

Merchant shipping in the service of the Navy Board

The chartering of storeships, 1739–48

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The War of the Austrian Succession was a strategic revolution for Great Britain. Not only was it the beginning of a series of great conflicts in the Age of Sail fought for empire, it was also a war in which British naval power, for the first time, was projected, in the form of a large number of ships of the line, to conduct sustained operations in distant seas.¹ In the course of the war large squadrons of British warships operated for the first time not only in northern European seas but also in the West Indies and the western Mediterranean. The strength of the Royal Navy was increased from eighty-five ships and vessels manned by 15,988 men in 1739 to 233 ships and vessels manned by no fewer than 59,276 seamen in 1745.² This naval force was, for the first time, spread out geographically to cover multiple theatres of war. For example, in August 1741, out of twenty-seven third-rate ships of the line in commission, seventeen were either in the West Indies or *en route* to Britain from that region, while a further three ships were in the Mediterranean. Similarly, in 1747, out of a total of twenty-three third-rates in commission, three were in the West Indies and twelve were serving in the Mediterranean.³ In order to meet the logistical requirements, such as the provision of naval stores, the Royal Navy chartered a number of civilian merchant ships.

The Navy Board, a department of the Admiralty, was responsible for the procurement and distribution of all the naval stores required, not only in Britain but also overseas.⁴ In order to perform the task effectively during the War of the Austrian Succession the Navy Board not only made use of the small number of storeships commissioned into the Royal Navy⁵ but also chartered nearly 100 merchant ships to transport naval stores and other equipment from its depot at Deptford, on the river Thames, to the ships of the Royal Navy stationed, in particular, in the West Indies and the Mediterranean.

In the course of the war the Commissioners of the Navy, known collectively as the Navy Board,⁶ also chartered a number of vessels to carry naval stores between various naval establishments in Britain. For example, in 1740 the sloop *John and Anne* was hired to carry timber from Portsmouth to Plymouth, being compensated at the rate of 8s per ton of cargo placed on the vessel, and in 1744 the sloop *Edward and Mary* was chartered, at the rate of 13s per ton of cargo, in order to convey stores from Deptford to Portsmouth.⁷ From time

to time vessels were also chartered to carry, from Deptford, the materials and stores required to fit and equip warships being built for the navy in private shipyards in the outports. On 18 June 1740, for instance, the Navy Board chartered at Deptford the ship *London*, at the rate of 16s per ton of cargo, to carry masts, yards, sails and other stores to HMS *Success*, which was under construction at Hull.⁸ Occasionally the Navy Board would send small amounts of naval stores to North America as freight on merchant ships. For instance, on 17 September 1740 the commissioners contracted with the master of the merchant ship *Carolina Packet* to carry seven tons of naval stores to South Carolina at the rate of £1 5s per ton.⁹ The arrangements entered into by the commissioners for cargoes to be shipped between various British ports and North America were essentially *ad hoc*, and as such they usually involved relatively small amounts of stores; indeed, they were entered into mostly in order to avoid the need to employ large vessels.¹⁰ The vast bulk of the naval stores shipped overseas by the commissioners during the War of the Austrian Succession were thus dispatched to the West Indies and the Mediterranean on board chartered storeships.

All the ships hired to convey such naval stores were chartered by the Commissioners of the Navy at their offices at Crutched Friars in the City of London. Throughout the war the members of the Navy Board met five or six days a week to conduct business. Three commissioners were needed for a quorum and all orders, notes, contracts and the like had to be signed by at least three commissioners.¹¹ The Navy Board, sometimes in conjunction with the Admiralty,¹² at other times on the basis of information sent direct to Crutched Friars by naval officers stationed in the Mediterranean or the West Indies,¹³ decided whether to charter shipping to convey naval stores overseas.

