrival of Commissioner Shield in April 1809 until his departure in May 1813. Of the 1258 letters in this period over 50 percent of these were exchanged in the first year. This was a result of the presence of the commander-in-chief at the Cape throughout this period and the conflict that resulted between Admiral Bertie and Commissioner Shield. Much of this conflict centred on their respective interpretations of article nineteen of the commissioner's instructions, the superintendence of victualling and hospital activities, and the refitting role of the naval

⁷⁰ Naval yard technical officers: master shipwright, master attendant and foremen of artificers.

yard. An advantage of this conflict is that it reveals the ship deployment strategy and policies of the Admiralty which is studied in chapter five.

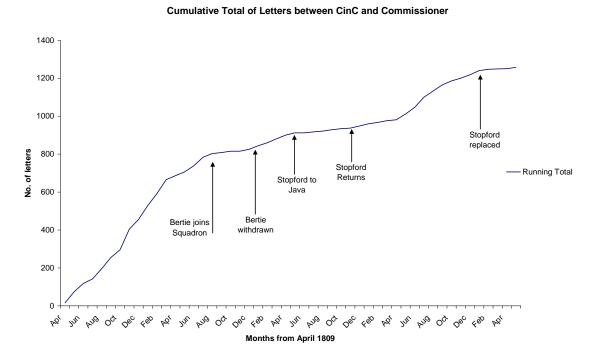


Figure 4j: Letters between commander-in-chief and commissioner (Cumulative)⁷¹

The number of letters exchanged between the commissioner and commander-in-chief reduced when the latter was at sea. This occurred when Admiral Bertie sailed to join the squadron in preparation for the invasion of Mauritius and when his replacement, Admiral Stopford, departed for Java. The capture of the French and Dutch bases in the Indian Ocean greatly reduced the threat from these powers in that ocean, resulting in the Cape station being almost on a peacetime basis. With the return of Stopford from Java, an increase in consultation resulted between the admiral and the commissioner. This discussion consisted of the role of Mauritius as a naval base, the consolidation of naval facilities at Simon's Town, provision of accommodation for the commander-in-chief and the smooth provision of service. This period is examined in chapter six.

⁷¹ Letter books between Commissioner Shield and commanders-in-chief at Cape of Good Hope, DRO, 74B/MFS 1-3, 1809-1813.

						rimmiy caregory	10901					
		Strategy /					Ship	Ship				
A	Administration	Blockade	Hospital	Hydrography	People	Boats	Repair	Stores	Timber	Transports	Victualling	Other
Buildings	2											
Accounts/ Financial	13		3		9						20	
Stores		37	5			7	43			7		
Boats							9					
Repair												11
People			22		45	3	78	26		18	33	
Slaves					23							
Planning			2			6	137	15	15	7	15	
Survey			5				54	16			8	5
Contracts			5					5	5	-	36	
Disputes			12		21		8	3		2	12	
Frand			22				-1		3		4	
Transport								31	19	13	4	
Establishment												
France		35										
Other	20	30	11	17	36	24	46	120	5	5	9	10
Totals	35	92	87	17	131	43	373	216	47	53	138	26

Table 4d: Letters by primary and secondary category – Apr 1809 to May 1813

The volume of letters between Commission Shield and the respective commanders-inchief, over the four year period of the commissioner's appointment, provided an opportunity to examine the relationship between the individuals, and the routine operations of a naval base. An added advantage being these routine operations were in support of the squadron engaged in the blockading and subsequent capture of the islands of Bourbon and Mauritius. By examining the concerns of the commissioner and commander-in-chief, a picture emerges of the role of the Cape of Good Hope overseas naval headquarters and to such bases in general.

To obtain this picture table 4d⁷² was constructed by classifying the letters into distinct categories.⁷³ Almost a third of the correspondence concerned ship refitting. This indicates the importance of this activity with providing naval stores also emerging from this classification system. Victualling and hospital activities were also prominent but other areas appear that were not so obvious. These included the use of slaves, transports and boats, hydrographic activities, contracts, timber acquisition and the considerable management of the officers, clerks, artificers and labourers in the various departments.

4.3 The naval yard following the re-capture of the Cape

During the first occupation, the naval yard had no capacity from within its own labour resources to carry out refit work. The yard was organised to support artificers and crews with the occasional use of hired personnel. The master shipwright and master attendant provided technical knowledge and supervision, with the naval storekeeper and clerks ensuring stores were available for issue with all records maintained. Following the second occupation, the Admiralty appointed the yard's principal officers and sent artificers from Britain. The yard officers appointed by the Admiralty had all arrived by early 1807, but the yard officers had no idea of the vessels that were to be supported. This lack of information was to restrict what naval stores to order, or any ability to recommend the numbers and type of artificers to send.⁷⁴

On Stirling's arrival, in September 1807, the yard officers at last had a commander-inchief to discuss the needs of an attached squadron. This enabled a list of the most wanted stores to be compiled and a request that six shipwrights who could also caulk,

⁷² A version of this table that covered a shorter period 1809 to 1810 first appeared in MA dissertation. Day. J., 'The role of the resident commissioner at the Cape of Good Hope 1809-1813', table 1, 31.

⁷³ Appendix 4a provides an explanation on how on the classification system was determined.

⁷⁴ Howitson, Goodridge and Ball to Navy Board, Master Attendant Letter book at Cape of Good Hope (1806-1809), Admiralty Library, 2008.154, 31st October 1806.

were sent. The reason for the yard officers' latter request was the difficulty of recruiting local artificers at a reasonable pay rate.⁷⁵

The Admiralty agreed to this request, with the six artificers arriving with Admiral Bertie in August 1808. This was the first intake of home dockyard artificers arriving at the Cape. With their arrival the Admiralty indicated the vessels of the squadron would be maintained by naval yard staff. However, it was with the arrival of the resident commissioner in April 1809 that the naval yard was organised in the method the Admiralty desired.

Organisation and labour force 4.3.1

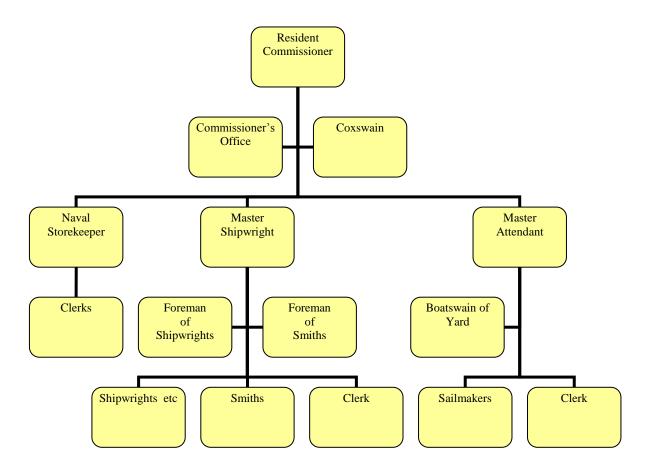


Figure 4k: Naval Yard Organisation – February 1810⁷⁶

Figure 4k shows the organisation following Commissioner Shield's rationalisation of artificer provision from February 1810. The paylists for this period and letters from Shield, Bertie and officials at the Admiralty and Navy Board, provide great insight into

⁷⁵ Howitson, Goodridge and Clark to Navy Board, Master Attendant Letter book at Cape of Good Hope (1806-1809), Admiralty Library, 2008.154, 25th and 26th September 1806.

76 Organisation derived from Cape of Good Hope Paylists, TNA, ADM 42/2206-7, 1809-1811.

the thinking of the individuals with regard to a refitting policy for British overseas yards.

The paylists record who was employed at the Cape of Good Hope naval yards, providing the name, role and payment details for the entire establishment and hired employees. From this can be determined the salary structure and pay rates for different types of artificer and employees.

The salary and allowances of the officers and clerks at the Cape are presented in appendix 4b, with the artificers and workmen of the naval and victualling departments shown in appendix 4c. They have been presented in the form of tables, to allow for ease of comparisons between the various types of officer, clerk and artificer. What became evident on compiling the tables was the composition of whose salary and pay was calculated using sterling whilst others were calculated in currency. It was noticeable that salaried employees had their pay rate expressed as sterling, as were artificers who had been sent out from England. This appears to have been to their advantage as their monthly pay was expressed in sterling and then in currency after an agreed exchange rate uplift. Other employees, one can assume locally recruited, had their day rate expressed in currency. Another feature of this was that the artificers were paid different amounts according to their trade. The pay rates of hired artificers can be seen to be considerably in excess to the equivalent permanent staff.

Following the implementation of the Commission of Naval Revision with the appointment of a resident commissioner to the Cape, the naval yard paylists changed in format.⁷⁷ This consisted of separate paylists for establishment employees, hired employees, H.M. ship's artificers and working parties, and slave employees.⁷⁸

The request for support from the squadron to assist in refit and supply of vessels was frequently in the correspondence between the commissioner and the commander-in-chief. Although paylists for ships' crews have yet to be found, the eighteenth General Instruction for Regulation of Foreign Yards states the payment terms and form to be

⁷⁷ Cape of Good Hope Paylists 1809, 1810 and 1811, TNA, ADM 42/2206, 2207.

⁷⁸ Examples of HM Ship's artificer and slave employee paylists have yet to be found for the Cape of Good Hope.

used to record their work.⁷⁹ The size of the skilled workforce on board HM Ships was set by the establishment of the ship and a sub set of this is shown in table 4e.⁸⁰

It is unlikely that all the individuals shown in table 4e were present, although logical to expect a reasonable number made a significant contribution to refitting the squadron. The pay rates of these individuals and supervised working parties from the ships were laid down in the fifth report of Commission of Naval Revision. However, this was evidently not entirely comprehensive as the Navy Board issued an update in March 1813. This included the terms for warrant officers, artificer types, marines and others missing from the report. The pay rates can be seen in appendix 4d, together with the source for the payment rate and general instructions. The principle of differentiating between performing work on his own, or another ship, was continued with clarification on what constituted extra payment for an artificer on his own ship.

D	Type of Ship										
Description	74	64	50	38	36	32	28	24	20	Sloops	Gun Brigs
Carpenter	1	1	1	1	1	1	1	1	1	1	
Armourer	1	1	1	1	1	1	1	1	1	1	
Carpenter's Mate	1	1	1	1	1	1	1	1	1	1	1
Caulker	2	2	2	1	1	1	1	1	1	1	
Caulker's Mate	1	1	1								
Ropemaker	1	1	1	1	1	1	1	1	1	1	1
Sailmaker	1	1	1	1	1	1	1	1	1	1	1
Armourer's Mate	2	2	1	1	1	1	1	1	1		
Sailmaker's Mate	1	1	1	1	1	1	1	1	1		
Carpenter's Crew	8	8	6	5	5	5	4	4	4	2	
Sailmaker's Crew	2	2	2	1	1	1	1	1	1	1	

Table 4e: Planned artificer complements of HM Ships

⁷⁹ General Instructions - eighteenth article, Fifth Report of Commission of Naval Revision, House of Commons, (1806), 13-14.

Lavery, B., Nelson's Navy - The Ships, Men and Organisation 1793-1815, (London, 1989), 138-9.

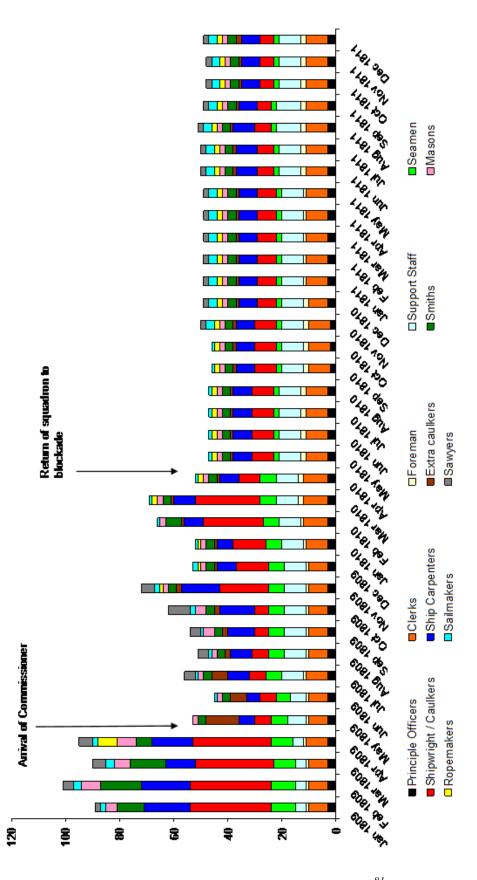


Figure 41: Cape of Good Hope Naval Yard employees – 1809-1811⁸¹

 $^{^{81}}$ Cape of Good Hope Paylists 1809, 1810 and 1811,TNA, ADM 42/2206-2207.

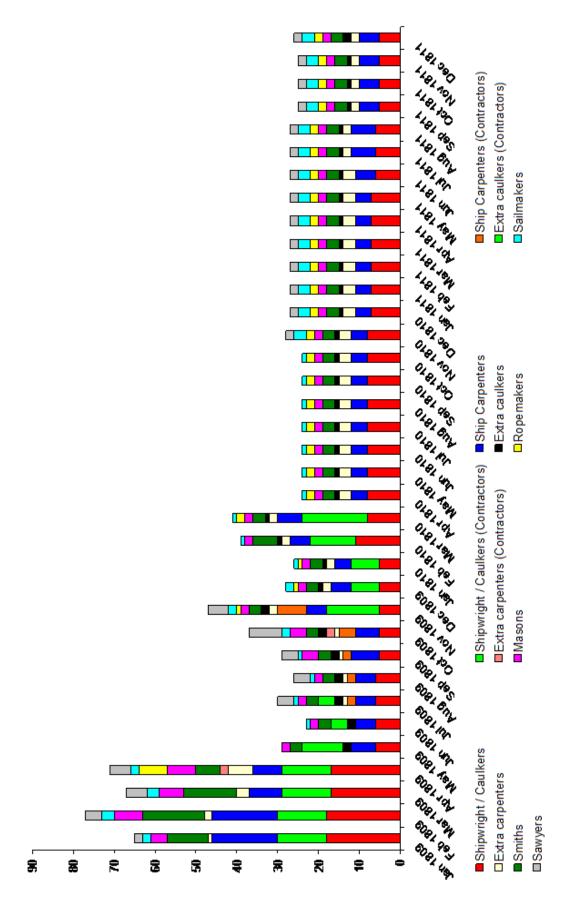


Figure 4m: Hired and establishment Artificers employed at Cape of Good Hope

Figures 4l and 4m have been constructed from the naval yard paylists covering the period when Mauritius and Bourbon were under blockade, followed by a year of relative peace to reflect a maximum and baseline workload. What was also provided by this period, was the change-over from commander-in-chief management to the implementation of the Commission of Naval Revision instructions, via the resident commissioner. Figure 4l provides the total number of employees at the naval yard and does not make any distinction between establishment and hired individuals. To enable this distinction to be made figure 4m shows the relative numbers of temporary and establishment artificers, as this was the only area where men were hired. These graphs show the impact in May 1809 of the arrival of the resident commissioner, and that hired men had been eliminated from the workforce a year later. As this refers to the management changes introduced by the resident commissioner, the reasons and impact are examined in chapter five.

4.3.2 The work of the naval yard

Table 4d confirmed the main purposes of the naval yard were two fold, the supply of naval stores and the refit and repair of HM ships. This latter activity at the Cape was, apart from the magnitude and scale of the work performed, similar to that at Britain's home dockyards with the major restriction being the lack of a dry dock. As at other overseas yards, repairs to the underwater parts of ships' hulls could only be achieved by careening. In the absence of a careening wharf, as was present at the major overseas yards, the only method available at the Cape was to use another vessel to haul down the ship requiring refit.

Figure 4n shows the *Doris* being put in a 'hauled down' state for survey at Valparaiso in 1828. Although this was for a survey it does show the principle of how underwater hull work was undertaken, with the bonus of the significance of boats in refit work. The preliminary work required was considerable, as a loaded ship would put additional stress on the structure of the vessel, and preventing access to the internal hull. The lowering down of the ship on to one side and the hauling back up, also required considerable control of the forces applied. A structurally suspect ship may not be sufficiently strong to be capable of being careened and a dry dock would be essential.

Careening was a most demanding operation, but was not always needed. Before any refit work was undertaken a survey of the ship was made by the master shipwright to

determine what needed to be done, together with a recommendation on the refit required. Many letters requested and discussed these surveys. An example of such a survey can be found in appendix 4f. ⁸² This survey was for the *Boadicea* following her service at the blockade and capture of Mauritius. The text of this survey not only confirms the type of work detailed in table 3c, shown in chapter three, but also included a recommendation to return her home for a full refit. The need to send ships to a home yard for repair was frequently a subject of dispute between Shield and Bertie and is returned to in chapter five.

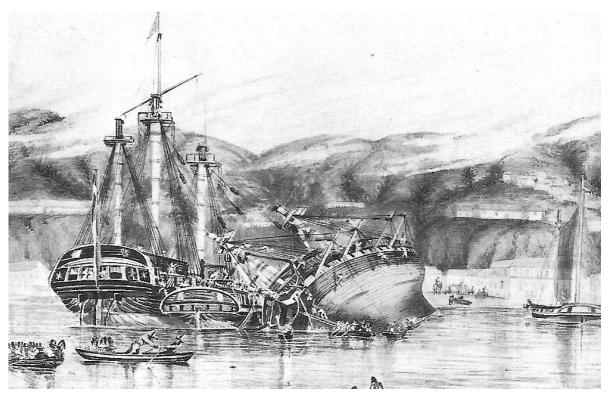


Figure 4n: A Ship in a hauled down state for careening (1828). 83

A report from Commissioner Shield, in answer to the criticism of the yard by Admiral Bertie, provides considerable detail on the type and extent of the refit work performed.⁸⁴ The type of work included caulking of hulls, topside decks and waterways, manufacture of masts and spars, repairing copper that had worn off, making sails, repairing pumps and various metal and timber work. Shield's comprehensive report not only contained the work done on the ships, but also their refit start and completion date, thus providing a comprehensive picture of activity. The period covered in this report, from June 1809 to April 1810, included work on the blockading squadron prior to the operations leading to the capture of Bourbon and Mauritius in July and December 1810.

Acting master shipwright Collom to Commissioner Shield, TNA, ADM 106/2004, 5th January 1811
 Doris being surveyed in Valparaiso in October 1828, National Maritime Museum.

⁸⁴ See appendix 4e. This first appeared in MA dissertation. Day. J., 'The role of the resident commissioner at the Cape of Good Hope 1809-1813', (Exeter University, 2007), Appendix 2, 76-79.

The labour force necessary at the naval yard was not restricted to those skilled in shipbuilding or ship repair, as erecting new and converting existing buildings, together with maintenance of existing facilities of the shore naval departments, required masons and carpenters on the yard pay role. Chapter six examines the plans of the Admiralty and the actions at the Cape to maintain and improve the shore facilities.

The primary role of the naval yard was supplying naval stores. The naval storekeeper's instructions concerning care of storehouses and stores, together with rules for procuring items overseas, were considerable. The stores status and re-ordering process was well established and allowed a picture to be regularly obtained, both locally and in London. In the hands of competent and knowledgeable individuals at the Cape and the Navy Board, it would have been possible to provide an effective and efficient logistics organisation, in spite of the delays in communication and transport.

The final link in the logistics chain, from naval and victualling storehouses, to the squadron's vessels can be easily overlooked, that of the role and use of boats. The naval yard's organisation during the first occupation had a number of sailors and yard boats on the establishment. Following the re-capture in 1806 at least six boatmen were recorded on the yard paylists until May 1810. The letters between the resident commissioner and the commanders-in-chief highlight the importance and use of the yard and the ship's boats in transporting stores and refitting the squadron. The ships were usually moored in Table or Simon's Bays and hence needed boats to transfer all items from the shore to the ship.

The request for yard boats to assist in supplying stores to the squadron was frequently made, but in 1809 and 1810 there seemed to have been an insufficient number of serviceable boats. To overcome this problem the commissioner and the commander-inchief reached a pragmatic solution. This was to retain some of the ship's boats at the Cape from vessels returning to Britain. Shield also comments in his early reports to the Navy Board on providing a covered area to repair and build boats. ⁸⁶ In an early letter to the Navy Board, Shield requested that a vessel was sent out to enable the yard officers and artificers to be transported between Cape Town and Simon's Town. He stated that it would be quicker and cost less than the current arrangement of hiring wagons. ⁸⁷ This in

⁸⁵ Appendices 2a and 2f contain business process diagrams indicating the activities involved operating an effective naval supply organisation.

⁸⁶ Shield to Navy Board, TNA, ADM 106/2004, 16th June 1809.

⁸⁷ Shield to Navy Board, TNA, ADM106/2004, 25th April 1809.

principle was agreed by the Admiralty, although instead of sending out a boat they gave permission to purchase a local craft, stating it should be manned by the yard.⁸⁸ The Navy Board's policy on yard boats for overseas yards also provides an insight into their thinking. The principal officers of the yard had asked for cutters to be sent out, but in a letter of August 1809 the Navy Board stated that no cutters, except jolly boats, were to be sent to Foreign Stations. Instead of cutters they said that, on demand, materials would be sent out for 26 foot yawls for assembling at the Cape.⁸⁹

Building boats at the Cape was undertaken in the naval yard and seems to have been very successful, as Shield informed the Navy Board that he had heard that the East Indies station was short of boats and had sent them two yawls. 90 The yard officers were still demanding 25 foot cutters in 1813, but the Navy Board held to their policy of only sending 18 foot cutters, instead directing local manufacture of 26 foot yawls instead of supplying large cutters.⁹¹

Boats were of great importance to the squadron in the support of operations, loading and unloading stores, and in general transport duties. By retaining returning ship's boats, together with building and repairing boats, Commissioner Shield found an economic method in meeting this vital need.

4.4 The victualling department following the re-capture of the Cape

Home Popham immediately on re-taking the Cape accessed the stocks of available provisions. He reported he had sent a ship to Rio de Janeiro for rice. That there was only a little flour at the colony so he had written to the governor of St. Helena to send any that could be spared. Home Popham suggested that storeships were sent with biscuit and other provisions to show the colony the navy's independence, and to lower tenders from local suppliers.⁹²

The commodore re-established a victualling department by appointing his secretary William Robinson as agent victualler and also consulted Mr. Maude, the late agent victualler left behind by Curtis in 1803, on local provisioning. 93 Home Popham's

⁸⁸ Navy Board to Commissioner Shield, TNA, ADM106/2479-80, 14th August 1809.

⁸⁹ Navy Board to Commissioner Shield, TNA, ADM106/2479-80, 8th August 1809.

⁹⁰ Shield to Navy Board, TNA, ADM106/2004, 25th April 1811.

⁹¹ Navy Board to principal officers of naval yard at Cape of Good Hope, TNA, ADM123/41, 20th April

⁹² Home Popham to Admiralty, TNA, ADM 1/58, 13th January 1806.

⁹³ Home Popham to Admiralty, TNA, ADM 1/58, 25th January 1806.

actions were quickly followed up by the Admiralty and Victualling Boards, as they decided to send out individuals to form the nucleus of a victualling organisation. An agent victualler and an experienced clerk, together with a foreman of coopers and three coopers were placed on the Cape establishment. This shows the Admiralty took control of victualling in a way quite unlike the first occupation. Henry Pallister, the agent victualler and his staff appear to have arrived in September 1806 as Pallister's accounts commence from the 1st October 1806.⁹⁴

Unlike the naval yard officers, Pallister was given guidance from naval officers on victualling before Stirling arrived in September 1807. Captain Stopford directed that provisions sufficient for 5000 men to last six months were always ready in store. Admiral Stirling before he left the Cape, briefed Captain Rowley on the victualling department. Stirling stated that cooperages were set-up at Cape Town and Simon's Town with contracts in place for wine, fresh meat and vegetables. Although there was only a limited supply of biscuit in store the admiral suggested, as plenty of flour was available that biscuit was baked. The admiral also informed Rowley that he was awaiting the Victualling Board's opinion as he thought there were too many clerks on the establishment. Figure 4q indicates Stirling was worried that the number of clerks would reach the level set earlier in that year.

4.4.1 Organisation and work of victualling department

Figure 4p shows the organisation of the victualling department established following Pallister's arrival in 1806. The agent victualler reported to the Victualling Board and was under the direction of the commander-in-chief until the arrival of William Shield as resident commissioner, when local management became more complicated.

Following Privy Council approval of the fifth and twelfth Reports of the Commission of Naval Revision, the management of overseas victualling changed. The resident commissioner was to superintending, the overseas victualling department with the role being that of a financial director and auditor. The resident commissioner had four main tasks: to examine the agent's accounts and regularly authorise them with his signature; to examine contracts and inspect contractors; to ensure good value for contracts was

⁹⁴ Victualling Cash Accounts of Mr. Henry Pallister at the Cape of Good Hope between 1 October 1806 & 30 June 1808, TNA, ADM 112/19.

⁹⁵ Murray to Admiralty, TNA, ADM 1/59, 8th April 1807.

⁹⁶ Stirling to Rowley, TNA, ADM 1/60, 9th January 1808.

obtained, and to exercise control over the performance of all contracts; and ensure the agents made timely demands for goods. However, there were three other statements in the resident commissioner's instructions that were more akin to direct management, as he was to see that business had been properly and economically conducted; provide copies of all the instructions given by Victualling Board to their officers; and to correspond with the Victualling Board, suggesting improvements for conducting business.

How the interaction between the resident commissioner, the commander-in-chief and the officers of the victualling department operated is examined in chapters five and six.

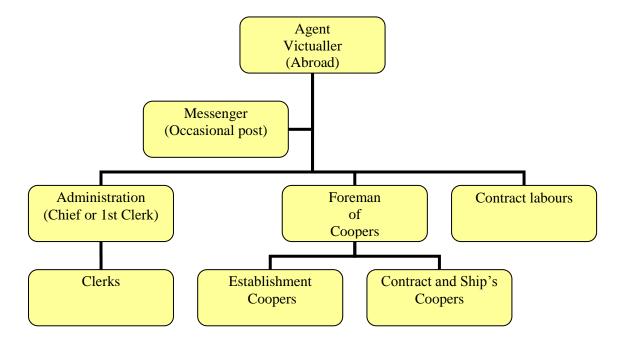


Figure 4p: Victualling organisation at Cape of Good Hope – March 1810⁹⁷

Figures 4p and 4q has been derived from the accounts of the agent victualler from his arrival at the Cape in 1806 and the paylists of the victualling department at the Cape. The work of the department indicated in figures 4p and 4q can be seen to consist of three parts; the administration of stores, placing and control of contracts and recording of work done; the manufacture and repair of casks to receive the contracted food stuffs; and, finally, the occasional requirement for labourers. Figure 4q shows the number of clerks and coopers varied considerably throughout the period, indicating a seasonal cyclic nature in temporary employment, with a peak occurring in March 1810. This peak coincided with the effort required to provision the squadron about to return on blockade of Mauritius for the final time.

⁹⁷ Victualling Paylists, TNA, ADM 113/3, March 1810.

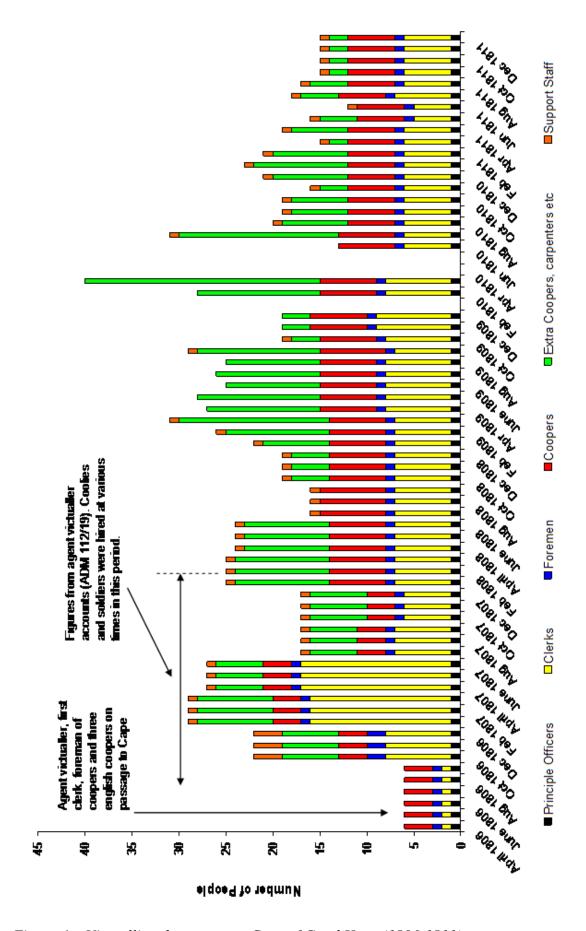


Figure 4q: Victualling department – Cape of Good Hope (1806-1811)

A marked reduction in establishment number can be seen from August 1810 when a new agent victualler and chief clerk were in post. Prior to this, Commissioner Shield was endeavouring to improve the performance of this department and was meeting considerable opposition from the agent victualler, victualling chief clerk and the commander-in-chief.

In the letters between the resident commissioner and the commanders-in-chief, the victualling department was represented with 138 letters. These letters were further categorised and represent the concerns of Shield in attempting to superintend the organisation. He became alarmed with the financial operation and performance of the department, the existing victualling contract and the re-negotiation of a replacement. Whether this was either fraud or incompetence was open to question, but the actions of the commander-in-chief appear odd and are examined in chapter five.

4.7 The naval hospital at the Cape of Good Hope

In common with the naval yard and victualling department, Home Popham reestablished a naval hospital at the Cape with the appointment of Carver Vickery as hospital surgeon. The Admiral and Transport Board accepted this post, but sent an agent from Britain to manage the financial and contracting affairs of the hospital. This was a departure from the first occupation when the surgeon also performed the agent's function.

The management of the hospital appears suspect, as Stirling reported to the Admiralty in December 1807, that the surgeon stated that the clerks had been deceiving him regarding the accounts and that Willett, the agent, had little idea of what had been happening prior to his arrival. In Stirling's briefing report to Rowley as acting commander-in-chief he considered the animosity between the agent and the surgeon prevented the talents of both from being useful to the public.

The Admiralty and Transport Board acted on Stirling's letters and informed Admiral Bertie, on his recent appointment as commander-in-chief, that the surgeon and agent of the hospital were being replaced. On arrival in August 1808 Bertie found that although Vickery had been sent home suffering from mental exhaustion, Willett, the agent, was

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⁹⁸ Stirling to Admiralty, TNA, ADM 1/59, 27th December 1807; Stirling to Admiralty, TNA, ADM 1/60, 13th January 1808.

till in post. 99 The admiral immediately dismissed Willet and appointed Richard Rankmore as agent and Charles Telfair as surgeon until superseded. 100

The financial and contracting affairs of the naval hospital department appeared fraught with difficulties. With the appointment of a new agent, surgeon and the introduction of the superintendence by a resident commissioner it would seem this had been addressed, but chapter five indicates otherwise.

4.7.1 Organisation and work

Following the absorption of the Sick and Hurt Board into the Transport Board in 1806 the naval hospital and its staff now reported to that board and the commander-in-chief until the arrival of the William Shield in April 1809. Similarly, to the victualling department, the hospitals at overseas stations were to be superintended by the resident commissioner. This management function consisted of the financial and contracting activities of the agent of the hospital.

Figure 4r provides the organisational structure of the hospital with the agent performing the administration required and the surgeon being responsible for the medical function.

The records at the National Archive concerning the hospital do not reveal a paylist, although some documents hint at the people involved in providing care to the patients. These documents consist of the certificates, which were signed jointly by the agent and surgeon of the hospital, on the men who had been in the hospital. These accompanied the Quarter Books that summarised the number of men treated in the last three months, those discharged, those who had died and the number still in the hospital. It also detailed the daily victualling of all patients on full, half or low diet, together with the servants who received victuals.

Table 4f is an example from the first quarter of 1810, of the returns for the hospital which coincides with the return of the squadron from blockade. Details of the rations issued, which also included the victualling of the servants, can be seen in a breakdown of the first quarter of 1810 in table 4g.

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⁹⁹ Bertie to Johnston (Captain of Leopard), TNA, ADM 1/60, 12th August 1808.

¹⁰⁰ Bertie to Admiralty, TNA, ADM 1/60, 30th September 1808.

¹⁰¹ Depositions and returns on rations issued and patients discharged, remaining or died, ADM 102/107, 1809-1811.

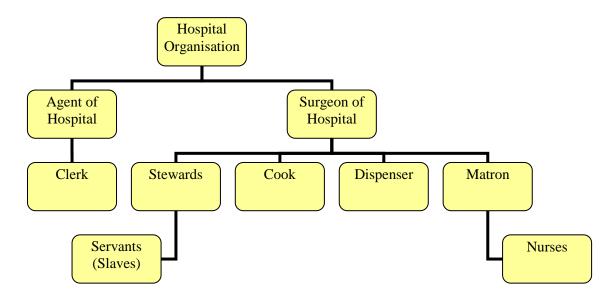


Figure 4r: Implicit Naval Hospital Organisation at the Cape of Good Hope

No. in hospital at beginning of quarter	37	230
No. received into hospital in quarter	193	230
No. discharged in quarter	179	
No. dead in quarter	15	195
No. run in quarter	1	
No. remaining in hospital at quarter's end	35	35

Table 4f: Hospital return for 1st quarter of 1810

The tables indicate the hospital was for rest and recuperation as much as for medical care, returning 179 men to duty, but the squadron was depleted by the loss of 16 men. A feature of the times was the use of slaves as the servants in the hospital and this is possibly why their victualling is included in the totals.

How the medical care at the Cape compared with other overseas bases has not been investigated in this thesis, but chapter seven examines the supply of medical services to the East Indies squadron. At a comparable date, April 1810, at Bombay, Commissioner Dundas records that of 607 patients admitted in the last 12 months only two had died. From this data it suggests the hospitals were effective in returning sailors to their ships.

¹⁰² Dundas to Navy Board, TNA, ADM 106/2008, 11th April 1810.

	Full Diet	Half Diet	Low Diet	Servants
January	626	497		248
February	1134	593	22	224
March	875	1280		227
Totals	2635	2370	22	699

Table 4g: Hospital rations issued for 1st Quarter of 1810

As with the victualling department the correspondence with the commander-in-chief on the hospital was considerable. The problems that Shield unearthed concerning the agent of the hospital caused him not only to involve the commander-in-chief, but also the Admiralty. As the management of the hospital related so much to Shield's relationship with the commander-in-chief it is examined in chapter five, together with the other departments.

4.8 Summary

This chapter has outlined why the Cape of Good Hope was of strategic importance to Britain in maintaining its trading links with the east. The Cape was perceived not so much as an asset, but its potential as a threat in the possession of an enemy. Until 1780 the Dutch, who had occupied the Cape since the 1650s, had been neutral or allied whenever Britain was at war with the Bourbon powers. This changed during the War of American Independence when the Dutch became an opponent. Unsuccessful attempts by Britain were made to capture the Cape during that war to eliminate the threat to East Indies trade. In the Revolutionary and Napoleonic Wars, the Dutch colony was again perceived as a threat. This danger was successfully neutralised by British occupation in 1795 and again in 1806.

The naval squadron stationed at the Cape during the first and second occupations reflect different strategy positions. During the period 1795 to 1803, the squadron was constructed to resist an attack from an enemy invasion force, but this was not the case in the second occupation. Following the re-capture in 1806 the squadron re-deployed to the River Plate although with the failure of that campaign by 1808 the squadron was reduced in size reflecting the campaign priorities of the Admiralty. That year the naval squadron was given an additional mission to defending the Cape, that of the blockade of Mauritius and Bourbon. However, at no time were more than two percent of Britain's naval ships allocated by the Admiralty to these tasks.

The civil departments of the British navy were all represented at the Cape during both occupations. As Table Bay was unsafe during the winter months the navy's vessels anchored in Simon's Bay, this resulted in a duplication of facilities to service the squadron. Cape Town was the main centre of activity, but Simon's Town also had a naval yard, victualling establishment and a naval hospital.

The most significant difference between the first and second occupations was the management of the civil naval departments. During the first occupation the Admiralty rested all control of the shore departments in the hands the commander-in-chief. After the re-capture in 1806, this attitude had changed. Following Home Popham's reestablishment of the shore naval departments and officers to man the significant posts, the Admiralty immediately responded with specialists of their own. The Admiralty's actions took time to implement, but they had now taken direct ownership of the civil naval departments. This ownership was enhanced following Privy Council approval in September 1808, of the Commission of Naval Revision reports, concerning the overseas civil departments of the navy and the appointment of resident commissioners to superintend these organisations.

This chapter has detailed the organisation, composition of the work force available and the work performed. The Cape squadron was the most distant from Britain's logistic support centre, as squadron's based in the East Indies had mature facilities and resources available from the East India Company. How this isolated logistic organisation was managed by the resident commissioner, armed with the new nineteenth article to superintend the victualling and hospital department, is examined in chapters five and six. The greatest problem he had to address was the difference in opinion between himself and the commander-in-chief on how the squadron should be supported. This was exacerbated by instructions he had received from the Admiralty to reduce expenditure, and the complications always encountered introducing a new method of management.

Chapter Five The part played by the shore facilities at the Cape of Good Hope in the blockade and capture of Mauritius and Bourbon

5.0 Introduction

The story of the blockade and capture of Mauritius and Bourbon has been told in many published sources, from James in the 1830s, to Taylor in 2007. All these sources have a common theme, that of operational histories. James and Clowes concentrated solely on operational matters, with no campaign focus and hence tended to jump from one action to another. Parkinson and Taylor provided an excellent campaign analysis, although there was understandably little regard to demands of theatres outside of the Indian Ocean. What was also common in these histories was that the support departments are either largely ignored, or criticised without an examination of underlying factors. This chapter seeks to examine this naval campaign from a different view point.

By investigating the timing, type and number of vessels deployed by the Admiralty, together with their directions on the older ships already at the Cape, a view can be formed on the strategic thoughts of their lordships regarding this campaign. The Cape of Good Hope station was isolated from other commands with only ships bound to, or from the East Indies, offering any opportunities for assistance. This makes a study of the contribution of the shore facilities at the Cape particularly useful, as it was the only agent that could influence the number of vessels that were available for blockade duty. The object of the naval yard, victualling organisation and hospital was to maximise the number of 'vessel days' available, for a commander-in-chief's direction.

With the focus on these shore organisations over a two year period of intense effort, the operation and management of these departments is highlighted, particularly, the refitting policy of the Admiralty and the use of local contractors for victualling and naval stores.

¹⁰³ James, W., *Naval History of Great Britain – Volume 5*, (1837); Clowes, W., *The Royal Navy a History – Volume 5*, (London, 1900); Parkinson, C., *War in the Eastern Seas, 1793-1815*, Allen and Unwin, (1954); Taylor, S., *Storm and Conquest – The Battle for the Indian Ocean, 1809*, (London, 2007). ¹⁰⁴ Vessel days - Example: Ten vessels days being one ship for ten days or ten ships for one day or five ships for two days or two ships for five days. Each ship has 365 vessel days in a year, for a ten ship squadron this provides a total of 3650 days, if a ship has to return for naval stores, repair or provisions the time away from blockade reduces the number of vessel days on patrol. If ships on patrol are in good condition the type of maintenance required will be minimal and hence this maximises the time available on station. By sending out provisions, fresh and preserved, naval stores and replacement sailors for those sent to hospital a ship can be retained on blockade. The value of the vessel day concept provides such calculations of 1000 vessels days equalling four ships in good condition for 250 days or five ships in poor condition for 200 days.

Central to Admiralty policy, implied in the fifth, twelfth and thirteenth reports¹⁰⁵ of the Commission of Naval Revision, was effective and efficient spending, with explicit expectation of honesty and checks to ensure compliance.

The 24 months from January 1809 to December 1810 presented two approaches of supporting the blockading squadron, a traditional one of complete attention to the naval operation without regard to expenditure, and another where central direction and economy were paramount. Following the arrival of a resident commissioner who was instructed to introduce the recommendations of the Commission of Naval Revision, a view into the management of the victualling and hospital departments is obtained. An unexpected benefit of this examination gives insight into how a resident commissioner handled a situation where the commander-in-chief appeared to support individuals and contractors engaged in fraud.

5.1 The campaign to blockade and capture Mauritius and Bourbon

In April 1808 the Admiralty appointed Albemarle Bertie as commander-in-chief, Cape of Good Hope. Significantly Bertie was not directed to undertake operations against the French islands and instead had been given instructions to report on refit and storage facilities at the Cape.

Commodore Rowley reported to the Admiralty that he had deployed some of the squadron to Madagascar and the French Islands, to obtain intelligence. It was however, the arrival of the new commander-in-chief in August 1808, which changed the focus of the squadron. This thesis does not examine the operational aspects of the campaign, but a timeline of the main events and activities is necessary to provide a context for the actions of Bertie, Shield and the Admiralty. Hence, figure 5a presents a timeline of the key events with figure 7a, in chapter seven, supplying a map of the Indian Ocean.

The desirability of neutralising the French base at Mauritius had long been in the thoughts of the British authorities in London and India, with plans made to seize the French Indian Ocean islands long before their eventual capture in 1810. At the beginning of the Revolutionary War in 1793, Gardner, the recently appointed

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¹⁰⁵ Fifth report: Dockyards (Foreign); twelfth report: Victualling Establishments (Foreign); Transport organisation (Home and Foreign).

Rowley to Admiralty, TNA, ADM 1/60, 2nd July 1808.

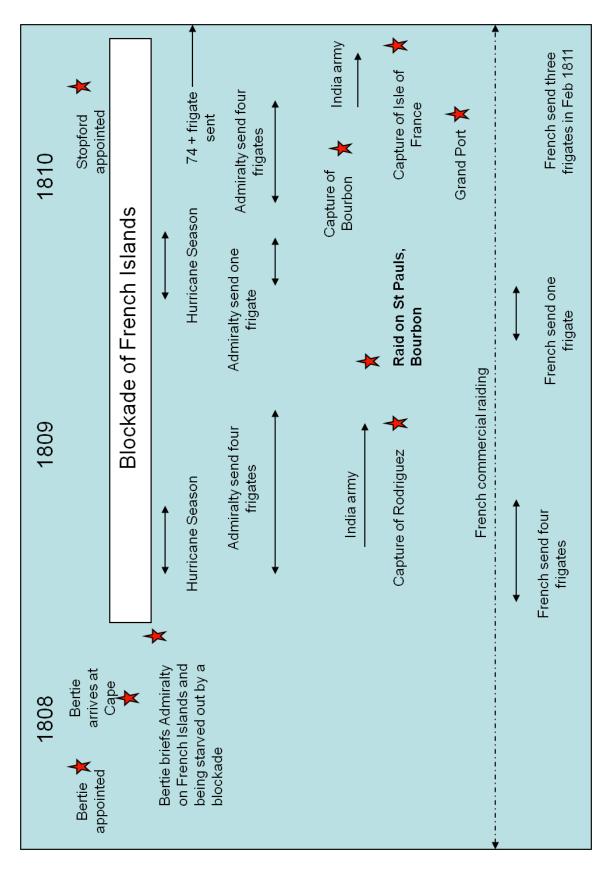


Figure 5a: Time line showing blockade and capture of Mauritius and Bourbon

commander-in-chief for the East Indies, was directed to capture Mauritius before arriving in India. His appointment and mission were subsequently abandoned, in favour

of operations in Europe and the West Indies. 107 Elphinstone, as commander-in-chief of the Cape and the East Indies stations, considered an operation against Mauritius, but this was also cancelled. Wellesley, governor-general of India, also planned to use elements of the Indian army to invade Mauritius in 1800. He needed support from the naval squadron, but Admiral Rainier refused this assistance as he considered the plan impractical, given his existing commitments and available resources. 108 However, the French increased their commercial warfare on Britain's trade in the Indian Ocean in 1808, so that the removal of this threat became of greater importance than had hereto been warranted.

On arrival at the Cape, Bertie discovered an opportunity to discomfort the French on Mauritius and Bourbon leading to their surrender. He learnt from several sources, including the recently captured paymaster general of the French Islands, that they could be made to surrender by starvation. Bertie discovered food was imported to these islands for 60000 people throughout the year. This was confirmed by observing that in 1805 the Americans had a contract for supplying the French with provisions. With the American government introducing their 1807 Embargo Act¹⁰⁹ to stop all trade between themselves and the French and British, Bertie observed; 'The American embargo having operated to distress it [French islands] so far, points out to us the means by which this spot of annoyance to our Indian commerce is to be subjected or kept at check'. 110 Bertie continues in the same letter to the Admiralty that his squadron was being deployed to blockade the islands and requested ships suitable for the operation. In 1808 the Cape squadron was a mixed bag of vessels consisting of elderly third and fourth rates, supported by small frigates and sloops. 111 Bertie also pointed out an additional problem of applying the blockade was that the squadron would have to quit the operational area from January to March, due to the hurricane season.

Ward, P., 'Admiral Peter Rainier and the Command of the East Indies Station', 8-9, 12, 27.

Ward, P., 'Admiral Peter Rainier and the Command of the East Indies Station', 31-32, 57, 146-152.

¹⁰⁹ United States Embargo Act of 1807, http://www.napoleon- series.org/research/government/us/c_embargo.html, accessed 15th June 2010.

110 Bertie to Admiralty, TNA, ADM1/60, 30th September 1808.

¹¹¹ The strength of the Cape of Good Hope station has been expressed throughout this chapter in two ways. The planned strength was obtained from the ship list records. This figure represented Admiralty thinking on the relative priority of the various commands. It also represented the Admiralty's knowledge of a squadron's strength. The on-station figure represents the vessels available to the commander-in-chief. Ships on transit from or to Britain are not included in the on-station figures.

The Admiralty's response to Bertie's communication was sent on the 30th December informing him they were sending four frigates as reinforcements. 112 Deploying these ships may also have been triggered by intelligence that the French had dispatched four frigates to their islands in late 1808. Bertie acknowledged the Admiralty's letter strengthening his squadron, and 'directing me in the meantime to keep up as strict a blockade of those islands as the force under my command will allow'. 113 It is in the next part of Bertie's reply to the Admiralty that shows that the use of Indian military resources was central to Britain's plans concerning the French Islands. For Bertie was to provide the Bombay Council with intelligence of the forces occupying Rodriguez to enable it to gauge what force was required to occupy that island. 114

The Indian army from Bombay occupied Rodriguez in 1809, with elements of that force being involved in the raid on Bourbon in September 1809. The French and British each dispatched another frigate, but it was not until after the 1810 hurricane season that the final push on the French islands was mounted. Lord Minto, governor general in India, informed Bertie of his plan to first capture Bourbon and later, Mauritius. This letter, dated 26th April, requested support from Bertie's squadron for both invasions and for troops from the Cape, for the capture of Mauritius. Bertie forwarded Minto's letters to the Admiralty, informing their lordships that he was leaving the Cape to join his squadron to support the army from India. 115 Bourbon was subsequently captured and garrisoned from early July with the Cape squadron returning to the blockade of Mauritius.

As Minto was closing in for the kill, the Admiralty despatched four further frigates timed to arrive in early September. This would have provided an overwhelming superiority in frigates, but the British lost four of the Cape squadron at the Battle of Grand Port, before the reinforcements arrived. This battle was the greatest defeat inflicted on the British Navy in the Napoleonic War, but it was strategically unimportant. With the further dispatch of Minto's military force from India, the troops and escorting warships met at Rodriguez, resulting in the subsequent surrender of Mauritius on 3rd December 1810.

¹¹² The Admiralty letter to Admiral Bertie has yet to be found, so date written is unknown. The Admiralty letter is quoted in Bertie's reply of 13th April 1809 in which he states *Cornelia* had arrived in late March. ADM 8/98 States the *Cornelia* sailed for India on 30th December 1808.

¹¹³ Bertie to Admiralty, TNA, ADM 1/61, 13th April 1809.
114 Bertie to Admiralty, TNA, ADM 1/61, 13th April 1809.
115 Bertie to Admiralty, TNA, ADM 1/63, 12th July 1810.

This brief review of the campaign shows the interaction between the Cape squadron and British forces in India. Without military occupation by elements of the Indian army the naval campaign might have continued indefinitely.

5.2 Admiralty planning (deployment strategy and refit policy)

The Admiralty ship lists books ¹¹⁶ contain the planned deployment figures for all ships in the navy and show the competing theatres and the resources the Admiralty considered appropriate. These figures were from time of ship allocation to a ship's return from theatre, or notification of loss, hence the figures were not the same as being on station and available for operations. Using these allocation figures, the Navy, Victualling and Transport Boards, had guidance for determining and solving logistical requirements. This included the victualling and naval stores required, together with the manning needs of the hospital, naval and victualling yards. The facilities of the operating bases could also be considered and measures planned for improvements or additions, or even closure, if a station was no longer needed. With the local naval storekeeper and agents providing regular returns of naval, victualling and medical stores usage and future requirements, the home organisations could anticipate what and when to send out supplies.

The Cape squadron never exceeded two percent of the navy's strength. 117 This only tells one side of the story as it does not consider the type or relative strength of ship. The most powerful and up to date ships tended to be placed in the critical theatres, leaving old and less formidable ships to other areas. Figures 5b and 5c illustrate this as they contrast the planned, with the on station deployments. The Admiralty changed the composition of the squadron from a mixed force of elderly, third and fourth rates supported by small frigates and sloops, to that based of modern fifth rates. These changes both matched the deployments of the French and fashioned a squadron better able to maintain a blockade. This was most noticeable in the deployment of fifth rate frigates.

 $^{^{116}}$ Admiralty Ship Lists, TNA, ADM 8/95-99, 1808-1811. 117 See figures 4f and 4g in chapter four.

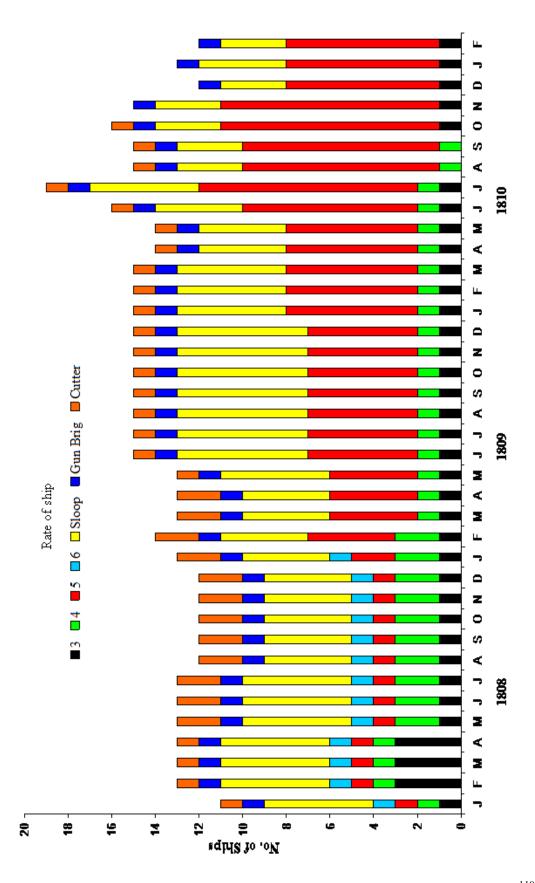


Figure 5b: Planned deployment at Cape of Good Hope (Jan. 1808 to Feb. 1811)¹¹⁸

 $^{^{118}}$ Admiralty Ship Lists, TNA, ADM 8/95-99, 1808-1811.

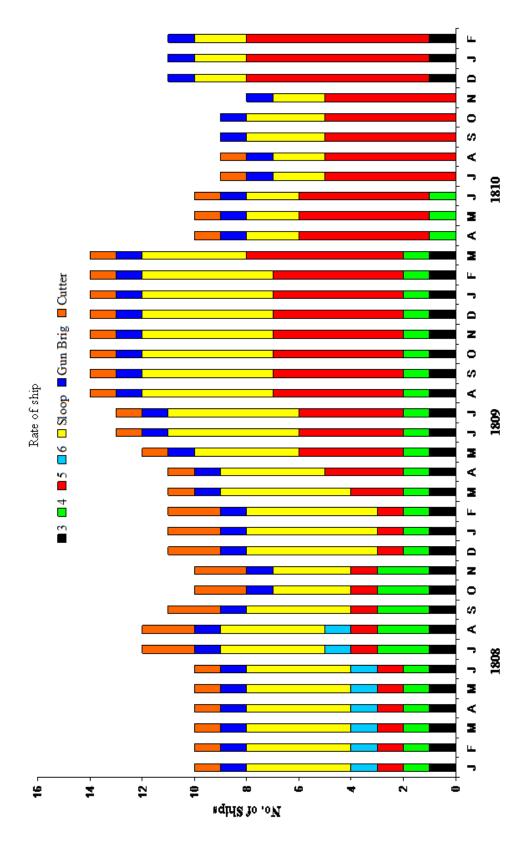


Figure 5c: On station deployment at Cape of Good Hope (Jan. 1808 to Feb. 1811)¹¹⁹

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¹¹⁹ These monthly figures have been obtained by referring to commander-in-chief, resident commissioner letters and journals for times of arrival at and departure from station. Note: One sloop, *Caledon*, was commissioned at Cape of Good Hope.

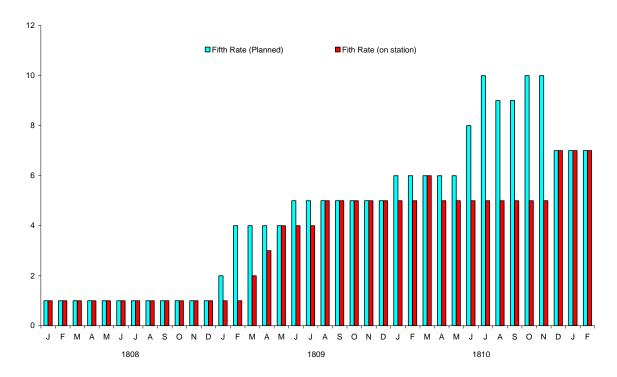


Figure 5d: Comparison of Admiralty deployed frigates and those on station

The following observations can be made by comparing the planned and on-station records. It took, on average, two to three months for ships sailing from England to arrive on station. Locally commissioned vessels, losses and ships returning to Britain were not reflected in the Admiralty's ship lists until the Admiralty were notified. For example, the sloop *Caledon* did not appear on the Admiralty's deployment records until five months after she was brought into service and only remained at the Cape for 15 months. The elderly, third and fourth rate ships remained on station even when their unsuitability for blockade duty had been recognised. *Raisonable* and *Leopard* were recalled by the Admiralty, but they were retained by the commander-in-chief. However, usually ships were returned to England when they had been away for a considerable time, indicating a refitting policy. What is evident is that the Admiralty planned to change the complexion of the squadron to one more suited to a blockading role, consequently building up its strength in time for the invasion of Mauritius.

The ship lists present a view into Admiralty thinking, showing how the composition of the squadron was changed, as well as its delay in reacting to losses. If the contribution of the shore establishment, in supporting the Cape squadron, is examined more aspects of the Admiralty's logistical thinking is forthcoming. With the appointment of a resident commissioner to the Cape, the Admiralty had a man on the spot to implement their

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¹²⁰ Caledon was immediately laid up on arrival and subsequently sold without further use indicating a poor investment in resources.

policies. The evolving role of the commissioner and problems encountered in executing policy constitutes the core of this chapter.

What becomes apparent from the letters of the Admiralty was their refitting policy and the role of the naval yard. The Admiralty's refitting strategy was based on economic considerations as ships were only to receive minimal refits. The effect of this reduced the number of artificers required in the naval yard, limited the usage of naval stores and hence also reduced the area required for storage space, accommodation costs and facilities needed. If a ship needed considerable work, the vessel was to receive sufficient repairs to enable her to sail to Britain for a full refit. A vessel that required dry dock was also to be sent to Britain.

The Admiralty and Navy Board ordered this for financial as well as operational reasons. The dry docks at Bombay were a commercial concern and charged for usage. If only vessels in the East Indies squadron used the facilities, costs could be predicted and kept to a minimum. However, if the Cape squadron also used the docks, it would disrupt the building, refit and repair programme of the East Indies squadron. Another policy, implied in the limited refit directive of the Admiralty, was that prize ships were to be patched up and sent to Britain. Examples of all of these instructions in action can be found during the blockade and capture, of Bourbon and Mauritius.

Exploiting local materials was a standing instruction at the overseas yards. This was to reduce the necessity of sending naval stores to an overseas yard. In the case of the Cape of Good Hope, not only were local forests at Plettenberg Bay used to reduce dependency on Britain, but investigations into the forests' potential for exporting ship building timber, spars and masts to Britain were commissioned. It was not just for naval stores that the importance of local contracts was recognised. To victual the ships with fresh provisions local purchase was inevitable, but if other items could be economically obtained, this would reduce the requirement for victualling stores being sent from Britain.

Keeping expenditure to a minimum always concerned the Admiralty. By controlling resources through set Admiralty policies, the most strategically important areas would receive the lion's share. These policies required strong local representation of the Admiralty, or the local commander-in-chief could demand and obtain resources he considered necessary. A phrase frequently used by the Admiralty and Navy Boards

when giving directions in their letters to the commander-in-chief and resident commissioner illustrate their concern for expenditure: 'only that absolutely necessary'.

By following the actions and dispute between Vice-Admiral Bertie and Commissioner Shield, from their respective appointments, the reason for Bertie's replacement as commander-in-chief becomes understandable. If Bertie's actions on arrival and the briefing Shield was given before departure are examined, the scene is set for the violent arguments that were to take place.

5.3 Albemarle Bertie takes command

On appointment to the command of the Cape of Good Hope squadron in April 1808 Bertie was provided with a briefing paper from the Navy Board on the facilities at the Cape. In this letter the Navy Board provided information from Admiral Stirling on the work that he had done to secure the stores from damage or theft. Information on the timber at Plettenberg Forest from a 1798 report, was also provided with a request for further investigation on what could be obtained. A third point in the letter was the sending of six shipwrights with Bertie for the naval yard to supplement the artificers of the squadron in the refitting of his ships. 121

Bertie on arrival answered the Navy Board's questions on timber and facilities. Regarding timber, he reported that substitutes for hull parts could be obtained in any quantity, but timber for masts and yards was more doubtful, as the pine substitute appeared to be too brittle and heavy. Whether the timber could be economically obtained was uncertain. As for naval yard requirements, Bertie forwarded letters from the yard officers on the need for blacksmiths, storage and refit facilities. These letters called for a very large increase in the number of shipwrights required and the provision of a sheer hulk. The question of accommodation for the artificers and their families, who had come out with him, continued to illustrate the high living expenses at the Cape, reported during the first occupation. This problem caused the admiral to recommend an increase in the accommodation and victualling allowances for the artificers. 122

Investigation into the recommendations for a sheer hulk and other improvements in naval yard facilities, including an increase in shipwright numbers, were passed by the Navy Board to the Admiralty's newly appointed resident commissioner, William

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¹²¹ Navy Board to Rear-Admiral Bertie, TNA, ADM 106/2479, 29th April 1808.

¹²² Bertie to Admiralty, TNA, ADM 1/60, 30th September 1808.

Shield. Bertie was informed of this appointment together with an order to give up the official house at Cape Town upon his arrival. In addition Shield would now be responsible for the exploitation of timber from Plettenberg Forest. 123

Until the arrival of Commissioner Shield in April 1809 the shore establishments continued to be under the direction of Bertie. Bertie had decided to devote the squadron to the blockade of the French islands but, as discussed above, the ships were not suitable for the operation and inadequate in number. This was exacerbated by the loss of the sixth rate frigate *Laurel* to the French in September 1808. To maximise the operational capability of the squadron, Bertie resorted to increasing the number of artificers in the naval yard, commissioned a prize as the sloop *Caledon* and refitted his only third rate ship. 124 Commissioning the sloop provided him with a replacement for *Laurel*, with the retention of *Raisonable* maintaining the appearance of strength at the Cape.

The increase in yard artificers was achieved by using prisoners of war, drafting artificers from ships calling at the Cape before the ships' return to Britain and the hiring of local contract labour. Bertie's reasoning for increasing the numbers of artificers, was to reduce the turn round times of ships returning from blockade and to carry out major refits. These measures would boost the number of ships, by removing the need to send them home and increasing the time available for operations.

The effect of these measures can be seen in the resources used to commission *Caledon*, repair *Nereide* following hurricane damage in March 1809, and refitting *Raisonable*. This latter refit enabled the *Raisonable* to be useful to Bertie, although the Admiralty had requested, prior to this refit, she was returned to Britain. Bertie noted this request in a letter to the Admiralty in January but his case for retaining her was rejected. This can be seen in a note, dated 29th March 1809 by the Admiralty, on Bertie's letter, reiterating their instruction that *Raisonable* was sent home. Bertie ignored these orders, with *Raisonable* not leaving the Cape until mid 1810. The commissioning of *Caledon*, was

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¹²³ Admiralty to Bertie, TNA, ADM 2/937, 28th December 1808.

¹²⁴ Bertie to Admiralty, TNA, ADM 1/60, 28th November 1808 for intentions to purchase into service; *Caledon* was commissioned at Cape of Good Hope on 2nd December 1808. Date given on State and Condition of HM Ships and Vessels (Form: 19th May 1795). Bertie to Croker, TNA, ADM 1/61, 1st September 1809. Note: Winfield, R., *British Warship 1793-1815*, 349 states that prize was captured in 1810 and is at odds with this documentation.

¹²⁵ The local shipbuilding firm of Osmond and Phillips provided artificers most of whom were slaves. Osmond and Phillips had both been carpenters and shipwrights in the navy who remained at the Cape on the 1803 withdraw.

¹²⁶ Figure 4m in chapter four shows the effect of this recruitment in the months January to May 1809. Bertie to Admiralty, TNA, ADM 1/61, 21st January 1809.

also to become a subject of enquiry by the Admiralty due to the costs incurred. It was not only the manpower costs of the repairs to Caledon, Raisonable and Nereide that was of concern, as the refits used considerable stores. Bertie had taken some measures in order to rectify his depletion of timber caused by these refits, by contracting local Boers to supply timber from Plettenberg Forest. To assist and oversee the contract, Bertie sent a foreman and two shipwrights. However, this did not solve the alarming naval stores situation that Commissioner Shield found on arrival.

Increasing the complement of the naval yard was not the only area in which Bertie involved himself concerning the shore establishments. He obtained slaves from captured prizes, employed them as labourers in the naval and victualling yards and requested permission to train some as artificers. Bertie was informed by Lord Caledon that an Order in Council had given directions on the use of captured slaves and the admiral considered this as authority for entering 72 men and eleven boys onto the establishment. 128 A further measure involved entering into a victualling contract with Maude and Robinson and the commissioning of building work for his own accommodation. Both these latter measures were to become a subject of much dispute with the incoming commissioner during his drive for economy.

5.4 Commissioner Shield: his briefing on appointment

William Shield¹²⁹ was appointed by the Admiralty as resident commissioner to the Cape of Good Hope in late 1808. The Admiralty, Victualling and Navy Boards all sent Shield letters briefing him of their concerns including papers and reports by the Admiralty solicitor concerning Maude and Robinson. The instructions to Shield from the Admiralty and the Navy Board were particularly instructive as they illustrated their concerns.

The Admiralty were uneasy about the actions of the agents of the victualling and hospital departments and the transactions of the victualling contractors, Maude and Robinson. Shield was to investigate the management activities of every agent victualler, since the second occupation. 130 The Navy Board in their briefing was focused on

¹²⁸ Bertie to Admiralty, TNA, ADM 1/61, 19th January 1809. The use of slaves in government areas in the

post abolish of slave trade era is worthy of investigation but not examined in detail in this thesis. ¹²⁹ A short summary of Shield's career is available in MA dissertation. Day, J., 'The role of the resident commissioner at the Cape of Good Hope 1809-1813', 47-48, 56.

Admiralty to Shield, TNA, ADM 2/937, 28th November 1808; Admiralty to Shield, TNA, ADM 2/937,

^{22&}lt;sup>nd</sup> December 1808.

economy, with repairs to establishment facilities to be done only if absolutely necessary stressing expenditure was only to save money, indicating any investment should have immediate benefit, as the Cape might again be returned to the Dutch.

Both the Admiralty and Navy Boards' letters indicate that prior to departure Shield was in London, where verbal directions and discussion of the written correspondence probably took place. Shield also appears to have collected and had bound, a copy of the relevant reports of the Commissioners of Naval Revision for managing dockyards and hospitals.¹³¹

In their letters, the Navy Board initially tasked Shield with advising, when he arrived, on the composition and numbers of artificers required at the naval yard, particularly the number of masons and smiths needed. In addition, he was to advise on the employment balance of hired and established artificers and labourers. He was also directed to keep the number of clerks on the establishment to a minimum. ¹³² All these instructions were given in late December, but it was the Navy Board's letter of 7th January 1809 that was Shield's key briefing document. ¹³³

Bertie's 30th September 1808 letter to the Admiralty concerning Plettenberg timber, naval yard facilities and artificers, promoted the following directives from the Navy Board to Shield. Regarding local timber, Shield was to obtain all necessary information to determine quantities, costs and potential for local use and export to Britain. The store buildings at both Cape Town and Simon's Town were only to receive repairs that were absolutely necessary. Concerning the other building projects being promoted by the admiral, the Admiralty directed that no expenditure should take place without their direct approval. What was requested was that Shield provided estimates for these projects and give advice on their practicality. The improvements to facilities together with the consolidation of them to Simon's Town are detailed in chapter six of this thesis.

It was the Navy Board's directives to keep costs under strict control and to recommend on the make up and numbers of artificers for the naval yard, which was to be particularly relevant, as it was to govern Shield's actions on his arrival. Regarding

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¹³¹ Commissioner Shield's copy of 1st, 2nd, 3rd, 5th, 6th, 7th and 8th reports of Commissioners for Revising and Digesting the Civil Affairs of His Majesty's Navy, NMM, PBD0719.

¹³² Navy Board to Shield, TNA, ADM 106/2479, 27th December 1808.

¹³³ The letters from the Navy Board and Admiralty are dated in the same month that Bertie is informed of reinforcements being sent.

