BOOK REVIEWS


The publisher is to be praised for producing a very beautiful book; the illustrations are particularly attractive. Moreover, some of the articles are based upon solid and original research, and are indubitably contributions to their field of knowledge.

And yet, I am a little puzzled with the title and supposed conceptional frame of the book. What is typical of an Asian port city? Apparently the authors are somewhat baffled by the question. Clearly, it is a town where the harbour occupies a major part of the population, patently it contains a cosmopolitan community of seamen and traders, and it is a meeting place between routes and cultures. Still, these are but truisms when not contrasted to different types of towns: ceremonial centres, the court-city or the fortress. Take for instance Lewandowski’s comparison between the layout of the port city of Madras with that of the ceremonial centre of Madurai. The port city should then be arranged within the framework of Asian towns in general.

Again, to gather an image of what is typical of a port and what holds for trading emporia in general, the features of the society found along the seashore ought to be contrasted to that of the caravan-cities in the hinterland. Thus, the temporary marriage between local girls and itinerant traders in the typical Southeast Asian port of Patani might be equally well located in the caravan trade and pilgrimage centre of Mashad in the Persian interior. The Asian port town needs to be placed in its historical development. Can the "colonial port city" be compared with pre-colonial trading-emporia for instance, and what are the differences? There are marked variations not only in the layout and administration of such cities, but as regards to their relationship with the hinterland as well; consider the part played by the railroads in the development of the Indian interior.

Still, these points are just reminders that this study is to be considered as one piece of the vast mosaic of urban history of Asia, of which many pieces are still missing. As such, this is a most useful work.

R.J. Barendse
Amsterdam, the Netherlands


This is the debut issue of a new journal launched at the same time as *The Northern Mariner.* Its prolific editor (who also edits *Flottes de combat* as well as several other journals), explains that until now there has been no French equivalent of *Mariner’s*
The Northern Mariner

The issue contains nine substantial articles, a strategic appreciation which first appeared in 1939 by the noted thinker Admiral Castex, and two editorials. The range of topics is both large in scope and topical—two contributions focus on the Middle East, one on Western penetration of the area in the past, the other on maritime commerce in the Red Sea in the first half of the nineteenth century. The most exotic essays examine how Portugal dealt with pirates off India's Malabar Coast in the sixteenth century, and prehistoric navigation in the Mediterranean. The latter knits together considerations of atmospheric conditions, prevailing winds and currents, archaeological evidence and particulars on mountain heights to demonstrate how early navigators "island hopped" or used prominent mainland peaks to develop a web of coastal passage routes.

One of the most comprehensive essays examines Russia in the Pacific in the nineteenth century. In the first half of the century, enterprising traders pushed into California and Hawaii, naval scientific voyages of discovery built on earlier successes, development of the colony of Alaska continued, while on the Asian mainland the area under Russian control was extended to the Amur River. However, such initiatives to expand beyond Asia exceeded the "reach" of the Empire. The Russian presence in California and Hawaii proved ephemeral while Alaska was sold in 1867. Thereafter Russian energies were concentrated on the Asian mainland, where expansion eventually led to unease in Britain and to tension with Japan. One of the particular strengths of this article is its concise description of the motives of the Russian and other governments.

There are articles on naval policy and the Anglo-German rivalry 1897-1914, on Chinese naval policy at the end of the nineteenth century (including a comparison with Japan), and on French naval staff plans for adequate fuel oil stocks in the years leading up to World War I.

The most spirited writing is by the distinguished editor in a tail-piece editorial in which he attacks recent criticisms of French military-industrial policies. He cites a trenchant observation by Robert Aron on foreign policy: "Everything cannot be achieved with military forces but without them nothing can be done." (p. 230)

In short, Marins et Oceans is a collection of thoughtful and authoritative articles. All are in a concise, clear, and jargon-free style and most provide many rewarding insights in a few pages.

Jan Drent
Ottawa, Ontario


It is no mean achievement to transform the career of a somewhat obscure merchant-adventurer, operating in a much contested but often neglected area of New England/Acadia, into a convincing and rewarding analysis of the individual and the currents at work within the worlds around him. Richard Johnson has achieved all this with his lucid study of John Nelson.

As the representative and then inheritor of Sir Thomas Temple's interests in Acadia, Nelson developed extensive trading connections during the 1670s and 1680s. His frequent travels facilitated the acquisition of his French and Abenaki linguistic skills as well as a cozy and respected relationship with representatives of French
authority in the area. No one better epitomizes Jean Daigle's description, from the Acadia vantage point, of some Boston merchants as "Nos Amis les Ennemis." His diplomatic skills and knowledge of the region were appreciated and utilized by governors in both New France and Massachusetts. By the late 1680s, his trading activities and an advantageous marriage into a prominent Boston family placed Nelson "among the wealthiest six percent of the town's 1,500 adult males." (p. 32) However his activities also ran the risk of being "Crush't between the two Crownes," (p. 132) while his persistent Anglicanism and friendships which transcended the more traditionally observed racial, religious and national perspectives of Congregational New England caused an alienation from Massachusetts which was "both self-fashioned and imposed." (pp. 32-33) Nevertheless he fit well with the emerging Massachusetts merchants of the 1690s and early 1700s who were prepared to adopt a broader perspective and even invited the intervention and cooperation of imperial forces to support a New England imperialism.

A long period of captivity at Quebec and in France, 1691 to 1696, and then time spent in London itself, 1696 to 1698, sharpened Nelson's awareness of the need to waken imperial policy-makers to the Acadia situation. His memorials and proposals, while not delivered with the same skills and success as those of other imperial lobbyists, made a real and continuing impact on Whitehall and no doubt contributed to the English conquest and permanent take-over of peninsular Nova Scotia by 1713. On this occasion and on others, on both sides of the Atlantic, Johnson captures and analyses Nelson's significant role, an analysis which at times is handicapped by source limitations but which is usually illuminating and convincing. There are aspects of Nelson's career and activities in New England, Acadia and Old England which might be further explored: his financial situation in his declining years, his network of London connections, and his failure to capitalize upon the respect which he enjoyed, in the early 1700s for example, in both London and Boston, to seek imperial office or concessions. But if there is a paucity of primary sources to deal with these items, Johnson has made excellent use of the English, French and Massachusetts sources which are available. Indeed, he demonstrates a mastery of the secondary literature in all three areas and a refreshing sensitivity to the work done by Canadian scholars (witness his use of the Dictionary of Canadian Biography). In a well-written and well-argued conclusion, Nelson's career is employed as an excellent vehicle and vantage point to understand the New England/Acadian/Old England worlds. Nelson's legacy is now obvious but equally clear in Johnson's outstanding contribution in bringing this adventurer and his several worlds into convincing focus.

W. G. Godfrey
Sackville, New Brunswick


The Anglo-Dutch wars came to an end in 1674; the War of the League of Augsburg began in 1689. Between there was "peace" and a period when, according to Samuel Pepys, the English navy fell to the "lowest state of importance" and was "abandoned to ruin." Pepys' view is widely echoed...
among historians of the seventeenth-century navy, who argue further that it was naval activity during the periods of war that gave England all its vital naval support for the spectacular foreign commercial expansion of the 1670s and 1680s. Sari Hornstein challenges these views.

