

BOOK REVIEWS

Tony German. *The Sea Is At Our Gates: The History of the Canadian Navy*. Toronto: McClelland & Stewart, 1990. 360 pp., maps, photographs, appendices, notes, bibliography, index. \$39.95, cloth; ISBN 0-7710-3269-2.

This is a pleasing, well-designed book. The cover and end papers by Alan Daniel, the layout and the font add much to the pleasure of reading it. The author takes us from the great fifteenth century voyages of exploration to shortly after the defence White Paper *Challenge and Commitment* of 1987, a span of about five hundred years, not an easy task in one volume. The editors have obviously been ruthless in making him reduce his manuscript, it appears more with an eye to the market than to the balance of the book. The book whizzes through the first four hundred-odd years of its story, showing the seeds from which grew the diversified Canadian maritime effort which we see today.

Provincial marines were introduced early to pick up the tasks the Royal Navy would not tackle for Canada. By the beginning of the twentieth century the Ministry of Marine and Fisheries handled everything to do with the sea: hydrography, lighthouses, port facilities, regulation of shipping, and Arctic sovereignty. For these tasks it had substantial resources, including the Fisheries Protection Service, begun in 1886, which by 1904 included armed fishery protection cruisers, icebreakers and

coastal radio stations. Some of the fisheries protection vessels were small warships with ram bows and quick firing guns, run like naval ships.

The impetus for a Canadian Navy was imperial defence. Could a new Canadian Navy work with the Royal Navy as part of a "one sea, one Empire, one Navy" approach to imperial defence, as well as perform the national tasks already identified as having to be performed by Canada? Or would another institution be required? The Royal Canadian Navy, which struggled into existence on 4 May 1910, effectively became the latter. It evolved into an internationalist institution, while national civilian maritime tasks were assumed by the progenitors of the Canadian Coast Guard, the Department of Fisheries and Oceans, and the Royal Canadian Mounted Police. Analysis of why this occurred has not yet been done. It should be. A lot of subsequent trouble for the navy may have stemmed from this.

We are led from these beginnings through the near still birth of the navy just after it was formed (political wrangling about form and function, and budget cuts, started early), through the Great War where gallant and dedicated men tried to respond to the U-boats as they found their first happy time off North America, when the Americans came into the war in 1917, too late to overcome the half-hearted naval efforts of the government. We share the discouragement of the sickly season

after the Great War, when Commodore Walter Hose, Chief of the Naval Staff, had to scrap the remaining vestige of an operational fleet, and decided to put virtually the entire naval budget into establishing the Naval Reserve divisions across the country. These exist to this day and form the vanguard of the connection between the navy and the people of Canada. Reserves formed the main means of implementing the build-up of the navy during World War II. The navy expanded by a factor of fifty during that period, an almost incredible feat which included major successes and woeful failures.

In 1939, the navy had no claim to be a national force. Acceptance of the Royal Navy as the mother service, combined with wretched budgets, led to total dependence on the Royal Navy for training and logistic support. Moreover, the country had no developed industrial base to support an effective fleet. The navy did the best it could, but Canadians should remember that it took about four years at the high pace of war before it started to become an effective fighting force, even in that era of comparatively simple technology.

The book follows the naval story to the present day. There have been some downs, but also some ups, at the top of the list of which I would put the achievement of the St. Laurent and later classes of ships, and the transformation of the navy under its postwar leaders into a professional group second to none. The lesson for today is that you cannot build an effective navy overnight. I believe this has been well learned. This country has not yet understood the degree of professionalism displayed by the navy in particular and the Canadian Forces and their civilian organizations in general, in the preparation of the ships deployed in September 1990 to the Persian Gulf.

Tony German has a real gift for making his history live. Thanks to his skill and a richer sea-chest of material from which to draw, we see through his eyes with better perspective than we could through Joseph Schull's *The Far Distant Ships*, the closest thing to an overall history of the Canadian Navy until this book came on the scene. It is a good read and an important addition to Canadian naval literature.

Dan Mainguy
Ottawa, Ontario

C. Anthony Law. *White Plumes Astern: The Short, Daring Life of Canada's MTB Flotilla*. Halifax: Nimbus Publishing Ltd., 1989. 170 pp., illustrations, photographs, glossary, index. \$24.95, cloth; ISBN 0-921054-27-0.

Tony Law is a distinguished Canadian artist who during World War II served in coastal forces. He wrote down his recollections soon after the war, subjected them to review by the Admiralty and shared them with the naval historian, Gilbert Tucker. For more than thirty years the manuscript lay dormant in the naval historian's office and, after integration of the armed forces in 1964, the Directorate of History at National Defence Headquarters.

It was Carl Vincent, the founder and organizer of a small publishing house near Ottawa called "Canada's Wings" who some years ago persuaded Commander Law to publish the manuscript. When Canada's Wings—which has brought out several excellent military and aviation titles—was for various reasons unable to bring the project to completion, Nimbus Publishing Limited of Halifax took it on and has produced a very handsome book. It is remarkable because it is so brilliantly

illustrated by the author himself, and by his wife, whose line drawings complement the text very nicely.

Canadian exploits in coastal force operations are well known: Hal Lawrence, for example, describes their activities in *Victory at Sea* (Toronto, 1989), and Gordon Stead has published his own, very well-received, recollections of Mediterranean experiences in *A Leaf upon the Sea* (Vancouver, 1988). Although Joseph Schull's *The Far Distant Ships* almost entirely overlooks the Fairmiles that patrolled Canadian coastal waters and the Caribbean, it does pay attention to the two RCN flotillas that operated against enemy coastal forces in the English Channel and North Sea for the last year of the war in Europe. *White Plumes Astern*, however, is the first detailed account of the vessels and the men that comprised one of those flotillas.

The 29th, which Law commanded from beginning to end, consisted of eight motor torpedo boats built by British Power Boats. Armed with two eighteen-inch torpedoes and a modest amount of gunnery firepower, they were seventy-one and a half feet in length, hard chine craft with three Rolls Royce Merlin engines. At twenty knots the boats started to plane; they had a maximum speed of forty-one knots. Their role, to counter enemy coastal forces and to attack convoys in the restricted waters off northwest Europe, led for the most part to work by night and rest by day.

Law's own boat, commissioned in March 1944, and the entire flotilla was ready for its first action on 22 May. On D-Day, 6 June 1944, the Canadian MTB's moved into station on the east flank of the great allied armada in the Channel to help protect the Allied force and to attack shipping out of Le Havre. Four months of

frenetic operational activity followed, punctuated by some memorable bouts of foul weather. In October the flotilla moved from its base at Ramsgate to Felixstowe for rather less demanding tasks. In January 1945 the Canadians shifted their base of operations to Ostend, and on 14 February, the very day that Law had to return to Felixstowe for some repairs to his boat, a tragic accident resulted in the destruction of the other boats in the flotilla by fire in Ostend harbour. Casualties in action against the enemy, never lightly borne, had (in view of the hazards) remained at a remarkably low figure. Now, in the twinkling of an eye, five Canadian boats were gone, and twenty-six people. One hopes that writing this narrative helped Law come to terms with the grief and disappointment he must have felt.

As a record of action the book is faithful and unpretentious. It tells the reader much about the tactics of coastal operations simply by anecdote and illustration. The author succeeds (apart from a few minor mistakes) because he sticks to his task, never trying to pontificate or theorise about the nature of the operations in which he was involved. For some readers, of course, this will still leave some questions unanswered. Why did the Canadian Navy raise MTB flotillas? Was it just to give sailors interesting employment when they could be spared from other duties? Was it, like destroyer operations in the Channel and elsewhere, to establish the RCN as a force capable of diverse roles in an alliance rather than simply a navy of convoy escorts?

Such questions would be difficult if not impossible for the author, as a young naval officer, to answer. For him, surely it was enough that he was there, demonstrating the light-hearted competence and courage that were needed to drive a

powerful and temperamental vessel in the face of the enemy. It is perhaps not out of place, however, for a reviewer to suggest that there were legitimate reasons for forming Canadian coastal forces in European waters.

Naval professionals in Canada were demonstrating interest in light coastal forces before World War II began. The technology was at a relatively early formative stage, but it did offer the possibility of getting numbers of warships for a variety of tasks at low cost. The concept of "small and many" has always been attractive, especially to small navies. Not that there was a "jeune école" in the RCN—Percy Nelles was no Théophile Aube, and he had no Gabrielle Charmes to advise him—but members of the naval staff were quick to accept the idea that rapid response to vaguely-defined threats on a long and tortuous coastline posed real difficulties for a navy with so few resources. More small ships with good seakeeping qualities could perhaps do the job better than the larger destroyers planned to meet alliance commitments.

Thus light coastal forces found a place in the wartime RCN. It was almost inevitable, in the circumstances of the day, that besides coastal forces in Canada's own territorial waters there would be Canadians in British coastal forces and, ultimately, Canadian flotillas of coastal forces in European waters. Fairmile flotillas in North American waters were uneven in quality and of dubious utility; the flotillas and boats commanded by Canadians in the Mediterranean, North Sea and English Channel won a reputation for dash and ability, and made some important contributions to naval ascendancy.

White Plumes Astern helps put these ideas into context. With the caution that its subtitle is misleading (there was more

than one Canadian MTB Flotilla), I recommend it as a very good read. More than that, in view of its superb illustrations, it is an addition of remarkable interest to any naval library.

Alec Douglas
Ottawa, Ontario

Betty Warrilow (comp. and ed.). *"Nabob": The First Canadian-Manned Aircraft Carrier*. Owen Sound, Ont.: Escort Carriers Association, 1989. ix + 210 pp., photographs, illustrations, bibliography, appendices, index. \$25 + \$3 postage, cloth; ISBN 0-9693438-0-9.

During World War II the Royal Navy obtained thirty-eight newly-built escort carriers from the United States under the terms of Lend-Lease, together with dozens of escort vessels, minesweepers and other types. By the summer of 1943, the Royal Navy was having severe manpower problems, so arrangements were made to have the Royal Canadian Navy man two of the carriers, the *Nabob* and the *Puncher*. This book is a very personalized history of the former. Both remained RN ships but were manned by the RCN with the exception of air crews and some specialized trades.

The book follows the short-lived career of HMS *Nabob* from her commissioning at Seattle, Washington on 7 September 1943 until her paying-off in October 1944 as a result of being damaged beyond repair by a submarine torpedo off North Cape, Norway in August. It is a unique book in that it is not only a history of the ship itself but is also a family history of the ship's crew.

Following her commissioning, the *Nabob* sailed to Vancouver for conversion to RN specifications by Burrard Drydock Co., where nineteen of the twenty-six es-

cort carriers, built by Seattle Tacoma Shipbuilding, were so converted. The book follows her work-ups on the west coast, passage through the Panama Canal and departure in convoy from New York in March 1944 for Liverpool. It also covers in detail her all too brief operational career in the United Kingdom.

On 1 August 1944 *Nabob* joined the British Home Fleet at Scapa Flow, and in the same month took part in two operations off the Norwegian coast, the second being an attack on the German battleship *Tirpitz*. On 22 August, she was torpedoed by the *U-354* in the Barents Sea, resulting in a hole some thirty-two feet square abaft the engine room and below the waterline. Amazingly, she made Scapa under her own power. However she was not considered worth repairing and was paid-off at Rosyth on 10 October. In 1947 she left for Holland to be broken-up. Despite her extensive damage, *Nabob* was resold and converted for mercantile service, emerging in 1952 as the German M/V *Nabob*. Under various owners she remained in service until 1978.

The most interesting aspect of this history is the detailed data, including numerous photographs, of the crew. An appendix includes the names of every crew member who served on the *Nabob*. In addition, obviously thanks to the Escort Carriers Association, the book details the post-war careers of many of the crew members.

The compiler, Betty Warrilow, is the wife of a former crew member. Her book, which is obviously a work of love, is a "must" for those who served on the ship and is highly recommended for the naval buff.

John K. Burgess
Calgary, Alberta

Jak P. Mallmann Showell. *U-Boat Command: Battle of the Atlantic*. London: Conway Maritime Press, 1989. 224 pp., maps, photographs, select bibliography, indexes. £18, cloth; ISBN 0-85177-487-3.

Jak Showell was born in 1944, three months after the submarine in which his father served was lost. Showell began to investigate the circumstances surrounding his father's death in 1973. Grand Admiral Dönitz lent him his private papers and gave him permission to consult the U-Boat Command War Diary. The Royal Navy, US National Archives, and the Bundesarchiv all cooperated. In 1976 Showell, feeling overwhelmed by his self-appointed task, was impressed with its importance by a captain in the German navy and encouraged to press on for another twelve years. This book is the result. It offers a straightforward, easy to read, dispassionate and apparently complete summary of the successes, failures, and struggles of the German U-Boat Command during the Battle of the Atlantic. It is an excellent look at "the other side of the hill."

For German submariners the Battle of the Atlantic fell into five phases. There was the first "happy time" in 1940, a period of devastating successes for the U-Boats. Allied monitoring of U-Boat radio transmissions, the use of radar, the breaking of the German Enigma code, and the loss of veteran commanders like Prien and Kretschmer all contributed to the collapse of the offensive. Late in 1941 Pearl Harbor introduced the second "happy time" on the east coast of the United States. Surprisingly, the slaughter on the American coast was accomplished by only five boats! From May 1942 to March 1943 the U-Boats returned in ever increasing numbers to the mid-Atlantic. In 1941 there were twenty-five U-Boats at sea every day; in early

1942 this number had risen to fifty, and by early 1943 there were a hundred U-Boats at sea every day. However, individual U-Boat performance steadily declined. By March 1944, wolfpacks had come to an end and attack opportunities diminished.

Those of us serving at sea at that time must have judged, by the great success of the U-Boats, that U-Boat Command would be a large organization with many resources. In reality it consisted of a small staff under Admiral Dönitz; even as Flag Officer he had relatively little authority—about as much, perhaps, as a cruiser captain. U-Boat Command operated throughout the war under many difficulties and handicaps. There was frequent pressure from the Supreme Naval Command to take part in or perform various impractical operations, thus disrupting the general anti-shipping effort. U-Boat sinkings of merchant ships were over-estimated by as much as one hundred percent, and there was no intelligence staff such as existed in the Royal Navy. U-Boat losses often were only discernable by failure to return to port. Admiral Dönitz must shoulder some of the blame. He could not believe that the Enigma radio code could be broken, crediting high losses to the activities of spies or to anti-submarine forces which he assumed were larger than they were. He disparaged the threat of radar until it could not be ignored. He discounted British interception of U-Boat radio transmissions and he failed to obtain significant air support for his campaign. Dönitz sent thousands of young men to sea in hundreds of U-Boats, never to return.