Bertie's request for an increase in shipwright numbers, the Navy Board delayed action until Shield gave his opinion. The request for a sailmaker and smiths was agreed with the latter sailing with Shield for the Cape. Concerning the welfare of the shipwrights and their families, who arrived with Bertie, Shield was directed to ascertain the allowances required and to find lodgings for them.¹³⁴

A major recommendation in Bertie's letter was the provision of a sheer hulk for hauling down ships and providing accommodation. The Admiralty and Navy Board rejected this as an option, as they considered the vessel would be in danger of being wrecked. Instead they suggested that ships requiring careening proceed to Saldanha Bay with a vessel being hired for that purpose. Shield was to inspect this option and report his findings on arrival. During the first occupation Saldanha Bay had been used as a refitting location and HMS *Sceptre* had been wrecked in Table Bay with the loss of about 300 men. ¹³⁵

The instructions contained within briefing letters from the Admiralty, Victualling and Navy Boards, provided the basis for what was to be Shield's subsequent actions. What was revealing was that the Admiralty, with Navy Board guidance, had calculated the number of artificers necessary to support the squadron at the Cape. This decision had been made with full knowledge of the reinforcements being sent for the operation against the islands of Mauritius and Bourbon.

5.5 Shield's first months at the naval yard: A new broom

Commissioner Shield in his first two months at the Cape was to make an immediate difference as to how the naval yard was to function. He made this his priority, before investigations into the supply of timber from Plettenberg Bay. However, he also found time to examine the work and management of the hospital and victualling departments, with this being discussed later in this chapter.

On arrival at the Cape, Shield immediately contacted Admiral Bertie. Their relationship got off to a poor start, as the admiral would not give up the commissioner's official house and continued to issue orders directly to the yard officers. The admiral's and commissioner's views on how many people should be employed in the yard and the latter's economising was to be at the root of their subsequent disputes. For example,

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¹³⁴ Navy Board to Shield, TNA, ADM 106/2479, 7th January 1809.

¹³⁵ Wreck of Sceptre 5th November 1799, Winfield, R., British Warships 1792-1817, 102.

Shield's refusal to spend any more money on the stable, the admiral had directed be converted from a store building, was not to the admiral's liking.

By the end of his first week at the Cape, Shield wrote to the Navy Board answering many of the questions set out in their letter of 7th January 1809. After consultation with his principal officers, Bertie and Captain Rowley, Shield rejected Saldanha Bay as a refitting location on grounds of time and cost. Simon's Bay was perfectly safe and very suitable; it was much easier and cheaper to hire a hulk for heaving down in that bay, whereas it would take weeks to move a hulk, artificers and stores to Saldanha to little advantage. Having confirmed the need for a Simon's Town establishment, Shield verified the necessity of paying travel costs for yard officers working at Simon's Town. Shield suggested that a more cost effective measure than paying travelling allowance was to obtain a vessel of approximately 60 to 70 tons to transport people and materials. Shield also commented on the usefulness of a ropemaker being added to the establishment, who was subsequently sent by the Navy Board. 136

Shield examined the stores inventory and found them at a very low level. There was an urgent need for naval stores to replace those consumed on Nereide repair, due to her damage from a hurricane, as her main and mizzen masts had been lost with all attached items. Stores required included blocks of all sizes, canvas, lower masts for frigates because none were in store, copper sheathing, nails and bolts, rough spars from 6 to 18 inches (noting Plettenberg contract spars might not be suitable), pitch, tar, sails, cutters, large cordage, and warm clothing. He also noted that a fire-engine was required in the vard to protect the storehouses. 137 Shield's concern regarding stores was again raised in early May in connection with hauling down Raisonable and 'the wretched little Caledon'. The increase in frigates on station was also noted by the commissioner, with him pointing out that lower masts were needed. Although some of these materials were available locally and had been purchased, they were extremely expensive consequently Shield considered it would be better practice to supply these from Britain. ¹³⁸

Regarding the instruction to report and make recommendations on the yard workforce, Shield found a much larger establishment of personnel employed than he had been given as guidance by the Navy Board. He therefore returned artificers from the yard, to the squadron and reduced the number of hired employees. On the question of the

 $^{^{136}}$ Shield to Navy Board, TNA, ADM 106/2004, 25th April 1809. 137 Shield to Navy Board, TNA, ADM 106/2004, 25th April 1809; Note: Different 25th April letter. 138 Shield to Navy Board, TNA, ADM 106/3206, 15th May 1809.

number of smiths and masons required, he suggested that a total of four smiths, one of which was to be a foreman, should be sent together with three or four masons.

The question of the balance of using hired, or establishment artificers, was addressed in favour of bringing labour from Britain. Shield's comments on the local labour force are damming as he states they were slow, expensive at ten shillings a day and difficult to hire on the spur of the moment. 139 This payment was approximately two to three times more than establishment employees received. Shield only used contractors as a last resort and this is reflected in the paylists, as contract labour was greatly reduced in May 1809. The commissioner re-introduced contractors to assist in refitting *Bourbonaise* in November 1809 and continued their use when the squadron returned from blockade for refit. The use of contract labour was however, completely eliminated by April 1810.

Pay and conditions was another task which required investigation by Shield. The existing ship carpenter artificers stated their pay was inadequate for subsistence and had requested their release back into a ship of war. Shield had the power to raise wages and increased the pay rate of carpenters from six to seven shillings a day. He also raised the pay rate for sailors from three to four shillings per day, as he commented it was impossible to hire the most ineffective slave labourer for that amount. 140 Shield also reported that the standard of lodgings at Simon's Town was not only miserable, but extremely expensive. He negotiated a reduction in the rent and even provided a diagram of the accommodation, so the Navy Board could see how little was obtained for the money. 141

Before his first month was out, Shield had formed a view on the facilities, location, stores situation, careening areas and transport required. He had determined the labour needs, balance of yard and contract artificers and addressed the payment and allowances required to retain his workforce. This was an impressive start, but until he obtained support and approval for his actions from the Admiralty, he was being attacked by Bertie for the reduction in the workforce. The admiral was reluctant to give up control of the naval yard, the commissioner's house, or agree to halt the building works he had commissioned. 142 However, Shield managed to gain access to his house, control of the yard and because he was holding the purse strings, all spending. All this was achieved

¹³⁹ Shield to Navy Board, TNA, ADM 106/2004, 12th May 1809.

Shield to Navy Board, TNA, ADM 106/2004, 12 May 1809.
 Shield to Navy Board, TNA, ADM 106/3206, 14th May 1809.
 Shield to Navy Board, TNA, ADM 106/3206, 14th May 1809.
 Shield to Navy Board, TNA, ADM 106/2004, 2nd June 1809.

before the Admiralty had ordered Bertie to relinquish the house and shown their disapproval regarding the conversion of a storehouse into a stable.¹⁴³

The Navy Board approved of Shield's actions regarding the navy yard informing him in August that the Admiralty would be informing Bertie of their support for the commissioner's actions. The stores situation was quickly addressed by the Navy Board, by the dispatch of storeships both directly and via ships first bound for Rio. They also approved the recommendations of Shield for shipwrights, ropemakers, masons and smiths.

5.6 The naval yard – support and refit of blockading squadron

Chapters three and four detailed the type of refit work performed on ships at overseas stations with appendix 4e showing the work performed by the naval yard at the Cape during a critical period. By studying the paylists of the shipwrights and caulkers of the naval yard during the transition year of management control, 1809, it becomes apparent why the Admiralty and Navy Board approved of Shield's actions.

The establishment figures shown in chapter four were derived from the paylists, but more information can be gained by recording where the workforce was engaged. Figures 5e, f and g show the relative effort of the shipwrights¹⁴⁶ on various tasks in 1809 and show three categories of work. Firstly, yard and Plettenberg Bay related activities, secondly, major refits such as *Raisonable* and finally minor refits.

The paylists were designed to record where work took place. If workmen were employed outside of the naval yard perimeter, certificates were provided by a ship's officer of the number, type and time spent by the artificers on board ship. This method suited the control mechanisms required at the time, but does not definitively state the effort required to refit the ships. It does however provide a sound method of comparing relative effort. The yard category, while not allocated to a ship, was either preparing items for ships or maintaining yard facilities. The shipwrights at Plettenberg Bay were obtaining timber for the naval yard and so were also indirectly working on the ships of the squadron.

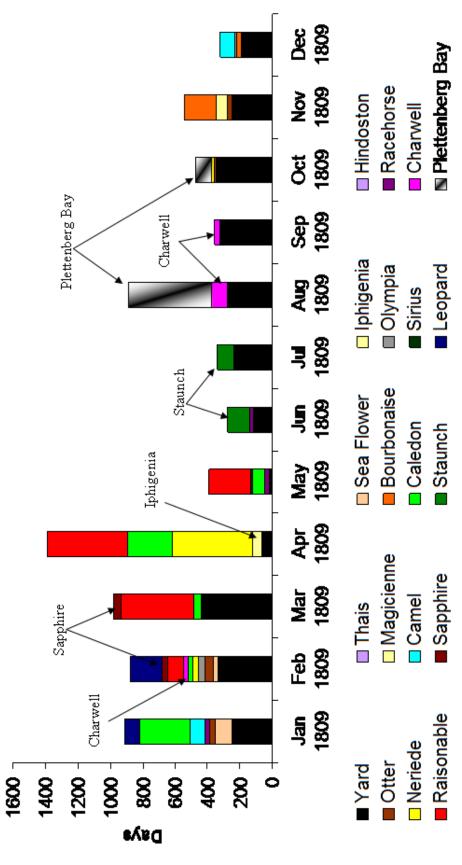
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¹⁴³ Admiralty to Bertie, TNA, ADM 2/937, 9th August 1809.

¹⁴⁴ Navy Board to Shield, TNA, ADM 106/2480, 8th August 1809.

¹⁴⁵ See table 3c in chapter three.

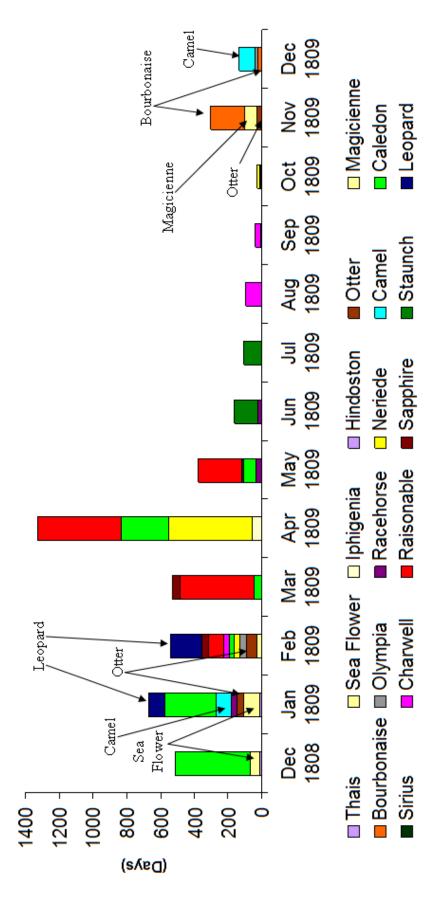
¹⁴⁶ Only shipwright, ship carpenter and caulker categories have been examined in this way as they were the trades that consistently worked on board ship. The other trades were normally recorded as working in the naval yard. The Plettenberg Bay figures appear only on two months of the paylists showing when individuals were paid and hence show as peaks rather than being evenly spread over the year.



This graph shows the number of days the shipwrights and caulkers on the naval yard pay-lists worked in 1809 and indicates whether they are on board ship or working in the yard. Note: The total number of days recorded for Thais (9), Sirius (14) and Hindoston (14) are too few to be seen

on this graph

Figure 5e: Shipwrights and caulkers – Employment on ship and shore (1809)



squadron was on blockade. The number of days recorded on Thais (21) occurred in December 1808 and January 1809, Sirius (14) in May 1809 This graph only shows the work done on ships and more clearly illustrates the very limited amount of ship born work in the period when the and Hindoston (14) in September and October 1809

Figure 5f: Shipwrights and caulkers – Employment on ships (Dec. 1808 – Dec. 1809)

Figure 5g provides a view of the relative percentages of the shipwrights and caulkers activity on ships and on shore in 1809. To understand when this activity occurred, figure 5e gives the month and amount of artificer's effort, including work within the yard, or at Plettenberg Bay, whilst figure 5f only shows the activity on board ship. The first third of 1809, during the period of direct management by Admiral Bertie, the artificers were involved in considerable ship refitting activity. Following Commissioner Shield's arrival the reduction in demand can be seen. This is more evident in figure 5f where the yard and Plettenberg activities have been removed. Once the ships returned on blockade there was only a very limited amount of ship borne work required. To have a large permanent artificer establishment would be costly and leave them very little to do for nine months of the year. Figures 5e, 5f and 5g also show that if high maintenance ships were removed from the squadron, and replaced by recently refitted ships from Britain, then the size of the establishment's workforce could be kept to a minimum.

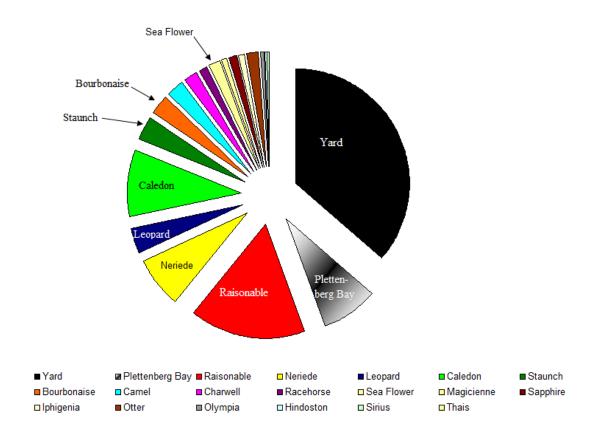


Figure 5g: Shipwright and caulkers: Allocation by percentage in 1809

Admiralty policy was to use its overseas yards for maintenance activities and hence only to resource these yards for that role. This is what Commissioner Shield had done, but in introducing this reduction in capability, a violent disagreement resulted between the commissioner and Bertie. However, if Bertie's recruits had been retained what were

they to do? There were insufficient ships for them to refit and unnecessary expenditure would have occurred employing them.

Bertie had a very different view on the role of the naval yard to that of Commissioner Shield and that of the Admiralty and the Navy Board. Bertie's squadron was unsuitable for the role he had undertaken; instead of merely defence of the Cape, it also included blockade of the French Islands. The composition of the squadron was not only inadequate for these tasks, but also of the wrong mix. By increasing his support capacity, commissioning a prize and retaining Raisonable, Bertie considered he was maximising the ability of his squadron to carry out their mission. With intelligence that four large French frigates were joining those already at the Mauritius, his view would appear to have made very sound operational sense.

This was the strong case that Bertie made to Shield in a series of letters between them in April and May 1809. Shield starts this strand of letters on 29th April, five days after informing Bertie he had arrived and taking charge of the naval yard. 147 Shield states he was reducing the enormous costs of running the yard at Simon's Town and asked Bertie who he would like returned to his ships. Bertie took offence at the implied criticism and stated the squadron's mission dictated a large establishment, especially with the expected French reinforcements. 148 Bertie took Shield even more into his confidence by sharing intelligence of the newly arriving French frigates. He acknowledged Shield's zeal, capabilities and power and that retrenchment was required, but objected to a reduction in the numbers of artificers. 149 Shield's reply was that the Admiralty were aware of his mission, and had laid down the establishment size to which he had to conform. He did try to mitigate this by saying he would continually review yard strength and increase support if he considered it necessary. 150 By the 17th May an impasse had been reached. Shield believed in his actions and that the Admiralty had correctly scaled the risk of French reinforcements with their own, while Bertie believed he was being inadequately supported by Shield and the Admiralty. 151

Bertie wrote to the Admiralty on 22nd May stating his strong objections to Shield's policy of reducing the manpower of the naval establishment. He provided copies of all

Shield to Bertie, DRO, 74B/MFS 2, 29th April 1809.
 Bertie to Shield, DRO, 74B/MFS 1, 30th April 1809.

¹⁴⁹ Bertie to Shield, DRO, 74B/MFS 1, 3rd May 1809. ¹⁵⁰ Shield to Bertie, DRO, 74B/MFS 2, 5th May 1809.

¹⁵¹ Bertie to Shield, DRO, 74B/MFS 1, 16th May 1809; Shield to Bertie, DRO, 74B/MFS 2, 17th May 1809.

the letters that had passed between them and wanted the policy reversed. 152 The Admiralty replied on the 12th September defining the role of overseas naval yards. They stated in this letter 'that they can not but approve' of the actions of Commissioner Shield, particularly the reduction in the size of the establishment workforce. They further outlined their policy directing the admiral that no large repairs were to be undertaken, as the cost of materials and labour was too high; that vessels requiring such refits were only to be repaired to make them safe for a return to England; and that vessels returning to the Cape were only to receive small or temporary repairs. The Admiralty's letter contained a sting in the tail; 'their Lordships trust that you have paid too much attention to the expenditure of the public money to have allowed any considerable expense to be already incurred on any of the old or unsound ships under vour command'. 153 Bertie did not acknowledge receipt of this letter until 9th January 1810, by which time his relationship with Shield had gone from mutual dislike to open warfare.

Admiral Bertie pleaded for a reversal of the Admiralty's refit policy and wanted to know how he was to blockade the French Islands with the resources he had available, without resorting to the methods he had employed. 154 Given a campaign focus this was an attitude easy to understand. However, Bertie does not seem to have realised that his squadron was involved in a holding operation until the Indian army was available and reinforcements arrived from Britain.

The Admiralty continued to rebuke Bertie for deviating from his orders and instructed him to not interfere with vessels bound or returning to the East Indies, nor to remove sailors from those ships. 155 It was not only for this interference with the East Indies squadron that the Admiralty was later to scold the commander-in-chief. To circumvent his problems with refitting at the Cape, the admiral sent the Leopard and Iphigenia to Bombay for docking and repair. Commissioner Dundas at that dockyard accommodated these repairs, but reported that if the Cape squadron were to use his yard on a regular basis it would be a ruinous plan. 156 The Navy Board asked the Admiralty if it was their intention to direct Cape ships to Bombay for refit.¹⁵⁷ This caused the Admiralty to

¹⁵² Bertie to Admiralty, TNA, ADM 1/61, 22nd May 1809.

¹⁵³ Admiralty to Bertie, TNA, ADM 2/937, 12th September 1809.

¹⁵⁴ Bertie to Admiralty, TNA, ADM 1/62, 22nd January 810.
155 Admiralty to Bertie, TNA, ADM 2/937, 12th August and 12th September 1809.

¹⁵⁶ Dundas to Navy Board, TNA, ADM 106/2008, 17th September 1809.

¹⁵⁷ Navy Board to Admiralty, TNA, ADM 106/2008, 30th January 1810 (note on 17th September 1809) letter).

reinforce their directive to Bertie of 12th September for ships not to be sent to Bombay for refit, but instead to return them to Britain. 158

This clearly answered the question of the role of the naval yard at the Cape: it was for the maintenance and minimal refitting of ships. The Admiralty knew of the operations which the Cape of Good Hope squadron was engaged in and had reacted to Bertie's request for reinforcements and to intelligence of the French sending frigates. What the Admiralty required was for expenditure to be effective and not spent on vessels that would consume valuable stores and expensive labour.

The Admiralty may have clearly stated their directions regarding the purpose of the naval yard in August and September 1809 to Bertie, but he was not to receive these letters until January 1810. It therefore left the resident commissioner as the only brake on the admiral's intentions to refit his squadron without thought of the cost. The resulting dispute is best examined through three case studies. These studies are firstly the commissioning of Caledon and refit of Raisonable, the second being the commissioning and refit of La Bourbonaise and the third the refit of Inconstant. Appendix 5a contains a detailed report on the refit of *Inconstant* and the commissioning of Caledon and La Bourbonaise, but the essential points are summarised below.

Figures 5e, 5f and 5g showed that prior to Shield's arrival, considerable work had been performed on the Caledon and Raisonable. This caused the Navy Board to request reasons for Caledon's acceptance into service¹⁵⁹ and for the Admiralty to admonish Bertie for the expenditure on refitting *Raisonable*. ¹⁶⁰

An examination of the paylists explains why the Navy Board instigated an enquiry into the purchase of Caledon. From her commissioning, to her departure from the Cape in March 1810, she received more expenditure in shipwright labour than any other vessel in the squadron with the exception of Raisonable. 161 Bertie reported in April 1809 that the Caledon had three years of service in her, but she had already returned from sea in March with serious leaks. On beaching her it was found she had rotten wood and corroded nuts, bolts and other iron work. Bertie ordered her repair and re-coppering with completion in April 1809. This was not to be the end of surveys into making the

¹⁵⁸ Admiralty to Bertie, TNA, ADM 2/937, 8th February 1810.

¹⁵⁹ Navy Board to Shield, TNA, ADM 106/2480, 27th July 1809.

¹⁶⁰ Admiralty to Bertie, TNA, ADM 2/937, 16th January 1810.

¹⁶¹ From December 1808 to March 1810 1195 days of shipwright work was reported on *Caledon*.

sloop a safe vessel, as Bertie sent her to Bombay for docking and repair. On survey, Commissioner Dundas and the master builder refused, stating she was not worthy of repair and sent her back to the Cape. *Caledon* was eventually sent by the commander-in-chief to Britain in March 1810, where on arrival she was examined and subsequently broken up.

The consequent enquiry by Shield found the yard officers, on surveying the sloop had recommended to Bertie that she was not purchased for the service. Their recommendation had been based on the cost of repair compared to the cost of the vessel. The yard officers were over-ruled by Bertie and ordered to repair her for HM service.

More refit work was performed on *Raisonable* than any other vessel of the squadron. She had not received a full refit for many years and this had been recognised by the Admiralty as they ordered her return. ¹⁶² If she had been sent home when requested, stores would have been preserved and spending greatly reduced.

The successful raid on Bourbon in September 1809 captured a number of ships with the French frigate *Caroline* being amongst them. This captured ship was brought into Table Bay in October 1809 causing the admiral to commissioner her as *La Bourbonaise*. The type of refit she was to receive became the subject of much debate between the admiral, commissioner and yard staff, eventually resulting in her being repaired sufficiently for her return to England.

On arrival she was examined at Plymouth, paid off and never brought into service. The Admiralty and Navy Board supported Commissioner Shield on his stance regarding the type of refit she was to receive. The Navy Board informed the Admiralty, 'if the commander in chief upon foreign stations do order ships taken from the enemy to be fitted out and equipped from the arsenals abroad those magazines must inevitably be distressed for the stores which have been provided for the ships of the squadron stationed there'. ¹⁶³ The Admiralty subsequently informed Bertie that they disapproved

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¹⁶² The Admiralty ship lists state the *Raisonable* was last commissioned on 11th March 1803 and had sailed from England on 12th August 1805. She received a13 month refit at Chatham between April 1802 and May 1803 at a cost of £10848 (Winfield, R., *British Warships 1793-1815*, 94-94). She was part of the force that was at the capture of the Cape of Good Hope in January 1806 and remained part of the Cape

squadron until she sailed to Britain in March 1810. ¹⁶³ Shield to Navy Board, TNA, ADM 106/2004, 18th November 1809; Note by Navy Board forwarding this letter to the Admiralty.

of his commissioning of La Bourbonaise and that it was in direct violation of his instructions. 164

The Admiralty sent the 36 gun frigate *Inconstant* to reinforce the Cape squadron in late December 1809, matching intelligence that another frigate had been sent by the French. Inconstant arrived in March, but had run aground shortly before arriving at the Cape and reached Table Bay in a state just short of sinking.

Shield concentrated all the yard's efforts onto the ship, but requested urgent support from the commander-in-chief in saving Inconstant. The master shipwright had determined she needed immediate careening, necessitating a rapid unloading and temporary repairs being carried out. In addition to the naval yard and local hired contractors, the squadron's boats, artificers and seamen were requested to assist in repairing the *Inconstant*.

Bertie, instead of providing prompt support, held two courts-martial on the ship, diverted the squadron's boats to unload prize ships and stated the squadron had more important operational tasks to perform. Shield applied considerable pressure on the admiral and eventually obtained the support needed, but Bertie initiated an inquiry by three of the squadron's captains on the performance of the naval yard and its officers.

Both Shield and Bertie wrote to the Admiralty and Navy Board concerning the Inconstant and the dispute that had resulted between them. As before, the Admiralty and Navy Board approved of Shield's actions, with the Admiralty informing Bertie that they considered he had impeded the refit by holding the courts-martial on the ship. The Admiralty's letter was dated 15th August 1810 and may be significant, as another letter from Bertie was received on that day at the Admiralty. Bertie's letter complained that he had not been supported regarding his disputes with Shield and requested his withdrawal if the commissioner was not removed. An Admiralty official merely ticked this paragraph on the letter. 165

The subsequent career of *Inconstant* shows the repairs at the Cape allowing her to return to Britain were worthwhile. She was subsequently refitted at Portsmouth and recommissioned in October 1810 to remain in service until 1817 when she was broken up. The comparison with the fate of La Bourbonaise, that of paying off and subsequent

Admiralty to Bertie, TNA, ADM 2/937, 13th February 1810.
 Bertie to Admiralty, TNA, ADM 1/62, 24th May 1810.

scrapping, suggests that the actions of Shield and his yard officers were completely vindicated.

For a final review of the management of the naval yard up to the surrender of the Mauritius in December 1810, figures 5h and 5j provide a rational for the Admiralty's refit policy. Figure 5h follows the same principles as figure 5f as only shipwright and caulker activity on board ships have been evaluated. The spread of activity is presented over 24 months and shows an absence of refit work on ships occurring from April to December 1810, apart from repairs to allow *Leopard* to return home.

Shield looked for work for the shipwrights during this period and kept them occupied by training them in mast making and infrastructure work at the hospital and victualling yard. Employment on maintenance of Cape Town wharf was also a sound use of yard labour. If Bertie's policy of a larger workforce had been employed, it is difficult to know what value they could have been.

Figure 5j more clearly shows the purpose of the naval yard, that of small refits. Of the 27 vessels and three special shore duties on which work occurred between January 1809 and December 1810, three vessels dominated the refit activity. These were *Raisonable* (23 percent), *Caledon* (13 percent) and *Nereide* (11 percent), a worn out ship, a prize that should have not been brought into service, and a vessel that had survived a hurricane. If Shield had been in post with the Admiralty refit policy for foreign yards in place, this would have ensured that *Raisonable* was sent home and *Caledon* not brought into service. Money would have been saved without unduly weakening the squadron.

It has been argued that Shield refused to refit *Bourbonaise* and withheld stores for that purpose. The paylists, represented in figures 5h and 5j, indicate a different story as *Bourbonaise* received more days of artificer effort than any other ship, with the exception of *Inconstant*, under Commissioner Shield's management of the naval yard. *Bourbonaise* dominated activity in November and December 1809 and this was only to put her in a condition to safely send her to England and disposal. A closer examination suggests she was not the valuable ship that an operational historian considered her to be, or that stores had been refused by Commissioner Shield. 167

¹⁶⁶ Taylor, S., Storm and Conquest – The Battle for the Indian Ocean, 1809, (London, 2007), 246.

¹⁶⁷ Taylor, S., Storm and Conquest, 246-7.

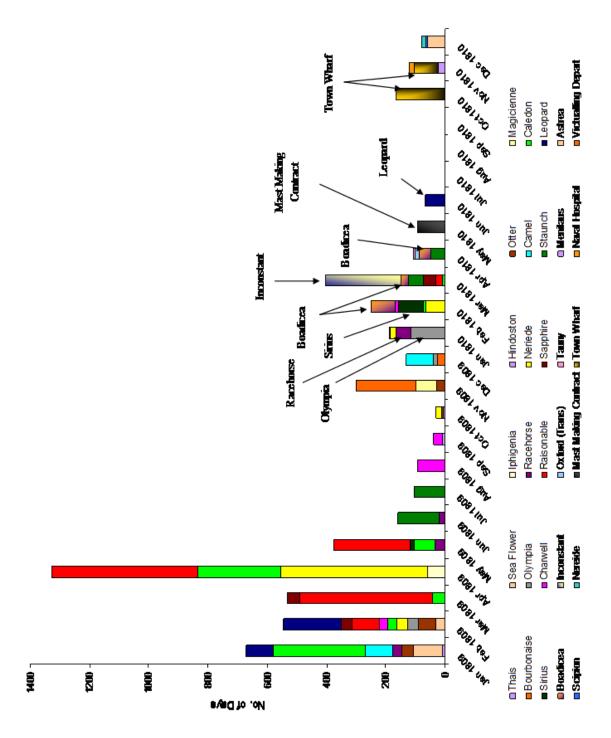


Figure 5h: Shipwright and caulkers – Employment on ships only (1809-1810)

A similar view can be formed of *Inconstant*, as she dominated activity in March 1810 to save her for future service. To make the overseas refit policy work in the most efficient manner, soundly built and recently refitted ships were required. This is what the Admiralty ship lists demonstrate, with the deployment of such ships from January 1809, but only taking effect from the beginning of 1810 when worn out ships were sent home.

The refits of *Caledon* and *Bourbonaise* provide a partial answer to the question of commissioning prizes overseas. These ships were locally commissioned and in both

cases used considerable manpower resources. However, it was probably the use of naval stores on *Caledon* which illustrates the wisdom of not commissioning prizes overseas, and instead to send them to Britain.

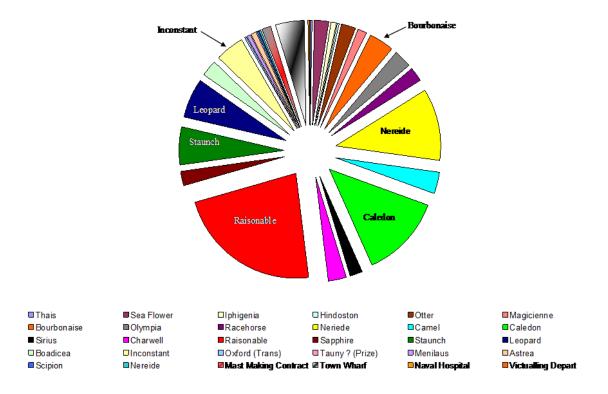


Figure 5j: Shipwrights and caulkers activity (on ships only) Jan 1809 – Dec 1810

5.7 The victualling department and naval hospital

The naval hospital at the Cape was part of the Transport Board as shown in figure 4h in chapter four. This chart also shows the superintending responsibility entrusted to the resident commissioner. Figure 4p provided a chart of the hospital organisation, with chapter two providing a description of the various activities of a naval hospital. When the squadron returned from blockade in December 1809, the sick were sent to the hospital to recover; tables 4f and 4g provided the hospital returns for the following quarter. The provision of a suitable diet appears to have been crucial to the recovery of the sailors, indicating the hospital victualling contract was as important as medical care.

Victualling the squadron was a vital service performed by the base at the Cape and as table 4d in chapter four demonstrated, a considerable number of letters between the resident commissioner and commander-in-chief were exchanged on this subject. Prior to Commissioner Shield's arrival at the Cape, the victualling organisation was completely in the hands of the local agent victualler, in support of the commander-in-chief, to whom he reported. Chapter two described what the Commissions on Fees and Naval

Revision sought to introduce, to improve the management of victualling overseas. They recommended an additional role for the resident commissioner, that of superintendence of victualling, but as described in chapter two there was much room for interpretation.

Shield was directed to investigate and report on the dealings of the previous agent victuallers; the Admiralty were suspicious and wanted an improved control system in place. William Maude had been that officer from 1800 to 1803, with William Robinson being the agent victualler in 1806 until Henry Pallister arrived. Maude and Robinson set up a company that was subsequently to become important to the navy as, not only were they prize agents, but also the main victualling suppliers. In addition, their role as victualling contractors became the cause of a considerable argument between Bertie and Shield, when they were supplying wine and goods to the blockading squadron.

The disagreement between the commissioner and the command-in-chief were not just confined to the naval yard possibly adding further evidence as to why Admiral Bertie's resignation was so eagerly received by the Admiralty. By examining the actions of Bertie and Shield regarding the victualling department and the hospital, not only does this provide evidence of the problems created by the framing of the nineteenth article of the commissioner's instructions, but also the improvements forced on these departments. These changes were introduced in the teeth of opposition from the admiral and the respective agents. It would seem significant that both of the agents were replaced followed by the admiral's departure, all of whom were never again employed in public service.

On arrival in April 1809, Shield had concentrated on the naval yard to dramatically reduce costs and improve the naval stores situation, but he quickly turned his attention to the victualling department and hospital. Within a fortnight of his arrival Shield had reported to Bertie that the Transport and Victualling Boards had not sent out the new instructions, or briefed their local officers on the resident commissioner assuming superintendence of their departments. 168 Bertie was supportive and stated that Shield should take responsibility until clear instructions were sent from England, but this support ends with the statement, 'subject to my [Bertie's] immediate control and direction'. 169 This still left the commander-in-chief as the controlling power for the

 $^{^{168}}$ Shield to Bertie, DRO, 74B/MFS 2, $10^{\rm th}$ May 1809. 169 Bertie to Shield, DRO, 74B/MFS 1, $10^{\rm th}$ May 1809.

victualling and transport agencies and hence, would only work if the commissioner and commander-in-chief could agree on areas of responsibility.

Shield was considered by the Victualling Board as their local representative, as they wrote directly to him regarding victualling affairs, for example, in June 1809 when Shield informed Bertie that provisions from Britain would be delayed. The next part of this letter provides a view of the depth of involvement Shield was already taking in victualling affairs. He observed that, as the stock of 'beef and pork are getting low I think it would be advisable to increase it whenever fair opportunity offer, 170 and that a tender for a large quantity of salted beef and pork at a very advantageous price had been handed in. He commented that he had inspected some of the casks and found the contents in excellent condition and hence requested the admiral to order the agent to purchase the items.

Five points become apparent from this letter; firstly, Shield had detailed knowledge of the items in store; secondly, he could calculate likely consumption, compare against items available and hence determine the short fall; thirdly, he had a clear understanding of local market conditions to ascertain an advantageous price; fourthly, the importance of a random inspection of the goods being tendered; and finally, only the commanderin-chief could direct the agent. The first point is particularly critical and rests on accurate record keeping and audit. To confirm these holdings, Shield obtained an inspection of the victualling stores in mid June 1809. This he stated was necessary, as the agent victualler needed a survey carried out to comply with Victualling Board regulations, subsequently requesting three officers from the squadron to carry out the inspection. 171 The commissioner may not have had direct control over the staff, but he was using his financial and audit powers to effect the actions he considered necessary.

Early indications were that Bertie considered Shield was in charge of the victualling department. This is shown in his use of Shield to solve a problem of the inadequate amount of wine in store, observing it would soon be exhausted and requiring requisition, a simple management function that could have been sent directly to the agent victualler. 172 By involving Shield in an activity, that was not one of merely financial control, it may have seemed to the commissioner that he had management authority in that department.

 $^{^{170}}$ Shield to Bertie, DRO, 74B/MFS 2, $11^{\rm th}$ June 1809. 171 Shield to Bertie, DRO, 74B/MFS 2, $20^{\rm th}$ June 1809. 172 Bertie to Shield, DRO, 74B/MFS 1, $28^{\rm th}$ May 1809.

Shield was to assume this authority and quickly became unpopular with the agent victualler and his office clerks. In attempting to implement his interpretation of his instructions, Shield found much wanting in the management and work performed in the victualling department. The deficiencies he uncovered in the victualling yard and office were many. These consisted of poor time-keeping and attendance at the victualling yard and office, with consequent over manning, inadequate financial and contract management, poor record keeping, defective procedures in the acceptance of items delivered and finally insufficient supervision of the workforce. Appendix 5b contains details of the problems Shield encountered in the victualling department.

The local victualling contract and money management was to prove the means that Shield was to use to operate his authority and in doing so, effected a replacement of the agent and his first clerk. A further result of Shield's management demonstrated the very strange behaviour of the admiral in defending and continuing the existing victualling contract, which the commissioner and the Admiralty found perplexing. They wondered whether Bertie was party to fraud, an accusation that was never made, but was hinted at many times.

Admiral Bertie wrote to the Admiralty on 1st September 1809 with a copy of the letter he had sent to the Victualling Board. This outlined the victualling contract that he and the agent victualler had entered into with Maude and Robinson in November 1808.¹⁷³ He pointed out that only two tenders were received, but that he felt a good contract had been obtained with a solvent and respectable firm. This showed an understanding of vender assessment, as there was no point having a contract with an organisation that could not be trusted, or would become bankrupt during the contract period. What concerned Bertie was that the renewal date was in October and he wanted to extend the contract term. Shield's examination of the victualling department and the problems that were occurring with supplying the squadron caused him to question the suppliers, which seems to have prompted Bertie's letter to the Admiralty.

In order to examine the victualling contract with Maude and Robinson, Shield requested from the admiral, copies of the tenders that had been submitted. On receipt Shield recorded that he had received copies of four tenders when the admiral had earlier

¹⁷³ Bertie to Admiralty, TNA, ADM 1/62, 1st September 1809.

reported to the Victualling and Admiralty Boards that there were only two. 174 Shield now proposed, as the Maude and Robinson contract was coming up for renewal, effective from 1st November, that the existing contract only be extended for six months, when a re-tendering exercise take place and more advantageous terms obtained. 175 Bertie replied he had anticipated this, had written to the Admiralty on 1st September and that he would continue the contract until the Admiralty directed otherwise. 176

Shield appears to have informed the Victualling Board of his suggestion, as the Admiralty directed Bertie to terminate the Maude and Robinson contract and act on Shield's proposal. The Admiralty's letter revealed their surprise: 'their lordships astonishment at your having shown any opposition to the commissioner's proposal so obviously for the advantage of the public service and that they are further of opinion that any loss the Country shall sustain in consequence of such opposition should be charged as an impress against you'. 177 This Admiralty letter was in advance of their reply to Bertie's of 1st September, as their reply to that is dated 14th February 1810 in which they referred him to their earlier letter.

This was not the end of the matter as the Admiralty's letter took a few months to arrive and the admiral continued to resist the termination of Maude and Robinson's contract. As part of this campaign Bertie sent a series of letters to the Admiralty. He had requested from his squadron commanders details of the quality of the provisions that had been provided under the victualling contract. This action was prompted because Shield initiated an enquiry into the quality of some wine delivered to the squadron's ships. All of the reports from the squadron stated the provisions and wine had been of a good quality during the last twelve months. 178 However, Shield's concern had not been about quality, but of cost, as acceptable quality of items supplied was a contractual obligation. Nevertheless a revealing argument over quality occurred regarding the wine.

Commissioner Shield in early November 1809 carried out an inspection of the wine supplied to two ships of the squadron and found it was inferior to the test sample of the nine month warranty wine. He asked his yard officers to give their opinions on the wine supplied to the ships, and they concurred that the contractor had supplied inferior

¹⁷⁴ Shield to Bertie, DRO, 74B/MFS 2, 5th October 1809. ¹⁷⁵ Shield to Bertie, DRO, 74B/MFS 2, 25th October 1809.

¹⁷⁶ Bertie to Shield, DRO, 74B/MFS 1, 25th October 1809.

¹⁷⁷ Admiralty to Bertie, TNA, ADM 2/937, 19th January 181.0

¹⁷⁸ Bertie to Admiralty, TNA, ADM 1/62, various forwarded letters from late 1809 and early 1810.

wine.¹⁷⁹ Howell, acting agent victualler, was requested by Shield to inform the commander-in-chief of the situation and the contractor of their non-compliance with the contract. The contract stated, 'that the whole of the wine delivered under the contract shall be at least one year old, and warranted to keep six or nine months, as may be required'. Howell considered the victualling department was not to blame for the quality of the wine, but noted this had never happened before and that the contract had always delivered good quality provisions.¹⁸⁰

Maude and Robinson provided a lengthy defence against the complaints of Howell, Shield and the yard officers refusing to take any responsibility for the wine's condition. Their view was that the wine was acceptable when it left them. They provided an affidavit from their storekeeper to that effect, adding that the varying climatic conditions from one year to another provided differences in taste. They further commented that the yard officers were not skilled in assessing wine quality. The contractor's bottom line was that they took no responsibility for the wine supplied.¹⁸¹

This view was endorsed by Bertie who appears to have used this case as an example of Shield's interference with the smooth running of the victualling contract. He considered the oaths of the contractor's men on the quality of their products to be of greater standing than the evidence of the yard officers on two samples of wine. ¹⁸² In this letter Bertie also stated he was obtaining information from the squadron of the quality of all provisions supplied, together with the comparison between Maude and Robinson's contract and Mr. Bird's¹⁸³ tender, which represented a saving of £4386 currency over the past 12 months. ¹⁸⁴ Was the defence of the contractors out a sense of fairness, or did Bertie have another reason? What was strange was there was no evidence of the admiral demanding an improved acceptance process in the victualling department.

A strange postscript to the wine element of the contract was to occur in December 1809. Shield demanded to know of Bertie why he had ordered more wine against the contract than could be used by the ships of the squadron, plus if it was not for the ships, what

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¹⁷⁹ Shield to Howell, TNA, ADM 1/61, 4th November 1809.

¹⁸⁰ Howell to Bertie, TNA, ADM 1/62, 6th November 1809.

¹⁸¹ Maude and Robinson to Howell, TNA, ADM 1/62, 8th November 1809.

¹⁸² Bertie to Victualling Board, TNA, ADM 1/62, 17th November 1809.

¹⁸³ William Wilberforce Bird had been Member of Parliament for Coventry from 1796-1802 and came to the Cape of Good Hope in 1807. He settled and became part of the colonial government becoming Controller of Customs in 1810. On arrival at the Cape he appears to have been a prize agent and man of business including the submission of tenders to supply goods to the navy (Philip, P., *British Residents at the Cape*, 28).

¹⁸⁴ See appendix 5c.

was the wine for? He also complained that he only found out about this order by accident and that, as he had superintendence of the department he wanted an explanation. Shield did not stop there, as he continued to point out the disadvantageous terms of the contract and the admiral's refusal to even issue a termination notice. 185 Bertie refused to be drawn into an argument. He merely stated that store wines were being shipped into La Bourbonaise for transport to England and that he would not discuss the matter further. However, he was reporting the obstacles Shield was putting in his way, to the Admiralty, Victualling and Navy Boards. 186 This did not deter Shield, as he pointed out that Bertie was sending home wine to England on a contract that was six pounds per ton more expensive than could be obtained in the colony. It was also in this letter that he pointed out that, unlike Bertie, he had no connection with the contractor, as Maude and Robinson were Bertie's prize agents and he had only the public's interest in mind. 187

Bertie never replied to Shield's letter, so we do not know if he was promoting colonial products at the suggestion of local government, or for his own interest, or that of the contractors. All of this discussion occurred during the aftermath of the La Bourbonaise affair and the clash between Captain Corbet and Shield when the relationship between the commander-in-chief and the commissioner was at a very low point.

The victualling contract remained with Maude and Robinson until the January letter from the Admiralty arrived in June, but Shield was still determined to extract value from the contractors. The new agent victualler, Alfred Johnson, arrived from England on the 23rd May 1810 and dined with Shield the following day, presumably briefing the commissioner on the thoughts of the Victualling Board. Shield had recently found the contractors had substituted calavance for pease and he wanted to make it a contract termination issue. He informed the admiral of what had happened and that the Victualling Board had disapproved of this practice. 189 However, Bertie merely stated in his reply that he had approved this substitution, as it had been in the original tender and was unaware of the Victualling Board's ruling. 190 Shield stated he was in charge of paying for goods on contract and that as it was not in compliance with the contract, he was not paying for the goods. The commissioner had found pease in the colony at a

Shield to Bertie, DRO, 74B/MFS 2, 6th December 1809.

Bertie to Shield, DRO, 74B/MFS 1, 6th December 1809.

Shield to Bertie, DRO, 74B/MFS 2, 7th December 1809.

¹⁸⁸ Journal of William Shield, DRO, 74B/MFS 30, 23rd May 1810.

¹⁸⁹ Shield to Bertie, DRO, 74B/MFS 2, 9th June 1810.

¹⁹⁰ Bertie to Shield, DRO, 74B/MFS 1, 9th June 1810.

competitive price and could not account for the victualling department asking for the substitution.¹⁹¹ Unfortunately for Bertie the new agent victualler had similar views to Shield, but Bertie did not give up his contract without a fight.

Bertie informed Shield that his delay in replying to the letter of 11th June, was due to the fact that he had resorted to the law officials at the colony to rule on the terms of the contract and the legality of the substitution of alternative items. He ended by directing Shield to pay for the calavance.¹⁹² Shield's reply is one of amazement, 'most sincerely lamenting that you have sought legal opinions to thwart me in my duty and operating essentially against the interest of the public really sir you could not have advocated the cause of the contractor more strenuously had you belonged to the firm and a partaker of the profits.' He further stated that the contract was no longer binding on the crown and that calavance would not be paid for.¹⁹³ Bertie's letter of 30th June to the Admiralty's letter acknowledged that the Maude and Robinson contract was to be terminated, but even at this late hour he still championed the contract and his actions.

With the new agent in place, tenders for a replacement victualling contract were advertised. Shield wrote to the admiral that a new contract had been entered into and that a saving of over £5000 would result, with a further £2360 saved if put into effect immediately. He added he had consulted the King's Procter who had stated that Maude and Robinson had been in breach of their contract and hence it could be terminated. Bertie again jumped to the defence of the contract, by obtaining the procter's opinion and presented this, together with supporting information to the King's advocate, the highest legal opinion at the colony, and stated the advocate's opinion was at variance to Shield's and the procter. This appears to have been a delaying tactic, as the admiral used the time taken to fill the storeship *Ranger* with stores from the old arrangement, before the new contract could be put in place. Shield's comments to Bertie were scathing, regarding the 'retention of your darling contract the dissolution of which has been extorted from you by my endeavours [....] to promote the real interests of the public'. 197

¹⁹¹ Shield to Bertie, DRO, 74B/MFS 2, 11th June 1810.

¹⁹² Bertie to Shield, DRO, 74B/MFS 1, 3rd July 1810.

¹⁹³ Shield to Bertie, DRO, 74B/MFS 3, 5th July 1810.

¹⁹⁴ Shield to Bertie, DRO, 74B/MFS 3, 15th July 1810.

¹⁹⁵ Bertie to Shield, DRO, 74B/MFS 1, 3rd July 1810.

¹⁹⁶ Shield to Bertie, DRO, 74B/MFS 3, 23rd July 1810.

¹⁹⁷ Shield to Bertie, DRO, 74B/MFS 3, 21st July 1810.

Bertie's options to retain the contract, or extend it for any length of time, had now run out. The Admiralty and Victualling Board wanted a more cost effective contract with Shield and the new agent letting nothing obstruct this aim. Victualling was not to become an issue of controversy again.

Bertie's behaviour at best looked intractable and incompetent providing another reason for his removal as commander-in-chief. The case, while not strong enough for a prosecution for fraud, was suspicious enough to put a black mark against his name and prevent his employment again in a position in which he had access to government contracts. Hence, although it may have been the refitting policy that he had objected to, which caused him to be withdrawn; his actions concerning the victualling contract may have been the reason why his request for an enquiry into his removal was not granted.

The fate of Pallister and Howell is also instructive. They were not investigated but were never to work in public service again. Pallister had been involved with the British victualling organisation for over twenty years. In his last month as agent victualler he called on Bertie's support as Shield was questioning him regarding fraudulent practices. 198 This investigation appears to have ceased with Johnson's arrival causing Pallister's replacement, shortly followed with Howell leaving the following month. Pallister remained in the colony until 1812, when he is recorded as leaving on storeship Dolphin, on which he died at sea in September 1812. 199 Howell remained at the Cape in various enterprises and found himself bankrupted within two years. 200 Alfred Johnson, however, remained as the agent victualler at the Cape until 1820 shortly before the naval base was put on a care and maintenance basis. 201

Following Admiral Bertie's examination of the medical department and appointment of senior staff on his arrival at the Cape, the Admiralty informed the commander-in-chief that a new surgeon and agent to the hospital were being sent. 202 These individuals, James Cairns (surgeon) and Andrew Millar (agent), arrived at the Cape on 13th December 1808 to take up their posts on 1st January 1809. 203

¹⁹⁸ Bertie to Shield, DRO, 74B/MFS 1, 7th May 1810; Philip, P., British Residents at the Cape 1795-1819,

¹⁹⁹ Philip, P., British Residents at the Cape 1795-1819, 314.

²⁰⁰ Philip, P., British Residents at the Cape 1795-1819, 194.

²⁰¹ Philip, P., British Residents at the Cape 1795-1819, 208.

²⁰² Admiralty to Bertie, TNA, ADM 2/937, 20th December 1808.

²⁰³ Cairnes to Shield, TNA, ADM 1/62, 25th April 1809.

Within days of his arrival at the Cape, as resident commissioner, Shield made enquiries of the surgeon regarding the naval hospital. ²⁰⁴ Shield's questions prompted a series of letters from Cairns that not only provided information on the running of the hospital, but also the control the commissioner wished to exercise. Shield in his letter, asked for information on who worked in the hospital, their role, how much they were paid and who had appointed them. He also requested copies of the survey reports carried out by Captains Rowley and Johnson on the hospital together with an account of the hospital stores. By obtaining this information Shield was obtaining a picture of the current hospital organisation, enabling him to compare this with the Commission of Naval Revision report on home establishments. ²⁰⁵

The reply Shield received, contained worrying information from the surgeon. Cairnes stated he was concerned over the victualling contract for the hospital on which he and the agent disagreed. The latter, Millar, had stated he was retaining the existing arrangement, set up by his predecessor, unless directed otherwise by the commander-inchief. Cairnes reported the quality of the goods was poor and that Millar had received a considerable sum from the previous agent. What Cairnes also brought to light was that he was never consulted on purchases, but was asked to approve accounts the correctness of which he had no means of ascertaining. Shield quickly dealt with the contracting arrangements. He obtained agreement from Bertie that he take the hospital contract and combine it with the existing victualling department contract.

Suspicion of Millar's honesty was again put into question by Cairnes, who on investigating a complaint from his patients, found their rations were being reduced without reason or the surgeon's agreement. Cairnes commented, 'highly improper it appears to me that the agent or any other person connected with the department should act in the capacity of contractor' suggesting the agent was involved in fraud. 210

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²⁰⁴ Cairnes to Shield, TNA, ADM 1/62, 25th April 1809.

²⁰⁵ Commissioner Shield's bound volume contained the 7th report on Home Hospitals, NMM, PBD0719.

²⁰⁶ Previous agents of the hospital being Isaac Willet, 1807-1808, who left for Rio, and Mr. Rankmore Millar's immediate predecessor. Cairnes to Shield, TNA, ADM 1/62, 25th April 1809.

²⁰⁷ Cairnes to Shield, TNA, ADM 1/62, 25th April 1809.

²⁰⁸ Shield to Bertie, DRO, 74B/MFS 2, 10th May 1809.

²⁰⁹ Cairnes to Shield, TNA, ADM 1/62, 10th May 1809.

²¹⁰ The probation of public servants receiving of rewards from contractors or having a commercial interest with firms receiving contracts or orders was part of the recommendations of the Commissioners on Fees. The Commission of Naval Revision introduced forms for individuals to swear oaths that they had not been involved in such practices.

Shield acted on this information by removing victualling from Millar's influence, and requesting Cairnes draw up detailed instructions to record and audit the food and medicines given to the patients.²¹¹ Millar was to account for every item provided to a patient, recording whether on half or full rations, so that Millar only received payment from the commissioner for these items. To obtain the status of the stores at the hospital, Shield obtained a survey. This was requested of the admiral who sent officers from the Boadicea with them carrying out the audit in mid June 1809. These officers subsequently complained to the admiral that the allowances awarded them were insufficient. Bertie used this complaint in his quarrel with Shield, by forwarding the letter to the Admiralty. Shield merely records in his journal, 'believe they were drunk most of the time'212 and to the admiral, replied that he had paid the officers subsistence and travel costs at naval vard rates. 213 It is difficult to know what other amount he should or could have paid.

In attempting to manage the hospital Shield had encountered similar problems to those he had with the victualling department. Shield attempted to exercise his superintending powers over the hospital and, as seen, started by obtaining information from the hospital's functional head. The commissioner focused on the performance of the agent and his reports caused the Admiralty to replace Millar. ²¹⁴ The new agent of the hospital was to remain in post until 1822 when the naval base was run down to care and maintenance status.

5.8 The relationship of Admiral Bertie and Commissioner Shield

Shield's arguments concerning the hospital and victualling departments continued with Bertie until the respective agents were replaced. Once the new individuals were in post, the commissioner's and agents' positive relationship removed Bertie's close involvement in hospital or victualling affairs. It seems the commissioner and the agents worked as a team, with the commander-in-chief rarely becoming involved in the general running of the civil naval departments. Article nineteen of the commissioner's instructions had caused considerable problems, but by placing an individual to act as an auditor and financial controller, it created more effective departments for the delivery of public service.

²¹¹ Cairnes to Millar, TNA, ADM 1/62, 9th June 1809. ²¹² Journal of William Shield, DRO, 74B/MFS 30, 17th June 1809. ²¹³ Shield to Bertie, DRO, 74B/MFS 2, 17th June 1809.

²¹⁴ Day, J., 'The role of the resident commissioner at the Cape of Good Hope 1809-1813', 64-65.

The continuing disagreements on policy and violent arguments between Admiral Bertie and Commissioner Shield have been thoroughly examined concerning the naval, victualling and hospital departments. Both Bertie and Shield found the situation intolerable, but the commander-in-chief took action to have Shield removed. He did this in a series of letters to the Admiralty and his letter of 24th May 1810 resulted in the resolution of this dispute. In this letter he referred to his earlier dispatch of 10th December 1809 to which he expressed his dissatisfaction with the Admiralty's response.

Bertie's letter of 10th December 1809²¹⁵ to the Admiralty contained a record of many of the disagreements the admiral, his officers and the agents of the hospital and victualling, had had with Shield. Bertie provided a catalogue of this correspondence ranging from complaints on inadequate allowances, when officers undertook a hospital survey, not assisting with boats in loading vessels, not providing stores authorised by the admiral, and Shield seeing fraud everywhere, including not giving freedom to agents to draw money. Bertie thought he was showing Shield's general interference in his management of the civil departments.

The admiral considered the drive for economy was ill thought out, interfered with operations and slowed action by endless discussion. Bertie considered the commissioner's nineteenth article undermined the authority of commanders-in-chief; that it gave the commissioner too much independence; that orders given by Bertie concerning the civil departments were subject to Shield's agreement. The admiral considered the commissioner was only the representative of boards subordinate to the Admiralty and should not be causing trouble.²¹⁶

Bertie sent more letters showing he wanted Shield removed, but it was by his letter of 24th May that Bertie asked 'that their lordships will be pleased to recall me from my command'. This appeal was annotated on the letter by the Admiralty with, 'acqt. [acquaint] him that his request will be complied with'. 217

The admiral appears to have been compelled to this action because the Admiralty never supported him in his complaints against Shield. In fact the reverse was the case. The

 $^{^{215}}$ Bertie to Admiralty, TNA, ADM 1/62, 10^{th} December 1809. 216 Day, J., 'The role of the resident commissioner at the Cape of Good Hope 1809-1813', 47, 61-63. 217 Bertie to Admiralty, TNA, ADM 1/62, 24^{th} May 1810.

Admiralty had disapproved of his refit policy, locally commissioning ships, his control of costs, ignoring directions to return ships and not to remove men from homeward bound vessels. The swansong of Bertie's campaign obsession was the order he sent to St. Helena calling for ships there to join him at the Cape. The Admiralty not only disapproved of this action, but sent a ship to the island countermanding the order.²¹⁸

5.9 Summary

This chapter has examined and reviewed the part played by the civil departments of the navy at the Cape of Good Hope in the capture of Mauritius and Bourbon. It has shown that the Admiralty changed the complexion of the squadron to one of recently refitted heavy frigates more suited to the operation, and timed an overwhelming force to be in place to support the invasion of Mauritius.

It illustrated that a mere reading, or studying, of operational histories and naval commanders' reports provides only one side of a campaign and ignores logistics and central planning. By examining the Admiralty, Navy Board and resident commissioner's actions and thoughts, a more complete understanding is obtained.

Bertie as commander-in-chief had become completely campaign orientated and did not obey the orders of the Admiralty, who had a clearer view of Britain's priorities. Capturing or neutralising the French Indian Ocean Islands was not one that could be accomplished by naval action alone, regardless of the resources applied, but one where an army was required. Until this could be arranged, the squadron from the Cape could obtain intelligence, apply pressure on French commanders by disrupting food imports and to their ships, but not invade Mauritius.

The appointment of Commissioner Shield by the Admiralty placed an individual to ensure the shore naval departments worked effectively and economically. This took longer than it should as the commander-in-chief protested the implementation of the Admiralty's policy for overseas bases which was one of maintenance of vessels and supply of stores to ships. An overseas naval yard was not for major repairs or commissioning vessels.

A close examination of Bertie's observations on Shield's behaviour as resident commissioner indicates the commissioner was carrying out the tasks the Admiralty

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²¹⁸ Admiralty to Bertie, TNA, ADM 2/937, 5th September 1810.

required. The Admiralty wanted central control over expenditure and behaviour in all the support areas, which was achieved. By pressurising the agents slack and possibly corrupt practices were removed with improvements made in the deliver of victualling and medical services. Article nineteen of the resident commissioner's instructions can be seen to have been successfully implemented, even in the face of the commander-inchief's obstruction.

The reason for the Admiralty's acceptance of Albemarle Bertie's resignation, and its refusal to sanction an enquiry would seem to lie in the admiral's independent behaviour. This ranged from interference with Admiralty dispositions and refit policies, to odd contracting practices. However, the era when such behaviour could be tolerated had passed, Bertie was never employed again.

Chapter six The Cape of Good Hope base following the capture of Mauritius

6.0 Introduction

This chapter examines the shore naval facilities at the Cape of Good Hope following the capture of Mauritius and Bourbon. The utility of these islands was examined by the British, as anchorages and potential naval bases and provides evidence for the retention of Mauritius together with the return of Bourbon to the French. With the capture of Java in 1811, French and Dutch bases were eliminated in the East Indies, resulting in the East Indies and Cape of Good Hope squadrons being reduced in size and power. With the reduction in ships the resident commissioner now had to either find alternative work to occupy the labour force, or decrease their number.

The Cape of Good Hood squadron had an anchorage during the summer at Table Bay moving in the winter to Simon's Bay. This resulted in two naval arsenals and refit locations being provided at Cape Town and Simon's Town an inefficient and costly arrangement, but consolidating to one location would require investment. Before this investment could be made the fate of the Cape required resolution. If the Cape was again to be returned to the Dutch then the venture was unnecessary. The re-organisation of the naval shore establishments are investigated in parallel with this political decision.

6.1 Operational context

Following the capture and occupation of Mauritius and Bourbon, the activity of the Cape of Good Hope squadron and its support services, became one that almost descended into peace-time conditions, until the outbreak of war with the United States in 1812. On discovering that Drury, the commander-in-chief in the East Indies, had died, Admiral Stopford left his command at the Cape, to assist in the elimination of French and Dutch power in Java. Stopford returned to his squadron after the capture of Java, arriving at Mauritius on 20th October 1811. In his absence Stopford had left behind the majority of his squadron with a strong force concentrated at Mauritius. Unaware that Mauritius had been captured the French sent three frigates to reinforce their position at that island. This resulted in an encounter with British warships in May 1811. Two of these frigates were captured in late May off Tamatava, Madagascar, with only the *La Clorinde* escaping back to France.²¹⁹

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²¹⁹ The French *Nereide* and *La Renommee* were subsequently re-commissioned as *Madagascar* and *Java*. *Madagascar* arrived at Portsmouth on 6th April 1812 and was subsequently refitted from September 1812

With the occupation of Tamatava and the Seychelles in 1811, the Admiralty responded to this removal of French power in the Indian Ocean, by reducing the number of ships in the Cape squadron. By July 1812 the squadron consisted of the Lion (64) as flagship and a force of only four frigates and three sloops. The squadron was further reduced in number by July 1813, to the *Lion*, three frigates and two sloops. ²²⁰

An indication of the central control exercised by the Admiralty, plus the trust in their abilities was shown in Stopford's reply to a briefing report from Britain. Responding to Admiralty intelligence that two French line of battleships with supporting frigates were bound for Mauritius in early 1812, Stopford replied he was concentrating his weaker force at Simon's Bay, awaiting re-enforcements and only engaging if opportunity dictated. 221 This threat never materialised but the response made sound strategic and tactical sense. The only other operational threat Stopford and his successor Tyler had to counter in this period resulted in war being declared by the United States in 1812 necessitating the need to provide escort vessels.

6.2 The potential of Mauritius and Bourbon as naval bases

With the capture of Mauritius and Bourbon, the British had not only removed the threat of the French, but also acquired another port for its own navy. The advantageous position of these islands for supporting operations in the western and southern Indian Ocean can be seen in chapter seven, figure 7a. Since the French stationed large frigates at Port Louis, Mauritius, this implied that such vessels could be accommodated. The number and type of vessels to be stationed at that port, together with the scale of local shore support to be provided, exercised the minds of Admiral Stopford and Commissioner Shield over the next eighteen months.

Initially Stopford stationed frigates at Port Louis, as can be seen in the engagements that took place in May 1811, calling on Shield at the beginning of March 1811 to discuss the arrangements that should be made to support these ships.²²² However, with the departure of Stopford to support the invasion of Java, decisions on the shape and role of the base were delayed until his return in October. In the interim Stopford delegated

to April 1813 for subsequent service. Java also arrived at Portsmouth on 6th April 1812 and completed fitting for service there on 21st October 1812. However, she did not have a long career in British service as she was taken by USS Constitution on 29th December 1812 and subsequently burnt. Winfield, R., British Warships in the Age of Sail, 179-181.

²²⁰ Ship list books, TNA, ADM 8/100, 1812-1813.

²²¹ Stopford to Admiralty, TNA, ADM 1/64, 1st June 1812.

²²² Stopford to Shield, DRO, 74B/MFS 1, 2nd March 1811.

authority of the civil naval departments to Commissioner Shield, together with instructions to open all dispatches addressed to the commander-in-chief. During this period Shield operated a stores policy of equipping ships bound for Port Louis with naval stores for four or eight months, with regular forwarding of items on request. The commissioner's approach was detailed in a letter to Captain Butterfield, commander of *Malacca*, on storing his ship at the Cape. ²²³

On Stopford's arrival at Mauritius in October he found a letter from the Admiralty requesting a report on the suitability of Mauritius and Bourbon as naval bases.²²⁴ Stopford provided a long report²²⁵ not only on these islands, but also information on the Seychelles from a dispatch he had received from Captain Beaver.²²⁶ In Stopford's reply to the Admiralty's request he immediately disposed of Bourbon's potential use by stating the island had no harbour.²²⁷ His observations on Mauritius were extremely detailed and commented on the harbour at Port Louis, the depth of which had been surveyed in 1810.²²⁸ The admiral reported the depth of water was low but the harbour could be dredged if a vessel was provided for that purpose. However, he observed that the Admiralty had already directed that the harbour was not to be deepened, indicating the retention of Mauritius at a future peace conference was not yet certain. Therefore he suggested the improvement of the harbour was foolish until its fate was known.

Nevertheless, the harbour depth was sufficient for frigates, though not a safe anchorage in the months of January, February and March. Stopford confirmed this by stating three ships²²⁹ had broken three of their eight cables during gales from the west, observing that if the wind had blown directly into the harbour that anchors could not have prevented the ships going on shore. To alleviate this problem the commander-in-chief planned to dispatch a frigate and sloop to the Seychelles in these months, leaving two frigates at Port Louis with them being secured in Trou Farfayon,²³⁰ the inner and most protected part of the harbour.

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²²³ Shield to Butterfield, TNA, ADM 123/42, 31st July 1811.

²²⁴ Admiralty to Stopford, TNA, ADM 2/937, 3rd July 1811.

²²⁵ Stopford to Admiralty, TNA, ADM 1/64, 26th October 1811.

²²⁶ Captain Beaver to Stopford, TNA, ADM 1/64, 26th April 1811.

Bourbon, now known as Reunion, was returned to France at the Congress of Vienna presumably as it had no usefulness to Britain and unlike Mauritius could not be a potential threat to British trade in the future.

²²⁸ See figures 6a and 6b as they give the depth of water in fathoms as reported in 1810 with the actual soundings recorded in 1817.

²²⁹ Nisus, Astrea and Phoebe.

²³⁰ Stopford comments in a later letter (ADM 1/64 16th November 1811) that this area only had a depth of 12 to 13 feet of water.



Figure 6a: The harbour of Port Louis indicting soundings in 1810 and 1817²³¹

²³¹ The harbour of Port Louis – Mauritius, Admiralty Library Portsmouth, Vz 8/24.

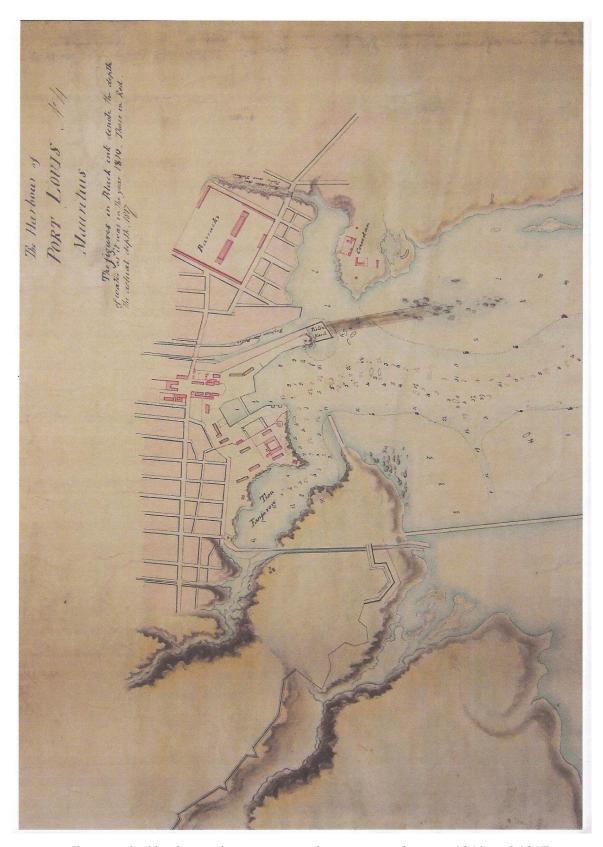


Figure 6b: Detail of harbour of Port Louis indicating soundings in 1810 and 1817

Stopford had thus reported the shelter and capacity elements of Port Louis as a naval anchorage, but he also outlined other aspects of Mauritius contributing to its suitability as a naval base. He noticed that fresh water was abundant and excellent in quality, but

all other items were scanty and extravagantly high in price. To obtain fresh meat for the naval squadron and the military garrison, transports were being sent to Madagascar to obtain cattle, but there was a shortage of transport ships. All other naval and victualling stores had to be obtained from the Cape of Good Hope for which he recommended dedicated transports were attached to the squadron. This caused Stopford to conclude, 'I can not consider Port Louis in the respects of supplies as by any means a desirable Naval Port excepting for a very small force'. 232

The admiral also recommended the kind of repair and storage facilities that were required at Port Louis, together with observations on the management and workforce required. He thought repairs to the ships might be done using the carpenter crews of the squadron, supported by contracted artificers and that this would be cheaper than maintaining a large establishment. In the absence of a dedicated artificer workforce Stopford considered the shore establishment need only consist of secure buildings for victualling and naval stores. To manage this establishment he considered an officer, who combined the role of storekeeper and agent victualler with two clerks would be sufficient. This officer was to be in constant correspondence with, and submit his accounts to, the resident commissioner at the Cape.