During these years of peace, the English admiralty deployed a large number of ships to convoy commercial vessels bound for the western Mediterranean. Merchantmen with fish from Newfoundland, the herring fleet out of Yarmouth with fish for the Catholic South, merchant ships from England bound for Portugal Spain, Italy, the Levant all had such convoys, as did English shipping involved in carrying trade between Mediterranean ports. Mediterranean-bound fighting ships through these years often represented upwards of 50-60% of the fleet in sea pay. While initially a naval ship was required both to convoy merchants and hunt down corsairs of the Barbary Regencies, this proved unworkable, so that a division of labour evolved among fighting ships which saw some assigned to convoy while others became part of naval stations in the western Mediterranean, patrolling dangerous waters or directly involved in one of the three naval wars with the Barbary Regencies. From the accounts of these naval commanders it is evident that Tunisia, by many considered the linchpin in England's Mediterranean presence, was not significant and its abandonment in the 1689 was not a symptom of the weakening of England's presence in the Mediterranean. Tunisia's problem as a naval station was that it had no commercial hinterland and therefore was unable to supply the naval stores or services necessary for maintaining the Mediterranean fleet. Also its weather limited the time, in the course of a year, during which ships could be careened, cleaned and repaired. Both commanders in

the Mediterranean, Sir John Narbrough and Arthur Herbert, turned to other ports, principally Leghorn, Port Mahon, Cadiz, Gibraltar and Malta.

Hornstein has presented clear and persuasive evidence that during these years of "peace" the English navy played an active and, it would seem, significant role in supporting English commercial activity in the Mediterranean. Third, fourth and fifth rated ships were best suited to the required tasks of convoy and patrol. Their predominance and the absence of first and second rate ships cannot be interpreted as symptoms of naval neglect or decline. Hornstein's study is also valuable for the graphic detail, taken from naval commanders' reports, correspondence, and other archival sources, describing the organization of convoys and the very complex logistical problems of keeping the Mediterranean squadron in a state of good repair and readiness. She has also provided us with an account of a neglected period in naval history.

In a critical vein, the perspective and analysis of Hornstein's study is narrow. The Mediterranean theatre of activity is treated in isolation. The structure, level, and change of England's commercial activity in the Mediterranean is not clear, nor is the interface between commercial interests and naval administration described. Also, Hornstein appears to fall victim to the dualism between conditions of war and peace which underlies the historical distortions she is criticizing. Much of this book, subtitled "the peacetime use of seapower," is about the navy at war with the Barbary Regencies. This irony begs elaboration, and suggests that in more ways than the one Hornstein has stressed, there was continuity between the time of war and of peace.

David McGinnis
Calgary, Alberta

The naval battle of 30 June, 1690 off Pevensey between an Anglo-Dutch fleet of some fifty-nine sail of the line under Arthur Herbert, the earl of Torrington, and a French fleet of over seventy sail commanded by the comte de Tourville has long been the subject of controversy between French and English naval historians. The English refer to the battle as Beachy Head and have traditionally held that Herbert's mistakes in the encounter, including his failure to attack the French center vigorously, were chiefly responsible for French successes on that day which included the loss of at least eight allied ships and perhaps as many as sixteen. In the English version, these successes were, in any case, squandered by Tourville in his overly cautious pursuit of the fleeing allies, an act which rendered the "victory" far from convincing. French historians refer to the battle as Beveziers, and have predictably viewed it as one of their greatest naval triumphs of the Old Regime. They view Tourville as a military genius and the battle as the glorious culmination of the visionary naval reforms of Louis XIV's great minister Jean-Baptiste Colbert, which bore fruit under his son and successor as minister of the marine, the baron de Seignelay.

On the tricentennial of Beveziers, the Commission française d'histoire maritime published the present study by two noted French naval historians as part of its *Etudes d'histoire maritime* series. This slim volume, bereft of footnotes and bibliography, contains three sections. The first on Tourville, and titled "Le vainqueur de Beveziers," is by Etienne Taillemite, who provides a concise biography of the French commander's life and naval career from his birth in Paris in 1642 until that fateful day in June 1690. Taillemite also furnishes a useful summary of the history of the French marine during the seventeenth century, in particular Colbert's reforms, which he believes were responsible for providing his "vainqueur" with the instrument to humble (finally) the vainglorious English and Dutch after decades of naval defeats at the Protestant hands. The second section, "La bataille de Beveziers," by Pierre Guillaume predictably offers a detailed account of the encounter off Pevensey. While Guillaume provides no major revisions of the traditional French view, he does breathe new life into re-telling the battle by adopting an hour by hour description of events. The final section, "Documents relatifs à la Compagnie de 1690 et la victoire de Beveziers," affords the reader the opportunity to peruse a variety of archival materials relating to the battle (originally published by J. Délabré and Charles de la Roncière during the last century), including the "Ordre de Bataille de la Flotte Française," letters from Tourville to Seignelay, and other contemporary accounts of the battle.

While *Tourville et Beveziers* adds little to the traditional historiography, it provides a useful synthesis on Tourville and the 1690 campaign for the general reader. "The French," as Taillemite reminds us, all too frequently ignore their "gloires maritimes." (p. 11) This slim volume provides ample testimony that such "gloires" (thanks largely to Colbert) in fact existed, and convinces us that even more study on late seventeenth century French maritime history is merited before we can fully appreciate them.

Glenn J. Ames
Toledo, Ohio

This, the third in the publisher's series of reprints on shipbuilding, was the standard work on naval architecture throughout the late eighteenth century. It is structured like a textbook, leading the student through a series of exercises, from a whole-moulded launch, via a yacht and a sloop-of-war designed on the single-sweep system, to a cutter, a 44-gun two-decker and a 74, the latter design following the then-new centre of floor sweeps method. In each "exercise" Stalkartt introduces additional complexities: determining the proper bevels of the transoms or laying down the curves of the head rails, for example. The text is detailed and thorough, with much of the "draw a line from A to B; at C erect a perpendicular" style of explanation; the resulting draughts, showing all necessary construction lines, are reproduced as plates; the plates for the 74's fold out to six feet in length!

However, this is a textbook of draughting for naval architects rather than of naval architecture as a whole. Where earlier shipwrights had been restricted to arcs of circles, with their radii fixed in proportion to the length of the keel, Stalkartt frequently says "draw a curve at pleasure." Such new freedoms made for more suitable hulls but they demanded additional expertise that is not discussed in the book.

*Naval Architecture* is most remarkable for the amount of detailed draughting described. Whereas earlier accounts presented only the basic sheer, half-breadth and body plans, Stalkartt developed the shapes of timbers that are not square to any of the principal dimensions, made full use of fairing lines, used a planking expansion diagram to determine the shifts of the butts and so on. Some of this work, certain of the bevels for example, can hardly have been carried out on paper at the standard scale of 1:48 and may have been intended for full-size "design" in the mould loft. This begs the question: did earlier shipwrights ignore such niceties and simply develop the shape from the hull itself or did they lay it all down on the loft floor but leave it out of their books as being too hard to explain?