When the Navy Board decided to charter ships a notice was issued calling for bids to be put forward for the hiring of merchant ships to serve as storeships. There are no records in the minutes of the Navy Board¹⁴ of the Commissioners of the Navy placing, during the War of Austrian Succession, advertisements in the London newspapers calling for bids for the chartering of shipping. It is clear from the existing records that the commissioners made known their wish to hire shipping through notices at coffee houses in the City of London frequented by merchants, shipowners and ship masters as well as by word of mouth, passed by officials at Deptford dockyard to the masters and owners of ships on the Thames. For example, on 8 July 1743 the commissioners decided to 'Publish Wednesday the 13th instant to Treat for freight for Antigua and Jamaica'.¹⁵ Here the word 'publish' did not mean newspaper advertisements, but rather that notice was sent 'to the Exchange & to the usual Coffee houses to give notice thereof'.¹⁶ Sometimes the Navy Board ordered that 'the officers at Deptford send a proper person in quest of Large Ships ... & invite the Masters and Owners to attend the Navy Board'.¹⁷ On occasion the board might also receive unsolicited offers of ships available for charter.¹⁸

At the time appointed those who wanted to let vessels to the Navy Board assembled outside the room at Crutched Friars where the Commissioners of the Navy were meeting. The tenders, usually in writing, were submitted by

the interested parties for consideration. For example, on 18 January 1744 the board received seven tenders to carry stores to Jamaica 'And [Thomas] Hood being the Lowest in his demand ... the Board were pleased to agree'.¹⁹ If there were no suitable bids the board would sometimes make a counter-offer.²⁰ At other times, when no satisfactory tenders were received, each bidder was 'called in singly to leave their Lowest prices'.²¹ If there were no acceptable tenders, all the prices being for instance too high, the whole process was 'adjourned' to be repeated at a later date.²²

Ships chartered by the commissioners to carry cargoes of naval stores to the West Indies and the Mediterranean were paid freight according to the amount of cargo placed on board a vessel and not by the length of the voyage or the time actually spent on the passage. That is, the freight of a ship for a single outward voyage from Britain was computed by the Navy Board according to the amount of cargo, usually expressed in tons, actually loaded on a vessel. For example, on 14 October 1742 the commissioners agreed with the ship broker John Major, of Tower Street, in the City of London, for the ship *Winchilsea* to carry to Gibraltar large masts at £2 15s per ton, small masts and other stores at £2 5s per ton, tiles and bricks at £1 per thousand and coals at £1 per caldron.²³ The terms of the space charters used by the Navy Board to hire ships to convey naval stores were in marked contrast to the time charters employed to charter shipping to carry troops overseas. The owners of ships chartered to serve as troop transports were paid according to a ship's measured tonnage times the number of months of service.²⁴ Unlike vessels transporting naval stores, whose services were required only for an outward voyage, troop transports, owing to military necessity, the conduct of amphibious operations and the like, were kept under charter for extended periods of time. Attempts by shipowners to obtain time charters and to be paid according to the length of time their ships actually spent on a voyage transporting naval stores were always resisted.²⁵

The rate of freight paid for ships transporting naval stores was, obviously, of great importance to both sides. Shipowners let their ships to the Navy Board to make money. However, it was also the task of the commissioners to charter shipping for government service at the lowest possible rates. Although the rates of freight rose slowly, but steadily, throughout the war, owing to inflation and the increasing demands for shipping, the policy of the Navy Board remained one of paying freight rates just high enough to procure the required number of ships. On 14 March 1740, the Navy Board was able to charter the ship *Dawkins* to carry naval stores to Jamaica at the rate of £2 per ton for large masts, £1 5s per ton for small masts and other stores, and £1 per caldron of coals or 1,000 bricks. By the autumn of 1747 the freight for large masts had increased to £3 5s per ton while the freight for small masts had decreased to £1 per ton and the rate for a thousand bricks or a caldron of coal remained the same at £1.²⁶ As the rates of freight increased slowly during the war they were the subject of extensive negotiations. It is very difficult, if not impossible, to compare the rates earned by ships under charter to the Navy Board with those of merchant ships carrying civilian cargoes. Few

statistics are available and those that do exist show that rates of freight in trades such as those to the West Indies were subject to 'violent fluctuations' so as 'to make generalizations ... difficult'.²⁷

