

The Halifax Naval Yard and Mast Contractors, 1775-1815

Julian Gwyn

"The people here are not wealthy eno' to provide
much [timber] upon speculation."

One issue that ought to have been discussed thoroughly by the British Admiralty and Navy Board in 1775-6 upon the outbreak of war with rebel America was the supply of 'sticks.' This was naval jargon for masts, bowsprits, topmasts, yards, and spars. "The business of maintaining an adequate supply of timber and other stores in the dockyards," Morriss reminds us, "was fundamental to the navy's existence."² Part of the navy's needs since the seventeenth century had been supplied from New England.³ The river systems to the Maine coast and from the New Hampshire interior proved the most promising, though the Carolinas also possessed impressive stands of pine. Since the first recorded shipment of New England timber to England in 1639, exports were stimulated by the Anglo-Dutch wars. Trade centred at the mouth of the Piscataqua River. In theory, New World supplies were so abundant that the monopoly hitherto held by the Baltic ought to have been broken. Yet, whatever was imported from New England remained, until the mid-eighteenth century, a small fraction of Britain's requirements whether for warships or merchant vessels. The Navy Board, believing that American hardwoods were inferior to those of the British Isles and the Baltic, had little use for them. Their interest was largely confined to pine masting timber. To effect this import it established a system whereby merchants in England would bid for an exclusive contract, frequently of several years' duration. The contractors in turn employed local agents in New England or sent them from England to oversee the work.

The process was similar to that operating in the Baltic. Cut and hauled to river banks

Public Record Office (PRO), ADM106/1653, Wentworth to Navy Board (NB), 14 June 1806.

² Roger Morris, *The Royal Dockyards during the Revolution and Napoleonic Wars* (Leicester, 1983), 73.

³ The colonial American timber supply, from Maine south, has been well-studied especially by Joseph J. Malone, *Pine Trees and Politics. The Naval Stores and Forest Policy in Colonial New England 1691-1775* (Seattle, 1964). Pre-1815 timber exports from Nova Scotia remain virtually unstudied, though some data for 1799-1815 is found in Robert Greenhalgh Albion, *Forests and Seapower. The Timber Problem of the Royal Navy 1652-1862* (Cambridge, Massachusetts, 1926), Appendix D, 420-2.

in winter by oxen, the masting timbers were then 'twitched' into the water when the ice melted and were carried down water courses with the heavy spring run-off. Before they reached the river's mouth, the timbers were driven into a mast pond where mastwrights began to set about their skilled work of mast making. Such work the agents superintended until the masts, bowsprits, yards, and spars were loaded for the English dockyards, their final destinations.

By mid-eighteenth century the New England contract contained terms long-established. For instance, it noted, if "by reason of open winters or for want of snow, the masts, yards & bowsprits cannot be brought down at the appointed times, they shall be received the following year." In wartime mastships were given naval escorts. An allowance for demurrage, at twelve shillings a ton per month to begin a fortnight after the first fair wind, was part of the contract.⁴ In addition, the English contractor John Henniker, his agent and his workmen were given leave "without any interruption to travel into and search His Majesty's woods in the Province of Maine and other of His Majesty's colonies in New England, there to fell and cut down so many good and sound trees as may answer the number and dimension mentioned in the said contract." Throughout Massachusetts this was possible under its 1691 Charter, whereby all trees at one foot above the ground with a diameter of two feet or greater were reserved for the king's use on land yet ungranted. Furthermore, a 1729 Act of Parliament entitled *An Act for the Better Preserving of his Majesty's Woods in America and for the Encouragement of the Importation of Naval Stores from Thence, and to Encourage the Importation of Masts, Yards and Bowsprits from that Part of Great Britain called Scotland* noted among other things that thereafter no one within the provinces of "Nova Scotia, New Hampshire, the Province of Maine, the Massachusetts Bay, Rhode Island and Providence Plantation, the Narragansett country of King's Province and Connecticut in New England, New York and New Jersey in America...shall cut, fell or destroy any white pine trees except those on private property, without a royal license for so doing.' Though such grasping laws were no longer found in Great Britain and were widely resisted in North America wherever timber abounded, they remained the basis of the navy's claim to the best American mast timber. It is probably fair to say that through this policy, that of the so-called 'broad arrow,' the navy occasioned more irritation among American colonials over a longer period than any other British institution.

A vain attempt to challenge the New England near-monopoly was made by William Duer of New York. In 1773, Duer suggested to the Admiralty that four mast yards be established for the navy in North America. With other shipbuilders in New York he was prepared to build frigates for the navy at a time when they were greatly needed. The Navy Board responded that they were well-supplied with as many masts as they needed from New England, for their contractors had "never failed to deliver the quantity agreed for." As to

⁴ Public Archives of Nova Scotia (PANS), MG13/3, NB to Henniker, 4 June 1755.

⁵ 2 Geo II c. 35. An additional contract in 1757, also won by Henniker, called for the delivery of two ships' loads to the naval yards at Antigua and Jamaica, of New England masts, yards and bowsprits, cheeks for masts, spars, rafters, capstan bars, sheathing boards, pitch, tar, turpentine, and other stowage goods.

shipbuilding, having experienced disappointments, as they claimed, at the hands of New England shipbuilders in the 1740s, they would not recommend this new experiment.' There the matter died. It is interesting to note just how many American-built vessels, both warships and privateers, just a few years later the navy was anxious to commission.' Then there was nothing but fulsome comment about their beauty and fine sailing qualities.

Of this misplaced complacency the Navy Board was soon disabused. A month after the battle of Lexington in April 1775, the surveyor-general of the woods, John Wentworth from New Hampshire, reported that Edward Parry, the London-born agent for the mast contractors Messrs Durany & Bacon, had been seized and held in custody on the Kennebec River by the "country people."⁸ There, Parry's mastwrights were hewing the huge pines into masts both for the home yards and for the Halifax yard. This was a very serious loss, as the agent had readied cargoes for at least three mastships - fully a year's harvest - at the mast dock on Pierce's Island about sixteen miles from the mouth of the Kennebec River. As a result of this rebel action, the navy failed to receive, from this source, some sixty-five large masts and twelve smaller ones, twenty-six yards, nineteen bowsprits between twenty-five and thirty-one inches, and thirty-four pine logs, eighteen inches square.'

When events in 1775 evolved into the prolonged war with rebel America, the British government found its supply of North American masts, bowsprits, spars, and yards suddenly severed. Nothing from the rebel colonies was exported to the home yards in 1776, while for the balance of the war less than ten per cent of the usual peacetime supply reached the English dockyards. For Portsmouth, the largest of the dockyards, the last deliveries of North American masts occurred in 1772. Albion believed that had the Navy Board shifted its mast contracts to Nova Scotia as soon as its New England supply was cut off, "an ample stock of the largest American sticks could have been secured within a year."¹⁰ He did not take into account the rebel attempt to seize Fort Cumberland late in 1776 on the Chignecto Peninsula, an episode which tended to disrupt trade in the Bay of Fundy for some months. Britain paid a severe price for its failure to develop a Nova Scotia mast policy in 1775-6, for there is a correlation between timber shortages in the English dockyards and Vice-Admiral John Byron's failure to prevent Admiral D'Estaing's squadron from reaching American waters in 1778.

⁶

Julian Gwyn, "Shipbuilding for the Royal Navy in Colonial New England," *American Neptune* 48 (1988), 22-30. The Board responded in the same tone to an offer from Messrs Begbie & Manson, shipbuilders at Hobeau, South Carolina, who offered to build a 32-gun ship with oak and pine timber. "We cannot by any means think it advisable to accept their offer of building any abroad." National Maritime Museum, Greenwich (NMM), ADM/B/187, NB to Stephens, 30 April 1773.

NMM, ADM/BP/3, Some twenty-eight such warships were commissioned by the end of 1781, nine as frigates, fourteen as sloops, one fireship and four brigs. NB to Stephens, 22 January 1782.

⁸ Since 28 October 1768. They undertook to supply three or four loads annually of North American white pine masts, yards and bowsprits. NMM. ADM/B/181, NB to Admiralty, 5 July 1775. NMM. ADM/B/190.

⁹ NMM. ADM/BP/2, Middleton to Sandwich, 4 May 1781. As the cargoes were still largely intact six years later, Middleton wanted a water-borne assault made on the mast pond to recover the sticks.

¹⁰

Albion, *Forests and Sea Power*, 290.

squadron was dismantled and dispersed by summer gales owing to bad masts and rotten timber."