In the following month the admiral provided an update to his October letter observing, '[the] insecurity of the harbour for many months of the year and the difficulties of procuring refreshments at all times, prevent the port from ever becoming of consequence to the British, though its situation rendered it particularly favourable to the French'. 233 In this Stopford summed up the reason for retaining Mauritius at the subsequent peace treaty, even though it was of limited use to Britain.

In spite of the disadvantages, the commander-in-chief continued his plan to establish a temporary base by appointing Thomas King²³⁴ as acting naval storekeeper and agent victualler at Port Louis with two clerks. The establishment was to be considered an appendage to the Cape of Good Hope under the direction of Commissioner Shield. Regarding the availability of contractors at Port Louis to assist in ship repairs, Stopford found Rondean and Piston, who had previously supplied the French with materials and

²³² Stopford to Admiralty, TNA, ADM 1/64, 26th October 1811.

²³³ Stopford to Admiralty, TNA, ADM 1/64, 16th November 1811.

²³⁴ Thomas King had been first clerk to Commissioner Shield at the Cape of Good Hope until December 1810.

artificers.²³⁵ This confirmed his contention that maintaining a permanent establishment was not required.

Medical services were also available to the squadron at Mauritius as a hospital was available, being attended by both the army and naval surgeons. Stopford commented this arrangement was at risk, as the general hospital was about to be abolished removing the support of the army's staff. This would leave naval patients without a medical person when ships were absent from port, causing Stopford to recommend the appointment of a surgeon, with medical supplies being sent from the Cape.

A more considered recommendation was also made in the admiral's November letter concerning the vessels he had found at Port Louis on his arrival. *Nereide* he thought was of little use to the service and recommended she was broken up. ²³⁶ The *Staunch* was in a poor shape and not worth refitting and he put her up for sale. ²³⁷ The admiral sent the two frigates captured off Madagascar in May to the Cape where the prizes were surveyed for acceptance into service and repaired for the voyage to Britain. Stopford's actions were approved and confirmed that the refitting and prize policy of the Admiralty for overseas stations, that Admiral Bertie had disputed, was being observed.

The commander-in-chief had decided the forward positioning of part of his Cape squadron for nine months of the year, was worth the investment in civilian staff and hire of storage space at Port Louis. Commissioner Shield came to a different conclusion, that this ship detachment could be supported without the need for a shore establishment. This difference of opinion was to become the subject of debate between Shield and Stopford on the latter's return to Table Bay in mid December 1811.

On being told by the admiral that King had been appointed as acting storekeeper and agent victualler at Port Louis, Mauritius, Shield provided Stopford with evidence of King's unsuitability for the post. Stopford stated it was a case of necessity, rather than choice, as a storekeeper was needed to oversee the stores at Mauritius. Shield questioned the need for such quantities of stores being lodged at Port Louis to necessitate a storekeeper. The commissioner suggested that as the ships could not operate in the surrounding seas for at least three months of the year, it would be more

²³⁵ Figure 6b shows Piston's yard at the end of the key at Port Louis.

²³⁶ Nereide had been captured by the French in August 1810 at the Battle of Grand Port.

²³⁷ Note: *Staunch* was purchased for 4500 Spanish dollars as a receipt for that sum was handed over to Commissioner Shield. Shield to Stopford, DRO, 74B/MFS3, 19th December 1811.

economic to have them return to the Cape for refit at that time. When necessary they could be re-supplied for eight to twelve months by means of a transport supplying Mauritius with minimal stores. Shield went on to worry that having an establishment at Mauritius would result in wastage and increased expenditure, especially as the captains would have full control over the stores.²³⁸ This had been the policy that Shield had operated during the commander-in-chief's absence. 239 Shield briefed the Navy Board on the conflicting views of himself and the commander-in-chief with that board forwarding the letter to the Admiralty. The Admiralty had not previously formed a view, but instead had directed the commissioner and commander-in-chief should consult each other and reach an agreement on supplying ships at Mauritius.²⁴⁰ On the subject of Thomas King, the Admiralty backed Shield and directed that King was removed from his post and the stores put in charge of another person.²⁴¹ Shield's stores and refitting policy was adopted, but achieved at some cost to his relationship with Stopford.

6.3 The work of the naval yard

The influence of the capture of the French Islands on the naval yard at the Cape was evident in an examination of the Cape of Good Hope naval yard paylists. These confirm that the refitting policy of the Admiralty was firmly in place. Figure 41 in chapter 4 showed that the permanent workforce at the naval yard had been stabilised in 1810, containing a complete range of skilled artificers with recourse to contract labour being no longer required.

The trend of continued involvement in colonial activities plus enhancements to shore facilities, started in the second half of 1810, is evident in figures 6c and 6d. Shield's workforce continued to work on the naval hospital, the victualling yard and Cape Town's wharf, but it was in the support of the colonial schooner Isabella that considerable labour was provided. The colonial governor had requested Commissioner Shield's assistance as the materials required to refit the schooner could not be obtained. Shield informed the Navy Board he had not only released naval stores but, as there were no naval ships to refit, he had also agreed to supply yard labour. 242 Not surprisingly, the Navy Board confirmed their approval of his actions. This indicated that flexibility was

²³⁸ Shield to Navy Board, TNA, ADM 106/2004, 20th December 1811. Note: Admiral Drury made a similar point regarding refits at Calcutta.

239 Admiralty to Shield, TNA, ADM 2/938, 18th December 1811.

²⁴⁰ Admiralty to Stopford, TNA, ADM 2/938, 28th March 1812 .

²⁴¹ Navy Board to Shield, TNA, ADM 106/2483, 13th March 1812. ²⁴² Shield to Navy Board, TNA, ADM 106/2004, 18th May 1811.

expected of resident commissioners. As the work carried out on the *Isabella* was an inter-government department activity, the naval storekeeper provided a detailed financial bill so the colonial department was correctly charged.²⁴³ His report detailed all the stores and labour used, with the exchange rate and costs in both sterling and local currency.²⁴⁴

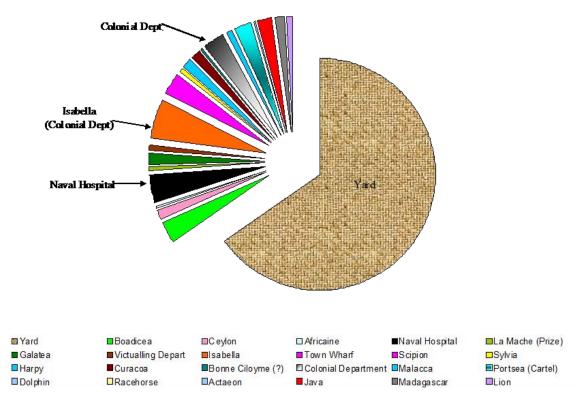


Figure 6c: Shipwrights and caulkers – 1811

Figures 6c shows that the policy of limited refitting work was in place on naval ships in 1811. The most significant refits performed were on *Boadicea*, *Scipion*, *Portsea*, *Java* and *Madagascar*. The *Boadicea*, a veteran of the blockade campaign, received a refit to enable her to return to Britain, *Scipion* was fitted for Java whilst *Portsea* was used to carry French prisoners to Britain. The significance of *Java* and *Madagascar* refits lays in them being prizes, they were only sufficiently repaired to enable them to sail to Britain. A comparison of their cost with that of *La Bourbonnais* in late 1809, adds further weight to the Admiralty's policy not to carry out major refits at overseas yards. *La Bourbonnaise* did not serve in the British navy, but *Java* and *Madagascar* were both subsequently refitted at Portsmouth and re-commissioned.

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²⁴³ Howitson to Navy Board, TNA, ADM 106/2004, 22nd July 1811.

²⁴⁴ Appendix 6a provides an extract of this report. The surviving naval yard paylists only record work on vessels if performed on board ship. Howitson's report records all artificer work and provides an indication of the work recorded in the naval yard that was directly involved in refit work. The paylists for slave labourers and artificers employed in the naval yard are missing but this report shows their presence.

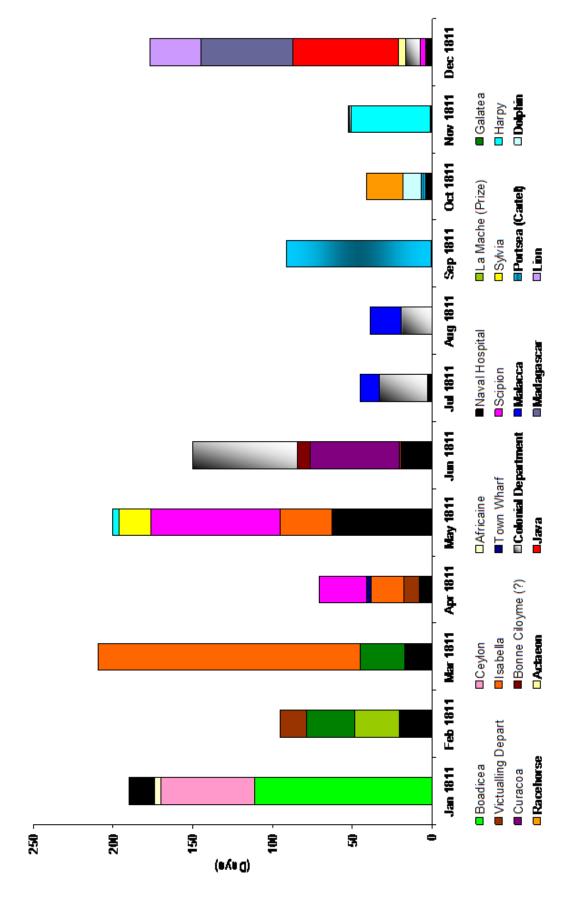


Figure 6d: Shipwright and caulkers (on board ship) in 1811

The composition of the naval yard workforce during the blockade and capture of Mauritius was shown in figures 4l and 4m, but with the elimination of French bases in the Indian Ocean, the Cape squadron was reduced in numbers. As work on ships declined so the need for a reduction in numbers of artificers was needed. Figure 6e provides a view of the naval yard workforce, from 1809 to 1815, hence including the entire period from resident commissioners being appointed, until the end of the French and American Wars. Artificers from Britain were usually contracted for three years service overseas resulting in individuals, who had served their time, either choosing to return home, remaining in post, or leaving the yard to settle in the colony. As artificers left the yard from 1811, they were not always replaced, as can be seen in the years from late 1811 to mid 1813.

With the reduction in establishment artificers until the decision to build at Simon's Town in late 1812, interaction with the private ship-repair business of John Osmond at Simon's Town was considerable. Osmond had supplied contract labour to the naval yard from 1808 to 1810, but the relationship changed over the next three years to a more sophisticated arrangement. It was not merely supplying labour when required; Osmond was given a complete task with a contract to report on the condition of yard launches including the materials and time required for repair. 245 The arrangement was not one sided, as Osmond hired naval yard equipment by obtaining the loan of scaffolding.²⁴⁶ Osmond also provided stores support as Shield asked if he could supply a large spar for a colonial schooner, *Egmount*, as none were available in the naval arsenals. ²⁴⁷ The picture this draws was one of a flexible approach to the employment of contractors and the support of government departments.

William Shield left the Cape of Good Hope in May 1813 and was replaced by George Dundas, who arrived in July 1813. The main task of Dundas was to transfer the naval establishments at Cape Town to Simon's Town which is examined later in this chapter. However, it was not only the resident commissioner who was changed in 1813, as Stopford was replaced by Rear-Admiral Charles Tyler as commander-in-chief. Tyler arrived in February and continued in command until the peace agreement with the United States of America was ratified by the American Congress.

Shield to Osmond, TNA, ADM 123/42, 27th July 1811.
 Shield to Osmond, TNA, ADM 123/42, 12th July 1811.
 Shield to Osmond, TNA, ADM 123/42, 5th November 1812.

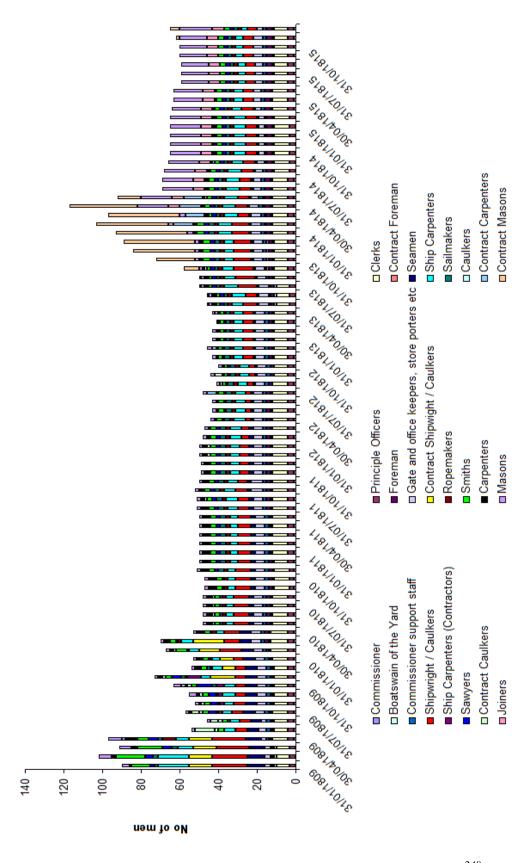


Figure 6e: Cape of Good Hope – Naval Yard Establishment, 1809-1815²⁴⁸

 $^{^{248}}$ Cape of Good Hope Paylists, TNA, ADM 42/2206-2209, 1809-1815.

Commissioner Dundas died in August 1814, resulting in the commander-in-chief taking full control of the shore naval departments. An unexpected benefit for the historian is that the monthly reports of ships arriving, departing and repair work performed at the naval yard, from April 1814 to February 1815, survived in Tyler's dispatches to the Admiralty. Compiling these reports and sending them to the Admiralty was a duty of all overseas resident commissioners, but only a small number have survived. Tyler's reports confirmed the limited nature of the refits recorded in chapters three and four, with caulking and minor repairs again dominating activity. Major refits were avoided with such vessels being either fitted for return to England, or locally condemned, confirming the actions of Commissioner Shield during the Mauritius campaign. Jahleel Brenton was appointed resident commissioner as a result of the death of Dundas, arriving at the Cape in March 1815.

6.4 Rationalisation and improvement of shore facilities: The move to Simon's Town (1809-1815)

The naval squadron based at the Cape of Good Hope from its first occupation in 1795 and again, following its recapture in 1806, had been supported by two naval yards and supply arsenals at Cape Town and Simon's Town. The reason for this seemly unnecessary duplication was the prevailing wind direction in Table Bay during the months of April to September. This meant ships had to be stationed in Simon's Bay to avoid being driven onto the shore during these winter months. ²⁵⁰ Simon's Bay is located within False Bay, which is subjected to prevailing winds from the south east, but Simon's Bay is sheltered. Simon's Town and its bay are sheltered from both prevailing winds and hence had the potential to be the single location for the naval squadron and the required shore facilities. The location was suitable, but Simon's Town was a small settlement without the facilities of Cape Town and to build a suitable navy base would require investment. The Admiralty had to decide if the investment was worthwhile, especially as the fate of the territory was uncertain.

The road between Cape Town and Simon's Town covered a distance of over 20 miles and was of very poor quality. Stores were moved by sea whenever a vessel was available, leaving the road for transport of people by wagon or horse. A map illustrating the distance between Cape Town and Simon's Town together with the route by the road

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²⁴⁹ Tyler to Admiralty, TNA, ADM 1/66, various dates starting 8th August 1814.

²⁵⁰ Figure 4a in chapter four provides a map showing the prevailing wind directions and ocean currents at the Cape of Good Hope.

can be seen in figure 6f. As most suppliers to the naval base resided at Cape Town the importance and condition of this road was still being felt after the relocation.

The improvement of this road was the responsibility of the colonial government, causing Lord Somerset²⁵¹ to write to Lt. Col. Torrens on his objection to the withdrawal of troops from the Cape, as he needed them to complete work on improving the Cape Town to Simon's Town road. Somerset observed that it was, 'not only for the utmost importance of this colony but of necessity to the naval establishment lately formed at Simon's Bay, viz making a road to Simon's Town, the excessive badness of which had already raised the naval contracts to an enormous height'. He went on to say that in a short time the road would become impassable and that he doubted contractors would be willing to supply the naval departments on any terms.²⁵² The isolated position of Simon's Town had been recognised by Commissioner Shield, even when proposing the centralisation of all naval facilities in 1810, but he lobbied for a yard there whilst at the Cape and when on the Navy Board.

At a local managerial level the advantages of one base was considerable. By reducing duplication of offices, accommodation, storage and specialised facilities, together with the removal of unnecessary transportation of stores and personnel, a more efficient operation would result. However, other factors had to be considered. Would investment be recovered before the war ended? If not, would the Cape of Good Hope colony be returned to the Dutch at the end of the war as it was in 1803? Would a mobile facility, a sheer hulk, provide a better solution to that obtained from buildings? The answers made to these questions provide insight into the thinking of the British authorities in 1810 to 1813.

The belief that Britain would retain the colony was a major factor in the decision to rationalise the naval facilities at the Cape. Until the colony's future was decided the Admiralty only allowed planning options to be prepared. It was in December 1812 they decided to proceed with Commissioner Shield's plan. This suggests that the Liverpool

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²⁵¹ Lord Charles Henry Somerset, Colonial Governor Cape of Good Hope 1814 to 1826, Davenport, T., Hunt, K., (rev.), *ODNB*, accessed 2nd August 2010.

²⁵² Somerset (Governor of Cape Colony) to Lt. Col. Torrens, H., 7th August 1814, Theal, G. (ed.), *Records of the Cape Colony from April 1814 to December 1815*, Vol. 10, (London, 1901), 154-155.

ministry had determined to retain the Cape, a year before Clancarty²⁵³ wrote to Castlereagh that the Dutch were penniless, and not able to defend their colonies. ²⁵⁴



Figure 6f: Cape of Good Hope – Route from Cape Town to Simon's Town (1822)²⁵⁵

²⁵³ Richard Le Poer Trench, 2nd Earl of Clanarty, British Ambassador to the Netherlands November 1813, Norgate, G., and Matthew, C., (rev.), *Oxford Dictionary of National Biography*, accessed 3rd August

<sup>2010.
&</sup>lt;sup>254</sup> Clanarty to Castlereagh., 25th December 1813, Theal, G. (ed.), *Records of the Cape Colony from October 1812 to April 1814*, Vol. 9, (London, 1901), 292-294.
²⁵⁵ A survey of the Cape of Good Hope – 1822 (Detail), UKHO, B772.

To keep or not to keep the Cape had been a Foreign Office question since its first occupation. It was considered that the Cape, in the hands of an enemy, was a dagger to the throat of British trade with the East Indies. However, possession of the colony was not considered an imperial jewel, being more likely to be a drain on Britain's exchequer. At the Treaty of Amiens in 1802 Britain retained Ceylon, captured from the Dutch in 1795, but returned the Cape to the Dutch. The first occupation by the British provided benefits useful at the subsequent re-capture. These included experience of the colony and British individuals, who remained to assist in the government of the colony on its second occupation. However, the previous withdrawal also made colonial business difficult to conduct. Previous arrangements made during the first occupation by the British colonial government were not honoured by the Dutch in 1803. Hence, raising funds by selling government property, or securing loans as collateral, for launching a colonial paper currency was compromised by uncertainty.

Whether the Cape was to be retained not only caused considerable difficulties to the colonial authorities in governing the territory, but also made it difficult for the Admiralty to decide if any investment should be made. The Anglo-Dutch Treaty of 1814 settled the fate of the Cape colony, together with the Dutch South American colonies of Demerara, Essequibo and Berbice, but this was not concluded until mid 1814 by which time the naval establishment was being built at Simon's Town.

Improving conditions for the workforce was one of Commissioner Shield's first objectives on viewing the 'miserable and expensive lodgings' he found at the Simon's Town settlement in 1809. Shield suggested the purchase of a house at £6000 to provide accommodation for 25 artificers, or the use of a prize ship as an accommodation ship.²⁵⁷

The commissioner again raised the subject of improving Simon's Town ability to support refits in early February 1810 with the impending transfer of the squadron to Simon's Bay. As Simon's Bay was a safe anchorage all year, Shield proposed that all naval establishments were moved to Simon's Town.²⁵⁸

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²⁵⁶ Craddock to Liverpool., 4th March 1812, Theal, G. (ed.), *Records of the Cape Colony from March* 1811 to October 1812, Vol. 8, (London, 1901), 347; Craddock to Liverpool, 14th June 1813, Theal, G. (ed.), *Records of the Cape Colony from October* 1812 to April 1814, Vol. 9, 193.

²⁵⁷ Shield to Navy Board, TNA, ADM 106/3206, 14th May 1809; Shield to Navy Board, TNA, ADM 106/2004, 16th June 1809.

²⁵⁸ Shield to Navy Board, TNA, ADM 106/3206, 3rd February 1810.

On receipt, the Navy Board sent Shield's proposal to Admiral Curtis, ²⁵⁹ for his opinion as he had been the last commander-in-chief at the Cape during the first occupation. Curtis considered Shield's proposals were sound, but would cost a considerable sum. His experience indicated operating two establishments was not overly expensive, but his main argument for not backing Shield's plan was the uncertainty regarding the future of the Cape. The admiral thought spending money on a station that might be returned to the Dutch was an unwise investment.²⁶⁰

The Navy Board sent Curtis's opinion of Shield's proposal to the Admiralty in June 1810, but it would seem that another letter from Shield moved the commissioner's plan to a more advanced state. Shield's June 1810 letter informed the Navy Board he was still of the opinion that two establishments were wasteful and that a saving of several thousand pounds a year would be made after the removal of the initial expenditure. The Admiralty took notice of Shield's plea by instructing him to prepare a plan for approval and requesting Rear-Admiral Stopford to investigate Shields' proposals on his arrival at the Cape. 262

Stopford's report to the Admiralty, on 1st March 1811, supplied considerable detail on conditions at the Cape, the cost of Shield's plan and the capacity of the anchorage. He confirmed that Simon's Bay was a secure harbour and capable of accommodating up to six sail of the line and a similar number of frigates. The only measure required was the marking of Whittle Rock in False Bay to ensure safe access to the anchorage.²⁶³ The admiral estimated that the cost of moving the whole establishment to Simon's Town was approximately £50000. Shield thought that money could be found by selling the existing naval buildings at Cape Town, but found the governor had considered these buildings to be colonial property and had already mortgaged them as security for the paper currency in circulation. Nevertheless Shield indicated to Stopford that independent of raising the funds, the savings accrued in consequence of having one establishment would cover expenses incurred within ten to twelve years.²⁶⁴

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²⁵⁹ Admiral Sir Roger Curtis, commander-in-chief Cape of Good Hope 1800 to 1803 and member of Commission of Naval Revision, Knight, R., *Oxford Dictionary of National Biography*, accessed 3rd August 2010.

²⁶⁰ Curtis to Navy Board, TNA, ADM 106/3206, 28th May 1810.

²⁶¹ Shield to Navy Board, TNA, ADM106/2004, 22nd June 1810.

²⁶² Admiralty to Stopford, TNA, ADM 2/937, 8th and 13th October 1810.

The hydrography carried out by the squadron and master attendant at the Cape station included buoying the Whittle Rock but the tides and ocean currents caused the marker to be frequently lost. ²⁶⁴ Stopford to Admiralty, TNA, ADM 1/63, 1st March 1811.

Stopford followed up his earlier letter with another that month, having obtained an additional estimate of the costs for the store-houses and lodgings required to be erected at Simon's Town. 265 The admiral observed that the cost of materials and labour at the Cape made it cheaper, wherever possible, to purchase existing buildings and modify them, than to purpose build. Amongst the buildings to be converted was accommodation for the commissioner, the yard officers, the agent victualler and their clerks. A building to serve as a hospital for 100 men also needed to be converted, but this would also provide lodgings for the dispenser and steward. However, a separate building for the surgeon and agent of the hospital would be required.

This was the limit to converting existing buildings as there were none suitable to serve as store-houses, specialised facilities, or for accommodation of artificers. A plan to meet these requirements was submitted by Shield for the erection of a mast house, a boat house with a sail loft above, three double store-houses, accommodation for 12 artificers and an extension to the existing wall to enclose the new yard. The total costs of erecting new, purchasing and modifying existing buildings was estimated at £56666.

The effort and money required, caused the commander-in-chief to again return to a solution proposed by Bertie and the yard officers in 1808, then again by Shield in 1810, that of a sheer hulk instead of dedicated fixed facilities. Stopford asked Shield for his opinion and a plan for stationing a 50 gun ship, armed and rated as a sloop of war, at Simon's Town to act as a store-ship, with accommodation for artificers. ²⁶⁶ Armed with this plan, in a letter of 31st March, Stopford proposed to the Admiralty in view of the uncertainty of retaining the Cape at the end of the war, that a floating support vessel was the most suitable and economical way forward. Yet again the Admiralty rejected this suggestion.

It is interesting to ponder the reasons for the Admiralty's elimination of the use of support vessels. Initially this was one of concern that the vessel would be driven on shore, but maybe their rejection was due to the likelihood of the Cape being retained at a future peace conference. With this in mind, fixed facilities at this strategic location would have had many attractions to the Admiralty. It was during this period the Admiralty were developing fixed facilities at existing overseas bases and initiating new bases at Bermuda and Trincomalee.

²⁶⁵ Stopford to Admiralty, 31st March 1811 Theal, G. (ed.), Records of the Cape Colony from March 1811 *to October 1812*, Vol. 8, 20-23.

266 Stopford to Shield, DRO, 74B/MFS 1, 22nd March 1811.

Armed with plans and costs for consolidating the naval establishments at Simon's Town, the Admiralty informed Stopford that they were considering his reports, but that no expenditure was to take place until they had made a decision. Only in December 1812, did the Admiralty inform Rear-Admiral Tyler that they had directed the Navy Board to move to Simon's Town.

With the decision made by the Admiralty in December 1812, the final phase to close the Cape Town facilities and re-locate to Simon's Town was commenced. The Admiralty's intentions were communicated to the secretary of state for the colonies, who wrote to the Cape of Good Hope governor to, 'afford every assistance in your power to this measure, which with regard to general convenience and economy is equally to be desired'. 267 However, a rider to this was to cause problems for Commissioner Dundas in his negotiations with the governor. Difficulties arose when Dundas wanted to occupy existing colonial buildings, by offering to build replacements, but found little agreement to his proposals.

The timing of the Admiralty's decision was unfortunate, as they also decided to change both the commander-in-chief and resident commissioner. Rear-Admiral Tyler arrived to take command on 7th February 1813 and whilst this was in the normal course of events for commanders-in-chief, withdrawing Commissioner Shield was regrettable. Shield was ordered to London on the next homeward bound ship to take up an appointment at the Navy Board. 268 Shield did not leave the Cape until early May and hence started putting his plans into action with particular attention to funding the move. Tyler appreciated the work that Shield had done and told the first lord of the Admiralty, 'I am sorry to find Commissioner Shield is ordered home to a seat at the Navy Board. His services at removing the Naval Establishment to Simon's Town will be much wanted and severely felt by me. '269

Shield was replaced by George Dundas, an experienced resident commissioner who had previously acted in that post at Bombay.²⁷⁰ Dundas arrived on 25th July 1813 and proceeded to re-open the question of moving with a very negative report.²⁷¹ Among his

²⁶⁷ Lord Bathurst, Secretary of State for the Colonies, to Craddock, 26th December 1812, Theal, G. (ed.), Records of the Cape Colony from October 1812 to April 1814, Vol. 9, 45. Admiralty to Shield, TNA, ADM 2/938, 27th January 1813.

²⁶⁹ Tyler to Lord Melville (Robert Dundas, Second Lord Melville), first lord of the Admiralty, NAS, GD 51/2/478, 8th May 1813.

²⁷⁰ See chapter seven for actions of Commissioner Dundas at Bombay.

²⁷¹ Dundas to Admiralty, TNA, ADM 106/2005, 12th August 1813.

concerns, were not being able to find Shield's plans, the lack of fresh water at Simon's Town and the problem of financing the project. Dundas subsequently came into possession of Shield's plans, but found support for local finance unforthcoming from the colonial government and Lombard Bank.

The Admiralty's reaction to the commissioner's letter was one of disbelief, replying they had not ordered the move without considerable thought and the guidance of men, who had great experience of the two establishments. They further quoted a passage from a letter by Commissioner Shield, now at the Navy Board, who stated, 'he had not the least doubt, had it been their lordships pleasure to have continued him at the Cape, every creature belonging to the Naval Establishment would have been quietly settled by this time'.²⁷²

The problem of funding by Lombard Bank, detailed in a letter to the Admiralty of 4th September, was answered by the Admiralty in their 29th October letter and re-iterated again in December. In both letters they told Dundas to obtain money at the market rate and hasten progress. The problem in local funding did not surprise the Admiralty, presumably from a briefing by Shield that the opportunity of a Lombard Bank loan had been lost since March 1811.²⁷³

In spite of his concerns, Dundas continued in preparing for the move to Simon's Town and reported to the Navy Board his purchase of buildings to serve the victualling department, the naval hospital and a smith's shop. Work was also being done to create slave quarters.²⁷⁴ His problems with the colonial authorities were raised again by him as the cost of purchasing buildings and land was being increased by a four percent purchase tax. Dundas asked the Navy Board to resolve this issue in London.²⁷⁵

Although continued progress was made, Dundas re-opened the problem of the cost of living at Simon's Town, with his expectation that clerks, artificers and other members of the workforce would leave. He maintained that the isolated nature of Simon's Town would increase costs by up to 25 percent and that an allowance would be necessary. The Navy Board agreed with the commissioner's assessment, particularly as Commissioner Shield now sat on that board and had personal experience of the local

Admiralty to Dundas, TNA, ADM 2/938, 23rd December 1813.

²⁷² Admiralty to Dundas, TNA, ADM 2/938, 29th October 1813.

²⁷⁴ Dundas to Navy Board, TNA, ADM 106/3206, 12th October 1813.

²⁷⁵ Dundas to Navy Board, TNA, ADM 106/2005, 18th September 1813.

²⁷⁶ Dundas to Navy Board, TNA, ADM 106/2005, 9th December 1813.

cost of living and the difficulty of retaining staff. The Navy Board recommended to the Admiralty that a 'Simon's Town allowance' was instituted.²⁷⁷

To progress construction and alterations to buildings Dundas obtained local contract labour, but his reports on the subject of their high cost resulted in the Navy Board deciding to send a construction team. At Commissioner Shield's suggestion, twelve masons and six house carpenters with a foreman as a supervisor, was sent out to replace the contractors. Figure 6e show these actions, with 47 contractors and a foreman being recruited by Dundas, before being replaced by Shield's recruits.

Dundas was encouraged by the Navy Board to hasten re-location in March 1814, ²⁷⁹ but he was never able to resolve his problems before his death in August 1814. The Admiralty do not seem to have been pleased with Dundas's performance as they decided to replace him as commissioner with Sir Jaheel Brenton in August 1814, shortly before Dundas died. ²⁸⁰

Brenton did not arrive at the Cape until 12th March 1815, but he was able to report considerable progress. The mast and boat houses were nearing completion and the naval hospital was almost finished. However, he did report problems concerning the substitution of new buildings for the army mess and officer accommodation and the relocation of the Custom's House.²⁸¹ Brenton overcame the problems with the colonial authorities, but this was only achieved by paying and building what was asked for by the colonial government. As a result Brenton was able to advise the Navy Board by May 1815, that the naval buildings at Cape Town could be returned to the colonial government and the admiral's residence, Mount Nelson, could be sold.²⁸² In a note on this dispatch Commissioner Shield recommended to the Admiralty the abandonment of Cape Town thus ended the navy's establishments at Cape Town.

6.5 Summary

The elimination of French and Dutch power in the Indian Ocean was achieved by the British in 1811. Following the capture of Mauritius in December 1810, the Seychelles were taken. Java, the seat of Dutch power in the East Indies, was occupied in September

²⁷⁷ See Navy Board notes on Dundas letter of 9th December 1813.

²⁷⁸ Navy Board to Dundas, TNA, ADM 106/2486, 16th December 1813. ²⁷⁹ Navy Board to Dundas, TNA, ADM 106/2486, 15th March 1814.

²⁸⁰ Admiralty to Dundas, TNA, ADM 2/938, 5th August 1814.

²⁸¹ Brenton to Navy Board, TNA, ADM 106/3206, 28th March 1815.

²⁸² Benton to Navy Board, TNA, ADM 106/3206, 26th May 1815.

1811. Without an anchorage or a place to receive support, French raiders could no longer operate effectively in the Indian Ocean. The need for a large squadron at the Cape was now removed, enabling the Admiralty to redeploy ships from the Indian Ocean to other areas.

Commissioner Shield had scaled down the workforce in 1809, to that laid down by the Admiralty for the blockading squadron and found tasks for them during the long absences of the squadron in 1810. The need to occupy the artificers during these absences continued in 1811, with the commissioner finding work in the naval hospital, victualling yard and as before, on colonial activities. Finding work for the naval yard workforce that was not related to refitting the squadron, confirmed the findings documented in chapter five. Refitting the squadron was a periodic activity and would have been unnecessarily expensive if the workforce could not be employed when the ships were at sea. With the reduction in ships stationed at the Cape from late 1811, the commissioner had few options to cope with the decrease in demand for refit work. He could either find more colonial or shore establishment work, or reduce the number of artificers. The paylists show the latter option was selected.

Following the capture of Mauritius and Bourbon, the Admiralty requested the commander-in-chief evaluate their potential as anchorages and naval bases. Stopford dismissed Bourbon's usefulness, stating the island was without a harbour, but for Mauritius he gave a much more detailed report. He stated Port Louis harbour had sufficient depth for large frigates and could accommodate a small number even though the anchorage was not safe during the months of January, February or March. Another drawback was the inability to provide provisions, as he had to import fresh food from Madagascar and victualling stores from the Cape. The admiral's view was that Mauritius was more useful to the French than the British, but in French hands it had been a troublesome base. These assessments were reflected in Britain retaining Mauritius but returning Bourbon to the French.

Stopford turned Port Louis, Mauritius, into a naval base in 1811, appointed an individual to hold the posts of naval storekeeper and agent victualler plus obtaining warehouses to receive stores. He did not intend the port to be a refitting establishment but noted that contractors could, if necessary, be hired to support the artificers of a vessel. Commissioner Shield disagreed with the commander-in-chief decision as he reasoned ships had to leave Mauritius in December and could only operate in the area

for nine months. The base only had a very short life as the Admiralty approved the commissioner's reasoning and ordered the dismissal of the Port Louis storekeeper.

The political future of Mauritius and Bourbon was minor compared to that of the Cape of Good Hope. Until the fate of this colony was determined, the decision on whether to commit funds to rationalise the shore naval facilities could not be made. Logic dictated that Simon's Bay was made the permanent anchorage, with the repair and support services being stationed at Simon's Town. Commissioner Shield lobbied for this move in 1810 and was instructed to prepare plans for evaluation by Admiral Stopford in early 1811.

The Admiralty informed Stopford and Shield to move the shore facilities to Simon's Town in December 1812, although the Cape of Good Hope was not ceded to Britain until the Anglo-Dutch Treaty of 1814. This indicates Britain had decided to retain the Cape in late 1812. Both Shield and Stopford were recalled to Britain in early 1813 leaving Admiral Tyler and Commissioner Dundas to complete Shield's plan. Dundas questioned the project but the Admiralty, with advice from Shield, now at the Navy Board, over-ruled his objections. The complexion of the establishment workforce changed in mid 1813, with the addition of masons and carpenters to build the new establishment. In 1815 the newly arrived Commissioner Brenton was able to report that the establishment at Cape Town could be closed.

Chapter seven The East Indies Station

7.0 Introduction

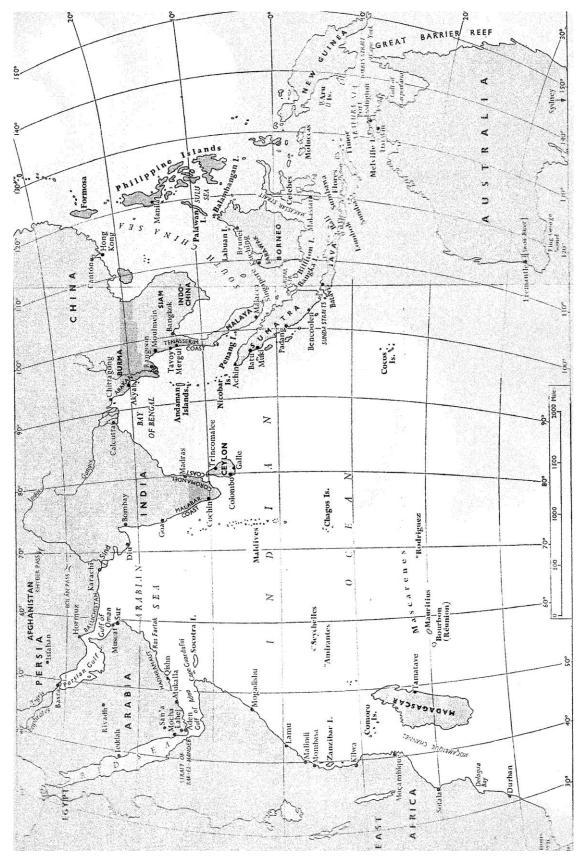
Chapter one provided a survey of British naval bases prior to the start of the Revolutionary War in 1793. It showed the squadron on the East Indies station was supported in a different manner from the other overseas commands. The West Indian, North American and Mediterranean naval squadrons were each supported via a yard, under the management of a resident commissioner or naval storekeeper; a victualling organisation, under an agent victualler; and occasionally a naval hospital with staff to aid the recovery of the officers and men of the ships. Table 3b, in chapter three, confirmed that the non East Indian naval yards were still managed in an identical manner, and chapters four and five showed the Cape of Good Hope squadron also used this shore support structure. However, the East Indies command was reliant on the East India Company for refitting bases, plus an administrative, technical and manual workforce. This chapter examines why the East Indies station was supported in a different way, who supplied this support, what this support was, and how a system became more akin to the other overseas commands was implemented.

Pragmatism was the reason why the shore support services were initially so heavily dependent on the Company which had the required infrastructure and unique knowledge of the area. To create an independent support system, or at least one where the naval officials could intelligently question the suppliers, would take time, considerable investment in facilities and management expertise. As the British government had latterly obtained some control over the Company, it would seem foolish to create an independent support system.

Prior to 1765, when the East India Company obtained control of the Indian province of Bengal, it was a mercantile organisation. The Company had been established to trade with the east. This was a capital intensive venture, with large sums risked on long return voyages to India, China and Bencoolen in Sumatra. The investors would have their money tied up in vessels for well over a year, with a return dependent on secure ports and skilled crews. To compensate for the financial risks taken by investors, the British

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²⁸³ Bowen, H., British India, 1765-1813: The Metropolitan Context, Marshall, P. J., (ed.), *The Oxford History of the British Empire – Volume 2 The Eighteenth Century*, (Oxford, 2001), 532.



Map of the Indian Ocean²⁸⁴ Figure 7a:

Government gave a monopoly to the Company on all imports of Asian products until

²⁸⁴ Graham, G., *Great Britain in the Indian Ocean*, 1810-1850, between 459 and 460.

1813.²⁸⁵ Initially the Company established factories at the ports of Canton, Bencoolen, Bombay, Madras and Calcutta. The necessity to make the sub-continent ports secure against European and Indian enemies resulted in the establishment of fortifications and a Company army. Following the Seven Years War the areas under British control increased, with the Company changing its role, together with its relationship with India and the British state. The size of the land revenues, the involvement of Britain's moneyed classes and the wealth from the east, now made the Company too important to fail. The price the Company paid for its monopoly was to be no longer an independent organisation, but instead to become an arm of the British state.²⁸⁶

7.1 Operational context

The East Indies station was far removed, in time and distance from Britain. By sea it took a minimum of four months for a letter to reach India, but more normally six months for a despatch to reach Madras, Bombay or Calcutta. A faster method of communication was available via the overland route; letters could arrive in India within three months. The supply of stores, replacement ships, officers and men always took the sea route and frequently only sailed with the outward bound convoys, which were delayed, until they could be timed to catch the south west monsoon in the Indian Ocean. Hence, the overall time delay between sending a letter and receiving a reply could be as much as twelve months. The East Indies station was from necessity, almost an autonomous command. 288

Figure 7a presents a map of the East Indies station. At its greatest extent the command was bounded in the north by the Indian sub-continent, in the west by the east coast of Africa, to the north west the Red Sea and Persian Gulf, to the south east Australia and New Zealand, and to the north east by the seas around China, Japan and the Philippines. Within this area of over 30 million square miles, ²⁸⁹ the commander-in-chief was responsible for providing trade protection, support to offensive operations and defence against military incursions into Britain's Indian Empire. However, the crucial sea area where protection was necessary was simplified to the Bay of Bengal, the coasts of

²⁸⁵ Marshall, P. J., 'The British in Asia: Trade to Dominion', Marshall, P. J., (ed.), *The Oxford History of the British Empire – Volume 2*, 487-507.

²⁸⁶ Bowen, H., 'British India, 1765-1813: The Metropolitan Context', Marshall, P. J., (ed.), *The Oxford History of the British Empire – Volume 2*, 530-551.

²⁸⁷ Parkinson, C., War in the Eastern Seas, 12.

²⁸⁸ Ward, P., 'Admiral Peter Rainier and the Command of the East Indies Station 1794 – 1805', Unpublished PhD, (Exeter University, 2010).

Ward, P., 'Admiral Peter Rainier and the Command of the East Indies Station 1794 – 1805', 10.

Malabar and Coromandel, Ceylon, the Rea Sea, Persian Gulf, South China Sea and the straits through the Indonesian barrier. These latter straits, particularly the Straits of Malacca, were used for the vessels trading with China in which the Country trade²⁹⁰ and Company ships were engaged

To protect the primary wealth generating area of India, the Bengal Presidency, command of the Bay of Bengal was essential. Prior to the capture of Trincomalee in 1795 and its development as a naval base from 1810, another base was required on the Coromandel Coast to achieve this aim. There was no natural port on that coast, so the Company's settlement at Madras was used throughout the period as the principal naval base. During the north east monsoon, Madras was a dangerous anchorage; fortunately the harbour at Bombay, on the west coast, was protected during these months, and as detailed in chapter one, was equipped with dry docks capable of accommodating a 74 gun ship; hence it was the principal refitting location for the British navy.

7.2 East Indies Squadron – Size and Composition

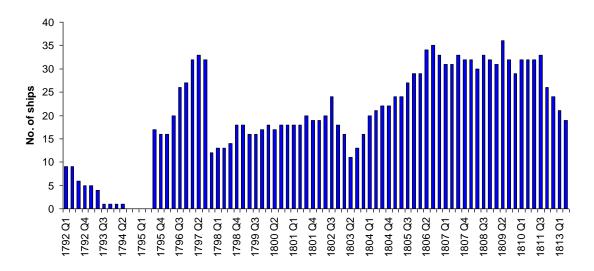


Figure 7b: Planned ship deployment on East Indies station (1792-1813)²⁹¹

Throughout the Revolutionary and Napoleonic Wars the squadron changed in the type of ships and numbers deployed. Chapters three and four have provided charts of the planned deployment of British ships during the Napoleonic War, showing the East Indies squadron was approximately five percent of the total strength of the navy. Figure 7b presents the Admiralty's planned ship deployment on the East India station from

²⁹⁰ While the East India Company had a monopoly on trade between Britain and the East Indies trade wholly contained within the east was exempt from this arrangement. Merchants engaged in this regional enterprise were referred to as Country traders.

²⁹¹ Admiralty ship lists, TNA, ADM 8/68-100.

1792 until mid 1813. This shows the peak number of ships deployed occurred in the post Trafalgar period, and that it was not significantly reduced until the French Indian Ocean islands and Java were captured in 1810 and 1811. The reduction in deployed ships to Britain's most distant commands was even more marked in the Indian Ocean with the inclusion of the squadron at the Cape of Good Hope, figure 7c.

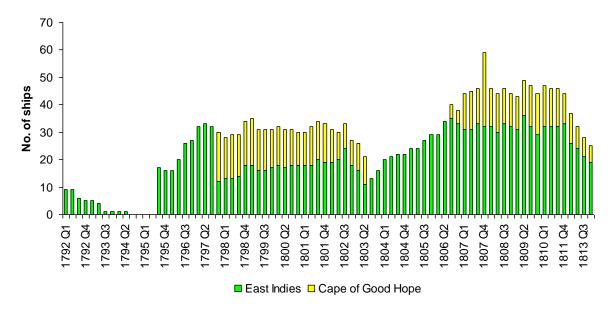


Figure 7c: Planned ship deployment on East Indies and Cape of Good Hope stations (1792-1813)²⁹²

Figure 7d concentrates on the change in the number of third rate ships deployed in the East Indies, as these ships made the heaviest demands on Bombay's dry dock. These ships were either 64 gun or standard sized 74 gun vessels and hence could be accommodated in Bombay dock.²⁹³

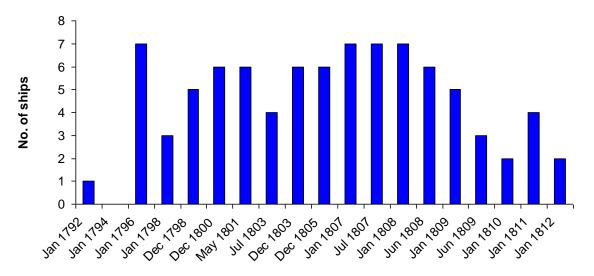
The third rates could be considered the most difficult vessels to maintain in the East Indies, as the limited docking capacity, the numbers of ships and their extensive duties restricted refit opportunities. This is borne out by the fate of two third rates which never returned to Britain, *Arrogant* and *Russell*. Both were worn out. However, another 14 third rates sent from Britain all returned, indicating the success of the Admiralty's refitting policy and use of Bombay dock.²⁹⁴ These vessels, although difficult to refit, were ideal as counters to enemy battleships, command ships for operations or escorts for important convoys to and from China. Yet, they were not the best ships to combat

²⁹² Admiralty ship lists, TNA, ADM 8/68-100.

²⁹³ Troubridge's flagship was the *Blenhiem* a 74 gun vessel razeed from a 90 gun second rate ship and was too long to fit into Bombay's dry dock. She ran aground and had to be refitted by careening rather than docking. This may have contributed to her loss with Troubridge on sailing to the Cape.

²⁹⁴ The third rate ships appearing in Admiralty ship lists for January 1798, May 1801, July 1803 and January 1808 to July 1812, TNA, ADM 8/75, 81, 86, 95-100.

fast privateers or commercial raiders. Frigates, especially powerful fifth rates of 36 to 44 guns, were the true providers of trade protection with sloops and cutters performing scouting and communication duties. Appendix 3b shows this balance of ship types for 1809 and 1810 that was typical throughout this period.



Number of third rate ships in East Indies Squadron *Figure 7d:*

7.3 Administration of the naval shore facilities

The development in how the British navy was managed on the East Indies station is most clearly shown in the change from complete reliance on the Company, to one of Admiralty control. Figure 7e provides a timeline during the 1793 to 1815 period detailing the individuals and organisations involved, but it does not provide the whole picture as it only highlights the posts in the East Indies. The British government's control of the Company also provides a context into which the British navy was to operate, and how it was to change.

Until the 1770s the East Indian Company was solely controlled by the Company's Court of Directors, but following the dramatic collapse of the Company's finances in 1772, the British Government became increasingly involved in Company administration and finance.²⁹⁵ Initially the 1773 Act merely provided a loan and placed the Company under the sovereignty of parliament, but eventually it led to Pitt's India Act in 1784. There was a great reluctance to take responsibility for direct administration in India. Instead state control over the policy, strategy and management of the Company, was to be exercised by a Board of Control, consisting of six commissioners, with the board

²⁹⁵ Bowen, H., 'British India, 1765-1813: The Metropolitan Context', Marshall, P. J., (ed.), *The Oxford* History of the British Empire – Volume 2, 537.

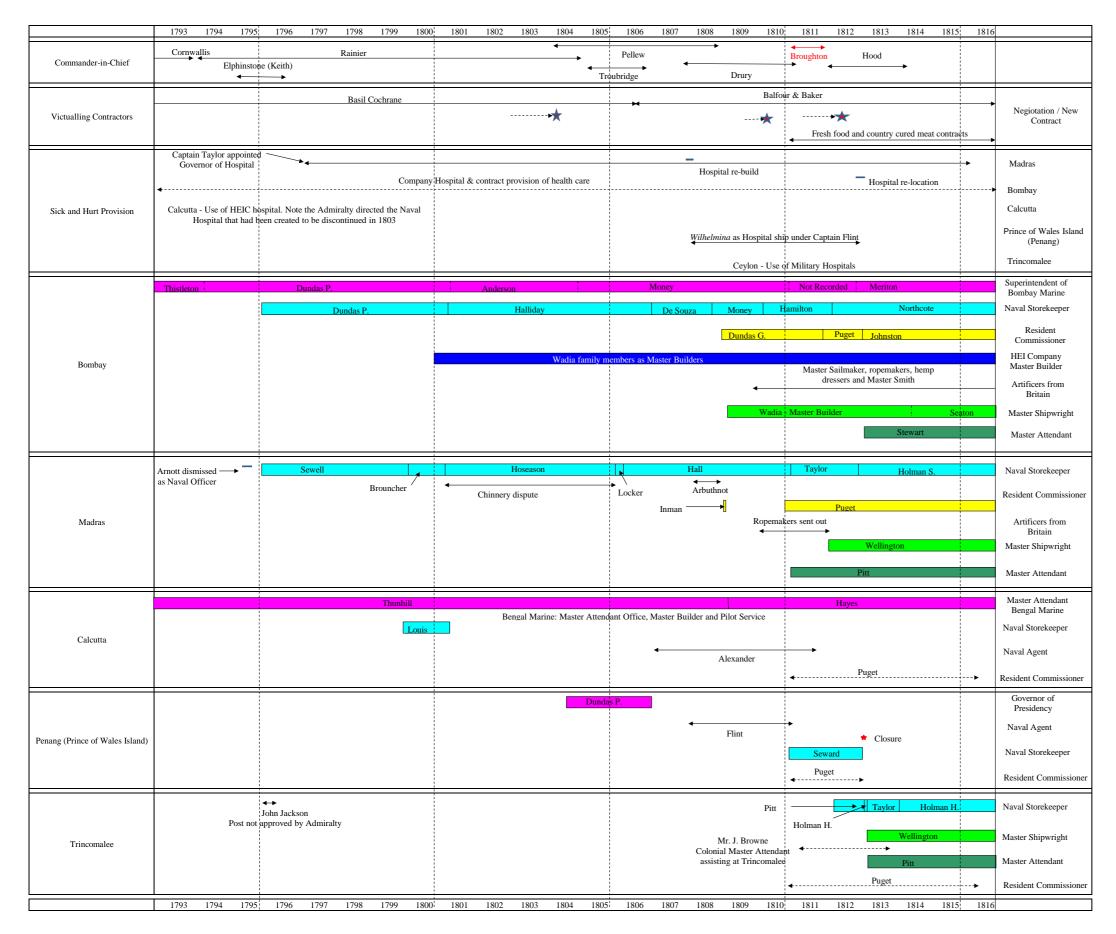


Figure 7e: The Civil Naval Department Organisation and Post Holders on the East Indies Station, 1793 - 1815

chairman being a significant ministerial appointment. The appointment as a governor of a Presidency came under state patronage with the governor-general at Calcutta subsequently having his powers over the other Presidencies increased. A further change was the reduction in the power of the Company's shareholders to influence decision making. All this resulted in the Company managing itself at the lowest levels and operating to commercial principles, but with its senior managers being state appointees and its policies being influenced by the Board of Control.

Before the implementation of the fifth report of the Commission of Naval Revision in 1809, the day to day administration was in the hands of the naval storekeeper. The timeline provided in figure 7e, illustrates the development in the role and the number of people involved in providing support to Britain's navy on the East Indies station.

This pictorial approach more easily illustrates the interaction between individuals and actions they implemented, for example the re-negotiated Balfour and Baker victualling contract in 1811/12. Previously Samuel Hood has been credited for the savings, but as can be seen, this was achieved by the resident commissioner before Hood arrived as commander-in-chief in April 1812.¹ The most notable change is the move from dependence on Company officials to Navy Board officers, following the appointment of resident commissioners in 1809, particularly with the arrival of Commissioner Puget on 1st January 1811.²

Before the arrival of the resident commissioners, the commander-in-chief was the only senior naval officer directing the shore support services. Figure 7e shows Peter Rainier was the longest servicing commander-in-chief on the East Indies station, but the diagram also shows he was not always the senior commanding officer through his term. Elphinstone had command of the joint Cape and East Indies stations from May 1795 until October 1796. His influence on civil administration is evident, as he appointed naval storekeepers at both Bombay and Madras, the chief supply and refitting bases. He also appears to have started the actions that resulted in Madras being provided with a naval hospital.³ Rainier's long term ended in 1805 and he was initially succeeded by Pellew. The command was briefly split between Pellew and Troubridge until the latter was appointed to the Cape in 1806. The division of the command is evaluated later in

¹ Parkinson, C., War in the Eastern Seas, 420.

² Hall to Navy Board, TNA, ADM 106/2009, 31st January 1811.

³ Sick and Hurt Board to Admiralty, TNA, ADM 98/17, 16th March 1795 references request from Elphinstone dated 31st January 1794 requesting approval for building naval hospital at Madras. I am grateful to Peter Ward for bringing this to my attention.

the chapter as this decision influenced the planned naval establishment at Penang. Broughton became temporary commander-in-chief on the death of Vice-Admiral Drury in March 1811. He continued the arrangements that Drury had initiated with the newly arrived Madras resident commissioner, Peter Puget. Sir Samuel Hood arrived the following year but died in December 1814.

Figure 7e has concentrated on the locations where support services were delivered and on the individuals who occupied the naval stores and refit posts. The victualling function was delivered by contract with the agent victualler post nominally held by the commander-in-chief. This latter arrangement occurred in August 1795 following Rainier's dismissal of Charles Arnott for corrupt dealings with Cochrane, the victualling contractor. Arnott, had previously been Rainier's purser on *Suffolk* before his appointment as both naval storekeeper and agent victualler at Madras. The chart shows the victualling contractors together with the approximate dates of the re-tendering and renegotiation of prices. The provision of health care also showed considerable dependence on contract delivery by Company employees, particularly at the Bombay and Bengal Presidencies. Madras was the only location where a naval hospital was established and provided with administrative and medical staff. This hospital was rebuilt and expanded following storm damage in December 1807. Pellew also created a naval hospital at Prince of Wales Island by moving the de-commissioned frigate *Wilhemina* to Penang as a hospital ship.

What became evident in assembling the information in figure 7e, especially before the resident commissioners arrived in 1809 and 1811, was the dependence on officers of the East India Company providing administrative support. Examples of this being Philip Dundas and William Taylor Money, who were both the naval storekeeper at Bombay while also being the Company's marine superintendent.⁵ These gentlemen continued to receive their Company's remuneration whilst in receipt of a Navy Board salary and percentage fee on expenditure. Money's replacement as storekeeper at Bombay was Hamilton who was also a Company employee, having been a captain in the Bombay Marine, as well as previously being Money's first clerk in the naval office.⁶ It was not just Bombay where this dependence occurred, as the naval storekeeper post at Madras was also frequently held by a Company employee. Both Henry Sewell, who held the

⁴ Rainier to Navy Board, TNA, ADM 106/2008, 14th August 1795; Ward, P., 'Admiral Peter Rainier and the Command of the East Indies Station 1794 – 1805', 187.

⁵ See appendix 7a: List of Bombay Marine superintendents and clarification of appointment periods.

⁶ Dundas, G., to Navy Board, TNA, ADM 106/2008, 1st October 1810.

post from August 1796 until his death in 1800, and Henry Hall who was employed, from late 1806 till early 1811, were Company men. Hall had been in the Madras Master Attendant's office from the early 1790s and held the post of deputy master attendant on his appointment by Pellew. He retained this position in the Company through-out his term as naval storekeeper. It was not only Company employees who found employment in naval administration, as merchants were also employed. Matthew Louis, a local merchant, was employed at Calcutta by Rainier in 1800, as deputy naval storekeeper until the appointment was annulled by the Admiralty the following year.

It was not merely in the administration area that Company employees supported the British navy. The Bombay and Madras Presidencies both provided artificers and labourers for the repair of the squadron's ships. This provided technical expertise and management of the local workforce, and removed the necessity of appointing British artificers and technical officers until 1810, when men skilled in rope making were sent to India. This deployment occurred to reduce, or even eliminate, the necessity of sending cordage from Britain by using Indian hemp to produce rope and cables.

The naval administration at Bombay was blessed with more advantages than the other ports that were used. This was not solely due to the dry docks at that port, or the skilled Parsi shipwrights, but reflected the quality and experience of the officers of the Bombay Marine. As mentioned above Philip Dundas and William Taylor Money occupied both the post of superintendent of the Bombay Marine and that of naval storekeeper at Bombay. They were both experienced sea officers having commanded ships before becoming superintendent. The family influence of Henry Dundas, President of Board of Control 1793 to 1801, was almost certainly important in placing his nephew in the superintendent post, but he was well qualified. The system of 'interest', the supporting of careers of relations or favourites, was the norm in this time, being the only logical system that could be used to advance able men. Money also had a powerful champion in Frances Baring, who lobbied St. Vincent, when first lord of the Admiralty, for the post of master attendant at Bombay. St. Vincent was not able to help, as he stated no such post existed and the naval storekeeper in post, Mr. Halliday, had the favour of the Prince of Wales.⁷ As Money was shortly to become the superintendent of the Bombay Marine, it would appear Baring's interest in him was effective. With these individuals having experience as captains of Company ships they were hence akin to resident

⁷ St. Vincent to Baring, 22nd April 1804, Bonner Smith, D., *Letters of Admiral of the Fleet Earl St. Vincent whilst First Lord Admiralty – Vol.* 2, NRS, Vol. 61, (London 1927), 238.

commissioners of Navy Board dockyards. They were both later to make a contribution in the East Indies, to provide ships for the navy and had an understanding of what resources could be exploited.

Simon Halliday, who replaced Philip Dundas in 1801, resigned in March 1807, 8 handing over to Sir Migual de Souza, who served until he died in October 1808 when Money stepped into the breach. It was not until Charles Northcote arrived to serve as naval storekeeper in August 1812 that a Navy Board official took up a Bombay post. Northcote was followed in the next 18 months by a master attendant and master shipwright, thus ending the reliance on Bombay Marine officers.

The expertise and assistance of Company officers was also to be found at Madras, the navy's principal operating base. Company ports frequently had a master attendant in place, with duties depending on the importance of that location. At Calcutta, the master attendant's office was part of the Company's Bengal Marine¹⁰ which operated the pilot service on the Hooghly. At Madras, a master attendant office was available for port duties and able to supply manpower to naval ships to carry out refits. 11 Minor Company ports also had master attendants, but these only covered harbour master and customs duties. 12 It was not just Company ports that appointed master attendants, as Ceylon, a crown colony from 1802, also had colonial officials appointed as master attendants at Point de Galle, Trincomalee and Colombo.¹³

Figure 7e shows the base at Madras had a number of naval storekeepers with two Company officials, Sewell and Hall, providing over eight years service. Henry Sewell was appointed in early 1796, with his office consisting of a further nine clerks and four labourers, all supplied by the Company. ¹⁴ On Sewell's death in 1800 Rainier appointed John Chinnery as deputy naval storekeeper, but soon appointed John Brouncher as the naval storekeeper with his resignation the following year. 15 Rainier's next appointment as naval storekeeper, Thomas Hoseason, the ex purser of Suffolk, was to cause

⁸ Halliday to Navy Board, TNA, ADM 106/2008, 1st April 1807.

⁹ Parkinson, C., War in Eastern Seas, 339, Parkinson records that de Souza had served as naval storekeeper under Hughes over 25 years before.

¹⁰ See appendix 7c.

¹¹ Puget to Navy Board, TNA, ADM 106/2009, 22nd July 1811.

¹² Hood to Puget, Royal Military College of Canada, Massey Library, DA88.1.H66A4 1809 V2, 1st June 1813; Hall to Navy Board, TNA, ADM 106/2009, 31st January 1811.

¹³ Hood to Puget, RMC of Canada, DA88.1.H66A4 1809 V2, 3rd December 1812 and 6th May 1813.

Sewell to Navy Board, TNA, ADM 106/2008, 11th August 1796.
 Chinnery to Navy Board, TNA, ADM 106/2008, 8th October 1800; Rainier to Navy Board, TNA, ADM 106/2008, 30th August 1800.

considerable dispute and litigation. 16 The Navy Board appointed Chinnery as their official naval officer at Madras, but Rainier objected when Chinnery produced his warrant and he refused to remove Hoseason. Chinnery understandably complained and lobbied the Admiralty using his brother in London to further his case. Rainier produced documentation to show that Chinnery was unacceptable, but was told by the Admiralty that as commander-in-chief he could not make civil appointments.¹⁷ Although having thus been 'ticked-off', Rainier still retained Hoseason in post, which appears to have resulted in both Chinnery and Hoseason being paid as the naval storekeeper. 18 This continued until Pellew suspended Chinnery's warrant, due to the latter's pecuniary embarrassment. 19 A naval storekeeper had to provide financial securities to hold such a post and Chinnery no longer had the means to satisfy this criteria.

In 1804 Rainier extended Hoseason's duties to include those as his secretary with an additional salary, but payment of this was refused by the Admiralty, eventually resulting in Hoseason's resignation. Pellew appointed his secretary, Edward Hawke Locker, in Hoseason's place but he resigned after holding the post for only six months. Pellew then resorted to a pragmatic solution by requesting of the Madras governor that the Company's deputy master attendant, Henry Hall, take the post of acting naval storekeeper in addition to his current duties. 20 Hall held both these posts from 1806 until Commissioner Puget replaced him as naval storekeeper in early 1811. With Puget's arrival, the management, personnel used and auditing function of the civil naval departments were to change dramatically.

Parkinson states, 'At the period when [Pellew] left India the East Indies station was organised on a pattern which survived for the rest of the war². In this he was incorrect. Pellew left before the arrival of newly appointed resident commissioners and the implementation of the fifth report of the Commission of Naval Revision. This fundamentally changed the relationship between the Company and the British navy. Following an Order in Council in September 1808, authorising the adoption of the recommendations of the fifth report, George Dundas²² and Henry Inman were appointed to be commissioners at Bombay and Madras. Inman arrived on 4th July 1809 but died on

Rainier to Navy Board, TNA, ADM 106/2008, 10th June 1801.
 Admiralty to Rainier, TNA, ADM 2/937, 17th February 1802.

¹⁸ Both Chinnery and Hoseason appear as the naval storekeeper at Madras between 1801 and 1806 in the Salary and Pensions records of the Admiralty, TNA, ADM 7/823.

¹⁹ Pellew to Governor at Fort St. George, TNA, ADM 106/2008, 4th October 1806.

²⁰ Pellew to Governor at Fort St. George, TNA, ADM 106/2008, 4th October 1806.

²¹ Parkinson, C., War in Eastern Seas, 337.

²² George Dundas was not related to Philip or Henry Dundas.

the 15th July²³ resulting in a long delay before the Madras base was brought under the new procedures.

George Dundas arrived at Bombay shortly before the 6th June 1809, when he reported that Mr. Money was acting naval storekeeper following the death of de Souza. Dundas reported to the Navy Board that he thought, 'the service may receive much benefit from his [Money's] local knowledge, he being I apprehend a man of strict honor (sic)'.²⁴ Until ill health forced Dundas to return home in January 1812 his tenure at Bombay was reliant on Company staff to assist him. His principal officers were Money and Hamilton as naval storekeepers, with the Parsi master builder being also paid as the master shipwright. Money asked to be released in August 1810 resulting in a fellow captain of the Bombay Marine taking his post.²⁵ Hamilton remained as storekeeper until August 1812 when Northcote arrived from England.²⁶

Dundas had been tasked by the Navy Board to report if British artificers were needed at Bombay.²⁷ On arrival he found that Pellew had already appointed a master smith for whom Dundas reported, a workshop was necessary. The requirement for masons, as suggested by the Navy Board, was considered unnecessary by Dundas, but he suggested a master sailmaker was sent out.²⁸ The individual sent was an existing foreman of sailmakers, with the Navy Board stating the pay rate, allowances and working hours.²⁹ Rope making artificers were also sent, to assist in the manufacture of cordage from local hemp. This was the entire British dockyard personnel sent to Bombay until 1813, when a master attendant was appointed, followed by a master shipwright.³⁰

During his thirty months at Bombay, Dundas first concentrated on rectifying the defective state of the naval storehouses and the depleted store holdings. This he did by building a new warehouse, vacating expensive hired property, entering into local contracts to obtain masts and spars, and requesting items from Britain not obtainable in India. Being the Bombay naval commissioner, Dundas also had an additional duty, that of supervising and reporting on the construction of the warships being built at Bombay.

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²³ Drury to Admiralty, TNA, ADM 1/182, 15th July 1809.

²⁴ Dundas to Navy Board, TNA, ADM 106-2008, 6th June 1809.

²⁵ Dundas to Admiralty, TNA, ADM 1/3441, 1st October 1810.

²⁶ Navy Board to Northcote, TNA, ADM 106/2485, 26th July 1813.

²⁷ Navy Board to Dundas, TNA, ADM 106/2479, 27th December 1808.

²⁸ Dundas to Navy Board, TNA, ADM 106/2008, 15th June 1809.

²⁹ Navy Board to Dundas TNA, ADM 106/2481, 6th and 9th June 1810; Dundas to Navy Board, TNA, ADM 106/2009, 16th January 1811.

³⁰ Navy Board to Stewart, TNA, ADM 106/2485, 17th January 1813; Navy Board to Seaton, TNA, ADM 106/2485, 29th January 1814.