Demurrage was an important issue for the owners of ships hired by the commissioners and another area of negotiation between the two parties. At the beginning of the war the vessel's charter parties contained no provision for compensation to be paid for expenses incurred while a ship awaited convoy or was forced to lay idle waiting to be loaded or unloaded. As far as the shipowner was concerned prolonged delays in completing the loading drove up all related expenses, such as the cost of provisions and seamen's wages, greatly reducing or even eating away completely the value of the freight earned by a vessel. On 23 February 1740 the owners of the ship *Dispatch*, which had been chartered to carry naval stores to Gibraltar, wrote to the Navy Board requesting to be paid demurrage because the vessel had been waiting for convoy at Spithead for ten days.²⁸ As a result of this request, four days later, the commissioners decided to pay demurrage at the rate of 12s per month per ton of cargo for any ship freighted with naval stores that lay at Spithead awaiting convoy for more than fourteen days after the wind had turned fair for sailing.²⁹ Gradually, under pressure from shipowners,³⁰ clauses were added to Navy Board charter parties allowing demurrage for all excessive delays caused by lack of convoy or by having to wait for prolonged periods of time to be loaded or unloaded.³¹ For instance, Joseph Kell, the owner of the ship *Russell*, was paid £300 in demurrage, after negotiations with the commissioners, for time spent in the Downs awaiting convoy,³² and the owners of the ship *Anne* were paid demurrage for the forty days the ship was detained at Jamaica by the failure of the authorities there to unload the vessel promptly.³³ The Navy Board, however, did not always agree readily to pay demurrage. Charles Savage, owner of the ship *Londonderry*, was paid for the time his ship spent awaiting a convoy at Spithead only after filing a suit in the Court of Exchequer.³⁴

When the financial terms for chartering a vessel had been agreed, the ship was inspected by the officials of Deptford dockyard to see if it was fit for the service.³⁵ The results were sent to the Navy Board.³⁶ Thus on 30 March 1740 the ship *Ranger*, after being inspected by the Deptford officials, was rejected as unfit for the service.³⁷ On 6 April 1744, after inspection at Deptford, the *Resolution* was judged to be 'a proper ship' to carry naval stores to Port Mahon.³⁸ However, on 22 February 1741 the ship *Elizabeth and Mary* was found by the master attendant at Deptford to be lacking the proper number of sails and cables. The master of the vessel was informed that unless these items were immediately placed on board all claims to demurrage would be forfeited.³⁹ There is no evidence in the surviving records describing just how the dockyard officials conducted the inspections. Other than examining them for suitability, the only structural alterations they ordered appear to have been the cutting of raft ports to facilitate the storing of large masts.⁴⁰

Under the terms of the charter parties each storeship hired by the commissioners had to be manned by a specific number of seamen. For example,

the ship *Dawkins* was required, to have a crew of thirty seamen.⁴¹ Moreover the Deptford officials had specific instructions to see that each storeship was manned by the number of seamen called for in the ship's charter party. For obvious reasons, the Navy Board was quite insistent on this point. The master attendant at Deptford was required to send the board reports showing the status of the crews of all storeships and to keep records of the number of seamen on each ship in case 'he should be called to appear in a Court of Judicature, he could make oath to it'.⁴²

Impressment for service in the Royal Navy was one of the major causes of storeships being undermanned. When seamen serving on a storeship in its employ were impressed the Navy Board sought the men's release by writing to the Secretary of the Admiralty or to the regulating captains on the river Thames requesting their return to service in the storeship.⁴³ Despite such measures a number of storeships were, at various times, found to be short-handed. Such was the case of the storeship *Fair Tree*, cited by the Navy Board, on 12 March 1740, as being short of seamen.⁴⁴ Undermanning usually came to the attention of the Deptford officers when the ships were being loaded, for under the terms of the vessel's charter party the crew had to assist in loading the cargo; a lack of seamen to perform this task quickly became apparent. For example, when the master attendant at Deptford attempted to load the storeship *Tryton* he found that there were only the second mate, the cook and 'two little boys' on board.⁴⁵ The failure of seamen to assist in the loading of a storeship brought from the commissioners threats of loss of demurrage or an abatement of the ship's freight.⁴⁶