In time, one of the important roles played by the Halifax yard was as a supplier of sticks to other naval yards in North America and the West Indies during the American War of Independence, and to the home yards and elsewhere in peace and war from the 1780s. Though the timber resources of Nova Scotia were imperfectly known as settlement was so sparse and scattered, some timber suitable for masts was shipped from Halifax in most years between 1750 and 1775.¹² In 1760 the naval storekeeper, Joseph Gerrish, informed the Navy Board that on the LaHave River were available "mast trees of considerable dimensions."¹³ Three years later Philip Peake, foreman of shipwrights, went to Chester and Mahone Bay in search of black birch, trees suitable for oak and pine timber for capstan barrels, catheads, knees, standards, and cheeks as well as masts, spars, yards, and bowsprits. He returned with a rather discouraging report, having found only a few black birch fit for capstan barrels between thirty and thirty-three inches in diameter, some small oak, pine and spruce from sixteen inches and smaller, but very straight and tall. There was no oak timber for ships above 150 to 200 tons, some pine fit for masts of up to 20-gun ships, yards and topmasts for 40-gun and 50-gun ships, but at a great distance from the rivers, the ground being rough and rocky.' In 1774, Surveyor-General of the Woods John Wentworth set aside for the navy extensive forest tracts in Nova Scotia even including the upper St. John River valley.' Yet for years the Navy Board ignored this information, so that by 1776 its knowledge of the timber resources of Nova Scotia had scarcely deepened during the eighteen years its yard had been based in Halifax harbour.

Upon the outbreak of hostilities with the American rebels, so great was the shortage of spars and topmasts that yard artificers themselves had to spend time in the woods felling trees around Halifax harbour, then hauling them to the water's edge to be rafted to the yard's mast pond. Commodore Sir George Collier noted that the forest in the 1770s was still but two

¹¹ Albion, *Forests and Sea Power*, 297-8. One termed it "ill-luck." David Syrett, *The Royal Navy in American Waters 1775-1783* (Aldershot, 1989), 101. Another referred to Byron's "costly wild goose chase." N.A.M. Rodger, *The Insatiable Earl. A Life of John Montagu 4th Earl of Sandwich* (New York, 1993), 278. None seems to have considered, let alone challenged, Albion's contention.

¹² Nova Scotia's Mast Exports to Great Britain

Year	Great	Middling	Small
1751-7	16	125	210
1766-75	216	178	740
1776-83	220	456	177

Also exported were several hundred spars, at least twenty-five bowsprits and 283 yards. PRO. CUST3/49-71, CUST16/1, CUST17/1-8.

¹³ PRO, ADM106/1121, Gerrish to NB, 18 July 1760.

¹⁴ PRO, ADM106/1134, Jacob Hurd to NB, 7 May 1763.

¹⁵ Before the outbreak of hostilities Wentworth had "pushed out far into Nova Scotia," to survey forest tracts for the navy. Malone, *Pine Trees and Politics*, 135.

or three miles distant from the town of Halifax, while the rest of Nova Scotia was "one wild desert, thick wooded as possible with trees, which principally consists of what they call hemlock."¹⁶ Yard labourers and working parties of seamen toiling in the woods happened frequently during four successive winters of 1776-7 through 1779-80. Only in the autumn of 1779 did some artificers design and build a "pair of stout wheels for getting mast out of the woods." Such work as lumberjacks was a unique experience among Britain's dockyard workers, for which none of them had been specifically engaged.

So adequate was the New England supply to the home yards and to those in the West Indies and Halifax, that it never occurred either to the Navy Board or to yard Commissioner Mariot Arbuthnot to consider appointing an agent specifically to look for suitable timber in Nova Scotia. It is arguable that as the navy was hardly able to hold its own in the waters around Nova Scotia in 1775, 1776 and 1777, it could not undertake a search for mast timber through the forests of Nova Scotia. Fixated on the defence of Halifax harbour, the Admiralty failed to concentrate sufficient naval forces in Nova Scotia waters to establish continuous command in the Gulf of Maine and the Bay of Fundy or the Northumberland Strait as far as the mouth of the Miramichi. Only when the threat of invasion from New England had subsided by the end of 1777, and with it the fear of aboriginal raids, was it safe for timber contractors to roam the woodlands of Nova Scotia with impunity.

Entrepreneurial initiative, when it came in 1777, immediately caught the Navy Board's attention. A Mr. Gray offered to supply spruce and pine masts from thirty to twenty-four inches in diameter from the Bay of Fundy. "If a supply could be obtained from thence," the Navy Board responded, "it would be of the greatest advantage to the service." The Board urged Arbuthnot to contract with anyone else who could furnish masts both for Halifax and New York. As Arbuthnot was recalled, negotiations were left to the new resident commissioner, Sir Richard Hughes.¹⁸ When Hughes reported in September 1778 a new offer from a John Cort of the Miramichi River, the Board remarked especially on the shortage of large masts caused by "the troubles in America" and welcomed "the prospect of being furnished from...Nova Scotia.' In fact Cort, a Scotsman, had been on the Miramichi since 1765, and was familiar with the extent of its pine forests. Like Gray, he lacked the capital to undertake a contract. The Board sent Hughes a list of the last pre-war contract prices. They doubted the accuracy of Cort's assessment of the size of the trees he had seen "knowing by experience how greatly persons are deceived therein when trees are standing, as they seldom hold the sizes required by the contract at the several quarters, which must ascertain the diameters at which they are to be received and paid." In May 1779, after Hughes wrote about

¹⁶ Sir George Collier, *A Detail of Some Particular Services Performed in America, during the Years 1776, 1777, 1778, and 1779* (New York, 1833).

¹⁷ PRO, ADM42/2152, October-December 1779.

¹⁸ Phyllis R. Blakeley, "Sir Richard Hughes, c. 1729-1812," *Dictionary of Canadian Biography (DCB)* V (Toronto, 1983), 434-5.

¹⁹ PRO, ADM1/2471, 34-7, NB to Hughes, 9 December 1778.

locating masts in Cape Breton, the Board again asked only for samples.²⁰ When that first shipment reached England in 1779, the Board found them "so knotty" they declined any more of similar quality.'

The supplier was not Cort but William Davidson, with whom Hughes had concluded an initial contract in 1779.²² Originally a partner of Cores, he had brought out settlers to the Miramichi, established a fish trade to the West Indies and a fur trade to London, employing vessels which he built on the Miramichi.' As Davidson later explained:

Great pains had been taken prior to that period by different persons in exploring the woods in the province in order to compass the same end, but without effect. Hence it was deem'd a thing impracticable, as well from the want of timber of the requisite dimensions as from the danger apprehended from the enemy who held the post called Machias removed only a few leagues from the River Saint John where the masts &c were found by your memorialist who could not for some time draw any security from Fort Howe being between fifty and sixty miles distant from the tract that produced the sticks.'

No payment was to be made until the sticks, suitably trimmed, had been inspected in the mast pond he had erected at Fort Howe. He concluded his contract by March 1783, but not without difficulty, because the surveyor sent from the yard, the shipwright George Andrew, rejected many of them, while several more, when worked on by the yard artificers, were found to have hidden defects.'

When Sir Andrew Snape Hamond superseded Hughes as commissioner in 1781, he concluded a contract with the newly-created partnership of Francklin, Hazen and White also to supply masts for the English dockyards from the Saint John valley.²⁶ The same problem

²⁰ PRO, ADM106/2471, 66-7 Acknowledged letters of 15 & 17 May from Hughes; NB to Hughes, 12 August 1779.

²¹ PRO, ADM106/2471, 87 NB to Hughes, 30 December 1779.

²² The contract called for the supply of eighty sticks. Hamond amended upward this to 150 to be delivered to Fort Howe by the end of June 1782. Hamond to Davidson, 27 August 1781. University of Virginia Library. Hamond papers (HP). VII, 32. "Having had that country accurately examined to the distance of ninety miles from the mouth, it is reported to me that a very considerable quantity of masts from twenty-six inches downwards may be cut annually for many years to come." Hamond to NB, 25 November 1781. VII, 45-6.

²³ W.A. Spray, "William Davidson, c.1740-1790," *DCB IV* (1979), 195-7.

²⁴ NMM, HAL/F/2, f. 240-3, Davidson to [Duncan], 29 July 1784.

²⁵ NMM, HAL/F/2, f. 312-5, Thomas to NB, 18 November 1784.

²⁶ HP, IX, 17, They completed their contract in September 1783. Hamond to Hayes, surveyor to attend the contractor at 10s. a day, 9 August 1781; NMM, HAL/F/2, f. 155-9, Hazen & White to Duncan, 8 April 1784. See Lewis R. Fischer, "Michael Francklin, 1733-82," *DCB W* (1979), 272-6; Rod Campbell, "William Hazen, 1738-1814," *DCB V* (1983), 415-7.

with quality which plagued Davidson was encountered by the new contractors except on a larger scale. Like Davidson they had no prior experience in the business. Almost 200 of their sticks were rejected. Like Davidson before them, they were required to make up the deficiencies before final payments were made, a problem that continued for them well after the end of the war.

Whatever the difficulties Davidson had experienced in locating the sticks, getting them out, sorting them for quality, and then shipping them first to Halifax and then to England and receiving payment, he had demonstrated that an important new source of masts could be harvested, even on a threatened frontier.²⁷ With the permanent loss of the New England source for sticks, the Admiralty and the Navy Board needed to become properly informed about the extent of suitable timber found in what remained of British North America, especially in the new colony of New Brunswick, which was carved from the former frontier territories of Nova Scotia. The Navy Board now urged the Admiralty to appoint a surveyor-general of the woods for what at war's end remained of British North America. At the same time the Board ordered Henry Duncan, the first post-war resident commissioner of the naval yard, to make a quick survey of them on his own.²⁸

The initial reports both of the surveyor-general, the experienced and talented John Wentworth, and of Commissioner Duncan proved each to be so encouraging that the loss of the New England sources now was no longer even mentioned.²⁹ As a result the Navy Board thereafter concluded a series of further contracts, which continued until the end of the wars against Napoleonic France and well beyond.