Apart from the activities required to supply and refit the squadron, Dundas also became involved with the victualling and medical services, confirming his new duties in these areas. Unfortunately, the naval commander-in-chief at this time, Drury, thought Dundas an obstructive assistant. The basis of their disagreement was the standard of workmanship at the dockyard, together with confusion over victualling contract arrangements that both attempted to negotiate. The most furious disputes arose however, over the role of the receiving ship and the provision of medical care at Bombay.

Seventeen months elapsed between the Admiralty hearing of Commissioner Inman's death and the arrival of a replacement commissioner at Madras. The Admiralty was fortunate, as an experienced candidate was available, Peter Puget, who had just returned as resident commissioner at the temporary yard at Flushing. He arrived at Madras in January 1811 and brought with him two clerks, William Taylor and Samuel Jones.

Puget's arrival at Madras at last achieved an aim of the ninth report of the Commission on Fees, the provision of a resident commissioner where a fleet in the East Indies was based. Puget commented on his arrival that 75 percent of the squadron called at Madras for refit and supply.³¹ In Puget, Admiral Drury found a very willing ally in his efforts to improve the support services and praised his capabilities and ideas.³² The short time they were together set in train cooperation that Drury's successors continued. Drury delegated financial control to Puget and supported his investigations into the accounts of Hall and Arbuthnot as naval storekeepers. Taylor was swiftly to replace Hall as storekeeper when Hall refused to swear an affidavit that his financial accounts were a true record.³³ This had been a requirement of Hall's instructions since his appointment. Hall's behaviour was not unique, as Arbuthnot also refused to swear and sign an affidavit. The Navy Board had suspected collusion between these two in their financial accounts and directed Puget to suspend Hall.³⁴ Another factor in Hall's resignation was the change in reward for the naval officer brought in by the new regulations. Prior to Puget's arrival, Hall received a £200 salary and 1.5 percent fee on all expenditure. The commissioner calculated that Hall had received in fees approximately £6250 a year. 35

³¹ Puget to Navy Board, TNA, ADM 106/2009, 18th January 1811. ³² Drury to Admiralty, TNA, ADM 1/183, 12th February 1811.

³³ Puget to Navy Board, TNA, ADM 106/2009, 30th January 1811.

³⁴ Navy Board to Puget, TNA, ADM 106/2482, 29th January 1811. ³⁵ Puget to Navy Board, TNA, ADM/106/2009, 20th January 1811.

Before he left England Puget suggested he be given authority as resident commissioner over affairs at Calcutta, Penang and Ceylon. ³⁶ It was not until he arrived in India that he obtained this authority. Admiral Drury entrusted all civil affairs on the eastern side of India, including those with the Company for ordnance supplies, to Puget, placing considerable faith in the newly arrived commissioner. Puget found on examining the administration provision at Calcutta and Penang that agents were employed. John Alexander at Calcutta and Captain Flint at Penang both received a fee of five percent on expenditure incurred supporting ships using their ports. Both Alexander and Flint were required to swear affidavits regarding their accounts and accept a reduction in their fee. Alexander decided he no longer wished to act as an agent³⁷ and Flint requested he was replaced. This led to the stationing of a salaried storekeeper, John Seward, at Penang.³⁸ At Calcutta, Puget obviated the need for an agent by entering into direct arrangements with the Bengal Marine and private contractors, thus automatically reducing costs by five percent. The civil naval departments on the east coast of India were now under one guiding hand.

Before Drury's death in early March 1811, he agreed that Puget end the reliance on Company employees in managerial and technical posts. Drury had previously raised the question of a shipwright being appointed to supervise refits in the East Indies, but the Navy Board had refused and directed he discuss the matter with Commissioner Inman on his arrival. However, with Inman's death, this matter was not resolved until Puget arrived.³⁹ Puget's request to Drury was for a master attendant. He recommended William Pitt, ex. master of *Nereid*, as he knew him to be an individual of ability, zeal and fidelity. This is not so surprising when one considers that Puget and Pitt had both travelled together to India on the *Barbados*. Requesting the services of Pitt appears to be one of the commissioner's first actions on arrival, as Puget's letter is dated the same day he reported his arrival at Madras. 40 Subsequently the commissioner informed the Navy Board of this appointment and outlined his reasons, chief of which was the lack of surveys on ships, inspections of stores purchased and unloaded, and the need to supervise the rope walk. 41 Puget pursued this logic and next provided a case to the Navy Board for a master shipwright to be sent from Britain. In this letter the commissioner

³⁶ Puget to Navy Board, TNA, ADM 106/2008, 29th August 1810.

³⁷ Pellew, Fleetwood, to Puget, TNA, ADM 106/2009, 5th December 1811.

³⁸ Seward to Puget, TNA, ADM 106/2009, 5th April 1811. ³⁹ Navy Board to Drury, TNA, ADM 106/2479, 27th July 1809.

⁴⁰ Puget to Drury, TNA, ADM 106/2009, 9th January 1811.

⁴¹ Puget to Navy Board, TNA, ADM 106/2009, 18th January 1811.

stated that there had never been a system to exercise any control over the Company workforce, as it was left to the carpenter of any ship being repaired to provide supervision. This resulted in inconsistent practices and little or no means for the storekeeper to question the vouchers supplied by the workforce and also resulted in the wastage of materials.⁴² Puget returned to the necessity for a master shipwright in July 1811. As the hired native artificers were completely under the Company's master attendant Puget considered that this arrangement had encouraged inefficiencies. Without an alternative the Company could do as they wished. Having demonstrated the advantage of a master shipwright being on the establishment, Puget commenced an experiment to break the Company monopoly by directly hiring a native foreman, 15 carpenters and four sawyers to form a naval yard workforce directly under the commissioner's control.⁴³

The Navy Board had agreed to Puget's earlier request for a master shipwright and obtained Admiralty approval to appoint Matthew Wellington. 44 This appointment reunited Puget and Wellington, as both had been at the Flushing yard. 45 Regarding the master attendant post, the Admiralty were not initially convinced that it was necessary. 46 However, Commodore Broughton, temporarily commander-in-chief on Drury's death, concurred with Puget's view that a master attendant was needed, especially in the light of the additional responsibilities placed on Puget since his arrival. Broughton also stated the lack of a master attendant was sorely felt at Bombay. 47 It may have been this letter that convinced the Admiralty that the Bombay post was required. The Navy Board informed Puget in September 1811, that the Admiralty had approved his proposals for the establishment required at Madras together with the appointment of Wellington. 48 This now gave Puget the organisation he had suggested, providing him with a workforce completely under his control and breaking the navy's dependency on Company employees.⁴⁹

Puget's re-organisation was not restricted to ship refitting, as he also initiated savings at the Madras hospital and entered into re-negotiating the victualling contract. He also managed to find time to visit Trincomalee, resulting in recommendations for its

⁴² Puget to Navy Board, TNA, ADM 106/2009, 19th January 1811.

⁴³ Puget to Navy Board, TNA, ADM 106/2009, 22nd July 1811.

⁴⁴ Navy Board to Wellington, TNA, ADM 106/2483, 22nd August 1811.

Admiralty to Drury, TNA, ADM/2479, 27th August 1809.
 Admiralty to Drury, TNA, ADM 2/937, 3rd July 1811.

⁴⁷ Broughton to Admiralty, TNA, ADM 1/184, 17th February 1812.

⁴⁸ Navy Board to Puget, TNA, ADM 106/2483, 17th September 1811.

⁴⁹ See figure 7f.

suitability as a refitting yard. Amongst the initial measures taken at Trincomalee, was to station *Blanche* there as a storeship and sheer hulk to create an embryonic naval yard, and the detachment of Pitt to superintend the yard.

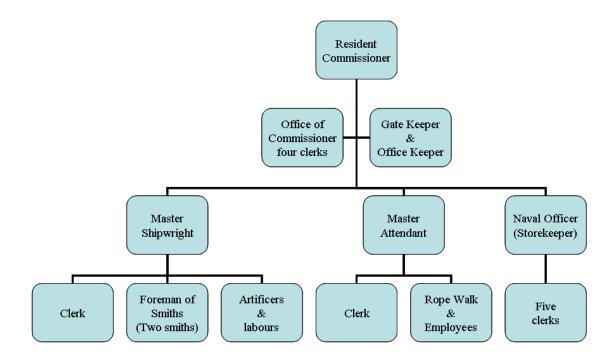


Figure 7f: Puget's suggested Madras naval yard organisation

On Hood's arrival as commander-in-chief in April 1812, he found Puget had recently completed the re-negotiation of the victualling contract and had a firm grasp on civil naval concerns. On learning that Commissioner Dundas had left Bombay, Hood appointed Puget to act as resident commissioner at that port, in addition to his existing duties at Madras. This commander-in-chief also found that he had a complete naval yard organisation at Madras. Hood was to make full use of these individuals, using them as independent experts on the potential exploitation of the resources of India, to advise on building standards at Bombay and to manage the establishment of a naval yard at Trincomalee. Puget found himself in sole charge of all civil naval affairs until Commissioner James Johnston arrived at Bombay in March 1813.

As at Bombay, the transfer of British dockyard artificers to Madras also occurred with cordage specialists being the first sent.⁵¹ These individuals, at both locations, were sent not only to manufacture ropes and cables, but to instruct the local workforce in European methods. This principle was developed, on the advice of Wellington, by Puget

⁵¹ Puget to Navy Board, TNA, ADM 1/184, 13th April 1811.

⁵⁰ Broughton to Admiralty, TNA, ADM 1/184, 29th February 1812.

when he suggested that other specialists be sent out to instruct local boys.⁵² The Navy Board agreed and stated they would dispatch a foreman of shipwrights, two boat builders, two mast makers and two smiths from Plymouth dockyard, where Wellington had recently been an assistant to the master shipwright. However, economy was still in the minds of the Navy Board as they did not agree to formal apprenticeship bonds for the boys. Instead, they instructed that the recruits received an annual pay increase as their skills developed.⁵³ This measure was probably to prevent a legal entanglement in the event of peace which would result in the trainee boys being dismissed. The training of an indigenous establishment workforce appears to have been initiated by Puget as he anticipated a problem in providing a skilled labour force at Trincomalee.

The administrative reorganisation of the civil naval departments was now complete so that on Admiral Hood's arrival in India the shore support of his naval squadron had moved from one of dependence on Company employees to one of crown independence. By the employment of an Indian workforce and the training of its own artificers the Admiralty now had control of a naval refitting organisation in India.

7.4 The naval refitting and re-supply bases

The naval defence of India and British trade in the east rested on the East Indies squadron and the bases from which its ships could operate. The following presents a review of the principal bases, Bombay and Madras, and the other ports that were considered to provide refitting, re-supply and hospital capability. These other ports were Calcutta with it dry docks and commercial shipbuilding resources, Trincomalee, and Prince of Wales Island, Penang. Negapatam was also considered by Drury a more suitable refitting location than Madras.

The evolution, adoption and use of ports fall into three periods. From 1793 to 1805 Bombay, Madras and Calcutta were the main ports used, while Trincomalee, Penang and some other minor havens were rendezvous and refreshment locations. The second period, 1805 to 1813, still involved Bombay, Madras and Calcutta, but also included Penang, a product of Lord Melville's initiative to build an eastern base. The third period, 1810 to 1815, overlaps the second and centres on Drury's plan and Hood's actions, to build an establishment at Trincomalee. The reasons for their use, abandonment and eventual consolidation at Bombay and Trincomalee, are examined

⁵³ Navy Board to Puget, TNA, ADM 106/2485, 27th July 1813.

⁵² Puget to Navy Board, TNA, ADM 106/2009, 15th September 1812.

below. A strategic outlier of the British in this period was the colony of New South Wales with Port Jackson being its principal port. This location is examined to ascertain if this distant port was capable of supporting naval refits after over twenty years of settlement.

Bombay provided the primary refitting location for vessels in the East Indies squadron, but its location was too far from the ships stationed to protect the Bay of Bengal and the eastern side of the Indian peninsular. How to support the squadron on that side of India was a problem that exercised the minds of the British throughout the Revolutionary and Napoleonic Wars. It was the attempt to solve this problem that gave impetus to the evolution of Admiralty autonomy from the East India Company.

The founding of an East India Company settlement on Penang in 1786 was obtained partly as a potential base for ships, but this was not the limit to the Company's ideas for such a base before 1793. In 1789 the Andaman Islands were claimed by the governor general, with plans for establishing a naval base on Great Andaman Island, initially at Port Blair and later at Port Cornwallis, both being subsequently abandoned following the capture of Trincomalee.⁵⁴

It was not only the Company that looked for anchorages or replenishment bases before the Revolutionary War. Commodore Cornwallis's squadron surveyed potential sites. Amongst these were all the bays of the Andamans, Nicobars, Diego Garcia, the northwest side of Sumatra and many other locations. The Company and the British navy therefore had already determined there was a need for a naval base on the eastern side of India, but it was not until late in the Napoleonic War before Trincomalee was adopted as the solution.

It was not only the refitting capability that made a naval base, as logistic supply of ordnance stores, victualling items and health care provided in hospitals were also vital elements of such a facility. Once a naval ship arrived in the East Indies, ordnance stores were provided by the East India Company and not the Ordnance Board. This is not covered in any detail in this thesis. Similarly the victualling system used in the East

⁵⁴ Frost, A., *Convicts and Empire - A Naval Question 1776-1811*, (Melbourne, 1980), 143-144, 147-148; Colgate, H., 'Trincomalee and the East Indies Squadron', 134.

⁵⁵ Colgate, H., 'Trincomalee and the East Indies Squadron', 129.

Indies is not covered in this thesis as recent scholarship has already reported on this area. ⁵⁶ The provision of medical care in the east is examined later in this chapter.

7.4.1 Bombay



Figure 7g: Sketch of Bombay dockyard and fort from HMS Suffolk circ. 1801⁵⁷

Earlier in this chapter and in chapter one, it was noted that Bombay was the best equipped port in the East Indies, with its dry dock, access to a skilled workforce and the timber of the Malabar forests. However, it was not only these facilities that made Bombay valuable. This port was also ideally situated to serve vessels defending the western regions of India from any threat coming from the Red Sea or Persian Gulf plus protecting British trade between India and the Arab world. The British were frequently concerned in this period that the French could threaten India from these areas via an attack staged from Egypt.

Figure 7h indicates the location of Bombay dockyard and the position of the islands that were considered as sites for hospitals or naval accommodation. This map together with figure 1j in chapter one and figure 7j show the location and development of the dockyard in this period.

Figure 1j in chapter one provides a plan of the Company yard at Bombay in 1803 prior to the building of Duncan dock. St. Vincent's decision to order the construction of a 74 gun ship at Bombay resulted in the construction of a double dock. The inner dock was to be used to build ships, with the outer dock for the repair of vessels of up to 74 guns in size.⁵⁸

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⁵⁶ Knight, R., and Wilcox, M., *Sustaining the Fleet 1793-1815*, 155-176; Wilcox, M., 'This Great Complex Concern: Victualling the Royal Navy on the East Indies Station, 1780-1815, *MM*, Vol. 97, No. 2, (May 2011), 32-48.

⁵⁷ Detail view of Bombay Harbour 1801, TNA, ADM 344/1274-1278.

⁵⁸ Appendix 7b provides plans and details of the docks built and proposed during this period in the East Indies.

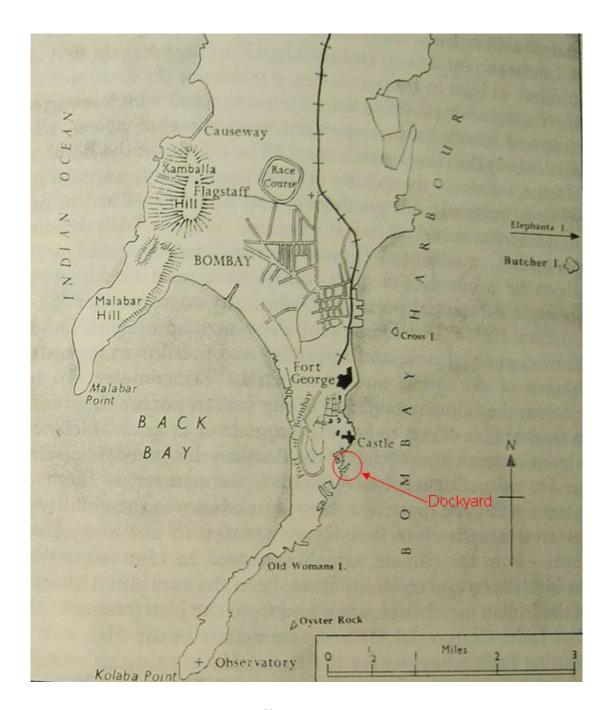


Figure 7h: Map of Bombay harbour⁵⁹

Figure 7j shows the position of these new docks together with the location of the principal buildings in the dockyard and to whom they belonged. The draughtsman colour coded and annotated the plan, with ownership and building description. The Company buildings and facilities were shown in pink with those of the Crown shown in blue.

 $^{^{59}}$ Graham, G., Great Britain in the Indian Ocean, 1810-1850, map 6, 313.

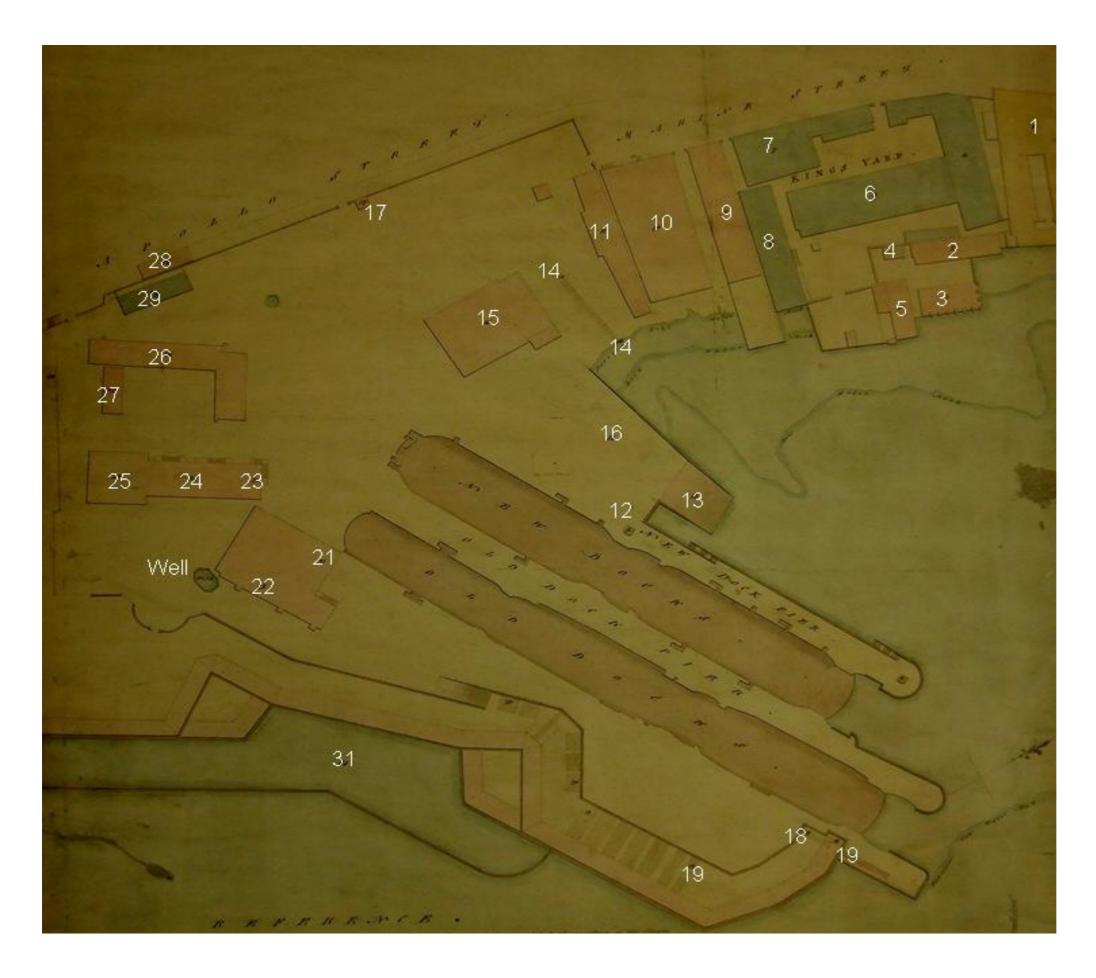


Figure 7j: Plan of Bombay Dockyard in 1816 575

Description

- Mrs Nisbitt's building (Private ownership)
- Marine Storekeeper's rooms (Company)

- Tar House (Company)
 Cook House belonging to building No. 5 (Company)
 Building occupied by the lascars in the Attendant's office (Company)
- Naval Storehouse (Crown)
- Naval Storekeeper's office and dwelling house (Crown) Commissioner's office, Sail Loft and Mast House (Crown)
- Mast House and Storerooms (Company)
- Mast House and Storerooms (Company)

- Mast House and Morerooms (Company)
 Joiners and Blacksmiths shop (Company)
 Sentry Boxes (not labelled)
 Slips for building timber and launching boats (Company)
 Slips for building frigates and merchantmen (Company)
- Saw pit and boat house (Company)
- Piece of ground lately taken from the sea to increase the size of 17 & 18 Unused
 - Casements appropriated for reception of steam engine
 - Casements made use of by cooks of the ships undergoing repair, no fires permitted within the docks (Company)
- 21 Old mast house (Company)
- Lodgings for the crews attached to the builder (Company) Master Attendant's office (Company)

- Sail Loft and Mould Loft (Company)
 Superintendent of Marine office (Company)
 Blacksmith's forge (Company)
 Guard Room (Company)
 Gate Guardroom (Company)
 Blacksmith's forge (Crown) 25
- 26 27
- 28

- Casements made use of by the painters (Company)
- Wet Ditch

The King's yard occupied only a small part of the dockyard, but had the offices, storehouses, mast house and sail loft that formed the essential elements of an overseas establishment. The Company dockyard also had these essential offices and buildings, plus the ownership of the old, Bombay dock and the new, Duncan dock. This duplication of buildings, for example storehouses, sail loft and mast house may seem an unnecessary expense, but can be easily explained.

The Company dockyard was a commercial concern involved in merchant shipbuilding and repair, Bombay Marine related activities plus work for the British navy, all of which required separate accounting. The King's yard existed only to support the supply of stores and repair of naval vessels. The physical division of Company and British naval supply organisations was a simple fraud prevention measure to ensure government stores were only used on naval ships. Other measures existed, including the identification of government items with the King's anchor, or by coloured threads in cordage. Instructions were also issued that all such items were not to be sold or otherwise disposed of at overseas locations, but always returned to Britain. By these measures, any such item found in non-naval vessels indicted theft and hence provided a deterrent against embezzlement.

The King's yard at Bombay was a lodger in the Company's dockyard and paid rent for the land occupied by the temporary buildings erected by the navy. When these buildings were found to be decaying in 1808, the cost of repair or re-building fell on the crown rather than the Company. Commissioner Dundas addressed this problem immediately on his arrival and discovered that Admiral Drury intended to build new storehouses at Bombay.² Dundas instead, negotiated with the Bombay government for replacement buildings within the dockyard, whilst giving up the land currently occupied. This agreement provided a new range of buildings with access to the sea front for £5000, as opposed to the estimated cost of £20000 for a re-built facility.³ Dundas and Drury disagreed, with the admiral wanting the re-built facility, but the Admiralty sided with the commissioner.

This was but one of a number of disputes between the commander-in-chief and the commissioner, as they also disagreed over the provision of hospital care and

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¹ Navy Board to Foreign Yards, TNA, ADM 106/2483,31st October 1811.

² Dundas to Navy Board TNA, ADM 106/2008, 15th June 1809.

³ Dundas to Navy Board, TNA, ADM 106/2008, 1st October 1810.

accommodation of naval crews, when ships were being refitted.⁴ Drury considered the existing arrangements for the care of the sick and wounded were inadequate, and ordered the conversion of the recently purchased *Ardasier* to a hospital ship, rather than to a receiving ship, as originally intended. Arrogant, the existing receiving ship, had been recently condemned, and a home for crews when ships were in dock was needed. The admiral's solution was instead to build accommodation on Butcher's Island and to turn the rented shore hospital into a storehouse.⁵ Drury reported that Dundas was obstructive to his orders and he attempted to use this case to have the commissioner removed, or placed directly under his command.

What Dundas presented to Drury and the Navy Board concerning the admiral's intentions, illuminate their respective concerns, one for economy, the other for operational efficiency. The necessity to erect accommodation on Butcher's Island to receive crews was only required in Drury's plan, because the ship purchased to replace the condemned receiving ship was to be a hospital. By pointing out the unsuitability of the Ardasier for such a service, because the lower ports were too low in the water to be opened, Dundas crucially undermined Drury's plan. Dundas also pointed out that the conversion of the existing hospital building to a storehouse was unnecessary, as the existing arrangements were more economic.⁶ Drury was unable to change the commissioner's mind especially as Dundas had already fitted the Ardasier as a receiving ship. The Admiralty backed the commissioner's actions and merely directed the *Ardasier* be renamed *Argonant*.⁷

This was not to end the Dundas and Drury disagreements, as the admiral enlisted the squadron's captains in an attack on the commissioner concerning the quality of the refits performed at Bombay. However, again the Admiralty supported the commissioner who was operating to his instructions. The later reports from Admiral Hood on the condition of ships sent to the East Indies provided a more considered reason for the refitting problems that Drury encountered. Drury's complaints centred on the need for frequent docking to replace copper, or repair other underwater defects, suggesting a poor standard of refitting, but Hood instead pointed out that more care was required in the

⁴ Rainier had not had any problems with the medical care provided at Bombay. I am grateful to Peter Ward for making this observation.

⁵ Drury to Admiralty, TNA, ADM 1/182, 26th February 1810.

⁶ Dundas to Navy Board, TNA, ADM 106/2008, 11th April 1810.

⁷ Navy Board to Dundas, TNA, ADM 106/2481, 15th August 1810.

⁸ Drury to Admiralty, TNA, ADM 1/182, 6th February 1810. ⁹ Admiralty to Drury, TNA, ADM 2/937, 9th July 1810.

selection of ships for the squadron. ¹⁰ Hood reported that ships which had been in eastern waters for as little as a year, needed underwater repairs and copper replaced. By ensuring the ships were sound before departure for the east, the need for docking and refits would be considerably reduced. In contrast to Drury, Hood reported refits and shipbuilding at Bombay were of a high standard.

7.4.2 Madras





Figure 7k: View of Madras (left to right) from anchorage circ 1810¹¹

The selection of Madras as the location to station the East Indies squadron and consequent establishment of a naval base was one of necessity rather than design. As a location Madras passed the essential criteria for such a base, being close to an area of operations, able to provide access to water, wood and food, plus being both politically and militarily secure. 12 Unfortunately it was not a safe anchorage and although naval stores, victualling and health care were available, the open roadstead two miles off shore, ensured that only limited refit work could be undertaken, with careening being particularly unwise. This latter technique was ruled out in a letter from master shipwright Matthew Wellington to Puget concerning the refit of HMS Cornelia in 1812.

¹¹ Detail view of Madras from anchorage, TNA, ADM 344/1102-1106.

¹⁰ Hood to Navy Board, RMC of Canada, Massey Library, DA88.1.H66A4 1809 V2, 9th March 1813.

¹² Once Pondicherry was neutralised by the British in 1793 and 1803 the French lost any base to launch an attack on Madras.

Wellington reported the sloop required docking or being hauled down to rectify her underwater defects, but that it should not be done at Madras.¹³

The risk of stationing the squadron at this open anchorage was well known to the navy, especially during the northeast monsoon period when ships usually retreated to Bombay, or to Trincomalee. However, Madras Roads was not always safe for ships at other times of the year and so it proved in May 1811. It was on the 5th May that Puget reported to the Admiralty the results of a severe east-southeast storm that struck Madras. Not only had the storeship *Chichester* and frigate *Dover* been lost, but a further 40 to 50 merchant ships had also foundered. Large trees had been blown down and houses had lost their roofs, but as Puget observed, it was fortunate the squadron had sailed on the Java expedition.¹⁴

Trusting to luck is never a secure strategy, especially as a single storm had the power to decimate a naval capability. Madras was not abandoned until 1817, but three potential sites: Calcutta, Penang and finally Trincomalee were tried.

7.4.3 Calcutta

Calcutta was at the heart of British power in the east making the port politically and militarily secure. The resources of Bengal were available for water, food, fuel, health care and ordnance, with appendices 7b and 7c showing that the shipbuilding and repair infrastructure was in place to support naval ships, but there were also disadvantages in using Calcutta. A glance at figure 7a indicates that the chief obstacle was its geographical position, a combination of Calcutta's distance from the most suitable area of operations in the Bay of Bengal and the inevitable delay, during the southwest monsoon when ships would be beating against the prevailing wind. A further complication is not evident from figure 7a, that of the distance from the mouth of the Hooghly River to Calcutta. This was compounded by the difficulty in navigating the river, necessitating a pilot of the Bengal Marine to be available. In short, Calcutta was unsuitable for the establishment of an overseas base, but it was used and resulted in a system of agents, or temporary appointments being used to support captains who took their ships to Calcutta for refit.

¹³ Wellington to Puget, NMM, MKH/131, 29th August 1812.

¹⁴ Puget to Admiralty, TNA, ADM 1/3441, 5th May 1811.

The refitting potential of Calcutta was not ignored by the British navy, as a number of ships were repaired at Calcutta, which included use of the dry docks that had recently been built on the Hooghly. However, Calcutta was never to become a primary refitting location, as it was found to be an expensive option.

Investigations into the cost of refitting at Calcutta resulted in parliament examining the actions of Commodore Home Popham who refitted his squadron there in 1801. 15 Home Popham had been put in command of a squadron to operate in the Red Sea, but sent his squadron to distant Calcutta to refit instead of to Bombay. When the Admiralty discovered Home Popham's actions, plus the excessive costs of the refits at Calcutta, a witch hunt occurred, with accusations and counter accusations flying between them. If the political and the vindicating aspects of this dispute are ignored, a useful picture is obtained of the suitability of Calcutta as a naval repair location. The ships Home Popham sent were Romney, a fourth rate, and La Sensible, a troop transport that the commodore had converted to a 32 gun ship, both of which were repaired. La Sensible was placed in dry dock, indicating Calcutta could dock escort vessels. It also had commercial repair yards, a labour force and master builders, but the costs of repair had amounted to over a quarter of a million pounds, ¹⁶ approximately the cost of building ten fifth rate frigates. 17 What became evident was the lack of a naval storekeeper or agent at Calcutta to assist naval commanders until Rainier appointed Matthew Louis as deputy naval storekeeper in May 1801. The total expenditure at Calcutta for Home Popham's command exceeded £600000 of which Louis was entitled to a five percent fee. The appointment of Louis was not approved by the Admiralty and Rainier was ordered to terminate the post. The parliamentary select committee concluded in their reports that Home Popham, or his commanding officers, had not been involved in any fraud, but that the costs incurred were excessive.

Apart from the high costs at Calcutta, the Admiralty considered that the location was unhealthy for ships' crews and requested that naval ships only visit the port if absolutely necessary. This ruled out Calcutta as a naval base and refitting location, but ships based at Madras still occasionally used the docking facilities at Calcutta. Amongst the vessels

¹⁵ 'Reports from the select committee on papers relating to the repairs of HMS The Romney and Sensible, while under the command of Sir Home Popham, first and second reports plus Accounts and Papers relating to repairs', House of Commons Parliamentary Papers, printed 1805, Vol. 10, 1-410.

¹⁶ 'Accounts and Papers of the House of Commons on The Repair and Co. of The Romney and other HM Ships under the command of Sir Home Popham 1800-1805', House of Commons Parliamentary Papers, 11.

¹⁷ A British merchant shipyard built frigate cost £17729 excluding items supplied by Navy Board. Navy Board to Admiralty, TNA, ADM 106/3123, 20th August 1810.

dry docked at Calcutta were the fifth rates *Phaeton*, *Dover*, *Modeste* and the *Samarang* sloop. Details of these refits together with the costs incurred were the subject of dispatches from Drury and Puget, from 1809 to 1811 and underlined their concerns regarding Calcutta.

Although Calcutta's docking facilities had been used, on obtaining command of the East Indies squadron in February 1809, Drury commented on the absence of a second naval port in India with dry docks. 18 It was in May of that year that the admiral pronounced his strategy for refitting in the East Indies to reduce, '[the] enormous expense attending the squadron'. 19 His plan rested on reducing the necessity of using Bombay, but particularly Calcutta where, he considered, the health of seamen suffered considerably. However, his comment on refitting costs at Calcutta was particularly illuminating. Drury considered the contractors were running rings around the young commanders who were having their ships refitted at that port. Drury considered the lack of a shipwright officer at Calcutta who could check the contracts, ship surveys and the quality of work done, had resulted in an increase in costs. Drury's solution was to warn his captains that investigations would be made on refits at Calcutta and to gave orders to shun that port unless unavoidable. The admiral's short term refitting plan centred on using Negapatam instead of Calcutta or Madras for refits, as he calculated the costs would be one tenth of those at Calcutta and a quarter those at Madras. 20 Drury's long term plan was to establish a refitting port at Trincomalee.

The Admiralty agreed with Drury's comments regarding refits at Calcutta and issued instructions to avoid using that port in October 1809,²¹ but they disagreed on the use of Negapatam, as the benefits over Madras were marginal. Regarding Trincomalee, the Admiralty fully supported Drury's proposals.

Calcutta continued to be used by the navy for refits and replenishment when unavoidable, but the reports to the Navy Board and Admiralty continued to detail the considerable expense involved. The removal of the naval agent and his five percent fee on all expenditure, reduced costs and the suspicion that the agent encouraged spending at Calcutta. Puget's actions as naval commissioner reduced the cost of using Calcutta,

¹⁸ Drury to Admiralty, TNA, ADM 1/181, 26th February 1809.

¹⁹ Drury to Admiralty, TNA, ADM 1/181, 10th May 1809.

²⁰ Drury to Admiralty, TNA, ADM 1/181, 10th May 1809, 15th July 1809, 17th February 1810.

²¹ Admiralty to Drury, 27th October 1809 referenced in Navy Board to Puget, TNA, ADM 106/2483, 14th August 1809.

especially by his direct arrangements with government officials, but the use of this port was negligible by late 1812.

Calcutta had the potential to become the second refitting port of the East Indies squadron. It had the infrastructure, investment and access to materials and labour, but the navy avoided using the port primarily on cost grounds. It seems that the private shipbuilders, dry dock owners and naval stores providers realised they were in a position to charge whatever the ships' captains would tolerate as there was no alternative. Possibly a cartel was in place, but as naval work was not essential to the private shipbuilders, they considered it an opportunity to charge premium rates. A naval dockyard could have been established at Calcutta, but it could not have functioned effectively as a naval base. This meant Madras, or another east coast location, was necessary. This appears to have been the reasoning of Lord Melville, Henry Dundas, first lord of the Admiralty who investigated and commissioned a naval base at Prince of Wales Island, Penang.

7.4.4 Prince of Wales Island, Penang

The first Lord Melville, on becoming first lord of the Admiralty in 1804, did not immediately look to create a new naval base, but had previously consulted his nephew on East Indian resources and shipbuilding locations in the east.²² The results of his discussions with Philip Dundas and Paul Tate, who had been recommended by Philip, provided Melville with first hand information.²³ These gentlemen and Hamond, the comptroller of the navy, met and helped to form Melville's plans.²⁴ The first lord was turning his thoughts from merely shipbuilding in the east to strategic considerations. In August 1804, Melville wrote to Wellesley on the advantages to be obtained by turning the settlement recently established on Penang, into a naval base and shipbuilding location. Francis Light had landed at Penang in 1786, establishing East India Company rule on the island, he founded Fort Cornwallis and the settlement of Georgetown.²⁵

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²² Minute of Philip Dundas conversation to Lord Melville circa mid 1803, House of Commons Papers, Enclosures 2 & 3, Papers presented to the House of Commons respecting Prince of Wales Island in the East Indies, 25th February 1805, 2-5.

²³ Memorandums by Philip Dundas and Paul Tate of June and July 1804, House of Commons Papers, Enclosures 4, 5, 6, 7 & 8, Papers presented to the House of Commons respecting Prince of Wales Island in the East Indies, 25th February 1805, 6-10.

Meeting occurred on 3rd July 1804, Melville to Wellesley, 4th July 1804, Enclosure 2, Papers presented to the House of Commons respecting Prince of Wales Island in the East Indies, 25th February 1805, 2. ²⁵ Webster, A., 'British Expansion in South-East Asia and the role of Robert Farquhar, Lieutenant-

Governor of Penang 1804-5', *The Journal of Imperial and Commonwealth History*, Vol. 23, No. 1, 1-25.

Melville's plan was to split the East Indies station into two commands saying; 'I have long thought that there was a defect in the distribution of our naval forces in India, and that the fleets should be so divided, under separate commands, as to afford constant protection to both coasts of the peninsular'. Melville logically followed this up with; 'If I am right in this position it is obvious that a naval station for the building and repairing vessels of every description, on both sides on India, would be a great accommodation to our naval interests in the Indian Ocean. A new naval establishment therefore at Prince of Wales Island affords no argument for undervaluing and neglecting the establishment now existing at Bombay.' The first lord now proceeded on two fronts, firstly to split the East Indies command and secondly to encourage the East India Company to establish a dockyard at Penang, with a shipbuilding and dry dock capability.

Pellew, already appointed to command the existing East Indies squadron, was reappointed to the westward station, using Bombay as his main base with its dry docks and yard. The eastward command was placed under Troubridge, who would defend the Bay of Bengal and trade with China. The dividing line between these commands was a line north/south and east/west drawn from Point de Galle. Pellew did not play to the intentions of this plan and shifted the line north and to the east of Galle to leave Trincomalee and Madras in his command, stating that during the south west monsoon Bombay was untenable.²⁷ This split in command was short lived, as Pellew refused to recognise the intended split, played for time and awaited unambiguous directions. With Melville's departure as first lord and the change in administration following Pitt's death, Pellew got his wish as the whole of the East Indies command was placed under his orders. Troubridge was appointed to the Cape of Good Hope command and sailed from Madras for the Cape in January 1807.²⁸

Melville's initiative was one dependent on the Company funding and building the Penang yard. As this project was to meet strategic aims, Melville showed considerable faith in the Company to delivery his plan. Unlike at Bermuda and Simon's Town, where the Admiralty merely commissioned and built establishments to meet strategic aims, Melville must have considered the orders for naval ships from Penang were incentive enough for the Company to build the yard. The Navy Board provided plans suited for this overseas naval yard. The Penang establishment was to be managed by the

²⁶ Melville to Wellesley, 30th August 1804, enclosure 9, Papers presented to the House of Commons respecting Prince of Wales Island in the East Indies, 25th February 1805, 11-12.

Parkinson, C., War in the Eastern Seas, 281.

²⁸ Parkinson, C., War in the Eastern Seas, 298.

Company, with the yard superintendent also acting as a naval storekeeper. This arrangement was identical to that at Bombay when Philip Dundas had been marine superintendent and naval storekeeper between 1796 and 1801. Hamond confirmed this arrangement in a letter to the chairman of the Court of Directors at the end of October 1804, offering the Company assistance in building the naval base.²⁹ The Board of Control and Court of Directors now discussed how to administer and bring this project into fruition. This resulted in Penang being given Presidency status, with Philip Dundas appointed its governor³⁰ together with a comprehensive staff.³¹

The combined nature of building this repair and building dockyard becomes evident in the support provided by the Navy Board. Following a meeting with the Company in December 1804, the Navy Board provided designs and estimates of the costs of building a naval yard with store houses, building slips and a dry dock capable of accommodating a 74 gun ship.³² It was recognised at an early stage that a steam engine would be required to pump out the proposed dock, resulting in the Navy Board entering into discussions with Boulton and Watt for the design and build of suitable engines.³³ Paul Tate again became involved as the engineer who would be sent from Britain with this engine.34

The question of financing the construction of the establishment, the warships built and the naval stores provided was to be one of the reasons why the project ended in failure. Hamond records the rules that had been agreed between Melville, himself and the Company. One third of the cost of the construction of docks, wharves and buildings would be paid by the British government, with the Company providing the remainder.³⁵ The construction of warships was to be a commercial venture with the Company paying for materials and labour, with the Admiralty agreeing to purchase the vessels if found

²⁹ Hamond to Elphinstone, 30th October 1804, enclosure 16, Papers presented to the House of Commons respecting Prince of Wales Island in the East Indies, 25th February 1805, 19-20.

³⁰ Philip Dundas appointed Governor of Prince of Wales Island, 5th December 1804, Papers presented to the House of Commons respecting Prince of Wales Island in the East Indies, 25th February 1805, 33.

³¹ Memorandums concerning governor and staff for Prince of Wales Presidency, House of Commons Papers, Enclosures 17, 18 & 19, Papers presented to the House of Commons respecting Prince of Wales Island in the East Indies, 25th February 1805, 20-33.

³² East India House to Hamond, TNA, ADM 42/89, 13th April 1805; Deptford yard officers to Navy Board, TNA, ADM 42/89, 15th and 18th April 1805.

³³ Boulton and Watt to Navy Board, TNA, ADM 42/89, 8th May 1805, 24th June 1805; Barrallier (Assistant Surveyor) to Navy Board, TNA, ADM 42/89, 13th May 1805, 29th June 1805. ³⁴ Ramsey to Navy Board, TNA, ADM 49/89, 4th July 1805.

³⁵ Elphinstone to Hamond, TNA, ADM 49/89, 29th March 1805; Hamond to Navy Board, TNA, ADM 42/89, 14th December 1806.

acceptable on inspection.³⁶ For the provision of naval stores to HM ships, the Company would purchase items from the Navy Board in Britain, transport to Penang and charge a 30 percent fee on all stores issued.³⁷ The Navy Board considered this arrangement was to the public's advantage, as a naval storekeeper would not be needed at Penang.³⁸ These arrangements placed all the financial risks with the East India Company, but left the strategic risks of a dry dock and base not being provided with the Admiralty.

The building of a naval establishment and dry dock at Penang was not completed, with a number of factors contributing to its failure. The death of Governor Dundas in April 1807 could be considered a crucial blow, especially as his uncle, the prime instigator of the idea, was in disgrace. Without these men the drive for the success of the project was lost. The financial condition of the Company, particularly in India, was starving the project of money, as the supreme government would not release any funds. Acquiring a skilled workforce was proving difficult to obtain, resulting in delays and the work being done of poor quality. The frigate being built, *Malacca*, was proving very expensive to construct as its teak was more costly than originally estimated. Drury reported in August 1809, 'I have explained to that Board [Navy], the wasteful and ridiculous idea of ever building Men of War at this island where neither timber or workmen can be procured without immense expense.' The Ordnance and Navy Boards were still sending stores for ships that it was thought Penang would build, but as Drury stated, the ability to build naval ships at that establishment had evaporated.

The parliamentary papers and Admiralty records strongly indicate that the Penang naval establishment was the idea of Melville in the summer of 1804, but Anthony Webster credits Robert Farquhar, lieutenant-governor of Penang, raising a similar proposal with Wellesley in April 1804. As the source cited is an article published in 1851 it casts doubt on the year quoted. However, if the date of Farquhar's proposal was April 1805, it would be consistent with Wellesley requesting information on receiving Melville's July and late August letters of 1804, via the land route. It would seem unlikely that Farquhar would submit an opinion on building a naval base without encouragement.

³⁶ Hamond to Navy Board, TNA, ADM 49/89, 14th December 1806.

³⁷ Elphinstone to Hamond, TNA, ADM 49/89, 29th March 1805.

Navy Board to Admiralty, TNA, ADM 49/89, 2nd April 1805.
 Drury to Admiralty, TNA, ADM 1/182, 13th August 1809.

⁴⁰ Drury to Admiralty, TNA, ADM 1/182, 15th August 1809.

⁴¹ Webster, A., 'British Expansion in South-East Asia and the role of Robert Farquhar, Lieutenant-Governor of Penang 1804-5',7.

⁴² Braddell, T., Notices of Penang, *Journal of the Indian Archipelago and Eastern Asia*, (Singapore, 1851), 407-8.

The embryonic naval base at Penang continued to limp along with naval ships calling for refreshment, access to naval stores and use of the hospital ship, Wilhelmina, but Puget, the Navy Board and the Admiralty had all concluded the base was now unnecessary. 43 Puget, in his briefing letters to the Navy Board on arrival in January 1811, considered Penang expensive beyond calculation, and that there were insufficient checks on supplies demanded, or any regard to economy. The commissioner stated that, although he had insufficient knowledge on the political necessity for retaining a naval base at Penang, he stated a naval storekeeper would be needed if the base was not closed. 44 The Navy Board replied in August that the Admiralty had issued instructions to Drury to break-up the Penang establishment and move the hospital ship to Bombay. 45 Commodore Broughton replied to the Admiralty in October that no advantage could be gained in moving Wilhelmina to Bombay, his opinion being that Penang was at a trade intersection with China, was a healthy place to recover, and the hospital ship would require a considerable refit to enable her to sail. 46 In July 1812 the Navy Board reiterated the Admiralty's order to close the Penang establishment.⁴⁷ Hood, as commander-in-chief, had been briefed by the Admiralty on their decision to close Penang, but he first ascertained the situation before both he and Puget closed the establishment.

The final acts involved in closing the establishment were issued by Hood in late August 1812, with directions to Puget to instruct the naval storekeeper to load serviceable stores on to a ship being sent. 48 It was left to the naval storekeeper to dispose of the hospital ship and all other unserviceable items. The establishment was finally closed in late December 1812, with the dispatch of naval stores and invalids to Madras. A poignant reminder of the project to build a dry dock and naval base at Penang remained, as Puget requested guidance on how to dispose of the steam engine that had been sent to Prince of Wales Island. 49

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⁴³ Penang had been used throughout the wars as a replenishment and rendezvous base for vessels patrolling the Straits of Malacca and escorting the China fleets. On the capture of Mauritius and Java the need for these patrols and convoy duty was almost eliminated.

⁴⁴ Puget to Navy Board, TNA, ADM 106/2009, 20th January 1811.

⁴⁵ Admiralty to Drury, TNA, ADM 2/937, 3rd July 1811; Navy Board to Puget, TNA, ADM 106/2483, 14th August 1811.

Broughton to Admiralty, TNA ADM 1/184, 1st October 1811.

⁴⁷ Navy Board to Puget, TNA, ADM 106/2484, 7th July 1812.

⁴⁸ Hood to Puget, TNA, ADM 49/89, 27th August1812.

⁴⁹ Seward to Puget, TNA, ADM 49/89, 1st January 1813; Puget to Navy Board, TNA, ADM 49/89, 10th February 1813; Note: the steam engine and associated apparatus had been sent out on HEIC Euphrates on 6th September 1805.

The faith in the principle of using the East India Company to support the aspirations of British strategists in providing naval support, without significant British government financial support, was tested to destruction with the Penang initiative. Melville's plan to provide an effective naval base, in addition to the one at Bombay was sound, but using the Company principally to fund the venture was optimistic. The attention now turned to Trincomalee, a crown possession, with the finest harbour in the region.

7.4.5 Trincomalee

The British East Indies squadron and its relationship with Trincomalee can be considered, from the mid eighteenth century, to consist of three distinct periods, 1746 to 1795, 1795 to 1810 and 1810 to 1822. The first period concerns the use of the port during its Dutch occupation, the second from Trincomalee's capture to Drury's plan to establish a naval yard and finally, the subsequent activities that occurred to build the naval yard, until Britain's financial position caused building to halt.

Chapter one provided a brief outline of British use of Trincomalee when occupied by the Dutch. The importance of Trincomalee as a naval anchorage and refreshment location became apparent on the Dutch being drawn into the American War of Independence in 1780. Initially the harbour was captured by the British, but they were expelled by the French who were subsequently able to retain their use of the port for operations against the British in Indian waters. The lesson learned was that it was not so much access to Trincomalee that was vital to the British fleet, but the denial of access to it for an enemy fleet. Only occupation, or in the possession of a neutral able to defend the harbour against Britain's enemies, was sufficient insurance against the events of 1782-83 being repeated.

With war against Revolutionary France commencing in 1793 and the uncertainty of the political stance of the Dutch, the British decided to occupy Trincomalee in 1795. The military defences of the port were weak, consisting of two forts, Fort Frederick and Fort Ostenberg, and even with an adequate garrison these in themselves were insufficient to ensure retention. The weakness of these fixed defences ensured the Eastern squadron would have to remain in close proximity to Trincomalee if a large French fleet was sent into these waters, or the French would repeat their success of 1782. The military security of Trincomalee was not improved to a significant degree during these wars,

until it was decided to build a naval yard. However, political security was assured when Ceylon was ceded to Britain in 1802.

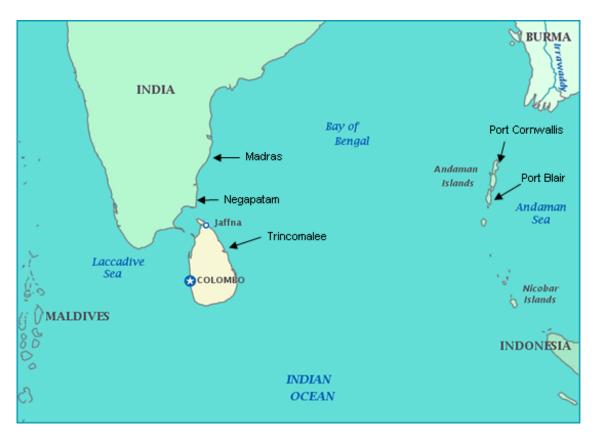


Figure 7m: Location of contending naval bases at entrance to Bay of Bengal

In terms of the necessary criteria for a naval base, Trincomalee was the reverse of Madras as its prime advantage was its superb anchorage, but it lacked almost all the other factors required, apart from proximity to the area of operations and access to wood and water. Trincomalee was a small settlement with limited indigenous capability to supply food or a labour force. Contemporary sketches and watercolours indicate the extent of the jungle surrounding Trincomalee and the considerable labour that would be required if a naval yard was to be built.⁵⁰ As with Penang, a large investment would be required to turn Trincomalee from a wilderness, into a thriving naval base, therefore it is not surprising that this did not occur until the last years of the French wars.

Until 1809 when Admiral Drury stated his plans to reduce expenditure servicing his squadron, the role of Trincomalee was restricted to one of shelter, limited refits by squadron artificers and obtaining fuel and water. In his MA thesis Colgate detailed the

⁵⁰ Sketches by an officer of HMS *Illustrious* off Trincomalee in 1812, TNA, ADM 344/1098-1101; Watercolours of Trincomalee anchorages in 1820s and 1830s showing dockyard, TNA, ADM 344/1093-1097.

use of the port from 1746 to 1844, and uncovered the considerable use of Trincomalee when occupied by the Dutch.⁵¹

During his term as commander-in-chief Cornwallis used the anchorage for refit and water in October 1789, July to August 1791, September to October 1792 and April and May 1793.⁵² However, it is Cornwallis's comment that best describes his view on Trincomalee, 'The harbour being little better than an uninhabited one'.⁵³ Rainier also used the anchorage with squadron artificers carrying out repairs in 1797 and he returned the following summer. Rainier realised the need to provide a storeship if Trincomalee was to be a useful repair location.⁵⁴ The port was still occasionally used by Rainier during the rest of his tenure as commander-in-chief, but his successors appear to have ignored Trincomalee. This would seem to have resulted from an increase in the use of Penang, the use of Calcutta for docking ships and the centring of activities at Madras. However, with the departure of Pellew, Trincomalee was to become with Bombay one of the principal naval yards in the east.

Figure 7m shows the position of Trincomalee relative to Madras and the bases that were used in the Andamans Islands before Trincomalee was captured. Figure 7n provides a detailed view of the various anchorages at Trincomalee relative to the large bay that allowed access to the very sheltered waters of the inner anchorage.

Drury's determination to turn Trincomalee from a mere anchorage into a major naval base was a combination of dissatisfaction with his dealings with the East India Company, and the expense and dislike of the attitude of the officials and merchants he encountered. Apart from the attractions of the harbour and Trincomalee's strategic position, Ceylon was a crown colony and its governor Maitland, was a very willing ally in creating a naval base on the island. Drury stated his intention to the Admiralty in May 1809 and by December reported he was settling artificers from southern India at Trincomalee, with Maitland allocating land for their families.⁵⁵ By March 1810 Drury was able to update the Admiralty that 30 families of shipwrights and smiths had been

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⁵¹ See chapter one – pages 58-59.

⁵² Colgate, H., 'Trincomalee and the East Indies Squadron', 128.

⁵³ Colgate, H., 'Trincomalee and the East Indies Squadron', 156.

⁵⁴ Colgate, H., 'Trincomalee and the East Indies Squadron', 191-194.

⁵⁵ Drury to Admiralty, TNA, ADM 1/181, 10th May 1809; Drury to Admiralty, TNA, ADM 1/182, 3rd December 1809.

moved to Trincomalee together with 50 Chinese labours, and that the erection of buildings for the navy had commenced.⁵⁶

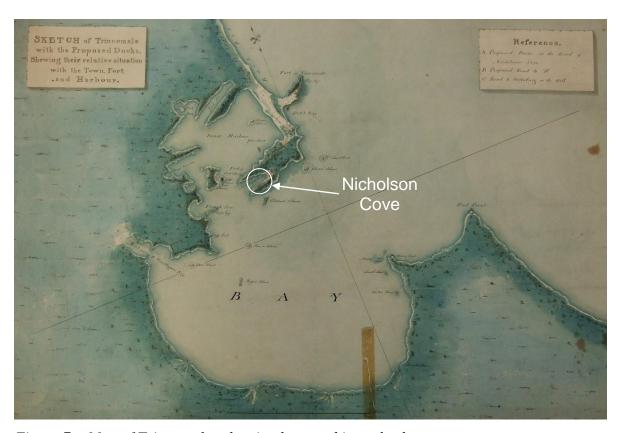


Figure 7n: Map of Trincomalee showing bays and inner harbour

Drury was without orders from the Admiralty to spend money or effort on a new naval base, but proceeded indicating the considerable freedom of action available to a commander-in-chief. The Admiralty approved of the admiral's actions, but only instructed him to prepare estimates.⁵⁷ Drury continued to paint a rosy picture of the advantages of moving all shore naval departments to Trincomalee and the assistance being given by colonial officials to further his great plan. 58 This caused the Admiralty to take him at his word, but they instructed him to restrict spending to the £3000 estimated by the local engineer.⁵⁹ The Admiralty were excited at the prospect of being able to replace all other bases in India, with the exception of Bombay, by a base at Trincomalee.⁶⁰

⁵⁶ Drury to Admiralty, TNA, ADM 1/182, 17th March 1810.
57 Admiralty to Drury, TNA, ADM 2/937, 27th September 1809, 24th September 1810, 1st October 1810.
58 Drury to Admiralty, TNA, ADM 1/182, 17th June 1810.
59 Admiralty to Drury, TNA, ADM 2/937, 27th November 1810.

⁶⁰ Admiralty to Drury, TNA, ADM 2/937, 28th November 1810.

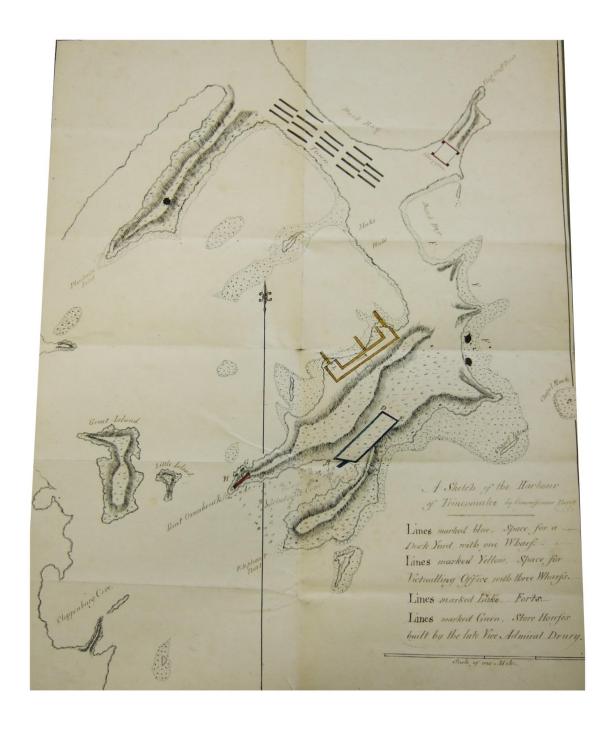


Figure 7p: Puget's sketch of Trincomalee harbour showing proposed dockyard⁶¹

Governor Maitland continued to offer support to Drury, including the provision of a civil engineer, Atkinson. Amongst the plans this engineer produced, was a set of drawings to build dry docks at the head of Nicholson Cove. 62 Drury proceeded with his plan to refit ships at Trincomalee and deployed the unserviceable Blanche to the

Puget to Admiralty, TNA, ADM 1/3441, 3rd October 1811.
 See appendix 7b for a study of dry docks in the East Indies.

harbour as a receiving and hauling down ship. This astute measure offset the delay in the stores houses being built by Maitland, but unfortunately came to grief with *Blanche's* subsequent running aground and loss. ⁶³

It was not until Puget arrived at Trincomalee on 2nd September 1811 that the Admiralty were provided with a detailed report on the practicality of building a dockyard, and centralising all civil naval departments at that port.⁶⁴ Puget's experience as a surveyor on Vancouver's voyage lent credence to his views on the suitability of the harbour and its capacity, but it is in his other assessments of Trincomalee that the most value can be derived.

Figure 7p is one of the sketches that Puget sent to the Admiralty that he referenced in his October dispatch. He provided details of the suitability of Nicholson Cove as a site for a dockyard, shown as a blue parallelogram, the current state of construction of the buildings commissioned by Drury, shown as GH, and a proposed site for the victualling department, shown in yellow. Puget strengthened the case to move from Madras by his evaluation of the ability to water and victual the squadron from Trincomalee, outlining how the existing contractors could be integrated. Puget considered the naval hospital at Madras to be one of the finest of its type at any overseas base, but instead recommended that a ship be stationed as a hospital at Trincomalee. To accommodate the officers and men of vessels being refitted, he recommended ships were used, with only naval yard and victualling department staff living on shore. Puget further detailed the civil naval organisation required and the nature of the workforce needed. He even detailed what and where building materials could be found. Puget's bottom line was that the ordnance, victualling, naval and medical departments, should be moved from Calcutta, Madras and Penang to Trincomalee. He considered dry docks would only be required at Bombay and that port would remain as the primary repair location, but one final consideration, that of adequate military defence needed addressing as he considered it was weak.

Governor Maitland expressed his concern regarding land defences against an invading force. Maitland wrote to Lord Liverpool, secretary of state for war and the colonies, in August 1810, stating that the defences of Trincomalee were weak against a surprise attack, which would mean the Eastern squadron would be tied to the port as it had been

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⁶³ Puget to Navy Board, TNA, ADM 106/2009, 16th September 1811.

in 1803.⁶⁵ His concern for improvement in land defences was also articulated by Governor Brownrigg, Maitland's successor in 1812, with the consequence that two towers were built named, Brownrigg and Hood.⁶⁶ Hood's meeting with the governor to improve the defences may have resulted from the Admiralty directing the admiral to make Trincomalee the principal refitting port in India and to vacate Madras.⁶⁷ With the agreement of Brownrigg to improve the defences of the harbour, Admiral Hood was able to press ahead with refitting part of the squadron at Trincomalee, and to build the naval yard.⁶⁸

Subsequent activity at Trincomalee included the deployment of Pitt, Puget's master attendant, as the first superintending officer, until ill-health forced his withdrawal. A workforce was required especially as a number of the settlers introduced by Drury had died from fever at Trincomalee in 1812.⁶⁹ Artificers and labourers were recruited from southern India and transported to Trincomalee in the late spring and summer of 1813. This was a considerable workforce of carpenters, smiths, masons, bricklayers, caulkers and labourers, as shown in the contemporary paylists.⁷⁰ They were all crown employees, giving complete independence from the East India Company. Nearly 300 artificers and labourers were taken by Wellington, the master shipwright, at the beginning of June 1813 to Trincomalee to build the establishment.⁷¹ It was not only a master builder that was sent, but also William Taylor, Puget's naval storekeeper, as the administrative officer.⁷² All that was needed now were the plans and decisions on what and where to build.

While waiting for clear directions from the Admiralty, Hood directed Puget to retain Drury's storehouses and have plans drawn for numerous buildings, including a careening wharf, capstan house, mast house, sail loft, boat house, and accommodation for a crew of a 74 gun ship. Many of these building plans have survived at the Hydrographic Office, with additional plans for office accommodation, saw pits and other buildings. Hood directed Puget to retain Drury's storehouses and have plans drawn for numerous buildings, including a careening wharf, capstan house, mast house, sail loft, boat house, and accommodation for a crew of a 74 gun ship. Many of these building plans have survived at the Hydrographic Office, with additional plans for office accommodation, saw pits and other buildings.

⁶⁵ Colgate, H., 'Trincomalee and the East Indies Squadron', 274.

⁶⁶ Colgate, H., 'Trincomalee and the East Indies Squadron', 276-277.

⁶⁷ Hood to Brownrigg, TNA, ADM 1/184, 17th September 1812. ⁶⁸ Hood to Puget, TNA, ADM 106/3216, 20th September 1812.

⁶⁹ Hood to Admiralty, TNA, ADM 1/185, 14th April 1813.

⁷⁰ Trincomalee Naval Yard paylists, TNA, ADM 42/2376.

⁷¹ Puget to Captain Hobbs (Royal Artillery), TNA, ADM 106/3216, 1st June 1813.

⁷² Hood to Puget, RMC of Canada, DA88.1.H66A4 1809 V2, 27th May 1813.

⁷³ Hood to Puget, RMC of Canada, DA88.1.H66A4 1809 V2, 28th May 1813.

⁷⁴ Dockyard and building plans for Trincomalee dockyard, UKHO, C294.

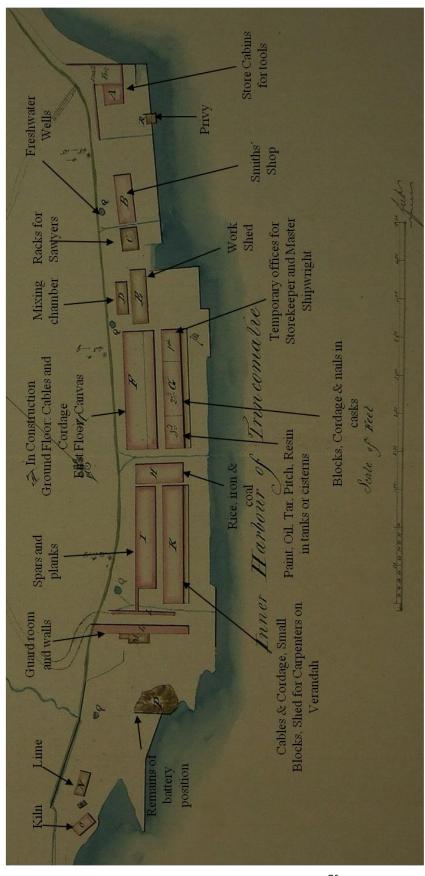


Figure 7q: Plan of Trincomalee naval yard – May 1815⁷⁵

 $^{^{75}}$ A Plan of His Majesty's Naval Yard at Trincomalee – May 1815, UKHO, C294.

The grand plans for Trincomalee were not to be executed, but it was not until the early 1820s that they were abandoned. Figure 7q shows the progress that had been made by May 1815, with building having taken place in the area adjacent to Drury's storehouses. Nicholson Cove was never to receive the dry docks, or careening wharf with capstan house. Instead the receiving ship at Bombay, *Arrogant*, was sent, arriving in June 1817 to act as a sheer hulk and to assist in careening.

The buildings required to move the civil departments from Madras were still not complete by September 1815 when Puget was forced, against his better judgement, to vacate Madras. It is Puget's letter to the Navy Board that best describes his exasperation with the lack of direction from London. He pointed out that three commanders-in-chief had died during the five years of his appointment, all with different ideas for Trincomalee and at no time had he received any directions from the Navy Board. He further pointed out that the Admiralty had not provided positive orders with regard to the victualling and medical departments, especially as these departments had excellent facilities at Madras. Puget's plea to the Navy Board was a result of the orders he had received from Burlton, the new commander-in-chief. Puget had earlier delayed the move as the military defences had not been completed, but more importantly the storehouses were incomplete, causing the stores moved from Madras by Admiral Burlton, to be damaged by white ants and rain. However, the work had progressed sufficiently to transfer the civil naval departments to Trincomalee in 1816, with the closure of the facilities at Madras in 1817.

7.4.6 Port Jackson, New South Wales

The reasons Britain established a penal colony and strategic base at Port Jackson have been the subject of many books and articles. This very short examination is to study if the colony was sufficiently mature to offer refitting and repair capability for the British navy in the French Wars. New South Wales and Van Diemen's Land were both part of the vast East Indies Station and fell within the remit of the commander-in-chief in the East Indies.

Port Jackson was established in one of the finest anchorages in the world and in 1788 was Britain's toehold on a continent. Survival was the first necessity and the tapping of local resources was at first limited, causing food and materials to be transported to the

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⁷⁶ Puget to Navy Board, TNA, ADM 106/3216, 23rd September 1815.

⁷⁷ Colgate, H., 'Trincomalee and the East Indies Squadron', 285-86.

colony for some time. Soon the colony was able to build small vessels and to harness the use of local materials, but the Navy Board continued to send naval stores. 78 A ship yard at Port Jackson is recorded as early as 1796, with Thomas Moore being appointed master boatbuilder. His later tasks included the survey and purchase of timber in New South Wales for naval purposes.⁷⁹ Commercial ship builders were also at Port Jackson, with James Underwood building many colonial vessels including the 200 ton ship rigged King George in the first decade of the nineteenth century. 80 All this indicates that resources and skills were available to assist in refitting naval vessels.