Most of this draughting reflects contemporary practice in the Royal dockyards. Yet the author was a noted designer of fast ships (including a standard class for the Packet Service) and his preferences for an absence of hollows in the waterlines, for considerable deadrise and for placing the dead flat well forward of midships were far ahead of his time. Indeed, following his own text, he append an amateur designer's proposal for a frigate with extreme deadrise. If built, she would have anticipated the supposedly-revolutionary American privateers of 1812 by twenty-five years.

This book has obvious importance as a primary historical source and should also appeal to ship modelers and others. Its scale and nature, however, necessarily price it beyond the means of many potential readers. This is a particular shame for Canadians, who do not have easy access to the original edition. Indeed and more generally, if nautical research is to progress in this country, it is essential that our institutional libraries acquire such early works as Stalkartt's. Since originals are (and will remain) virtually unobtainable, it would be well for those institutions to support the efforts of publishers of facsimile reprints by purchasing this and similar...
books. Unfortunately, private collectors desiring a fine binding to complement suitably the material within are already too late, the few copies of the deluxe edition having been sold.

Trevor Kenchington
Musquodoboit Harbour, Nova Scotia


In many ways, the late eighteenth and early nineteenth centuries was and still is regarded as the classic period of the sailing frigate, and an epitome of the type can be seen in this thorough look at Essex.

The general format, typical of the series, covers history, design, and construction, complete with rigging and colour scheme, as well as photographs and lines drawings. These characteristics are all quite well done, particularly the history and Takakjian's finely done drawings. This is no more than is expected of an author whose work spans more than a decade and a diversity of experience as a book illustrator, naval and maritime researcher, ship modeler, instructor of naval architecture, as well as teacher of ship modeling techniques.

The introduction to the drawings presents a rather interesting deviation from the norm by showing the half-breadth plan as viewed from below, which "permits the bottom of the hull to be seen in the plating, framing, and planking diagrams." (p.31) It's a rather pleasant change and can be particularly helpful to modelmakers.

And yet, in some respects the book is something of an enigma. Apparently Takakjian worked under some restraints; at one point she explains that "Space limitations preclude a complete bibliography." (p. 31) There are photographs (pp. 23-30), including portraits of William Hackett, Capt. E. Preble, and others as well as models by various modelmakers (pp. 28-30) which, while they appear to be well done, are disappointing in their quality, both in clarity and in the angles from which they were taken, rendering it difficult to determine what they really look like. Conspicuously absent are photographs of Takakjian's own model of Essex, a fine piece of work that should have been included. What springs to mind is an image of Essex in a strong wind sailing toward the enemy, the captain (i.e., the publisher) has rigged only the driver on the mizzen mast, while the Secretary of the Navy (Takakjian) stands on shore willing for more sail. We can all empathize with her situation.

The dust jacket is a colour copy of Ross Watton's depiction of Essex from starboard broadside and a stern view. It is well done and adds greatly to the book. However, the rear inside flap of the dust jacket is headed "The Anatomy of the Ship" series and lists those books published by Phoenix Publications (including the magazine Model Ship Builder); this is misleading except for the reference to Takakjian's book on Essex.

The positive aspects of the book certainly outweigh the negative ones. While the historical background is somewhat brief, when added to the Table of Dimensions, Sources of Dimensions and Proportions, Tables of Mast and Spar Dimensions, and the Lines Drawings, the book should be a welcome addition to anyone's library.

Bob Cook
Whycocomagh, Nova Scotia


In relative as well as in absolute terms, the United States Navy is now the most powerful naval force that ever existed. With the withdrawal of the Soviet Union from the competition for world influence, the USN controls the oceans with a completeness that the British Navy at the height of its power neither achieved nor desired. It is therefore an appropriate time for the publication of two popular and readable histories of the USN. One book, *This People's Navy,* is by a professor of history at Annapolis. The other, *To Shining Sea,* is by a British historian. One, therefore, issues from inside the United States Naval establishment, while the other presumably offers a more objective point of view. Nevertheless, the books are quite alike, for Hagan can be critical when he feels it to be necessary, and Howarth is frankly an admirer of the great organization of which he writes. In fact, without consulting the dust jackets, it would be hard to decide which book was written by the American author (a comment not intended as criticism of Mr. Howarth).

Hagan divides American naval policy into two major periods. From 1776 until about 1890 a classic *guerre de course* strategy was in force, well-suited to a nation remote from possible foes and possessing a relatively small population. During this period the Navy fought the British (twice), the French, the North African states, and acted to suppress piracy. It also engaged in two "brown water" wars in rivers, estuaries and near coastal waters: the war with Mexico and the US Civil War. It is sometimes salutary to read history from someone else's point of view. Hagan notes that, in the 1780s, Britain encouraged the Barbary States to attack American shipping, partly out of revenge for having lost the War for Independence and partly to grab the Mediterranean trade for British merchants. This is a matter that I have never seen mentioned in any British account of the period, and no wonder! Hagan does not hold a grudge and is soon remarking approvingly the co-operation between the USN and the Royal Navy in protecting trade after 1814.

After 1890, the US adopted a policy of sea control by battlefleets, as advocated by Mahan, a decision confirmed by thre-victories in the Spanish American War of 1898. Hagan has interesting insights on Theodore Roosevelt's naval objectives and the dispute within the USN as to whether Britain or Germany was the potential adversary. After World War I, the possible enemies were Britain and Japan (I well remember a heated discussion on this subject in a destroyer's wardroom about thirty years ago, between myself and a now distinguished member of this society). To someone more accustomed to the British point of view, Hagan's account of this period and the background to the Washington Treaty of 1922 is most interesting.

Hagan is approving of Secretaries of the Navy Carl Vinson, who prepared the USN for World War II, and James Forrestal who saw the conflict through. He is somewhat critical of Admiral Rickover and his "nuclear club" and condemns the way aircraft carriers were used in Viet Nam—oper-
ating from practically fixed stations and losing many planes and aircrew on bombing missions that were comparatively ineffectual. At the same time, the riverine operations echoed the Mexican and Civil Wars of the previous century. He also regrets that Admiral Zumwalt's proposed high/low technical mix of ships and weapons was not put into effect. But was it not? I would say that the USN today has a well-balanced fleet.

Stephen Howarth's book covers exactly the same ground as Hagan's. The early events are dealt with in much the same way, but the chapter titles are more evocative and there are many quotations from participants in events, both military and political, that add flavour to the narrative while revealing impressive depths of research. He recounts incidents both heroic and ridiculous; thus, a very rural Secretary of the Navy, on boarding a ship for the first time, is reported to have exclaimed: "Why, the durned thing's hollow!" (p. 219)

While both books are chiefly concerned with naval policy and large scale strategic considerations, the principal campaigns and actions are covered. Howarth gives more detailed accounts of naval battles than Hagan, and they are supported by useful maps. More of Howarth's book is devoted to World War II, especially the Pacific campaigns, during which the USN perfected the carrier task force and became the pre-eminent naval power.