It ordered Wentworth in 1783 to survey first those tracts of forest growing "nearest to the best & most commodious shipping places, and particularly on the River St. John, from whence were drawn the late supplies for New York and Halifax...and those which grow in the neighbourhood of Halifax, and the Bason above it, as the supply of that yard will become a material object in the future."³⁰ Halifax yard shipwright George Andrew, who since 1781 had inspected and approved all sticks cut for the navy and floated to the mast pont at Fort Howe, initially suggested various New Brunswick forest locations along tributaries of the Saint John River.³¹

The next year the Navy Board directed Commissioner Duncan himself to inspect the hinterland of Halifax for naval stores, masts and timber suitable for shipbuilding.³² Instead of reporting on the Halifax region's potential supplies of naval timber, which he thought in

²⁷ Admiralty provided escorts to convoy the mastships involved from Fort Howe either to Halifax or New York and thence to the English yards. PRO, ADM106/2471, NB to Hamond, 28 September 1781.

²⁸ NMM, HAL/F/2, f. 234-6, NB to Duncan, 1 May 1784. See R.J.B. Knight, "Henry Duncan, c.1735-1814," *DCB V* (1983), 280-1.

²⁹ NMM, HAL/F/2, f. 261-6, Duncan to NB, 2 November 1784.

³⁰ NMM, ADM/BP/4, NB to Stephens, 25 August 1783.

³¹ NMM, HAL/F/2, f. 38, Duncan to Wentworth, 15 November 1783.

³² NMM, HAL/F/2, f. 234-6, NB to Duncan, 1 May 1784.

the 1780s were limited, Duncan sailed instead to Passamaquoddy and returned to Halifax via Nova Scotia's southwestern coast. In the region of Passamaquoddy Bay and the Saint John River he found "white pine for masts sufficient to last the navy of Great Britain for any length of time. Nor do I think the destruction that naturally must follow from such numbers of people settling there will deprive us of that resource." Duncan was equally enthusiastic about white oak, which could then be purchased for twenty shillings a ton. He believed the Shelburne area would produce an abundance of deals, though he saw few pine over eighteen inches in diameter. He advised that contracting was the cheapest method, while freighting was better done by the ton delivered in England than to hire ships at a monthly rate. He warned the Navy Board that in any such contract the "first freight should be lower as they will have secured a freight out and home. If not, they will accept of lower terms here rather than go home in ballast."

The following spring, Duncan concluded his estimate of the timber potential of the colony by visiting the eastern regions of the province for the first time.³⁵ He cut across the peninsula by the Shubenacadie River to the Minas Basin, where he saw many white pine fit for masts. The rapids on the river presented no great barrier to float large timbers. He also visited Chedabucto Bay, sailed through the Canso Strait, to Pictou, Saint John's Island, and most of the ports on Cape Breton, commenting favourably on Merigomish oak and Pictou masting white pine. Everyone had assured him that at Miramichi large pines fit for masts were available in great quantities.³⁶ When he visited it in 1788 such prospects were amply confirmed. He thought the best oak of Nova Scotia, although "very good sound wood, is not the real white oak, like that of Great Britain, but I believe as the master shipwright says, better than the Staten [Island] timber" with which he had become familiar during the late war."

Duncan wrote almost lyrically about the harbours especially those of Nova Scotia. In all of them a ship would find wood or timber to repair the common damages afflicting ships and, in many harbours

a fleet might be amply supplied with masts...This country at present can

³³ NMM, HALF/2, f. 261-6, Duncan to NB, 2 November 1784.

³⁴ Davidson may have built the first such ship in the maritime colonies in 1784-5. "There is not water here for ships of a large draft, but one or two might be built to answer the purpose. I intend to build one here this winter for the lumber trade from this place. She will be fit to take in the largest masts." PANS, MG13/1, #568, Davidson to Thomas, 20 August 1785.

³⁵ In 1788 he travelled as far east as the Miramichi River. PANS, MG13/2, 568, Duncan to Andrew, 9 August 1788.

³⁶ PANS, MG13/2, 357-8, Duncan to NB, 11 October 1785; "On sarching [sic] through the woods here I fmd that better masts may be got and of a larger size than at the river Saint Johns." Davidson to Thomas, Miramichi, 20 August 1785. MG13/1, #568

³⁷ "There is no reason to doubt of the country's furnishing trees fit for masts." He went up both main branches of the rivers "as far as the keel boat could go," using Samuel Holland's not very accurate chart. PANS, MG13/2, 574-6, Duncan to NB, 15 & 25 September 1788.

produce for the use of the navy more safe harbours fit for a fleet than there are in the same space in any part of the globe. Timber of all kinds, firewood, coals, water and fresh provision, lime and brick, and if it is thought advisable to give encouragement, the country will produce, for I have seen it, hemp and flax, and there is iron all over the province. These last articles would require Parliamentary encouragement to bring them forward in quantities, but the country is capable of it. I do suppose that in a few years, grain of all kinds will be plenty here. The tar and turpentine are the material articles which will not be found in this country.³⁸

The Navy Board dismissed much of this. However useful for the supply of the Halifax naval yard, the English yards needed neither North American masts nor deck timber, it then believed. Interested though they were in samples of white oak sent them, as late as 1784 the Board remained "hopeful it will not be necessary to apply to America for that or any other for ship building" materials.' Such myopia was astounding!

When Duncan's enthusiastic report was matched by the annual reports from the surveyor-general of the woods, the Navy Board, under pressure from the Admiralty, altered its policy. Now in 1787 it wanted to establish a firm "ground for the supply of masts" and sought advice for the best mode of contracting for those masts.' It undertook to provide a priority list for the exploitation of the various regions which Wentworth had identified. A hint of its future plans came later when it inquired about the dimensions of masts if ever there was a need to supply the Jamaica and Antigua yards.' In response, Duncan and Wentworth assumed that letting of contracts would be made in North America through advertisements placed in newspapers. Duncan reminded the Board that, with a license, a contractor could take white pine for masts on any land, not just crown-reserve land. They believed that both the valleys of the Saint John and the Miramichi rivers held the greatest accessible reserves of the largest timber.'

More specifically, in 1788 the Board consulted Duncan about the suitability of North American fir for topmasts to be supplied to the West Indies' yards.' Again Duncan responded warmly, by assuring the Board that Nova Scotia's white pine was of "very good quality and

³⁸ PANS, MG13/2, 357-8, Duncan to NB, 11 October 1785.

³⁹ 'I have examined a piece of grey oak timber brought from Saint John. It is small grain'd: When green remarkable tough and stringy. In my opinion it is superior in quality to the timber that has been made use of in the king's dockyards in England, called saten [sic] timber." Comments by Master Shipwright Provo Wallis, 23 Sept. 1784; enclosed in NNW, HALF/2, f 266, Duncan to NB, 2 November 1784; PRO, ADM106/2471, f. 369-70, NB to Duncan, 8 December 1784.

⁴⁰ PANS, MG13/2, 457-8, NB to Duncan, 15 March 1787.

⁴¹ PANS, MG13/2, 506, NB to Duncan, 3 October 1787.

⁴² PANS, MG13/2, 459, Duncan to NB, 28 May 1787.

⁴³ PANS, MG13/2, 562, NB to Duncan, 2 May 1788.

I esteem it the best for ships above the class of frigates. For frigates and all under I should prefer black spruce. It is lighter and tougher and equally durable as the white pine, but would not answer so well when grown to a greater size."

In the meantime, Duncan oversaw the shipping of sticks awaiting in the mast pond at Fort Howe near the mouth of the Saint John River. By the end of 1783, he estimated that about 3,000 tons of shipping were needed to load the timbers already assembled. Loading could rarely occur in winter at Fort Howe, as thick ice froze the masts in the mast pond.⁴⁵ The site was also poorly protected from gales, which in 1784 "broke all the ropes & threw the masts...one over the other." Navigation was much more difficult, in part owing to the considerable tides, than getting into Halifax harbour. If mastships got into difficulties, as had *Britannia* in 1783, they had to be beached in order to be repaired, as had *Medway* which ran onto a ledge the following year.' So large were the sticks that some ships proved unsuitable to load the larger timbers, such as *Keppel*, which proved so short she could load no masts between decks, only shorter yards." Still, in 1784 Duncan was able to send both *Holderness* and *Selina* to load masts.⁴⁹

Duncan also had to deal with the first two wartime contracts which remained incomplete as a result of defects or incorrect measurements found when delivered to the Halifax yard. William Davidson, who had pioneered the supply under hazardous wartime conditions and had cut down, through his inexperience, many trees which proved unsuitable, had at the end of his contract in March 1783 many rejected timbers still on his hands. As a consequence he received £396 less than he had anticipated.' The deficiency was covered under a new contract, at prices reduced by 20 per cent.' The new contract allowed him to deliver two-thirds of the sticks left on hand in 1783, provided he made up the deficiencies in his 1779 contract.' Owing to the lack of snow in the winter of 1785-6, and the consequent

⁴⁴ PANS, MG13/2, 563, Duncan to NB, 16 June 1788.