Triumphs such as Prien's sinking of the *Royal Oak* in Scapa Flow may also have given us an exaggerated opinion of their technical skills. Showell reveals that the U-Boats experienced considerable difficulties with technical failures and

engine breakdowns. The introduction of *schnorkles*, much feared by the Allies, is shown to have created more problems than it solved. There were torpedo failures of all kinds. In HMS *Renown* we saw torpedoes bouncing out of the water astern of HMS *Royal Oak*. Throughout the war almost a hundred ships were hit but not sunk; post-war research indicates a forty-five percent torpedo failure rate! The Torpedo Inspectorate blamed submarines for not getting close enough, poor aiming, and so on. Many of us did not appreciate that German policy in 1940 and even later was to use U-Boats at night on the surface as torpedo boats. Had we known that, would our tactics have been different?

Winston Churchill commented that the Germans should have staked everything on the Battle of the Atlantic. Though they did not, the battle, like Waterloo, was "a damn close-run thing." Before 1939 the Royal Navy did not seem to consider the U-Boats a major threat. From what Showell reveals, it would appear that the German Supreme Naval Command also did not realize until too late the potential of the U-Boat for choking Great Britain to death. For this, the whole world may be forever thankful.

L.B. Jenson
Queensland, Nova Scotia

V. E. Tarrant. *The U-Boat Offensive, 1914-1945*. Annapolis, MD: Naval Institute Press, 1989. 190 pp., photographs, illustrations, maps, tables, appendices, notes, sources, index. US \$29.95, cloth; ISBN 0-87021-764-X. Canadian distributor, Vanwell Publishing Ltd., St. Catharines, Ont.

The pursuit of the strategic concept that resulted in the destruction of over twenty-seven million tons of Allied merchant

shipping in two world wars is an important aspect of the conduct of war at sea that is rapidly disappearing from public consciousness. During both world wars the assault by submarines against the lifelines of the Allies was costly in human lives, materially devastating and resulted in irreversible long-term shifts of power within the mercantile community that reshaped national economies. That it could happen again is unquestionable and that very fact, and its consequences, must never be forgotten. In neither war did the aggressor, Germany, have more than a limited command of the seas; in every other way it was the "weaker" naval power. Nevertheless, the U-boats exercised an influence far in excess of their numbers, material worth or even their paper military value. In both wars huge fleets and vast resources were tied up in countering a weapon that proved to be inordinately effective.

There has been a lot of rhetoric about the activities of the U-boats during both wars; sometimes biased, often ill-informed and frequently clouded by passion. A great deal has also been written, from both sides of the debate, much of it, like the rhetoric, dramatic, shallow and biased. Some of it, however, is factual, illuminating and well worth reading and studying. This slim volume, I am happy to report, is one of this variety.

In the cold light of military logic, it made sense that Germany should want to destroy the sea-borne cargo carrying capacity of Britain and her allies. Militarily and economically the logic was inescapable. During both conflicts, had the Allied war effort not been sustained by a constant flow of supplies from abroad, Britain, a critically important participant, would certainly have been forced to give up.

Though late in being developed, the

German plan was fairly straight-forward: to sink Allied shipping on an unprecedented scale. Submarines, once their potential was understood, made it all possible. Relatively cheap, quick and easy to build, they required only small crews, had enormous hitting power, were very hard to kill and could remain at sea unsupported for long periods of time. A well-placed U-boat could sink a lot of ships.

By the time the ineffectiveness of British anti-U-boat measures was recognized, it was almost too late for Britain. The Admiralty had failed to appreciate just how vulnerable was the humble merchantman, and how deadly their covert adversary. By mid-1917 the mathematics were appallingly obvious—not for long could the Allies and the British Empire withstand the loss of over six hundred thousand tons a month. Should the trans-Atlantic supply train be weakened beyond a critical point, one that was rapidly being attained, the war would have been lost.

During World War I it took much too long to develop an effective response and on the balance sheet of history it must be confessed that the U-boat was not defeated; outsmarted perhaps, but at enormous cost to the Allies. For Great Britain her near defeat at sea, not by the dramatic clash of mighty dreadnoughts, but by the sinking of thousands of humble merchantmen, was one of the most carefully guarded, and most quickly forgotten, realities of the war.

During World War II the story was almost repeated, for the Allies were not prepared for a U-boat campaign. The lessons had to be relearned and, fortunately for the Allied cause, effective countermeasures were quickly developed, though once again at great human and material cost. While the U-boat was decisively defeated, it was a very close race.

Tarrant deals with the submarine campaigns and their several phases almost entirely from the German perspective. He gives a brief but lucid account of the political background that established the manner in which the campaigns were to be conducted. He examines how the German High Command viewed the effects of these actions and how they tried to keep the delicate balance between military effectiveness and world reaction and how these plans were ultimately frustrated. Using statistics to support his discussion the author outlines what the Germans intended to achieve, what actually transpired at sea and what the effect was on the war effort. These figures are neatly laid-out in tabular form and permit the reader to follow the progress of the campaigns easily. For anyone unfamiliar with the war at sea during the two world wars this will surely prove an eye opener.

The author has provided the reader and the researcher with an invaluable account of the disposition and composition of the U-boat flotillas throughout both wars. He has also given a complete, chronological record of the loss of every U-boat in both conflicts, a table of inestimable value to the naval historian. These things have been available to the astute researcher before but always scattered throughout a selection of works, never concentrated in one convenient volume as they are here.

The parts played in this drama by the planners, the code-breakers and the scientific community on both sides are very clearly covered without being overly technical. The development of the submarine itself is described only as necessary to support the account; this is a study of the use of the weapon, not the weapon itself. A detailed table of the technical particulars of each type and class of U-boat is

provided in the appendices. Only the principal personalities are mentioned by name in the body of the text but the exploits of the individual submarine captains are tabled, providing the reader with another useful record. The book is well worth having, if only for the wealth of data assembled in the tables and appendices. The photographs are an interesting collection; many have obviously been selected for their historical value and not for their photographic qualities.

This is an excellent book. The author has stuck to the essentials of his subject and as a result it is packed with well-researched, clearly-presented factual material that is easily absorbed and digested. There are a few statements with which I would take issue and some of the captioning on the photos is technically inaccurate but these are minor flaws compared to the very high overall standard.

J. David Perkins
Dartmouth, Nova Scotia

David Zimmerman. *The Great Naval Battle of Ottawa*. Toronto: University of Toronto Press, 1989. xiv + 209 pp., photographs, notes, bibliography, index. \$24.95, cloth; ISBN 0-8020-2687-7.

During World War II installation of high technology equipment in ships of the Canadian Navy was often eighteen months to two years behind ships under the operational control of the Royal Navy. This contributed to our escorts being less effective than their allied counterparts. The author examines the documented evidence associated with this delay in the application of advanced technology to naval operations. He concludes that it was a national failure.

The book describes the main organi-

zations involved in the research, development, production and installation of asdic and radar equipment. Names, meetings and decisions are included. The activities of Naval Service Headquarters, National Research Council and Research Enterprise Limited are described. Even the unheralded role of the Department of Mines and Resources in the production of crystals is mentioned.

The management problem of naval scientific liaison is thoroughly explored. There is recognition of the paucity of trained scientists with naval experience and naval officers with scientific training. The loan to the Royal Navy of many of the technically-trained, naval-oriented volunteers as radar officers continued even when their skills were required in Canada.

The author has made a contribution in providing details of some of the communication difficulties that occurred between military officers, scientists, public servants, industrialists and politicians in wartime. However, the contribution is blemished by the manner in which he dramatized conclusions by insensitive and inimical consideration of the documented facts as they related to the period. It is the accusations throughout the book of individual incompetence, poor leadership, conservatism, undue reliance on Admiralty recommendations and empire building that I found less than fully justified. There were consequences from legitimate but often conflicting issues that were not adequately considered.

The government of Mackenzie King desired visibility for Canadian Forces engaged in combat in World War II. The Canadian Navy was to support but act independently of the RN. There were consequences to this important demonstration of sovereignty. Was the lack of priority assignment of scarce equipment to

Canada a vindictive refusal to assist due to operational independence or was it simply reasonable management of scarce resources? By prewar policy, Canadian Naval Officers were trained and received their naval experience from the Royal Navy. Their peacetime activities were based on receiving operational, administrative and technical support from the Admiralty. There were consequences to this historical fact. Was it conservatism or poor leadership to seek information and assistance from a source you understood and trusted or was it simply prudent decision-making? The massive growth of naval and civilian institutions created by the war effort inherently carried the by-products of management and efficiency errors. There were consequences to these errors. Was it empire building when the automatic result of a job well done was an empire? Prewar scientific education in Canada was confined to the rigid boundaries of the academic disciplines of the day. The understanding of high technology equipments required mastering concepts from a variety of these disciplines. Communication even between competent scientists was difficult. Should naval officers who lacked an immediate technical understanding of radar be considered incompetent? The reader is left with the impression that individual incompetence made the timely application of technology to naval operations a national failure. Canadians did not have a monopoly on incompetence.

Many Canadian naval veterans sense that historians have not always treated the contribution of their navy to World War II with the esteem it deserves. *The Great Naval Battle of Ottawa* has contributed to this perception.

Carl W. Ross
Kingston, Ontario

B. Mitchell Simpson, III. *Admiral Harold R. Stark-Architect of Victory 1939-1945*. Columbia: University of South Carolina Press, 1989. xii + 326 pp., notes, bibliography, index. US \$24.95, cloth; ISBN 0-87249-596-5.

Through deprivation of available sources of information over very long periods, those who served at sea in World War II were without adequate knowledge of then current events, of information of a strategic or political nature, and were restricted to such tactical information as could be observed from their ships. For such persons, this excellent book provides many of the missing links. It opens in August 1939 with Stark at the pinnacle of his career, when he was Chief of Naval Operations. Already the enormity of the peril in which the world stood was obvious; undue optimism still prevailed but Stark remained fully aware of the danger to the United States in the Pacific—a danger which led to keeping the US fleet in Hawaii.

Stark was the most influential planner prior to Pearl Harbor. Though faced with isolationism, reluctance to add to the tax burden, pacifism and unawareness of the dangers of war, he stuck steadfastly to the dual objectives of making war *matériel* available to the allies and building up the American forces. Simpson paints a picture of a very able and likeable man: "a modest man, a rarity at the upper levels of a military organization" (p. ix), highly skilled in technical matters, an able shiphandler as a result of having commanded seven US Navy ships, kind, considerate, industrious, diplomatic and sensitive. Stark assumes heroic proportions early in the book.

Simpson also takes us through much of the strategic thought of the time with great skill. Doubts about Britain's capacity

to survive, combined with the collapse of France, made it possible for Stark to get through Congress his unprecedented proposal for an increase of seventy percent in spending on the US Navy. Early on, Stark agreed to the principle of "Germany first." By the spring of 1941, the United States was all but formally allied to Britain; Stark was already supporting planning for convoys in mid-December 1941, although there is nothing in the book about Admiral King's initial reluctance to institute the system when the United States became formally involved. Nevertheless, Stark was clearly concerned about the safety of the US fleet in Hawaii. At his instigation a message was sent stating that a declaration of war "may be preceded by a surprise attack on Pearl Harbor" (p. 106); in late November, he issued a warning to fleet commanders called "war warning" which advised that "an aggressive move by Japan may be expected within the next few days" (p. 110).

Later Stark became Commander of US Naval Forces in Europe, with his base in Britain. We are then led through the North African campaigns. On de Gaulle's seizure of St. Pierre and Miquelon, the author bravely asserts that the islands never transmitted information to Vichy France for German submarines, notwithstanding quite convincing evidence to the contrary to be found elsewhere. The submarine menace, the invasion of fortress Europe and planning for the period after victory are all well-covered. The last chapters give an enlightening overview of the American investigations of the Pearl Harbor disaster. Initially Stark was the butt of serious criticism by a Naval Court of Inquiry. Such courts generally show a distinct propensity to attach blame anywhere in order to remove it from the military organization involved; the Court

did just this but later a Congressional inquiry refuted its findings and vindicated Stark. This is a book which should be compulsory reading for those whose service in World War II was at sea.

L.C. Audette
Ottawa, Ontario

Marjorie H. Fletcher. *The WRNS: A History of the Women's Royal Naval Service*. Annapolis, MD: Naval Institute Press, 1989. 160 pp., photographs, appendices, tables, index. US \$24.95, cloth; ISBN 0-87021-997-9. Canadian distributor, Vanwell Publishing Ltd., St. Catharines, Ont.; \$34.50.

When Commandant Marjorie Fletcher took over as Director of the Women's Royal Naval Service (WRNS) in February 1986, she inherited a cupboard filled with documents and memorabilia. Although the collection included a number of books about the Service, Commandant Fletcher discovered that a factual account of its almost seventy-year history did not exist. To remedy this historical oversight, she set about compiling data on the Service's origins and continuing history. Word of Fletcher's research efforts spread and soon unexpected letters and photographs started to arrive from ex-Wrens detailing their reminiscences of Service life. Fletcher realized that these treasured records would be lost if they were not woven into the story. Accordingly, she traced the occasionally spectacular and frequently unrecognized role women played in Britain's defence in World Wars I and II, the Suez Crisis, Falkland Islands conflict, in Northern Ireland, and to the present.

World War I saw the formation of regular Women's Services in support of the Armed Forces. On 29 November 1917,

the Admiralty Office announced establishment of the WRNS under its first Director, Dame Katharine Furse, GBE, and for the war's duration the WRNS furnished personnel wherever the Admiralty required it, thus releasing men for sea service. The WRNS (the author does not say how many women served) demobilized in September 1919, for as Dame Furse maintained, there was "no room for women in the Navy in peacetime." It would take another generation for that view to change.

An Association of Wrens was formed during the inter-war years to help ex-Wrens stay in touch; publication of a magazine, *The Wren*, beginning in 1920 also contributed to that end. Fear of war brought re-formation of the WRNS under a new Director, Mrs. Vera Laughton Mathews, early in 1939. Under her guidance the WRNS grew to its highest strength of approximately 4,650 officers and seventy-five thousand ratings by September 1944. Women's perspective of their working life altered by the war's end. On 1 February 1949 the WRNS became a Permanent Service, separate from but integral to the Royal Navy. Henceforth, a career in the WRNS would be considered a worthwhile vocation in peace and war.

In content *77ie WRNS* is more descriptive than analytical, but Fletcher chronicles the Service's history superbly. The appendices include names from the WRNS Book of Remembrance and a record of ships and establishments worldwide where Wrens have served. The book should appeal to those interested in naval history and the twentieth century evolution of women's occupational roles.