Except for the Cuban missile crisis in October 1962, the Cold War competition between the USN and the Soviet Navy never reached the point of actual confrontation. Most of the events described in the later chapters of To Shining Sea deal with encounters with Arab and Middle Eastern powers: Lebanon, Libya, Iran and Iraq. Both books cover events right up to practically the same moment: just before the outbreak of actual hostilities with Iraq.

It would be hard for me to decide which book I would prefer on my shelf. I would probably choose To Shining Sea by Howarth, but for reasons of style rather than substance. On the other hand, This People's Navy is a better buy. Though Howarth's book has maps and more illustrations, the difference in price seems disproportionate. These are two good books on the same subject, published by chance at practically the same moment. Take your pick.

Douglas Maginley
Mahone Bay, Nova Scotia


Admiral Philip Colomb's book Naval Warfare is a valuable addition to the "Classics of Sea Power" series. John Hattendorf, Wayne Hughes, Barry Gough and the Naval Institute Press are all to be congratulated. The delightful two volume edition is set out in a format that is easy to read in the physical sense. Barry Gough has provided a helpful introduction that sets Colomb in some context, especially in context of the development of Russian sea power in the recent Soviet Age. The text itself is not meddled with, for which serious readers will be grateful. Indeed, Colomb's maps are worth the price of the book!

Admiral Colomb's book, as most naval writers and thinkers will know, was unfortunate in its original time of publication. It
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followed hard on the heels of Mahan's *Influence of Sea Power Upon History*. This was unlucky for Colomb because his own case studies were authoritative enough that people might have benefited more from reading him than Mahan. Its original format was bulky and forbidding. As in the case of Thomas Brasseys volumes on *The British Navy*, it required a dedicated and resolute strategist to "pluck it down" from the shelf, and hold it to read. The writing was not vivid and Colomb, as the editor states, handsomely gave the laurels to Mahan when it came to felicity of prose style. He may have been too hasty. What favoured Mahan was that his book took on a universal perspective, and he sold widely in both Britain and the United States. But Colomb was much more topic-oriented than Mahan, and his book deserved a better fate than to be regarded as second best. Readers may now give him the credit that is his due and read him for his insights, free of the mendacious trammels of the comparative method.

The great value in Colomb's method, for strategic students, stems from his resolute and painstaking use of the casebook approach. Whether he used historical examples in the best possible way, in terms of establishing reliable norms, might well be, and indeed has been, argued. What is clearer is that he took endless pains to present his examples in a rounded historical setting, from the new point of naval behaviour. This means that this book could well serve as a primer in naval colleges and, indeed, as a practical basis for maritime history in universities.

Philip Colomb was well read in reference literature available to him during the 1860 to 1890 period, so the reader gets a glimpse of what the intelligent naval officer in the Royal Navy could rely on as historical source material for strategic thinking. In short the book provides a unique and irreplaceable look at what "history" had to teach an intelligent man in those days. For that reason alone it should be a valuable addition to our bookshelves.

It is also interesting from the viewpoint of determining the worth of the method of strategic analysis through "principles." Mahan's success has stamped his name forever as the "principles" advocate for sea-power. Colomb held somewhat similar views. However, when Mahan looked for principles in historical events he dealt freely in what might be called absolutes. Colomb was more cautious. While he believed that intelligent preparation for war be based on the fact that "command of the sea" was a prerequisite for maritime success, he was nervous enough of the proposition that he discoursed on questions of absolute, partial, and divided "command of the sea." That is, he knew very well that the preparation for war did not always take the fine points into account, and he also knew that the Imperial duties of the Royal Navy might require the absolute command notions to be modified to suit the situation. Thus it is that those who like to differentiate between Mahanian and Corbettian notions of "command" might well take a look at Colomb's views on command. Since much of the book is given over to this kind of thinking the new edition is exceedingly valuable to have "on board." This subject is one that might merit a separate article, if not more, and one that I, personally, discussed, if only in passing, years ago.

Although he did not know much about the seamy side of power structures, Colomb's great strength was that, like his brother, he was imbued with the need to maintain the links between naval policy making and the shifting of an Empire undergoing a real crisis in the attempt to translate common need, colonial individual-
ity, and financial arrangements into a pattern. If Colomb thought that "Command of the Sea" was necessary, and that Admiralty control was mandatory, he was also in no doubt that British sea-power, in the long run, was Imperial sea-power and that his "principles" had to take that fact into account. This Imperial problem may have turned out to be intractible, but it was no less real for all that, or for colonial suspicion of it.

Finally, this book, like Mahan's celebrated work, is based on the then available secondary literature. While Sir John Laughton was slugging away in the Public Record Office (shortly to be joined there by Julian Corbett) Colomb's views came from an astoundingly perceptive culling of available secondary printed sources and from his considerable sea experience. There was a great deal to be learned from both sources, and I do not share the current professional contempt for writers who have never worked in the Round Room or Admiralty Arch or the Empress Building. On the other hand, the kind of history that linked frigate activity at the small action end with home preoccupations concerning trade, alliances and commitments at the other end, was almost impossible to write without the more modern kind of research.

Indeed, the researcher, before the days of state document preoccupation, was cut off from the real nature of naval cause and effect. This had the result of making such a researcher fall heavily into the necessity of relying on "principles" since the more sobering details of fact were denied him. This was Colomb's fate. He distilled almost as much as he could possibly have done from his second hand researches, and the resulting corpus will still repay study. But life goes on, and the more sophisticated results of state paper research were left for others to garner. As Churchill thought, on the eve of his becoming Prime Minister, "facts are better than dreams."

Donald M. Schurman
Kingston, Ontario


During intermission in one of the many " Strategic" conferences of the late 1980s, the talk turned to the *Bismarck* action and I mentioned being present in *Rodney.* "Ah-ha," said a colleague, "Captain Dalrymple-Hamilton and Admiralty Fire Control Table MK I." This remark struck me as a mildly astonishing comment, some forty years after the event. Certainly it was accurate in providing the name of our gallant Captain, but I could not myself have supplied details about the fire-control. This, at any event, was my introduction to the author of this massive work. Clearly, the development of fire control for capital ships of the Royal Navy is of profound interest to him.

We are taken to the end of the nineteenth century when warships were becoming faster, with heavier guns, more manoeuvrable and with an ability to engage at increasing ranges. All this demanded an awareness of relative courses and speeds, the rate at which the range was changing and a recognition that the "change-of-range" rate was itself changing.