⁴⁵ PANS, MG13/1, #415, George Andrew to Thomas, 17 December 1783.

⁴⁶ PANS, MG13/1, #432, Andrew to Thomas, 18 March 1784.

⁴⁷ PANS, MG13/1, #417, Andrew to Thomas, 28 December 1783.; NMM, HAL/F/2, f. 302-3, Andrew to Duncan, 11 September 1784.

⁴⁸ The same problem limited the value of both *Prudent* and *Diand*. The former was "not calculated for masts, as the greatest length she can take on the upper tier in the hold will not exceed 81 feet and 25 inches in diameter with not 10¹/₂ feet in the hold. There is a ship *Diana* with provisions, whom her agent wants used as a mastship, but as her raft port is only 22" and so near the deck that she could not take in more than 18" or 19" of which there are not many." PANS, MG13/1, #421, Andrew to Duncan, 13 January 1784; MG13/1, #481, Andrew to Thomas, 1 July 1784.

⁴⁹ PANS, MG13/1, #431, Andrews to Thomas, 17 March 1784.

⁵⁰ NMM, HAL/F/2, f. 312-5, Thomas to NB, 18 November 1784.

⁵¹ NMM, HAL/F/2, f. 240-3, Davidson's memorial, 29 July 1784.

⁵² PANS, MG13/1, #548, Duncan to Davidson, 18 April 1785. In 1786 Davidson, who was struggling to avoid insolvency, supplied about ninety sticks before the fishing season began, "which I must attend." MG13/1, #617, Davidson to Thomas, 15 April 1786.

"very short time for hauling the masts out of the woods with oxen, and the uncommon lowness of the freshets in the spring that prevented the sticks cut and trimmed on the small streams from being got onto the main river," he needed until the spring of 1787 to complete his contract." With insolvency threatening, he began to draw bills on the yard to pay his workers, in anticipation of his future contract payments.⁵⁴ In effect he was using the naval yard as a bank by being granted credit, secured on the future delivery of sticks, something not anticipated by the terms of his successive contracts.

The second wartime contract, given to Francklin, Hazen & White in 1781, was concluded in September 1783. Yet as in Davidson's case, so many timbers were found to be defective or wrongly measured, that their anticipated payment was reduced by £416.⁵⁵ In expectation of a second contract from Commissioner Hamond, though none had actually been signed, the consortium injudiciously had cut an additional 200 sticks. When hostilities ended in 1783 without a subsequent contract having been negotiated, they managed to ship only about fifty of these to Lisbon. In April 1784 they begged Duncan to be allowed to deliver the remaining sticks to Fort Howe. 'To this the Navy Board eventually consented.' It stipulated in addition that, owing to the fall of prices owing to the peace, the contract price must be lowered by 20 per cent.' When Hazen & White agreed to these conditions, Duncan concluded a new contract with them, principally "to encourage and enable the undertakers to refund the deficiencies on former engagements.'" It required them to deliver, by 1 July 1785 at the

⁵³ PANS, MG13/2, 429-30, Memorial to Duncan, 28 August 1786; MG13/1, #711, Davidson to Thomas, 16 February 1787.

⁵⁴ "From different unexpected disappointments in trade I am at present obliged to adopt the method of making partial payments to those I'm due. They are sufficiently safe in the whole and will instantly receive one half and in some months after the whole, when I can convert some part of my propertie [sic] into cash for that purpose. But in the meantime it's reasonable every one should be put on the same footing." Though he claimed his assets were four times greater than his H£2,700 debts, "yet...I cannot immediately convert so much of it into ready money as will discharge them." PANS, MG13/1, #668, Davidson to Thomas, 28 August 1786.

⁵⁵ NMM, HAL/F/2, f. 312-5, Thomas to NB, 18 November 1784.

⁵⁶ NMM, HAL/F/2, f. 155-9, Hazen & White to Duncan, 8 April 1784; HAL/F/2, f. 227, NB to Duncan, 8 June 1784.

⁵⁷ Eventually the Navy Board allowed the sticks cut in wartime and undelivered to be paid 10 per cent above the 1784 contract prices. PANS, MG13/1, #627, NB to Thomas, 9 March 1786; MG13/2, p. 415-6, same day to Duncan.

⁵⁸ Their partner, Michael Francklin, had died in 1782. NMM, HAL/F/2, f. 237-8, Duncan to Hazen, 13 September 1784; HAL/F/2, f. 243-5, Hazen to Duncan, 5 October 1784. The new contract required, among other things, that the "head is to be 4³/₄" for every yard the mast is long. The diameter was to be measured in each quarter, and wrought in a workmanlike manner in one-eighth squares, to be free of large knots, or sudden bites below the tongue or any defects, one-quarter of all masts between 22" and 27" shall not be 'tongued.' All bowsprits shall be at the upper end in the four squares for the better putting in the caps and bees, that the length of the square from the upper end shall be three times the diameter of the bowsprit, and that one-third of the bowsprits from 26" to 31" in diameter shall be left from the bed to the heel in the four squares, and the same diameter in the bed where there is proper room for it." PANS, MG13/2, p. 351-4, 5 October 1784. See NMM, HAL/F/1, f. 213-8, Duncan to Andrew, 27 May 1786; "Deficiencies to be good" masts £28.12.4., yards £5 5s.,

mouth of the St John River at the cove under Fort Howe, some 100 white pine masts, yards and bowsprits ready to be surveyed by a yard shipwright. When one-half were cut and hauled to the frozen river ready to be carried in the spring thaw, they were free to draw on the yard storekeeper for half the value of the contract.'

When the Navy Board underwent its change of heart about the potential importance of North American timber, it also decided to assume control of the contracting process, by removing it from the hands of the resident commissioner. This was to revert to a procedure which had become standard in the twenty years following the first such mast contracts for American masts given to Henniker in 1755. Though entrepreneurs from the colonies were given the opportunity to submit tenders on the same basis as those from Great Britain, by moving control to London, British merchants were necessarily favoured, owing to their much deeper pockets.'

A draft advertisement reached the yard to be placed in newspapers both in Halifax and neighbouring colonies. Toward the end of August 1788, it stated, "the Navy Yard will issue a contract for yards in England for a supply of North American white pine masts, yards & bowsprits, also at yards at Antigua and Jamaica. It is not intended to confine the tenderers to any particular spots, but to extend to St. John's River, Lake Champlain, or any other parts of the British territories there." Contract conditions were made available both in Quebec and from Commissioner Duncan at Halifax.'

Doubtless one of the reasons the Navy Board in 1788 looked beyond the North American colonies for a contractor may have been the lack of suitably large colonial-owned ships for the task of freighting the sticks either to England or the West Indies. This implied a lack of sufficient capital to carry on the sort of task the Board now had in mind. Hazen and White on the one hand and Davidson on the other, from their scrambling always to be paid, conducted businesses far too limited and too precarious to be entrusted with this new larger task. Duncan was explicit on that point, "There are no shipping here, or that come to this place, fit to carry masts."⁶² Indeed just to clear the masts still at Fort Howe, he needed a 700-ton ship which in 1787 could not be found in the colonies, so had to come from England.⁶³

Before the results of the contract tendering process were known in Halifax, Michael Wallace, a Scots exile from Virginia who reached Halifax via New York in 1779, and

bowsprits £164.17.9Y2., topmasts £72, in total £270.15.1Y2. NMM, HAL/F/2, f. 295, 23 December 1784.

⁵⁹ Hazen & White also agreed to make good the deficiency in their 9 August 1781 contract with Hamond. Permission to cut had first to be granted by the surveyor-general. NIVIM, HAL/F/2, f 253, Duncan to Wentworth, 18 October 1784. It was late in 1786 before the contractors received their final payments. PANS, MG13/2, 600-1, Hazen & White to Duncan, 16 October & 28 November 1787.

⁶⁰ PANS, MG13/2, 520-1, NB to Duncan, 16 October 1787.

⁶¹ PANS, MG13/2, 521, Deadline was delayed by two months.

⁶² PANS, MG13/2, 512-3, Duncan to NB, 26 November 1787.

⁶³ Ship *Admiral Parker*, PANS, MG13/2, 550-1, NB to Duncan, 31 January 1788; she arrived at Fort Howe the following July. MG13/2, 572, Andrew to Duncan, 13 September 1788.

Benjamin Mulberry Holmes, a refugee merchant from Boston, formed a consortium with Davidson to tender a bid.' With their business acumen and Davidson's personal experience as a contractor tramping and canoeing the inland rivers of New Brunswick from the headwaters of the Miramichi to the Northumberland Strait, and from the upper Saint John valley to the Bay of Fundy, they believed they had reasonable expectations of success. To support their cause Wallace and Holmes planned to travel to London to present their tender, but were prevented from doing so by the lack of London-bound shipping from the port of Halifax.' Though the Navy Board assured them that their tender had been considered, it concluded an agreement in 1788 "on much lower terms than their proposals."⁶⁶

The Greenock firm of George Robertson, James Hunter, and William Forsyth won the competition to supply the navy with "North American masts, yards, &ca."⁶⁷ Only William Forsyth lived in Nova Scotia, where he had arrived less than five years earlier, but whose scale of business, owing to the wealth of the Scottish company, probably equalled that of any other Halifax merchant. Forsyth first evinced an interest in supplying masts to the navy when the contracts held by Messrs Hazen & White on the one hand, and William Davidson on the other, came to an end in 1787. Their remaining sticks, then gathered into the mast pond at Fort Howe, awaited delivery to the English yards. Through his London agent Robert Livie, Forsyth offered to deliver all the masts either to England for £2,000 or for £2,500 to the West Indies .68 Nothing came of this though his name became known to the Navy Board. Fourteen months later Forsyth was destined to arrange the actual work in the forests, to deal with any problems relating to loading and shipping and, in wartime, conveying home the mastships.