The loading of cargo was important to the shipowner because the amount of freight the vessel earned was determined by the tonnage of naval stores on board. The volume, weight and type of cargo determined the amount of freight a vessel earned. Moreover the seaworthiness of the vessel required that cargo should be correctly stowed. The cargoes carried by most storeships to the Mediterranean and the West Indies consisted of large masts which were 'above 16 hands', small masts and other stores plus coal, bricks and tiles.⁴⁷ The Deptford officials 'cast the tonnage of all stores'.⁴⁸ Each item was assigned an arbitrary tonnage. For example, a caldron of coals or 1,000 bricks equalled one ton.⁴⁹ Seven tons of coal, bricks, or tiles per 100 tons of a ship's measured burden was carried as ballast at the rate of 20s per ton. Any additional bricks, coal or tiles above that amount earned freight at the rate of 40s per ton.⁵⁰ Articles of cargo other than naval stores, coal, bricks and tiles were assigned an arbitrary value for the purpose of calculating freight. For instance, owners of the storeship *Elizabeth and Mary* were paid £6 for carrying two ship's boats.⁵¹ In order to maximize the freight earned, owners sought to have as many tons of cargo as possible loaded on their ships.⁵² When a storeship had completed loading the Deptford officials gave the master a bill of lading.⁵³ Bills of lading were also sent to the Commissioners of the Navy, who in turn sent copies to the commander of the squadron of the King's ships in the Mediterranean or the West Indies as well as to the naval officer at the port to which the storeship was bound.⁵⁴ When required, the

Navy Board obtained clearance through customs.⁵⁵ Finally, just before the vessel set sail it was issued with a 'naval jack' signifying that it was in the service of the commissioners and was carrying naval stores.⁵⁶

Owing to the danger of capture by the enemy both the Admiralty and Navy Board insisted that all storeships sailed in convoy. For example, the master of the *Neptune*, outward bound to Antigua, was ordered to proceed to the Nore and 'from thence under convoy of the first ship of war to the Downs and to do the like from the Downs to Spithead and from the latter place to Antigua under care of such convoy as the Lords Commissioners of the Admiralty shall be pleased to appoint'.⁵⁷ This was a policy whose implementation was as difficult as it was important for the Royal Navy, whilst the shipowners tried frequently to bypass it. In 1740 when the Navy Board learned that the storeship *Byam* was about to sail from Spithead for Gibraltar, on the orders of the owners and without convoy, it directed that orders should be sent immediately to prevent the vessel from leaving.⁵⁸ In 1742, upon learning, when the storeship *Collet* bound for Jamaica separated from her convoy, that under the terms of the charter party the ship's owners 'were under no greater penalty than £100 for non-compliance with the terms of their contract', the Admiralty demanded of the Commissioners of the Navy that they should 'consider stricter clauses in their future contacts'.⁵⁹ In 1743 the master of a storeship who proceeded from the Downs to Portsmouth against orders and without convoy was informed by the Navy Board that he was placing the King's stores at great risk and that 'his proceedings therein were contrary to orders from us'.⁶⁰ While insisting that storeships must sail in convoy for the sake of security, the delays and confusion that arose if the necessary warships were not ready could and did result in the payment of excessive demurrage.⁶¹

The owners of a storeship received their money when the voyage was completed, the cargo discharged and the Navy Office had passed the vessel's accounts. Upon completion of a voyage, officials of the Navy Board had to determine whether any of the cargo was missing or if there had been any abuses of the charter party. If such were the case the vessel's remuneration was abated. The accounting in such cases was meticulous. For instance, the freight of the *Peter and Mary* was reduced by £9 5s 1d 'for the value of several particulars delivered short of the bill of lading'.⁶² The *Carolina Packet* had abated from her earnings the 'value of one Jack ... not returned into store'.⁶³ The storeship *Ranger* 'had £26 abated ... for short delivery of stores'.⁶⁴ There were cases when no freight was paid at all. For instance, if a ship was taken or destroyed by the enemy while carrying naval stores the commissioners paid only the demurrage, if any, that was due to the owners.⁶⁵ Since the charter parties were space charters, it fell to the owners of the ships to insure their vessels. When matters such as these had been settled the commissioners ordered remuneration to be paid in navy bills.⁶⁶

The Navy Board always paid the freight of storeships in navy bills and not in cash. Such bills were interest-bearing negotiable instruments which could be converted into money several months after the date of issue provided the Treasurer of the Navy was solvent. Should this official not have the funds the

bill holders had to wait. Navy bills could usually be sold, at a discount, to a bill broker in the City who speculated in government paper. Shipowners did not like being paid in navy bills and maintained that they were not, receiving the full value of their freight. However frequent, protests were of no avail, for the bills were vital to the wartime finances of the government.⁶⁷