Coming to address these questions was Arthur Joseph Hungerford Pollen, the manager of the Linotype Company in Britain. While neither an engineer nor scientist, he could conceive the conceptual
approaches needed—leaving it to designers of precision linotype equipment to develop the mechanisms required. Much of this book provides an extended account of Pollen's struggles during a decade and a half (1900-1915) to persuade the Admiralty—unsuccessfully as it turned out—to adopt his fire control system. There is a great deal of technical analysis, but also an on-going review of the financial and contractual implications of developing the equipment, while maintaining appropriate secrecy. A wide range of political and Admiralty figures are introduced, together with revelations of the Royal Navy's endeavours—not always above board—to develop its own system.

Revealing also, is the tale of Admiral "Jackie" Fisher. Initially a strong proponent of the battleship, with the building (in only a year) of the epoch making Dreadnought he became equally enthused for the development of large, fast, heavily armed but lightly armoured battle-cruisers initially with Invincible but eventually, as a link to our own age, with Hood. It was for such long-range, high-speed combat that good fire control was essential. Unfortunately, after his earlier successes, Fisher appeared to lack the technological understanding for the support of these complex new concepts. The various failures at the Battle of Jutland revealed the lack of achievement in this field. Progress was not made until Beatty established the Admiralty's own fire control design establishment in the 1920s (using some of Pollen's technical colleagues).

This is clearly an academic book; to his credit Sumida notes, at the outset, that "it supersedes (the) preliminary report of his findings and doctoral dissertation." (p. xv) There is an incredible number of end-notes—an average of more than 200 per chapter with one having a remarkable 435! Thus, it is not an "easy read" nor an inexpensive one. Nevertheless, for those who are interested—and happen to come across a copy—the conclusion (some 1052 pages and only eight notes) is an admirable summation.

In spite of overall failure, it is concluded that Pollen's work was a key element (although somewhat overlooked) in the history of computers. Similarly, with his grasp of overall concepts Pollen "may be considered not only as an important pioneer in the development of the computer but, in addition, an early practitioner of what was later to become known as systems analysis." (p. 336)

Sumida appropriately takes us forward to the present era with its greater sophistication of management and complexity of technology. He notes, of the US scene but certainly relevant for our own, "The propensity, moreover of individuals and groups of individuals to pursue their own interests at the expense of the institutions and larger society of which they are a part has probably not diminished...the story of Fisher, the battle-cruiser and the Pollen system of fire control may seem not only modern or recent, but contemporary." (p. 339)

Perhaps a final anecdotal comment may be permitted. During the summer of 1941 in Rodney, when fire control was beginning to be assisted by radar, there were regular mid-morning sessions in the wardroom, during which the First Lieutenant manipulated a device that simulated, on a model, shell-splashes "over" or "short." Officers at the far end of the room had to judge individually what was happening at "the target." Clearly, the Gunnery Department—after decades of development—was disinclined to discount human influence. Perhaps this was as well—both then, and now, another half century later.

S. Mathwin Davis
Kingston, Ontario

The years 1917-1919 spanned one of the most critical phases in Anglo-American relations. As Winston Churchill wrote to US Admiral W.S. Sims on the latter's departure from Britain in 1919, "the harmony and success of this [naval] co-operation form a new precedent, and one which is of the highest value to the future in which such vast issues hang on the unity between our two countries in ideals and action." (p. 188) This was, of course, but the grandiloquent summation of a phase of growing partnership that had not been without its suspicions and doubt, nor without its ascerbic criticism and outright distrust. It would end as it had begun.

When World War I began, the United States was a nation whose official neutrality and enormous industrial potential loomed large in both British and German strategic policies. The US was viewed as a sleeping giant who might be wooed but who never should be provoked. Britain and Germany each saw the US as in some way favouring the other. Thus, from Germany's viewpoint the US had "tolerated" Britain's "Hunger Blockade" of Germany in 1915 while profiting from "English demands" for war material. Britain, for her part, watched anxiously as the US "violated" her own neutrality in 1916 by allowing the commercial visits to New York of Germany's submarine freighter U-Deutschland and permitting the export of war material to Germany aboard her; later, the US accepted the "good-will visit" to Newport of Germany's combat submarine U-53, and in a seeming-ly conspiratorial move, did not intervene when the U-boat sank ships just beyond the three-mile limit, closely observed by sixteen USN destroyers. Documentary evidence shows that such crises were far more serious than was generally appreciated at the time. As is known, German submarine forces almost succeeded in bringing Britain to her knees. The German Navy declared unrestricted submarine warfare on 1 February, 1917, the last in a series of provocations that brought the US into the war on Britain's side in April of that year.

In the best tradition of the Navy Records Society, Michael Simpson's handsome volume provides a judicious and perceptive selection of documents that reveal in tone, temper and substance the full range of Anglo-American relations in the "honeymoon years" 1917-19. Organized both chronologically and thematically, these well-edited British and American documents capture the essence of the naval relationship they corroborate. Part I (January-April 1917) sheds light on the hesitant contracts of the two powers prior to the American declaration of war; Part II (April-June 1917) shows them trying to integrate their operations while coping with the U-Boat threat; Part III (July-November 1917) takes us up to the USN's total commitment to the war at sea; Part IV deals with the pivotal issue and theme of these years, namely the U-boat campaign and Allied countermeasures; Part V examines the role played by US battleships in European waters; Part VI documents the joint North Sea mine barrage between Scotland and Norway; Part VII covers joint Mediterranean operations; Part VIII highlights the naval relationship on the US Atlantic seaboard and in the Caribbean; Part IX (October 1918-November 1919) deals with forging both the armistice and the peace treaty. Ironically, as Simpson's preface
explains, "the warmth of wartime co-operation was replaced by an atmosphere of suspicion, rivalry, acrimony, jingoism and chauvinism which threatened to make enemies of the two powers." (p. xi)

Specialists and general readers alike will welcome this superbly edited volume, not only because of the reprinted documents themselves but because of Simpson's incisive and lucidly written introductions to each of the parts. However, one might have wished for a more finely-tuned index. One seeks in vain such detailed entries as asdic/sonar, armed merchant cruisers, battleships, depth charges, losses, raiders, submarines, U-boats-only to find them subsumed under more general headings such as convoy, and Germany. Despite this shortcoming, Simpson impresses one with having mastered his craft—not only the ability to sleuth about in archives—but to have grasped and explained both the detail and the context.

Michael L. Hadley
Victoria, British Columbia


Sea War should be required reading for those who are to undertake the management of violence at sea. It will instill an understanding of the horror of war at sea and provide insight into the psyche of those who must carry it out. What the book will not do is allow the reader to understand the deeper motivations of senior naval and political leadership. Thus, one can enjoy this book to the full by not bothering to read the introduction and instead concentrating on the feast which Pearce presents in the body of the book. From the destruction of the Graf Spee to the "The Supreme Sacrifice" (p.45) that is the obliteration of HMS Glowworm by Hipper, the reader experiences the agony of the afflicted and the ecstasy of the victor. The travails of Bismarck are adequately dealt with, as is the debacle that resulted in the loss of Repulse and Renown, though the strategic underpinnings are not explored. Pearce claims that "In 1942 in the Arctic Ocean there occurred the most bizarre event in naval history," (p. 137) as he introduces the self-inflicted torpedo attack of HMS Trinidad while engaging three Narvik class destroyers. This yarn brought back memories of the First Canadian Destroyer firing ten practice torpedoes at HMCS Porte St Jean many years ago. As I recall, most of the torpedoes went to destinations decidedly different than those intended, and these not only in two dimensions but in three as well! Times may change but little else does.