David Pierce Beatty
Sackville, New Brunswick

Carol Popp. *The Gumboot Navy. Memories of the Fishermen's Reserve*. Lantzville, B.C.: Oolichan Books, 1988. 159 pp., appendices, photographs. \$24.95, cloth; ISBN 0-88982-091-0.

While hardly "history" in any normal sense, this little book is nonetheless a valuable addition to the Canadian naval and maritime library. It is, as the sub-title indicates, memories of life in the short-lived Fishermen's Reserve of the Royal Canadian Navy in the early days of the last war.

In 1981 Carol Popp was a cook in a west coast seine boat. There she heard older crewmen reminiscing about their days in the "Gumboot Navy," about which she, like most Canadians, knew nothing. This led to a research project and to this collection of yarns by the participants. As she admits, she does not vouch for the accuracy of the tales (and some are patently in error), but they are meant to be as accurate as the memories of those she taped allowed, after some forty-five years. And each represents the feelings, the reactions and the life of those days of the person quoted.

The real value of this book lies in the history of the Fishermen's Reserve that can be extrapolated from the short paragraphs which introduce each chapter, and the remarks of those interviewed. In 1938 Canada was almost totally unprepared for war. The RCN had less than two thousand men (and no women!), five destroyers and four minesweepers. The west coast in particular had no protection because the destroyers stationed there were earmarked for the anticipated Atlantic battle. For this reason, and at the initial suggestion of Lieutenant Commander Roland Burke, VC, DSO, RNVR, who was described by the Director of Naval Reserves, Commander E.R. Mainguy, as "a Clerk

Grade IV, employed as a Writer in the Reserve Training Office at Esquimalt" (p. 15), it was decided to form a special naval reserve of fishermen, with their vessels, to patrol the west coast in any emergency. Lieutenant Commander Colin Donald, RCN, went up the coast from village to village, recruiting fishermen into a loosely-organized reserve. If available, they were brought to the naval base at Esquimalt with their own boats, in which they slept, during February 1939. There they received some basic training in discipline, marching, small arms, and elementary naval skills; their skippers received training in navigation, command responsibilities, reporting and also a bit of marching and small arms. The service was entirely voluntary, and the crews remained with their own boats and skippers. They were an autonomous body, though they came under the RCNVR. The officers had their own rank system of "skippers" which tended to rankle when comparisons were made with the newly-arriving RCNVR officers, who often had no sea experience whatsoever, yet were ranked as "naval" lieutenants and sub-lieutenants!

With the outbreak of war in 1939 and the disappearance of the destroyers, the Fishermen's Reserve took on the responsibilities of patrols from Victoria and Vancouver to the Alaska Panhandle and beyond and out to the Queen Charlotte Islands. They were to report anything unusual, act as port guard ships, show the flag to reassure the outports that the navy was there, and await events. By late 1941 the FR consisted of seventeen vessels and some 275 officers and men. Then came the shock of Pearl Harbor and the very real possibility of the Japanese arriving on the coast. The first task of the Fishermen's Reserve was to impound the large Japanese-Canadian fishing fleet. Several FR

men were sorry to have to take this step, some with fellow-fishermen they knew well, yet it was an understandable stage, given the times and under the circumstances-Japanese submarines eventually appeared off the coast and there were landings in the Aleutians. The FR grew in those hectic days to forty ships and 475 men on patrols. The authorities, anticipating Japanese landings or raids on the coast, also set up a mobile commando force to be carried to any point threatened in one hundred wooden elementary landing craft, manned by five hundred of the Fishermen's Reserve. The patrol craft were the fishermen's own seiners, trawlers and other boats, plus twenty of the larger confiscated Japanese fishing boats. In addition to the FR crew, each carried an RCNVR wireless operator.

They were extremely proud of their Reserve, as the memorials indicate, and carried out their patrols to the outer islands even in the worst of weather, when the RCNVR in its new Fairmile Motor Launches were confined to harbour. After all, they had been doing this for a living for years before the war, and accepted their new role with aplomb. By early 1944, the Americans had pushed the Japanese back into their own waters, the risk was obviously minimal, and so the Fishermen's Reserve was disbanded in May 1944. The members were offered the opportunity to transfer to the RCNVR, but few took advantage of this. Most simply went back to fishing for a living. The reluctance to transfer arose from the comparison of their former service in the FR, where there was little to distinguish skipper-coxswain from crewman or cook, and each boat operated as a team, with service in the RCNVR, where crews would be split up to be used as required, and petty officers and officers would need official qualifi-

cations to be rated as such. This was hardly appealing, so only a small proportion went off to finish the war in distant climes. Some of the commando seamen did so, participating in landings in Europe.

The stories are full of seamen's tales of weather, long days of distant patrols, events where only skills gained from years of coastal experience saved the boat and her crew, orders that seemed to conflict with common sense, fun and games, and a job done to most persons' satisfaction. It is easy to read between Popp's lines to see the men as they were, as human beings faced with an unusual problem, solved in a highly imaginative manner. Not all decisions regarding the Fishermen's Reserve were correct or rational even in hindsight. But it is a very real credit that the naval hierarchy in Esquimalt and Ottawa showed sufficient imagination and skill in management to enable this unique force to fulfil its role when it was needed. Perhaps, given its amateur status, it is well that they were never directly tested by the enemy. But they very much saved the day for the five years they were really required. In short, this is an interesting tale, and a valuable niche filled, in our naval history.

Fraser M. McKee
Markdale, Ontario

Paul Ditzel. *Fireboats. A Complete History of the Development of Fireboats in America*. New Albany, Indiana: Fire Buff House, 1989. xxxv + 125 pp., photographs, plans, appendix, bibliography, index. US \$24.95, cloth; ISBN 0-925165-01-0.

A "fire buff is not someone who enjoys watching things burn, but rather someone who is enthusiastic about how fires are put out: the equipment, the method and, of course, the dedicated fire-fighters who

undertake this essential and dangerous task. Paul Ditzel is a real fire buff who has written many books and magazine articles on the subject. In this book he tells the story of the development and adventures of the purpose-built fireboats.

An ordinary manual pump on a barge was the first form of fireboat. By the 1870s special craft were in use, reaching a high degree of sophistication in the 1890s. *Fireboats* traces their development, using numerous illustrations and plans. This is a very military sounding subject: fireboats are armed with water-cannon and truly go into battle against the flames, while their crews not infrequently suffer casualties. The contribution of fireboats during major ship and waterfront fires in the United States is well covered, including the unsuccessful attempt to save the burning *Normandie* in New York in February 1942 and the fire-fighting tug *Hoga's* efforts to help the USS *Nevada* and other vessels during the attack on Pearl Harbor on 7 December 1941.

Modern fireboats, many of which are described, can divide their available horsepower between propulsion and pumping, as required, and can project foam to quell oil fires as well as water (the Canadian Navy has two of this type). The latest development is the small, fast catamaran, or ground-effect type. The book includes many excellent action photos, as well as illustrations of virtually every US fireboat, past and present. Although full of information, it is limited in scope, being confined to American vessels built for port fire departments or similar authorities. Some Canadian events are mentioned, especially if US fireboats assisted. One exception to the generally American theme is the story of the London fireboat *Massey Shaw*, which performed distinguished service at the evacuation of Dun-

querque, rescuing 646 soldiers and sailors.

The author of *Fireboats* has set out to describe a specific type of craft, the American fireboat, and has done it very well. The subject, however, is limited. Good as the book is, I do not think it will have a very wide appeal, except for the fire buff fraternity, outside the United States.

C. Douglas Maginley
Sydney, Nova Scotia

Michael S. Robinson. *The Paintings of the Willem Van de Velde*. Greenwich: National Maritime Museum, 1990. Vol. 1: xxvi + 566 pp., 19 col. plates + b & w. Vol 2: 586 pp. + 43 pp. appendices and indices, 27 col. plates + b & w. f 195, hardback in a slipcase; ISBN 0-85667-352-8. Distributed in USA and Canada by Rizzoli International Publications Inc., 300 Park Avenue South, New York, NY 10010.

From before the last war until his retirement in 1970 as Keeper of Pictures at the National Maritime Museum, Michael Robinson devoted his professional life to a study of the work of the two Van de Velde held at Greenwich. In 1958 and 1974 the first two volumes of his definitive catalogues of the drawings of these two artists appeared. These were followed in 1979 by co-authorship in the production of a three-volume catalogue of the collection of Van de Velde prints held in the Boymans-Van Beuningen Museum in Rotterdam. In retirement Mr. Robinson devoted his energies to the compilation of a worldwide catalogue of the paintings and *grisailles* of the two artists. But for a coincidence, this monumental work would probably have remained unpublished. Fortunately the Royal Dutch Petroleum Company (Shell) was seeking a suitable way to celebrate its centenary. Being attracted to

the concept it agreed to underwrite the publishing costs. The result is two large volumes containing everything an art or naval historian is likely to want to know about the pictures. More than two hundred and fifty copies have apparently been sold already; not only is Royal Dutch Petroleum likely to cover its costs but the museum should benefit to the tune of £50,000.

Over eight hundred paintings are categorised thematically; e.g., Chapter 1, "Calm and Light Breeze, English;" Chapter 5, "Moderate to Fresh Winds, Dutch;" etc. Each picture is represented by a small black and white photograph, followed by a full and detailed description of the painting, where it can be found, its provenance, references and details of where it has been exhibited. This wealth of information is rounded off with chapters depicting contemporary coats of arms, a guide to dating maritime paintings 1600-1801 and nine pages of line drawings depicting seventeenth century vessels of all types.

This is a truly remarkable work of scholarship which, although beyond the means of the average person, cannot be ignored and is unlikely to be surpassed.

Norman Hurst
Coulsdon, England

Frank Mastini. *Ship Modeling Simplified-Tips and Techniques for Model Construction from Kits*. Camden, Maine: International Marine Publishing, 1990. x + 162 pp., Italian-English dictionary, glossary, bibliography, index. US \$17.95, paper; ISBN 0-87742-272-9.

Over the last few years, we have seen an increase in the number of books on ship modelling. Some have been useful, even indispensable, while others have fallen

short of our expectations. Unfortunately, Mastini's book fits this latter category.

Mastini states in his introduction that this book is directed at inexperienced modellers; as the title indicates, the focus is on kits. He also indicates that his twenty-five years of experience has included helping neophytes "grapple with their first projects." A few pages later he addresses the problem of selecting the right kit and suggests looking "inside the box before you buy, for the quality of the fittings should help guide your selection and may even decide the issue." Someone of his experience should know better! Most beginners do not know what to look for when it comes to quality in kits, and it would have been better to suggest that the novice ask an experienced ship modeller for assistance.

There are many ways to construct an accurate ship model even from a kit. But Mastini's methods are not only inaccurate but also too numerous to cite in a short book review. An example of his use of nautical terminology appears on page 47; Figure 20 depicts a gun emplacement in which he describes the "breeching rope" which should be twisted around "the back pin on the gun barrel." Of course, he means the cascabel, but that's like referring to a ship's bow as "the pointy end." Wherever rigging is shown in sketches, rounded blocks are drawn. But the four partially stroped blocks in the photo on page 80 are the square, obnoxious things for which kit manufacturers are famous! His remark on page 94, that "it's quite impossible to find fabric that is thin enough to be in scale with your model," is totally unacceptable, and suggests that Mastini has considered only the poor quality material supplied in kits.

Most experienced modellers agree that when building from a kit, a certain

amount of modification is necessary to achieve accuracy; with many kits, there are a great many changes needed to bring the model up to proper standards. As someone once said, "if something's worth doing, it's worth doing well." Unfortunately, the book is riddled with incorrect ship model building practices and inadequate nautical terminology. His use of quotations is also rather disorganised. The chapter on "Building the Hull" begins with a quotation from Lever's *The Young Sea Officer's Sheet Anchor, 1819*: "The Topmost Studding Sail is bent to a Yard" (p. 18). This would have been better placed with the rigging section. One saving grace of Mastini's book is the Italian-English dictionary starting on page 115. The directions found in the kits manufactured in Italy are mediocre at best, and this dictionary may be of value to those who build from them.

The bibliography on page 155 lists only six books. However, Mastini would do well to consult three of those listed, namely H.I. Chapelle, James Lees, and Darcy Lever, in order to better familiarize himself with proper ship modelling techniques and nautical terminology.

Robert W. Cook
Whycocomagh, Nova Scotia

John Franklin. *Navy Board Ship Models 1650-1750*. Annapolis, MD: Naval Institute Press, 1989. vi + 186 pp., photographs, drawings, colour plates, tables, index. US \$34.95, cloth; ISBN 0-87021-442-X. Canadian distributor, Vanwell Publishing Ltd., St. Catharines, Ont.

Seventeenth and eighteenth century "Navy Board" models are acknowledged as the finest products of the ship modeller's art. They are also among the most important contemporary "documents" concerning

English warships of that era and have been extensively used as such. John Franklin's book is focused on this latter facet; it is about ships as much as models. No instructions for copying these masterpieces are provided.

The book is built around detailed and copiously illustrated descriptions of twenty-six selected models. These accounts are excellent, though they cannot substitute for the original objects. Moreover, no list of surviving models is offered. Thus, the descriptions are not a comprehensive catalogue, although they are a step toward one. There is some inevitable repetition among the twenty-six accounts but it is less marked than the differences between the ships. These pages should be sufficient to disabuse anyone who supposes that all sailing warships were simply variants on the theme of Nelson's *Victory*.

The introductory chapters and appendices are of much broader relevance. Before "reading" these models as "documents," it is important to know which ships they represent, who built them and why. Franklin makes the first serious attempt to explore such questions, though he is often unable to provide conclusive answers and sometimes fails to develop his arguments to their logical conclusions. Thus he discards the idea that the models were preliminary design studies prepared for Navy Board approval (though some of the earliest ones clearly were) but suggests no clear alternative purpose and still proceeds to interpret them as though they were "official" representations. Although there has been no previous analysis of these models of comparable width or depth, these are not entirely uncharted waters and it is unfortunate that few references to past discussions are given.

These chapters also draw on the model descriptions to summarize the deve-

lopment over time of salient features—the forms of channel braces or quarter deck ladders, for example. Amidst this, Franklin provides what is surely the best available discussion of the structures of seventeenth century ships. He also argues convincingly that shipwrights built large ships to the draughts of smaller ones simply by reading dimensions off the drawings at a smaller scale. On the other hand, some of his account of full size practice places more weight on the model evidence than its fragile structure can bear.

This book is essential reading for curators of model collections, for historians of English ships and for marine archaeologists. However, it is a specialized work that may overwhelm general readers; there is much technical terminology but no glossary to aid those who do not know a carling from a footwale.