For the most part the Commissioners of the Navy were successful in chartering the merchant shipping required to convey naval stores to the Mediterranean and the West Indies during the War of the Austrian Succession. During the years 1738–45 the Navy Board chartered almost a hundred vessels.⁶⁸ Indeed, on only two occasions during the war did the commissioners have difficulty hiring shipping. In November 1740 the owners of the *Speaker* refused to carry out an agreement and permit their vessel to transport naval stores to the West Indies; the Navy Board was forced to suggest that the commissioned naval storeship HMS *Deptford* should be employed to carry masts to the Caribbean.⁶⁹ A much more serious situation occurred in spring 1744 when for a short period of time the commissioners could not hire any ships by means of space charters to convey naval stores to Port Mahon. The shipowners were insisting at the time that their vessels should be chartered by the month, under the terms of time charters, rather than the usual space charters, and should be escorted to and from Port Mahon by warships.⁷⁰ However, the availability of ships for hire worked in favour of the Navy Board and against the shipowners. The Admiralty, probably aware of this state of affairs, refused to submit to pressure⁷¹ and did nothing. It was only a few weeks before the commissioners were again able to engage ships to Port Mahon by means of space charters.⁷² With these two exceptions they found it possible throughout the war to go into the London shipping market and hire the necessary shipping on their terms.

During the eighteenth century, in time of war, both the government and the shipowners faced a number of difficult decisions. To conduct a maritime war in distant seas the Admiralty had to be able to transport naval stores to squadrons operating from remote stations. It could be done either by employing storeships commissioned in the Royal Navy or by sending cargoes of naval stores, and the like, as freight on chartered merchant ships. Obviously it was much less expensive to charter merchant ships than go to the trouble of commissioning, fitting out and manning storeships in the Royal Navy for the purpose.

The owners of merchant ships also faced a number of difficult problems. On the one hand, a shipowner could send his ship without convoy and make a good profit but at the great risk of its being captured. The ranks of eighteenth-century shipowners abound with men who lost their vessels to the enemy by sailing without convoy. On the other hand, waiting for a convoy greatly increased expenses. Here was the crux of the shipowners' dilemma. Sailing without convoy could yield a good return but there was the risk of losing everything. Sailing in convoy, while greatly reducing the chance of capture, also greatly reduced and might even destroy any profit from the venture.⁷³

The shipowner could earn more at less risk by making sure there were demurrage clauses in the charter party. During the War of the Austrian Succession only one ship chartered by the commissioners to carry naval stores was lost through enemy action.⁷⁴ The disadvantages of the convoy system were greatly reduced in 1740 when the Navy Board began to pay demurrage when storeships had to wait to join a convoy. This meant that vessels were almost never captured and the shipowner did not lose out whilst they remained idle. An additional benefit in a trade like that to the West Indies was that carrying naval stores to the Sugar Islands ensured an outward-bound cargo which earned freight.⁷⁵ It is clear from the total economic package – freight, demurrage, certainty of earnings, as well as protection of investment – that during the war shipowners profited from chartering their ships to the government. Why otherwise would they have continued to do so, not just in this war but in other conflicts during the eighteenth century?⁷⁶

The true significance of government chartering was not so much economic as administrative and strategic. It has been estimated that in 1751 the British merchant marine consisted of some 421,000 tons of shipping.⁷⁷ Obviously the 100 or so vessels hired by the Navy Board to carry naval stores represented only a small fraction of the available tonnage. What is important about the chartering of merchant ships, especially to transport naval stores during the War of the Austrian Succession, is that it enabled the Royal Navy, for the first time in its history, to conduct large-scale and sustained operations outside the northern European seas in such blue waters as the West Indies and western Mediterranean. The administrative procedures adopted by the Navy Board in hiring a small amount of shipping to carry naval stores were refined and then used to charter huge amounts of merchant shipping to support naval and military operations in later conflicts. In the American War, for example, in the course of a single year, the Navy Board chartered more than 400 merchant ships to support the operations of the forces of the Crown.⁷⁸ The ability to charter merchant shipping in support of naval and military operations in distant waters was one of the reasons why British armed forces had the ability to operate almost anywhere in the world which could be reached from the sea. The hundred or so merchant ships chartered by the Navy Board to carry naval stores during the War of the Austrian Succession were the precursors of today's Royal Fleet Auxiliary.