A month later a second contract was awarded to Alexander Blair of London and James Glenie of Fife and Goldsborough, New Brunswick.' They were to supply several English yards and those of Antigua, Jamaica and Halifax with white pine masts, yards, spars, and bowsprits on the same terms and in the same dimensions as those in the contract with Hunter, Robertson & Forsyth.' By July 1789 Glenie was in Saint John to implement his contract to supply at least twenty shiploads of masts. His first two ships, *Admiral Parker* and *Amphion*, loaded for Plymouth and Portsmouth respectively, where they were needed

⁶⁴ PANS, MG13/2, 590, Duncan to NB, 19 Dec. 1788. This matter was missed by D.A. Sutherland, "Michael Wallace, c.1744-1831," *DCB* VI (1987), 798-801; Holmes was ignorant of the mast business but experienced in whaling matters.

⁶⁵ PANS, MG13/2, 592-3, Wallace, Holmes & Davidson to Duncan, 30 December 1788; MG13/2, 591, Duncan to NB, 1 January 1789.

⁶⁶ PANS, MG13/2, 614, NB to Duncan, 17 February 1789.

⁶⁷ PANS, MG13/2, 625, NB to Duncan, 27 March 1789.

⁶⁸ PANS, MG13/2, p. 516, Forsyth to Duncan, 24 September 1787. None of these details are found in D.A. Sutherland, "William Forsyth, c.1749-1814," *DCB* V (1983), 327-9.

⁶⁹ For details of the Blair-Glenie contract difficulties, see Wentworth letterbooks, PANS. RG1/49-54. W.G. Godfrey, "James Glenie, 1750-1817," *DCB* V (1983), 347-58.

⁷⁰

PANS, MG13/2, 642, NB to Duncan, 17 April 1789.

immediately.' So began a new phase in the supply of the naval masting needs by exploiting the forests of British North America, whose later history has been studied so well.'

This invasion of the forest by agents of the British navy, which these and later contracts precipitated, led to renewed conflict with private landowners, similar to experiences in New England until 1775. Several parliamentary acts specified white pines for the masting of the fleet. This crown right could not be alienated by any provincial patent to private persons. Such patents were void *ab initio*, as Wentworth reminded the Admiralty in 1791, and were inconsistent with the 1729 statute enacted for the express purpose of preventing larger white pines from becoming private property.'

A balance had to be struck between the legitimate development of a lumber trade in the colonies, which threatened mast timber, and the exaggerated claims of the contractors to all the pine timber to fulfil their contract whether it proved fit or not. They claimed the right to any tree they cut down or which broke upon felling and which proved defective for masting purposes, as compensation for the expence involved. As this wastage was part of their contracts with woodcutters, the workers also laid part claim to such felled timber. Wentworth, the surveyor-general of the woods, explained the process. "The workmen claim an interest in the timber hawling on to the river St. Johns, being, as they said, unpaid for their labor.'

Such claims were inadmissible, as they would have given the contractors virtually a monopoly of the market. At the same time they would have removed any incentive to the landowner to nurture his woodland. Rather he might lay waste his wood, if he could not find a ready market for the timber, before the contractors arrived on his grant.

Another of the problems faced by the contractors related to the crews on their mastships. Certain ships were granted special protection from the press; the contractors frequently had to apply for this privilege. A naval escort sent to the Bay of Fundy to convoy the mastship *Earl of Mansfield*, which lacked such protection, pressed seven men from her. When only four were returned upon the merchant captain's complaint, the rest of the crew fled, fearing impressment. Before the matter was cleared up, an eleven-thy delay had ensued.'

⁷¹ PANS, MG13/2, 652-3, Glenie to Duncan, 4 July 1789.

⁷² Especially Arthur R.M. Lower, *Great Britain's Woodyard. British America and the Timber Trade, 1763-1867* (Montreal, 1973), Graeme Wynn, *Timber Colony. A Historical Geography of Early Nineteenth-Century New Brunswick* (Toronto, 1981).

⁷³ PRO, ADM106/1653, Wentworth to NB, 12 December 1791.

⁷⁴ PRO, ADM106/1653, Wentworth to NB, 10 January 1794.

⁷⁵ PRO, ADM106/1531, Robertson to O'Brien, 2 October 1791; copy sent to the owners Hunter, Robertson & Forsyth in Greenock.. The 15 October 1791 crew list of *Earl of Mansfield* numbered thirty-two including six "black men who had never been to sea before" - Roberts, Rogers, Terrey, Will, Smith & Davie - six discharged soldiers and four apprentices, with only four capable of "taking the wheel." Affidavit sworn in Greenock, 5 April 1792 by Robertson. ADM106/1531, James Hunter to NB, 11 November 1791.

This resulted in a demand to the Navy Board for demurrage.'

On occasion, North American mastships arrived in an English harbour only to become so short of crew through pressing, the ship could scarcely be navigated with safety. In other instances, ships hired in the colonies to load masts for the Halifax yard could not find crews unless protected from the press. In 1805 the problem was experienced acutely at Saint John when only some of the pressed men from mastship *Governor Carleton* were returned.' When I-1M brig *Busy*, assigned to escort mastship *Lilly*, came into port, the labourers loading mast ships, to avoid the press, went into hiding and soldiers had to be hired to complete the work.' In 1806 in Saint John harbour, HMS *Cambrian* pressed four men from a mastship, again contrary to the express conditions of the contract and to the protection granted by the Admiralty. "The injury is the greater that one of them is an officer, whose services on board are indispensable," explained the contractors.' A similar incident occurred in 1808, when the escort, HM brig *Plumper*, pressed five men from the mastship *America* while they were in the process of loading her.'

Once the Navy Board assumed control over the major masting contracts, the resident commissioner was confined to making contracts solely to supply the Halifax careening yard. The accumulated numbers of sticks involved could be enormous. In August 1801, for instance, when the squadron was still of moderate size, after a load arrived from the mastship *Duke of Kent*, in the Halifax yard there were 347 masts, yards and bowsprits, and 1,106 spruce spars." As their number was so large and the mast pond could not accommodate them, newly-appointed naval yard Commissioner John Inglefield shipped many to Gibraltar, where he knew there was a great shortage, especially of smaller spars.⁸² In 1803 when next a significant surplus accumulated at the yard, two storeships, one on its way from England to Jamaica and the other homeward-bound from the Mediterranean, were routed home via Nova

⁷⁶ They [Forsyth et al] considered inaccurate the captain's description of the events relating to the pressing of seven men from their ship *Earl of Mansfield* in October 1791. O'Brien to Stephens, 19 December 1791 enclosed in NB's letter to them of 7 March 1792. PRO, ADM106/1531, Hunter & Robertson to NB, 19 April 1792.

⁷⁷ One retained was a 16-year old apprentice, expressly exempted by Act of Parliament. PANS, MG13/9.1, 295-6, Forsyth & Smith to Inglefield, 10 May 1805.

⁷⁸ "The *Busy* has got three of *Governor Carleton's* men from the jail, and one of the *Lilly's*. But Capt. Bryant rendered assistance to carry both ships to Halifax." PANS, MG13/4, 52-3, John Black to Forsyth & Smith, 28 June 1805.

⁷⁹ NMM, HAL/A/3b, f. 155-7, Forsyth & Smith to Inglefield, 13 August 1806.

⁸⁰ NMM, HAL/E/39a, f. 5, Forsyth & Smith to Inglefield, 24 September 1808.; HAL/E/39a, f. 6, Warren to Inglefield, 26 September 1808.

⁸¹ Some 176 masts from 17" to 33" in diameter, 146 yards from 16" to 24", 25 bowsprits from 17" to 33", and 1,106 spruce spars mainly from 10" to 14" in diameter. PRO, ADM106/2027, 20-4 August 1801.

⁸² He had just arrived from Gibraltar, where "immence [sic] prices are demanded." PRO, ADM106/2027, Inglefield to NB, 25 August 1801.

Scotia to load whatever the yard could spare." It was 1807 before, for the first time, a brief shortage of masts and spars occurred in the careening yard. It was large-sized masts with which they were principally concerned "in case of the arrival of ships from other foreign stations disabled in their masts, considerable delay to the injury of the service might be occasioned.'

When Forsyth claimed that his firm could not deliver unless the yard ordered the equivalent of a full load, the Navy Board insisted that there were sticks enough in the yard's mast pond, according to information in the yard's quarterly reports.' This was yet another example of micro-managing the yard's routine business from a distance of 3,000 miles. The Board went further by reserving for itself the power to supply the Halifax yard with those masts requested in their quarterly returns. This was not the response Inglefield wanted, as he had hoped to be able to order such items locally, without going through London, when a response might take six months to reach him from the time the yard requested the items.' The first such supply came from the contractors selected by the Navy Board late in 1807."