Trevor J. Kenchington
Musquodoboit Harbour, Nova Scotia

Paul W. Bamford. *Privilege and Profit: A Business Family in Eighteenth Century France*. Philadelphia: University of Pennsylvania Press, 1988. xxv + 347 pp., maps, illustrations, notes, bibliography, glossary, index. US \$45.95, cloth; ISBN 0-8122-8135-7.

This is not a book for everyone interested in naval history for it deals not with the ships that made the history but with the materials that made the ships of the age of sail. Many of us have probably wondered where these materials originated and how they were brought to shipyards. Professor Bamford goes into many phases of this process, telling the story through a history of a French family enterprise. It centres around the person of one family member, Pierre Babaud de la Chaussade, detailing

his career and business dealings from the early eighteenth century to the immediate pre-revolutionary years. Pierre became a junior partner in the business in 1733 and later a full partner. Born in 1706, he served an apprenticeship in the timber business, learning the complicated and labour-intensive processes of acquiring land for trees, their cutting and hauling to rivers for rafting, negotiating tolls for this transportation and paying the rafting crews. Because of the need for large trees and huge quantities of wood the rafts themselves were usually added to during their trips down river on their way to the sea. Concurrently with the timber operation, forges were acquired and developed for manufacture of anchors and iron fittings required for shipbuilding. Both phases of the business were successful for a span of fifty years or more, although how successful in terms of competitors is not mentioned. The profits the family enjoyed under the royalist regime made it suspect after the revolution, and the business underwent many changes. Pierre died in 1792, having retired some years earlier. Although the book deals largely with family relationships, it also provides some interesting historical details of French naval growth during the pre-revolutionary years. Those interested purely in naval combat may find this approach unenlightening, but it does help explain various strengths and weaknesses that are part of the overall picture. Not only is this volume definitively and excellently researched, it is a beautiful example of the expertise of the University of Pennsylvania Press. It is expensive, but well worth the price for those who value good books.

William P. Avery
Bethel Island, California

Patrick Crowhurst. *The French War on Trade: Privateering 1793-1815*. Aldershot, UK and Brookfield, VT: Scolar Press, 1989. ix + 251 pp., bibliography, index. US \$49.95, cloth; ISBN 0-85967-804-0.

A follow-up to Crowhurst's *The Defence of British Trade, 1689-1815*, this study looks at French privateering activities following the French Revolution to the end of the Napoleonic wars. It is meticulously researched and contains a wealth of detail, particularly impressive when one realizes that France lost much original documentation during the Commune fires of 1871 and the two world wars of this century.

Traditionally, privateering has always been the resort of a lesser maritime power. In the case of post-revolutionary France, it was clear that the French navy was too weak to challenge Britain's sea-going supremacy. In fact, as the author points out, the inability of the French navy to defend its own colonial trade in the mid-eighteenth century contributed to the eventual collapse of French commerce.

Crowhurst has organized his material into six chapters, each one dealing with an aspect of the *guerre de course* and its effect on the French commercial community. The lack of complete records restricts the author's ability to paint a full picture of French privateering activity on a national scale. We do not know how many letters of marque were issued for each conflict, how successful the corsairs were, or how their efforts compared with British privateers of the same period. However, Crowhurst's skilful use of the records he did obtain allows him to evaluate individual cases and to make an informed judgement. For example, he uses the case of Nantes merchant Benoit Bourcard, who invested in corsairs in both wars, to argue that the post-revolutionary wars was more lucrative

for investors than the Napoleonic War.

Whereas Americans seemed able to overturn their political system while carrying on business as usual, the French Revolution came at a time of declining economic conditions, falling productivity and rising debt. In 1790 paper *assignats* became legal tender; subsequent inflation made them almost worthless. Once-wealthy merchants faced heavy taxes from the revolutionary government and denunciation from fellow citizens. They had little incentive to invest in commerce-raiding. When war was finally declared against Britain in 1793, efforts were made to encourage privateering. Dunkirk and St. Mâlo, those ports with the longest history of privateering, sent out forty-nine and twenty-three corsairs, respectively, along with dozens of others. But periodic government interference in the practice meant privateers made few fortunes. One of the interesting aspects of this period was the fact that privateering ventures were not organized by the major commercial leaders in their communities as they were in maritime British North America. Rather, it was the smaller coastal traders and members of the merchant marine who organized such ventures.

While the revolutionary war flowed into the Napoleonic wars, Crowhurst's simultaneous treatment of the two conflicts in each chapter creates some confusion. Since French corsairs appear to have been less numerous, less successful, and less economically effective during the Napoleonic wars, their activities might better have been consolidated into one chapter. Also, Crowhurst's final chapter on French prisoners-of-war seems slightly out of place in the overall economic framework of the rest of the book. The relevance to privateering is minimal since the author does not make the link between

the imprisonment of sailors and the resulting reduction in crews available for corsairs. Although the appendices that relate to it are interesting, the chapter does not enhance the economic argument either for or against the war on trade.

Crowhurst's book opens up a fascinating area of historical research. Unfortunately, the publisher does not do it justice. The book is poorly-designed and could use some maps and illustrations to alleviate the visual tedium of page after page of tightly-printed text. The presence of numerous typographical and editorial errors undermines the credibility of the text. No reader of maritime history should have to put up with a "navel patrol". Before this book is reprinted, I would hope it would be thoroughly proofread. The bibliography is extensive and impressive, but the index covers every chapter except the conclusion, leading the reviewer to suspect that the conclusion may have been added later. This too should be corrected in reprint.

The *French War on Trade* is an important and badly needed study of the activities of French privateers of the period. Despite typographical problems, it makes a significant contribution to the growing literature on privateering.

Faye Kert
Ottawa, Ontario

David J. Starkey. *British Privateering Enterprise in the Eighteenth Century*. Exeter: University of Exeter Press, 1990. ii + 344 pp., maps, plates, tables, bibliography, index. £25, cloth; ISBN 0-85989-312-X.

This is a well-structured study of the subject, with three introductory chapters on origins, typology, and risks and rewards, followed by a chapter each on the five wars between 1702 and 1783 within their

historical setting. Various types of commissioned ships are identified ("pure" privateers, large deep-water and smaller "channel" ones, Letter of Marque trading ships and specialists such as those belonging to the Hudson's Bay and East India Companies), with the input of each regional port calculated by numbers and tonnage. The output (i.e., prizes taken) tabulated year by year, is compared with naval successes and allocated to each port; examples are given of various prizes, usually the richer ones, and of the involvement of company vessels. Starkey concludes with "constraints and determinants," the tensions between private and public interests - mostly to do with hostile naval attitudes towards this privately-financed volunteer force—and some conclusions, followed by eight appendices. The whole is based on his M.A. thesis and Ph.D. dissertation at Exeter University (1985), to which he has added much subsequent research.

Since it is about British privateering, little is said about colonial endeavours. Losses of allied shipping, privateers and armed traders are not calculated, while recaptured British shipping, a not unimportant element, gets only a footnote. It is a product of the Exeter school of aggregating, defining and drawing conclusions, of which some are based on the limitations of the sources, while others are arguable. In comparing privateering successes with those of the navy Starkey uses two sources (HCA 34 and ADM 43) which are very incomplete. The first lists only sixty percent of all prize instances contained in HCA 32, a source which, because of its size, researchers tend only to sample, as Starkey does, for richer prizes. This methodology therefore tends not to examine the many smaller prizes which offered little or no profit and yet had strategic importance,

since one objective was to blockade or interrupt French coastal traffic and demoralise the enemy by every means possible. The other source, ADM 43 (Head Money Vouchers), leads him to argue that privateers rarely attacked enemy ships of force. This is unfortunate; although he later inserted footnotes and a final paragraph in Appendix 1 to warn that this source is very incomplete, the main text creates an impression which underates the privateering effort.

His search for profitability leads him to indicate that the less-valued French ships outward-bound to Canada and other colonies were only "incidental" targets (p. 146) compared with those returning with richer cargoes. But their real importance lay in cutting lines of communication and essential supplies, without which the defence of those outposts was jeopardised; profitable or not, they were strategically valuable targets and privateersmen thus helped to contribute to the fall of Louisbourg, Canada, Guadeloupe and Martinique in the Seven Years' War. The interception of coastal traffic, including essential supplies for French naval bases, requires much more research. As a primary incentive, patriotic endeavour at no expense to government gets little attention. The definition of smaller privateers as "Channel" ones is geographically misleading, since many operated far south of Brittany and even off the Spanish coast. The wealth of material in French archives (*Amirauté* as well as much official correspondence) has not been tapped. The disdain in some naval quarters—but not all—is not seriously challenged. Over-concentration on profitable prizes and too many sentences that begin: "It is (quite) clear that..." combined with the use of defective sources may mislead some readers and feed a new mythology. Real

costs and losses are going to be harder to come by despite some of his global estimates and examples. A thorough analysis of HCA 32, containing some 1,855 docketts for, say, the 1756-1763 war, would produce a more definitive base; it might also throw up some happier instances where the navy and privateers worked together in harmony to their mutual benefit and to the confusion of armchair critics. The index, very helpful at first sight, omits many British ships and includes only one French prize.

The excellence of this book lies in the research that has gone into it, its orderly structure and its readability. Most of all it opens the way for even more detailed work to be undertaken at national, regional and local levels. It will remain a standard text, but one on which other scholars will need to work, challenging some tentative conclusions, expanding others and turning to archival sources that have only been sampled or that may yet come to light in order to place this fascinating and highly complex subject more firmly into the economic, maritime and social history of this period. While it is not the last word, we are indeed deeply indebted to Dave Starkey.

Peter Raban
Market Harborough, Leicester

Spencer Tucker. *Arming the Fleet: U.S. Navy Ordnance in the Muzzle-Loading Era*. Annapolis, MD: Naval Institute Press, 1989. xvii + 308 pp., illustrations, tables appendices, index. US \$42.95, cloth; ISBN 0-87021-007-6. Canadian distributor, Vanwell Publishing Ltd., St. Catharines, Ont.

The subject of this book, the development of United States naval ordnance from the Revolution to the Civil War, is an import-

ant and difficult one. Important because the small American navy of this period sought to balance the overwhelming strength of the French and British fleets by mounting unusually heavy calibre weapons in its ships. The success of this policy was demonstrated by the achievements of American warships in the Quasi-War with France in 1798-1800, and more particularly by the victories gained by American frigates in single-ship actions against their British counterparts during the War of 1812. The difficulty of the subject lies in the diversity of armament in US service. The author argues that until the end of the War of 1812 the USN still depended on imported foreign ordnance to augment the limited production of American arms manufacturers. Thereafter, erratic shifts in Congressional funding for the navy, combined with rapid changes in technology as all the major powers adopted heavier shell-firing guns, ensured that a profusion of types were in service.

The author laboured under special advantages and disadvantages. Although a professional historian, he frankly admits being a specialist in neither military nor technological history. His purpose in undertaking this project was to assemble and shape a lifetime of research done by his late father, an army officer with an evidently passionate interest in naval ordnance. It is pleasant to be able to state that this family collaboration is successful—the prose is clear, the organization is logical and the author avoids oversimplification and generalization. Throughout, he demonstrates a respect for the complexity of the material and the maddening ambiguity of the records that could only derive from the decades and surviving examples of memorial guns or museum pieces across the United States, not normally exploited by academics. But then it is

quite evident that a researcher into early American naval ordnance must go beyond the documentary sources to the material artifacts themselves.

This book contains a wealth of technical information that is carefully set in context. Three useful introductory chapters summarize the development of naval ordnance prior to the American Revolution, describe in detail how guns were mounted and served at sea, and, most importantly, explore the development of American gun foundries from the colonial era to the Civil War. Within the four, long chronological chapters that comprise the rest of the book, the author carefully outlines the salient features of US naval policy and particular warship building programmes that dictated ordnance acquisition. Perhaps the most important strength of this book is that the author does not leap forward, like so many others, from each major technological advance to the next. Instead, he steps back from time to time to survey—as much as the records allow—the guns that were actually in service at the time.

Similarly, the author successfully explores the sources of innovation, most notably in the competitive influences of the British, American and French services upon each other. He traces the development of the shell-firing gun that became the leading type in the period 1820-1850, and points out that the British and American navies had been experimenting with this weapon as early as the 1790s. Paixhans, the French naval officer commonly credited with this innovation, emerges as essentially a successful popularizer. Moreover, the Paixhan's shell guns were rather light, short-ranged weapons that were employed as auxiliaries to the traditional primary armament of short-firing long guns. It was the American John Dahlgren who developed the shell gun into the prin-

cipal naval weapon with his superlative, heavy, long-range weapons.

Dahlgren's powerful, dependable weapons formed the backbone of the Union naval ordnance inventory during the Civil War. Tucker suggests that with these excellent guns the American service did not have a pressing need to rush headlong into the acquisition of the new rifled guns with heavy elongated shells that were being developed in Britain and Europe in the 1860s and more slowly in the United States. I wish the author had elaborated on this point. His chapter on the Civil War does treat rifled guns, but not in the same depth as his earlier analysis of smooth-bore technology.

This, however, is a minor complaint. The focus of the book is clearly smooth-bore ordnance, and on this subject it is a gold mine of detailed and generally well-digested information. The beautifully reproduced line drawings, most done by the author's father, deserve special mention and enhance a fine piece of work.

Donald E. Graves
Ottawa, Ontario

Francis Duncan. *Rickover and the Nuclear Navy: The Discipline of Technology*. Annapolis, MD: Naval Institute Press, 1990. xxvii + 374 pp., photographs, appendices, bibliography, index. US \$28.95, cloth; ISBN 0-87021-236-2. Canadian distributor, Vanwell Publishing Ltd., St. Catharines, Ont.

Admiral Hyman George Rickover, father of the United States Navy nuclear program, became a legend in his own time. He graduated from Annapolis in 1922. In 1946 he led a team of naval officers to study the Manhattan Project atomic technology. He became the head of the

nuclear propulsion group in the USN. Concurrently he was a member of the Atomic Energy Commission and Director of their Division of Naval Reactors. From 1953 when his friends in Congress forced the navy to promote him to flag rank rather than let him retire, he was held to be indispensable. Finally, to quote Duncan, "at the end of 1981 John H. Lehman, secretary of the navy, abruptly announced that Rickover would not be reappointed for 'actuarial' reasons" (p. 291).