In January 1812, the Navy Board instructed Commissioner Puget to purchase 2500 Pagodas, convert them into Spanish dollars and transport them to the governor of New South Wales. 81 Puget requested a vessel for the voyage from Admiral Hood who allocated the sloop Samarang.82

The sloop arrived safely at Port Jackson in November 1812, after experiencing very severe weather and delivered the treasure to the governor. The sloop was then placed under maintenance by the artificers of the vessel, resulting in considerable caulking being carried out. On completion, the Samarang sailed in January, but sprung a dangerous leak soon after clearing the harbour making four and a half feet of water an hour. She returned to Port Jackson and went to Sydney Cove, had her stores and guns removed and was surveyed by the ship's carpenter, local shipbuilders and the recently resigned agent of the navy. The captain of the sloop explained there were very limited resources at the port for refitting and no naval stores that could be purchased as they were all reserved for colonial vessels.⁸³ The sloop could not be repaired and was subsequently sold, but this left the crew stranded. Hood briefed Puget on what had occurred and requested he arrange for Palmer and Co., who regularly traded between Calcutta and New South Wales, to bring back the Samarang's crew.⁸⁴

⁷⁸ Many references to stores being supplied can be found in the index of Navy Board to governor of New South Wales letters. Copies of these letters can be found in the Navy Board to Overseas Yards series, TNA, ADM 106/2476-2485.

⁷⁹ Loane, M., Thomas Moore, Australian Dictionary of National Biography, accessed 27th June 2011. ⁸⁰ Hainsworth, D., James Underwood, Australian Dictionary of National Biography, accessed 27th June

⁸¹ Navy Board to Puget, TNA, ADM 106/2483, 27th January 1812.

Puget to Hood, NMM, MKH/131, 19th August 1812.

83 Hood to Admiralty, TNA, ADM 1/186, 20th August 1813; contains many letters from Commander Case detailing the circumstances and surveys made.

⁸⁴ Hood to Puget, RMC of Canada, DA88.1.H66A4 1809 V2, 19th July 1813.

As this occurred almost 25 years after the colony was established, it would be safe to conclude that Port Jackson's resources were only scaled to service colonial requirements, and that the navy did not regard the port as a naval refitting location, but as a safe anchorage.

7.5 Exploiting the shipbuilding potential of the East Indies

The East Indies is unique in a study of British overseas stations, as the local economy provided ships that contributed to Britain's seapower to a greater degree than in any other area. Access to plentiful materials, a large skilled labour force in the Company's and private merchants' employment, together with financial capital had created a burgeoning shipbuilding industry. In addition, the Admiralty was interested in tapping the shipbuilding potential of India, with this resulting in considerable activity by the Navy Board's officers in India.

Henderson in his history of the operations of Britain's frigates and small ships in the Revolutionary and Napoleonic Wars has suggested that the East Indies command relied on locally built vessels for sloops and cutters. He considered that these vessels had insufficient storage capacity to cope with the six month voyage from Europe.85 Examination of the Admiralty's ship lists indicates a different, but even more interesting development in tapping Indian shipbuilding resources. The ship list records of the Admiralty⁸⁶ provide not only the names of the vessels deployed, but also the dates when they sailed from England hence indicating if a vessel was obtained in the East Indies. These records show that sloops, gun brigs and cutters were almost exclusively sent from England. However, it confirms that vessels built or captured in the East Indies were frequently purchased and commissioned into the British navy. In 1796 five East India Company vessels had been purchased to strengthen the navy, being fitted as 64 gun ships, four of which were at the Battle of Camberdown, but these were ships built in British shipyards. 87 After 1803 the Admiralty again called on Company ships, but this time on vessels that had been built in India. Table 7a lists these India built vessels purchased for the British navy.

As president of the Board of Control, Henry Dundas had championed exploiting the shipbuilding resources of India which was also explored by St. Vincent while first lord

⁸⁵ Henderson, J., Frigates, Sloops and Brigs, (Barnsley, 2005), 203.

⁸⁶ Ship lists, ADM 8/1-100, TNA.

Winfield, R., British Warships in the Age of Sail, 1792-1817, 104-105.

Name	Place built	Date	Date of Admiralty Order	Notes
Malabar (ex. mercantile Cuvera)	Calcutta	Launched 1798	30th May 1804 Purchased in England	Originally a two deck ship of 56 guns
Hindostan (ex. mercantile Admiral Rainier)	Calcutta	Launched 1799	30th May 1804 Purchased in England	Originally a two deck ship of 52 guns
Weymouth (ex. Wellesley)	Calcutta	1797	30th May 1804 Purchased in England	Originally a two deck ship of 44 guns
Duncan (ex. mercantile Carron).	Bombay	Launched 1792	29th May 1804 Purchased in India	Renamed <i>Dover</i> 1807. Frigate of 38 guns
Howe (ex. mercantile Shah Kaikisroo)	Bombay	1799	29th May 1804 Purchased in India	Frigate of 38 guns
Bombay (ex. HIEC Bombay)	Bombay	1793	29th May 1804 Purchased in India	Renamed <i>Ceylon</i> in 1807. Frigate of 32 guns
Str Francis Drake (ex. HEIC Asia)	Bombay	1797	29th May 1804 Purchased in India	Frigate of 32 guns
Cornwallis (ex. HEIC Marquis Cornwallis)	Bombay	Built 1800-1	7th June 1804 Purchased in India	Originally a 50 gun ship became a 38 gun vessel. Renamed <i>Akbar</i> in 1811
Sir Edward Hughes (ex. HEIC Sir Edward Hughes)	Bombay	1784	7th June 1804 Purchased in India	Frigate of 38 guns
<i>Hyaena</i> (ex. merchantile <i>Hope</i>)	India	Launched 1800	Purchased in England June 1804	Frigate of 28 guns
Lilly (ex. HEIC Swallow)	Bombay	1779	Purchased in England May 1804	Ship Sloop of 16 guns

Indian built ships purchased for the British navy⁸⁸ Table 7a:

⁸⁸ Winfield, R., British Warships in the Age of Sail, 1792-1817.

of the Admiralty. However, purchase of vessels in 1804 have a hint of panic. This may have resulted from St.Vincent's disastrous handing of civil naval affairs and his run down of the navy resulting in a temporary shortage of ships. With St. Vincent leaving office on 15th May 1804⁹⁰ it was the first action of his successor, Melville, to issue instructions to India to purchase escort vessels. This appears to have been an urgent order, as the letters to Rainier were sent via the overland route. The Admiralty's first letter requested, 'purchase without loss of time upon the best and cheapest terms in your power four ships fit for His Majesty's service capable of carrying 36 to 40 guns'. It added that Rainier was to fit out the ships, with the Admiralty sending officers and men for them. On the heels of that letter came another, naming two additional ships to be purchased, the *Sir Edward Hughes* and *Cornwallis* and added, that the Ordnance Board would be sending out 18 pdr. cannon and carriages for these ships. Copies of these orders were also sent to Pellew, who is usually credited with the purchase of these vessels, but Rainier again, in his quiet way, had probably already prepared the ground.

These nine fifth rate Indian built ships, purchased from the Company or Indian merchants, were a small contribution to naval strength, but compared to the number of such frigates stationed in the East Indies, they was significant. In the 1808 to 1811 period, approximately 15 fifth rates were in the squadron, so on balance these emergency purchases contributed over 50 percent of the force. ⁹³ If one includes the two frigates ordered from Bombay, *Doris* and *Salsette*, together with the Penang built frigate, *Malacca*, this contribution figure increases to 75 percent. In reality some of these purchased ships were soon relegated to auxiliary roles as storeships, but *Ceylon*, *Dover*, *Cornwallis* and the *Sir Francis Drake* all gave service in the east from their purchase and continually throughout the critical years of 1805 to 1811. The *Dover* was lost in 1811 but the Navy Board had instructed, before being notified of her lost, that *Dover*, *Sir Francis Drake*, and *Akbar (ex. Cornwallis)* were to be sent to England. It further stated that, if they were not suitable as warships, but in a sound condition, they were to be sent home to become storeships. ⁹⁴ This was to be the case for *Sir Francis*

⁸⁹ Knight, R., *The Pursuit of Victory*, 437-439; Morriss, R., 'St. Vincent and Reform, 1801-04', *MM*, 1983, Vol. 69, No. 3, 269-289.

⁹⁰ Crimmin, P., John Jervis, earl of St. Vincent, *DNB*, accessed 22nd March 2011.

⁹¹ Admiralty to Rainier, TNA, ADM 2/937, 29th May 1804.

⁹² Admiralty to Rainier, TNA, ADM 2/937, 7th June 1804.

⁹³ Not all the ships shown in table 7a served in the East Indies but were substituted by ships from Britain.

⁹⁴ Navy Board to Dundas, G., TNA, ADM 106/2482, 27th February 1811.

Drake which was converted to a storeship at Deptford in 1813, before being sold in 1825. 95

As the nine Indian built frigates exemplify, the sub-continent was able to build European style ocean-going ships mainly from indigenous sources. The ability of the Bombay Presidency to build ships of high quality had been known from the Company's earliest occupation. Table 7a illustrates that the Calcutta shipbuilders were also able to build large ships. It was in this period that Calcutta overtook Bombay as the principal shipbuilding location in India. Milburn observed in his 1813 survey of oriental commerce that, 'Bombay [..] has always been famous for shipbuilding, and formally supplied Bengal and other parts of India with shipping, and when any considerable repairs were wanting, they were obliged to proceed to Bombay to have them effected. Many fine ships have lately been built at Bengal, so that branch of commerce at Bombay has rather diminished.'96 This growth in local shipbuilding appears to have been a consequence of the need for country trade vessels. These ships traded within the East Indies and hence were not subject to the Company monopoly. The increase in the wealth of individuals in India provided the capital required for these ships while the outbreak of the Revolutionary War in 1793, limited the availability of ships from Britain and provided the impetus for growth in indigenous shipbuilding.⁹⁷

Appendix 7d shows that although Bombay was still a major shipbuilding location in the first two decades of the nineteenth century, it had been overtaken by Calcutta in both the numbers of ships and in total tonnage constructed. What is also noticeable is that Rangoon in Burma, a non-East India Company controlled area, contributed ships for country trade merchants. With the exception of Bombay dockyard, the contribution of other shipbuilding ports for building warships was minimal. However, this burgeoning of indigenous shipbuilding confirms the presence of a plentiful skilled workforce and the availability of building materials. Figure 7r shows the locations of the principal shipbuilding areas within India in the first two decades of the nineteenth century and confirms, that apart from Coringa, the activity was concentrated in three areas.

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⁹⁵ Winfield, R., British Warships in the Age of Sail, 1792-1817, 213-214.

⁹⁶ Milburn, W., *Oriental Commerce, containing a geographical description of the principal places in the East Indies with their produce, manufactures and trade*, Vol. 1, (London, 1813), 171.

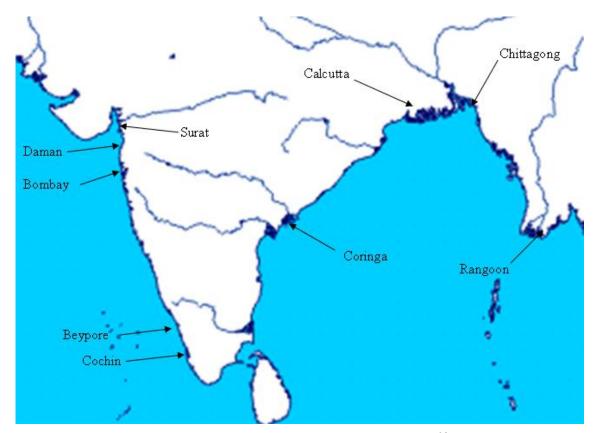


Figure 7r: The principal India shipbuilding areas, 1800-1819⁹⁸

Appendix 7d shows that the number of ships built at Bombay from 1800 to 1819 was exceeded in number by both Rangoon and Chittagong, but Bombay exceeded them in total tonnage. The chief reason for this was the specialised nature of the ships built at Bombay, particularly the warships constructed for the British navy. Between 1804 and 1819 five ships of the line, five frigates, two sloops and two gun brigs were ordered from Bombay dockyard, together with a number of duplicate frames being transported to British dockyards for completion. It would seem that two factors played a part in the British government entering into an experiment with Indian built ships. Firstly, a combination of a shortage of British oak and other European timber and secondly, to capitalise on the cooperation between the Board of Control and the Court of Directors to utilise Bombay's potential. What is significant is that knowledge of the potential of Indian shipbuilding grew considerably during the Napoleonic War. A parliamentary report, published in 1805, 99 a letter from the master builder of the Bengal Marine in 1808, 100 together with a manuscript report in 1810 from the marine superintendent at

⁹⁸ Phipps, J., *A collection of papers relative to Shipbuilding in India*, (Calcutta, 1840); Kirk, W., Shipbuilding in Southern Asia Ports, 266-275.

⁹⁹ Papers presented to the House of Commons, respecting Prince of Wales Island in the East Indies, House of Commons Parliamentary Papers, 25th February 1805.

¹⁰⁰ Letter from James Kyd to Rear-Admiral Drury in 1808, On Indian Timber and Ship Building, Phipps, J., (ed.), *Shipbuilding in India*, 7-35.

Bombay, 101 followed by his later published work in 1811, 102 provides considerable contemporary evidence on the shipbuilding potential of the East Indies. It was to Bombay however that attention was initially drawn for building vessels for His Majesty's fleet.

In July 1801 St. Vincent, the newly appointed first lord of the Admiralty, wrote to Henry Dundas, a long time chairman of the Board of Control, on the subject of building ships for the navy at Bombay. Dundas replied he had discussed the issue with Baring and that the Court of Directors had no objections. 103 This line of thought on warship building in India was pursued by St. Vincent, one reason being timber shortages in Britain. St. Vincent wrote to the chairman and deputy chairman of the Court of Directors in March 1802, requesting that the Company limit the tonnage of vessels built for the Company in Britain to 800 tons, thus preserving all timber of a large size for the Royal Navy. It was in the second part of this letter that St. Vincent broached the subject of the Company to undertake annually the building of a ship of the line and a frigate at Bombay. 104

This seems to have been agreed by the Company officials as St. Vincent informed the prime minister a few days later that Nepean, secretary of the Admiralty, would consult him on building ships at Bombay. 105 The first lord wrote again to the Company requesting an overland dispatch was sent to the Bombay government asking that they collect and prepare timber to the ships. Nepean formally told the Navy Board of the agreement to build warships at Bombay in May 1802, requiring them to consult with the Company on what items would be required at Bombay for these vessels. 106 Ramsay, the secretary of the East India Company, wrote to the Bombay government asking them to comment on the practicality of annually building 74 and 36 gun ships at Bombay. It was not until June 1803 that Ramsay was able to confirm to the Admiralty, the Bombay government's agreement. The shipbuilders at Bombay requested that the Navy Board supplied upper masts and spars, copper and iron items and drawings, but that lower

Money to Duncan, Governor of Bombay Presidency, TNA, ADM 106/2008, 22nd January 1810.

¹⁰² Money, W., Observations on the Expediency of Shipbuilding at Bombay for the service of His Majesty, and the East India Company, (London, 1811).

Dundas to St. Vincent, 14th July 1801, Bonner Smith, D. (ed.), Letters of Admiral of the Fleet Earl St. Vincent whilst First Lord Admiralty - Vol. 1, NRS, (London, 1922), 301.

¹⁰⁴ St. Vincent to chairman and deputy chairman of East India Company, 31st March 1802, Bonner Smith, D. (ed.), Letters of Admiral of the Fleet Earl St. Vincent whilst First Lord Admiralty - Vol. 2, NRS, (1927), 241-242.

¹⁰⁵ St. Vincent to Addington, 3rd April 1802, Bonner Smith, D. (ed), Letters of Admiral of the Fleet Earl St. Vincent whilst First Lord Admiralty – Vol. 2, 242-243.

Nepean to Navy Board, TNA, ADM 106/3123, 12th May 1802.

masts of teak would be locally supplied.¹⁰⁷ A frigate was subsequently laid down with her launch in January 1805, followed by her commissioning as *Salsette*. She was followed by another 36 gun frigate being laid down in April 1806 and her subsequent commissioning as *Doris* in 1808.¹⁰⁸

The building of the 74 gun ship encountered problems before being laid down as Bombay practice was to build large ships in dry docks, rather than on slipways, meaning a new dry dock would be required to ensure the squadron always had access to a dry dock for its battleships. To accommodate the construction of the ship, Duncan dock had to be built before the 74 gun ship *Minden* had her keel laid in December 1807.¹⁰⁹ She was not floated out and sent to England for completion until 1810. A further problem was whether timber of sufficient size could be found. Extracts of letters from Ramsay illustrate this problem, with the Bombay superintendent of marine, reporting the difficulty of obtaining timber for a 74 gun ship.¹¹⁰ This timber problem was overcome, but supply was hand to mouth throughout the period.

Salsette, Doris and Minden completed the initial building phase and it was not until July 1810 that the next ship was requested. This was for a 74 gun ship to be named Cornwallis which was built after Minden had been launched. The Admiralty also directed that timber was collected and prepared for another 74 gun vessel. This kit of parts was to be shipped home in the Cornwallis for assembly in Britain. However, the order for this vessel did not proceed smoothly. The Navy Board enquired, of the Admiralty, on what contractual terms should the vessel be built. Would this be, as before, with the Company paying for construction and then being paid on completion? If so, they pointed out, Commissioner Dundas would have no control over costs. The Navy Board wanted this control, as they reported the Bombay built frigate Salsette had cost £20667, excluding supplied items, whereas a British merchant built frigate of similar type had cost £17729 and a Chatham built frigate only £16187.

The method of payment for the *Cornwallis* disclosed the poor financial state of the East India Company and provided the navy with another method of funding shipbuilding and supplying the East Indies squadron with stores. Firstly, the Admiralty stated, the method

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¹⁰⁷ Navy Board to Admiralty, TNA, ADM 106/3123, 5th May 1803.

¹⁰⁸ Winfield, R., British Warships in the Age of Sail, 1792-1817, 158.

Walia, R., The Bombay Dockyard, Bombay, 1955, 54.

¹¹⁰ Ramsay to Admiralty, TNA, ADM 106/3123, 26th July 1804.

¹¹¹ Navy Board to Commissioner Dundas, TNA, ADM 106/2481, 1st September 1810.

¹¹² Navy Board to Admiralty, TNA ADM 106/3123, 20th August 1810.

used regarding payment for *Minden* was to be continued for *Cornwallis*; 113 secondly, the Company had been provided with £1.5 million by Act of Parliament in June 1810; 114 thirdly, the commissioner at Bombay was to keep a detailed record of all naval expenditure as this would be offset against the £1.5 million. 115

A temporary cancellation of the project by the Admiralty occurred when Commissioner Dundas reported that the Bombay government had released timber, collected for naval vessels, to build merchant ships. 116 However, the Court of Directors assured the Admiralty they would pull the Bombay authorities into line and the order was recommenced. The prompt action of the commissioner, ensured that the ship was built with his role being one of naval overseer ensuring that value for money was delivered. 117 The progress on Cornwallis continued apace and can be traced in the weekly reports of the master builder to the commissioner, with examples surviving when Commissioner Puget was the temporary commissioner in 1812. 118

When Commissioner Dundas returned home from Bombay on health grounds, it provided the Admiralty with an opportunity to obtain first hand experience from a navy official, of the building potential at Bombay. The Admiralty asked the Navy Board to obtain Dundas's views on building brigs of 382 tons or gun-brigs at Bombay. 119 The Navy Board replied that two brigs of 382 tons and two lesser vessels of 179 tons could be built at the same time, and that Commissioner Dundas was of opinion they could be built at a lower cost provided a large ship or frigate was also being built. 120 Armed with this information, the Admiralty placed another order with the Company on 2nd October 1812 for a 74 gun ship, two brig sloops of 382 tons, two brigantines of 237 tons with frames for a further five ships to be brought home in these vessels. 121 This was quickly followed by more orders that month for two frigates, Amphitrite, and Trincomalee, to be built. 122 Further orders for a third rate and a fifth rate frigate were made in September

¹¹³ Admiralty to Navy Board, TNA, ADM 106/3123, 25th August 1810.

¹¹⁴ A bill for granting to His Majesty a sum of money, to be raised by exchequer bills, and to be advanced and applied in the manner and upon the terms therein mentioned, for the relief of the United Company of Merchants of England trading to the East Indies, 19th Century House of Commons Sessional Papers, Session 1810, Vol. 1, Page 559.

Navy Board to Commissioner Dundas, TNA, ADM 106/2481, 1st September 1810.

¹¹⁶ Dundas to Navy Board, TNA, ADM 106/3123, 4th April 1811.

¹¹⁷ Admiralty to Commissioner Dundas, TNA, ADM 106/3123, 6th December 1811.

Master builder Bombay to Puget, NMM, MKH/131, 27th July 1812 to 30th November 1812.

¹¹⁹ Admiralty to Navy Board, ADM 106/3123, 27th August 1812.

¹²⁰ Navy Board to Admiralty, ADM 106/3123, 30th September 1812.

Navy Board To Commissioner Johnston, ADM 106/2484, 14th & 21st October 1812. Navy Board To Commissioner Johnston, ADM 106/2484, 23rd & 31st October 1812.

1813,¹²³ but October 1812 was the high water mark in the experiment in overseas warship building.

Had the monograph ¹²⁴ of William Taylor Money, published in 1811, influenced the Admiralty? Money, the ex marine superintendent and naval storekeeper at Bombay, wrote on the advantages to Britain of building a fleet at Bombay. It would be mere conjecture to suggest this, but Money presented a detailed argument for such a fleet. Not only did he point out the advantages of teak, the quality of the ships built at Bombay and the growing shortage of British oak timber, but also produced a proposal based on through-life hull costs for such a fleet. His model compared the longevity of vessels with teak, to those with oak for their hulls. Using as an example, a fleet designed for service in Eastern or West Indian waters, he postulated that over a fifty year period the oak ships would have a life of only 15 years, and hence would have to be renewed three times, whereas the teak vessels would last the full period. His calculations showed a teak fleet was approximately 21 percent of the cost of a force constructed of oak. ¹²⁵ A brief look at the subsequent careers of the Bombay built vessels shows that Money was not over optimistic on the life time of such teak ships.

From 1800 Calcutta was the principal area for shipbuilding in India, but no orders were placed there for naval vessels. As the private shippards were engaged in commercial work perhaps there was little spare capacity for naval contracts; besides that, Calcutta was seen as a very expensive refitting location by naval officials in London and the east. Both these factors would work against naval contracts, a case of naval work only arising from customer necessity on an already busy market, resulting in commercial suppliers being able to inflict high charges. Another factor was the limited knowledge of the ability of Calcutta to build ships, or support the navy. At Drury's request James Kyd, the master builder of the Bengal Marine, wrote a long dispatch in 1808, in which he detailed many aspects of Bengal shipbuilding, especially the sources of materials and whether they could be supplied from the east, or depended on imports. The chief difference between Bombay and Calcutta built vessels was the construction material of the ship's hulls. The Calcutta ships used saul¹²⁶ timber, a product of Bengal, for every part of the hull except the deck and outside planks, which were of teak imported from

¹²³ Navy Board to Commissioner Johnston, ADM 106/2486, 7th September 1813.

Money, W., Observations on the Expediency of Shipbuilding at Bombay for the service of His Majesty, and of the East India Company.

Money, W., Observations on the Expediency of Shipbuilding at Bombay, 53-55.

¹²⁶ Saul or sal timber, *Shorea Robusta*, *The Wood Explorer Database*, accessed 3rd September 2011, http://www.thewoodexplorer.com/maindata/we1088.html.

Pegu, Burma. Bombay ships' hulls were teak throughout. 127 Kyd's letter did not result in Drury commissioning work from Calcutta, but it greatly increased his understanding, especially when it touched on the comparative merits of setting up a shipbuilding facility at Penang. 128

The merchants of Calcutta offered to fund and built a 74 gun ship to demonstrate their ability to construct such a vessel at that port. 129 Hood reported the Calcutta merchants' proposal to the Admiralty in January 1814. The Admiralty stated it had no objection to this project but that on arrival in Britain the ship would be surveyed before it was agreed to purchase her for the navy. 130 This ship was to become the *Hastings*, launched in January 1818 and hence outside the period covered by this thesis. However, she was unique in two ways. Firstly, she was built of Bengal saul with teak planking; secondly, she was constructed on a slip-way and launched in conventional manner, the first time in India for a vessel of this size. 131 The Calcutta merchants were unsuccessful in obtaining orders from the Admiralty, a case of too little too late, but they demonstrated the potential of Bengal. The second Viscount Melville, first lord of the Admiralty, stated regarding ships for the navy from that port, 'Calcutta and the means of building there is not very tempting particularly as to the timber. The saul which they offer us at Calcutta may be equal to the Malabar teak; but we have most favourable experience of the one and none of the other.' 132

It was not only Bombay and Calcutta where the navy had warships built for them in the east during these wars, as Prince of Wales Island, Penang also constructed a frigate. As detailed earlier in this chapter, the building of warships at Penang was part of a larger plan and strategy to turn Prince of Wales Island into a naval base, for a reconfigured command structure in the East Indies.

Naval Stores – Potential and exploitation of East Indian resources 7.6

'Hearts of oak are our ships' 133 is the opening words of the chorus to the Royal Navy's official march and reminded Britons that their victories of 1759 were based on British

¹²⁷ James Kyd to Drury, 'On Indian Timber and Ship Building', Phipps, J., (ed.), *Shipbuilding in India*, 7.

¹²⁸ James Kyd to Drury, 'On Indian Timber and Ship Building', Phipps, J., (ed.), *Shipbuilding in India*, 9.

¹²⁹ Merchants of Calcutta to Admiralty, British Library, IOR/F/4/466 11275, November 1813.

¹³⁰ Admiralty to Hood, TNA, ADM 2/938, 6th July 1814.

¹³¹ Lee, I., Commodore Sir John Hayes: His Voyage and Life (1767-1831), (London, 1912), 239-240.

¹³² Melville to Sir Richard King, National Archive of Scotland, GD/51/2/609, 1st January 1820.

¹³³ Garrick, D., Lyrics of a song Hearts of oak are our ships from Harlequin's invasion first performed in 1759, Oxford Dictionary of Dictionary of Quotations, accessed 1st June 2011.

oak and valour. The threat to British naval power from a shortage of shipbuilding timber interested the historian, R. G. Albion¹³⁴ early in the last century and gave rise to many studies in this area.¹³⁵

The growth of native oak and elm trees in Britain was promoted by the British state, together with the search for sources of foreign oak and other timber. In emergencies, alternatives to seasoned oak were available and unseasoned oak, fir and pine ships were built. This was an expensive strategy, as the life of these vessels was short, but they could still operate effectively.

Although alternatives were available for hulls, which still allowed a ship to be effective, if sub-standard materials were used for masts and spars then the performance of a vessel could be seriously affected. European and American pine was the preferred material, with shortages of large diameter timber being compensated for by the construction of composite masts (made masts). The pine from the Baltic and North America was the favoured material because it combined strength with light weight, compared with most other substitutes that were tried. European and American pine was reliable, had known properties and was therefore predictable in performance.

The investigation of the quantities of timber available, their individual properties and availability for both local consumption and export from the East Indies and the Cape of Good Hope are studied later in this chapter. However, it was the efforts made to harness the potential of the East Indies to provide hemp that could have made a significant contribution to Britain's war effort.

7.6.1 Cordage

quantities, to no

The items used to hold the masts in position, to raise and lower upper masts and spars, to 'work the ship' and harness the wind, all demanded hemp. Unlike the hulls and to a lesser extent the masts and spars, there was not a satisfactory substitute, in sufficient quantities, to hemp based products.

Albion, R., Forests and Seapower: The Timber Problem of the Royal Navy, (Cambridge, Ma, 1926).
 Knight, R., 'New England forests and British seapower: Albion revisited', American Neptune, Vol. 46, (1986), 221-229, Crimmin, P., "A great object with us to procure timber": The Royal Navy's search for ship timber in the Eastern Mediterranean and Southern Russia, 1803-1815', Journal of International Maritime History, Vol. 4, (1992), 83-115, Crimmin, P., 'The supply of timber for the Royal Navy, 1803-1830', The Naval Miscellany Vol. VII, NRS, (Aldershot, 2008), 191-234.

The finest hemp came from Russia and was used to make cables and ropes (cordage) and canvas. By using the best material available, the strongest, lightest and most reliable sails, anchor cables and ships' rigging could be manufactured. By using these high quality items, the ships could be sailed with confidence and with the maximum operational efficiency. The use of lower quality material reduced the effectiveness of ships and probably contributed to lower moral, as lives depended on the strength of the materials.

Figure 2b in chapter two illustrated the dependence on Russia for the supply of hemp, with at least 95 percent of that vital commodity coming from that state between 1797 and 1806. The Commission of Naval Revision's fifteenth report also stated only two percent of hemp imports came from British controlled territory. Without access to Russian raw material, the canvas, ropes and cables required for the British naval and merchant fleets would not be available at the quality and quantity necessary to maintain trade or defend the realm. This overwhelming dependence on Russia for this critical commodity caused both the British government and the East India Company to look to the east to reduce their reliance on these Baltic supplies. There were two imperatives to the reduction, or possibly removal, of the use of Russian hemp, commercial and strategic.

For the Company, the ability to exploit the hemp growing in India could provide an income from the raw material, or from finished products. Market forces ruled that the quality of the manufactured goods and raw hemp produced had to reach a similar standard to Russian material with a comparable price. During peace-time Indian hemp was unlikely to be competitive, as there was unhindered access to the plentiful Baltic supplies, but during war the economics of the venture made sense. It was therefore during crises in wartime, that the strategic and commercial imperatives drove British authorities to the exploitation of Indian hemp or other East Indian cordage substitutes. Two such crises occurred, the first during the Second League of Armed Neutrality from 1800 to 1801 and the second following the Treaty of Tilsit in 1807.

In 1791 it was first suggested by the Board of Trade that hemp was cultivated in the Bengal Presidency with items manufactured locally for sale in Britain. 136 The Court of Directors saw the potential of this proposal, including the possibility of reducing its use

¹³⁶ Board of Trade (Bengal) to EIC Court of Directors, TNA, BT 6/101, March 1791.

of Russian material. 137 However, it was not long before it was realised that the quality of Bengal (sunn) hemp was poor, causing the Company to explore methods to improve the cultivation and processing of the raw material. Bengal was not the only area where hemp was available in India, as the Court of Directors were informed that high quality hemp was available on the Malabar coast and Salsette Island near Bombav. 139

It was in this light that the first crisis occurred, causing the cost of Russian hemp to escalate from £23-10s-0d per ton in 1792 to £61 in 1800, with this rise in price boosting the opportunity for Company hemp. 140 By 1802 the Navy Board obtained samples of sunn hemp, canvas and cordage, and carried out tests on these items to determine their suitability for use in service. The trials appear successful, as the Navy Board informed their storekeepers at Bombay and Madras that they fully expected the East Indies squadron could be supplied with locally manufactured cordage and canvas. 141 This would have been a desirable outcome for the Navy Board as it would have removed the need to send out transport ships with European stores. By 1807 manufacture of hemp cordage in India had still not occurred, in spite of the Navy Board sending out machinery for that purpose, but with the Treaty of Tilsit the necessity of Indian manufacture changed from desirable to urgent in the minds of the British.

	1805	1806	1807	1808	1809	1810
Europe (£)	512327	619911	639462	214240	719239	750834
Asia (£)	5995	404	3794	1780	8524	60132
Total (£)	520127	621757	645063	217828	729572	812776

Imports of hemp (rough) to Britain 142 *Table 7b:*

Table 7b shows the immediate influence of the Tilsit Treaty and subsequent war with Russia. Imports of European hemp dropped in 1808 to approximately a third of that in 1806 and 1807, but it was not until 1810, that a significant quantity of hemp arrived from Asia. The table also shows that it was not hemp from Asia that saved Britain from a critical shortage, as methods were found to circumvent Napoleon's Continental

¹³⁷ EIC Court of Directors – secret note, TNA, BT 6/101, 23rd October 1793.

¹³⁸ Sinclair, G., to EIC Court of Directors, TNA, BT /101, 22nd January 1798; Bengal Marine minutes to EIC Court of Directors, TNA, BT 6/101, 12th March 1799.

¹³⁹ Tate, P., to EIC Court of Directors, TNA, BT 6/101, 13th February 1796.

¹⁴⁰ EIC Court of Directors to Bengal Government, TNA, BT 6/101, 10th October 1800.

¹⁴¹ Navy Board to Hoseason, TNA, ADM 106/2476, 19th December 1803.

¹⁴² An account of the value of all imports into and all exports from Great Britain, in the years 1805, 1806, 1807, 1808, 1809 and 1810, House of Commons Papers, Order dated 16th May 1811 and printed 28th February 1812, Vol. 10, Page 79.

Blockade. The use of diplomacy, neutrals and forged paperwork backed by a powerful Baltic fleet were the methods employed by Britain to maintain their supplies of hemp and other Baltic naval stores. 143

The Navy Board could not assume in late 1807 that access to Russian hemp could be maintained, causing them to look for methods to mitigate this potential disaster. Their recommendations to the Admiralty were two-pronged regarding Indian hemp and the East Indies squadron. To obtain material for the rope-yards in Britain they recommended 20000 tons of sunn hemp was imported at a cost of £31 per ton by 1811. 144 Their second recommendation was to halt supplies of European cordage and canvas to the East Indies and instead to direct Pellew, the commander-in-chief, to obtain his squadron's needs by using local raw materials and manufacturing capability. 145

Pellew complied with the Admiralty's directions resulting in two rope-walks being commissioned, one at the newly re-built Madras hospital and the other at Bombay. Considerable investment was made in the attempt to obtain locally manufactured cordage from sunn hemp at Madras over the next four years, but the ropes obtained were of poor quality and potentially dangerous in use. The cordage manufactured at the Bombay rope-walk could produce acceptable cordage as it used higher quality hemp, salsette, but inadequate control of the hemp purchased frequently resulted in unacceptable rope.

The commitment of the Navy Board to manufacturing cordage at Madras and Bombay extended to sending ropemakers, hemp dressers and spinners from Britain. 146 These artificers arrived in January 1811, but although they could increase production, they were unable to improve the quality of the rope manufactured at Madras. The Madras artificers were sent home in early 1812 and rope-making abandoned. Sunn hemp was an unsuitable material and could not make acceptable rope. 147 The cordage manufactured from salsette hemp appeared to be more successful with Commissioner Dundas purchasing a rope-walk to increase production. 148 Unfortunately the cordage supplied to

¹⁴³ Crosby, A., *America, Russia, hemp and Napoleon*, (Ohio State University Press, 1965); Ryan, A., 'The Defence of British Trade in the Baltic, 1807-1813', English Historical Review, Vol. 74, (1959), 443-466; Voelcker, T., Admiral Saumarez versus Napoleon – The Baltic, 1807-1812.

¹⁴⁴ Navy Board to Admiralty, TNA, ADM 1/184, 5th May 1808, in digest of letters dated 11th September 1811.

185 Admiralty to Pellew, TNA, ADM 2/937, 8th December 1807.

¹⁴⁶ Navy Board to Dundas and Hall, ADM 106/2480, 4th April 1810.

¹⁴⁷ Navy Board to Puget and Drury, TNA, ADM 106/2482, 21st March 1811.

¹⁴⁸ Navy Board to Johnston, TNA, ADM 106/2484, 7th July 1812.

the navy failed in service. On investigation it was found that poor quality control standards had contributed to unsatisfactory rope being manufactured. Admiral Hood on examining the operation considered that Dundas had unwisely purchased the rope-walk and had not put his European artificers to best use in the purchase of local hemp or in its preparation. 149

Of the Navy Board's recommendations in 1807, both failed, but of the two the importation of sunn hemp was more unsatisfactory. By 1811 the Navy Board had paid the Company £268394 for only 2311 tons, all of which was unusable. On attempting to cancel the contract and return the hemp, they were instructed by the Treasury to advance to the Company another £100000. 150 At least in India rope-walks were commissioned and some useful cordage had been produced.

Although the exploitation of Indian hemp for cordage had been unsuccessful, the canvas that was produced at Calcutta proved satisfactory in service. Other substitutes for European cordage were available in the east, but only for limited purposes and only The local cordage material most mentioned in available in small quantities. contemporary reviews of Indian shipbuilding was coir. Coir 151 was both light and elastic, used primarily for running rigging and it was particularly good when wet in seawater making it very suitable for cables. Its greatest disadvantages were the limited amount of processed raw material, it rotted in fresh water and was not suitable for standing rigging. 152 However, Maria Graham records in her journal that whilst coir rope rotted in fresh water, it was used for standing rigging being protected by wax cloth and hempen yarn. 153 Kyd and Graham record other local substitutes, such as ejoo, plantain and imports of Manila rope, but these were only available in very limited quantities.

Puget on his arrival in India wrote to the Navy Board in January 1811 and gave them an informed view on local cordage and canvas supplies. Coir cables and ropes, for use only as running rigging, were being obtained for the East Indies squadron. Imports of high quality rope from Manila were being obtained with Puget commenting that although this rope swelled when wet, with consequent shrinkage on drying, it was strong and

Hood to Johnston, RMC of Canada, Massey Library, DA88.1.H66A4 1809 V2, 3rd March 1813.
 Navy Board to Admiralty, TNA, ADM 1/184, 13th August 1810, in digest of letters dated 11th
 September 1811; Navy Board to Admiralty, TNA, ADM 1/184, 3rd July 1811, in digest of letters dated 11th September 1811.

¹⁵¹ Coir is manufactured from the husks of coconuts.

¹⁵² James Kyd to Drury, 'On Indian Timber and Ship Building', Phipps, J., (ed.), Shipbuilding in India,

¹⁵³ Graham, M., Journal of a short residence in India, (Edinburgh, 1813), 85-86.

durable. In spite of this local supply Puget recommended that regular supplies of cordage and canvas were still sent from Britain. He suggested another 18 months was required so the quality of the manufactured cordage could be assessed and advantageous contracts arranged with the merchants at Calcutta. The plan, by the Navy Board, to make the East Indies squadron independent of European supplies was eventually abandoned as the local supplies of hemp rope never reached an acceptable standard.

7.6.2 Timber

Exploitation of the timber resources of the Indian Ocean had more success. Imports of masts and spars were required from Britain, in spite of the hopes that India, New Zealand, Norfolk Island and New South Wales could supply these items. The dependence on European and North American for these articles was well known, with Money and Kyd in their letters detailing this fact. Lower masts could be made of teak and for some light upper masts and spars, local poon timber could be utilised, although European and North American pine was preferred. Navy Board and local storekeeper letters frequently referred to the supply of masts and spars of European origin throughout the period, indicating that dependence on this source never ended.

The search for timber resources in the East Indies and across the southern ocean was ever present in this period. This ranged from kauri spars from New Zealand, ¹⁵⁷ the hoped for pine masts from Norfolk Island, ¹⁵⁸ timber from Madagascar and the Cape of Good Hope in the southern seas to Java, Burma, Ceylon and the forests of India in the East Indies. The organisation established to record what was available and to report on the ease of exploitation is impressive. For the territories under Company control, officials were appointed as conservers of the forests and together with other employees such as Kyd and Money they provided a working knowledge of the resources available. For Ceylon the colonial government and British naval officials recorded the potential, ¹⁵⁹ but for areas such as Burma it became more difficult. Burmese teak was widely used in

¹⁵⁴ Puget to Navy Board, TNA, ADM 106/2009, 16th January 1811

¹⁵⁵ James Kyd to Drury, 'On Indian Timber and Ship Building', Phipps, J., (ed.), *Shipbuilding in India*; Money to Duncan, TNA, ADM 106/2008, 22nd January 1810.

¹⁵⁶ Poon, *Calophyllum inophyllum*, Tree with wide distribution in East Indies and still used for masts and spars., *AgroForestryTree Database*, accessed 4th September 2011, http://www.worldagroforestrycentre.org/sea/Products/AFDbases/AF/asp/SpeciesInfo.asp?SpID=2.

¹⁵⁷ Hawkins, C., 'To New Zealand for Kauri', MM, Vol. 51, No. 4, 1966, 315-328.

¹⁵⁸ Frost, A., 'The choice of Botany Bay: The scheme to supply the East Indies with naval stores', *Australian Economic History Review*, Vol. 15, (1975), 1-20.

¹⁵⁹ Office of the Commissioner of Revenue and Commerce Ceylon, Enumeration of the Woods of Ceylon, NMM, MKH/233, April 1810.

Calcutta shipbuilding and was considered plentiful, as even though accurate estimates were not available, timber could always be obtained. With the capture of Java, numerous reports were sent on the island's potential for shipbuilding timber. ¹⁶⁰

New Zealand was to become a supplier of highly regarded masts and spars, but this was of minimal importance in this period. For Madagascar, Stopford the commander-inchief at the Cape, reported to a query from the Admiralty that although good timber could be obtained, the climate was unhealthy for six months of the year subsequently concluding the timber that could be removed was not worth the lives of the Europeans involved. 161 However, considerable effort was made to obtain timber from Plettenberg Forest at the Cape of Good Hope. The master shipwright at the Cape in 1798 reported that fine shipbuilding timber was available in Plettenberg Forest. Following the reoccupation of the Cape in 1806, the idea to obtain this timber was revived. It was left to Commissioner Shield to progress this project in 1809, resulting in the export of stinkwood logs and planks to Britain. To expedite the export of this timber, the Navy Board in 1811, sent Mr. A. F. Jones, a quarterman of shipwrights at Portsmouth, to act as purveyor of Plettenberg Forest. The efforts of Shield and Jones to survey, plan and remove timber for export can be followed in detail providing an understanding of the role of a purveyor and the difficulties encountered at such remote locations. 162 Following the survey and plans required to remove the timber it was realised it was an uneconomic source for the navy. It was at this point in 1813 that the project was abandoned with Jones returning to Britain.

Until 1812, the knowledge of the resources of India resided with Company employees and private individuals. With the arrival of Matthew Wellington as master shipwright at Madras, Hood took the opportunity to use a public servant to determine the available resources.

Puget informed Matthew Wellington in October 1812 that Hood had requested the master shipwright accompany him to Bombay. Hood wished to determine to what extent Indian and Ceylon's timber and hemp could be depended upon for shipbuilding and repair. Puget's directions to Wellington are instructive as he directed him to look for masts and spars, equal to the requirement of squadrons of differing numbers and

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¹⁶⁰ Hopkins to Second Lord Melville, NAS, GD 51/2 487/1-2, 22nd August 1813.

¹⁶¹ Stopford to Admiralty, TNA, ADM 1/64, 2nd January 1812.

¹⁶² Letter book of Commissioner Shield concerning timber at Cape of Good Hope, TNA, ADM 106/3570, March 1811 to May 1813.

composition. Wellington was to consider the potential growth of both the teak and poon trees together with the facilities available for moving timber from the felling and preparation grounds to a beach. This was even to include the practicality of a railway to move timber, as well as labour requirements and likely wage rates. Puget also wanted statistics on quantity and quality on the trees available, together with their local uses. He requested samples of black ebony, satin wood and iron wood for dispatch to Britain. On arrival at Bombay, Wellington not only reported on the timber and hemp of Ceylon and the Malabar Coast, but of the timber that was being prepared for export to Britain. Included in his Bombay investigations was the quality of the ships being built plus the methods used by the native builder and artificers, to ascertain their knowledge of the general principals of shipbuilding. ¹⁶³

Wellington's report to Puget was comprehensive providing valuable information and opinion on the trees and hemp around Trincomalee, Point de Galle and the regions adjacent to the ports of the coast of Malabar. 164 The master shipwright detailed the type and number of trees he had found, together with their size and local uses. Concerning the hope to supply the squadron with masts and spars from Ceylon, Wellington was pessimistic commenting; 'I am of opinion that the resources of Ceylon is not sufficient for supplying masts and yards for the squadron at present employed in these seas'. 165 Only limited time was available for Wellington's inspection of the Malabar Coast, but he was able to determine that timber purchased direct from Baliapatam, rather than from Bombay was half the cost. He also reported on the hemp grown, concluding encouragement would be needed to obtain good quality material, as the samples of hemp he obtained on that coast were of very poor quality. Wellington reported on his activities at Bombay, having spent two months at the dockyard inspecting timber, shipbuilding practice and the skills of the master builder and artificers. ¹⁶⁶ Armed with the master shipwright's report, Hood, Puget, Johnston and the Navy Board had information they could trust, demonstrating the advantage of having their own technical specialists.

¹⁶³ Puget to Wellington, TNA, ADM 106/3216, 3rd October 1812.

¹⁶⁴ Wellington to Puget, TNA, ADM 106/3216, 1st May 1813; Puget to Navy Board, TNA, ADM 106/3216, 3rd May 1813.

¹⁶⁵ Wellington to Puget, TNA, ADM 106/3216, 1st May 1813.

¹⁶⁶ Wellington's Bombay report provides a description of the method used by Parses builder to construct a 74 gun ship, TNA, ADM 106/3216, 1st May 1813.

7.7 Supply of medical care to the East Indies squadron

The necessity to maintain the health of the crews in the East Indies squadron was essential, especially if the number of European sailors on board Britain's ships was to remain at a high level. Replacement of European losses could only be obtained from either extra sailors being sent from Britain, or pressing seamen from East Indiamen. This latter measure, whilst resorted to, was fraught with political repercussions. Sending replacements from Britain took a minimum of a year to arrive from initial request and only with Admiralty agreement. The alternative to maintain manning levels was to take care of the men already in the east. This highlights the role of victualling the squadron, especially with fresh provisions and the issue of lemon juice as a preventative to scurvy. However, when officers and men were injured or ill, medical care on board ship or at hospitals was needed.

Providing medicines to ship's surgeons, together with hospital care to the East India squadron went through many stages during the French wars. As with repair and refitting of naval ships the East India Company provided access to their hospitals throughout the period. By 1815, hospital care for the squadron had been provided by an official naval hospital at Madras, a British army hospital at Ceylon, a contracted hospital at Bombay, a naval hospital ship at Penang, and contract care at Company hospitals at Calcutta. Obtaining medical necessities in the east also varied from the payment of an allowance to ship's surgeons for the purchase such stores on the open market, to the official Madras hospital issuing these items.

The decision to reduce reliance on the Company for hospitals by establishing its own at Madras can be traced to Elphinstone writing to the Sick and Hurt Board in 1794 requesting approval to build such a facility. This board wrote to the Admiralty for guidance in March 1795 so it is unlikely that approval would have arrived at Madras until 1796. Until a naval hospital was obtained at Madras, Rainier used the Company hospital but complained to the governor on treatment and care. This possibly caused him to take such care under his control. Rainier is credited with obtaining a building at Madras and providing a naval hospital. He placed the establishment under the command

¹⁶⁷ Sick and Hurt Board to Admiralty, TNA, ADM 98/17, 16th March 1795, in which a letter from Elphinstone is referenced. I am grateful to Peter Ward for bringing this reference to my attention.

¹⁶⁸ Rainier to Lord Hobart, NMM, RAI/4, 10th October 1795. I am grateful to Peter Ward for bringing this reference to my attention.

of Captain William Taylor as governor of the hospital. 169 The admiral informed the Admiralty of his actions in August 1797 with the hospital remaining the most important medical facility available to the navy throughout the Revolutionary and Napoleonic Wars.

Pellew confirmed Rainier's actions to purchase and establish the hospital, without any directions from the Sick and Hurt Board, in February 1808. In this letter Pellew states that although medical staff had been sent out, guidance on managing such a facility had not been received. It was the severe damage to the existing hospital building in December 1807, which caused Pellew his greatest problem as the existing building was so damaged that parts of it had to be pulled down. A new building was urgently needed, with the commander-in-chief informing the Admiralty he was having estimates and plans produced to build a new hospital. The admiral stated he intended building without waiting for approval. ¹⁷⁰ The admiral defended his action as this measure would keep the number of European invalids returned to Britain to a minimum.

In May 1808 Pellew was able to report that he had a plan and estimate for a new hospital which consisted of a facility with a capacity for 200 patients, with separate officer and men buildings, staff accommodation and offices. This Pellew had agreed with expectation that the hospital would be ready in October and in time for the winter monsoon.¹⁷¹ The admiral was able to report in October that the hospital was nearing completion and would soon receive its first patients. ¹⁷² As with all such facilities snags were identified requiring expenditure. The changes required included additional baths, furniture and store rooms for hospital staff and contractors. 173

The organisation of the Madras hospital included posts, which were in addition to those found at the Cape of Good Hope hospital. Apart from the surgeon, agent and dispenser, as found detailed in the posts defined in the reports of the Commission of Naval Revision, this hospital also had a governor and lieutenant-governor, being respectively a naval captain and lieutenant. This indicates that the hospital was of serious concern to the respective commanders-in-chief, having placed the facility under naval command. On arrival Commissioner Puget became increasing occupied with medical department

¹⁶⁹ Rainier to Admiralty, TNA, ADM 1/168, 20th August 1797.

Pellew to Admiralty, TNA, ADM 1/180, 20th February 1808.

¹⁷¹ Pellew to Admiralty, TNA, ADM 1/180, 20th May 1808; Note: This letter has attachments showing plans for a 300 bed hospital with estimates for both a 300 and 200 bed complex. ¹⁷² Pellew to Admiralty, TNA, ADM 1/180, 15th October 1808.

¹⁷³ Governor of Hospital to Drury, TNA, ADM 1/181, 21st February 1809, 5th May 1809.

activities and briefed the Transport Board that with Broughton's approval, he had taken control of the hospital. Hood, the new commander-in-chief, on his arrival concurred with Puget's proposals for the regulation of the hospital, including his appointment as governor. 175 By these actions the commissioner was officially placed at the head of naval medical service, and was operating as suggested in the reports of the Commission of Naval Revision. The Madras naval hospital 176 was the major such facility in the east, but Bombay also had a naval hospital.

The number of naval ships visiting Bombay was considerably less than Madras, with a consequent change in medical provision. This was provided by utilising the services of Company personnel and the use of a building on shore as a hospital. Drury was not in favour of this arrangement stating, 'the grave of our sailors is Bombay hospital'. He wanted to commission the local receiving ship as a hospital. ¹⁷⁷ Commissioner Dundas did not agree, and had ensured that the ship's role could not be changed. The commissioner also backed up his belief that the existing arrangement was acceptable, stating in the last 12 months 607 sailors had been admitted with only two deaths. This statistic does not suggest the shore hospital was the grave of sailors. Dundas further pointed out that the medical contract with the Company provided accommodation, victualling, attendance of the surgeon, medicines and washing of clothes, all for the payment of one Rupee per day per patient. 178 It can be of no surprise that this arrangement met with much favour with the Admiralty as it meant an agent, surgeon, dispenser, assistants and nurses required for a regular establishment was not needed.

Although the existing arrangement was both economic and effective, proposals to build a naval hospital on Old Woman's Island or Butcher Island was considered. Both Commodore Broughton and Admiral Hood disliked the location of the hospital at Bombay, but realised removal to an island in the harbour was too expensive. Instead another building in Bombay was found and the hospital moved. Hood was content with the contracted care arrangement, commenting to the Admiralty, 'it cannot be carried on so regularly as in an established hospital but the men appear equally

¹⁷⁴ Puget to Transport Board, NMM, MKH/130, 22nd June 1811.

Hood to Admiralty, NMM, MKH/130, 28th February 1812.

¹⁷⁶ Committee of Military Board, Madras, Civil Engineer's report of Madras Hospital detailing construction, layout and location, attached to Pellew to Admiralty, TNA, ADM 1/181, 25th June 1809. ¹⁷⁷ Drury to Admiralty, TNA, ADM 1/182, 5th May 1810. ¹⁷⁸ Dundas to Navy Board, TNA, ADM 106/2008, 11th April 1810.

¹⁷⁹ Hood to Northcote, RMC of Canada, DA88.1.H66A4 1809 V2, 1st February 1813, This letter was in reply to Northcote's (not found) of 31st January 1813 approving move of hospital to a better location and at a reduced rent.

comfortable as well taken care of [...] The whole cost of this establishment has been extremely reasonable'. The final nail in an official naval hospital being established at Bombay came in July 1814, with the Admiralty stating they saw no need for such a facility at that port. 181

If the necessity for an establishment naval hospital at Bombay was questionable, then it was not surprising that the Admiralty directed the Sick and Hurt Board to discontinue such an establishment at Calcutta in 1803. Instead, the Admiralty directed the men housed at this temporary hospital were moved into the Company facility as had previously been the arrangement. 182 Calcutta was used as little as possible by successive commanders-in-chief and was considered an extremely unhealthy place, not an ideal hospital location. As naval vessels were still, occasionally, to call at Calcutta, the need for medical care for sailors was sometimes required, resulting in contract care at a Company hospital.

Where there was no official shore establishment available, captains had been placing their sick crews into private houses and paying for their care. This was a logical solution for returning seamen to health, but caused administrative problems for the Transport Board (Sick and Hurt) as it provided an opportunity for fraud. They closed this loop hole in 1811, with the issue of instructions and forms to cover this ad hoc medical provision. The Transport Board was concerned regarding the lack of evidence of expenditure incurred. Accordingly the Admiralty directed that sending men on shore to recover was to be avoided at non-hospital ports. 183

It was not only shore hospitals that were used, as it was considered healthier by many to keep men on board a ship than ashore. Drury championed this method, as did Broughton, Hood and Puget, but the only such vessel commissioned as such, was the Wilhelmina at Penang, placed there by Admiral Pellew. Pellew informed the Admiralty of his decision in May 1808, when he reported that on finding Wilhelmina in an uneconomic state of repair, had re-allocated her to Penang as a combined receiving and hospital ship under the command of Captain Flint. 184 She was to remain in this role until the establishment was closed in late 1812, when she was sold.

¹⁸⁰ Hood to Admiralty, TNA, ADM 1/185, 12th April 1813.

¹⁸¹ Admiralty to Hood, TNA, ADM 2/938, 23rd July 1814.
182 Admiralty to Rainier, TNA, ADM 2/937, 16th September 1803.

¹⁸³ Transport Board to Hood, NMM, MKH/128, 18th August 1811.

¹⁸⁴ Pellew to Admiralty, TNA, ADM 1/180, 10th May 1808.

The plan to create a naval yard and base at Trincomalee also considered what medical provision should be provided. In his October 1811 report to the Admiralty, Puget stated that the general opinion was the use of an old battleship was a better place to recover in tropical areas than on land. This caused him to recommend a hospital ship was provided, rather than a shore establishment. Instead the navy obtained medical aid from the military.

Obtaining care of its sick and wounded from the military authorities on Ceylon was a sensible method of medical provision rather than building a naval hospital. Puget renegotiated the costs of medical care with the lieutenant-governor of Ceylon, Major General Wilson, in July 1811, confirming to the Transport Broad that the military medical services provided victualling, accommodation and care for seamen landed at Ceylon. Hood in his discussions with Brownrigg on the building of a naval yard at Ceylon also continued the agreement for medical provision from the army, stating that he considered the arrangement brought much benefit to the service. ¹⁸⁶

The use of military medical services at Trincomalee, contract services from the Company at Bombay, Calcutta and other ports together with the investment in its own medical services at Madras hospital plus the hospital ship at Penang, showed the British navy had a flexible approach to caring for its officers and men. Madras was the major concentration point for her naval forces ¹⁸⁷ so the establishment of its own hospital was the logical, economic and most effective measure. Establishing its own hospital ship at Penang was also sound as the colony was probably not large enough to provide indigenous support to a desired level. Bombay and particularly Calcutta were well established areas with significant medical needs for their respective Company armies and hence had hospitals and surgeons. The British navy frequently used Bombay and occasionally Calcutta, but they were not major rendezvous ports so the number of men likely to need medical services was small. This indicates contract care was the most economic choice. With the use of military medical personnel and facilities at Ceylon, rather than duplicating this service, the Admiralty again followed an effective and economic course.

¹⁸⁵ Puget to Admiralty, TNA, ADM 1/3441, 3rd October 1811.

¹⁸⁶ Hood to Puget, RMC of Canada, DA88.1.H66A4 1809 V2, 22nd December 1812.

The overall impression of the British navy's provision of medical care to the East Indies squadron was one where it was considered of great importance, but where pragmatism ruled the selection of the most appropriate delivery mechanism.

7.8 Summary

The East Indies station covered the greatest expanse of ocean held under the command of a British admiral during the Great Wars with France. It was an isolated command with urgent communications usually taking three to four months, via the land route, with routine dispatches by sea taking at least four to six months. The time required for a request for naval stores to be answered was considerable; delivery within a year was remarkable.

The East Indies squadron was never large and rarely exceeded seven percent of the ships available to the Admiralty. The composition of the squadron reflected its main role, that of trade protection, with frigates and sloops being its principal constituents. Given the sea area to cover and the trade to protect, there were never enough vessels available. Third rate ships were always part of the squadron to counter any deployment by the French on trade or conquest missions.

Given the area to protect, the limited numbers of ships available and its isolation, the East Indies squadron depended heavily on its shore naval departments and the resources of the east to maximise its numbers. All naval commands depended on their local naval bases and economies, but none to the degree of the East Indies as it was at the end of the Admiralty's longest logistics chain. The make-up of the squadron with its battleships together with the distance from Britain, necessitated the provision of docking facilities that were absent from the other overseas commands.

Being more isolated from Britain created specific challenges. The political circumstances, strategic necessities, geographic constraints, climatic conditions, seasonal wind directions and diseases created a special set of conditions. This shaped the decisions on the location of the naval bases, the facilities that were provided, the workforce used and the utilisation of indigenous materials.

The climatic conditions particularly influenced the locations of Britain's naval bases. During the summer monsoon, the wind came from the south-west and during the winter monsoon, from the north-east. Apart from Trincomalee, the coast of eastern India

lacked a secure anchorage, resulting in vessels only being supplied or repaired for part of the year. Bombay, on the western Indian coast, was protected in the winter months and not overly affected by the summer monsoon, and subsequently became the primary refitting base.

Unfortunately the critical area of operations was the Bay of Bengal and the route through the Straits of Malacca to China. Bombay was too distant to supply the squadron on the eastern side of India, so bases near the Bay and the Straits were essential. The choices initially available were Calcutta, Madras and Penang, as these were occupied by the Company. Until the capture of Trincomalee in 1795, investment was made in the Andamans to offer shelter and limited provision of supplies. All the choices on the eastern side of India had merits, but all had severe disadvantages. Madras had all the virtues required of a perfect base except for one. It was close to the area of operations, militarily and politically secure, able to supply medical services, water, fresh and preserved food, and a skilled workforce; it only lacked a harbour and safe anchorage. Calcutta was the commercial and political centre of the Company, had the ability to deliver provisions and access to a developing shipbuilding and repair industry. Regrettably Calcutta was not close to the area of operations, especially during the southwest monsoon, was tortuous to reach up the winding Hooghly River, unhealthy and expensive. Penang had great strategic potential, being close to the Straits of Malacca and able to cover China trade ships. It was unaffected by the direction of the monsoons, but required considerable investment to make it a useful naval base. Melville recognised Penang's potential, as he attempted to turn the island into a Company shipbuilding centre with a naval squadron being hosted at the dockyard. The lack of finance, local labour force and immature economy, together with the death of the governor and disgrace of its progenitor, ensured the project was still born.

Trincomalee was blessed with two over-riding advantages over the other locations on the eastern side of India. It had a large, safe anchorage, was close to the area of operations and in a position to defend both coasts of India. The drawbacks were its complete lack of all the facilities available at Madras and being militarily insecure. As Ceylon was a crown possession the rectifying of the shortcomings of Trincomalee was solely in the hands of the British government and did not depend on the actions of the Company. Eventually Trincomalee was chosen as the home of the East Indies squadron, but even after its facilities were available in the post war years, the dry docks at Bombay were still required.

Where the East Indies differed from other overseas areas was in the scope and scale of the facilities and resources available, together with the management methods used to deliver the services. These differences resulted in the Admiralty altering its refit and supply strategy and seeking to exploit the potential of India for ships and naval stores.

Britain's access to timber and naval stores was heavily dependent on limited supplies of British oak, plus imports from North America and Europe, with supplies of timber and hemp from the Baltic, being essential to the maintenance of her seapower. The Admiralty's strategy was, if possible, to make the East Indies squadron self-sufficient in ship refitting and naval stores. The British state hoped to build warships from Indian timber, import timber if possible and break the dependence on hemp from Russia by importing raw material from the east. These aims were only partially met. Squadron self-sufficiency was met for ship refits and in part for naval stores, but while the supply of limited numbers of ships and of timber was successful, the faith and money invested in obtaining hemp was not.

Chief amongst the factors that altered the refitting strategy of the Admiralty was the presence of the East India Company and the dry docks available at Bombay. This port was the home of the Bombay Marine and dockyard. The dockyard initially provided a dry dock capable of accommodating three vessels for refit, one of which could be a 74 gun ship. By 1810 another dry dock had been built that allowed vessels of 74 guns to be constructed, together with another such vessel being refitted. The presence of a skilled native workforce and master builder at Bombay made the presence of a workforce from Britain unnecessary. As the Bombay Marine provided a Company management team, a conventional Navy Board yard organisation was redundant unless other factors than providing services became important. Foremost in the reasons to create its own management and employ its own workforce, was one of control to improve accountability, effectiveness and economy. It was not until the post Trafalgar era and the implementation of the recommendations of the Commission of Naval Revision that this occurred.

Madras was the primary naval supply base during the wars with France. Provisions, water, fuel and naval supplies were all available at this location with crews also able to recover in the naval hospital. Limited refits were also available in Madras Roads, as ship's companies could be supplemented by Indian artificers obtained from the Company. A Company master attendant's office was also available and as at Bombay

officers of this organisation were frequently used to administer the purchase, order, and issue of naval stores.

The principal difference between the delivery of shore services in the East Indies and the other overseas commands was therefore the dependence on the Company rather than autonomous control. This reliance was progressively reduced until by 1812, the delivery of all services was now aligned to those at the other overseas bases.

Rainier concentrated on the services concerned with the needs of his men. He put in place, an effective victualling contract and dispensed with an agent victualler by personally managing the contractor. This method continued throughout the wars with only a change in contractor and in the role performed by the resident commissioner to reduce costs. Rainier's establishment of Madras naval hospital and contract care in Company hospitals at Bombay and Calcutta was also effective. The appointment of resident commissioners to Bombay in 1809 and the arrival of Commissioner Puget in January 1811 ensured that alignment with all of Britain's overseas naval bases occurred. Prior to these appointments, the commander-in-chief was frequently the only government servant overseeing the affairs of Company employees, providing opportunities for fraud and inefficiency.

The challenges of maintaining the East Indies squadron throughout the Revolutionary and Napoleonic Wars were all met. With the presence of the East India Company and the mature economy of India, the provisions, refit facilities, raw materials, and skilled workforce were available. Private individuals existed to administer and deliver challenging victualling contracts and to refit ships at Calcutta. Management expertise and local knowledge was available from Company employees, at a price, until the Admiralty invested in its own management. The East Indies naval bases were the last to come under the management of resident commissioners, with the implementation of the recommendations of the Commission of Naval Revision. The strategy previously in place to support her eastern squadron was pragmatic: the ships and men received what was required, the service had been stretched, but had not broken. Appointing the resident commissioners merely delivered the goal of all organisations, obtaining more for less, resulting in an increase in efficiency.

Postscript

By the abdication of Napoleon in April 1814 a network of British naval bases encompassed the world and protected her trade and empire, but what would be needed in peacetime and was this affordable? This was a question that was essentially driven by foreign policy, but the first lord of the Admiralty asked for an opinion on this issue from the Navy Board.

The official who replied to Lord Melville's request on what overseas naval establishments would be necessary to keep in a profound peace was William Shield, by then the deputy controller of the Navy Board. Shield had experience as a resident commissioner at the Cape of Good Hope and had been at the Navy Board in London for over 12 months. Shield's letter was written before Napoleon was incarcerated on St. Helena and the war with the United States had ended, but he presented an informed opinion of Britain's needs with economy being his watchword. 188

Shield's opinion was that only one naval base was required in India and that it should be established at Bombay. Jamaica and Antigua naval establishments were the only ones necessary in the West Indies, whilst the establishment at Malta would suffice for the Mediterranean. For the defence of British North America he considered that the Halifax base was necessary. These were Britain's mature naval bases where considerable investment had been made in buildings, careening wharfs and in the case of Bombay, dry docks. This would seem a very low cost option, as all the vital command areas were covered with no additional investment required. Shield considered the establishment at Madras should be closed and all functions moved to Bombay. The bases at Gibraltar, Bermuda, Trincomalee and the Cape of Good Hope he recommended were put on a care and maintenance basis.

The deputy controller seemed to assume that building work at Trincomalee, Bermuda and Simon's Town would be halted recommending the investment already made was protected by 'mothballing' the existing buildings. He suggested an agent of buildings was appointed at Gibraltar, Bermuda, Trincomalee and the Cape of Good Hope to keep the shore establishments in a satisfactory condition. These mothballed establishments were to be visited by a resident commissioner once a year. While Gibraltar, Trincomalee and Bermuda could be covered by a relatively local commissioner, Shield

¹⁸⁸ Shield to Melville, NAS, GD 51/2/533, 16th December 1814.

suggested that the senior captain of the squadron at the Cape of Good Hope report on that location. Barbados was not forgotten, with Shield proposing that the resident commissioner at Antigua, Commissioner Lewis, inspect the buildings and report if they should be retained or sold.

These were sensible and economic suggestions from Shield, but they were not wholly adopted. By 1820 Madras had been shut, with investment at Trincomalee to create Britain's eastern naval base. Halifax naval base had been shut in 1819 and mothballed, whilst Kingston on Lake Ontario, had become the only Canadian naval base. Bermuda had become the principal North American base, in place of Halifax, with naval facilities being built. The naval establishments at Jamaica and Antigua were retained, while Malta had become the principal Mediterranean naval base with Gibraltar under care and maintenance. Simon's Town at the Cape was still supporting a naval squadron as Napoleon was imprisoned on St. Helena, but all was to change with the Emperor's death and domestic financial pressures. 189

Building at Trincomalee ceased, with the base to become a backwater, especially when operations moved to China with the acquisition of Hong Kong in 1841. With Napoleon's death, the need for a garrison on St. Helena and a naval squadron at the Cape became unnecessary and the establishment at Simon's Town was mothballed, with the withdrawal of the commissioner, and principal officers of the various departments. Investment continued at Bermuda, but it was many years before this was finished. The need for a naval base on the Great Lakes was removed in the 1830s, as more faith was put in diplomacy regarding relationships with the United States. ¹⁹⁰ In the light of events Shield's advice appears prescient, especially as economic pressures were to cause a depression in Britain in the following decade.

¹⁸⁹ For a background in the domestic financial pressures and depression following the Napoleonic War see Boyd Hilton, A., *Corn, Cash and Commerce The Economic Policies of the Tory Governments 1815-1830*, (Oxford, 1977).

¹⁹⁰ Bartlett, C., *Great Britain and Sea Power 1815-1853*, (Oxford, 1963), 74.