Inglefield's direct intervention helped to define the limits to the mast contractors' monopoly. Until the end of 1807 Forsyth & Smith of Greenock held the contract for masts. Inglefield thought any new contract should exclude the supply of all smaller spars used in the careening yard, that is those of twenty-two inches diameter and less, as they could readily be supplied from Nova Scotia."

When Forsyth & Smith saw his advertisement calling for tenders for small black spruce spars to be supplied to Barbados and Bermuda, they protested claiming that by their 1805 contract they alone should fill the order. Since 1788 spruce and pine sticks suitable for topmasts, from eighteen inches to fourteen inches inclusive, had always been inserted in the contract. The expense of supplying such items differed from yard to yard, yet the price hardly varied between the Thames River and Plymouth, Halifax and the West Indies, as the deductions in Nova Scotia and the West Indies were subsequently countervailed by the duties payable in England. In their 1805 tender, they had aggregated all costs, thus blending the benefits of one with the disadvantages of another. "For some of the smaller spars we are paid

⁸³ NMM, ADM/B/209, NB to Nepean, 27 June 1803. The problem recurred in 1805, "as there is a considerable surplus of masts and spars at Halifax, in part of what was deposited there in the late war," storeship *Dolphin* on her way to Antigua to bring them to England. ADM/B/219, NB to Marsden, 7 June 1805.

⁸⁴ Two each of 27", 26", 25" and 24" diameter. NMM, HAL/E/38, f. 178-9, Respective Officers of the naval yard (RO) to Inglefield, 12 August 1807. RO to Forsyth & Smith, 15 August 1807; HAL/E/28, Forsyth & Smith to RO, 18 August 1807.

⁸⁵ NMM, HAL/C/1, f. 5, NB to Inglefield, 11 September 1807.

⁸⁶ NMM, HAL/E/28, NB to Inglefield, 26 August 1807.

⁸⁷ Scott & Idle to supply masts: two 24"-24½"; six each 22"-22½" and 21"-21½", fifteen 20"-20½", eighteen 19"-19½", twenty each of 18"-18½", 17"-17½", 11"-11½", 10"-10½", 9"-9½", and thirty each of 8"-8½", and 7"-7½". NMM, HAL/C/1, f 9, NB to RO, 6 October 1807.

⁸⁸ PRO, ADM106/2028, Inglefield to NB, 20 June 1807.

little more, after transporting them to England, than they cost in the woods in North America. In the case of the *Hamilton* and *Governor Carleton* last year, the whole amount of their cargoes would hardly pay a common freight at the present rate of tonnage."

The Navy Board agreed with Inglefield's interpretation, that the mast contractors had no right to the small spar supply either to Bermuda or Barbados. The Board's earlier scheme to supply Bermuda with spars and other stores from New York and the Chesapeake ports had fallen foul of American foreign policy. The American embargo of 1807, followed in 1808 by non-intercourse, brought all supplies from the United States to a virtual standstill. Now the Board endorsed a proposal made by Inglefield, whereby smaller spars would first be delivered to the Halifax yard, before being shipped on board warships bound for Bermuda. Some would sail directly to Cochrane's squadron at Barbados.'

With hostilities against France renewed in 1793 and faced with the need to supply the ever-increasing requirements of the yards at home and in the West Indies, the Halifax squadron assumed the responsibility of escorting mastships. Shipping masts, spars, yards, and bowsprits to the home yards continued uninterrupted throughout the war. One or two mastships sent home yearly were usually escorted by the ship on station which most needed extensive repairs in a drydock.

The mastships originating in England sailed directly either to Saint John, St. Andrews or Miramichi, then were escorted either to a rendezvous at Halifax or directly to England, Antigua or Jamaica, wherever the masts, yards, bowsprits, and spars were destined. In the summer of 1797, for instance, mastship *Trelawny* sailed from Halifax to the Bay of Fundy, having arrived from England. Once loaded it was escorted from the Bay of Fundy directly to Jamaica.' Meanwhile mastships *Britannia*, *America*, *Earl of Mansfield*, and *Princess of Wales* arrived from England. The first two of these then returned to England from the Bay of Fundy under convoy, while *Earl of Mansfield* brought mast cargo to Halifax, before returning to the Bay of Fundy to load a second cargo for England. *Princess of Wales* sailed directly to Miramichi before sailing for England.'

The mastships sailed from Saint John to Halifax often without escorts. At Halifax the mastship found ordinary merchant ships awaiting her arrival in order to make up a small convoy of perhaps five to eight vessels with the escort. In 1793, with "a superior fleet now upon the American coast," and a number of privateers cruising to intercept the British trade, William Forsyth's mastship, *Earl of Mansfield*, then loading in the Bay of Fundy ran "a great risk of being captured" before reaching the safety of Halifax. Commissioner Duncan with but

⁸⁹ PRO, ADM106/2028, Forsyth & Smith to Inglefield, 26 August 1807.

⁹⁰ NMM, HAL/C/1, f. 8, NB to Inglefield, 2 October 1807.

⁹¹ The escort was HMS *Maidstone* (32). PRO, ADM1/494, f. 83-4, Vandeput to Marsden, 31 October 1797. In 1798 it was HM sloop *Dasher*. ADM1/494, f. 118, Vandeput to Marsden, 23 June 1798.

⁹² PANS, MG13/6, 235, Forsyth to Duncan, 15 May 1797.

one frigate in port was unable to help.'

Occasionally, the commander-in-chief and the commissioner redirected a mastship from her original to an alternate destination. Thus when Admiral Berkeley learned in 1806 that a hurricane had dismasted "three line of battleships" at 21°30'N 63°40'W, while the mastship which sailed earlier bound for Antigua had been captured, he directed that the mastship then loaded and bound for England should instead be sent to Antigua to aid Cochrane's squadron, which he believed had been devastated by the storm.' The only cautionary note came from the contractors, Forsyth & Smith, who pointed out that since the insurance did not cover this diversion, which was not contemplated until she was *en route* from the port of loading, the contractors had to pay the full premium to the insurers. The additional expense of a new insurance policy would have to be absorbed by the Navy Board. Moreover, as they still intended to send a shipload of masts to England, *Rosina* would require a return escort out of danger."

Between 1795 and 1801 storms frequently separated the escort from the mastships, but none was lost. In 1795, when letter-of-marque mastship *Brunswick* was on the point of sailing from Saint John, part of her crew deserted. Reaching Halifax only in mid-January, she struck a shoal. Delayed for a further three weeks by unfavourable wind and weather from sailing for England, she was partially manned by invalids and French prisoners. Escorted by HMS *Severn* (44), she proved so leaky from her accident that, even when she threw all her guns overboard, water rose almost three feet above the ceiling of the lower deck. She had to make for Antigua instead.

Details of one 1795 convoy will serve to illustrate the difficulties for escorts, especially in winter crossings. When HMS *Thisbe* escorted three mastships and five other merchant ships to England in November 1795, convoy orders required mastship *Earl of Mansfield* to lead, followed by the two other mastships abreast with the two escorting frigates on either flank, with the rest of the convoy following as closely as possible.

No ship to show any lights except when seeing a strange sail, except to hoist lights and make every possible effort to warn convoy. On parting at night and meeting again, hoist three lights in inverted triangle. Within hailing distance, ship hailed to cry 'King George' hailing ship to respond 'Old England.' No ship to pass one carrying a light. From Sambro lighthouse SE

x S by compass 130 miles then ESE 60 miles, then make a 74°E course for 1,280 miles which leads you into the 47°N 30W and about 21 leagues to the westward of Lizard and so between 49° and 49°20' degrees, the convoy to

⁹³ PRO, ADM106/2027, Forsyth to Duncan, 15 August 1793; Duncan to NB, 27 August 1793.

⁹⁴ NMM, HAL/A/3b, f. 173, Berkeley to Inglefield, 13 September 1806; HAL/A/3b, f. 174, Inglefield to Berkeley, 14 September 1806.

⁹⁵ NMM, HAL/A/3b, f. 155-7, Forsyth & Smith to Inglefield, 15 September 1806.

keep by that means should I unfortunately part company I may be enabled to join them.⁹⁶

One week out from Halifax a violent gale, which lasted several days, dispersed the convoy; the escort reached Spithead alone.' Three years later when HMS *Resolution* acted as escort, outside Halifax harbour mastship *America* was taken in tow, the sea captain intending thereby to ensure her safety. Within five days the hawser broke in a violent storm, separating the mastship from the frigate, which reached Spithead alone.

Losses inevitably occurred at the hands of the enemy. In 1803-4 when two of Hunter, Robertson & Forsyth's mastships were captured by privateers, Inglefield recommended that the use of armed storeships was the only safe way thereafter to send such "valuable cargoes of masts." He wanted the Navy Board to assign such a ship armed with forty-four guns to ply regularly between Halifax and England with a cargo of masts." The policy was not implemented. Later in 1806, despite the gallant action fought by HM sloop *Busy*, a French frigate took mastship *Lady Parker* which she was escorting to Antigua.'