It is probably impossible, and will remain so for at least a generation, to have a neutral or ambivalent opinion about Rickover; either you like him or hate him. The author joined Rickover's staff to begin research for this book in 1974. Not surprisingly, therefore, the book is friendly. It ignores areas of controversy. For example, Lehman's decision to retire Rickover "for actuarial reasons" appears to have been motivated in part by Rickover's hazarding of the "688-class" nuclear attack submarine *La Jolla* during builder's trials. Duncan makes no reference to it.

A more serious omission is the lack of discussion about the position of Rickover's empire within the larger context of the USN. Rickover believed the end justified the means, including his autocratic and vindictive personnel practices, or his own wilful insubordination in the naval hierarchy. His "end" was the creation of a superlative nuclear navy. Over the thirty years that he ran the nuclear program this objective varied in importance within overall US defence and strategic policy. It would appear that Rickover was oblivious to the changes in relative importance of his end. Duncan omits any substantive discussion of American strategic objectives or requirements. The "high-low" mix issue, whether the USN should have a small

number of expensive, capable, nuclear ships, or a large number of relatively inexpensive, smaller, marginally less capable ships, is discussed only in the context of the jeopardy or security of the nuclear program.

To these criticisms the author might well reply they are outside his defined subject. His topic has been very carefully limited, and is accurately reflected in his sub-title, "The Discipline of Technology." It is an important component of the nuclear program, and Duncan's book should be useful contribution to a discussion of USN and US nuclear policies. Rickover was fully aware both of the awesome power of nuclear energy and of the enormous consequences of any error. He therefore demanded that at every level of a project *an individual* was clearly responsible and could be held accountable by a *legible* signature that the necessary work was complete and correct. Standards were just that, minimum acceptable levels, not lofty remote ideals. This was particularly important in submarine construction. Duncan provides an interesting account of the difficulties surrounding the USS *Thresher* building, loss, and inquiry. It is a sad comment on today's society if any of Rickover's unpopularity was due to his requirement of clear individual responsibility in place of bureaucratic anonymity, or to his insistence on total compliance to all construction specifications. Rickover has been accused of conservative reactor design. Duncan answers that he was an engineer, not a developer. His job was to provide proven and reliable systems for submarines and ships, not to pursue costly, theoretical research programs.

Compliance to Rickover's standards was expensive; there was no room for compromise. In addition, he believed implicitly in the necessity of the USN main-

taining a nuclear superiority over the USSR. These views led to budget conflicts. In pressing his case Rickover repeatedly went outside the naval chain of command and used his AEC position to appeal directly to Congress. Duncan's description of Rickover's battles with the navy and Congress is one-sided. However, it does provide an interesting perspective on the American policy process.

One great strength of the book is the extensive reference made to official documents. Future scholars, using these notes as an introduction to the nuclear archives, will determine whether this book is merely useful today or has risen above the limitations of Duncan's close personal involvement with Rickover and will stand "the test of time."

William Glover
Ottawa, Ontario

Robert Waring Herrick. *Soviet Naval Theory and Policy: Gorshkov's Inheritance*. Annapolis, MD: Naval Institute Press, 1989. xiv + 318 pp., notes, glossary, bibliography, index. US \$23.95, cloth; ISBN 0-87021-677-5. Canadian distributor, Vanwell Publishing Ltd., St. Catharines, Ont.

Soviet Naval Theory and Policy is an encyclopedic recitation and analysis of the leading theoretical studies of naval warfare published in restricted and unrestricted Soviet naval and defence journals for the period 1919 to 1955. It is clearly a labour of love; detailed, repetitive, richly footnoted, plodding in places, and insightful. Its repetitive qualities are justified in many instances because theoretical and semantic subtleties abound and Herrick guides his reader skilfully through thickets of mind-numbing nuances. What makes *Soviet Naval Theory and Policy* even more valu-

able is that it gives the reader access to a wide range of Soviet naval literature which, by virtue of language or accessibility, is not readily available to most students of naval affairs. Indeed, as Herrick points out, the Soviet authorities have attempted to prevent any copies of *Morskoi Sbornik (Naval Digest)* for the period 1948 to 1960 from reaching the west. It was during that time that many of the theoretical foundations of contemporary Soviet naval policy were laid and a significant component of our fragmentary knowledge of naval debates within the Soviet Union in the mid-1950s is based on a handful of *Military Thought* articles that the ill-fated Colonel Oleg Penkovskiy managed to smuggle to the west.

It is entirely appropriate that an analysis of Soviet naval theory encompass what Fleet Admiral Sergei Gorshkov called a "sharp struggle of opinions" (p. 99), a dialectical struggle in the Marxist tradition between two competing schools and the emergence, by a process of synthesis, of an interesting and politically astute amalgam. In the immediate post-revolutionary period from 1918 to 1928, the so-called Old School of naval theory held sway. It espoused Mahanian and Corbettian maxims and advocated the achievement of the classical command of the sea (*gospodstvo na more*) through the destruction or blockade of the enemy navy. Implicit in this approach was the need for a fleet of capital ships centred on the battleship. By the late 1920s, however, a competing school of thought, the Young School, began to achieve prominence. Its proponents argued, *inter alia*, that earlier concepts of command of the sea were merely expressions of imperialist expansion and that the inconclusive nature of the Battle of Jutland as well as the appearance of submarines and aircraft had rendered

those concepts invalid. What the Young School was arguing for was a variation on Aube's "Jeune Ecole"; like so much of the theoretical discussion contained in *Soviet Naval Theory and Policy* it constitutes an *apologia pro vita sua* for an inferior coastal navy, severely restricted by economic considerations, the inadequacy of Soviet industry, and the doctrinal and practical dominance of the army and the party.

Many of us are well acquainted with the factors that shape naval theory and policy, yet relatively few have probably had occasion to reflect upon the dangerous and unpredictable hall of mirrors in which Soviet policy was formulated. As Herrick demonstrates, arguments by indirection, surrogate examples, and Aesopian communications were standard fare in Soviet theoretical reportage as commentators sought to zig and zag in keeping with their megalomaniacal leader's latest version and the dictates of an army-dominated high command. When Stalin became convinced by 1938 of the necessity of building battleships, a number of Old and Young School exponents accused of trying to weaken the navy's combat power went to the wall. As one bluntly worded article put it, "the glorious NKVD [the secret police] has cut off the head of the snake" (p. 93). Abject recantations, dazzling theoretical gyrations, and appointments with the firing squad were the order of the day as theoreticians tried desperately to adjust to the latest *volte face*.

Out of the struggle between the Old and Young School emerged the Soviet School which, having analyzed Hitler's Norwegian campaign and US carrier operations in the Pacific, made a virtue out of necessity by arguing that command of the sea was not an end in its own right but a means to an end (usually retailed with a careful eye to what the political market

would bear as a way of enhancing army coastal flank operations) and that there were various gradations of command. The hallmark of the Soviet School was limited command of the sea, that is to say the ability to exert authority over a limited area for just as long as it took to execute a successful operation.

At the heart of limited command was an unrealized naval ambition, the development of a bluewater navy. In fact, a close reading of the theoretical literature suggests that there was an elastic quality about command of the sea definitions. The navy tested the army's resolve constantly, hoping against hope to acquire a set of independent naval missions that would justify the construction of a powerful fleet based on attack carriers. The army and the party set their face against such theoretical casuistry with equal determination.

After Stalin died, Khrushchev and Zhukov embraced a neo-Young School approach, advocating submarines which seemed more cost-effective and invulnerable. Considerable store was also placed in the force-multiplication potential of tactical nuclear weapons against NATO carriers. The principal theoretical piece from that period was Shavtsov's 1955 analysis, characterized by Herrick as "an extended and exceptionally clever formulation of the command of the sea dispute." (p. 245). While genuflecting toward submarines, Shavtsov ingeniously advanced arguments in favour of an "active" or tactically offensive fleet-in-being. Thus, like naval bureaucracies around the world, the Soviet Navy tried to weather oscillations in approved policy while advancing elastic formulations that would enable it to realize its long term goal, Gorshkov's big ship navy.

James A. Boutilier
Victoria, British Columbia

Elizabeth Riddell-Dixon. *Canada and the International Seabed: Domestic Determinants and International Constraints*. Kingston & Montreal: McGill-Queen's University Press, 1989. xi + 225 pp., map, photograph, figures, tables, bibliography, index. \$32.95, cloth; ISBN 0-7735-0694-2.

In this political scientist's case study of the process of Canadian foreign policy formulation for the most contentious issue in the Third United Nations Conference on the Law of the Sea (UNCLOS III), the author's objective was to explain why the negotiation of a comprehensive and universally acceptable law of the sea treaty, coupled with the safeguarding of Canada's land-based nickel-mining industry against subsidized competition from the deep seabed, was given top priority.

When Arvid Pardo, Malta's ambassador to the United Nations, made his visionary declaration to the General Assembly in August 1967, proclaiming the deep seabed and its resources to be "the common heritage of mankind," he was referring mainly to polymetallic concretions of manganese, nickel, copper and cobalt that form naturally on the ocean beds and were first recovered in 1872 by the Royal Navy scientific ship, HMS *Challenger*. The principle of "the common heritage of mankind" became the cornerstone for subsequent negotiations on the law of the sea, in the United Nations Seabed Committee, 1968-73, and in UNCLOS III, 1973-82.

The positions of the industrialized countries and those of the developing states in Committee I, charged in the Seabed Committee and the Conference with establishing an international legal regime to regulate exploitation of the resources of the seabed beyond national jurisdiction, were directly opposed: north versus south. The former wanted private companies to

mine the seabed under a regime of free enterprise. The position of the developing countries was that free enterprise would preclude their participation; therefore the development of the seabed should take place only under the authority of an international body, the Enterprise (the operating arm of the proposed International Seabed Authority), to ensure that less-developed states could fully participate in mining the seabed and benefit financially and technologically from the exploitation of its resources.

Initially, Canada was concerned that the "common heritage" principle might limit the jurisdiction of a coastal state over its continental shelf. Canada also wished to ensure that its companies would be able to take part in exploiting the resources of the Area—the international seabed; by 1974 both INCO and Noranda were members of multinational consortia formed to explore and exploit the seabed. Later—by 1975—Canada's aim was to secure an international agreement that would protect its land-based nickel-mining industry from market disruption when seabed mining began, possibly as early as 1988. Being the world's largest exporter of nickel, Canada co-operated with other land-based producers, most of which are developing countries. Their goal of obtaining an effective production formula was strongly opposed by Canada's traditional allies, the United Kingdom, the United States, and the Federal Republic of Germany.

Riddell-Dixon explains, in appropriate detail, how the policy decision on seabed mining was determined, approved, and implemented. In chapter 4, on the "Federal Government Actors," she makes the point that cabinet ministers held the ultimate authority for the decisions taken, but that it was the public servants, in particular the lawyers in the Legal Bureau of the

Department of External Affairs, who were the sources of nearly all policy positions or decisions and were responsible for their implementation. That is to say, in practice public servants played the lead role in formulating and implementing Canada's policies on seabed mining.

This book should appeal to those who are interested in the politics of foreign-policy formulation in Canada and to those who may wish to probe more deeply into the most controversial issue facing the Law of the Sea negotiators. Elizabeth Riddell-Dixon has given us a first-class analysis of the policy-formulation process on the seabed mining issue.

Allen D. Taylor
Cantley, Québec

David L. VanderZwaag and Cynthia Lamson (eds.). *The Challenge of Arctic Shipping: Science, Environmental Assessment and Human Values*. Kingston & Montreal: McGill-Queen's University Press, 1990. xii + 282 pp., maps, figures, tables, bibliography, index. \$34.95, cloth. ISBN 0-7735-0700-0.

These eleven essays are highly informative on many aspects of shipping problems in a hostile environment. The editors have made a good selection of topics with considerable concentration on environmental assessment requirements. The shipping industry is faced with a plethora of government regulatory agencies, Inuit organizations and do-gooders, all with concerns about protecting the Arctic environment.

As described, the Arctic Pilot Project (APP), which was designed to move liquid natural gas (LNG) by super ice-strengthened tankers from the High Arctic to southern Canadian ports, was subjected for years to a barrage of lawyers who

knew little about the Arctic, from a multitude of environmental agencies, all of which had an axe to grind. The National Energy Board hearings cost millions of dollars to the taxpayers and the proponents of the venture spent \$60 million to convince the opposition that their project was safe. The APP finally died as world markets for Arctic gas dried-up and the project became uneconomical. However, the environmental assessments (over seven hundred exhibits) provided much basic information for the future of Arctic shipping and protection of ice-infested waters.

Annually, the Arctic communities are supplied by ships with general cargo and fuel in hazardous waters. Shipowners take every precaution to avoid oil spills but inevitably these can happen due to ice damage to a tanker or ice breaking the sea hose from ship to shore. There have been and will continue to be small fuel spills which cannot be contained with booms due to the ice problem. This difficulty is glossed over in the book.

The Arctic is a playground for the environmental enthusiasts but there has to be a compromise on what is possible and what is not as regards environmental protection if Arctic shipping is to continue to develop. As it is, the extra Arctic ship insurance rates north of Hudson Strait are astronomical compared to southern rates. These are included in the charter rates of the ships so that the shipper of the cargo pays. The book does not present the economics of Arctic shipping which is a high-risk financial operation. The Inuit concerns regarding their fragile environment, traditional way of life and social attitudes are presented in Peter Jull's essay. This is one of the best succinct explanations of these problems I have come across, and should be required reading for the "instant Arctic experts" in government agencies.

Apart from editing the book Lamson and VanderZwaag contribute the first and last essays, respectively. The first essay, "In Pursuit of Knowledge," sets the scene as it affects Arctic shipping, while the last essay, "On the Road to Kingdom Come," sums up the problems in Arctic offshore management environmentally, ethically and legally, and offers new directions to provide for safer ship and other offshore operations. It is, however, regrettable that none of the Arctic shipping industry is represented nor are the problems it has in delivering the goods in aging ships discussed. As an example, the newest tanker built in Canada for the Arctic trade was in 1982. This is not surprising, since the industry cannot afford to build ships in Canadian shipyards. The necessity for public participation in environmental assessment hearings is emphasized in the book and it has recently been demonstrated in the hearings (1989) by a government constituted Tanker Safety Panel. The report was released in November 1990 and its recommendations address many of the issues raised in the essays, including the suggestion that all tankers be double-hulled within seven years. The industry has yet to react to these recommendations. The cost of building such ships or retrofitting old ships is well-known, but to do so will require financial assistance from somewhere, i.e., inevitably the taxpayer.

The book concludes with an extensive bibliography of twenty-three pages. In fact the compendium of scientific and other Arctic knowledge as a ready reference is worth the price of the book. At the same time, *The Challenge of Arctic Shipping* is highly-educational and easily-read.