To conclude, by chartering a ship to the Navy Board to carry naval stores to the Mediterranean and the West Indies during the War of the Austrian Succession a shipowner not only made money from freight but at the same time protected his investment by greatly reducing the risk of capture. The government on the other hand, by chartering merchant shipping to carry naval stores overseas, secured the means to keep the ships of the Royal Navy in the West Indies and the Mediterranean supplied without the great expense of maintaining its own storeships commissioned for the purpose.

Notes

- 1 Richard Harding, *Seapower and Naval Warfare, 1650–1830* (1999), pp. 183–201.
- 2 Public Record Office, ADM 8/20, December 1738; ADM 8/25, July 1745. (Hereafter Public Record Office will be cited as PRO.)
- 3 PRO, ADM 8/21, August 1741; ADM 8/25, June 1747.
- 4 For an account of the workings of the Navy Board see Daniel A. Baugh, *British Naval Administration in the Age of Walpole* (Princeton NJ, 1965), pp. 32–48.
- 5 During the War of the Austrian Succession only two purpose-built storeships, HMS *Deptford* and HMS *Portsmouth*, served in the Royal Navy; in addition six merchant ships were purchased by the government and commissioned into the navy as storeships. David Lyon, *The Sailing Navy List: all the ships of the Royal Navy: built, purchased and captured, 1688–1860* (1993), pp. 61, 201.
- 6 In 1745 the Commissioners of the Navy were Richard Haddock, Jacob Ackworth, John Cleveland, William Corbett, Francis Gashry and George Crowle.
- 7 PRO, ADM 106/2554, 8 December 1740; ADM 106/2563, 4 March 1744.
- 8 PRO, ADM 106/2554, 20 June 1740; ADM 106/2595, p. 29.
- 9 PRO, ADM 106/2554, 5, 17 September 1740.
- 10 Cf. PRO, ADM 106/2893, 4 April 1745.
- 11 Baugh, *British Naval Administration*, p. 38.
- 12 E.g. PRO, ADM 106/2559, 13 July 1743.
- 13 E.g. PRO, ADM 106/2554, 6 March 1740.
- 14 PRO, ADM 106/2553–65, *passim*.
- 15 PRO, ADM 106/2559, 8 July 1743.
- 16 PRO, ADM 106/2559, 4 June 1740.
- 17 PRO, ADM 106/2558, 4 January 1742.
- 18 E.g. PRO, ADM 106/2553, 13 July 1739.
- 19 PRO, ADM 106/2563, 18 January 1744.
- 20 E.g. PRO, ADM 106/2892, 9 October 1747.
- 21 PRO, ADM 106/2553, 10 October 1739.
- 22 PRO, ADM 106/2892, 30 October 1747.
- 23 PRO, ADM 106/2559, 14 October 1742.
- 24 E.g. PRO, ADM 106/2554, 28 June 1740.
- 25 PRO, ADM 106/2892, 20 November 1747.
- 26 PRO, ADM 106/2555, 14 March 1740; ADM 106/2892, 9 October 1747.
- 27 Ralph Davis, *The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries* (second edition, Newton Abbot, 1972), pp. 281–3.
- 28 PRO, ADM 106/2555, 23 February 1740.
- 29 PRO, ADM 106/2555, 27 February 1740.
- 30 E.g. PRO, ADM 106/2557, 12 November 1742.
- 31 PRO, ADM 106/2561, 27 June 1744.
- 32 PRO, ADM 106/2561, 18 April 1744.
- 33 PRO, ADM 106/2596, pp. 35–6.
- 34 PRO, ADM 106/2562, 29 October 1744.
- 35 E.g. PRO, ADM 106/2560, 28 March 1743.
- 36 E.g. PRO, ADM 106/2554, 20 December 1740.
- 37 PRO, ADM 106/2560, 30 March 1743.
- 38 PRO, ADM 106/2561, 6 April 1744.
- 39 PRO, ADM 106/2556, 22 February 1741.
- 40 E.g. PRO, ADM 106/2557, 12 August 1742. A raft port is a square port cut, under the counter, in the stern of a vessel to permit the stowage of large pieces of timber, including masts, which because of their size will not fit through the hatchways in the deck.
- 41 PRO, ADM 106/2554, 14 March 1740.
- 42 PRO, ADM 106/2558, 11 April 1743.
- 43 PRO, ADM 106/2555, 2 November 1741; ADM 106/2893, 17 April 1745.
- 44 PRO, ADM 106/2555, 12 March 1740.
- 45 PRO, ADM 106/2555, 13 May 1741.
- 46 PRO, ADM 106/2557, 4 October, 25 November 1742; ADM 106/2558, 28 March 1743; ADM 106/2563, 22 February 1744.
- 47 PRO, ADM 106/2554, 20 August 1740. Coal, tiles and bricks, being difficult to obtain in the West Indies or at Gibraltar, were shipped not only as ballast but also as cargo. The building materials were used at naval bases at Gibraltar, Antigua and Jamaica.
- 48 PRO, ADM 106/2554, 3 September 1740.
- 49 PRO, ADM 106/2555, 28 October 1741.
- 50 PRO, ADM 106/2557, 15 October, 30 November 1742.
- 51 PRO, ADM 106/2558, 19 April 1743.
- 52 E.g. PRO, ADM 106/2563, 8 March 1744.
- 53 PRO, ADM 106/2558, 1 January 1744.