Conclusion

The introduction to this thesis posed Kipling's honest men¹⁹¹ as the methodology for studying the purpose and role of Britain's overseas naval bases. It asked when, where and why naval bases were necessary, what services were delivered, who provided the support and how the bases were managed and developed. Of these 'honest men' why Britain placed faith in such bases is the key question, especially when compared with Spain, France and the Dutch. These nations also invested in overseas bases but none with the energy or success of Britain.

The ability to maintain a naval squadron in a critical operational area by replenishing ships and providing a secure location for refits maximised the effectiveness of the deployed vessels. The presence of a world-wide network of naval bases was later also to influence the design philosophy of British warships, especially when their motive power changed from wind to coal and oil. Solving the conflicting requirements for space and weight ensured a warship designer compromised between weapons carried, sea keeping ability, endurance and accommodation. Britain's system of overseas bases, particularly from the mid nineteenth century and into the 1950s, allowed naval constructors to design ships with limited endurance as repair, refuelling and re-supply locations were always at hand. It was only with the loss of Singapore in 1942 and the vast distances involved in the Indian Ocean, together with later operations required of the British Pacific Fleet, that the design philosophy limited the projection of naval power.

The location of Britain's overseas naval bases and when they were acquired followed strategic necessities and tactical opportunities. By 1815 the Admiralty had not only developed a comprehensive web of world-wide bases, but had removed the potential for European nations to create a similar facility by occupying the most advantageous harbours. What services these naval bases could deliver and who should supply the support underwent considerable development from the capture of Jamaica in 1655 to the end of the Napoleonic War.

This thesis has examined the contribution made by Britain's overseas bases to the support of naval forces at key strategic areas, with particular attention being paid to the East Indies and the Cape of Good Hope commands during the Revolutionary and Napoleonic Wars. These latter areas were the most distant from Admiralty control at a

¹⁹¹ I keep six honest serving-men (They taught me all I knew); Their names are What and Why and When and How and Who; Kipling, R., 'The Elephant Child', *Just So Stories*, (New York, 1912), 83.

time when parliament was demanding reforms and probity in its public bodies. How the Admiralty changed from issuing commands and laying down rules and regulations to ensuring their instructions were enacted is shown in this thesis. The solution was a mixture of increased centralised control by common codified instructions, appointment of all civil officers and placing empowered representatives at distant stations.

How the naval bases were managed and staffed throughout the eighteenth century was studied in this thesis. This shows that many options were used to deliver military effectiveness with economy always being important. Other nations' ports, informal utilisation of commercial facilities and contracted labour were used throughout the eighteenth century. But in the Indian Ocean after 1795 the Admiralty created state owned, manned and operated naval yards. This latter option was undertaken to reduce risk and to deliver greater effectiveness at an acceptable price.

The role for Britain's overseas bases changed from only providing an anchorage for ships as a rendezvous, to a location where the needs of ships and their crews could be met. Fresh water and fuel together with access to local fresh food was available from many neutral and allied ports, but the naval bases were to provide much more. The various elements of a naval base consisted of a naval yard, a naval hospital and a victualling organisation. Collectively these facilities enabled vessels to remain in an area of operations for a longer time than if ships had to return to Britain, providing the Admiralty with a tactical and strategic advantage over enemy forces.

Diplomacy was always an important tool in obtaining bases and frequently enabled Britain to maintain a naval force close to an area of operations when a sovereign base was not available. Early examples of the use of other nation's facilities were Cadiz in 1694, and Leghorn and Lisbon at various times during the eighteenth century. There were many advantages to this arrangement, as it removed the necessity to build and maintain a facility which was economical and convenient for operations. However, the port could only be used with permission; with a change in political circumstances their value was always threatened. This was particularly true for the Indian Ocean region where access to the Cape of Good Hope and Trincomalee for British ships was available until the late eighteenth century. Britain discovered in the American War of Independence that, if these locations were in the hands of an enemy fleet, then her trade and possessions in the east were under severe threat.

Access to Trincomalee and the Cape was obtained following the American War, but the possibility of these Dutch colonies being used by the French resulted in both locations being taken by British forces in 1795. The capture of the Cape was a considerable logistical achievement and, with a squadron based there, enhanced the Admiralty's ability to launch naval power into the South Atlantic and Indian Ocean. A French or Dutch squadron venturing into the Indian Ocean would always have the British Cape squadron at their backs. However, the British considered Trincomalee the more valuable location, although not initially for British use, rather from the lesson learnt in the American War. This consideration resulted in Trincomalee being retained as a crown colony and the Cape being returned to the Dutch in 1803. With war recommencing that year the strategic importance of the Cape again resulted in re-conquest by Britain in 1806.

Other locations that were used as naval bases were acquired during the wars with France. At the start of the Revolutionary War in 1793 the Admiralty only possessed four overseas naval bases at Halifax, Jamaica, Antigua and Gibraltar with the East India Company supplying facilities for the Eastern squadron. By 1814 Britain had created a comprehensive network of 14 overseas naval bases with Malta's acquisition and Bermuda's development being significant additions. The 14 bases occupied strategic points on the globe and locked out potential European enemies from the eastern empire that was being built.

It was not only in the number of bases, or in the global reach they provided, that had altered during the Revolutionary and Napoleonic Wars as the management of the organisation underwent fundamental change. This was most noticeable in the East Indies and the Cape of Good Hope commands which ensured naval control of the Indian Ocean. Although the Admiralty had been deploying ships in the Indian Ocean since the 1740s, it was not until the capture of the Cape of Good Hope in 1795 that a squadron was stationed at that location. The Cape and East Indies squadrons were the Admiralty's most remote commands with correspondence to the former taking a minimum of two months to arrive, while letters for Madras took at least three months to be delivered overland. Communication delay was but one difficulty, as the logistics required for these commands were also challenging.

From the first deployment of British naval ships to the East Indies, the Admiralty was faced with a different problem regarding the refit and repair of its vessels compared to

other overseas locations. The time required for a ship to return from the East Indies station was upwards of four to six months, with those in an unsound condition unlikely to arrive home. Therefore, unlike other vessels stationed overseas, for ships in the East Indies it was not practical to return to Britain to be docked and receive a major refit. The Admiralty's initial solution was not to build its own facility, but to encourage the East India Company in the late 1740s to build a dry dock at Bombay. This dock was later lengthened to enable British ships of up to 74 guns in size to be accommodated. The option chosen to support Britain's ships in the East Indies was unique as it was completely reliant on a commercial organisation to provide ports, dry docks, skilled artificers and managers. This provided for the needs of the ships, but victualling and medical care was also required. How these latter requirements were met show the policy by which Admiralty management evolved from dependence on the Company to one of autonomy.

Initially during the Revolutionary and Napoleonic Wars the Cape and East Indies squadrons were supported in different ways, but by the end of the period the Admiralty had obtained centralised control with locally empowered civil naval administration. The path to Admiralty rule in the East Indies was more complicated than at the Cape. The search for a base to station ships to defend the east coast of India, the Bay of Bengal and the route to China required solution, and the relationship with the East India Company was always a factor to be considered.

While Trincomalee was in Dutch possession the East India Company established a settlement at Penang and took possession of the Andaman Islands where the British navy established a base at Port Cornwallis. With the capture of Trincomalee the Andaman station was abandoned. As Trincomalee's superb anchorage and strategic position covered both coasts of India and the Bay of Bengal, it would seem to have answered the Admiralty's requirement for its primary headquarters in South Asia. As Ceylon became a crown colony in 1802, rather than coming under the control of the Company, it would seem to have been the perfect place to build a naval base. Trincomalee had great advantages, but it was only an anchorage surrounded by jungle, without an indigenous labour force or an economy to support the victualling of a squadron. All the fixed facilities required would have to be built and a labour force recruited and settled.

The investment required by the Admiralty to turn this wilderness into a naval base would have been considerable, so instead in 1804 the first lord of the Admiralty proposed a joint venture with the East India Company as part funders and hosts. Henry Dundas had great faith in the Company and wished to create a copy of Bombay dockyard at Penang. This would provide another shipbuilding centre for large warships and a naval dockyard to station a squadron serving the Bay of Bengal and the route to China. This was a visionary project and if successful would have resulted in Trincomalee never being developed, but Penang proved an expensive place to build ships and suffered from a starvation of funds from the Company in India. This resulted in Admiral Drury, the commander-in-chief, lobbying for a base at Trincomalee and independence from the Company. However the Admiralty delayed full approval until 1812 resulting in the base not becoming available until after the Napoleonic War ended, but a future home for Britain's Eastern squadron had been found.

Although Bombay was the major refitting port, Madras was the chief supply and rendezvous location for Britain's navy. Madras did not have a port, was a dangerous anchorage and completely unsuitable as an assembly point, but it was militarily and politically secure. Madras's greatest advantages were its location in southern India, the presence of the Company and the economic maturity of the region. This latter factor allowed the victualling contractor to easily supply ships from Madras and for labour and materials to be available.

During the American War the victualling of Britain's Eastern fleet relied on the Company. They were to ship preserved stores to India and supply them together with local produce to the navy where needed. Admiral Hughes, the commander-in-chief, found fault with this victualling arrangement and it was subsequently changed, especially following the criticism of the Fees Commissioners in 1788 regarding the lack of oversight and excessive costs. The Admiralty's decision to dispense with the Company for victualling and instead place this vital service to a contractor in 1789 was the first sign of the navy's independence in India. Victualling by contract continued

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¹⁹² The use of space on Company ships to deliver naval and victualling stores for the navy had been common practice, but the informal relationship broke down in 1781. This resulted in a parliamentary act (21 Geo III ca 65) for the Company to provide and deliver provisions to HM Ships in the East Indies. Morriss, R., *The Foundation of British Maritime Ascendancy*, 26-27.

¹⁹³ Wilcox, M., 'This Great Complex Concern: Victualling the Royal Navy on the East Indies Station, 1780-1815', *MM*, Vol. 97, No. 2, (2011), 35-37.

throughout the Revolutionary and Napoleonic Wars and, despite accounting issues with Basil Cochrane, ¹⁹⁴ can be considered a successful state and private partnership.

The East India Company had hospitals for its army and marine at all its presidencies with the British navy having access to these facilities. The arrangements made by the Admiralty for the care of its sick sailors during this period were more nuanced than has been previously suggested. The main rendezvous location for the navy was Madras, and in 1794, before Elphinstone's departure as commander-in-chief to India, he suggested a Sick and Hurt Board hospital was established at that location. An Admiralty controlled hospital was authorised for Madras with Rainier ensuring it was ready and under his control in 1797. However, the Company still supplied medical care at Bombay and Calcutta. Admiral Drury, the commander-in-chief from 1808 to 1811, reported that Bombay was a graveyard for British sailors and wished to replace the existing arrangement of Company medical care at Bombay with a naval hospital. The presence of the recently arrived resident commissioner, George Dundas, was to stop this plan as he demonstrated to the Admiralty that the Company Marine hospital was not a death trap (only two men died out of over 600 in a year), but was an effective and economic service.

As recruitment of European sailors in the east was negligible, to take responsibility for the care of those already serving was a logical step for the Admiralty. By establishing the naval hospital at Madras, which was the major rendezvous for the squadron, the Admiralty provided a facility and staff where it would do the most good. As adequate medical provision could be obtained in Company hospitals at Bombay or Calcutta, the Admiralty ensured it controlled the care of its sick by the most effective and economic means.

Although dependence on the Company for victualling had been eliminated and appropriately scaled for medical care, it was not until the arrival of Admiralty appointed resident commissioners to India in 1809 that a path to naval self-reliance was found.

¹⁹⁴ Basil Cochrane had been the victualling contractor for the Eastern squadron during the Revolutionary and Napoleonic Wars until 1806. Dr. Wilcox details the disputes that the Victualling Board and Cochrane had in settling the contractor's accounts in chapter 8 of Knight, R., and Wilcox, M., *Sustaining the Fleet 1793-1815*, *The British Navy and the Contractor State*, 155-176.

¹⁹⁵ Parkinson, C., War in the Eastern Seas, 353-363.

¹⁹⁶ Parkinson records that a hospital ship was provided at Bombay on Drury's initiative but this did not occur as the vessel was only fitted as a receiving ship; Parkinson, C., *War in the Eastern Seas*, 356-357.

The changes introduced by the Commission of Naval Revision resulted in the convergence of the management of shore services in both India and the Cape.

During the first occupation of the Cape of Good Hope from 1795 to 1803 the naval base created followed the guidelines that had been established over the eighteenth century. The commander-in-chief set up the shore services he considered necessary, appointed the principal officers of the naval yard, an agent victualler and established a naval hospital. Unlike the East Indies command, access to a large skilled labour force and dry docks could only be obtained in England. However minor repairs to ships could be performed by the artificers and crews of the squadron, with the naval yard establishment being only constituted as a supply organisation. The only intervention the Admiralty made in the commander-in-chief's arrangements was to replace the naval storekeeper with their own appointee. Naval commanders in the Revolutionary War were left to make their own shore supply arrangements, a case of considerable autonomy and little central control.

Following the re-capture of the Cape in January 1806, the Admiralty demonstrated that the period of autonomy for commanders-in-chief had ended. As in 1795 the naval commander re-established the shore naval establishments and appointed the principal officers of the naval yard, an agent victualler and surgeon of the hospital. The Admiralty reassessed the facilities required at the Cape and the officers to send, as they quickly replaced the temporary naval storekeeper, master attendant, master shipwright and agent victualler with their own appointees. Appointing these officers was only one element of increased central control as the Admiralty used these individuals for advice on workforce composition and facilities required, a task previously required of the commander-in-chief. This resulted in artificers being sent from Britain to form a core naval yard workforce. These changes showed the direction the Admiralty was travelling to obtain central control.

Although this thesis has shown the naval yard element of the overseas base was for two functions, to undertake minor repairs and supply naval stores to the ships of the attached squadron, it was the dispute between a commander-in-chief and resident commissioner that confirmed this role. The overseas naval yards were not to repeat the capabilities of the home dockyards, but to compliment them. This was undoubtedly the most economic arrangement regarding investment in fixed infrastructure such as store buildings and careening equipment, but also the most effective in the use of manpower and naval

stores. It was in the use of the stores, that the Admiralty's role for overseas naval yards becomes particularly rational. By directing that ships only received minor repairs and maintenance, the consumption of items shipped from Britain was reduced, with consequent savings in the use of transports and of strategic naval stores. This arrangement allowed for a predictable outlay in stores ensuring ships could always be maintained or issued with items for use at sea. If major repairs were undertaken there was a risk that naval stores would be reduced to such a level that vessels on station could not be maintained. This was the Admiralty's policy for overseas naval yards, but whilst they controlled the deployment of ships and men, the operational demands of commanders could break this strategy, unless a local restraint could be placed on them.

Naval history has traditionally concentrated on the priorities of operational commanders and presents the actions of the Admiralty and shore naval establishments as obstacles to be overcome. Although the records of commanders of ships have been analysed, the thoughts and actions of service providers have either been ignored, been too difficult to interpret, or not available. This thesis has examined a naval campaign from the viewpoint of the Admiralty towards the shore services at the Cape of Good Hope and the commander-in-chief.

The campaign was the blockade of Mauritius and Bourbon Islands from 1809 to their capture in December 1810. This campaign was only one call on the resources of the Admiralty, examination of ship deployment records demonstrating that there were many calls on vessels. These records show the Admiralty's clear strategy to change the composition of the squadron to provide a suitable force, and to deliver an overwhelming number of ships to coincide with the invasion fleet from India. Although this was the Admiralty's strategy, ensuring the commander-in-chief's actions were subordinated to this, produced conflict between the naval commander, Admiral Bertie, and supplier of shore services, Commissioner Shield, at the Cape.

Analysis of this dispute through the correspondence of the commander-in-chief, resident commissioner and the Admiralty revealed the coherent strategy of the latter for ship deployment, ship repair and shore support services. The naval commander ignored directions from the Admiralty, changed the role of the naval yard to perform major refits and pursued campaign objectives without regard to cost, or the suitability of his squadron for its task. Unlike previous campaigns, the Admiralty had sent a resident commissioner to the Cape to superintend their shore departments, with strict

instructions to deliver their policies and economies. Their nominee, Commissioner Shield, was successful in delivering the Admiralty's wishes, but at the cost of a harmonious relationship with the commander-in-chief - and the misunderstanding by an historian of the role of an overseas naval yard. The resident commissioner also delivered economies and compliance to Admiralty regulations at the naval hospital and victualling department.

The presence of a commissioner at the Cape and of his contemporaries at Madras and Bombay was the result of a reform process started in the 1780s. Britain's defeat and the loss of North American colonies in the War of American Independence had a catastrophic affect on her self-confidence and on the exchequer. Carrying out government business, as had always been done, was no longer acceptable with parliament demanding reform. This clamour for change resulted in many parliamentary commissions and enquiries but their influence on Britain's overseas naval departments has been generally ignored by historians. 198 The Commission on Fees in 1788 produced a report dedicated to improving naval shore services at overseas locations. In common with the other reports of the Fees Commissioners they recommended a change in the payment conditions of employees, with considerable impact on the culture of employment. However, their most important proposal was for the appointment of a senior manager to key overseas headquarters. The Fees Commissioners concluded that the regulations and instructions in place for individuals were sound; they merely had to be enacted. They thought that with the presence of a resident commissioner superintending activity, all fraud and poor practices would be stifled at source. They also considered that the power of swearing an affidavit to the truthfulness of an officer's accounts and actions should not be underestimated.

Although resident commissioners were increasingly appointed during the Revolutionary and Napoleonic Wars, it was not until the implementation of the Commission of Naval Revision's recommendations in 1808 that the Admiralty was to gain complete control at overseas bases. For the first time the Admiralty appointed resident commissioners to the Cape of Good Hope and of more significance to the East Indies. These individuals were not only to manage the naval yard, but to superintend the financial and contracting affairs of the naval hospital and victualling department.

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¹⁹⁷ Taylor, S., *Storm and Conquest*, 246-7, 327.

¹⁹⁸ Breihan, J. R., 'William Pitt and the Commission on Fees, 1785-1801', *The Historical Journal*, Vol. 27, No. 1, (1984), 59-81; Haas, J., *A Management Odyssey, The Royal Dockyards 1714-1914*, (London, 1994); Morriss, R., *Naval Power and British Culture, 1760-1850*, (Aldershot, 2004).

Resident commissioners were appointed to Bombay and Madras in 1809 but, while the Bombay commissioner gave the Admiralty a presence where naval ships were being built, the arrival of Commissioner Puget at Madras on the 1st January 1811 completely changed the British navy's relationship with the East India Company. Puget, unlike Dundas his Bombay colleague, developed a good working relationship with successive commanders-in-chief and was given control of affairs at Calcutta, Penang and Trincomalee, in addition to Madras. He was also asked to assume responsibility for ordnance supply from the East India Company. When Dundas returned to Britain in January 1812, Puget was also given control of Bombay until March 1813 when Dundas's replacement arrived. Puget, with commander-in-chief approval, appointed a master attendant, replaced Company and agent naval storekeepers with crown servants, and persuaded the Admiralty to send a master shipwright from Britain. This created in the East Indies the naval yard management structure that was in place at all other naval bases. Apart from the necessity for access to the dry docks at Bombay dependence on the Company was finally broken. Puget employed artificers and introduced a training system for local youths, rather than hiring Company employees.

The Admiralty subsequently replaced the Company naval storekeeper at Bombay in 1812 with a crown employee, following this up with the appointment of a master shipwright and master attendant. The actions of Puget and those of the Admiralty had removed dependence on the Company, reduced costs and improved effectiveness. A further benefit was the presence of specialists employed by the Admiralty to provide first-hand advice on the raw materials and shipbuilding techniques of India.

A legacy left for continued British presence in the Indian Ocean at the end of the Napoleonic War was the establishment of a naval headquarters at Trincomalee, together with the rationalisation of naval facilities at the Cape of Good Hope to a permanent home at Simon's Town. The retention of Mauritius at the end of the war removed that island from again becoming a threat to British trade. Credit for the establishment at Trincomalee has been given to Admiral Hood as commander-in-chief, ¹⁹⁹ but Admiral Drury deserves this accolade as he initiated the plan. However, the person who surveyed, planned in detail, obtained the workforce and managed the building of the establishment was Commissioner Puget until Commissioner Upton replaced him in

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¹⁹⁹ Duffy, M., 'Sir Samuel Hood, 1762-1814' in Le Frevre, P., and Harding, R. (eds), *British Admirals of the Napoleonic War, The Contemporaries of Nelson*, (London, 2005), 341-342.

1817. Similarly, Commissioner Shield has not been credited with the initiative to relocate all facilities at the Cape to Simon's Town. He initially planned the move and continued guidance of the project when on the Navy Board.

The presence of Britain's overseas naval bases throughout the eighteenth century enabled the attached squadrons to defend British colonies, British trade and contribute to the defeat of her enemies. Their efficiency experienced a dramatic increase from 1809. This occurred with the introduction of the Commission of Naval Revision's recommendations. This thesis is not unique in observing the improvement in naval administration resulting from the reforms introduced in the 1790s and 1800s, or the importance of the Commission of Naval Revision. However, this thesis has shown that the crucial link required by the Admiralty to deliver the improvements at the Cape and East Indies bases was the presence of resident commissioners. These individuals gave the Admiralty representatives who could concentrate on delivering their policies and give advice on improving shores facilities and services.

The Admiralty had great faith in the role of a senior manager at their overseas headquarters and in the individuals selected. This is demonstrated in figure 3e which shows the Admiralty created a cadre of officers who repeatedly served as resident commissioners, or in other civil naval posts. A professional class of industrial managers and supervisors had been established by the Admiralty in the first decades of the nineteenth century. By the presence of these managers the Admiralty had reconciled the domestic demands for economy with the military necessity for effectiveness. These managers subsequently had their title changed to Captain or Admiral Superintendent and were not phased out until the 1960s. Similarly the naval base at Simon's Town did not lower the white ensign for the final time until 1957. The changes brought about in the 1800s lasted for over a 150 years.

²⁰⁰ Davey, J., 'War, Naval Logistics and the British State – Supplying the Baltic Fleet 1808-1812', 269-270; Knight, R., and Wilcox, M., *Sustaining the Fleet 1793-1815, War, the British Navy and the Contractor State*, 211; Morriss, R., *Naval Power and British Culture*, *1760-1850*, 259-265.

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Appendices

Submitted by John Frederick Day, to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Maritime History in April 2012.		
This thesis is available for Library use on the understanding that it is copyright material and that no quotation from this thesis may be published without proper acknowledgement.		
I understand that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.		

Appendix 2a: Business Processes at Overseas Naval Yards derived from ninth report of the Commission of Fees (1788)

The following diagrams have been drawn to explain, in a graphical manner, the activities of the overseas naval yards. For those unfamiliar with business process¹ diagrams they may at first be difficult to interpret, hence an explanation of their purpose and structure is required.

The origins of examining how organisations, governmental, manufacturing or service industries, function is probably as old as their existence, but an early published example of an investigation into a manufacturing process is in Adam Smith's *Wealth of Nations*. Smith's description of the operations to produce a pin provides the flow of the interacting activities. He also described how output could be greatly increased by the use of allocating single tasks to individuals within the production process. Network scheduling, a graphical representation of activities with a time being allocated to each activity, not only provides a mechanism to examine the logical relationships between the activities, but also the minimum time that the overall task can be completed via Critical Path Analysis. These workflow examples are but one aspect of modelling, with the diagrams below being an analysis tool for examining a business.

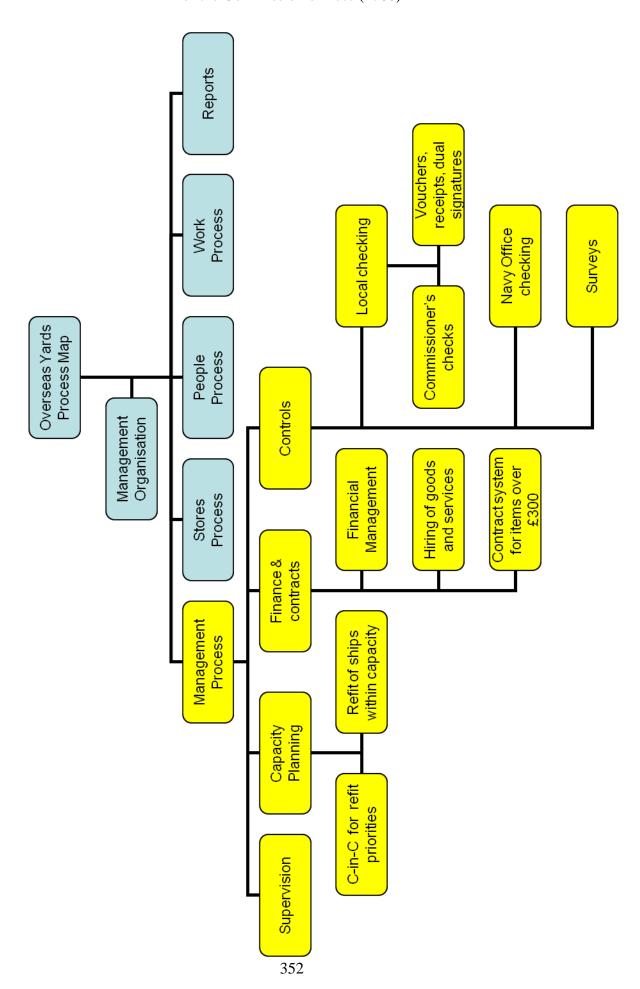
The method used below merely identifies the activities described in the ninth report of the Commission on Fees. What becomes evident is whilst there were links between the activities that would be shown in a work flow diagram the activities fell into distinct categories. Five categories, or parent processes, were chosen with the activities found in the ninth report aligned to one of these areas. These areas were: a) Management of all the activities of the naval yard; b) Stores provision; c) People (management of the workforce); d) Work done by the workforce; and e) Reporting on all aspects of the yard's operation. This method of analysis not only mapped the operations of the yard but indentified gaps, missing activities, and links between tasks.

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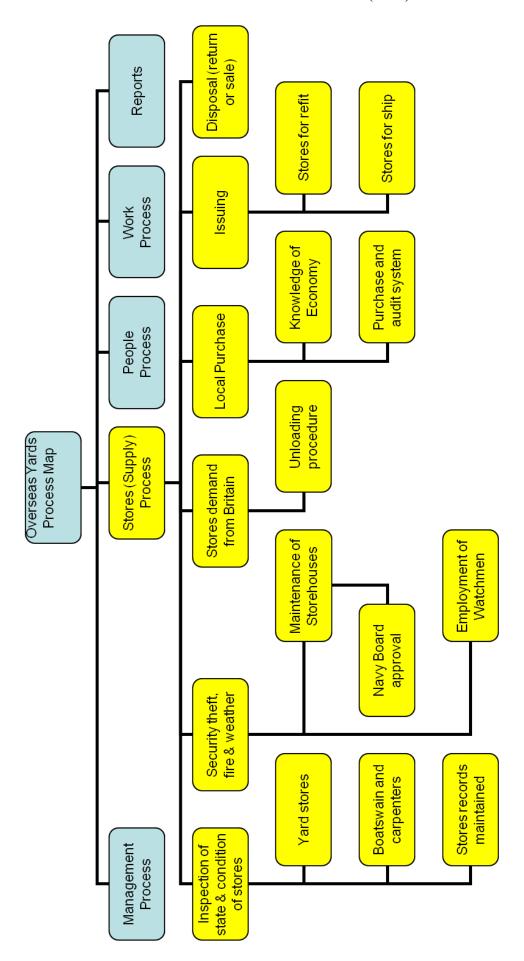
¹ Business Process Definition: A set of tasks that can cross organisational boundaries to achieve a defined business outcome for a known customer, *Changing Business Processes*, Gartner, Exp Premier Reports, (2005), 5; Business Process Definition: A series of logically related activities or tasks (such as planning, production, or sales) performed together to produce a defined set of results, *Business Dictionary.com*, http://www.businessdictionary.com/definition/business-process.html, accessed 2nd August 2011

² Smith, A., An inquiry into the Nature and Causes of the Wealth of Nations, (1776)

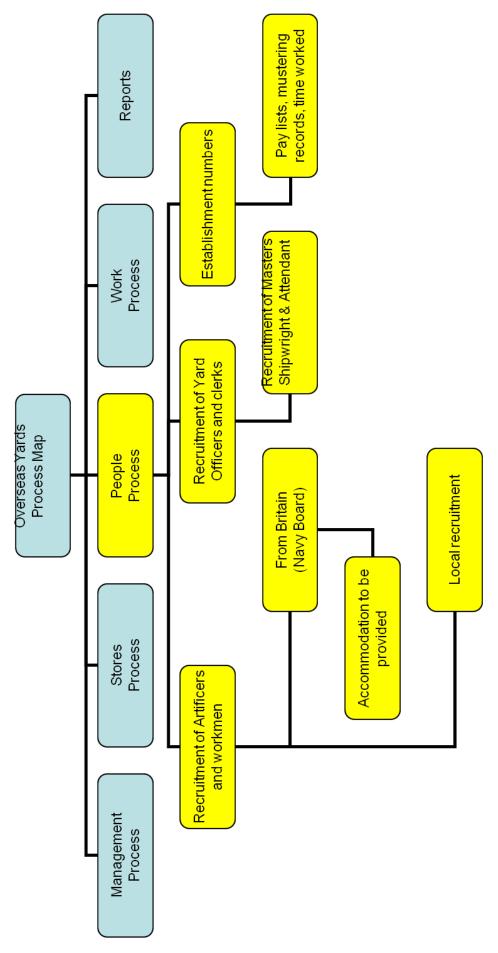
Appendix 2a: Business Processes at Overseas Naval Yards derived from ninth report of the Commission of Fees (1788)



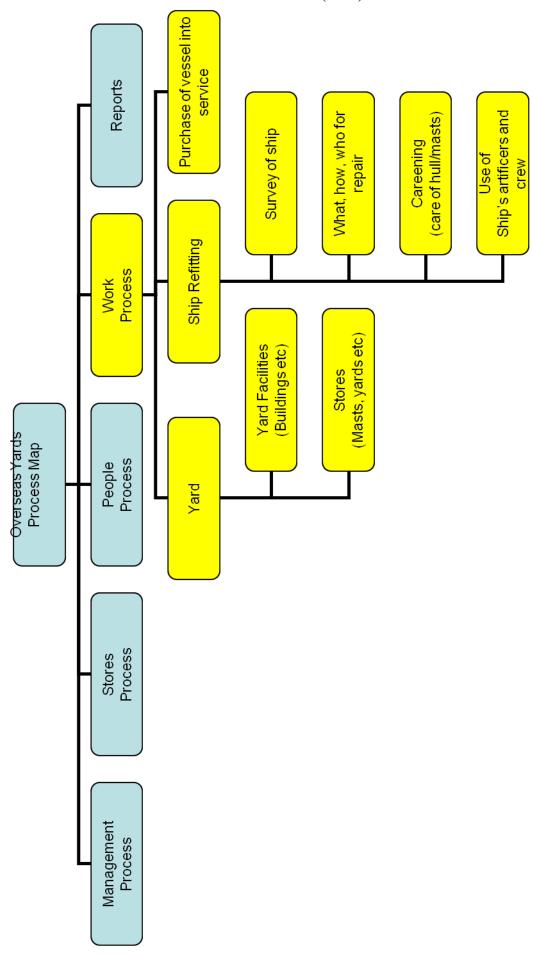
Appendix 2a: Business Processes at Overseas Naval Yards derived from ninth report of the Commission of Fees (1788)



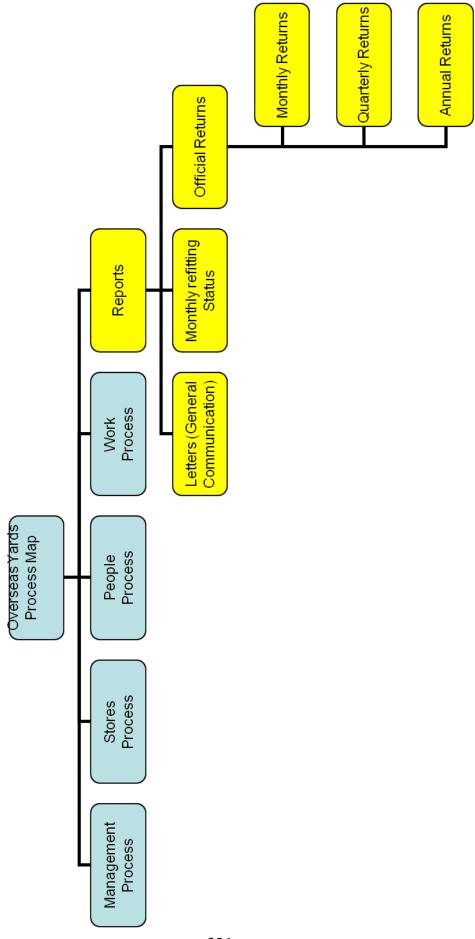
Appendix 2a: Business Processes at Overseas Naval Yards derived from ninth report of the Commission of Fees (1788)



Appendix 2a: Business Processes at Overseas Naval Yards derived from ninth report of the Commission of Fees (1788)



Appendix 2a: Business Processes at Overseas Naval Yards derived from ninth report of the Commission of Fees (1788)



Appendix 2b Reports recorded in Commission of Fees for Foreign Yards

Monthly Reports

Description

A progress of the works carrying on in the yard.

Cash accounts and vouchers.

Accounts of warrants unexecuted, and abstracts of letters to the Navy Board unanswered.

Abstract of yard and ship musters.

A list of all ships and vessels on the station, including those that occasionally arrive.

Quarterly Reports

Description

Accounts of old or unserviceable stores sold.

Charge incurred on ships and works in the yard.

Issue and remains, including masts &c. and muster paper.

Store accounts.

Yard pay books.

Demands of stores, accompanied by remains.

Receipts and expense of muster, pay and other form paper.

Annual Reports

Description	Remarks
Works and estimates proposed for the ensuing year, with the	To arrive at Navy
state of the works in hand at that time.	Board by 30 th Sep
General annual demand, accompanied by remains.	To arrive at Navy
	Board by 30 th Sep
List of artificers entered, dead, or discharged.	Their rate of pay
Return of negroes.	Their rate of pay
List of advertisements, tenders, and bargains, and hire of	
artificers.	
Monthly rate of exchange, and bills drawn within the year.	
Account of the total quantities of naval stores issued or	
expended annually.	

Instructions proposed for Charles Sterling Esq. Commissioner of HM Navy appointed to reside at Jamaica for the better superintendence and dispatch of HM Naval Affairs at the Island.¹

And

For Charles Henry Lane Esq. Commissioner of the Navy appointed to reside at Antigua.

1. Upon your arrival at Jamaica you are to enquire into the state and condition of His Majesty's stores there particularly Masts, Sails and Cordage to inform yourself in what manner they are lodged and how secured from the injury of the weather and Embezzlement, and what houses proper for lodging of stores, for receiving items when landed, and issuing them when the service requires it, can be occasionally hire in convenient situations near the works of the Careering Wharf and timely to hire all such as you foresee may be wanted those purposes upon the best and cheapest terms you care for His Majesty taking care to provide no more then shall be absolutely necessary and to give orders to the Naval Officer at Jamaica to pay for them quarterly or otherwise according to your agreements and to take Receipts for the said payment and you are to consult with the Naval Officer and consider whether if be necessary to Erect any additional buildings for lodging of stores and, if so, in what place or places they may be most properly built to answer the services with what materials, where such materials can be had, and how the whole of those Erections may be completed with all possible good husbandry.

And if the Flag or other Sea Officers Commanding in Chief at Jamaica be in port you are to communicate the same to him for his opinion and you are to transmit to the Navy Board by the first opportunity plans of the additional buildings proposed to be created with Estimates of the Expenses there of with such further particulars as you shall judge necessary in order that the same may be laid before the Lord Commissioners of the Admiral.

2. You are as soon as possible to procure an account of the state and condition of all HM Ships and vessels employed at and about Jamaica and of their Masts, Furniture and Stores, and to get the best information you can of the times when they may be respectively expected at that Island to be careened, cleaned and refitted, and there to consult with the proper officers, and consider how the same may be executed to the best

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¹ Proposed instructions by Admiralty to resident commissioners at Jamaica and Antigua, TNA, ADM 1/3368, 31st December 1803

advantage and what stores and workmen may be wanted. You are strictly to charge the officers to make timely and proper demands of stores, that [?] the service may not at any time be in want, and with their demands to mention the particulars of Remains in stores. And you are to inform yourself what stores can be purchased and brought to Jamaica upon reasonable terms, not only on any Emergency but at all times to furnish the magazines with such as you foresee may be wanted there, and to procure all such workmen in addition to those sent from England as there may be occasion for or you shall foresee the want of but never to purchase any stores, or hire any workmen beyond the Establishment without an absolute want thereof.

- 3. You are to take care to procure good lodging for such workmen as are in want there of <u>and are entitled to it</u>, and to see that the same be as near the works as possible, and in the most healthy part.
- 4. Your are likewise to take great care to have at all times proper Careening Gear of every kind and sheds or such convenience for securing the Blocks, [?] from injury by the weather, as shall be judged necessary
- 5. If you find it necessary you are to purchase a vessel for a Pitch Boat and to order her to be sheathed and properly fitted for that service.
- 6. You are to cause the Boatswains and Carpenters store of all ships and vessels which come into port to be carefully surveyed and the state of them as well as the stores in the magazines to be considered before any supplies are ordered and to take care and consider likewise the wants of the ships in port, or which you may expect there to refit and present your supplies so as that the stores may be issued to ships that are most in want of them and to cause the rigging, cables, and sails to be surveyed on Board before the ship is dismantled as is practised in the King's Yards in England.
- 7. You are to see that great care be taken in the husbanding of such materials as are used in refitting and cleaning of all H M ships, that not any be wasted, embezzled, or misapplied and that the remains be secured for future service letting the person concerned know that any extravagant expense either charged on the ships by the Naval Officers, or made by the officers of ships will not be allowed of upon making either of their, accounts.

- 8. You are to appoint proper watchmen to secure the stores from Embezzlement or any accident by fire.
- 9. You are to take care that all ships and vessels to be careened be fitted in all respects proper for it, particularly so as to secure their masts and that proper provision of water casks or otherwise be made to prevent as much as possible their straining their masts and hulls.
- 10. To the end that these services may be carried on with the utmost dispatch, safety, and good husbandry, you are to see that the methods used in the King's Yards, in cleaning and refitting H M ships and supplying them with stores and accounting for the (same) be observed at the place where you reside so far as the said services will admit of its calling upon the officers under your directions for copies of their instructions for your guidance therein.
- 11. That the works may be well and expeditiously performed you are to see that no more ships be taken in hand to be cleaned, refitted, or stored at a time than you have hands and conveniences to dispatch. So as one may not hinder another and always to inform yourself from the Flag or other Sea Officers Commanding in Chief which ships the services require first to be dispatched, and to give preference to them accordingly.
- 12. You are to exact the attendance and assistance of the officers and companies of the said ships, in the cleaning, refitting and storing of them, according to their duties respectively and if any of them shall be wanting therein, to give an account of it to the flag or other sea officer commanding in chief, that he may give such directions there upon as he shall judge necessary for as much as if the said officers and companies do not do their parts, the above mentioned works will become very changeable and dilatory and the Service will necessarily suffer very greatly thereby.
- 13. You are particularly to exact the attendance of the carpenters and their crews and also of the sail makers of the said ships without any other allowances for the said [?] what is mentioned in the 50th and 51st Articles of the Captain's general Printed Instructions, Viz', one shilling and sixpence per day². But in case the Carpenters and Sail makers of any other ships shall be called upon to assist in the works of ships to which they do not belong, you are then to cause them to be made an allowance of three

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² Antigua station only 1 shilling per day

shillings per day³ and as the service shall call for each assistance you are to apply for the same to the Flag (or other sea officer) Commanding in Chief, and where any such shall be granted to order the Naval Officer to keep lists of the names of Persons appointed for that service, to muster them thereby, and weekly, or monthly, to cause those lists to be cast up and the said persons paid what may be due them either by your order thereon to him, and the Master Shipwright, or in your own presence taking care in the later case to give certificates thereof that the Payments may be properly vouched by those orders, or certificates, and the Receipts of the Parties to who whom payments shall be made.

- 14. When any ship is to be careened you are to give orders to the Master Shipwright, to cause the needful bulkheads upon the Deck to be made, and the Upper works within and without board well (seemed) and caulked, the pumps in the hold to be properly placed and everything else to be timely provided for performance thereof, and in Caulking the said ships, and putting in pieces where necessary to take particular care not to strip or (unbind) the works further then may be absolutely necessary.
- 15. You are to procure from the Navy Office and to take along with you a copy of the General Establishment of the proportion of stores for all HM Ships for your better guidance in examining and correcting the officers demand which is one principal matter requiring your care, and you are therefore from time to time inform yourself by survey or otherwise of the necessity of [using parts? of] such demands before you order the supply thereof, and never to direct any more to be issued than shall be agreeable to the Rules of the Navy and appear to be absolutely necessary.
- 16. You are to cause all such ships as shall be laden with naval stores and come to Jamaica to be unloaded without delay in order to prevent the charge of demurrages.
- 17. You are to take care that all such burning stuff and other materials and stores of any such, as shall from time to time be wanting and can be had in those parts for carrying on the service be timely provided on the best terms that may be ordering such stores to be received and Bills made out for their value agreeable to the method of the Navy and when those Bills shall be signed by you are to give your orders thereof to the Naval Officer to Pay them.

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³ Antigua station only 2 shillings per day

- 18. That no money may be taken up by the Naval Officer, or Bills of Exchange drawn by him upon the Naval Board unnecessarily, you are to underwrite your approval of such as it might be requisite for him to draw agreeably to the 13th Article of his instructions and to give the said Board the earliest advice of them, with the occasion and services that called for the money for which they are respectively drawn and to see that the Naval Officer takes up the Money for his Bills by Public advertisement agreeably to his instructions and that the Premium, if any, be brought to Public account, and the same be certified upon each Respective case.
- 19. When any ships come in for stores you are not to over press the storekeeper (or Naval Officer) with demands at any one time, but to let him have leisure to make his issues by degree, to any one or two ships at once, as he can dispatch them.
- 20. You are to order the Naval Officer to send home his muster Books as often as conveniently may be for checking his Pay Books, and victualling books of the ships when they come Home, and as delays frequently happen in the Captains not transmitting the Muster Books, You are to impress upon them the necessity of their complying with their Instructions on this Head.
- 21. You are to order the Naval Officer to state and send home likewise his accounts of Disbursements with his vouchers for the same as often as he possibly can, and you are to direct him to send home in like manner his accounts of the issues of stores and the vouchers relative thereto, And as after your arrival the Naval Officer is not to make any payment whatsoever, but by your order. You are to signify the same to him and before you authorise such payments you will inform yourself fully of the necessity thereof and see that the vouchers conformable to his instructions (a copy of which will be furnished to you by the Navy Board) are produced. You will observe that the 13th Article of these Instructions as it stands in the Printed Copy, is framed upon a general principle applicable in some parts to Naval Officers at one place, and others to Naval Officers in other places. You will therefore apply it according to the circumstances at the Place where you are Resident at. And as money is taken up at Jamaica by Public Advertisement and the lowest tender is to be approved by you, and transmitted to the Navy Board with the Naval Officer's letter of advice it is unnecessary for him to transmit the monthly certificates of the exchange from town merchants because as all payments are made at the rate of £140 Currency for £100 Sterling (agreeable to a law of

the Colonial Assembly) the rate of exchange at which he actually takes up money, has no relation to the Rates at which he makes and charges his payments. You will be careful not to authorize any payment for Bounty to seamen, nor suffer any Merchant Vessel to be repaired not any stores supplied to her, without particular directions from us for so doing. Anything in the 13th Articles of the Instructions to the Storekeeper (page 17) to the contract not withstanding.

- 22. You are to see that the business of every office under your direction whether within the Naval or any other department of Government be done at, and the expense thereof be brought and the charge of such offices respectively; And that the officers of one department be not troubled upon business relating to another. You are to see that the officers and companies of the ships do fetch their own stores and water and ballast them with their own Boats, without any extraordinary expense to His Majesty.
- 23. If at any time the works shall require more hands than the standing workmen and the assistance to be procured from the ships in Port can dispatch in time you are to hire as many more hands as shall be absolutely necessary and care be had at the place at which you Reside upon the best terms you can, taking care they are kept no longer than the Service Requires ordering the Naval Officer to keep lists of them and causing them to be paid in the manner directed by the 15th Article of the General Printed Instructions for the Officers at the Foreign Yards.
- 24. You are to keep and send to the Navy Board monthly, or as often as you can, an account of every ship that has been Careened and Refitted with any particulars relative there to which may be necessary for their information.
- 25. When there shall not be any ships of War in want of cleaning, or refitting, or not so many as will employ the workmen you are not to suffer them to be idle, but to see that they are employed on the repairs of any of the King's vessels belonging to the Port, or of any Buildings, Boats and Masts that may stand in need of it; And also on such other works as shall be most for His Majesty's advantage and to be particularly careful that not any Boats or Masts be "cast" that can be repaired be made serviceable again. And that everything be husbanded to the best advantage.

26. You are to examine the Books and Pay lists of the Dockyard, particularly the Muster Books so as to satisfy yourself of their correctness before they are regularly signed by the Respective Officers.

And as the Naval Officers are directed to receive into their charge all Muster Books accounts of Warrant officers Reports of survey on stores, and other papers necessary for keeping their accounts, and forward these to the Navy Board from time to time as opportunities may offer, informing the Board not only of the time, but of the ships or vessels by which they may be transmitted and to give Receipts to the parties for all such Accounts Reports and as they may receive from them into their charge. You are particularly required to see that this duty be punctually attended to.

- 27. You are to keep a constant correspondence with the Navy Board in the same manner as is done by the Commissioners of the Out Ports in England, and to manage affairs and to act accordingly.
- 28. To prevent any differences of opinion which might otherwise arise between you and the Commander-in-Chief of HM Ships at Jamaica, respecting the appointment of persons to any vacancies which may happen amongst the officers of HM's Yard ______, you are hereby authorised and empowered to appoint proper persons to fill any such vacancies until the some shall have been reported to the Navy Board and directions given there upon: but in the appointment to any vacant office, except the storekeeper such as Master Shipwright, Master Attendant or Boatswain you are to take the Recommendation of such Commander in Chief.

Lastly

It being very material that the Quarterly Returns (No 6) of the remains of and demands for stores should be made up within the period prescribed by the Navy Board and forwarded to England by the first proper opportunity afterwards, you are to see that the same is done, or that satisfactory reasons are assigned for not doing it; And in order to keep this matter in your memory you are to order the Officers to report to you Monthly, when the last Return of the before mentioned kind was completed, when forwarded to England and by what conveyances and in their monthly reports on: 1st February; 1st May; 1st August; 1st November. They are to acquaint you whether the Return in question for the preceding Quarter is completed, or will be completed by the prescribed period or what cause will prevent it.

Appendix 2d Table of Reports produced by Commission for Revising and Digesting the Civil Affairs of His Majesty's Navy

Report	Description	Date	Date	Order in
No	•	completed	printed ¹	Council ²
1	Dockyards (Home) – Instructions	13/6/1805	4/2/1806	4/7/1805
	for Resident Commissioner and			
	Principal Officers.			
2	Dockyards (Home) – Instructions	6/2/1806	3/4/1806	11/2/1807
	for inferior officers.			
3	Dockyards (Home) – Instructions	24/6/1806	16/7/1806	20/9/1809
	and duties for Surveyors and			
	Assistants; Education of			
	shipwrights; Construction of ships;			
	Payment methods of workforce.			
4	Navy Office.	9/7/1806	11/4/1809	28/10/1807
5	Dockyards (Foreign) – Instructions	2/8/1806	11/4/1809	14/9/1808
	for Resident Commissioner and			
	Principal Officers.			
6	Out Ports – Instructions for Naval	4/12/1806	11/4/1809	14/9/1808
	Storekeepers at Deal, Harwich,			
	Leith, Falmouth, Kinsale.			
7	Hospitals (Home).	26/2/1807	11/4/1809	14/9/1808
8^3	Dockyards – Management of	26/2/1807	26/2/1807	20/9/1809
	workforce.		(Not by	
			Parliament)	
9	Transport Office.	25/6/1807	11/4/1809	14/9/1808
10	Victualling Office.	11/8/1807	11/4/1809	14/9/1808
11	Victualling establishments (Home).	22/12/1807	11/4/1809	14/9/1808
12	Victualling establishments	22/12/1807	11/4/1809	14/9/1808
	(Foreign).			
13	Transport organisation (Home and	22/12/1807	11/4/1809	14/9/1808
	Foreign).			
14^{4}	Timber – sources of supply from	8/3/1808	Not printed	Remained
	Britain and many areas of the world			in
	(manuscript copy).			committee
15 ⁵	Appendices only: correspondence	1804-07	Not printed	Remained
	on various projects. Includes			in
	thinking on strategic materials			committee
	supply and manufacture. Also			
	special projects, e.g. Plymouth			
	Breakwater and Northfleet			
	dockyard (manuscript copy).			

¹ Printed by House of Commons unless otherwise stated.

² Reports of Revision – progress through Privy Council (Approval date), TNA, PC1/13/93, 8th Feb 1810. ³ 5th, 6th, 7th and 8th Reports of the Commissioners for Revising the Civil Affairs of the Navy, NMM Library. PBD0719.

⁴ 14th Report of the Commissioners for Revising the Civil Affairs of the Navy, TNA, ADM 106/3110. ⁵ Appendix to 15th Report of the Commissioners for Revising the Civil Affairs of the Navy – 1807,

NMM, CAD/A/10.

Appendix 2e Proposed foreign yard establishments – Fifth Report of Commission of Naval Revision

	Present S	Salaries	Proposed
Station	In War	In Peace	Salaries in War
Station	(£)	(£)	and Peace
			(£)
Gibraltar, Jamaica and Antigua			
Commissioner	1200	1200	1400
1 st Clerk	240	200	250
2 nd Clerk	120	100	120
Naval Storekeeper	600	500	600
1 st Clerk	240	200	250
2 nd Clerk	120	100	120
3 rd Clerk (if necessary)			
Master Attendant	300	250	400
Clerk (if necessary)	120		120
Master Shipwright	360	300	400
Clerk	120	100	120
Halifax			
Commissioner	1200	1200	1200
1 st Clerk	180	150	180
2 nd Clerk	120	100	120
Naval Storekeeper	480	400	450
1 st Clerk	180	150	180
2 nd Clerk	120	100	120
Master Attendant	240	200	350
Clerk (if necessary)			120
Master Shipwright	360	300	350
Clerk	120	100	120
Malta			
Commissioner	1200	1200	1400
1 st Clerk	240	200	250
2 nd Clerk	120	100	120
Naval Storekeeper	600	500	600
1 st Clerk	240	200	250
2 nd Clerk	120	100	120
Master Attendant	300	250	400
Clerk (if necessary)	120	100	120
Master Shipwright	360	300	400
Clerk	120	100	120

Appendix 2e Proposed foreign yard establishments – Fifth Report of Commission of Naval Revision

	Present	Salaries	Proposed
Station	In War	In Peace (£)	Salaries in War and Peace (£)
Cape of Good Hope			
Commissioner			1400
1 st Clerk			250
2 nd Clerk			120
Naval Storekeeper	600	500	600
1 st Clerk	240		250
2 nd Clerk	200		120
Master Attendant	300	250	400
Clerk (if necessary)	120	100	120
Master Shipwright	360	300	400
Clerk	120	100	120
Bermuda			
Naval Storekeeper	300		300
Clerk	100		100
Madras and Bombay			
Commissioner			2000
1 st Clerk			350
2 nd Clerk			180
Naval Storekeeper	200 + 3d per	200 + 3d per	850
_	£ on his	£ on his	
	disbursements	disbursements	
1 st Clerk			350
2 nd Clerk			180

Appendix 2e Proposed salaries foreign victualling yards – Twelfth Report of Commission of Naval Revision

Station	Present Salaries (£)	Proposed by Victualling Board	Proposed by Board of Revision (£)
Gibraltar			
Agent Victualler	600	800	600
1 st clerk	240	350	250
2 nd clerk	120	180	120
3 rd clerk (if necessary)	100	120	120
Malta			
Agent Victualler	400	700	500
1 st clerk	90	300	220
2 nd clerk	75	150	120
3 rd clerk (if necessary)	60	100	100
Cape of Good Hope			
Agent Victualler	600	700	600
1 st clerk	240	300	240

Appendix 2f: Business Processes at Overseas Naval Yards derived from fifth report of the Commission of Naval Revision (From September 1808)

In chapter two it was noted that those familiar with the practice of management consultants would find themselves on recognizable ground on reading the reports of the Commission on Fees. This is also true for those who have familiarity with the introduction of ISO 9001 (International Organization for Standardization 9001)¹ into their organisations and the process and output of the Commissioner of Naval Revision. A brief examination of ISO 9001 actions illustrates this comparison with one important exception that of actively facilitating continual improvement. Both ISO 9001 and the Commission of Revision lay down the following, a) a set of procedures that cover all key processes in the business; b) monitoring processes to ensure they are effective; c) keeping adequate records; and d) checking output for defects, with appropriate and corrective action where necessary.

The work and output of the Commission of Naval Revision was impressive for any organisation attempting to have all of its business operating in the same way. Examples of this are in the many forms that were produced to ensure that work was carried out with the same objectives. A particular feature of this is the 187 forms to be found in the first report. The language of the report also reflects the principles of clear instructions via the use of shall and will as opposed to should and may to ensure that the instruction is an order rather than a request.

Appendix 2a examined the underlying activities derived from the ninth report of the Commission on Fees drawn as business process diagrams. These diagrams were used to examine the core activities of the overseas yards and provide a method to visualise the grouping of activities. This approach is continued in this appendix to determine if the detailed instructions of the fifth report can be mapped to those already established. This also allowed a comparison to be made to determine if there had been changes in tasks or additional tasks had been detailed in the fifth report.

The same method has been used in describing the main procedures and the tasks within these areas to enable the development within these areas to be clearly seen. Where a process has been added or more detail expressed it has been shown in green. What

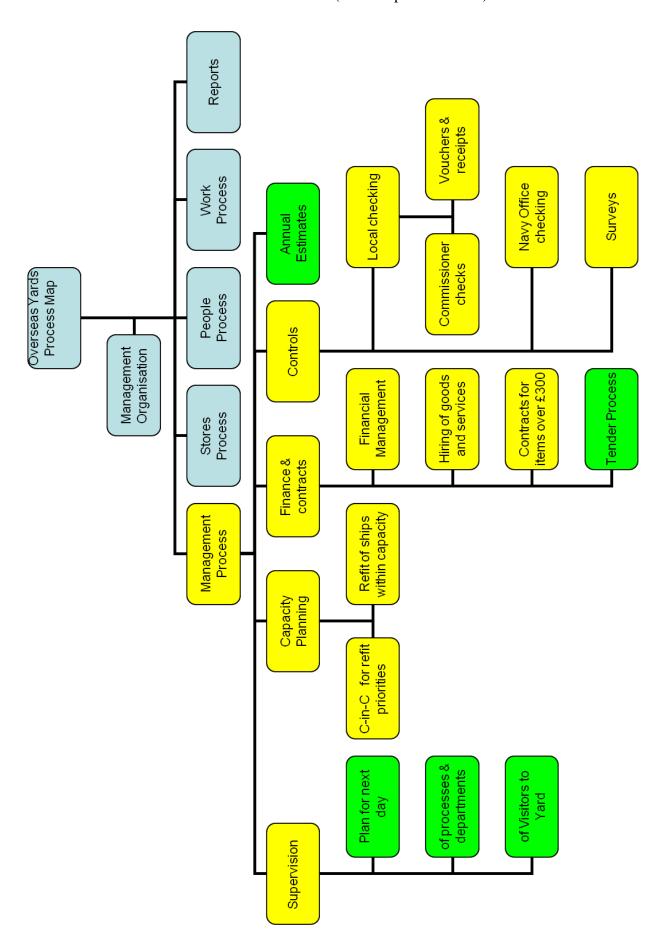
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¹ Good Management Practice, *International Organization for Standardization*, http://www.iso.org/iso/management_standards.htm

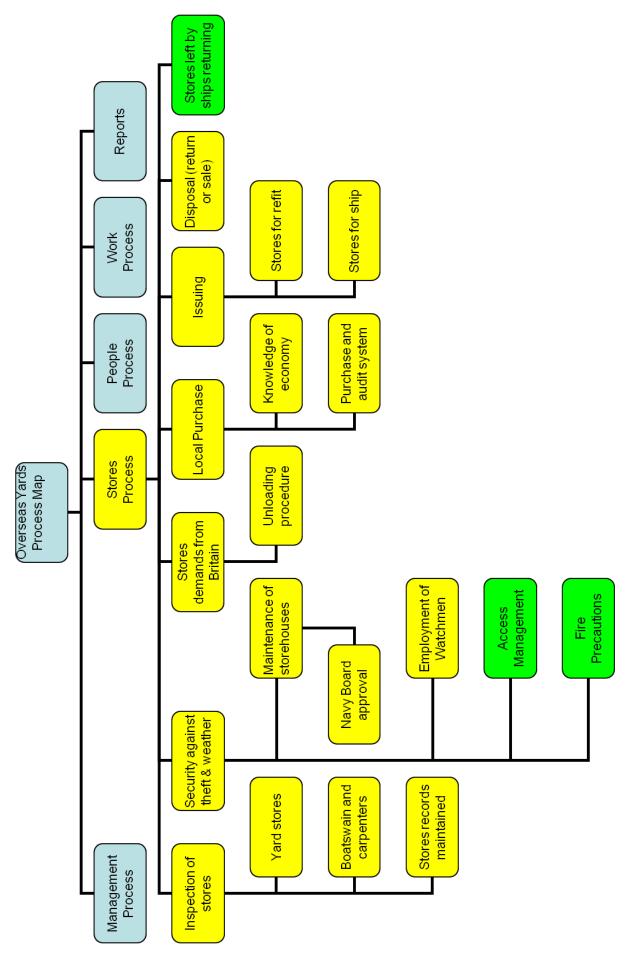
Appendix 2f: Business Processes at Overseas Naval Yards derived from fifth report of the Commission of Naval Revision (From September 1808)

becomes evident is the procedural areas of management, stores, people, work and reporting were correctly captured from the ninth report of the Fees commission. When these areas are further examined a more detailed picture emerges. This could be for a combination of two reasons firstly, the procedures were already present but could not be obtained from the Fees Commissioners' report; and secondly, new procedures were needed. Although all the areas have been provided with additional activities, those concerning stores and the workforce and staff of the naval yard had been considerably detailed. The additions have been show as in green.

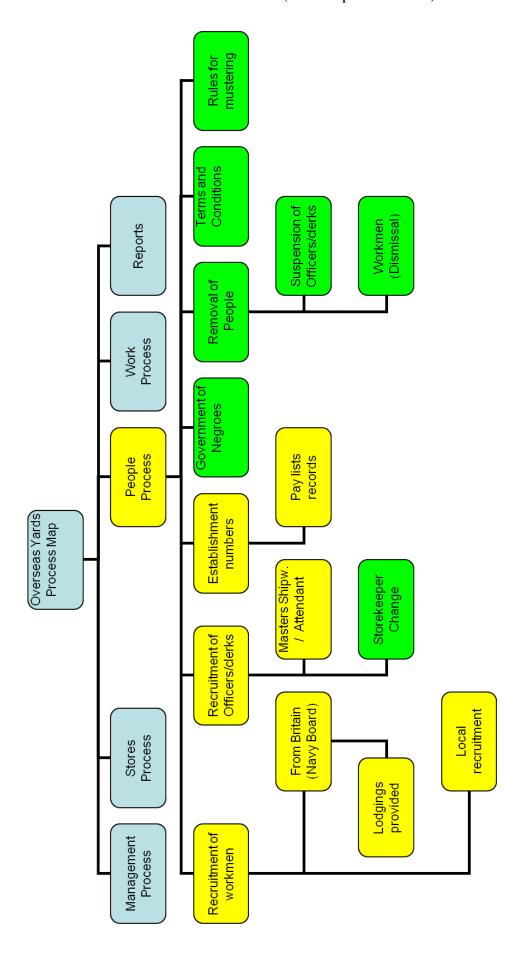
Appendix 2f: Business Processes at Overseas Naval Yards derived from fifth report of the Commission of Naval Revision (From September 1808)



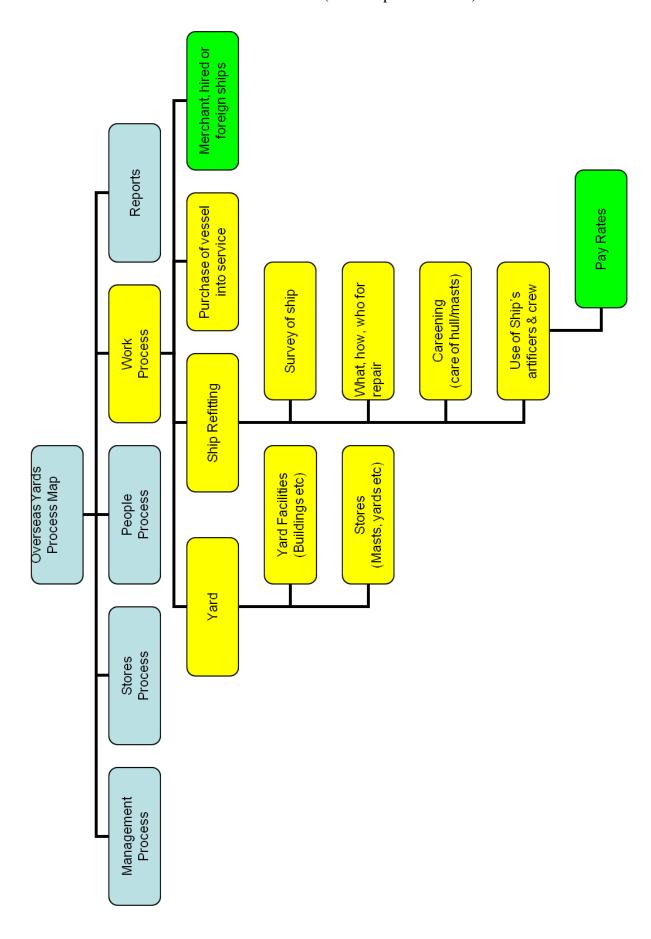
Appendix 2f: Business Processes at Overseas Naval Yards derived from fifth report of the Commission of Naval Revision (From September 1808)



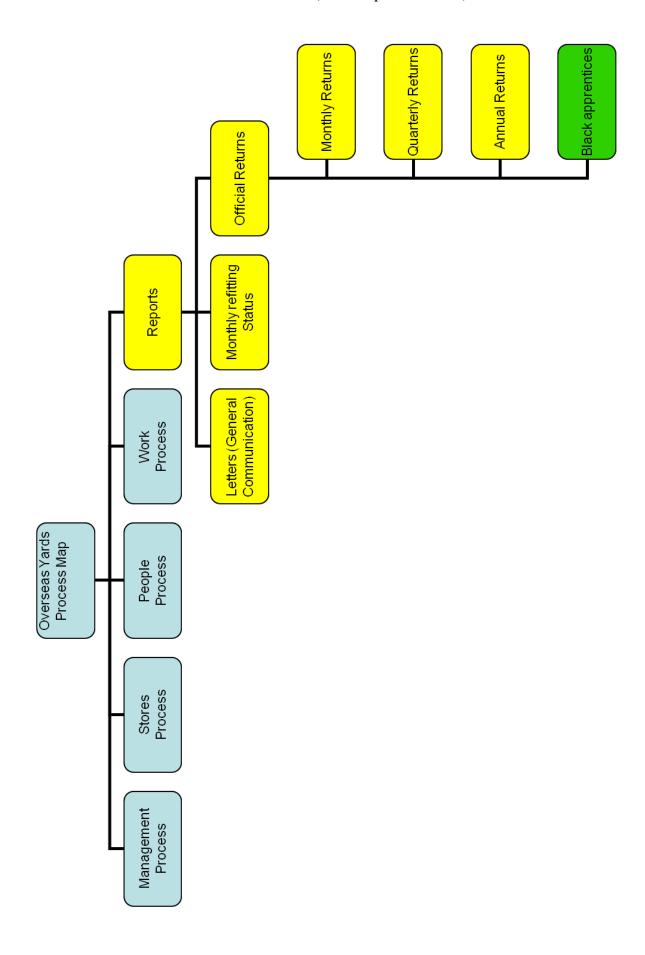
Appendix 2f: Business Processes at Overseas Naval Yards derived from fifth report of the Commission of Naval Revision (From September 1808)



Appendix 2f: Business Processes at Overseas Naval Yards derived from fifth report of the Commission of Naval Revision (From September 1808)



Appendix 2f: Business Processes at Overseas Naval Yards derived from fifth report of the Commission of Naval Revision (From September 1808)



Appendix 3a: Drawings, charts and pictures of the dockyard at Kingston, Ontario during War of 1812



Plan of Kingston Harbour showing location of Dockyard at Point Frederick¹



The naval facilities at Point Frederick, Kingston about 1815 viewed near Point Henry²

¹ Gardiner, R. (ed), The Naval War of 1812, 106.

² Part of a watercolour by Irvine, H., *National Archives of Canada*, C145247, Gardiner, R. (ed), *The* Naval War of 1812, 110.

Appendix 3a: Drawings, charts and pictures of the dockyard at Kingston, Ontario during War of 1812

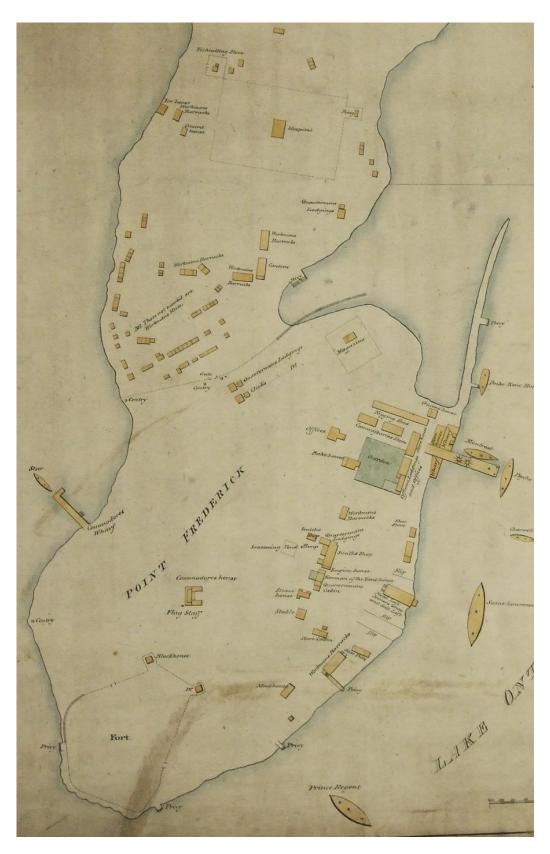


A plan of Point Frederick showing location of dockyard buildings descriptions³

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³ Kingston Dockyard around 1815, UKHO, Ae1.