Tom Irvine
Nepean, Ontario

Eric L. Mills. *Biological Oceanography: An Early History, 1870-1960*. Ithaca: Cornell University Press, 1989. xvii + 378 pp., photographs, figures, tables, notes, index. US \$47.95, cloth; ISBN 0-8014-2340-6.

Eric Mills' *Biological Oceanography* gives proof that history need not be dull. It should have its greatest appeal to the specialist marine biologist and oceanographer, but the volume will reward the perusal of the general reader as well. It is that good and that well constructed.

Mills dates his subject from the pioneering thinking and research of the groups at Kiel, Germany, and in Scandinavia in the late nineteenth and early twentieth centuries. Predominant was Victor Hansen (1835-1924) who apparently first applied (1887) the name "plankton" to the myriad number of forms of living organisms inhabiting the world's oceans and which, as the Greek word he employed indicates, float passively "hither and thither." (But be not forgetful that it was the Dutch tapestry and dry goods dealer, A. van Leeuwenhoek, who first saw microscopic plankton forms back in 1677). From Kiel and Oslo, Mills shifts the action, as it were, to the United Kingdom and the Plymouth Laboratory, then to the United States. Equal to the wealth of detail given the German innovators is the refreshingly human portrayals of such contributors as the UK's E J. Allen (1866-1942), F.S. Russell (1897-1984) and, most importantly, H. W. Harvey (1887-1970). The latter literally comes alive again in the prose portrayal. Gordon Riley of Yale and Dalhousie is the ultimate hero of the book, taking planktology from the era of the tow-nets, introduced to the study of the sea and its biota by Charles Darwin on the *Beagle* (1845), to the technology-driven world of mathematical modelling. Thus, past development of

the science brought us to Gordon Riley's threshold view of the future.

This is modern history. The cast of characters, some personally known to me, none a complete stranger, are brought together in the telling of Mills' story. If I have any fault at all with the book, it is that the reader must come away from it with the sense that biological oceanography and planktology are one and the same. They are not. True, the carbohydrate factories of the sea are the plankton, as are most of the primary consumers. I don't intend to downgrade this significance, but any "ology" is a human endeavour and man's efforts to understand the biology of the oceans include much more than planktology.

Perhaps I have stressed the historical and the personality-oriented aspects of this fine book. In doing so I must not fail to point out that much hard science is therein, too. Mills takes the reader through the logical accumulation of what knowledge we have concerning plankton. The amazing thing is that he records this material with a lyrical facility equal to his handling of the more human-oriented matters.

Eric Mills is an accomplished author. He writes with ease and grace, and with the characters at his disposal he tells a fine story. It makes the reader wonder what is coming next.

Frederick A. Aldrich
St. John's, Newfoundland

Gunnar Thompson. *Nu Sun: Asian-American Voyages, 500 BC*. Fresno: Pioneer Press, 1989. xii + 231 pp., maps, illustrations, figures, tables, bibliography, index. US \$25, cloth; ISBN 0-9621990-0-1.

In this diffuse and rather rambling account Gunnar Thompson has attempted to add

to the case for Asian influence in the political, religious, technological and artistic development of the Mesoamerican Mayan culture of the Late Preclassic and Classic periods. Other scholars have noted similarities in the calendrical, cosmological and astronomical systems, and in some of the technology. There is however a substantial body of archaeological evidence for the contrary view, the indigenous development of Mayan technology and art, and at present this is the majority opinion. Mayan writing probably originated with the Zapotec of Oaxaca and the Mayan Long Count calendar with the Olmec.

Thompson's hypothesis is based on two approaches, the practicability of trans-Pacific voyages by the Chinese in the late first millennium BC and the early first millennium AD, and the similarity he detects between the iconography of Asian and Mayan art forms, in particular what he calls the omnibus power sign. The possibility of trans-Pacific voyages seems to be introduced principally to provide a mechanism to justify his principal interest, the similarity in the art forms. He also seems concerned to discredit the view that Columbus was the first outsider to reach the Americas, a view that hardly needs discrediting today.

On the possibility of trans-Pacific voyages he proposes a departure from southern China, wintering in Japan, then proceeding to Siberia, the Aleutians, Alaska, and down the North American coast to the Gulf of Fonseca in Mexico. The return journey would be made in the following year across the southern Pacific. The brief chapter on the likelihood of the Chinese having ocean-going vessels capable of this voyage uses material from the standard texts and publications, and adds nothing new. The problems of provisioning, navigation, and dealing with the

myriad hazards of the sea on such a voyage with the technology then available, are not discussed. To give a human face to the hypothetical voyage, the author invents an entirely imaginary Chinese merchant admiral, Nu Sun, to whom plans, decisions and thoughts are ascribed. This device rather detracts from the dispassionate scholarly approach desirable in a book advocating a contentious hypothesis.

The author's original contribution is the comparison of a wide range of iconographic symbols from around the world of 500 BC, including the Mediterranean, Northern Europe, the Near East, Persia, India, Asia, and the New World. Table 3 shows the thirteen elements that occur in his omnibus power sign and that all these elements are common to east Asian, Chinese, and Mayan iconography, but only a few occur in other areas.

This book might be of greater interest to art historians and archaeologists than to those engaged in maritime research.

R.J.O. Millar
Vancouver, British Columbia

Frederic W. Howay (ed.). *Voyages of the "Columbia" to the Northwest Coast 1787-1790 and 1790-1793*. Portland: Oregon Historical Society Press, reprint 1990. 576 pp., illustrated, map, index. US \$40, cloth; ISBN 0-87595-250-X.

Many *Northern Mariner* readers will welcome this high-quality reprint of Howay's 1941 edition, which is almost impossible to find in the original. It is of particular interest to those who study the history of north-west coast exploration, but there are numerous other areas which repay investigation. The diligent reader will learn much of such topics as early Indian-European contacts, early American shipping business

practices, sailing and navigation skills, the outfitting of ships, the trans-Pacific fur trade, and the 1790 Anglo-Spanish Nootka Sound confrontation.

The manuscripts which Howay reproduced and edited are four journals of officers on the *Columbia*, which made two voyages in 1787 and 1790 from Boston to the north-west coast of North America in search of furs for sale on the China market. Two (by Robert Haswell, who made both voyages) are called "logs" but all are more properly described as narratives. This should reassure those who might shy away from documentary logs as unreadable; these selections were written by intelligent and observant young men who commented on everything that caught their attention in their strange surroundings. Howay chose, rightly, to retain their spelling and grammar, but this is not a problem after a few pages.

In 1787 the *Columbia*, commanded by John Kendrick, accompanied by the sloop *Washington*, Captain Robert Gray, set out from Boston. Dissension appeared quickly, as Kendrick's dilatory seamanship and personal abrasiveness caused grumbling. Upon arrival at Nootka, Kendrick just anchored the *Columbia* and sent the smaller *Washington* to gather furs. Although Spanish ships had been in the area before, the Americans (along with the British) represented a new element, the first wave of European traders who might bring prosperity, but who would certainly bring disruption, to the lives of the Indians. Captain Gray quickly had problems when a crew member, protesting the theft of a cutlass by an Indian, was killed for his trouble. The rest opened fire and shot several Indians to effect their escape. On the second voyage, when Gray wintered near a large village, the Americans narrowly escaped a general attack

from the local dominant chief. Such events, and there were more, underlined the very real dangers faced by the traders.

Some felt guilt too. "Hoskins' Narrative" describes how a chief sold a slave girl to a ship's captain who apparently used her as a sexual outlet during his stay, only to abandon her upon leaving. When the chief subsequently had relations with her he contracted a serious venereal disease, which he soon communicated to his wife. Hoskins feared for their survival, and lamented: "Infamous Europeans, a scandal to the Christian name; is it you who bring and leave in a country with people you deem savages the most loathsome diseases? Oh, miserable inhabitants!... Where is your native happiness you so long uninterruptedly enjoyed? Is it not gone, never, never more to return" (p. 196)? Some months later, after a nasty brush with a tribe, Hoskins was cured of the "noble savage" line of thought, and concluded "it is impossible for an honest honourable or grateful principal [sic] ever to enter the breast of a savage" (p. 272).

Regular contacts with the Indians were established all along the coast, from Oregon to the Queen Charlotte Islands. All the journals contain lengthy and detailed descriptions of Indian life, customs, celebrations, homes, canoes, dress, and diet, which give the book much anthropological interest as one of the few first-hand accounts of Indian society just before the advent of the white man altered their way of life forever. That influence can be seen quickly in the prices of furs, which seemed to go through a process of double-digit inflation during the periods of the two voyages. Although at first a handful of iron chisels bought top quality skins, the Indians quickly demonstrated a shrewd innate capitalistic spirit and began to demand muskets, powder, and shot, along

with articles of clothing. Within two years the traders had to go farther afield in search of less knowledgeable tribes. It was on one such trip that the *Columbia* made the momentous discovery of the great river which bears her name, a discovery upon which subsequent American claims to the territory were based.

All the journals describe the large numbers of ships in the area at the close of the century. American and British traders were there in plenty, and there was much visiting, mail delivery, and outright help in time of trouble, which is some evidence of the fellowship of the sea. There are also examples of non-delivery of homeward bound mail, where representatives of one company feared carrying messages which might have valuable commercial intelligence to their rival's headquarters. Spanish warships (including two line-of-battle ships!) and settlements were there in plenty as well, in an attempt to enforce their claims to the entire coast. The Americans also met Captain Vancouver in the *Discovery* on his more well-known voyage. At some points the bemused reader suspects the main problem was not finding cheap furs, but avoiding collisions!

The editing job by Howay could serve as a model of the art. Naturally there are hundreds of items in the text which need explanation, particularly locations of the innumerable coves, rivers, capes, and landfalls, but also identification of other ships and traders, business contacts, subsequent careers of all concerned, and cross-referencing events and individuals with other contemporary sources. The footnoting is awesomely extensive, but it is not obstructive or fussy; readers will appreciate the briefness and helpfulness of all notes. Indeed it would be hard fully to appreciate the related events without Howay's guid-

ance. This is a monumental job of scholarship of the highest quality.

There are no shortcomings of a serious nature. The major complaint is the lack of even one good map. The only map supplied is a very old one of such small scale that it is virtually illegible, nor does it have most of the places mentioned in the text. Any reader wishing to follow the trading voyages with precision will need a separate atlas. For a serious west coast historian this is an annoying situation.

That complaint aside, there is no hesitation in applauding this new issue of a classic account of the opening of the west coast. It is handsomely produced and reflects the highest standards of scholarship in numerous subjects which are of interest to the readers of this journal.

Paul Webb
London, Ontario

James Belich. *The Victorian Interpretation of Racial Conflict: The Maori Wars, the British, and the New Zealand Wars*. Kingston & Montreal: McGill-Queen's University Press, 1989. 396 pp., glossary, maps, bibliography, index. \$17.95, paper; ISBN 0-7735-0739-6.

Bench's study on the New Zealand Wars (1845-1872) should be required reading for anyone interested in historical relationships where one side dominates the written record. Notwithstanding Maori brilliance in responding to advanced nineteenth century military technology and their strategic and tactical successes, British writers exaggerated their own victories and found a variety of lame explanations for the apparent failures of the Victorian army. Convinced that they must win any war against primitive "savages," contemporary observers and subsequent historians

simply could not bring themselves to accept any other outcome. They fictionalized actual events, overestimated the small numbers of Maori warriors involved in combat, exaggerated native casualties, and attributed British failures to the difficult terrain of New Zealand's North Island. Often, the New Zealand settlers and later historians sought scapegoats among the British army commanders or excoriated the low quality of the rank and file soldiers. While some observers were willing to give the Maoris some credit for military capabilities, Victorian racial stereotypes created a fog that obscured the true situation.

The early nineteenth century history of New Zealand paralleled that of other islands and territories of the Pacific littoral where trade in firearms dramatically altered the existing balances of power. As in the Hawaiian Islands or along the northwest coast of North America, tribes possessing muskets crushed those that lacked chemical firepower. In New Zealand, the Musket Wars (1818-1833) ended when all Maori tribes obtained firearms and restored a balance of weapons. As was true elsewhere, the maritime traders did not always provide Pacific peoples with the best firearms. By 1845, the Maoris managed to supplement their flintlock muskets and shotguns with some good percussion-lock muskets. At the same time, they needed European trade and contacts to overcome chronic difficulties with repairs, replacements, and ammunition supply. In terms of firepower, the Maoris could not expect to match the British—particularly after 1860 when the army adopted the Enfield rifle firing the expanding Minie bullet. Even more important, the Maoris lacked the capacity to sustain lengthy military campaigns that removed men from essential food produc-

tion in a subsistence economy.

The key to Maori survival during the different stages of the war lay in the avoidance of open battles and in the adoption of guerrilla tactics and new style fortification techniques. Beginning with the Northern War (1845-46), Belich reinterprets British accounts to show how the Maoris altered their basic methods of warfare. Anxious to halt European land encroachments and to protect their sovereignty, Maori leaders modified their traditional fortifications (*pa*) to resist artillery barrages and infantry charges. They dug trench systems, rifle pits, and prepared deep anti-artillery bunkers which Belich argues were quite similar to those developed during World War I on the Western Front. Employing effective deception, concealment, and surprise, the Maoris evolved strategic plans to defend their territories based upon defensive lines and fortifications. By 1864, an army of eighteen thousand British regulars, colonial militiamen, and some Maori allies (*kupapa*) was tied down in counterinsurgency warfare against a Maori force of only four thousand warriors. Despite British command of the sea and other advantages, most of their manpower was tied up in sedentary garrison and transport duties, leaving insufficient troops for the offensive flying columns. The Maoris used sophisticated earthworks, trenches, bunkers, and disciplined fire to defeat British assaults against their fortified positions. At the Battle of Gate Pa during the Tauranga Campaign, the Maori defenders successfully resisted an artillery barrage by mortars, howitzers, and modern rifled and breech-loading Armstrong guns.

Belich's chapters on the campaigns of Maori generals and prophets Titokowaru and Te Kooti point out the effectiveness of native fighters in guerrilla warfare. The

emergence of millenarian beliefs common in insurgent wars, Maori terrorist tactics, and modern counterinsurgency "bush-scouring" employed by the British to destroy villages and crops remind readers of more recent wars. Indeed, Belich's study is highly significant at two levels: first, it illustrates many themes common in the eighteenth and nineteenth century Pacific world as native cultures resisted European encroachments; and second, it illustrates how Victorian observers twisted the historical record to blot out British military failures against the Maoris. The fact that these events took place after the mid-century adoption of breech-loading and repeating weapons makes the Maori struggle all the more remarkable. Belich's outstanding study will be required reading for all those interested in the history of the Pacific world and in the relations between European and native peoples.