The battle at Midway is viewed from a tactical and material perspective. The presentation is adequate but not definitive. There is much to learn about the use of sea-based air power from the USN experience at Midway that is relevant today. Maritime powers like the USA and Great Britain will eventually prevail at sea. The problem is how and when. Midway is about the how and the when, not about the likelihood of strategic success.

The final chapters deal with the Battle of Leyte Gulf and the defeat of Japan. The last chapter can be filed with the introduction since Pearce is not strong on the political dimension of naval warfare. This should not dissuade readers from enjoying a relaxing afternoon with this book.

A.G. Schwartz
Mississauga, Ontario

Operation Sealion, the planned German invasion of Britain in 1940, continues to excite the interest of historians and novelists. Peter Schenk's book, a detailed study of the technical aspects of Sealion, provides much new and useful information from the German side. However, as Schenk makes clear almost from the outset, Hitler never really intended to mount Sealion, so that any discussion concerning it must fall into the fascinating but groundless realm of the 'what if scenario.

Over half the book is devoted to a comprehensive catalogue of the specialized and extemporized amphibious vessels and equipment developed for Sealion. The result of much research, this catalogue comprises a fascinating variety of matériel ranging from modified coastal steamers to rubber dinghies. Schenk emphasizes the production programmes to modify standard river barges into landing craft. He also describes at length the German equivalent to the artificial Mulberry harbours used by the Allies in 1944. These were mobile landing bridges or docks developed in prototype by the German firms of Krupp and Dortmunder Union but not completed in time for the operation. It is interesting to note that the two prototypes were installed together to form a dock on the German-occupied island of Alderney that remained in service until 1978.

The rest of the book is concerned with the planning of Sealion, an awkward arrangement which forces the reader to go from the particular to the general. Detailed planning only began on 16 July, 1940 after Hitler issued a directive to his senior commanders. An exhaustive and useful description is provided of the headquarters organization, preparations, and detailed operational plans of the three services. It is obvious that Germany never came to the realization, as Britain eventually did, that major amphibious operations require joint planning and preparation by all three services as well as a separate and specialized organization that was almost a fourth service itself. Of the German forces, the army was the most enthusiastic, the air force offered the alternative of a bombing offensive that would bring Britain to its knees while the navy, which had to bear the brunt of mounting and sustaining Sealion, was the most reluctant to undertake it.

Schenk is critical of the Kriegsmarine; he castigates it for "putting the brakes on the invasion" so that Sealion "in its final form without any naval protection to speak of, was designed so that no military commander in his right mind would have given the order to proceed." (p. 356) He criticizes the Kriegsmarine's conservative thinking which rested on "the classical concepts of wresting sea control from the superior fleet, which could only be achieved (in the German case) through cruiser warfare and submarines attacking merchant fleets." (p. 356) In essence, the Kriegsmarine "had the chance to end the conflict with Britain with one lightning combined arms operation" but because it was "Intellectually as well as materially unprepared for this...let the chance slip away."(p. 357)

The reason for the Kriegsmarine's reluctance becomes immediately apparent when the opposing naval forces are examined. In the autumn of 1940, the Kriegsmarine had available thirty-two modern warships, ranging from cruisers to torpedo boats (small destroyers) and fifty-nine submarines (including obsolescent and
training craft). Also available were thirty-two obsolescent warships mostly constructed before 1914. Facing them, according to Schenk, was a Royal Navy with three battleships, two battle cruisers, two aircraft carriers, eight heavy and twenty light cruisers, seventy-six destroyers and many smaller vessels. Far from a lack of intellectual or material preparation, the Kriegsmarine's reluctance looks like a healthy dose of common sense.

In fact, Corelli Barnett argues in *Engage the Enemy More Closely* (London, 1991), the RN calculated that only a fraction of its available strength, thirty-six destroyers backed up by cruisers, would be sufficient to destroy the German invasion fleet. The Admiralty could make this calculation and, accordingly, deploy the necessary ships because it possessed an asset which is not mentioned in Schenk's book—accurate information concerning German intentions based on aerial reconnaissance and signals intelligence. When this added dimension is included in the formula, SEALION becomes even more unviable as a military operation.

Although the author argues that Germany's air superiority would have compensated for its naval inferiority, this superiority is not clearly proven. Furthermore, given the technological limitations of 1940, German air cover would have been much less effective during the hours of darkness. What is more certain is that the RN, as it did in 1941 in the Mediterranean, would have fought hard under such adverse conditions and, indeed, events in that theatre provide a signal example of what might have occurred if SEALION had taken place. On the night of 21 May, 1941, three British cruisers and four destroyers intercepted a German assault force bound for Crete. In a little over two hours, they located and sank almost every vessel in that force causing the loss of nearly 4,000 German soldiers—SEALION would not have been much different.

The *Invasion of England* is an interesting and useful work but its author fails to place SEALION properly in the broader context of the history of amphibious warfare. Indeed, Schenk's grasp of this history appears somewhat uncertain. We are told that there were "only two small-scale landing operations during the First World War, the ill-fated attempt by the British to land at Gallipoli, and the German invasion of the Russian island of Oesel in the Baltic;" (pp. 1-2) "the development of amphibious craft was still in its infancy in the US and Great Britain in 1940" (p.2) and, thus, "Operation Scalion stands alone as the first planned, large-scale amphibious operation" in history (p.3). This is putting undue attention on one aborted operation and paying very short shrift to many others. I am not familiar with Oesel but I am familiar with the failed landing at Tanga in East Africa in 1914. This was the first amphibious assault across a beach defended by automatic weapons and an important milestone in the history of amphibious warfare. More importantly, Gallipoli was far from being a "small-scale landing operation," it was a major operation that had a major effect on postwar amphibious planning in Britain and the United States. It may be true that these nations had produced few actual landing craft by 1940 (although they had the basic designs ready) but we now know that they studied the lessons of Gallipoli intensively and incorporated the results in the foundation manuals used for the planning of the massive assaults of the latter years of World War II.

There is also a broader historical context that cannot be ignored, for amphibious operations are not a child of the twentieth century. According to Martin
Garrod, writing in the *Journal of the Royal United Service Institute* (Winter 1988), the classic definition of such operations is that they allow a nation "to project force from the sea onto land, into a hostile or potentially hostile environment, in a tactical posture, without any reliance on ports." The Royal Navy possessed this capability as early as the mid-eighteenth century. In this respect, it is worthwhile noting that the RN had developed specialized and standardized landing craft for infantry by 1758 and that the first manual of amphibious operations, John Molyneaux's *Conjunct Operations; or, expeditions that have been carried on jointly by the fleet and navy*, was published in London in 1759. Britain thus possessed an amphibious assault capacity that was limited only by the technological constraints of sail-powered wooden warships nearly two centuries before SEALION.