Appendix 3a: Drawings, charts and pictures of the dockyard at Kingston, Ontario during War of 1812



Detail of Kingston dockyard showing building slips and ships at their berths⁴

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⁴ Kingston Dockyard around 1815, UKHO, Ae1.

Appendix 3b: Planned British Ship Deployments 1792 to 1813 and by vessel type in 1809 to 1810

The following graphs have been drawn to determine the planned location of British naval ships at overseas stations during the Revolutionary and Napoleonic wars, and to determine the anticipated peak refit workload at overseas commands.

Figures 3bi shows the strength of the British navy over 21 years commencing in 1792. This shows the navy peaked in numbers of ships in 1809 with 732 vessels. The graph shows the individual commands, both at home and overseas, and includes the vessels that were awaiting assignment.

Figure 3bii more clearly shows the number of ships allocated to the overseas commands during the Great Wars with France. The Jamaican and Leeward Island commands have been combined as the West Indies with the North American, Nova Scotia and Newfoundland stations represented as North America. This graph also indicates the maximum number of ships deployed occurred in 1809.

Figures 3bi and 3bii did not identify the type of vessel deployed to the individual stations, but to more easily understand the vessels supported at the overseas stations figures 3biii, 3biv and 3bv have been drawn. These graphs show the deployments for January and June 1809 and January 1810 to coincide with the year when naval strength reached it peak in numbers of ships.

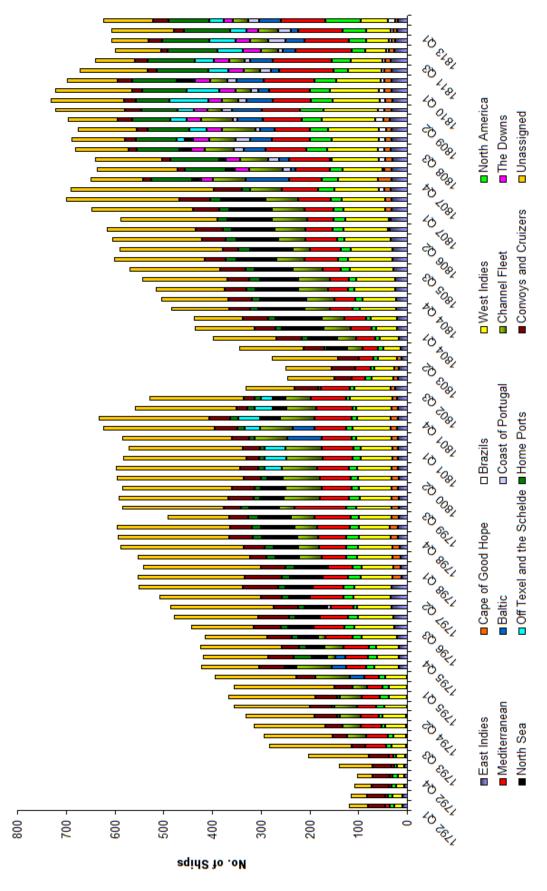


Figure 3bi: Planned ship deployment for all theatres, 1792-1813

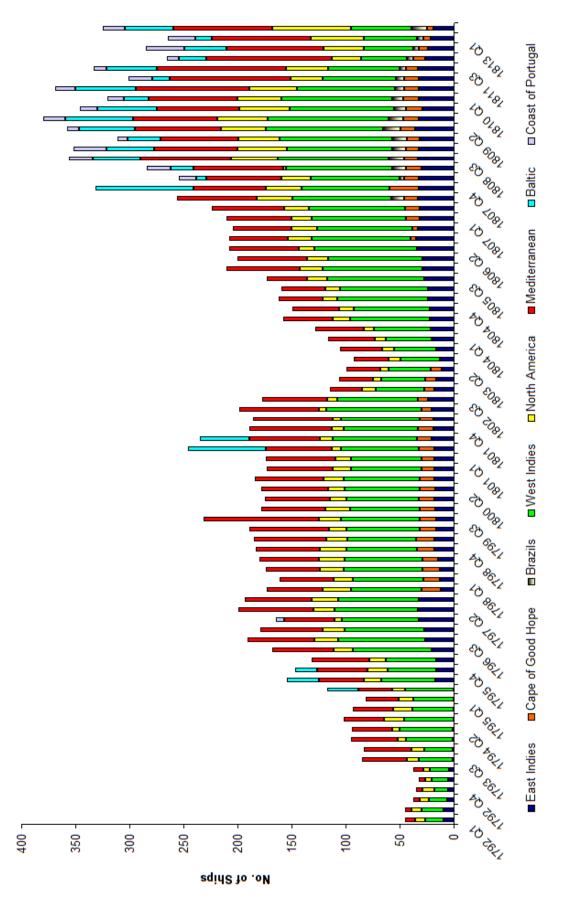


Figure 3bii: Planned ship deployments at overseas stations – 1792 to 1813

Appendix 3b: Planned British Ship Deployments 1792 to 1813 and by vessel type in 1809 to 1810

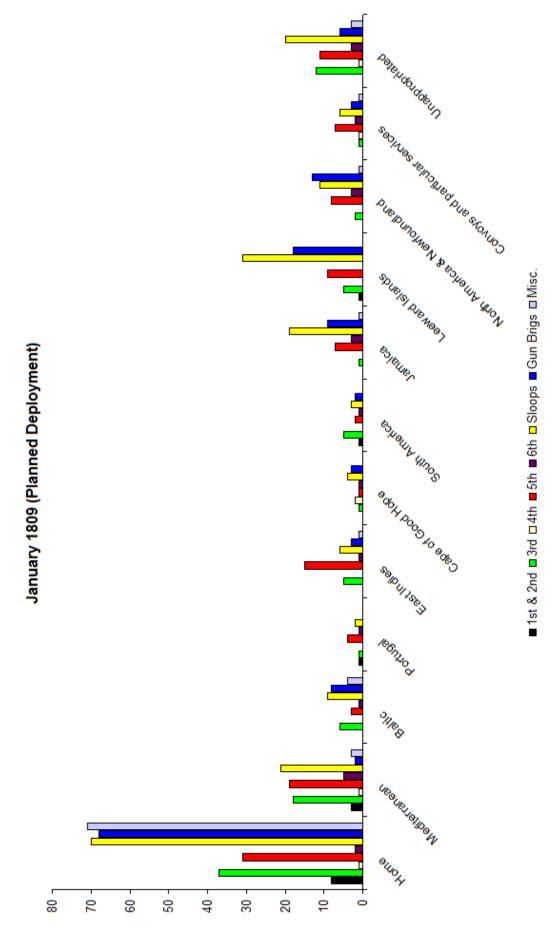


Figure 3biii: Planned deployments by vessel type in January 1809

Appendix 3b: Planned British Ship Deployments 1792 to 1813 and by vessel type in 1809 to 1810

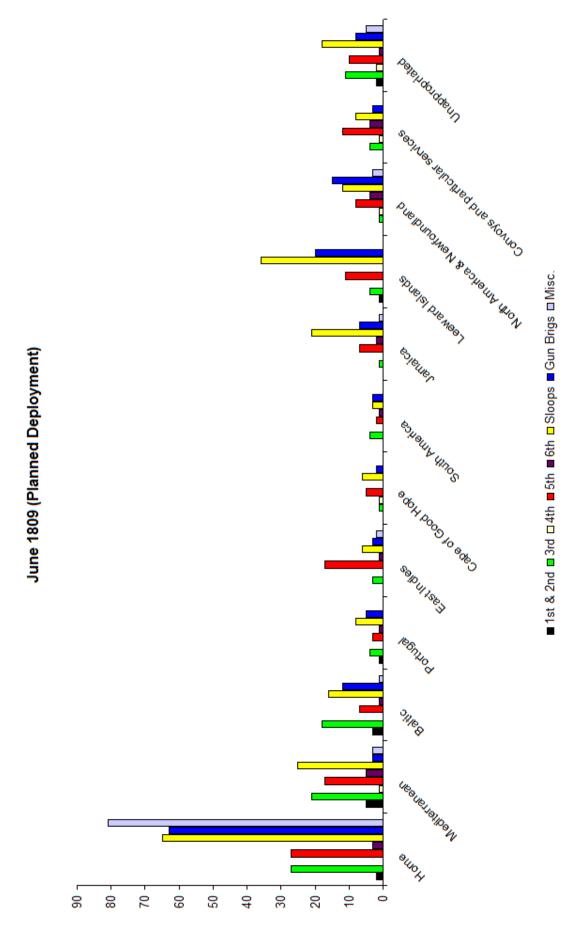


Figure 3biv: Planned deployments by vessel type in June 1809

Appendix 3b: Planned British Ship Deployments 1792 to 1813 and by vessel type in 1809 to 1810

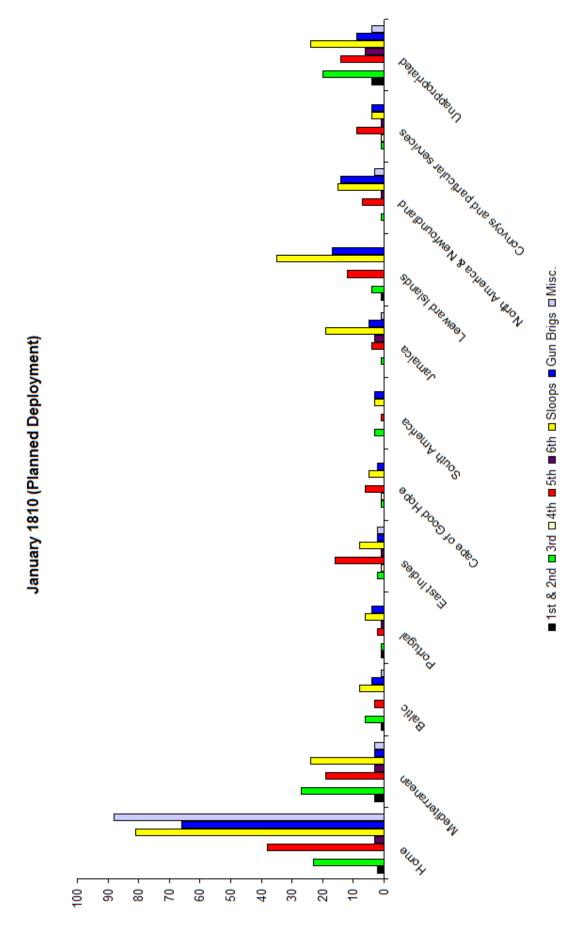


Figure 3bv: Planned deployments by vessel type in January 1810

Appendix 3c: Commission of Naval Revision – Instructions for Resident Commissioners at Overseas Stations

INSTRUCTIONS FOR THE RESIDENT COMMISSIONERS AT HIS MAJESTY'S NAVAL ESTABLISHMENTS ABROAD.

BY The Commissioner for executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, &c.

ARTICLE 1.

YOU are to apply to the Navy Board, for a Copy of their Infructions to the Officers of His Majefry's Foreign Yards, which you are to observe for your guidance, in conducting the concerns of the Yard to which you are appointed, as firiedly, in every respect, as if they had originated from us; and you are to consider yourself responsible for seeing them most punctually carried into execution by the Officers to whom they are addressed. You are frequently to peruse the same, to make yourself acquainted with the respective Duties of those Officers, in order that you may beable to judge of the attention, zeal, and ability displayed by them in the performance thereof. by them in the performance thereof.

2.]—On your arrival you are to take upon you the superintendence of the Yard, residing Autodance and Reconstantly in the house or apartments aliotted you, in order that you may be at all times sidence. in readiness to give directions, and see the Duties of the Yard properly carried on.

3.]-You shall have full Authority over all Officers and other persons in the Yard, and shall controll every part of the bufiness carried on therein; and you are to exercise this Authority whenever you may find it necessary for the purpose of obliging every person under your fuperintendence to discharge the Duties of his Office with promptitude and fidelity, and to pay obedience to all Orders and Regulations issued by the Navy Board, or given by yourself. To this end you shall have the power of suspending any Officer or Clerk, and of discharging Authority

as well as fulfording any other perfor in the Yard, Hulk, or Craft belonging thereto. In case of the suspension of an Officer or Cierk, the caste and circumstances thereof shall be forthwith reported to our Secretary, for our information, or to the Navy Board, as the case may require; and you are to appoint another person to act in his stead, until our pleasure or that of the Navy Board be known.
4.]—All Orders, Warrants, and Letters, from the Navy Board, will be fent under cover to All Orders to pass

you; and you are to be very particular in caufing them, as well as fuch directions as you may through his hands. from time to time find necessary to give, to be carried into execution in the most speedy, effectual, and economical manner. All official Letters and Reports from the Officers of the Yard shall be delivered, unscaled, to you, to be transmitted to the Navy Board, in order that you may have complete knowledge of all the concerns of the Yard, and be able to make such observations thereon as you shall think necessary

Tobservations thereon as you that think necessary.

5.]—When Stores are demanded for any of His Majesty's Ships, you are occasionally to Demands for Stores inspect the Boatswain's and Carpenter's Expence Books and working abstracts yourself, and for Stores not trust implicitly to the examination of the Master Attendant and Master Shipwright; and species, and improper expenditure reported.

not trust implicitly to the examination of the Master Attendant and Master Shipwright; and spected, and improper in case any wasteful or improper expenditure of Stores of any kind should be discovered, you are to represent the same to the Commander in Chief of His Majesty's Ships on the Station, and also to the Navy Board; you are also to examine demands for Musice Paper, and prevent, as much as possible, any abuse in the expenditure thereof.

6]—You are never, of your own authority, to function the issue of more Stores than are warranted by the Establishment; and, notwithstanding it is desirable that His Majesty's Ships should at all times be well supplied with Stores, you are to the your discretion, in resulting even to complete that Establishment in articles not absolutely necessary, if, from the exhausted state of the Magazines, with respect to any species of Stores, and the probable wants of the Squadron, you should see good reason for so doing. wants of the Squadron, you should fee good reason for so doing.

7.]—If the Commander in Chief, in confequence of any particular fervice he may have in view, shall find it necessary that any Ships should be furnished with more, or with other performance of Works focies of Stores than what are preferibed by the Establishment, or shall require any extraordinary Works to be performed in any Ship, or any alteration to be made therein, and shall make application to you in writing for those purposes, you are, notwithstanding the above directions (which are given for your general guidance) to comply with any such special Requisitions, transmitting a copy of them to the Navy Board by the first opportunity; but you are not to comply with any application of that nature which may be made to you by the Capare not to comply with any application of that nature which may be made to you by the Captains of His Majeffy's Ships in the absence of the Commander in Chief, excepting in eases of the most argent necessity, of which you are to be fully fatisfied, and the particulars of which you are to communicate to the Navy Board.

you are to communicate to the Navy Board.

8.3—You are to be very particular in causing timely Demands to be made by the Officers of the Yard for Stores, to prevent the Service being put to inconvenience for want thereof, or the incurring of unnecessary expense, by making purchases in the Country; but, at the same time, you are to guard against too great an accumulation of Stores of any description.

9.3—You are to inform yourfelf, very particularly, of the resources of the Country, communicating, occasionally, to the Navy Board, what Stores and Materials are produced there at a cheaper rate than they can be sent from England; and you are to entite such as may be wanted to be sincly provided, on the best possible terms, in the manner directed by the Commissioners of the Navy; giving them the necessary information thereon, by the earliest opportunity, that the supplies may be regulated accordingly.—You are also to inform yourself what Stores, of all other descriptions, can be procured on the spot, in case of an emergency 121.

Appendix 3c: Commission of Naval Revision – Instructions for Resident Commissioners at Overseas Stations

FIFTH REPORT OF THE COMMISSIONERS

4.0

gency and an abblute necessity of having recourse to this mode for furnishing any articles How agreements for ufually fent from England .-- You are to observe that all agreements and bargains of every Stores, &c. are to be kind, whether for the purchate of Stores or for works to be performed, are to be made, made.

under your immediate infpection, by the Naval Storekeeper, agreeably to the Navy Board's Instructions on that subject.

and Ships.

10. You are to be particularly careful that the Naval Storckeeper comply firicity with his Instructions, in mustreing the people of the Yard, as well as the Companies of His Ma-Mustering the Yard jesty's Ships and Vessels which may be in the Port, or in the limits thereof; and that he

Conduct of Clerks.

picty's Ships and Veffels which may be in the Port, or in the limits thereof; and that he punctually transmit to the Navy Board his Muster Bocks of the Ships and Vessels which he has had an opportunity of mustering, in order that the Pay and Victualling Books of such Ships and Vessels may be checked thereby on their arrival at the proper Offices.

11.]—You are frequently to visit the several Offices, to see that the Clerks regularly attend to their Duties, and that the principals of the respective departments preserve good order and regularity among them; occasionally asking such questions publicly as may satisfy you that no part of the business of the several Offices is neglected.—And as the keeping up of the general Store Accounts demands the most particular attention, you are occasionally, and at uncertain times, to call for and inspect the same, and to see that they as well as every other account be not suffered to fall into arrear.

. Store and other Accounts.

. Returns counts.

General Duty

account be not fuffered to fall into arrear.

12.]—You are to cause the respective Officers of the Yard to be punctual in making all the periodical Returns which are required of them; and which they are to prepare and lay before you as foon as possible after the expiration of the times to which they are to be made up. You are carefully to examine the whole, and certify thereon your having so done. You are frequently to inspect the Muster Books of the Yard, and take care that all absenters have been checked as the case may have required, and that the Victualing Books correspond therewith. You are to see that the Pay Lists be made out agreeably to the Muster Books; to examine and compare them with the Monthly Progrets, taking care that no person be paid for a longer time than he shall absolutely have been cur-Muster Books; to examine and compare them with the Monthly Progress, taking care that no person be paid for a longer time than he shall absolutely have been employed, and also, as far as you may be able to judge, that a fair and proper proportion of work has been done by each man for the money he is to receive; and you are to certify on such Pay Lists and Progresses, that you have inspected the same. You are to controul the Payments of the Yard, and certify on the Pay Lists that you have so done, and that the Payments were made in your presence. You are also to controul all Disbursements of money of every description, and to consider it as a most important part of your Duty to inspect, in the minutest manner, all contingent Accounts and Disbursements of every kind; you are to compare the Bills and Receipts for every article which may have been purchased, with the charges made in the said Accounts, and see that every voucher, required by the Navy Board, be produced; and that they be attested by respectable persons, and proper judges of the prices of the articles purchased; and the same care is to be taken with respect to the production of the vouchers, required by the Navy Board, for every other Payment made by the Naval Storekeeper. Naval Storekeeper.

Procuring and dif-

Naval Storekeeper.

13.]—You are to cause the most scrupulous attention to be paid to all the Regulations, with respect to procuring Money; to take care that no Bills be drawn unnecessarily, and that the Naval Storekeeper has not, at any time, in his hands a greater sum than is prescribed by the Instructions of the Navy Board on that head. For this purpose, you are strictly to examine his Disbursements and balance of Cash, before you approve of any Bill being drawn on Government. You are to certify the monthly Rate of Exchange, which the Naval Storekeeper is directed to fend to the Commissioners of the Navy; and you are to be very particular in seeing that the Rate be instructed. fioners of the Navy: and you are to be very particular in feeing that the Rate be just, and that upon all occasions of taking up and paying away Money, the Public have the full benefit of the Exchange or Premium.

Inftructions and Re-

-In order to impress upon the minds of the Officers of the Yard a stronger sense of

Infructions and Regulations to be read, to the Officers.

14.]—In order to impress upon the minds of the Officers of the Yard a fironger fense of their Duties, you are, as often as you may find it necessary, but at least twice in each year, to assemble them before you, and in the presence of each other to cause the Navy Board's Instructions, as well as such Local Regulations as may have been established, to be read; making such remarks as you may judge proper on any instance of neglect or inattention that you may have observed in any Person, cautioning him against a repetition thereof; and you are to suggest to the Navy Board any alterations or additions, which may occur to you, for improving their Instructions to those Officers.

15.]—When any Vacancies happen in the Yard for Officers, you are to cause the most proper persons to act therein until others are appointed, or until you shall receive directions from us on the subject. But, in appointing a Master Attendant or Master Shipwright, you are to take the recommendation of the Commander in Chief, when he shall be able to furnish, from the Squadron, persons more fit for such vacant Offices than you can otherwise procure. In case you should have occusion to appoint an acting Naval Storekeeper, you are to require him to give security to such amount as you shall think proper; cause the Stores to be surveyed, agreeably to the Navy Board's Directions, and charge him therewith accordingly. accordingly.

To co-operate with 16.]—You are at all times zealoufly to co-operate, as far as possible, with the Commander in Chief, Captains, and Officers of His Majefty's Ships and Vessels on the Station, in all Chief, &c. their Duties connected with the Yard, so that the Public Service in every respect, as far as may depend on your co-operation, may be carried on with all possible advantage and difpatch.

: Ships.

17.]-You are to transmit regularly to our Sceretary, for our information, a Monthly Appendix, No. 81. [17.]—You are to transmit regularly to our Secretary, for our information, a Monthly Arrival and tailing of Report, agreeably to the form an exed, of the Arrival and Sailing of all II.s Majetiy's Ships, Transports,

Appendix 3c: Commission of Naval Revision – Instructions for Resident Commissioners at Overseas Stations

ON THE CIVIL AFFAIRS OF THE NAVY.

11

Transports, and other Vessels in the pay of Government; noting the principal repairs the former may have received and the time they were under the Yard Progress. This Report is also to notice the Arrival and Sailing of all Foreign Men of War, and a copy of it is to be . fent to the Commander in Chief for his information.

18.]—When any extraordinary circumfiances occur, you are to transinit, for our in- Who to correspond formation, an account thereof to our Secretary; but you are regularly to correspond with the Commissioners of His Majesty's Navy, and to obey all Orders given, and conform to every Regulation which may be made, from time to time, by them, for the management of the affairs of the Yard to which you are appointed; and it is expected that you are your utmost diligence to detect and prevent abuses of every kind, and to promote, to the best of your abilities, the wessure of the Public Service. Service.

10.]—You are, in addition to what is stated in the foregoing articles, to take upon the fuperintendence of the Department under the direction of the Commissioners for conducting the Transport Service, and for taking care of sick and hurt Seamen and Prisoners of War, and also that under the Commissioners for Victualling Ilis Map jesty's Navy, which may be established on the Station where you reside. You are therefore at the sud of each quarter or offener if you think proper to call for and therefore at the end of each quarter, or oftener if you think proper, to call for and to examine all the accounts of those branches of the Naval Service, to fee that the whole bufiness thereof has been properly and economically conducted. You are to inspect and compare the bills and receipts with the charges made in the accounts; fatisfying yourself as to the validity of the vouchers, the respectability of the Merchants and Tradesmen attesting the same, and their competency to judge of the circumstances to which they certify; and also, whether the articles purchased for His Majesty's Service were really necessary, good in kind, and procured at the cheapest rate or current makes raises at the time that the cheapest rate or current to which they certify; and alfo, whether the articles purchafed for His Majefty's Service were really necessary, good in kind, and procured at the cheapest rate or current market price at the time; that all the workmen, labourers, and other persons employed in their different departments were requisite for the Public Service, and that no works have been taken in hand unnecessarily; that all the money drawn for has been procured on the best terms, and that the premiums on the bills of exchange have been regularly brought to account. Having satisfied yourself that no frauds or abuses exist, and that the accounts are just and proper, you are to fign a Certificate to that essential that the account are just and proper, you are to fign a Certificate to that essential account thereof. But if, on the contrary, any improper charges, unsatisfactory vouchers, or any irregularity whatever should appear, you are to transmit a full and circumstantial account thereof to our Secretary, for our information, and send a copy thereof, by the sirft opportunity, to the Board under which the Officer, so offending, may be serving. You are also, at the end of cach quarter of a year, to call for an exact Return of all the Provisions, Stores, Medicines, and necessaries of all descriptions remaining in the respective Departments, and to cause the several Agents at the head of those Departments to make timely demands for all such Provisions, Stores, Medicines, &c. as are usually fent from England, in order to prevent, as much as possible, the necessity of making purchases in the Country. You are to controus the performance of all Contracts which may be concluded by the Commissioners of either of the before mentioned Boards, or their Agents, for furnishing Stores, &c. for victualing Prisoners of War, or for supplying Provisions for His Majesty's Fleet; and you are to take-special care that every Contractor do, in all respects, suffill his agreement with Government. For your guidance in superinteading the concerns of those branches of the N

Boards, fuggefting to them every improvement, that may occur to you, for conducting

the various concerns thereof.

Appendix 4a Explanation of primary and secondary categories for Table 4d and how and why selected.

The categories evolved and in a sense selected themselves, but initially a hierarchy of classification was attempted. This consisted of identifying strategic and top level organisational matters, separating out the department specific correspondence, such as victualling and hospital areas, leaving the majority as naval yard letters. This gave a good first indication of the concerns of the correspondents, but further categories were evident. Although the letters could be allocated into the initial classifications an opportunity was available to provide a thematic approach. The themes chosen were people, transports, buildings, hydrography and stores, to allow for further examination. What has been noteworthy for the Cape of Good Hope station has been the letters concerning blockade and strategic issues. The exploitation of local timber from Plettenberg Bay was found by this method of category selection, as was the importance and availability of boats. A secondary category of government slaves and their use was introduced in the people primary category to highlight this issue in the post abolition of the slave trade era.

Having the initial classification it presented the opportunity to further identify themes for examination. These secondary categories, or activities, followed a similar process to the primary classification selection, with ship repair being subdivided by the following logic:

- Survey: to ascertain work required, cost estimates and recommendation for location of refit;
- Planning: priority of refit, when and where repair was to be done;
- People: request for assistance from squadron;
- Transport and stores: transport and stores required for refit;
- Refit: work under way;
- Lessons learnt: how to do it better next time.

This exercise not only clarified the important activities, but also uncovered the underlying and rarely changing logic of business processes. The commercial and financial themes were now more clearly evident as were the areas where suspected fraud was taking place. As these civil departments were engaged in a logistics operation it is noticeable, as with all organisations, that the effective use of resources was paramount, of which the human resource is particularly evident in this classification exercise.

Appendix 4b Salaries and Allowances -Civil Officers and Clerks

Post	Salary (£)	Housing Allowance (£)	Other Allowances (£)	Notes
Resident		Official	Stationary	Increased to £1800 on
Commissioner	1200-	House	£4 5s 4d per	appeal by William
(RC)	1800^{1}		month	Shield by Order in
				Council. ²
RC 1 st Clerk	300			Pay Lists
RC 2 nd Clerk	150			Pay Lists
Naval			Stationary	Salary – assumed figure
Storekeeper	600	120	£1 5s 0d per	recommended amount
	000	120	month	shown in 5 th Report of
				Naval Revision
Store 1 st Clerk	250			Pay Lists
Store 2 nd Clerk	200			Pay Lists
Store 3 rd Clerk	150			Pay Lists
Store 4 th Clerk	150			Pay Lists
Master			10s per	Pay Lists
Shipwright	400	100	month	
			Stationary	
MS Clerk	120			Pay Lists
Master			6s 8d per	Pay Lists
Attendant	400	100	month	
			Stationary	
MA Clerk	120			Pay Lists
Agent of				ADM2/937, 6/4/1810.
Transports and	450			
POWs				
Surgeon of	600			ADM2/937, 20/12/1808.
Hospital				Order in Council 13/4/08
Agent of	350			ADM2/937, 20/12/1808.
Hospital				Order in Council 13/4/08
Agent of				Shield and NB question
Victualling	600	150		Admiralty if yard
	600	150		Principal Officers should
				have an increase in
X7' 4 11'				allowance. 3
Victualling 1 st Clerk	240			Pay Lists
Victualling	100			Pay Lists
2 nd Clerk	100			
Victualling				Pay Lists
3 rd to 7 th	60 to 90			
Clerks				

¹ Fifth Report of Commission of Naval Revision recommended £1400 for the post, 7.
² Shield to Navy Board, TNA, ADM 106/2004, 9th Jan 1811; Navy Board to Shield, TNA, ADM 106/2482, 17th April 1811.
³ Shield to Navy Board, TNA, ADM 106/2004, 3rd Apr 1811.

Appendix 4c Artificers and Workmen Pay Rates – Cape of Good Hope (1809-1811)

Naval and Victualling Yard working hours and conditions¹

Monday to Saturday 0600 to 1800 Breakfast 30 minutes Dinner 90 minutes

Artificers from Britain

Home Pay 32 shillings per month (Sterling) Extra time to be allowed at double time

Term of appointment three years

Apprentices – allowed an apprentice after three years if conduct has been suitable with a certificate provided. If they return home they can have an apprentice on producing certificate. If they remain at the yard after three years they are to receive an extra sixpence a day in lieu of an apprentice.

Туре	Day Rate	Extra Rate	Allowances	Notes
Store Porters	5s 0d (Curr.)			Proposal from NB
				Dec 1808
				(ADM106/2479-80)
Office Keepers	4s 0d (Curr.)			Proposal from NB
& Messengers				Dec 1808
				(ADM106/2479-80)
Gatekeepers	5s 0d (Curr.)			Proposal from NB
				Dec 1808
				(ADM106/2479-80)
Coxswain	4s 6d (Cur.)			ADM42/2007 Pay
				Lists
Quarter Master	4s 6d (Cur.)			ADM42/2007 Pay
				Lists
Seaman	4s 0d (Curr.)			ADM42/2007 Pay
				Lists
Foreman of			3s per day	ADM42/2007 Pay
Shipwrights ²	7s 0d (Ster.)		victualling	Lists
			(Cur.); Lodging	
			allowance	
Foreman of			1s 6d per day	Reply to Shield letter
Smiths ¹	5s 0d (Ster.)	5s 0d	victualling	(ADM106/2004) of
		(Ster.)		25/9/10.
Apprentice to	2s 4d 1 st yr			Reply to Shield letter
Foreman of	2s 8d 2 nd yr			(ADM106/2004) of
Smiths	3s 0d 3 rd yr			25/9/10. (Sterling
	3s 4d 4 th yr			shown)
	3s 8d 5 th yr			
	4s 0d 6 & 7			

¹ Navy Board to Commissioner Shield, TNA, ADM 106/2481, 12th June 1810.

² Home Pay of 36 shillings per month (Sterling).

Appendix 4c Artificers and Workmen Pay Rates – Cape of Good Hope (1809-1811)

Type	Day Rate	Extra Rate	Allowances	Notes
Sailmakers ²			No chip money.	ADM123/41 17 th Jan
	2s 2d (Ster.)	2s 2d	1s 0d per day	1809
		(Ster.)	victualling	Notes payment of
				hurt pay if incurred
				in work: 3s 9d per
7				week after six weeks.
Smiths ²			1s 0d per day	ADM123/41 17 th Jan
	2s 6d (Ster.)	2s 6d	victualling + 4d	1809 for chip money.
		(Ster.)	chip money ³	Pay lists for day rates
Ropemakers ²			1s 0d per day	ADM42/2007 Pay
	2s 0d (Ster.)	2s 0d (Ster.)	victualling	Lists
Masons	6s 0d (Cur)			Proposal from NB
				Dec 1808
				ADM42/2007 Pay
G1.1	- 0.1			Lists
Ship	7s 0d			Increased from 6/-
Carpenters	(Currency)			per day by Shield.
				Approved by NB in January 1810 ⁴
				ADM42/2007 Pay
				Lists
Shipwright			1s 0d per day	ADM42/2007 Pay
and caulker ²	2s 6d (Ster.)	2s 6d	victualling.	Lists
and eddiner	25 04 (Ster.)	(Ster.)	Chip money of 6d ³	Zisto .
Extra Ship	7s 0d (Cur.)			ADM42/2007 Pay
Carpenter	, ,			Lists
Extra Caulker	7s 0d (Cur.)			ADM42/2007 Pay
				Lists
Sawyer (Top			Chip money 4d	ADM106/2481 12 th
Man) ²	2s 0d (Ster.)		1s 0d per day	June 1810
			victualling	
Sawyer			Chip money 4d	ADM106/2481 12 th
(Bottom Man) ²	1s 8d (Ster.)		1s 0d per day	June 1810
			victualling	
Foreman of	6s 6d (Ster.)			Pay Lists
Coopers				ADM 113/3
Cooper	5s 6d (Ster.)			Pay Lists
				ADM 113/3

³ Chip money was only to be paid for up to six days in any week unless they are especially employed on Sundays. On 24th Oct 1810 the Navy Board changed the rules that chip money was only paid to individuals who had already received this privilege all new artificers were not to receive the allowance. ⁴ Navy Board to Resident Commissioner at Cape of Good Hope, TNA, ADM 106/2479-80, 13th January 1810.

Appendix 4c Artificers and Workmen Pay Rates – Cape of Good Hope (1809-1811)

Type	Day Rate	Extra	Allowances	Notes
		Rate		
Shipwright	10s (Curr.)			ADM42/2006-7 Pay
and Caulker				Lists
(Hired)				
Extra Caulker	4s 0d to 7s			ADM42/2006-7 Pay
(Hired)	0d (Curr.)			Lists
Superior	6s 0d (Curr.)			ADM42/2006-7 Pay
Carpenter	to 10s 0d			Lists
(Hired)	(Curr.)			
Extra Sawyer	2s 6d (Curr.)			ADM42/2006-7 Pay
(Hired)				Lists
Extra Mason	6s 6d (Curr.)			ADM42/2006-7 Pay
(Hired)				Lists
Extra	4s 0d (Curr.)			ADM42/2006-7 Pay
Carpenter				Lists
(Hired)				
Extra Cooper	6s 0d Curr.)			ADM113/3
(Hired)	to			Pay Lists
	8s 0d (Curr.)			

Appendix 4d Pay rates for Naval Officers and Men supporting refit work

The Naval Storekeeper was to compile a list in annex 11 form to record the work of HM Ships officers and men for payment.¹

Payments to Officers and Men of HM Ships – Working Parties

		Rate	per day	
Description	In what rank to be paid	At Home	Abroad / (other ship)	Source
Lieutenants of the			3s 0d	18 th General
navy				Instruction ¹
Captain of Marines	Lieutenants of the	2s 6d	3s 0d	ADM123/41 15 th
	navy			March 1813.
Master's Mates and			2s 0d	18 th General
Midshipmen				Instruction ¹
Lt. of Marines	Midshipmen of the	1s 0d	2s 0d	ADM123/41 15 th
	navy			March 1813
Boatswain's mates			1s 3d	18 th General
				Instruction ¹
Sergeants of	Boatswain's mates	9d	1s 3d	ADM123/41 15 th
Marines				March 1813
Men			1s 0d	18 th General
				Instruction ¹
Corporals of	Seamen	6d	1s 0d	ADM123/41 15 th
Marines				March 1813
Drummers of	Seamen	6d	1s 0d	ADM123/41 15 th
Marines				March 1813
Boys of Marines	Half of seamen	3d	6d	ADM123/41 15 th
				March 1813
Marines	Seamen	6d	1s 0d	ADM123/41 15 th
				March 1813
Master of the navy	Lieutenants of the	2s 6d	3s 0d	ADM123/41 15 th
	navy			March 1813
2 nd Master of the		1s 6d	2s 6d	ADM123/41 15 th
navy				March 1813
Boatswain	Midshipmen of the	1s 0d	2s 0d	ADM123/41 15 th
	navy			March 1813
Gunner	Midshipmen of the	1s 0d	2s 0d	ADM123/41 15 th
	navy			March 1813
Boys	Half of seamen	6d	1s 0d	ADM123/41 15 th
				March 1813

 $^{^1}$ 18th Instruction of Fifth Report of Commission of Naval Revision, House of Parliaments, 1806, 13-14.

Appendix 4d Pay rates for Naval Officers and Men supporting refit work

Payments to Officers and Men of HM Ships – Artificers

		Rate	per day	
Description	In what rank to be paid	Own ship	Other ship or in yard	Source
Carpenters of ships		2s 0d	3s 0d	18 th General
				Instruction ²
Carpenter's Mates		1s 6d	2s 0d	18 th General
				Instruction ²
Shipwrights		1s 6d	2s 0d	18 th General
				Instruction ²
Caulkers		1s 6d	2s 0d	18 th General
				Instruction ²
Smiths		1s 6d	2s 0d	18 th General
				Instruction ²
Sailmakers		1s 3d	1s 9d	18 th General
				Instruction ²
Sawyers	Carpenter's Mates	1s 6d	2s 0d	ADM123/41 15 th
				March 1813
Plumbers	Carpenter's Mates	1s 6d	2s 0d	ADM123/41 15 th
				March 1813
Painters	Carpenter's Mates	1s 6d	2s 0d	ADM123/41 15 th
				March 1813
Bricklayers	Carpenter's Mates	1s 6d	2s 0d	ADM123/41 15 th
				March 1813
Armourers	Smiths	1s 6d	2s 0d	ADM123/41 15 th
				March 1813
Pitch boilers	Caulkers	1s 6d	2s 0d	ADM123/41 15 th
				March 1813
Rope makers	sailmakers	1s 3d	1s 9d	ADM123/41 15 th
				March 1813
Taylors		1s 0d	1s 6d	ADM123/41 15 th
				March 1813
Boatswains acting	Carpenters	2s 0d	3s 0d	ADM123/41 15 th
as superintendents				March 1813
of sailmakers or				
ropemakers				

² Fifth Report of Commission of Naval Revision, House of Parliaments, 1806, 13-14.

Appendix 4d Pay rates for Naval Officers and Men supporting refit work

General Instructions for payment of Officers and Men of HM Ships³

- 1. Seamen employed as artificers to be paid as such.
- 2. King's officers and men of HM Storeships to be paid for loading and unloading ships. Does not apply to hired men.
- 3. Artificers employed on own ship with work from other ships to be paid at own ship rate.
- 4. Double pay not to be paid on Sundays or other reason.
- 5. Extra pay not eligible to artificers for following work on own ship: Making Topsails, Yards, Jib booms, Fishing bowsprits, refitting half ports and gratings, and caulking from time to time. Nor is any to be allowed except during careening or other considerable repair or general refit.
- 6. Commanding Officer of HM Ship to ensure that men lent to his ship to be entered as supernumeraries on the ship's books during time employed.

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³ Principal Officers of Navy Board to Naval Storekeepers, TNA, ADM 123/41, 15th March 1813.

Ship	Date taken in	Work done	Date	Date Sailed
	hand		Completed	
Racehorse (18) HM Sloop	29/6/1809	Made a square mainsail	5/7/1809	27/7/1809
		Hove her down both sides, caulked and coppered her bottom. Enlarged the main and fore tops. Refitted the Capt. bulkheads, quarter		
Staunch	21/6/1809	davits, lower deck hatches and made a new pump and wedged the	11/7/1809	27/7/1809
HM Brig		masts. Made a spare tiller, row scuttles, bow ports and replaced bulkheads, rudder and sundries of iron works.		
Charwell	10/8/1809	Caulked the wales, topside decks waterways and repaired the	23/8/1809	27/9/1809
HIM Sloop		channels, fore and mizzen tops, hatches and grating, chain plates and		
		bolts, dead eyes, hammock stautions. Shitted 98 feet of main deck and sundries of lower deck. Sheathed the deck and put temporary	-	
		carolines, hoses and stautions under the beams.		
Olympia HM Cutter	23/9/1809	Made a topsail yard and leathered a cap	24/9/1809	27/9/1809
Hindostan	29/9/1809	Caulked the wales and topsides and main deck	3/10/1809	13/10/1809
(Transport Ship)				
Nereide	19/10/1809	Made a main top mast, fore topsail yard and main top gallant yard. Repaired shot hole of the mizzen top mast. Made iron hoops, chain plates and rolls.	26/10/1809	Not given
Anna (Transport Ship)	18/10/1809	Fitted bed plates for the reception of troops.	28/10/1809	Not given
Otter (18) HM Sloop	9/11/1809	Caulked sundry parts of the decks and bottom, coppered worn off pieces and repaired the funnel.	13/11/1809	24/11/1809
Magicienne (36) HMS	9/11/1809	Caulked the main, middle, lower and quarter decks.	17/11/1809	24/11/1809

Ship	Date taken in	Work done	Date	Date Sailed
•	hand		Completed	
Bourbonaise (ex Caroline) (40) HMS	16/11/1809	Caulked the main deck, wales and topsides. Made a main cap, two long fishes and fished and wedged the main mast, repaired and hung the rudder and cat heads, cut out shot holes and put in engraving pieces and lined the magazine – built round house, fitted up some births, made a mess table. Caulked the magazine and repaired courses, topsails, stay and studding sails.	5/12/1809	11/12/1809
Camel (Store Ship)	12/12/1809	Caulked the weather works topsides, waterways and main decks, replaced decayed parts of the bows and quarter. Repl. the fore yard and pumps and courses, stay sails, studding sails and spanker.	28/12/1809	Not given
Olympia HM Cutter	29/12/1809	Caulked the wales and topsides, replaced sundry parts of the deck stove in by firing guns and took out defective knees and replaced them. Repl the channels chain plates, back say stools and Mn boom and wedged the Mn mast. Made a main mast, spread and cross jack yard and sundry mast – made two jibs, lower and top main studding sails, water sail ring tail and topsail. Repl Jib, cross jack and top mast studding sail.	29/1/1810	Not given
Camel (Store Ship)	9/1/1810	Caulked the raft ports, put up bulkhead, made a Mn top mast studding sail and repaired sundry sails.	10/1/1810	23/1/1810
Racehorse (18) HM Sloop	Not given	Caulked the main deck wales and made a jib boom sail, fore and main royal, main top gallant studding sail, fore and main top gallant sails, main top mast studding sail and repaired sundry sails.	9/1/1810	14/1/1810
Sirius (36) HMS	12/2/1810	Caulked the wales, topsides and decks. Made and fitted clasp hoops on the fore and mizzen masts, martingale straps and dolphin stickers, top rails and stautions. Repaired lead pipes, locks and co, made a main and a fore yard, Mn. top mast, driver boom, Mn and fore top gallt masts, lower studding boom and two yards, two top mast stud sail booms and four top gt studs sail yards.	20/2/1810	24/3/1810

Ship	Date taken in hand	Work done	Date Completed	Date Sailed
Charwell HM Sloop	6/2/1810	Caulked the decks and repaired sundries of iron work.	8/2/1810	1/4/1810
Abundance (Store ship)	3/2/1810	Made bolts for the chaining strops for the martingale eye bolts, a flying jib boom iron, made a jib boom, spritsail yard and topmast studding sail boom.	8/2/1810	30/3/1810
Nereide (36) HMS	19/2/1810	Caulked the decks, made and fitted hoops on the fore yards.	24/2/1810	27/3/1810
Boadicea (38) HMS	20/2/1810	Caulked the wales and topside, put in graving pieces and repaired and bolted back stay stools, made a jib boom, main top sail yard, fore top galt. and royal masts and a bowspt. and caulked the lower deck.	2/3/1810	Not given
Raisonable (64)	19/2/1810	Repaired the fore hearth and fitted up the ships boilers.	2/3/1810	1/4/1810
Caledon HM Sloop	27/2/1810	Caulked the decks, made eye bolts, took out and fitted in a new breasthook.	3/3/1810	1/4/1810
Raisonable (64)	17/2/1810	Fished the bowsprit. Caulked the wales and decks, repaired the pumps. Made iron knees and bolts.	10/3/1810	1/4/1810
Inconstant HMS (Frigate)	14/3/1810	Repaired the pumps. Made bulkheads under the quarterdeck and forecastle, took up the partners round the main mast. Filled in the ports and scuttles. Fitted a capstan and pumps down the hatchway, caulked the topsides. Hove the starboard and larboard sides out, plugged up and sheathed over the keel, repaired the rudder, bottom decks and magazine, secured the counter timber, caulked the wales and middle decks, fitted partners to the main and fore masts, relayed the magazine platform fished a top mast yard, made braces and cooper bolts.	31/3/1810	6/4/1810
Sapphire HM Sloop	3/3/1810	Caulked the wales and top sides.	6/3/1810	11/3/1810

Ship	Date taken in	Work done	Date	Date Sailed
	hand		Completed	
Staunch	28/3/1810	Caulked the main deck, buttocks and counter and made a main yard.	6/4/1810	16/6/1810
HM Brig		Rebuilt the round, made good the copper on her bottom, repaired the		
		Repl the boilers, repl main top mast stay sail, fore stud sail, for top		
		gallant, Main top sail and main top gallant sail.		
Sirius (36)	Not given	Supplied a fore mast from the Boadicea	Not given	9/4/1810
HMS				
Boadicea (38)	4/4/1810	Built two slop lockers, sheep pens and co and fitted the cabin for the		
HMS		commander-in-chief, made a foremast in lieu of one supplied the		
		Sirius		
Oxford	7/4/1810	Relayed the decks, repl the channel and chain plates. Caulked the	14/4/1810	
(Transport Ship)		decks and topsides, occasioned by preparing the ship for heaving		
		down the Inconstant.		

Appendix 4f Example of a survey report by master shipwright

Survey of HMS Boadicea – Carpenter's Defects¹

The wales topsides and decks want caulking. The copper much wore and broke in a number of places. Two of the fore castle beams broke and one knee. The main deck much worn and four strakes under the fore castle want shifting. The main deck, the 2nd beam from forward broke three knees in general work very much. The quarter galleys and [?] want repair. A cistern wanted for the larboard quarter galley and pipe.

The fore bulkhead for the captain's cabin wanted and lockers aft. A Bulkhead wanted for the gun room and offices cabin out of repair. The fore chains want repair. The bowsprit shot and fished. The fore yard sprung and fished. The cross jack yard arm broke. The mizzen mast fished. The ship has been on shore and it appears the false keel is injured. Glass broke in different parts of the ship.

The ship in general in a very weak state and works very much and in my opinion not fit to remain a cruising ship and would recommend her to a Dock as she cannot receive the repairs at this arsenal which are required

George Collom Acting Master Shipwright 5th January 1811

¹ Acting Master Shipwright Collom to Commissioner Shield, TNA, ADM 106/2004, 5th Jan. 1811.

Major refits of HMS Caledon, HMS La Bourbonaise and HMS Appendix 5a *Inconstant* at the Cape of Good Hope (1809-10)

The commissioning of two French prizes at the Cape was to provide considerable evidence for the Admiralty's directions not to commission ships abroad. If major repairs were required on a captured ship it would not be the most effective use of stores and labour at overseas yards. Comparing the refits of Caledon and Inconstant provides evidence of the Admiralty's stores and repair policy. If a resident commissioner had been present it is unlikely that the *Caledon* would have been commissioned for service at the Cape. The saving of the damaged frigate *Inconstant* illustrates the effective use of an overseas yard, even with the opposition provided by a campaign focused commander-in-chief.1

The commissioning of Caledon at Cape Town in December 1808 was carried out by Admiral Bertie to mitigate the loss of a sixth rate frigate to the French in September 1808. Given his determination to place Mauritius and Bourbon under blockade, and the composition of his squadron this appears a sound decision. However, a different impression emerges when the commissioning and subsequent refits of the Caledon is investigated. Examination of the naval yard paylists provides a numeric explanation for the Admiralty to call for an inquiry into the circumstances of her being purchased into service. From December 1808, the month of *Caledon's* commissioning, to her leaving for England in mid 1810 a grand total of 1195 days of shipwright work was undertaken on-board the vessel. Apart from Raisonable, an old and worn out ship that was retained by the commander-in-chief in spite of the Admiralty's request for her return, no ship approached the effort expended on Caledon.

In April 1809, shortly after the completion of her refit, Bertie reported to the Admiralty that Caledon had returned to the Cape as a result of damage from a gale. The repairs required appeared to the Admiralty to be incompatible with a ship that had been recently commissioned.² The inquiry initiated by the Navy Board asked what was found when the sloop was beached, and what work was done.³ Commissioner Shield had already reported on 'the wretched little Caledon' concerning her depleting the arsenal of stores, but the yard officer's report indicated she was also an unsound ship. They found on

¹ An examination of *La Bourbonaise's* and *Inconstant's* refits was presented in MA, Day, J., 'The role of the resident commissioner at the Cape of Good Hope', 60-64. This appendix provides additional

information on these refits together with the addition of an examination of Caledon's commissioning. This appendix strengthens the case made in the MA for the correctness of the commissioner's actions.

² Bertie to Admiralty, TNA, ADM 1/61, 13th April 1809; This letter has an Admiralty note to Navy Board asking for a report from the master shipwright on Caledon, 13th July 1809.

³ Navy Board to Shield, TNA, ADM 106/2480, 27th July 1809.

Appendix 5a Major refits of HMS *Caledon*, HMS *La Bourbonaise* and HMS *Inconstant* at the Cape of Good Hope (1809-10)

surveying *Caledon* at Simon's Town that under the copper sheathing was decayed wood, corroded nuts, bolts and iron work. The sloop was subsequently repaired, recoppered and taken her off the beach on the 30th April 1809.⁴

The yard officers' report was received by the Navy Board on the 12th April 1810. Following examination of this report the Navy Board informed the yard officers they had been instructed by the Admiralty to ascertain on what principle they had recommended *Caledon* being taken into service. Replying to this order in October 1810 the yard officers stated they had no principle for bringing the vessel into service, in fact they had stated she was not a fit ship. However, the commander-in-chief had over-ruled the yard officers and directed them to repair the sloop for HM service. The yard officers considered the value of the vessel was less than the cost required for refitting her for service. The survey had not included an inspection of the underwater hull.

As can be seen the commander-in-chief had the power to make local decisions that were not based on economic considerations. This also demonstrates why the refitting and overseas commissioning policy of the Admiralty had been for only limited repairs and returning prizes to Britain. It was not however, only this policy that Bertie ignored concerning *Caledon* as he sent her to Bombay for docking, an order Commissioner Shield was unable to explain. The master builder and commissioner at Bombay reported she was not worthy of repair and sent her back to the Cape. Shield stated it was his opinion that purchasing *Caledon* was a waste of public money, with the yard officers' report of November 1808 confirming she should not have been purchased. The *Caledon* was now sent to Britain were she was examined and subsequently broken up. It is unlikely that the *Caledon* would have been brought into service if Commissioner Shield had been at the Cape in November 1808. This is demonstrated by comparing *Caledon's* purchase and the fates of the French prize ships *Caroline* and *Grappler* in October 1809.

The raid in September 1809 by Commodore Rowley's squadron and Lt. Col. Keating's troops on St. Paul's resulted in the capture of the French frigate *Caroline* and corvette

⁴ Naval yard officers at Cape of Good Hope to Navy Board, TNA, 30th December 1809.

⁵ Navy Board to Naval yard officers, TNA, 12th May 1810.

⁶ Yard officers to Navy Board, TNA, 8th October1810; Attachments to this letter are dated 14th to 27th November 1808 between yard officers and commander-in-chief.

⁷ Shield to Navy Board, TNA, 23rd February 1810.

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Grappler, together with the re-taking of several East Indiamen. Captain Corbet in the *Nereide* brought back the two French warships to the Cape of Good Hope in mid October, where all three ships required attention from the naval yard. Bertie requested an examination of the *Grappler* for purchase into the navy, but she was found unsuitable on inspection.

It was not only the return of these ships to the Cape that occupied the local authorities at this time. The Madras Mutiny and the influence on the Cape of Good Hope's armed forces was tangential to its main role in 1809, but Governor Lord Caledon, General Grey, commander of land forces, and Admiral Bertie became increasing involved in sending a military force to Madras. Caledon consulted both individuals on what military force could be sent together with what transport was available. Grey considered he could dispatch over 2000 troops. Bertie detailed what transport ships were available from his resources, and what could be obtained from East India Company sources. Shield became involved in an organisational role causing him to comment in his journal on 27th October, 'Governor General and Admiral requested me to equipment of the ships for taking troops to India as if there not enough to do'.⁸

Bertie considered the blockade was his most important task, and was concerned he had insufficient escort vessels for the Madras force. However, Caledon forced his hand by stating it was pointless to chance the loss of India for the continuation of the blockade. Bertie considered the escort needed to be strong and promised the *Nereide* and *La Bourbonaise*, but the stand made by Shield and his yard offices on the non-practicality of refitting her for service put Bertie to considerable embarrassment. This situation was saved when news reached the Cape that the mutiny has been suppressed.

The bringing of *La Bourbonaise* into HM Service would have provided Bertie with a 40 gun frigate, and provided him with prize money. Figure 5f indicates the effort expended on this ship, but that was only for ensuring her safe return to England. The initial survey undertaken by the yard officers reported that the ship could be taken into service, but the resources of the yard were too limited to refit her at the Cape. If done the refit would exhaust the naval stores in the arsenal, prevent the support of other vessels, and entail

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⁸ Journal of William Shield at Cape of Good Hope, (1809-1813), DRO, 74B/MFS 30, 27th October 1809.

⁹ Caledon to Bertie, 17th October 1809, Theal, G., (Ed.), *Records of Cape Colony from May 1809 to March 1811*, Vol. 7, 1900, (London), 200-201.

considerable expenditure. Their survey reported that 30 shipwrights and caulkers, four smiths and ten sailmakers were needed. It would require fifty days to complete the task of refitting and storing the frigate for eight months at a cost of £7000 to £8000.

Bertie would not accept this view, and ordered Shield to repair her for local service. Admiral Bertie placed Captain Corbet¹⁰ in command of La Bourbonaise, a man who had similar views to the commander-in-chief on Shield's obstructive manner. There were considerable discussions and changes of mind by Bertie on the destination and refit required for the frigate; sending her to India, to the blockading squadron, and eventually giving in to the commissioner's view of returning her to Britain. Shield commented to the Navy Board, 'After a great variety of reports, and counter requests, the Admiral at last came to the resolution of sending La Bourbonaise to England, a measure there should never have been the least resistance on, but the Admiral's agents were very anxious for her being retained on the station.'11 The agents were Maude and Robinson who also had the existing victualling contract, and were under investigation by Shield for the Admiralty.

Bertie's letter of 8th December to the Admiralty provided a clear defence of his views for bringing the prize into service. In this he states his clear disagreement with Shield and the yard officers. He said the argument to not refit the La Bourbonaise because it would strip the arsenal could have been avoided by purchasing local materials. He had consulted a local ship builder, Mr Osmond, who stated he could repair her in three weeks for only £1000. Bertie further argued that the ship would have been of considerable value to his squadron, and having to send her home with a captain and crew he could ill afford to lose was putting his ability to support operations at risk.

The entries in Shield's journal in November 1809 provide an insight into the reaction of Bertie, 'War again with the Admiral on the subject of *Bourbonaise* he is inconsistent without any Principle of Justice'. 12 This was not the only reason that the admiral was annoyed with the commissioner. Shield also wrote concerning suspicion of fraud by the

¹⁰ J. K. Laugton, (rev. Tom Wareham), 'Corbet, Robert, (d. 1810)', Oxford Dictionary of National Biography, Oxford University Press, (2004), accessed 10th June 2011.

¹¹ Shield to Navy Board, TNA, ADM106/2004, 8th December 1809.

¹² Journal of William Shield at the Cape of Good Hope, DRO, 74B/MFS 30, 11th November 1809.

agent of the hospital causing him to comment in his journal, 'Violent communication from the Admiral inconsistent and troublesome to a degree'. 13

Shield's letter to the Navy Board of the 18th November outlined the problems regarding the refit of *Bourbonaise*. Bertie refused to accept the judgement of the yard officers and Shield to only refit *Bourbonaise* for enable her sail for Britain. With the escort mission Bertie envisaged, he considered sending her to India to refit was the best policy. With the abandonment of this operation he eventually gave in to the views of the naval yard. The commissioner's letter arrived at the Navy Board in January 1810, together with the survey reports of the yard officers. The letter was annotated by the Navy Board with a note dated 30th January and forwarded to the Admiralty with their professional opinion; 'acquaint their Lordships that if the commander in chief upon foreign stations do order ships taken from the enemy to be fitted out and equipped from the arsenals abroad those magazines must inevitably be distressed for the stores which have been provided for the ships of the squadron stationed there'. This gives an unambiguous official view of the role of the overseas naval yards and confirms the instructions issued by the Admiralty to Bertie on 12th September 1809.¹⁴

In the Admiralty's reply to Bertie's letter of 16th November informing them of the commissioning of Caroline as the La Bourbonaise, they notified the admiral of their disapproval and that it was in direct violation of his instructions. 15 This was but one of the letters the Admiralty wrote to Bertie in January and February 1810 that showed their continuing frustration with his actions regarding refitting of ships. The action of the admiral concerning the hire of a hulk for the refit of Raisonable also disapproved of, especially as he had paid £500 for the service, a sum they considered excessive; in future the Admiralty directed Bertie to leave such matters to the naval storekeeper. 16 Their lordships also reminded him not to send ships to Bombay for refit instead as previously directed to fit them for return to England. 17

La Bourbonaise's very short commission came to an end on her arrival at Plymouth in early February 1810 with her being paid off, never to return to service. With all the

¹³ Journal of William Shield, DRO, 74B/MFS 30, 25th November 1809.

¹⁴ Admiralty to Bertie, TNA, ADM 2/937, 12th September 1809.

¹⁵ Admiralty to Bertie, TNA, ADM 2/937, 13th February 1810.

¹⁶ Admiralty to Bertie, TNA, ADM 2/937, 16th January 1810. ¹⁷ Admiralty to Bertie, TNA, ADM 2/937, 8th February 1810.

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resources of a home dockyard *La Bourbonaise* was not considered in a suitable state to be refitted for service, as presumably the effort and stores required were better expended on other vessels. Thus ended *La Bourbonaise's* life and fully justified the actions of Shield, his yard officers, the Navy Board and the Admiralty. The Admiralty had been consistent with their policy for overseas yards with their role being one as a supply depot and minor repairs for the ships on station.

The Admiralty ship deployment records show that *Inconstant* was allocated and sent to the Cape of Good Hope on 27th December 1809. She had been recently recommissioned in June of that year after a long refit at Portsmouth. She was a 36 gun, 18 pounder frigate having additionally been fitted with twelve 32 pounder carronades on her quarter deck, thus making her a strong addition to the squadron. This ship had been ordered in 1781, but was not commissioned until 1790 making her a vessel that had been in service for twenty years.

Shield records in his journal that *Inconstant* arrived on the 13th March, 'in great distress having been on shore on Darin Island'. The subsequent actions of Bertie and Shield and their reports to the Admiralty and Navy Board concerning the *Inconstant* were again to display their appalling relationship.

The master shipwright surveyed the damaged ship recommending *Inconstant* was careened. The work required before careening was critical as she needed rapid unloading and a considerable increase in the number of shipwrights and carpenters to effect temporary repairs. Shield immediately hired an additional six shipwrights, as can be confirmed in the yard pay lists. He requested all the squadron's carpenters were released and placed under the master shipwright, and finally the squadron's boats and men to assist in removing stores.

The commissioner ordered all the yard's shipwrights, caulkers and ship carpenters to report onboard the *Inconstant* on the 18th March, but assistance from the squadron was intermittent. Shield's efforts to obtain support to save the *Inconstant* caused the relationship between him and Bertie to descend into insults. Bertie's position was his squadron had more important priorities, that of the frigates returning to the blockade and the *Raisonable* to convoy vessels to St Helena. Shield appears to have forced the

admiral into action by the following statement, 'the only chance of her preservation rest entirely with you; you have the power and means of saving the ship for the King's Service and you only.' The admiral complied but attempted to embarrass the master shipwright and master attendant by initiating an enquiry by three post captains into the yard officers' direction of the saving of *Inconstant*.

Commissioner Shield's reply to this enquiry and Bertie's letters was damning. 19 He pointed out the *Inconstant* arrived in a sinking state on the 13th March; Bertie had a ship of the line, three frigates, two sloops and three transports at his disposal, but *Inconstant* was not ready for heaving down until 20th. It should have been done in 48 hours. Bertie had decided to hold two court-martials on board a sinking ship and hence work had to be done to ensure the safety of everyone on board. The enquiry agreed with Shield's observation that ship's boats were being diverted from the task of saving the *Inconstant*. Shield goes on to state the ship was being saved by the efforts of his officers, but Bertie needed to supply the means they were asking for, namely the assistance of ships' crews in the bay. The argument was won by Shield as the ships delayed their departure for St Helena, and the boats he needed were released to assist the refit. The correspondence again showed stark differences between Shield's and Bertie's approach. The commissioner had been completely focused on saving the ship. He used all the resources he had available with his requests to Bertie for support, starting with requests that became increasingly insistent, until he showed his absolute contempt for the admiral's actions.

Both Bertie and Shield wrote to the Admiralty and the Navy Board regarding the circumstances of *Inconstant's* refit. Commissioner Shield sent his report in late March, in which he copied details of the correspondence that had occurred between himself and Bertie, and the reports from his yard officers regarding the support supplied by the squadron.

The Navy Board annotated Shield's letters on 17th July and forwarded these letters to the Admiralty with two significant comments. The first of these concerned the 'unwarrantable' interference of the admiral with the dockyard which was saving the *Inconstant*. The second comment was probably the more damaging. This indicated that

¹⁸ Shield to Commander-in-chief, DRO, 74B/MFS2, 20th March 1810.

¹⁹ Shield to Commander-in-chief, DRO, 74B/MFS2, 22nd March 1810.

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the admiral had diverted boats from supporting the yard, and employed them in moving prize goods.²⁰

The admiral also wrote a series of letters to the Admiralty regarding his actions concerning the *Inconstant* and the disagreement with Shield, pointing out the difficulty he had working with the commissioner. ²¹ Unfortunately for the commander-in-chief the Admiralty agreed with their commissioner. The Navy Board's letter of 1st August to the commissioner informed him they had forwarded his letters to the Admiralty with a note backing him. ²² Bertie's actions of holding two court-martials on the sinking *Inconstant* were considered by the Admiralty to have retarded the refit, another black mark against him. ²³ The timing of this episode may be significant, as a letter from Bertie was about to land on the desk of Secretary Croker that gave the Admiralty an excuse to withdraw the admiral and replace him with Robert Stopford.

The refits of *Caledon*, *Bourbonaise* and *Inconstant* together with the retention of *Raisonable* have shown in detail the reasons for the Admiralty's policy for overseas naval yards, that of minimal refits. Their reasons were ones of economy as well as effectiveness as their policies enabled a coherent logistics structure to be maintained. The overseas yards were maintenance and supply bases rather than major refitting locations, but they still had sufficient resources to save valuable units of the British navy. Without the presence of a strong representative of their policies the Admiralty's rationale was at risk from a campaign focused commander-in-chief.

²⁰ Shield to Navy Board, TNA, ADM 106/2004, 30th March 1810.

²¹ Bertie to Admiralty, TNA, ADM 1/62, 20th to 29th March 1810.

²² Navy Board to Shield, TNA, ADM 106/2481, 1st August 1810. ²³ Admiralty to Bertie, TNA, ADM 2/937, 15th August 1810.

Appendix 5b Problems encountered by Commissioner Shield in the management and supervision of victualling department at the Cape of Good Hope

Commissioner Shield took his responsibility for superintendence of the victualling department seriously, and recorded in his journal the problems he was finding. His journal¹ is littered with references to his involvement with the victualling department, ranging from the inspection and purchase of casks of meat from prizes, to paying the establishment staff. What is also evident was his dissatisfaction with the running of the department, 'Had much to find with the victualling department, it is certainly very bad' on 5th July, 'no attention by the victualling department to the lemon juice' on 14th July and the timekeeping and quality of the staff was to become an obsession. 'Went to the victualler department to pay that department at seven o'clock office shut up no one to receive me. Paid one clerk and cooper remainder at 12 o'clock' on 3rd August and 'Victualling clerks very inattentive shameful' on 29th July.

As the victualling yard was next door to the commissioner's home it was not unusual for Shield to frequently check the victualling office. In September similar observations were made, 'No one at the victualling office at seven o'clock no work done at victualling house at quarter past seven', on 5th September and on the 6th September, 'No first clerk at the victualling office at half past seven'. By November Shield was still having trouble with the clerks of the victualling department with him recording he was dissatisfied with both the first and second clerks, especially when he records being verbally attacked by the second clerk. It was evident that the commissioner did not have the respect of the staff or authority to remove them, but the disputes with Bertie regarding this department was at the root of this inability to act radically.

The behaviour that Shield was uncovering indicates that the management and example set by the agent victualler and first clerk was suspect. Henry Pallister, the agent victualler, and his first clerk, James Howell, were appointed in Britain to manage the victualling department, arriving at the Cape in August 1806. ² Shield's journal continues to record problems concerning behaviour, timekeeping and the operation of the department until both Pallister and Howell were removed in mid 1810. With the appointment of a new agent and establishment of a new victualling contract, accomplished in the teeth of opposition from Admiral Bertie, the journal remains silent on these issues with the exception of frequent dining with the new agent. The arguments

¹ Journal of William Shield, DRO, 74B/MFS 30.

² Philip, P., British Residents at the Cape 1795-181, (Cape Town, 1981), 314.

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that Shield and Bertie had concerning victualling are worth examination, as they not only illustrate the problems of divided control, caused by the framing of article nineteen, but add further weight to the withdrawal of the admiral.

How the interaction between Bertie, Shield and the agent victualler, Pallister, developed during the next year shows the problems of article nineteen. If Shield had a direction or task he wished the agent to perform he had to ask Bertie to issue the order. This varied from directing Pallister to purchase items, to providing the accounts for Shield to examine. Considerable discussion occurred in August 1809 on who had authority to appoint a new agent if the existing one retired due to ill health, but Bertie and Shield could not agree on who had authority. They agreed that Bertie was to write to the Admiralty for direction for such appointments, and until informed the status quo remained. The admiral's letter to the Admiralty of 15th September requesting who had authority to appoint the agent victualler resulted in the Admiralty confirmed it remained with the commander-in-chief.³

In early September 1809 a complaint regarding the poor quality of the victualling stores being supplied to the blockading squadron was received from Commodore Rowley. Shield agreed with Rowley's observations and wrote to Bertie, 'the general carelessness in the carrying on every point of the victualling concern and the daily opposition I met with, is a constant source of vexation to me, and nothing can be expected efficient from it unless some change takes place'. Bertie's reaction to this letter was agreement and a wish to discuss matters rather than write letters, but his subsequent actions concerning improvements stopped at anything that could help, in fact the reverse was to occur.