Christon I. Archer
Calgary, Alberta

Vaughan Evans (comp.). *Illustrated London News: Index to Illustrations of Ships, Ports and Places*. Sydney: Australian Association for Maritime History and the Australian National Maritime Museum, 1990. 30 pp. AUS \$8 (+ \$3 postage), spiral-bound; ISBN 0-7316-8720-5 (order from: H. V. Evans, 85 Fullers Road, Chateau, NSW 2067, Australia).

Maritime History Sources and Victorian Collections. Melbourne: Australian Association for Maritime History, 1987. ii + 37 pp. AUS \$14.50 (+ \$3 postage), spiral-bound (order from: The Hon. Secretary, AAMH, P.O. Box 75, East Bentleigh, Victoria 3165, Australia).

These two publications will be helpful

sources for researchers interested in Australia's and New Zealand's diverse and fascinating maritime histories. The first, which is similar to other volumes covering the *Illustrated Sydney News* 1853-1889 and the *Australian Sketcher* 1873-1889, is a detailed index of illustrations that appeared in the *Illustrated London News* and relate in some way to Australian or New Zealand maritime history. This index includes a period before photography became widespread so that the engravings and other illustrations are often the best representation that may have survived of vessels, ports, and the conditions in which immigrants or others travelled.

The general index provides a listing of vessels with notes on rig, tonnage, date and place of construction, the specific *Illustrated London News* reference, and a brief comment such as "at Lisbon Bar," "launch" or "emigrants on deck; general view." Subsequent listings are: an analysis of sailing ship entries by type, decade of build, and tonnage relating to Australia and New Zealand; an analysis of sailing ship entries in a similar format relating to world-wide entries; an index to illustrations of general scenes of immigrants, etc.; indexes to illustrations relating to Australia and New Zealand whether maritime or not; and an index to illustrations of other ports and places relevant to voyages from Europe to Australia and New Zealand.

The early illustrations were often beautifully and carefully done. For some uses, such as in publications or exhibits, they may be more appealing than actual photographs from the period. The indexes are well presented and easy to use. Many of the vessels included in the listings also operated in other regions and, as a result, the indexes are a good reference for other areas of study. It is clear that much work went into compiling this useful document.

The second publication is a collection of five short papers and additional references from a conference held in Melbourne in November 1987. Included are: a review of the sources in Victorian maritime history; a survey of sources for determining shipping movements; an introduction to the Victorian Archaeological Society Shipwreck Register project; the "Log of Logs" project, an ambitious undertaking to catalogue logs, diaries, journals, etc. relating to Australasian maritime activities; and, maritime history sources at the Australian Public Record Office.

These papers, though brief, are well done and provide a valuable overview and introduction to a large range of sources, held in a number of institutions, for Australasian maritime history. Researchers will find them a very helpful starting point for enquiries and project planning.

Robert D. Turner
Victoria, British Columbia

A.G.E. Jones. *Ships Employed in the South Seas Trade 1775-1861 and Registrar General of Shipping and Seamen Transcripts of Registers of Shipping 1787-1862*. Aranda, AUS: Roebuck Society, 1986. xviii + 380 pp., index, illustrations, maps. AUS \$20, paper; ISBN 0-909-434-301.

Ian Nicholson. *Log of Logs: A Catalogue of Logs, Journals, Shipboard Diaries, Letters, and All Forms of Voyage Narratives, 1788 to 1988, for Australia, New Zealand, and Surrounding Oceans*. Aranda, AUS: Roebuck Society and the Australian Association for Maritime History, 1989. x + 630 pp., photographs, illustrations, bibliography. AUS \$40, paper; ISBN 0-7316-6534-1.

One cannot wax too eloquently on what

are essentially massive lists of ships, yet for further research and reference purposes these two volumes are extremely well done.

Jones' work is an excellent publication with a remarkable use of its source material. It covers the British end of the South Seas fishery as it became known. Meticulously researched and compiled from millions of entries in *Lloyd's List* and *Registers*, Custom House bills of entry, registers of the Registrar-General of Shipping and Seamen and the register of the Society of Merchants, it presents a superb chronology of thousands of whaling ships listing their arrivals, departures, speakings, casualties, ship's names, tonnages, dimensions, rigs, masters, owners, and details of cargoes of sperm oil, train oil, blubber and skins, etc. which were landed, almost without exception at the Thames River docks. To date these source materials have been largely and unaccountably ignored by academics and maritime historians researching the British South Seas fishery. An appendix gives a general overview of the history of the trade, its geographical expansion over some six decades, the principal operators, yearly production statistics, and an account of the short-lived Southern Whale Fishery Company in the last decade of the trade. The author emphasises the immense value of shipping reports as raw research material, acknowledging previous research in this field by Dr. John Crumpton in his *Sydney Shipping Arrivals, Departures, 1788-1825* and Ian Nicholson, who updated that work to 1840. Further acknowledgement is made to A.W. Pearsall former archivist of the National Maritime Museum, Greenwich, for the great help and encouragement extended over many years. The product of Jones' labours is a landmark volume which provides a catalyst for further research in

the history of the South Seas industry and many other maritime trades using the old shipping reports in a scholarly manner. Those interested in this subject are invited by the author to use his lists without seeking permission, provided proper acknowledgement is given, a generous offer indeed.

Ian Nicholson's beautifully published *Log of Laws* presents maritime historians and writers with a plethora of invaluable research and reference material. Commenced many years ago, it grew from the logs of a few merchant ship voyages, a full coverage of warships, and a reasonable selection of whaling ship logs mostly held in American collections. As more logs were discovered and microfilmed, other material and narratives were added: surgeon's journals aboard convict and emigrant ships, passenger diaries, published accounts, ships' newspapers, etc. Similarly, newspaper reports of ship arrivals with the length of the voyage and occurrences from the ship's official log, or often the master's verbal account, were incorporated in these lists. The entries are in alphabetical order by ship name, showing dates of voyages, master, owner, and registered tonnage. Ships with the same name (there were many such) appear chronologically. Collective entries for types of voyages are included in the lists, again alphabetically, these are numerous and include companies, convicts, labour trade, whaling, wrecks and so on. Entries are largely confined to Australasian waters and the Pacific and Indian Oceans. The introduction describes the various types of logs kept by captains, masters, chief officers and such, and in the case of merchant vessels, the ship's official log which is the navigational record of courses set, speed, weather, crew activities, etc., which had to be submitted to the Superintendent of the

Mercantile Marine Office where the crew was paid-off and discharged. With many finely-produced photographs, and a comprehensive index, this handsome volume is a welcome addition to maritime and other substantial reference libraries.

Harry C. Murdoch
Toronto, Ontario

P. J. Telford. *Donaldson Line of Glasgow*. Kendal, England: World Ship Society, 1989. 128 pp., illustrations, maps. £9, cloth; ISBN 0-905617-54-1. £7, paper; ISBN 0-905617-55-X.

A. J. Blackler (comp.). *An Index to Shipping Company Histories and Fleet Lists* (revised by K. Stuttard and H. M. Hignett). Liverpool: *Sea Breezes*, 1990. 16 pp. £2 + postage (order from: Jocast Ltd., 202 Cotton Exchange Buildings, Old Hall Street, Liverpool, Merseyside L3 9LA).

H. M. Hignett and K. Stuttard (comps.). *An Index to "Steamers of the Past"*. Liverpool: *Sea Breezes*, 1990. 25 pp. (order from: Jocast Ltd., 202 Cotton Exchange Buildings, Old Hall Street, Liverpool, Merseyside, L3 9LA).

Ship lovers, unlike academic maritime historians, have always been numerous. Over the years marine buffs world-wide have been well served by the long-running British journal *Sea Breezes* and by the World Ship Society's fleet histories. While professional historians may snub the efforts of enthusiasts, there is much that is useful even to the pedant.

Sea Breezes has published over six hundred company histories and fleet lists. Bladder's index covers a period of almost seventy years and includes references to several Canadian companies such as

Clarke Steamships, and to many other companies with Canadian connections. Between 1949 and 1987 John Isherwood published more than 450 ship histories in his *Sea Breezes'* column entitled "Steamers of the Past". These articles were illustrated by the author's own superb drawings and are a model of their kind. Both indices are a must for anyone who has access to a long run of *Sea Breezes*.

Telford's *Donaldson Line of Glasgow* is typical of the World Ship Society's fleet histories. It opens with a forty-page company history followed by a detailed, illustrated fleet list. Within these parameters Telford, who was a former Chief Officer in the company, has done a commendable job. After becoming established in the River Plate trade the company moved onto the St. Lawrence route in 1874; in 1924 service expanded to North American west coast ports. Donaldson's involvement with the Anglo-Newfoundland Development Company is also described. The author has drawn on his knowledge and on remaining company records in the Strathclyde Regional Archives to write a brief but informative history.

M. Stephen Salmon
Ottawa, Ontario

Tomohei Chida and Peter N. Davies. *The Japanese Shipping and Shipbuilding Industries. A History of their Modern Growth*. London and Atlantic Highlands, NJ: Athlone Press, 1990. xi + 240 pp., tables, charts, index, notes, select bibliography. US \$65, cloth; ISBN 0-485-11271-X.

The Japanese shipping and shipbuilding industries have long occupied part of what in the popular psyche is often labelled "the post-war Japanese miracle." Yet to westerners the explanation for their growth is

but little understood. Indeed, for many maritime historians the tendency has been to ascribe Japanese maritime achievements to the omnipotent vision of an all-powerful state. Fortunately, Professors Tomohei Chida and Peter Davies have provided an antidote to such simplistic thinking. If their book has a principal argument, it is that the state, while important, has been less central to maritime expansion than we have hitherto believed. While this is an important contribution - and the authors have also made others - it does not reverse totally the judgement that on balance this is a somewhat disappointing volume.

Western scholars have been somewhat hampered in their ability to understand Japanese history because of widespread inability to read the language. While this has also been a problem in maritime history, it is significant that *The Japanese Shipping and Shipbuilding Industries* is not only the first volume in English but also the initial attempt in any language to create an overarching synthesis. The fact that it is pioneering is both a strength and a weakness: it is a strong point because it provided the authors an opportunity to establish a coherent agenda for future research and to expose those areas in which our knowledge is less than adequate; it is a deficiency because much of the preliminary research that ought to underpin a synthesis has not yet been undertaken. While the authors freely admit the problem, it is debatable whether this is sufficient, since rather than organizing the book around important issues Chida and Davies have chosen for the most part a straight-forward chronological account that pays insufficient attention to gaps in our knowledge.

The decision to proceed this way is a pity. While the book will be useful to

researchers who want a basic understanding of Japanese maritime industries, it is doubtful that a narrative approach will spawn a host of much-needed specialist studies. And by scattering the discussion of important topics throughout the text, the authors have made it difficult to follow key developments. This might have been rectified in a proper conclusion that drew all the various arguments together, but this is singularly lacking. Although its narrative approach will commend it to the interested general reader, it is thus less useful than it might have been to scholars.

Nonetheless, the book still fills a void, especially for English-speaking readers. Previously, scholars unable to read Japanese could consult William Wra's magnificent, if somewhat narrow, *Mitsubishi and the NYK, 1870-1914*, which had the virtue of demonstrating that the roots of modern maritime industries lay in the early Meiji period. But we have lacked an accessible book-length study focusing upon the twentieth century. Chida and Davies have now filled this lacuna.

This book is not the final word. Perhaps the best judgement is that it outlines the story. The authors are now at work on a companion volume which should answer many of the important questions raised here.

Lewis R. Fischer
St. John's, Newfoundland

Edwin L. Dunbaugh and William duBarry Thomas. *William H. Webb, Shipbuilder*. Glen Cove, NY: Webb Institute of Naval Architecture, 1989. xiv + 240 pp., photographs, bibliographical comment, indices, references. US \$45, cloth; ISBN 0-9622631-0-9.

This is the biography of William H. Webb

(1816-1899), the well-known American shipbuilder whose New York shipyard produced 135 ships and vessels between 1840 and 1869, including clippers, packet ships, barks, barquentines, brigs, schooners, sloops, sidewheel steamships, sidewheel steamers, sidewheel ferries and towboats, screw steamships, and steam-powered naval vessels. His best known vessels are probably the clippers *Young America*, *Challenge*, and *Comet*; the ram *Dunderberg*; and the steam frigate *General Admiral*.

The book is divided into two sections. The first starts with a chapter on New York shipbuilders during the period 1800-1815. These include Henry Eckford, the Scotsman who emigrated to Canada in 1786 and who apprenticed with his shipwright uncle in Quebec before moving to New York in 1791. The shipyard that he later began would one day come under Webb family ownership. This section then goes on to deal with the development of the Webb shipyard and its significant output. The second section deals with the ships themselves. There is an index by hull number and another by type. These are followed by short biographical sketches of each vessel.

The emphasis of the book is shipbuilding in the production sense. Apart from sail plans for several vessels and two foldouts which show the lines of the clipper ship *Challenge* and the packet ship *Yorkshire*, there is virtually nothing in the way of actual construction detail. In general the book is well laid out and contains a great deal of information. One major drawback however is the lack of a general index. This unfortunate omission is surprising in a work of this kind. There are more than fifty black and white photographs and other illustrations and also two colour plates. The quality of the photo-

graphs varies considerably. Detail appears to have been lost during the reproductive process. The portraits of Webb, especially the frontispiece, are in particular poorly reproduced. The problem may lie in the way they were lit for photography or the fact that they need cleaning. As this is obviously a definitive work, it seems a shame that more control was not exercised over the preparation and type of printing used. Nevertheless, this book is a worthwhile addition to the library of those interested in the business of North American shipping during the nineteenth century.

Eric Lawson,
Bowen Island, British Columbia

Al Sykes and Skip Gillham. *Pulp and Paper Fleet: A History of the Quebec and Ontario Transportation Company*. St. Catharines, Ont.: Stonehouse Publications, 1988. vi + 90 pp., references, photographs. \$14.95, paper; ISBN 0-919549-15-2.

Lavishly-illustrated, including rare photos such as the one of *New York News* in two pieces at Pugwash, N.S., this book will please all readers with an interest in the history of shipping companies, particularly Canadian ones, of which not too many have been written. Co-authored by two well-known marine historians and photographers, the book consists mainly of two sections. The first deals with the company founders, its history (and that of its subsidiaries) from the beginning in 1914 to the cessation of activities in 1983. The second provides a description of each vessel in that fleet as it entered into operations for Q & O. Each is illustrated while serving in the company's colours and in most instances is also shown before and after her years service with them.