- 54 E.g. PRO, ADM 106/2555, 9 September 1741; ADM 106/2556, 27 March 1741; ADM 106/2558, 12 June 1742.
- 55 E.g. PRO, ADM 106/2555, 13 June 1741.
- 56 E.g. PRO, ADM 106/2555, 13 June 1741.
- 57 PRO, ADM 106/2562, 24 December 1744.
- 58 PRO, ADM 106/2555, 10, 12 March 1740
- 59 PRO, ADM 3/45, 22 April 1742.
- 60 PRO, ADM 106/2560, 25 June 1743.
- 61 Cf. PRO, ADM 106/2555, 24 December 1746.
- 62 PRO, ADM 106/2597, pp. 12–13.
- 63 PRO, ADM 106/3595, pp. 22–3.
- 64 PRO, ADM 106/3569, pp. 94–5.
- 65 PRO, ADM 106/2555, 30 November 1741; ADM 106/3600, pp. 30–1.
- 66 E.g. PRO, ADM 106/261, 7 April 1742.
- 67 One of the best accounts of the working of navy bills is J. E. D. Binney, *British Public Finance and Administration, 1774–92* (Oxford, 1958), pp. 161–2.
- 68 A rough count of vessels listed in the Navy Board minutes (PRO, ADM 106/2553–65) shows that some forty-eight ships were chartered during the war to carry naval stores to the Mediterranean ports of Gibraltar and Port Mahon while a further forty-nine were hired to carry naval stores to the West Indies.
- 69 PRO, ADM 106/2554, 26 November 1740.
- 70 PRO, ADM 106/2561, 13 April 1744; National Maritime Museum, ADM/B/125, 17 April 1744.
- 71 PRO, ADM 106/2561, 20 April 1744.
- 72 PRO, ADM 106/2561, 27, 28 June 1744.
- 73 For an account of the shipping industry during wartime see Davis, *Rise of the English Shipping Industry*, pp. 315–37.
- 74 *King William*. PRO, ADM 106/3600, pp. 30–1.
- 75 ‘The profit of owning ships in the West India trade depended, above all, on the homeward rate of freight.’ Richard Pares, *A West India Fortune* (1950), p. 231.
- 76 Cf. David Syrett, ‘The Ordnance Board charters shipping, 1755–62’, *Journal of the Society for Army Historical Research* 77 (1999), pp. 9–18.
- 77 Davis, *Rise of the English Shipping Industry*, pp. 26–7.
- 78 David Syrett, *Shipping and the American War, 1775–1783: a study of British transport organization* (1970). See also M. E. Condon, ‘The Administration of the Transport System during the War against Revolutionary France’, unpublished Ph.D. thesis, University of London, 1968.

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