With Mr. Pallister's health deteriorating the first clerk took over the management of the victualling office from September 1809, but it was not long before an example of appalling practice occurred. The victualling office appears to have been in the habit of keeping large sums of money to hand as Howell came to the commissioner to report the loss, presumed to be theft, of 2000 dollars from his office. Shield's reaction was swift, he reported to Bertie that Howell had given a lame excuse, and recommended that Howell be immediately directed to deposit the remaining money into the Lombard

³ Admiralty to Bertie, TNA, ADM 2/937, 14th December 1809.

⁴ Shield to Bertie, DRO, 74B/MFS 2, 2nd September 1809.

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Bank. This was followed by the suggestion that money only be drawn out when required, and only with Shield's authorisation. ⁵ Bertie's reaction was immediate with agreement to the banking and authorisation suggestions. The subsequent investigation into the theft caused considerable activity to find the thief with encouragement from the Admiralty, but the culprit was not found. Howell found the measures imposed by Shield's approval process very restrictive causing him to write to the admiral for a relaxation. In this he was unsuccessful. ⁶ Money management was now under the control of Shield who only allowed a small petty cash of 100 Rix dollars to be kept in the victualling office, but the relationship with Howell and Pallister became even worse.

To perform his audit role Shield requested the books of the department for authorisation. This resulted in considerable opposition from Howell and Pallister, with Shield having to ask the admiral to direct them to allow him access to the department's documentation. Bertie's direction to Howell was insufficient to overcome his reluctance to allow Shield access to the account books. This caused the commissioner to quote his authority with an extract of a letter to Pallister from the Victualling Board dated 9th January 1809 which stated; 'We therefore direct you in addition to compliance necessary due to the naval commander in chief to comply with all such directions as you may from time to time receive from the commissioner, allowing him access when he requires it, to all your accounts, and furnishing him with all information respecting our public transactions that he may require'. This still did not result in access to the documents. When Shield went to the office he was told the books were needed by Pallister and had been sent out of town, causing Shield to comment in his journal, 'that [I] might not see it'.

These actions, together with the general running of the department, caused Shield to write a long letter to the admiral demanding a complete re-organisation, especially as the first clerk was declining to act in the absence agent's role. He pointed out in this letter that his opinion of Howell was very low, and he was still awaiting access to the department books. However, the admiral was still backing Pringle and Howell. Shield

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⁵ Shield to Bertie, DRO, 74B/MFS 2, 25th October 1809.

⁶ Howell to Bertie, TNA, ADM 1/62, 20th November 1809.

⁷ Shield to Bertie, DRO, 74B/MFS 2, 13th January 1810.

Shield to Bertie, DRO, 74B/MFS 2, 16th January 1810.

⁹ Journal of William Shield, DRO, 74B/MFS 30, 18th January 1810; Shield to Bertie, DRO, 74B/MFS 2, 18th January 1810.

Problems encountered by Commissioner Shield in the management and Appendix 5b supervision of victualling department at the Cape of Good Hope

continues to record strange behaviour concerning the victualling department in his journal with such examples as, 'Victualling people behaving very ill and negligent' on 11th April; 'Sale of the victualling stores. Shameful conduct of the agent in offering for sale serviceable provisions.' on 28th April; 'Victualling goes on wretchedly' on 30th April; 'Violent and threatening letters from the agent victualler' on 5th May; and 'Paid victualling the agent made disbursements in direct contradiction to my protest' on 7th May.

The numbers of clerks in the victualling department also exercised Shield's pen with his belief that only five were necessary, hence a reduction of two. This Shield would have achieved by concentrating business at Cape Town, but also ensuring they worked the hours for which they were paid. Figure 4q in chapter four shows he was not successful in this endeavour until the new agent victualler took up his post.

The methods and manner used by Shield to improve performance caused Bertie to object. The argument they had in August 1809 not only concerned a 'turf war' on who had power of appointment, but on the size and make up of the victualling department. The language used in these letters bordered on the insulting with Shield saying, 'I by no means hold myself accountable to you for any part of my conduct', his argument was that the department was not working effectively or economically and that checks and restraints were necessary. Shield held that his measures were, 'irksome to the parties who no longer reap the benefit they had been accustomed to from the profligacy of those who care it should have been to have prevented such abuses'. 10 As Shield's journal records the admiral was unhappy with the controls being put in place, 'admiral did not speak to me at open war at least I'm [comfortable?] with it'.11

Shield's next manoeuvre on applying pressure was obtained by his attempts to obtain oaths and bonds from the agent and his clerks as required by the Admiralty. To obtain these he used the admiral to direct the staff to undertake these conditions of employment.¹² However, Bertie seems to consider his authority was under threat concerning the victualling and transport departments and entered into an attack on

Shield to Bertie, DRO, 74B/MFS 2, 17th August 1809.
 Journal of William Shield, DRO, 74B/MFS 30, 14th August 1809.
 Shield to Bertie, DRO, 74B/MFS 2, 28th September 1809.

Problems encountered by Commissioner Shield in the management and Appendix 5b supervision of victualling department at the Cape of Good Hope

Shield and his method of superintendence. Bertie wrote to the commissioner on the 1st October that he considered Shield had exceeded his authority contained in his instructions, and that he was informing the Admiralty. 13 Shield frustration with the commander-in-chief is evident in his reply to this letter and is worth quoting at some length. 'I most sincerely lament that such as I have found it absolutely necessary to exert over the agents and clerks, of the different departments, in order to prevent a reoccurrence of the peculations and wicked expenditure of the Public money hereto practiced in this colony, should have drawn jealousy instead of support as it cannot fail to impede me most materially in the execution of the unpleasant duties it has fallen to my lot to perform and which I find the utmost difficulty in getting through with owing to the want of support and to the determined hostility and opposition I daily meet with – the unsettled accounts of Messr Maude, Robinson, Hopley and co and the infamous conduct of the existing agent of the hospital point strongly to the futility of my sitting in my office until the accounts of the respective agents are laid before me for examination and approval.' He concludes his letter with the following 'much satisfaction at the determination you have taken to refer the charges you have been pleased to form against me to the Lord Commissioners of the Admiralty, having full reliance in their Lordships viewing with eyes of indulgence and approbation my earnest and anxious endeavours to perform a new duty in the way it appears to me most conducive to the good of His Majesty's service.' Bertie's reply to Shield denied he had put any obstacles in Shield's way, merely that he was operating to the new instructions and that the Admiralty would understand his tone rather than the commissioner.

The Admiralty and Victualling Boards concurred with Commissioner Shield's view as they removed Pallister and appointed a new agent victualler. This together with the Admiralty's directions to re-tender the victualling contract was to create a more effective organisation at the Cape.

Bertie to Shield, DRO, 74B/MFS 1, 1st October 1809.
 Shield to Bertie, DRO, 74B/MFS 2, 2nd October 1809.

Maude and Robinson Contract

Quantity	Description	Unit Cost	,	Total Cost	
Received		currency	Rd	Sc	St
886762	Biscuit (lbs)	$4^{1}/_{2} d$	83133	7	83133.9
84103	Wine 9 month warranty (Gallon)	3s 6d	73590	1	73590.1
14691	Wine 6 month warranty (Gallon)	3s 0d	11018	5	11018.3
6729	Vinegar (Gallon)	$11^{1}/_{4} d$	1576	2	1577.11
65011	Raisins (lbs)	$5^{3}/_{4}d$	7787	6	7787.78
2792	English Pease (Bushel)	16s	11169	0	11168
546	Cape Calavance (Bushel)	14s	1911	0	1911
11173	Cocoa (lbs)	1s 6d	4189	7	4189.88
19498	Tea (lbs)	4s 0d	19498	4	19498
1064	Roasted coffee (1.5 lb)	4s 0d	709	2	709.333
	Total (Calculation)		214584	2	0
	Total (Bertie's report)		214584	4	$^{1}/_{4}$

Mr. W. Bird's Tender

Quantity	Description	Unit Cost	ı	Total Cost	
Received		currency	Rd	Sc	St
886762	Biscuit (lbs)	$5^{3}/_{4} d$	106226	5	3.5
84103	Wine 9 month warranty (Gallon)	3s 11d	82350	6	5
14691	Wine 6 month warranty (Gallon)	2s 7d	9488	2	0
6729	Vinegar (Gallon)	$11^{1}/_{4} d$	1576	2	4
65011	Raisins (lbs)	$6^{3}/_{4}d$	9142	1	4
2792	English Pease (Bushel)	12s	8367	6	0
546	Cape Calavance (Bushel)	11s	1638	0	0
11173	Cocoa (lbs)	11d	2560	3	5
19498	Tea (lbs)	3s 0d	14623	7	0
1064	Roasted coffee (1.5 lb)	3s 0d	532	0	0
	Total (Calculation)		236506	3	3.5
	Total (Bertie's report)		236515	3	$4^{1}/_{2}$

	Rd	Sc	St
Mr. Bird tender	236515	3	$4^{1}/_{2}$
Maude & Robinson	214584	4	1/4
Difference	21930	7	$4^{1}/_{4}$

Notes on currency:One Rix dollar = Four shilling currency; Six stivers = one schelling; Eight schillings = one Rix Dollar

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¹ Burchell, W., *Travels in the interior of South Africa*, Vol. 1,(1822) 78-79 Source:http://www.tokencoins.com/history.htm

Description	No of	Rate per	Cost in sterling	Cost in Currency
_	Days	Day		
Shipwrights and	133.75	7s 7.5d	£50 19s 10.25d	£73 18s 9.25d
caulkers				
Sailmakers	59.75	6s 5.5d	£19 5s 10.5d	£27 19s 6d
Foreman of Smiths	36	12s 11.5d	£22 14s 6d	£32 19s 0.25d
Smiths	106.5	7s 5.5d	£39 14s 3.75d	£57 11s 8.75d
Blacksmiths	76	3s	£11 8s 0d	£16 10s 7.25d
Sawyer (Top man)	2.5	6s 5.5d	16s 1.75d	£1 3s 5d
Sawyer (Bottom man)	2.5	5s 9.5d	14s 5.75d	£1 1s 0d
Black caulkers	105.5	3s	£15 15s 6d	£22 18s 11d
Black labourers	80	3s	£12	£17
Ship carpenters	120.5	7s (c)	£29 1s 8.75d	£42 3s 6d
Ship carpenters' chip		4d (s)	£2 0s 2d	£2 18s 2.75d
money				
Caulkers	26	7s (c)	£6 5s 6.25d	£9 2s 0d
Caulkers' chip money		4d (s)	8s 8d	12s 6.75d
Masons	2.5	6s (c)	10s 4.25	15s 0d
Gatekeeper	2.75	5s (c)	9s 5.75d	13s 9d
Seamen	47.75	4s (c)	£6 11s 8.75d	£9 11s 0d
Quartermaster	3.75	6s (c)	15s 7.75d	£1 2s 6d
Labour	total		£219 13s 0.5d	£318 1s 5d
Rebate for materials v	wasted by	artificers	£1 19s 10.75d	£2 17s 10.25d
True labou	r charge		£217 13s 1.75d	£315 3s 7.25d

Notes:

The exchange rate applied above for sterling to currency = 145%

Stores and material costs = £711 6s $7^{1}/_{2}d$ sterling or £1118 8s $7^{1}/_{4}d$

The charge for materials and labour was determined from the rates directed by a Navy Board warrant of the 19th November 1796.

Cape Town was the major settlement at the Cape colony and the site of the principal shore naval facilities until they were moved to Simon's Town. An impression of the small size of this colonial town and where the naval establishment was located can only be visualised via contemporary paintings, drawings and charts.

Figure 6bi is a fine picture by William Hodges of Cape Town representing his visit in 1772, but another image of Cape Town by J. Wells in 1787, figure 6bii, shows more detail of the water front. In both pictures the castle and church are clearly shown and provide a context in which figures 6biii, 6biv and 6bv can be placed.

In 1807 Captain Beaufort¹ made an uncompleted survey of Table Bay on which he drew the layout of Cape Town. Figure 6biii shows this chart with figure 6biv being an enlargement of the town detailing the positions of the admiral's house (later the commissioner's accommodation), the naval yard, town wharf and victualling premises. The orderly layout of Cape Town is plainly evident in the plan but also shown is the small nature of the settlement. The regular and neat arrangement of Cape Town is also noticeable in figure 6biv. Figure 6bv shows a view of Cape Town from Signal Hill and dates from around 1780. From this picture the topography of the town and position of the main buildings detailed in table 6bi, in conjunction with Beaufort's plan, is evident.

Simon's Town 'raison d'être' was for the support of vessels. The settlement was established in the 1740s with the building of a combined hospital and store building to sustain ships of the Dutch VOC² sheltering in the bay.³ Figures 6bvi to 6bxi show the transformation that occurred to turn Simon's Town into a home of Britain's navy. The view presented in all these pictures is the very small nature of Simon's Town, even after the facilities and civilian staff were transferred. Figure 6bvi illustrates the buildings the Dutch had built prior to 1789 and shows it was a small settlement.

In June 1812, shortly before the order from the Admiralty to move to Simon's Town, the master of *Danmark* carried out a trigonometrical survey of Simon's Bay. This survey was accompanied by a watercolour picture shown in figure 6bvii and 6bviii. Figure 6bvii shows the bearings made by the master with descriptions of the buildings

¹ Captain Beaufort was commander of *Woolwich* at this time but was to become future Hydrographer of the navy.

² Dutch East India Company (Vereenigde Oost-Indische Compagnie or VOC in <u>Dutch</u>, literally "United <u>East Indian</u> Company").

³ Brock, B.B. & Brock, B.G, (eds), Historical Simon's Town, 22.

in Simon's Town. By using these indicators the detail in figure 6biii is more clearly understood. When the general plan of Simon's Town, shown in figure 6biv, is viewed in conjunction with Salmond's painting the layout of the naval establishment becomes plain.

In 1817 the naval establishment building work at Simon's Town was completed. Mary Brenton, the sister of the commissioner, painted many pictures at the Cape including one of the Simon's Town in 1816. A black and white image of her watercolour is shown as figure 6bx with 6bxi provided a key identifying the official buildings.

All the illustrations demonstrate the small nature of Simon's Town, with very few buildings not connected with supporting either the VOC or the British Navy. The settlement was without a church until the naval establishment was built and was very much a colonial backwater. It can be of little wonder that encouragement was required to retain a workforce.



Figure 6bi: A view of the Cape of Good Hope, taken on the spot, from on board the Resolution, Capt. Cook, November 1772⁴

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⁴ W. Hodges, Official artist on Captain Cook's second voyage, NMM, BHC 1778_700.

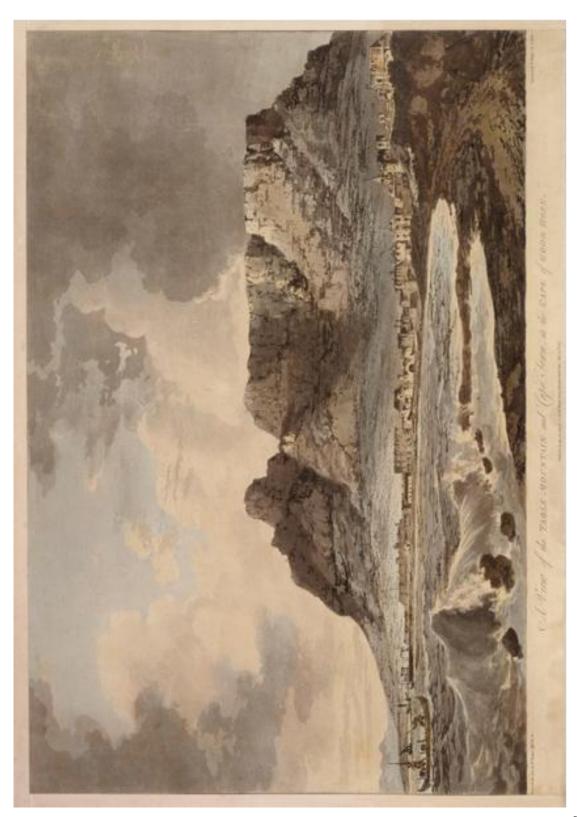


Figure 6bii: A View of the Table Mountain and Cape Town, at the Cape of Good Hope⁵

⁵ J. Wells, after W. Hodges, NMM, PAH2821.



Figure 6biii: Unfinished sketch of Table Bay and Cape Town by Captain Beaufort $(1807)^6$

⁶ Beaufort's sketch used by Dalrymple to produce Admiralty chart, UKHO, r89, accessed October 2009.

Appendix 6b: The naval establishment at Cape Town and Simon's Town

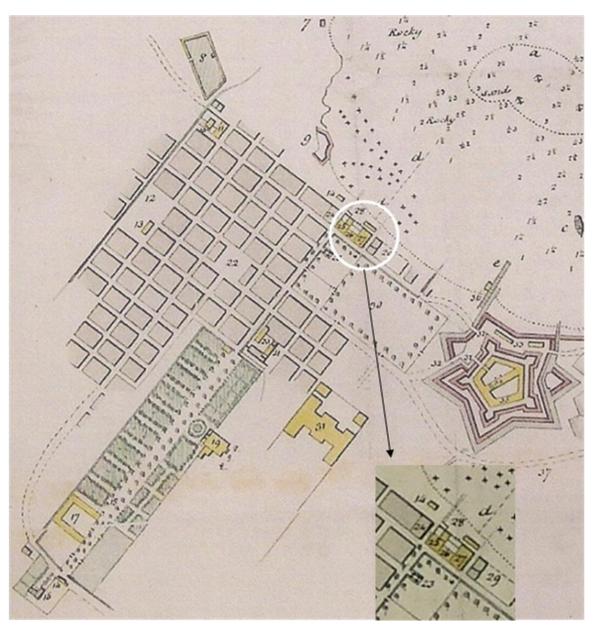


Figure 6biv: Detail of Captain Beaufort sketch of Table Bay and Cape Town $\left(1807\right)^7$

⁷ Beaufort's sketch used by Dalrymple to produce Admiralty chart, UKHO, r89, accessed October 2009

Location number	Description
1	Green Point and Battery mounting 4 guns in embrasures and 5 en
	barbette.
2	Mouille Battery – 4 barbette guns. It stands rather high on the sand hills
	commanding the other low batteries and round the coast. It has two flag
2	staffs. A mound of sand behind which are 2 mortars.
3 4	
	Chaverine Battery, guardhouse, magazine, forge and flag staff. 30 embrasures and 6 barbette.
5	Magazine
6	Amsterdam Battery, barracks, magazine, forges, and well of bad water,
	mounts 14 embrasure guns and 12 en barbette, with a tier of portholes
	underneath, which are now built up and prisoners kept there.
7	A house for boiling whale oil.
8	Burying ground
9	Rogge Battery, 13 guns in embrasures and 2 barbette.
10	Lutheran church.
11	Naval Hospital.
12	Hottentot square.
13	Theatre.
14	Guard houses.
15	Mount Nelson. Mr. Maude's house and garden.
16	Not used.
17	Menagerie.
18	Governor's Gardens, a Public Walk.
19	Governor's House.
20	Public Library.
21	Church with Spire.
22	Square and Green Market.
23	Fountain.
24	Mrs. Vanscou's Lodging house, on the north side of which is a small
	terrace to which my room opened and which I found a very convenient
	place for observations & co.
25	The Prison.
26	The Admiral's house, with door opening to the Dockyard.
27	Victualling Office.
28	Dockyard, storehouses, offices, flagstaff and co. but very confined.
29	An old barracks burned down. This would be a convenient place to erect
20	Victualling or other storehouse which are now up in the town.
30	Parade.
31	Barracks for cavalry and infantry.
32	Gates into the Citadel, a fortified pentagon with dry and wet ditch and
22	mounting upwards of 80 guns.
33	Artillery mess house & co.
34	General's apartments, together with all the Military Offices.

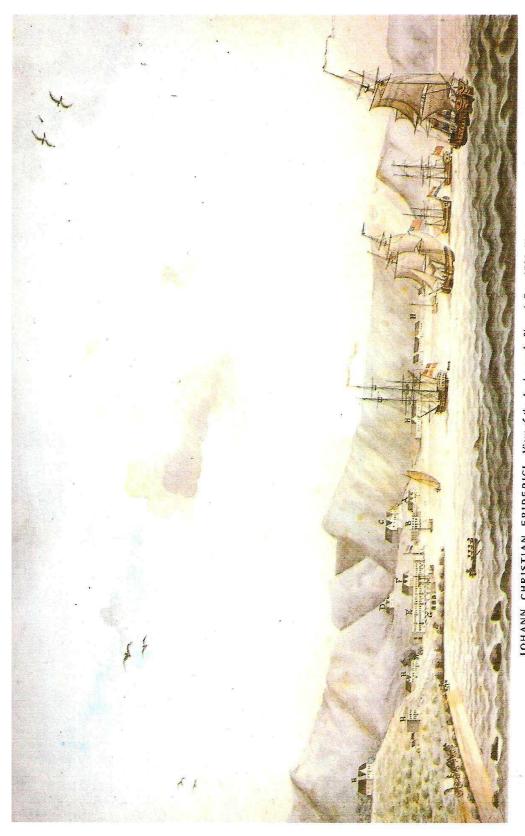
Location	Description
number	•
35	Barracks for the garrison of the Citadel.
36	Wooden Pier, supported on piles about 400 feet long and 24 feet broad
37	Road to the country branching off to the left to Hottentot Holland, and to
	the right to Constantia and Simon's Bay.
38	Line wall mounting cannon here and there.
39	Military Hospital.
40	Knocke Fort – 6 guns on embrasures but surrounded by ditch with draw
	bridge.
41	Craig's Battery of 5 barbette guns, and a small town commanding it.
42	Prince of Wale's blockhouse, about 480 feet above the level of the sea.
43	York blockhouse, about 930 feet above the sea: And battery below it.
44	King's blockhouse, about 1330 feet above the sea.
45	Water Mill, the road up to Table hill lies by this mill.
46	Commissary general Murray's house.
47	Guardhouse. The road round the Lion's Head to Green Point lies by this
	Guardhouse.
48	Lion's Head or Sugar Loaf, with Signal Post and hut, inaccessible but by
	one path and by the assistance of ropes in two places which are
	perpendicular. Its elevation above the sea is about 2320 feet.
49	Lion's Rump with Signal Post and lookout house about 1080 feet high.
50	Three Anchor battery somewhat about this point with an easterly wind
	there is (I have been told) good landing there.

Table 6bi: Building descriptions shown on figures 6g and 6h.



Figure 6bv: Cape Town from Signal Hill circa 1780.8

⁸ Worden, N., van Heyningen, E., and Bickford-Smith, V., *Cape Town - The Making of a City*, (Claremont (South Africa), 1998), 46-47; picture attributed to Johannes Schumacher.



JOHANN CHRISTIAN FRIDERICI. View of the Anchorage in Simon's Bay, 1789. Water colour. Key to the code letters: A, Government House; B, Resident's House; C, Hospital; D, Doctor's Lodging House; E, Barracks & Storehouses of the East India Company; F, Stables; G, Jetty; H, Private Houses.

Figure 6bvi: View of the Anchorage at Simon's Town in 1789°

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⁹ Brock, B.B. & Brock, B.G, (eds), *Historical Simon's Town*, 18-19.

Appendix 6b: The naval establishment at Cape Town and Simon's Town

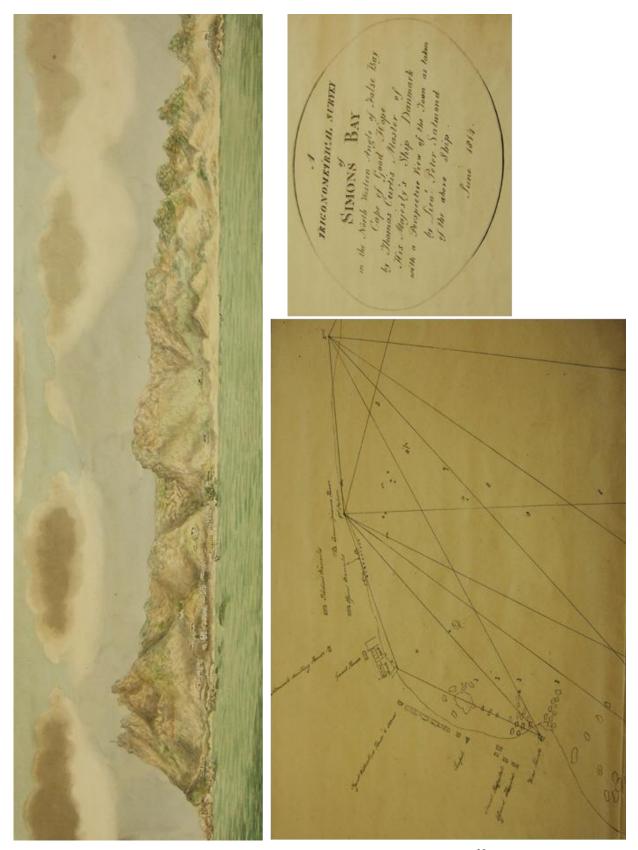


Figure 6bvii: Perspective view of Simon's Town by Lt. Salmond in 1814¹⁰

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 $^{^{10}}$ Part of a trigonometrical survey of Simons Bay by Thomas Curtis, Master of $\it Danmark$, June 1814, Admiralty Library, Vz 814.

Appendix 6b: The naval establishment at Cape Town and Simon's Town

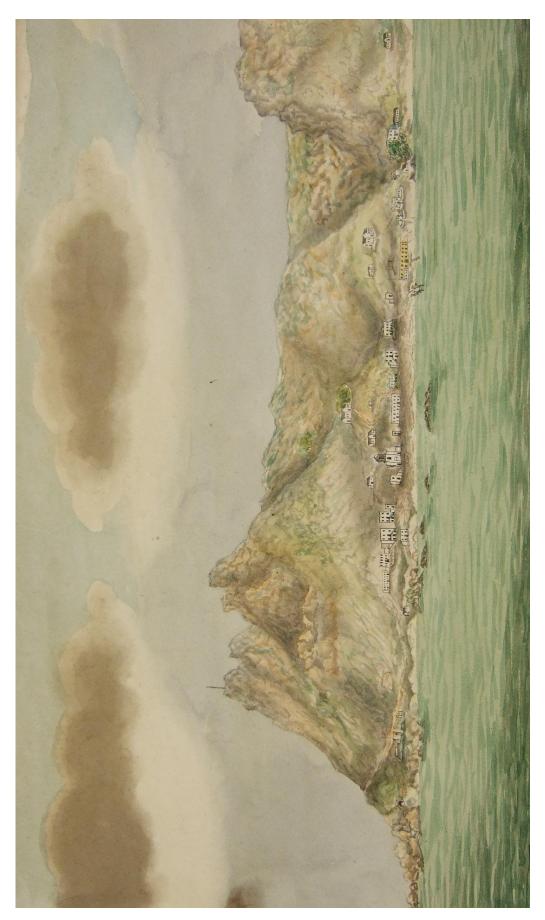


Figure 6bviii: Detail of Lt. Salmond's perspective view of Simon's Town

Appendix 6b: The naval establishment at Cape Town and Simon's Town

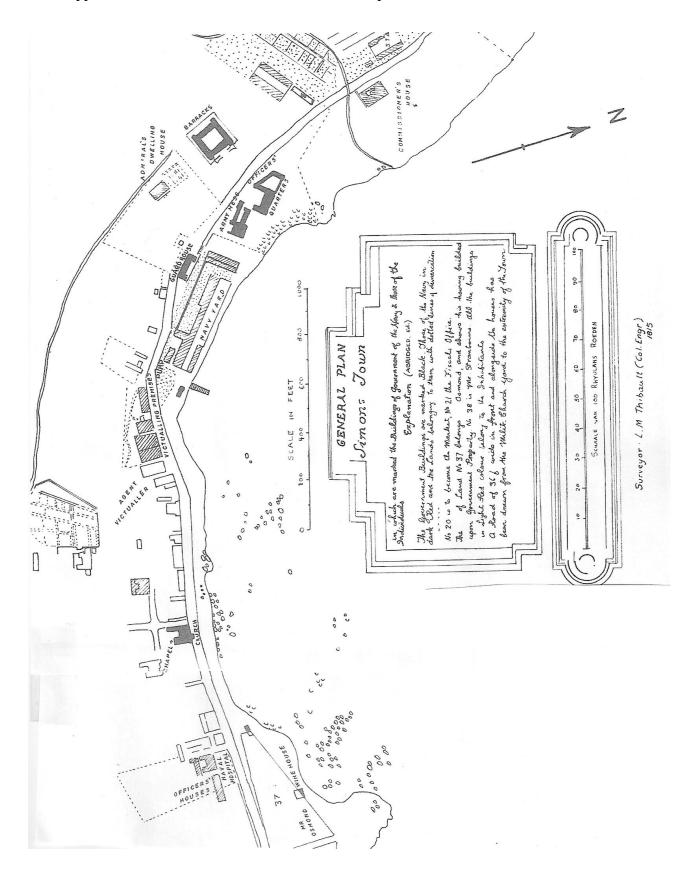
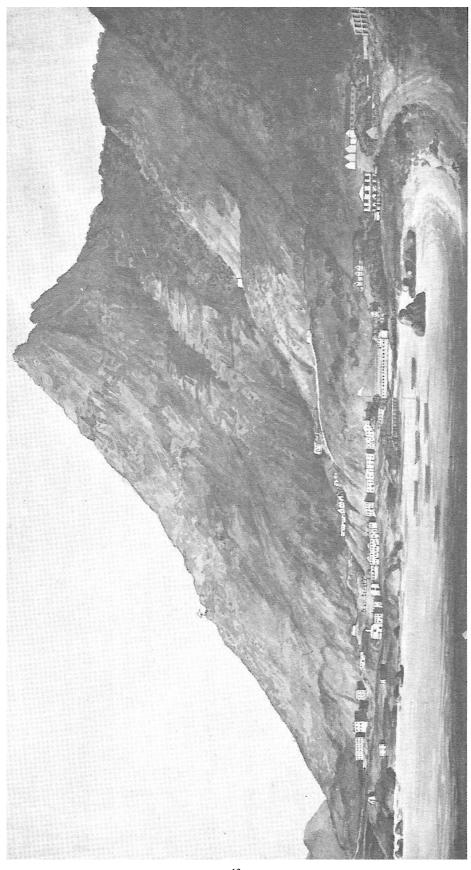


Figure 6bix: Plan of Simon's Town in 1815¹¹

 $^{^{11}}$ Brock, B.B. & Brock, B.G, (eds), $\it Historical\ Simon\ 's\ Town,\ 32-33.$



Simon's Bay, Town & Harbour, 1816. As the Deputy Fiscal (later, Resident) J.H. Brand knew it. Watercolour by Mary Brenton.

Figure 6bx: Simon's Town in 1816¹²

 $^{\rm 12}$ Brock, B.B. & Brock, B.G, (eds), Historical Simon's Town, 80

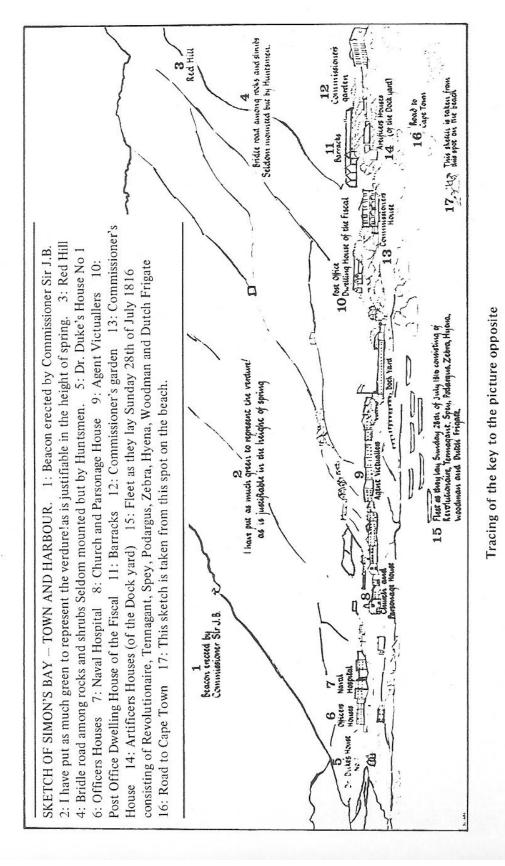


Figure 6bxi: Key to Figure 6bx¹³

¹³ Brock, B.B. & Brock, B.G, (eds), Historical Simon's Town, 81

This appendix has been written to clarify who occupied the post of Superintendent of the Bombay Marine during the Revolutionary and Napoleonic Wars as there are inconsistent statements in a number of books. Low's *History of the Indian Navy* states the post of Superintendent of the Marine was re-established on 1st August 1798 with Philip Dundas being appointed. Wadia states the post was also reactivated in August 1798. It becomes more confusing as Parkinson states Dundas had obtained the well paid post of master attendant, £10000 per year, from the mid 1790s.

Neither the master attendant nor the superintendent post was insignificant as the superintendent reported to the government of Bombay and was chairman of the Marine Board. This board consisted of the master attendant, the commodore and two senior captains of the Bombay Marine. As stated in chapter seven Philip Dundas was also appointed by Elphinstone to serve as Bombay naval storekeeper in January 1796. For this post the Admiralty allowed a salary of £200 and 3d in the pound sterling on his disbursements.⁴ This he received in addition to his Company salary. Dundas served in both posts until he asked to be released as naval storekeeper in 1801.⁵ This was also to be the case for William Taylor Money who held both posts from 1808 to 1810.

Name	Dates in Post
Philip Dundas	1794 to 1801
Robert Anderson	1802 to 1804
William Taylor Money	1805 to 1810
Post not recorded	1810 to 1812
Henry Meriton	1813 to 1824

Table 7bi: List of Bombay Marine Superintendents (1794-1824)⁶

Table 7bi provides a list of the superintendent of the Bombay Marine. Philip Dundas and Robert Anderson had both held the post of master attendant of the marine before becoming superintendent.

⁴ Admiralty to Elphinstone, TNA, ADM 2/937, 8th August 1796.

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¹ Low, C., *History of Indian Navy Volume 1*, 214-215.

² Wadia, R., The Bombay Dockyard and the Wadia Master Shipbuilders, 79-80.

³ Parkinson, C., War in the Eastern Seas, 290.

⁵ Admiralty to Rainier, TNA, ADM 2/937, 3rd March 1802.

⁶ Provisional list provided by M. Packer, Map Collection Manager, British Library, 10th March 2011.

Bombay

By 1815 Bombay had two dry docks. Chapter one detailed the history of the original dock with it being in use in July 1750 and twice extended to create a facility capable of accommodating three ships. Duncan dock was constructed in the first decade of the nineteenth century to enable the dockyard to construct 74 gun ships for the British navy, and increase its capacity to accommodate such vessels. On completion of the inner Duncan dock the yard was capable of building a frigate in the inner Bombay dock, a 74 gun ship in Duncan inner and repairs of sloops, frigates and 74s in the remaining docks. Table 7b1 provides the details of the completion dates and physical dimensions of Bombay and Duncan docks.

	Date completed	Length (ft)	Width (ft)	Depth (ft)
Bombay (Inner)	1750	209	47	15
Bombay (Middle)	1762	183	51	20
Bombay (Outer)	1773	256	51	20
Duncan (Inner)	1807	286	63	23
Duncan (Outer)	1810	246	63.6	23

Table 7bi: Dimensions and completion dates of Bombay dry docks

Figure 7j in chapter seven provided a layout of Bombay Dockyard in 1816, indicating where the multiple docks were divided, figure 7bi below shows a more detailed view of where and how partitioned. This contemporary diagram shows a plan of the Duncan dock with the divide clearly shown. The cross section view shows the profile of the dock with the outline of a 74 gun ship displayed.

Amongst the features introduced at this time were steam engines to pump out water from the excavations when constructing Duncan dock, and presumably to empty the docks to provide independence from the state of the tide. Wadia states this was a 20 horse power engine with Graham confirming this was the only such engine on the island and that it was for pumping the dock dry.¹

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¹ Wadia, R. A., *The Bombay Dockyard and the Wadia Master Shipbuilders*, 55-56; Graham, M., *Journal of a short residence in India*, (Edinburgh, 1813), 12.

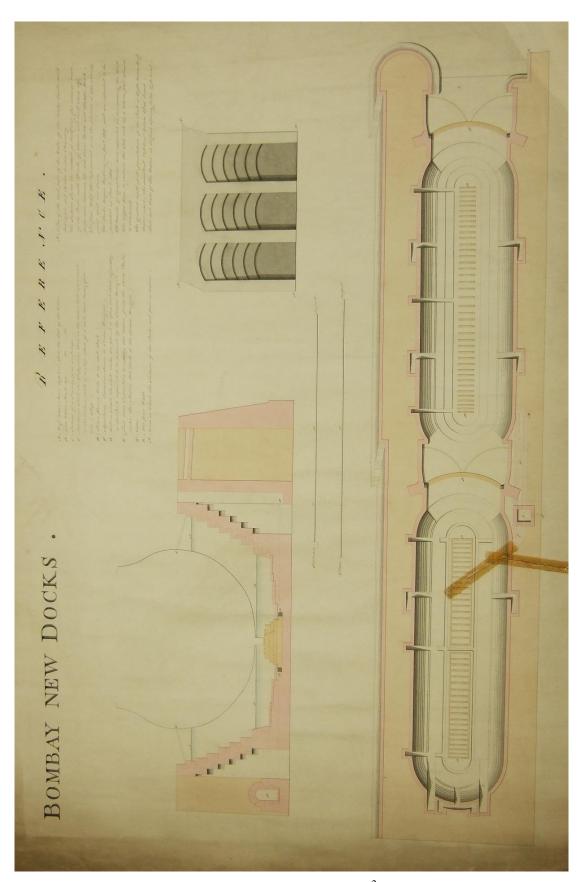


Figure 7bi: Plan and elevation of Duncan (New) Docks²

 2 Duncan Dry Dock – Bombay, UKHO, C104 Bf1.

Calcutta

The existence of dry docks at Calcutta in this period has been hinted at in naval histories, but frequently they have been completely ignored or forgotten. Usually the facilities at Bombay have received all the attention with the statement they were the only dry docks outside of Europe, or more correctly the only docks able to accommodate a 74 gun ship. Table 7bii provides a list of the dry docks at Calcutta in 1822. The capacity and dimensions of these docks have yet to be found, but we know that at least one dock was capable of receiving a 38 gun frigate as *Phaeton* was docked in Mr. Smith's dock in April 1809.³

Date	Description
1790	The East India Company built a dock at Bankshall for their pilot vessels.
	This was the first dock constructed at Calcutta, it was disused and filled up
	about 1808.
1796-7	A dock was constructed by Mr. Bacon, at Sulkea, on the western side of the
	Hooghly opposite to northern extremity of Calcutta. The frigate Orpheus
	was the first ship hauled into dock. Note: Possibly the 12 pdr fifth rate
	frigate of that name that was stationed in the East Indies at this time.
1801	A dock constructed by Mr. Gilmore at Sulkea.
1801	A dock commenced upon by Mr. P.Brady at Howrah, opposite the centre of
	Calcutta, and finished by Messrs Archer and Smith.
1803	A dock was constructed by Mr. A Waddell at Khidderpore, just below Fort
	William, since the property of Messrs J.& R. Kydd, the Company's master
	builder.
1808	A dock larger than any of the above was constructed by Mr. Matthew
	Smith now the property of Mr. F. Vrignon.

Table 7bii: Calcutta Dry Docks in Revolutionary and Napoleonic War⁴

It is very unlikely that any of the above docks were capable of receiving a 74 gun ship. This would seem to be confirmed as the largest ship built at Calcutta in this period was

³ Captain Fleetwood Pellew to Rear Admiral Drury, TNA, ADM 1/181, 8th April 1809; Note: *Phaeton* was 141 feet long, over 39 feet wide and nearly 14 feet draught (Winfield, *British Warships 1793-1815*, 138).

⁴ Phipps, J., A guide to the commerce of Bengal, 149.

the 74 gun ship *Hastings*, a vessel of 1732 tons, with her construction taking place on a slipway rather than the Bombay practice of building in a dry dock.⁵

Vessel	Charge (Rupees)
Sloop	300
Frigate	500
50 Gun Ship	600
64 Gun Ship	700
74 Gun Ship	800

Table 7biii: Rates of Pilotage of HM Ships from Sea to Calcutta⁶

Rule	Description	Charge	
		(Rupees)	
1	For pumping out the dock, shoring and the use of shores, stages,	500	
	warps and opening and shutting the dock gates. Note: This does		
	not include shores for hanging a ship, to shift the keel, which is		
	always an extra charge.		
2	For every ship of 500 tons registered and upwards which comes	500	
	into dock, for however short a period.		
3	For every ship of under 500 tons registered which comes into	400	
	dock, for however short a period.		
4	The above sums are to cover dock hire for a period of eight days,	50	
	from and including the day the ship enters the dock, after which		
	for every day a ship remains in dock the following charge.		
Thomb	The shove charges were established by the several proprietors of dry deels, at the		

The above charges were established by the several proprietors of dry docks, at the Port of Calcutta, in March 1822 for the use of their respective docks.

Table 7biv: Rates for Dry Dock hire at Calcutta in 1822⁷

The above indicates that Calcutta was capable of docking and refitting British naval vessels up to the size of fifth rates, but it was never to become a favoured refit location. Table 7biii shows the Bengal Marine pilotage charges and indicates that large naval

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⁵ Lee, I., Commodore Sir John Hayes: His Voyage and Life (1767-1831), 239.

⁶ Phipps, J., A guide to the commerce of Bengal, 24.

⁷ Phipps, J., A collection of papers relative to shipbuilding in India, 149

ships had called at Calcutta and that a substantial charge was incurred before a naval ship even arrived in that port to be repaired. The fees charged by the private ship repair companies was a considerable sum for long refits in dock fees, see table 7biv, in addition to the work undertaken. The cost of HM Ships refitting at Calcutta was investigated in a parliamentary select committee report in 1805. However, ships were still being sent there for refits later in the decade until Admirals Drury and Hood greatly reduced the number of refits at Calcutta.

Penang

Chapter seven has detailed Melville's strategy for naval defence of eastern Indian and the route to China by encouraging the East India Company to establish a building yard and naval base at Penang. Part of this strategy was to construct a dry dock capable of accommodating a 74 gun ship, thus providing greater availability of vessels by removing the need to return to Bombay for major refits. Modern technology was also introduced to construct the facility and to subsequently pump out the dry dock by the provision of a steam engine. Boulton and Watt provided this engine with John Rennie supplying ancillary machinery. The engine suppliers considered that two 6 horse power engines attached to a chain pump would shift 400000 cubic feet of water in less than 24 hours. Although this equipment was shipped out construction of the dry dock was abandoned.

Drawings and plans of the Penang dry dock have yet to be found by this author but an idea of their size, method of construction and the pumping engine configuration is suggested by the plans that have survived for the planned docks at Trincomalee.

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⁸ Reports from the Select Committee on papers relating to the repairs of HM Ships Romney and Sensible, while under the command of Sir Home-Popham, House of Commons Papers, 1805.

⁹ Boulton and Watt to Navy Board, TNA, ADM 49/89, 24th June 1805.

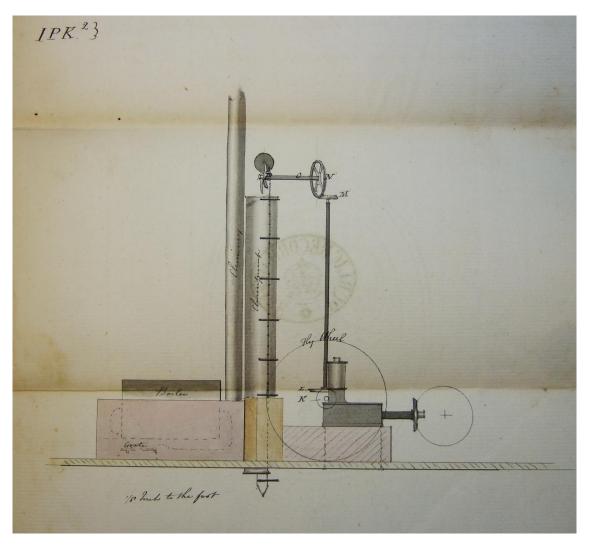


Figure 7bii: Side elevation view of Penang steam engines

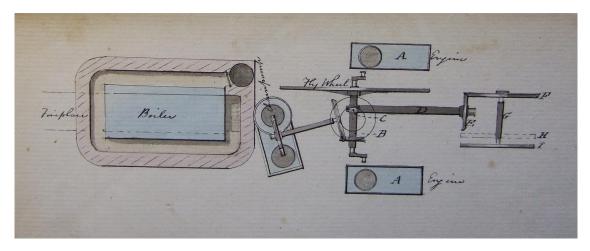


Figure 7biii: Plan view of Penang steam engines

Trincomalee

Unlike Penang this location was to become a significant navy base for the British, but Trincomalee was never to have a dry dock constructed. However, considerable investigation and planning was undertaken to build these docks. The advantage of having access to dry docks at Trincomalee was identical to that at Penang, tactical independence from Bombay, but also removing commercial dependence on the Company. This later aspect particularly appealed to Admiral Drury.

The site chosen for the proposed dry docks was at the head of Nicholson Cove. The civil engineer, Atkinson, produced three plans, for selection. These consisted of a single dock for a 74 gun ship, a double dock and finally twin docks capable of accommodating 74 gun ships. It was not merely the various design configurations that Atkinson supplied as he also provided profiles of the cove to show how much material would require excavating together with the coffer dam required. Atkinson's drawings are dated January 1811 and include the design and position of a steam engine. Figures 7biv to 7bix have all been obtained from the UKHO. ¹⁰

With Drury's death in March 1811 and the operation to capture Java the progress to establish a naval yard at Trincomalee slackened. The newly arrived commissioner at Madras, Puget, was busy reorganising and familiarising himself with civil naval affairs at Madras, Calcutta and Penang, but in August 1811 he sailed to Trincomalee. Puget sent a long report to the Admiralty in October with a part of his dispatch being devoted to the proposed dry docks. Puget understood that the suggestion to build the dry docks, championed by Drury, had been General Maitland's idea. The commissioner considered the location was ideal but questioned the necessity of building such an expensive facility with Bombay docks available. The low rise in tide would necessitate a steam engine and pumping gear, and together with the labour and masonry costs Puget considered a careening wharf would be a better option. ¹¹

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¹⁰ Designs for proposed dry docks at Trincomalee, Jan 1811, UKHO, C110.

¹¹ Puget to Admiralty, TNA, ADM 1/3441, 3rd October 1811.

Appendix 7b: The Dry Docks of the East Indies – Actual and Proposed (1790-1815)

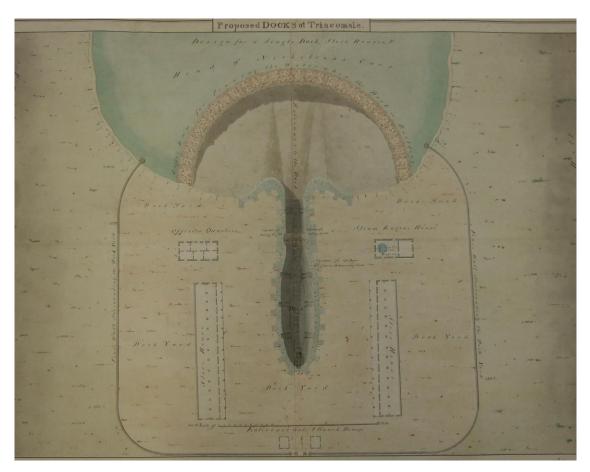


Figure 7biv: Proposed configuration for one dock and position of coffer dam



Figure 7bv: Cross-section of coffer dam

Appendix 7b: The Dry Docks of the East Indies – Actual and Proposed (1790-1815)

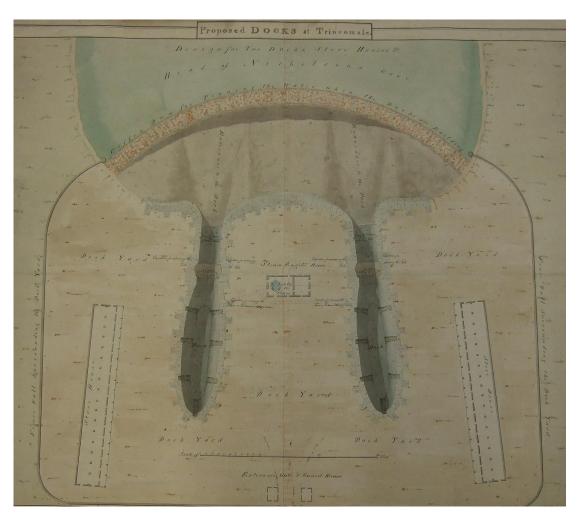


Figure 7bvi: Proposed twin dock design with position of coffer dam

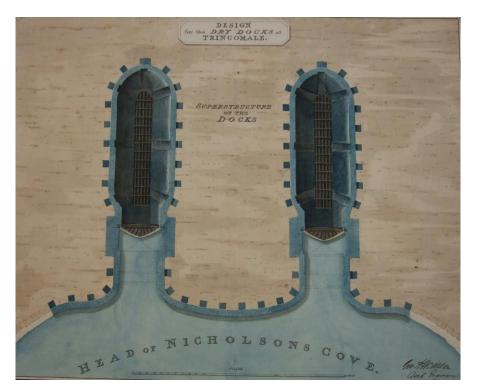


Figure 7bvii: Twin dock design on completion

Appendix 7b: The Dry Docks of the East Indies – Actual and Proposed (1790-1815)

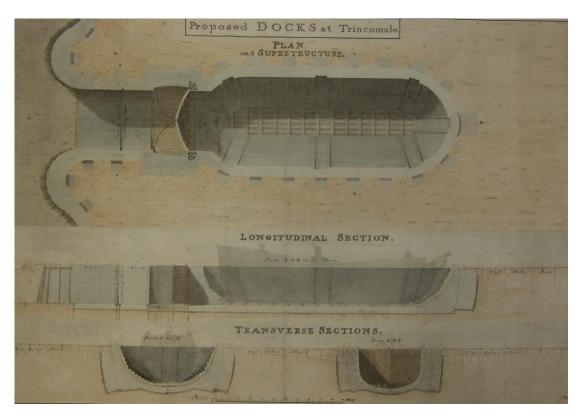


Figure 7bviii: Proposed docks showing, plan and sectional views

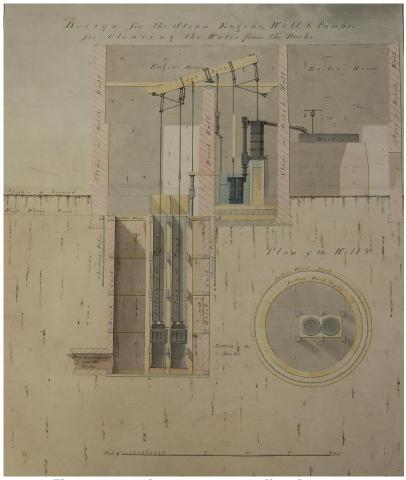


Figure 7bix: Design of steam engine, well and pump



Figure 7bx: Example of Thames floating dock circ 1813¹²

However it was another option that Puget suggested that was much later to be the answer at Trincomalee and other overseas bases, a floating dock. This he suggested if the Admiralty insisted on Trincomalee being established on a large scale as material and labour costs would be much reduced and that the harbour was suited to such a facility. For examples of floating docks in service he suggested they examine those already in place on the Thames. 13

Figure 7bx provides an impression of the configuration of a contemporary dock with the typical "U" shaped section. What is more difficult to ascertain is whether this design allowed for the dock to be lowered by flooding tanks and raised with a ship in dock by pumping out the tanks. This latter operation requires detailed knowledge of weight distribution to ensure when pumping out the tanks that a correct trim is maintained. With the limited raise and fall of tides at Trincomalee the floating dock referred to in

¹² Floating Dock, Rotherhithe, Drawn by L. Francia and engraved by J. C. Allen, published by W. B. Cooke, 1815, Ideal Home: A history of south-east London suburbs, accessed 5th September 2011 http://www.ideal-homes.org.uk/southwark/assets/galleries/rotherhithe/floating-dock.

¹³ Puget to Admiralty, TNA, ADM 1/3441, 3rd October 1811.

Puget's dispatch must have been of this type otherwise a ship could not have been put into such a dock.

Broughton, the temporary commander-in-chief, agreed with Puget that dry docks at Trincomalee were not required as Bombay's were sufficient. However, Hood was in favour of Atkinson's designs for a dry dock. Hood considered Puget's alternative option for a floating dock would incur increasing and continuing costs. The admiral also thought the utility of steam engines to off-set the problem of limited tides was well known and declared there was plenty of wood to fuel the steam engine. ¹⁵

Hood did not initially abandon the idea of building dry docks at Nicholson Cove informing the Admiralty in January 1813 that Puget was obtaining soil cores and soundings in the cove. As only one civil engineer was on the island Hood also asked that an engineer was sent out from England to build the docks. However, by May Puget reported to the Navy Board that Hood had halted all work on building docks until he had instructions from the Admiralty to proceed. Instead Hood had agreed with the commissioner and Wellington, the master shipwright, that a careening wharf and associated capstan house should be build.

The dry docks were never to be built at Trincomalee and the exact timing of their abandonment has yet to be determined, but Mr. John Rennie, the civil engineer frequently consulted and used by the Admiralty, can have the last word dated 1st July 1815. 'As I am informed that the Lord Commissioners of the Admiralty has given up at present of establishing dry docks at Trincomalee I am returning the papers your Honourable Board sent to me in July 1814'. ¹⁹

Summary

The provision of dry docks for the repair, refit and building of ships in the East Indies falls into three distinct categories from the mid eighteenth century. Firstly, with Bombay's docks being constructed for military and strategic reasons with the Company

¹⁴ Broughton to Admiralty, TNA, ADM 1/184, 29th February 1812.

¹⁵ Hood to Admiralty, TNA, ADM 1/184, 1st September 1812.

¹⁶ Hood to Admiralty, RMC of Canada, DA88.1.H66A4 1809 V2, 13th January 1813.

¹⁷ Puget to Navy Board, TNA, ADM 106/3216, 3rd May 1813.

¹⁸ Wellington to Puget, TNA, ADM 106/3216, 1st May 1813.

¹⁹ Rennie to Admiralty, TNA, ADM 106/3216, 1st July 1815.

also being able to build merchant ships when not needed by the navy; secondly, at Calcutta constructed by private concerns for commercial advantage; and finally those envisaged at Penang and Trincomalee for strategic reasons.

A significant difference between the dry docks built at Bombay compared with Calcutta was their size and reflects their reason and role. Bombay's first dock was built to accommodate a 50 gun ship, a major naval vessel in 1750, to enable the recently deployed squadron to be adequately supported. Bombay's dock was further extended in the next 20 years with another two docks to support a larger naval squadron and the Bombay Marine. The increase in size of the third dock also reflected that the arbiter in naval conflict had moved from small two deckers to 74 gun ships. The size of the docks at Bombay was suited for naval purposes and building large ships, but probably too large and expensive for small traders. It was hoped that the British navy would always have primacy of use and hence restricted use by merchants, but Admiral Rainier had to argue for priority. Bombay docks were conceived to service the defence of East Indian trade and hence were a significant national resource. This was also reflected in the building of Duncan dock as its purpose was to build 74 gun ships, and increase operational flexibility by doubling the capacity to repair such ships.

The driving force for the construction of dry docks at Calcutta was commercial and coincided with the growth in shipbuilding occurring in Bengal at the beginning of the nineteenth century. Many of the country trading vessels that were built were of a small size, but they were numerous providing an opportunity to supply docking and maintenance services. By building small dry docks and providing a flexible charging structure the private ship owners could maximise the life of their ships at a reasonable cost. This costing structure probably did not suit the requirements of the British navy as it appears to have been constructed for quick turn round maintenance rather than major under-water hull work. As the dock owners had constructed their facilities for expected numbers of commercial customers it would be unlikely that navy work was necessary. If this was the case than the ability of the British navy to negotiate more advantageous terms would not be the same as at Bombay. A more detailed study of Calcutta's docks and the work performed in this period is needed to confirm this conjecture.

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²⁰ Rainier had arguments with the Company to have his vessels docked. I am grateful to Peter Ward for bringing this to my attention. From 1808 to 1815 I have not found such disputes regarding the availability of docks for naval vessels.

Appendix 7b: The Dry Docks of the East Indies – Actual and Proposed (1790-1815)

The proposed dry docks at Penang and Trincomalee have been included in this study to illustrate the strategy vision of people in London and the east. By including Trincomalee in this evaluation an opportunity has been provided to show that coffer dams would be required for construction of such docks. The inclusion of the proposal to use floating docks was included to show this technology was coming to fruition and under consideration. Such docks were later a common feature at overseas yards with Bermuda's first floating dock being a wonder of the age in the 1860s.

This appendix is to explain the structure and purpose of the Bengal Marine. It was not a military organisation and was separate from the Bombay Marine.

In 1823 the head clerk of the Bengal Marine wrote about his organisation and the activities of the region in his book, *A guide to the commerce of Bengal*. John Phipps intended his book to be of use to merchants, ship owners and officers of ships who intended being involved in East Indian activities, particularly Calcutta. What he provided was a snap shot of contemporary East Indian affairs and a history of previous development. Phipps also published a collection of papers concerning shipbuilding in India during the Revolutionary and Napoleonic Wars.²

Phipps records the existence of a Marine Board at Bengal with Lee recording that the master attendant was a member of the Board.³ Phipps provides a list of the holders of the various posts in the Bengal Marine. His earliest record of an occupant of the post of master attendant was Page Keble who resigned in 1768. Cudbert Thuhill was in post from 1785 to April 1809 when Commodore John Hayes replaced him as master attendant. Hayes was still in post in 1821 but was to resign to take up active service to command Company naval forces in the Burmese War of 1824. As shown in appendix 7a there were instances of individuals holding multiple posts including work in a private capacity. Hayes had been a senior officer of the Bombay Marine for some time and commanded a squadron of ships on the Java expedition in 1811. The deputy master attendant was usually a captain in the Bombay Marine with lieutenants of that organisation also to be found in the master attendant's office. Possibly the most intriguing instance of dual activity is of James Kyd, the master builder of the Bengal Marine. Both James and his brother Robert were trained in shipbuilding in England with their father, Lt. Gen. Alexander Kyd, apprenticing them to Mr. Weddell the Company's master builder at Calcutta on their return. On Weddell's retirement in 1807 the brothers purchased Kidderpore dockyard with James also becoming the master builder for the Company.⁵

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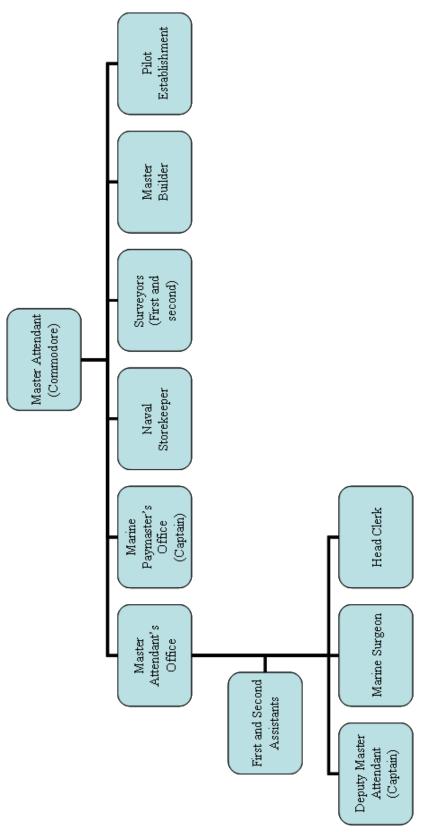
¹ Phipps, J., A guide to the commerce of Bengal, (Calcutta, 1823).

² Phipps, J., A collection of papers relative to shipbuilding in India, (Calcutta, 1840).

³ Lee, I., Commodore Sir John Hayes: His Voyage and Life (1767-1831), (London, 1912), 233.

⁴ Lee, I., Commodore Sir John Hayes: His Voyage and Life (1767-1831), 244.

⁵ Kochhar, R., Shipbuilding at Bombay, *Current Science*, accessed 12th March 2011, http://rajeshkochhar.com/data/publications/ship.pdf,



 $Figure\ 7ci: \qquad The\ Bengal\ Marine-Master\ Attendant\ Organisation^6$

⁶ Derived from the work of Phipps, *A guide to the commerce of Bengal*.

Appendix 7c The Bengal Marine

A vital roll of the marine service at Bengal was piloting vessels to Calcutta up the Hooghly River. Phipps provides a list of branch pilots, the senior rank, dated from 1771 indicating a hierarchy. Table 7ci shows the pilot establishment in 1821, but this was probably indicative of the service in the Revolutionary and Napoleonic Wars. What Phipps also provided was a list of the pilots who received a pension from the Bengal Marine.

Rank	Number	Pay per Monsoon (Sicca
		Rupees
Branch Pilot	12	700
Master	24	270
Mates	24	156
Second mates	24	60
Volunteers	70	60

Table 7ci: Bengal Pilot Establishment in 1821

For Royal Navy ships defending the Bay of Bengal if it was decided they should be refitted and resupplied from Calcutta, the Bengal Marine charged for pilotage with the private dockyards charging for use of their dry docks. These charges are detailed in appendix 7b.

The following graphs have drawn on John Phipps's book published in 1840 on shipbuilding in India, and Wadia's work on the Bombay dockyard. William Kirk published an article in the Mariner's Mirror in 1953 on this subject and cites Phipps's book as the statistical source for his work. Phipps had been a clerk in the master attendant's office at Calcutta, a part of the Bengal Marine, and had a detailed knowledge of Bengal and its commerce having previously published a book on the subject in 1823. Phipps provided tables on ships built at various ports in India, Burma and Penang. For Calcutta, Chittagong and Rangoon he gave details on the number of ships built each year, the total tonnage and the size of the largest and smallest ship built that year from 1800 to 1820. Phipps also gave details on other minor ports but these built fewer ships at intermittent intervals. An example of this is Penang as only three relatively large vessels were completed there from 1810 to 1813. Phipps did not provide comprehensive data on Bombay however, appendix two of Wadia's book details the name, date of completion and tonnage of the vessels ordered from the dockyard, and hence completes the data required for a statistical view.

Figure 7di shows the number of vessels built at each port during the period under consideration. The graph shows that Calcutta, Chittagong and Rangoon were constantly engaged in building relatively large numbers of vessels, whilst Bombay was ever present, fewer vessels were built there. This is confirmed in figure 7dii with Bombay in fourth place and Calcutta building over three times as many vessels. However, the importance of Bombay is demonstrated in figure 7diii because when the total tonnage of the ships built is considered that location rises to second place, indicating that larger vessels were built there. What becomes evident is the dominance of Calcutta for commercial shipbuilding, with that location providing over forty-four percent of the total tonnage for southern Asia. Appendix 7b provides information on the dry docks at Calcutta with the docking charges, indicating the commercial dockyards were also engaged in repair and refit work. Calcutta was hence the dominate shipping area, but chapter seven provides evidence on why it was not a favoured location for the British navy and so little used.

¹ Phipps, J., A collection of papers relative to Shipbuilding in India, (Calcutta, 1840); Wadia, R., The Bombay Dockyard and the Wadia Master Shipbuilders, (Bombay, 1955).

² Kirk, W., 'Shipbuilding in Southern Asia Ports' *The Mariner's Mirror*, Vol. 39, No. 4, (1953).

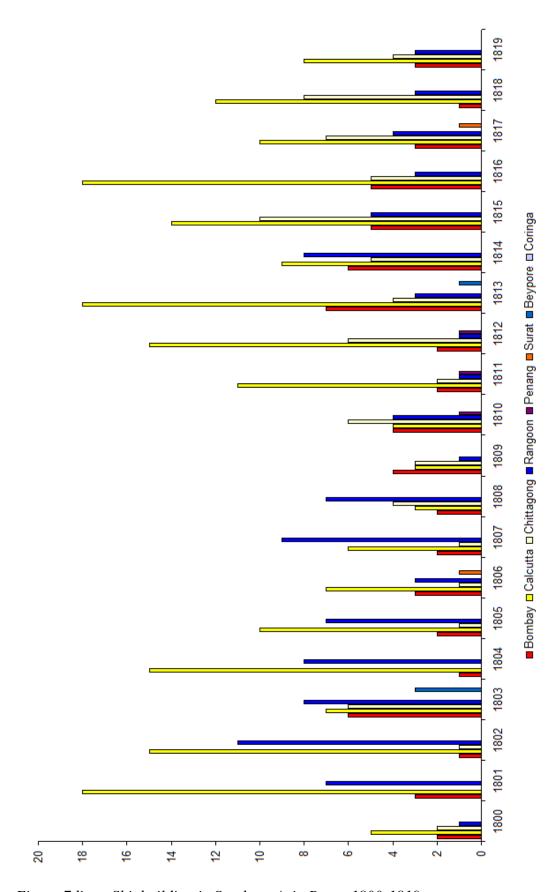


Figure 7di: Shipbuilding in Southern Asia Ports, 1800-1819

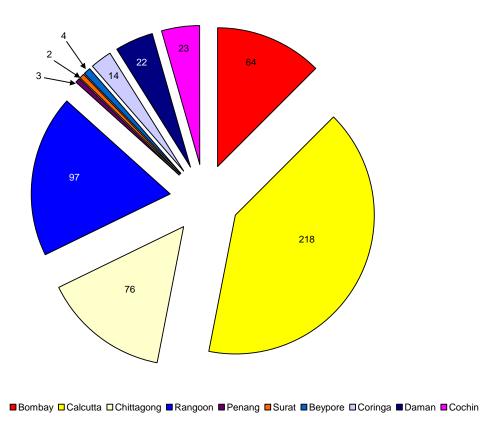


Figure 7dii: Numbers of Ships built in Southern Asia Ports, 1800 – 1819

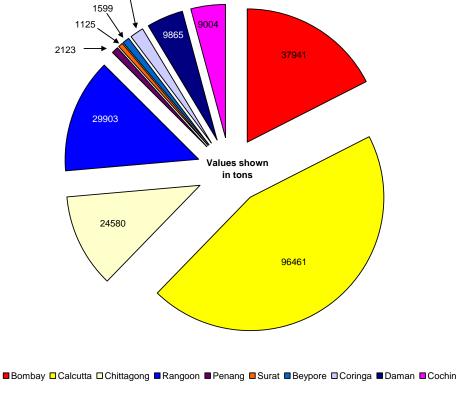


Figure 7diii: Total tonnage of ships built in Southern Asia Ports, 1800-1819