Schenk seems unaware of this background and his narrow focus detracts from the quality of his work because he does not place SEALION in its proper context. As an amphibious operation, SEALION may loom large in German history; it has considerably less importance in British and American history. Despite this flaw, *The Invasion of England 1940* is an interesting work with a wealth of technical detail.

Donald E. Graves
Ottawa, Ontario


Some thirty years ago Kapitän zur See Otto Kretschmer, the highest scoring ace of the U-boat service in World War II, spoke at a Toronto Naval Officers Association meeting. More recently Baron von Mullenheim-Rechberg, who had been the battleship *Bismarck*'s assistant gunnery officer, spoke at the Royal Canadian Military Institute. In each case, the members’ turnout was one of the largest in the group's history, even to this day. This illustrates the perverse interest we Canadians—and other Allies—have in the German participation in the Atlantic war, and the personalities involved. Lower attendance greets similarly successful Canadian Battle of the Atlantic officers. There seems to be a particular fascination with the U-boat arm. This book, by a young American ex-naval officer, is a somewhat pedestrian biography of a quite unusual but not especially fascinating U-boat commander. This critical groundwork should be qualified by adding that Vause has gone to considerable trouble to unearth the scant records and background facts for his tale, and withal, tells it well. He interviewed several of Liith's contemporaries and crew members, reviewed the logs of the four U-boats he later commanded, and the Bdu headquarters records. From these we get a somewhat fuzzy and only partly analytical picture of a rather different-from-average commander.

Liith, born in 1913 in Riga (then part of Russia) of a solid and respectable German family, joined the Navy in 1933, and, for no known reason, the U-boat arm in early 1937. His claim to historical fame is based on his wartime record, where, in sixteen patrols, he claimed he sank forty-nine ships with a total of almost 210,000 tons, an Ace second only to Kretschmer. Post-war records show that in fact he sank forty-three ships of 208,000 tons, an unusually accurate record. Unlike many U-boat COs, he was a dedicated, although not a fanatic, Nazi. He preached, sincerely albeit
moderately, the official doctrine to his crews. Yet he was greatly appreciated by them for his fatherly, careful, even prudish attention to their welfare, health, families and futures. He was an odd mixture of an excellent leader and political adherent, yet aloof, and rather unremarkable. As noted in biographies of other U-boat COs, he was either not aware of the Jewish "solution" and the extermination camps, or deliberately ignored the rumours he may have heard. Despite Vause's rather carefully controlled and questioning praise for Luth's efforts, based largely on his men's support of him and his successes in the Atlantic in 1939 to 1941, and in his two long cruises to the Indian Ocean in U-181, one of 203 days, it would seem that Luth had a firm grasp of his responsibilities and custody in that uniquely isolated command of a submarine. In fact Luth prepared two useful texts, one a carefully and accurately crafted diary of his first two years in command, *Boot Greift Wieder An* (The Boat Attacks Yet Again; p. 22). The other, evidently a very seminal and authoritative lecture (if we are to accept Vause's sparse quotations therefrom), "Problems of Leadership in A Submarine," was used at the Officers College at Weimar and elsewhere. Given Luth's success and his crew's strong support of his style, this lecture would be quite fascinating reading in itself. For Luth, a Nazi, inclined to occasional fits of odd behaviour, was recognized by his service and by Donitz with Germany's highest award, the Knight's Cross with Oak Leaves, Swords and Diamonds. By late 1943 he was given command of two training flotillas, and in September 1944 promoted to Captain (the Kriegsmarine's youngest) and appointed Commandant of the Marinekriegsschule near Flensburg. Here, six days after the war officially ended, Luth was accidentally shot and killed by one of his own sentries still patrolling the grounds to prevent looting and disorder. It was a sad and unnecessary end to a singularly competent but largely unknown survivor.

This is a book to supplement a collection on the U-boat war. There are some questionable assessments (Vause is critical of Luth's doctrinaire and crew self-improvement teachings and his sometimes excessive use of deck guns to sink smaller vessels), and a few factual and index errors. Luth is a wartime character of whom any student of the subject should be familiar. While not seriously analytical of the reasons for Luth's position as Germany's second most successful CO, ahead of the better known Endrass, Prien, and Schepke, this does the job of introducing us to Luth in quite a satisfactory manner.

Fraser McKee

Markdale, Ontario


The "Anatomy of the Ship" series is designed to provide detailed documentation of individual ships and types. It is directed to the more technically minded reader and is of particular value to ship modelers and marine artists. The series is lavishly illustrated with photographs and line drawings, though some volumes have an unevenness of information presentation and drafting quality. Al Ross's *The Destroyer Campbeltown* is, in the main, well done but does suffer from some of these shortcomings.

The book is divided into three sections. The first is an introduction in which the
author discusses the design, construction and history of American four stacker destroyers (Campbeltown began her career as USS Buchanan). We are taken from her commissioning in 1919 through her US Navy life, to her takeover in 1940 by the Royal Navy as one of fifty destroyers exchanged for bases in British territory. HMS Campbeltown was most famous for the way she met her end. On 28 March, 1942 she rammed the gates of the Normandie drydock at St. Nazaire, France; eleven hours later she blew up, destroying the gates and denying the use of the dock to the Germans for capital ship repairs. The final alterations for the St. Nazaire raid are also described. The history is brief but adequate and forms the background for what is essentially a technical presentation.

The second section contains twenty-five full page photographs of the ship and her sisters, including views of their deck fittings and armaments. The photos are clear and both well and interestingly captioned.

The final section is also the largest, and comprises the drawings of the ship in the four stages of her career. These are, for the most part, very competently done, though the coordination of the general arrangement plans is poor. The plans should follow the profiles for quick cross referencing. Instead, profiles for all stages in the ship's life are lumped together. The corresponding plan is usually four or five pages away, which is annoying to the reader. The author has also chosen the odd scale of 1/256 (3/64" = 1") in order to fit the page size. This scale, being non-standard, is impossible to work with directly. A scale legend on each drawing would have facilitated the taking off of dimensions accurately by dividers. The line drawings are incomplete, preventing an assessment of their true fairness or the location of the body plan stations. The draughtsmanship of these is inferior to the other drawings in the book (pp. 62 and 63). There is a duplication of information in the large scale partial profile drawings. These add no further information to the smaller scale full profiles already presented (pp. 64-75). The hull plating expansion drawings are incomplete, as are notations on the boiler construction section (pp. 78 and 81). Other details in the three-inch armament notation are missing and editorial mistakes in the titling of the twenty-seven foot Royal Navy whaler exist. Nor does the drafting quality of the latter measure up to the standard we have grown to expect in the series, (pp. 94, 122-3). Reference to Humbrol colours would have enhanced the camouflage scheme drawing. The back dustjacket illustration is not colour-accurate and will fade with time (pp. 126-7).

The artwork on the front cover of the dustjacket is superbly done by artist Norman Wilkinson. It shows the ship making her final approach to St. Nazaire, and he has caught the drama of the ship's impending end in a very tense and graphic way.