In 1807 Forsyth & Smith lost the masting contract to a consortium of London entrepreneurs: Christopher, John and George Idle, Thomas Coates, and William Haynes.' Their Halifax agent was Andrew Belcher, a Nova Scotian then living in London, until this opportunity hastened him back to Halifax. There, Belcher immediately irritated the yard officers by disputing the accuracy of their mast measurements, held in his absence, and by requesting a second survey with an independent timber measurer.¹⁰¹ This brought a sharp reaction from Dawes, the naval storekeeper. "The professional officers of the yard need no information from any individual," he wrote.

We imagine if the Navy Board thought a timber measurer necessary they would not leave the nomination of a person to that office with the agents of their contractors. Upon the whole we are of opinion that another survey is not necessary, that Mr. Belcher is not entitled to it, and that to comply with

⁹⁶ This is a rare document. Capt. Robert Murray's Convoy Instructions, 28 October 1795. PRO. ADM1/2130.

⁹⁷ PRO, ADM1/1913, John Oakes Hardy to Nepean, 25 November 1795. In 1792-4, Hardy spent at least two years in New York on leave. PRO. ADM1/1910-11.

⁹⁸ PRO, ADM106/2028, Inglefield to NB, 10 May 1804.

⁹⁹ At 13°10'N 57°10'W on 2 August. The sloop suffered one killed and eleven wounded. PRO, ADM1/496, f. 446-8, Keily to Berkeley, 2 August 1806; ADM1/496, f. 443, Berkeley to Marsden, 17 September 1806. The Halifax yard, when not excessively busy, also repaired the mastships damaged by stress of weather in their crossings. This was the case in 1801 and 1802, for instance, involving *America* and *Lord Macartney*. PRO, ADM106/2027, Inglefield to RO, 11 November 1801; PANS, MG13/3, Anderson to Forsyth & Smith, 21 April 1802.100

NMM, HAL/C/1, f. 19, NB to RO, 23 November 1807.

¹⁰¹ NMM, HAL/E/37, Belcher to Inglefield, 7 January 1809. This role is overlooked by D.A. Sutherland, "Andrew Belcher, 1763-1841," *DCB VII* (1988), 62-4.

his request would be introducing a practice that on future occasions might tend to the hindrance of the service.'

Belcher, for his part, begged to be forgiven for "having asked what appears to be contrary to the practice of the yard...I likewise hope I may be the more justified in the application when it is observed that almost all the masts fall short of the measurement at Quebec."

This occurred in a crucial era, when the loss of the Baltic supply triggered an extraordinary scramble as the Navy Board extended its range of suppliers from the shores of the Aegean to the Ottawa River valley in search of needed shipbuilding timber. The urgency of the situation was not lost on the Halifax yard where every reasonable offer of spars was accepted. Notices appeared in the papers for topmasts and topsail yards for the use of the Halifax yard.' They included requests for the spars and timber required for the home yards.' These anticipated the wishes of the new commander-in-chief, Vice-Admiral John Borlase Warren.' It also addressed the Navy Board's later orders.' All complacency vanished. In 1807 an offer of spars available at Miramichi had been rejected when the tender called for delivery in Halifax. A year later Warren changed his tune. Owing to shortages of wood at the yard, a naval transport was despatched to Miramichi unhesitatingly for a shipload of spars, pine timber and pine deals.'

Reliance was placed increasingly on Lower Canada, New Brunswick and Nova Scotia in descending order of importance. To the prejudice of the traditional Baltic supply, Parliament imposed duties in 1809-10 to favour British North American supply.¹⁰⁹ Not only was an unprecedented amount of timber thereby soon exported to England, but large ships of 500 tons and more, boasting raft ports up to thirty-eight inches wide, were built on the St. Lawrence, of a size not constructed in Nova Scotia until after the war's end. Mure & Joliffe, the Quebec agents for the London contractors Scott & Idle, with whom Admiral Warren opened a correspondence, themselves alone anticipated shipping between 16,000 and 20,000

¹⁰² NMM, HAL/E/39b, f. 51-3, Dawes to Inglefield, 9 January 1809.

¹⁰³ NMM HAL/E/39b, f. 54-6

¹⁰⁴ NMM, HAL/E/37, Douglas to RO, 12 May 1808.

¹⁰⁵ Twenty-six black spruce spars from 16"-22" in diameter and from 58 ft. to 70 ft. in length were purchased for H£123, supplied by John & James Feely of Windsor Road. NMM. HAL/E/37, f. 98 Douglas to RO, 29 March 1808.

¹⁰⁶ Several persons from England had recently arrived who "are now employed going over the country to buy up large quantities of timber...the Baltic being shut...the benefit which the provinces would derive from supplying Great Britain with timber...would be advantageous to the general service." PRO, ADM1/498, f. 2601, Warren to Pole, 16 June 1808.

¹⁰⁷ Formerly "obtained from Norway." NMM, HAL/A/4b, f. 1, NB to Inglefield, 8 June 1808.

¹⁰⁸ Fraser & Thom, Halifax merchants, made the offer. NMM, HAL/E/40, f. 87-8, Warren to RO, 20 July 1808.

¹⁰⁹ 49 Geo. III, c.98 and 50 Geo. III, c.77. See Albion, *Forests and Sea Power*, 355-7.

tons in 1808." It was in the years 1808 to 1812 that the supply of wood products entering the British market from British North America for the first time exceeded that of the Baltic.
111

For the first time also in 1808 the Halifax careening yard was supplied with masts from Quebec, a memorable year for British North America. When transport *Dawson* brought masts as well as 116 spruce spars at contract prices six time higher than such spars could be had in Halifax from Nova Scotian suppliers, the commissioner sent Mure & Joliffe a stinging rebuke for the inadequate quality of this first load." The "service would be much embarrassed if a ship of the line or large frigates should arrive here dismasted not having spars of proper dimensions for making large masts." Their next shipment satisfied him no better as it only included masts between twenty-three inches and twenty-seven inches, as the ship could not load masts of longer size. ¹¹⁴ In 1810 their ship *Dorset* carried the next cargo of masts, bowsprits, oak timber, and a few logs of pine timber.' In 1811 they delivered no masts whatever, which breakdown Inglefield characterized as a failure to "manifest the zealous attention to the conditions of the contract that might be expected." As a result he pictured his yard virtually devoid of masts yet having to refit a line of ships disabled by storm. ¹¹⁶ Two weeks later the North American squadron was indeed overtaken by a hurricane, not at sea but in Halifax harbour itself. The damage inflicted on masts and topmasts proved to be extensive.¹¹⁷

Inglefield's complaints about the dilatoriness of the contractors might have been accurate, but the underlying problem had arisen from the ineffective system established by the Navy Board which without consultation, as we have seen in many instances, centralized in London the control of masts shipped between Quebec and Halifax. Until then the Halifax yard had proved quite capable of making its own arrangements to keep itself supplied. The new procedure resulted in the Board ordering, among other things, thousands of oar rafters for Halifax, when local supply was more than enough and at one-third the contract price, a point which the commissioner was quick to underline both in Quebec and London. The Navy Board accepted his logic and immediately left him once again free to purchase masts or whatever else

¹¹⁰ David Roberts, "John Mure, d. 1823," *DCB VI* (1987), 531-5; PRO, ADM106/1437, Mure & Joliffe to Warren, 2 July 1808, enclosed in Warren to NB, 20 July 1808.

¹¹¹ PRO, CUST17/30, CUST4/1-3. See Bryan Latham, *Timber* (London, 1957), 48.

¹¹² NMM, HAL/E/39a, f. 66, Inglefield to Warren, 5 December 1808; HAL/E/39a, f. 69 Inglefield to Mure & Joliffe, 8 December 1808.

¹¹³ NMM, HAL/E/35b, f. 6, Inglefield to Mure & Joliffe, 8 July 1809; HAL/E/35b, f. 74-5 Mure & Joliffe to Inglefield, 17 August 1809.

¹¹⁴ Reached Halifax only on 14 October 1809. NMM, HAL/E/35b, f. 94, Mure & Joliffe to Inglefield, 11 Sept. 1809; HAL/A/4b, f. 322, NB to Inglefield, 28 November 1809.

¹¹⁵ Arrived on 23 July, and took sixteen days to unload. NMM, HAL/E/27, f. 118-9, Mure & Joliffe to Inglefield, 12 July 1810 ; HAL/E/27, f. 136-7, Inglefield to Mure & Joliffe, 7 August 1810.

¹¹⁶ NMM, HAL/A/2, f. 196 Inglefield to NB, 14 September 1811.

¹¹⁷ NMM, HAL/A/2, f. 219-20, Inglefield to NB, 10 October 1811.

he needed, without using the contractors, until alternative arrangements were made.¹¹⁸

Throughout his remaining three years in Halifax as the resident commissioner, Inglefield spent a significant part of his time overseeing the shipment of spars, timber and plank to the English yards. During one twelve months' interval in 1808-9, he boasted that ships calling at the Halifax careening yard shipped to the home yards and other overseas bases some 11,945 spruce and twenty pine spars, thirty-three bowsprits, 194,787 feet of pine plank, 263 tons of timber, three made masts for schooners, fifty ship's sweeps, 2,832 oar rafters, ninety-five capstan bars, 180 serving mallets, and 200 wood wedges.¹¹⁹ In addition the yard shipped 938 barrels of pitch, tar and turpentine and 218 gallons of train oil. In the absence of mastships, these products were freighted in a somewhat unorthodox manner by using nine warships, three storeships and nine transports.¹²⁰ How the warships were to engage the enemy, with their decks so encumbered, was not clear. As it turned out, none faced such an encounter.