Significant events which befell every

ship are reported, such as casualties, special occasions, etc.; the type of cargo as well as ports of call are mentioned with accuracy, based on company archives. This book and all others authored or co-authored by Skip Gillham (he has at least ten books and hundreds of articles to his credit) are a delight to read and to consult for anyone looking for the in-depth history of vessels which traded in the Great Lakes/Seaway system. Without hesitation, I recommend any of his works.

René Beauchamp
Montreal, Québec

A.B. McCullough. *The Commercial Fishery of the Great Lakes*. Hull: Canadian Government Publishing Centre, 1989. 110 pp., maps, photographs, illustrations, statistical tables, appendices, footnotes, bibliography. \$9.50, paper; ISBN 0-660-12937-X.

Here is a very informative government book, small for the information it contains, but a useful addition to the library of anyone interested in Great Lake history.

The book begins with a brief history of the European influence on the Great Lakes - perhaps too brief, since the land history provides a context for the history of the fisheries; here it is just enough to whet your appetite for more information. Quite a few significant dates are provided for the study as well as little bits of trivia such as the fact that the carp was introduced into North America about 1830 and the rainbow smelt introduced into Lake Michigan about 1912.

The development of the freshwater fisheries was very similar to the salt water industries, including methods of catching, processing, and marketing the fish. The exception was that the Great Lakes fishery began largely as a means of subsistence.

Most fishermen were part-timers who relied on lumbering or farming for their main source of income. As commercial fishing began to expand in the 1800s, rules and regulations appeared. These were observed by some, ignored by others. It was also about then that the demise of the Atlantic salmon in the Great Lakes began. From 1807 onwards, legislation to protect the different species was introduced, but the problems associated with an international border were substantial. Canadian regulations were stricter than the American, so that any fish caught in Canadian waters tended to be sold to the American markets. This complicated the task of collecting statistics describing the amount of fish caught in the early years.

Overfishing, environmental problems (especially pollution), lack of sufficient officials to control the fisheries, greed, corruption, recession, depression, larger corporations forcing out the smaller companies, disappearance of species, all contributed to the decline of the commercial fisheries as a major industry. Then, in the early twentieth century, sport fishermen appeared. Vying with the commercial fishermen and, at times, having more influence with government, the sport fishermen were able to restrict the commercial fishermen even further. Living by Lake Ontario and familiar with the "fishing scene," I would say that the sport fishermen now have the upper hand. With the introduction of the coho and chinook salmon, some of the commercial fishing stock has been depleted.

McCullough touches briefly on the involvement of the native people in the fishing industry. Other topics include labour problems (strikes, low wages), graft, corruption, fraud, and hardships due to gales, storms, and shipwrecks. Sixteen pages of references provide sources for

those who want to know more. There are a number of illustrations of vessels used by the lakes' fishermen, as well as of gill, pound, seine, hoop trap, and trawl nets. These support a brief discussion of historical changes in vessel technology (such as the introduction of steam, gas, and diesel engines) and in fishing technology (such as the introduction of the cursed nylon net). Numerous photographs depict various aspects of the fishermen's life, their vessels, and the ports from which they operated. Five maps show the Great Lakes and their fishing ports, while five tables describe the average catch of fish in the Great Lakes. Thus, one table shows the average Canadian catch together with the number of fishermen involved in the years 1881, 1931, and 1971.

I was a little surprised by the author's use of the personal pronoun "I" when relating his search for material (not normally used in government publications). In his words, "this book is a result of a study by Parks Canada on the commercial fishery of the Great Lakes" (preface). All in all, however, *The Commercial Fishery of the Great Lakes* provides a good introduction to Great Lakes fisheries history.

Bob Gibbons
Brighton, Ontario

Sjcek'len 1989: Arbog for Fiskeri- og Sofartsmuseet [1989 Yearbook of the Fisheries and Maritime Museum]. Esbjerg, Denmark: Fiskeri- og Sofartsmuseet, 1990. 120 pp., maps, figures, tables, photographs, bibliographies, English summaries. Dkr.148, cloth; ISBN 87-87453-43-6.

What a joy to behold another yearbook published by a Scandinavian maritime museum and to get immersed in its contents. And what a pity that so few of our

readers will be able to read it. The Esbjerg museum follows the tradition of other maritime museums in Norway and Sweden by producing *Sjaek'len*, a hard-cover Annual Report full of meaty, well-illustrated articles printed on good paper and with the supporting advertisements decently kept in the back. It is the kind of book which will stand the test of time and which will be referred to frequently in the future, unlike all those newsletters, brochures and flyers produced by Canadian and American maritime museums which, at best, are glanced over, only to land in the "round file" or as useless ballast in the library.

This, the second volume of *Sjaek'len*, opens with a well-researched and well-illustrated article on the history of medicine at sea, a veritable godsend to any museum curator who intends to present this subject in an exhibit, especially since it encompasses modern times as well. Another chapter covers the first year at sea aboard a Danish steamship in 1916 (do I need to point out that this was during World War I, aboard a neutral ship?) as experienced and told by a retired chief engineer. It is an illuminating account of particular interest to labour historians. "The Daily Fish" is based on an unpublished M.A. thesis entitled "Tradition and change in regional eating habits—diet and sex-roles in a North Jutland fishing community." The manner of preserving fish in the days before refrigeration, the role of fishermen's wives in complementing the hard work of their husbands at sea and what this kind of co-operation meant and still means to the life within the community, is extremely well-described. Such a study of a fishing community in the Atlantic provinces would be a worthwhile project for an enterprising researcher.

The chapter on "The Modernisation of

the Fishery—the Scandinavian and the British Model" presents a most timely bit of research considering what is going on in the continuous struggle between the large fishing firms operating in the Atlantic provinces and the locally-owned and operated fishing vessels. Britain does not fare well in this comparison and neither do the Atlantic provinces, though the latter go unmentioned. One wishes that the findings and conclusions expressed by the author would be studied by the federal and provincial fishing bureaucracies, by the large fishing firms, and by the local fishermen, their families and their associations.

The last two chapters of this particular yearbook are devoted to seals and don't we know about them on the Atlantic coast! The Danish investigations on hand of young "tagged" seals might shed some light on the habitat and habits of these friendly mammals which suffer under various diseases and are both cursed and violently protected at the same time on this side of the Atlantic.

The volume closes with a detailed year-end report on the activities of the Esbjerg Museum and its plans for the future. Looking at the museum situation here in Canada, I cannot help but profess to a certain amount of envy. We do have much to learn from our Scandinavian brethren such as, for instance, their way of connecting the past to the present. The *sjaek'len* (the shackle) is a well-chosen name or symbol—a link between the museum and the surrounding world, a link between the past and the present. My congratulations to Morten Hahn-Pedersen, the director of the museum, the editor and master of many trades who is responsible for the production of this volume.

Niels W. Jannasch
Tantallon, Nova Scotia

Daniel Francis. *A History of World Whaling*. Markham, Ontario: Viking/Penguin Group, 1990. xvi + 288 pp., maps, photographs, source list, index. \$29.95 cloth; ISBN 0-670-82447-X.

It is hardly possible to chronicle a thousand years of interaction between mankind and whales in a single volume, much less in a manuscript of readable length which might be acceptable to the financial and business wizards of any major publishing house. In recent years only two authors have tried: Bill Spence in *Harpooned: The Story of Whaling*, published in 1980 by Conway Maritime Press in London and reissued by Crescent Books; and now Dan Francis, with his new work, *A History of World Whaling*.

Both books generalize about their subject matter, and each has strengths. Spence's is minimal in its treatment, but richly amplified by historic photographs and a fine set of maps showing the locations of important whaling grounds and shore stations. Francis's is more complete textually, probably more accurate overall, but less fully illustrated.

Yet the difference between them runs deeper than the layout, and reflect the change in perception about whaling which has taken place in the last decade. As near as I can tell, Spence is a direct student of whaling, whereas Francis is much a campaigner against whaling, a journalist who wishes to make a point about the future of whales and the planet. True, the first 205 pages are given over to a summary of western civilization's (principally American) attempts to catch and profit from the whale. This history the author has carefully culled from secondary sources, mixing scholarship with the too-often repeated legends of whaling history: the *Globe* mutiny, the sinking of the *Essex* by an

enraged sperm whale, "Mocha Dick" (whose exploits are somewhat naively treated as fact by the author, including the date of the whale's death), the destruction of whaleships by CSS *Shenandoah* in 1865, and the various disasters which beset both British and American whalers along the icy circumference of the Arctic Sea.

He has been reasonably careful about citing sources, but in some cases has moved from the facts toward some unusual conclusions, suggesting, for example (pp. 110-1) that the impact of whaling among the Pacific Islanders may not have been as profoundly evil as we have all been told, but was instead a beneficial arrangement for both sides in their attempt to learn about the oceanic world. There is some glossing of causes: at pages 158-9 the author explains the decline of New Bedford whaling as a result of catastrophes in the Arctic during the 1870s. He does not mention the negative effect of the Civil War in driving whaleships from American registry, nor, in this context, does he cite the changing oil market which made railroads, western land speculation, and textile manufacture the more profitable investments for New Bedford's merchants.

It is at page 206 where the author seems to reach his main interest, the modern efforts to control and eventually ban the commercial whale hunt. In his final chapters he shifts easily from the general to the specific: he names names, and seems to want to catalogue every important incident in the recent war to stop the killing, outlining in the process the role of activist organizations such as Greenpeace and Earthforce. This is new information, not previously available in one readily-accessible text.

The author believes that "the 1990s will be a turning point in the history of

whaling. The International Whaling Commission will be making the most crucial decision in its history: whether to continue the ban on commercial whaling, or to allow a limited resumption of the hunt. Either way, the Commission faces a crisis" (p. 248). All the preceding text now seems to set the stage for this confrontation, and it is clear how the author believes it should be decided.

I wish Francis had written a book about the history of anti-whaling protest. This would have allowed him to face this emotionally-charged issue without compromise, while compiling much valuable information. What he has done is to provide a primer which whets the appetite for the economic, social, and technical relationships that have inspired mankind to hunt whales. His is a useful book, particularly in its later pages, and I expect he will inspire others, like Bill Spence did before him, to seek out the finer details of this ancient calling.

Robert Lloyd Webb
Bath, Maine

P.R. Sinclair, *et al.* *Social and Cultural Aspects of Sealing in Atlantic Canada*, ISER Report No. 5. St. John's: Institute of Social and Economic Research, Memorial University of Newfoundland, 1989. iii + 67 pp., references, tables, figure. \$4.75, paper; ISSN 0840-9927.

Whether intentional or not, this publication enters into the debate on the seal hunt on the side of those who advocate its continuation. While those in favour of the seal fishery and those committed to its abolition have both attempted to influence public opinion, it has been, and still is, an uneven contest. By skilfully playing on honest emotions and human compassion,

the protesters have been the clear winners. To those who live close enough to nature to realize that prédation goes far beyond carefully packaged meat displays in local supermarkets, the antics and successes of the anti-sealing groups have long been a source of frustration. They find it hard to understand why the protesters refuse to accept that seals can be important economically, socially, and culturally.

This volume is essentially the report of the Institute of Social and Economic Research (ISER) submitted to the Royal Commission on Seals and Scaling in Canada under the title "The Social and Cultural Impacts of the Seal Utilization Process in Atlantic Canada." The main objective of the ISER team was to assess "the significance of sealing in the social life and values of coastal communities" throughout this region. The project was directed by Peter Sinclair, a sociologist at Memorial University. Other members who took responsibility for the regional collection and analysis of materials included Robert Hill (Newfoundland), Cynthia Lamson (Nova Scotia, the Magdalen Islands and the lower north shore of Québec), and H A . Williamson (Labrador).

The introductory section contains brief treatments of seal population dynamics, the regional context, the history of sealing, and the social and cultural impacts of the industry. These provide a useful context for the main body of the report which examines the landmen, longliner, and offshore components of the hunt. The Inuit-settler communities of Labrador are given separate treatment. Despite its brevity, constraints imposed by submission deadlines, and noticeably different research emphases and writing styles of individual team members, the report provides an excellent review of the importance of sealing in parts of one of the

poorest regions in Canada. Weaker aspects include the uneven treatment, general lack of a cohesive theme and focus, too great a dependency upon often poorly selected secondary sources, and lack of in-depth analysis, especially in the background sections.

In that the original submission to the Royal Commission was simply "published... with minor editorial changes," weaknesses are not surprising. While this is only a report, it is still difficult to understand why ISER and an obviously competent project team did not take a little extra time and effort to produce a better publication on this important topic. A more thoroughly researched and properly edited publication, besides being timely, would lend credible conviction to the economic and social importance of sealing in the eastern and northern regions of our country. Despite its shortcomings, however, the report does contribute towards this end. That it is able to do so is because the team was able to maintain a detached viewpoint.

While there have been numerous attempts to provide dispassionate analysis of the sealing debate, there are virtually no independent and objective investigations of the impact protest organizations have had on the industry and the livelihood of many Atlantic Canada fishing families. This publication is an exception. The conclusions identify succinctly the economic, social, and cultural impact of sealing and the significance of its decline. In its limited way, therefore, it stimulates constructive thought enabling us to re-evaluate our place in a world where prédation is still a major force.

Chesley W. Sanger
St. John's, Newfoundland

Ken McLeod (comp.). *The Shipwrecks of Ontario: Toronto and Western Lake Ontario (1820-1937), Volume One*, SOS Shipwreck Research Publication No. 1. Orleans: Save Ontario Shipwrecks, 1990. 50 pp., staple-bound.

This invaluable reference is a labour of love. McLeod spent several years slogging through back issues of local newspapers such as the *Brockville Recorder*, *Kingston Chronicle*, *Kingston Herald*, *Kingston News*, *Kingston Whig*, and the *Toronto Globe* for shipwreck items. These were entered onto a database with several fields: name of ship; vessel type; occurrence; remarks; and reference and date. Approximately 550 entries are published and sorted by date, by vessel and by location. This is a valuable and useful index.

Nothing is ever quite perfect. Inclusion of page and column references would have facilitated locating these items in the various newspapers. Unreferenced illustrations, several with captions for which this reviewer would have been extremely interested to see the supporting documentation, create a cheerfully casual atmosphere which does not support the precision of the text. Finally, there is no indication how to order copies! Two addresses are included for other reasons; for further information on SOS, its programs, chapters, and projects, contact SOS Executive Director, 6065 Forestglen Crescent, Orleans, Ontario, K1C 5N6 and, to pass along new data, write to: Ken McLeod, PO Box 605, Osgoode, Ontario, K0A 2W0. Prospective purchasers will almost certainly find that either one of those two contacts will enable acquisition.

Emily Cain
Jerseyville, Ontario