In 1810-11 Inglefield contracted with James Fraser of Halifax to ship cargoes of red pine timber and plank, red pine and spruce spars fourteen inches and less from Miramichi.¹²¹ He stowed over 2,000 spars into the captured French frigate, *Furieuse* and other warships returning to England.¹²² Much of her cargo he purchased from small local suppliers around Halifax, including M. & A. Archibald, John Clark and Godfrey Schwartz of Windsor Road. He used available transports for the same purpose.¹²³ As well, he appointed naval escorts for as many of these *as* needed them.¹²⁴

Inglefield's successor as resident commissioner of the Halifax careening yard and the last officer to hold this post, Captain the Hon. Philip Wodehouse, scarcely had to concern himself with the question. In 1813, when Wodehouse wrote to the Quebec agent to order the masts needed in the Halifax yard, he was first informed that the war with the United States

¹¹⁸ NMM, HAL/A/2, f. 277, NB to Inglefield, 16 January 1812.

¹¹⁹ PRO, ADM106/2028, Inglefield to NB, 6 November 1809.

¹²⁰ The warships included HMS *Horatio*, *Milan*, *Guerrière*, *Junon*, *Cherub*, *Cleopatra*, *Thetis*, *Melampus*, and *Pompey*. For cargo details for storeship *Eisdale*, armed ship *Diligence* in 1808, *Dawson*, and armed storeship *William* which departed Halifax for England in April 1809, see NMM, HAL/A/4b, f. 112-3. Another 2,002 spars went with *Ajax* in August 1809; for cargo details, HAL/A/4b, f. 201. Transport *Eliza* sailed in August 1809 with 893 spruce spars from 16½" downwards, two 14 ft. & 15 ft. spruce bowsprits, 3,166 ft. of oak plank from 1½"-4½". HAL/A/4b, f. 208.

¹²¹ NMM, HAL/E/35b, f. 63-4, Fraser to Inglefield, 7 September 1809; W.A. Spray, "James Fraser, c.1760-1822," *DCB VI* (1987), 262-3.

¹²² Cargo listed: NMM, HAL/A/2, f. 37-8, Inglefield to RO, 14 May 1810; HAL/A/4b, f. 215-7, Inglefield to NB, 14 September 1809; HAL/E/40, f. 286, and HAL/E/37, Inglefield to RO, 26 and 28 October 1809.

¹²³ Cargo for transport *Ariel* completed in part from spars supplied by Andrew Blair of Windsor Road. NMM, HAL/E/35a, f. 189, Inglefield to RO, 13 November 1809. On 8 January 1810 *Diligent*, transport *Robert* and armed storeship *William* sailed with cargoes mainly of spars up to 16½" & 18½". HAL/A/4b, f. 295-7.

¹²⁴ As examples, see Forsyth & Black to Inglefield, 2 January & 11 October 1810. PRO, ADM106/2028.

had completely interrupted the lumber trade with Upper Canada.¹²⁵ Later he learned that some large masts and bowsprits would be sent as soon as the navigation on the St. Lawrence River opened.¹²⁶

That year he was surprised to receive from England a shipment of Riga masts and yards from England.¹²⁷ Though valued by the Navy Board at between £125 16s. and £180, Wodehouse quickly assured the Board that "sticks of equal quantity and diameter and 70 feet long could be cut within twenty-five miles of Halifax and delivered to the yard for no more than £18 each."²⁸ Upon the advice of his master shipwright, Wodehouse ordered the mastships, still loaded, to return to England.¹²⁷ As a result the Navy Board ordered that a dozen spruce spars of twenty-two inches diameter be ordered for the Halifax yard and inspected for their suitability as topmasts. These were fetched not far from Halifax off the Windsor Road.' Before the results were known in London, the Navy Board by March 1814 had reversed its position and informed the commissioner that it would continue to ship to Halifax from England either Riga or red pine masts for topmasts, while Nova Scotia spruce were to be used only when necessary.'³¹ No such further shipments were made to Halifax before the wars with the United States and France came to an end in 1815.

That the supply of sticks even to the Halifax careening yard had almost entirely been removed from the initiative of the resident commissioner there, is seen in some surviving correspondence in August and September 1813 between a London merchant and the Navy Board. In response to the Board's advertisements for spars and handmasts placed in the London newspapers, one Fenchurch Street businessman was moved to write to their lordships. "The woods on the banks of the Bay of Fundy in the province of Nova Scotia...abound with that species of fir which yields the handmasts and the other spars used for the...navy." He noted:

There they may be had of all the dimensions usually required at the dockyards and of a quality equal to any imported from America being generally considered as inferior to none in toughness and durability. I intend

¹²⁵ NA, I, 51, Wodehouse to Oviatt, 12 February 1813.; NA, I, 134-5, William Oviatt to Wodehouse, 31 March 1813.

¹²⁶ NA, I, 132-3, Wodehouse to Capt. Hawkins, 6 May 1813. In fact, they were not shipped until August in the ship *Sir George Prevost* (William Barratt, master). Oviatt to Wodehouse, Quebec, 12 July and 8 August 1813. NA. I, 332-3 and NA. II, 352-4.

¹²⁷ From Messrs Osborne Benson. NMM, HALE/29, f. 6, NB to RO, 6 April 1813.

¹²⁸ PRO, ADM106/2029, f. 65, Wodehouse to NB, 18 August 1813. *Minute*: f. 64 "pleased that masts have been found growing so near Halifax, but fear they might be of yellow pine, which they fear are not strong enough to serve as topmasts."

¹²⁷ PRO, ADM106/2029, f. 107, Wodehouse to NB, 5 November 1813. *Minute*: "will not send any more."

¹³⁰ PANS, MG13/9.3, 33, NB to Wodehouse, 6 October 1813; NA, II, 79, Wodehouse to RO, 3 January 1814.

¹³¹ PANS. MG13/9.3, p. 85, NB to Wodehouse, 17 March 1814; NA. II, 137, Wodehouse to RO, 24 May 1814.

to form an establishment in that part of Nova Scotia, and to turn my attention in particular to the cutting down and sending to Britain of those spars...

If favoured with the Board's encouragement he would furnish handmasts and spars "upon better terms than any they have yet been offered at."

He planned to purchase directly from the woods, and would supply ships to carry them to the English dockyards for a commission of 5 per cent to compensate him for the cash and credit advances needed to undertake the work. Though he guaranteed that the Board would only be charged the actual price contracted for with other suppliers plus the commission, he was informed that it would not be "expedient to adopt the plan he suggests."¹³² The centralizing process of the London-based Navy Board in the matter of contracts for sticks long before the peace descended on the Atlantic Ocean in 1815 was complete.

In conclusion, besides the usual activities of an overseas base, the Halifax yard acted as a distribution centre for all sorts of wood products needed not only in the English dockyards but also at foreign bases. It became a major *entrepôt* from 1778 for the procurement and shipment of masts, bowsprits, yards, spars, deals, and timber for the home yards as well as the naval establishments permanently based in the West Indies or temporarily established elsewhere in North America during the War of Independence. This was unique to Halifax among all the empire's overseas bases before 1820.

Supplies sent to Jamaica, Antigua and later Bermuda were coordinated by the successive commissioners and commanders-in-chief. Their task was principally to determine how the supplies were to be shipped: either stowed on warships or by hiring suitable vessels in Nova Scotia.

That the British navy was already dependent on masts supplied with the help of the Halifax yard before the crisis created when the Baltic became closed to the British in 1808 is little appreciated. By 1801 the Navy Board estimated that it then needed about 18,000 tons of timber, 13,000 tons of hemp to make about 15,260 tons of cordage, 1,400 tons of iron, 949 tons of copper, 200 tons of copper bolt staves, 18,000 barrels of tar, 5,500 barrels of pitch, 371,000 deals, 500 masts, and 111,000 wooden blocks.¹³³ The cost was £2.9 million; half the masts came from North America. It quickly became apparent that the timber resources of Nova Scotia, in so far as they were known by 1783 or even by 1815, would not suffice. Those of New Brunswick and, after 1808, of Upper Canada and Lower Canada, came to dominate this supply.

Finally, it seems reasonable to conclude that the opening of the timber market in England from British North America by the British navy initiated the process of familiarizing the English with Nova Scotia's wood products. British North American timber, an insignificant English import commodity before 1800, became by 1808-12 more than 60 per

¹³² PRO, ADM106/1524, Alexander Gardiner to NB, 9 August 1813. *Minute*, 12 September 1813.

¹³³ Morriss, *Royal Dockyards*, 73.

cent of total British timber imports, and by 1830 more than 82 per cent. If the impact on the Ottawa, the Gatineau, the Saint John, and the Miramichi river valleys was especially important, it was no less so on select regions of Nova Scotia.'