Keeping in mind the criticisms noted, I believe that the book has good technical value and should be on the bookshelf of any serious marine artist or modeller of destroyers of the World War II period.

D.B. Munro
Ottawa, Ontario


British naval writer David Brown has compiled the most complete and detailed record of the more than 1600 warships and vessels lost during World War II. It is the first single-volume reference to offer such
The book includes a mass of appendices, indexes of principal battles and actions, ship names and most importantly a commentary which allows the reader to track the vast war at sea from 1939 to 1945.

Part One, which encompasses roughly half the book, consists of a chronology of warship losses. There, for example Brown explains how the Germans struck a serious psychological blow in October 1939 when the daring commander of U-47 penetrated the shoals and currents among the islands surrounding Scapa Flow and sank at anchor the battleship Royal Oak. The attack, in which 786 British officers and men lost their lives, was possible only because of the inadequacy of the fixed defences and obstructions at the Royal Navy's main Fleet base in Home Waters. Brown might have added that Winston Churchill a few days later in the House of Commons termed the U-boat commander's attack "a remarkable exploit of professional skill and daring," and observed that throughout World War I, Scapa Flow had remained immune from such attacks due to obstacles imposed by currents and net barrages.

Part Two includes a summary of warship classes by nation and particulars regarding type of vessel, class, number built, period of service, displacement, torpedo-tubes, mines, machinery (steam or diesel), and complement of officers and men. There is documentation on warship armament, e.g. capital ship and heavy cruiser main armament, or surface or submarine-launched torpedoes. A map section details the theatres of war: European, North Sea, Mediterranean, North Atlantic, Indian Ocean, South Pacific, Solomon Islands, etc. More space should have been devoted to maps for, although informative, they are almost microscopic to read. A statistical analysis outlines warship losses by ship type, area, country, cause (e.g. air attack, submarine torpedo), and by year.

In examining these data one can, for instance, understand why there was deep concern, even panic, in some Washington, DC circles as naval losses of men and ships climbed after Pearl Harbor. Not many American ships sent to join the final stand off Java in February 1942 survived. Yet few Allied leaders realized that with Java's fall the Japanese Navy had fought its last successful campaign. Two months later the US, at enormous cost, turned back the next Japanese amphibious assault in the Coral Sea. The US Navy's carrier aircraft won the Battle of the Midway a month later, thus, permanently halting the Japanese Central Pacific advance. By August 1942, the US Navy launched a limited offensive in the Solomon Islands. After the US invasion of Guadalcanal the Japanese threw almost their entire fleet into a counter-offensive. The US lost twenty-eight ships to the Japanese nineteen, but it won the strategic victory. Japan could no longer replace its lost ships, crews and expertise while the US possessed the industrial base and manpower to build, man and train a completely new navy. This reference work is one that no student of World War II naval history should be without.

David Pierce Beatty
Sackville, New Brunswick


This book examines two wars which may be new to us and which we can gratefully
add to our present knowledge. It also provides tales heretofore unknown of the men of the "Other Navy," the US Naval Armed Guard (NAG) and their Merchant Marine shipmates who played an important but little-recognized role in transporting troops, guns, and goods of war. This is the story of nearly 145,000 Americans who served in about 6,000 merchant ships on the freezing Murmansk Run, the U-boat-infested Atlantic, the fiercely-contested Mediterranean, and the vast Pacific.

Those who chronicle the lives of battleships, carriers, cruisers and destroyers may pay homage to the Merchant Navy, but rarely with more than a paragraph. Few have heard of the NAG either of the USN, RN or RCN (we called them DEMS Gunners—Defensively Equipped Merchant Ships; see Frederick B. Watt's In All Respects Ready). They got cargoes through despite the dangers of the sea and the violence of the enemy.

Gleichauf begins by reminding us that submersibles were proven seaworthy as early as 1897 but neither Britain nor Germany realized their potential. A Sea Lord said in 1914, "It is child's talk to say U-boats will ever amount to anything! Disregard them entirely!" (p.1) By early 1917, Britain had food for only six weeks and First Sea Lord Sir John Jellicoe said, "It's quite impossible for us to go on with the war if losses like this continue." (p.3) Germany began the war with twenty boats and ended with 144. In 1914 they sank 310,000 tons; in 1917 6,270,000 tons. Only then did the Admiralty agree to an experimental convoy, which one naval historian insists "saved Britain from defeat in World War I." (p.3) Yet Germany was equally blind. Commodore Herman Bauer urged that a U-boat patrol off the Western Approaches and co-ordinate operations by radio (as the Donitz wolf packs would do so well in World War II) and was relieved of his command for his efforts.

Both Germany and Britain offended the United States, which had been committed to a policy of "absolute neutrality" by Woodrow Wilson in 1914. (p. 4) British search and seizure of US ships recalled events leading to the War of 1812. The Chief of Naval Operations told Rear-Admiral W.S. Sims, "Don't let the British pull the wool over your eyes. It's none of our business pulling their chestnuts out of the fire." (p.4) Germany offended US sensibilities by her unrestricted submarine warfare despite claims it was necessary because of armed British merchant vessels. American resentment peaked when Lusitania was sunk in 1915 and 139 American lives were lost. Germany gambled that this would not bring America in before Germany won the war. The Americans waited until 1917, but Germany lost anyway.

By 1937 the Admiralty was convinced that the submarine would not be the problem it was in 1917, while the US was determined once again not to be drawn into a European war; these were their blindest blunders of the coming war. In 1935 Congress forbade the sale of arms or munitions to belligerents, though in 1937 it passed the "Cash and Carry Act." Sales were C.O.D.; consistent with American tradition, European wars did not preclude profit. By then President Roosevelt was leading his country into the war by establishing a neutrality patrol off the US coast, by calling the Naval Reserves to the colours, signing a 99-year lease for bases in the West Indies and Newfoundland, and sending USN ships to escort convoys to Iceland. Gleichauf says this relieved the hard-pressed RN and RCN of escorting convoys all the way from Canada to the UK. Not so. The map Roosevelt sent Churchill showed that the US would take over escorting west of
Iceland. This never came to pass. But the US was engaged in undeclared war and the first shots were fired in September 1941 at USS Greer by U-652. In October USS Kearny was hit by a torpedo and the USS Reuben James was torpedoed and sank. RCN sailors on the North Atlantic Run welcomed the sinking of Reuben James. We were now sure of an ally.

The Murmansk Run had more hazards than any other. But readers who made these convoys will remember the NAG were part of the problem as much as the solution. They opened fire on any excuse, even at our own aircraft. This incensed the C-in-C, Admiral Sir Bruce Fraser, who sent a signal, "Aircraft recognition. Two engines is theirs, one is ours."

NAG training began before Pearl Harbor, when reservists began gunnery at Little Creek, Virginia. In September 1941 they planned to train 1200 officers and 1000 enlisted men by January 1942. Canadians will be relieved to find that the US was as unprepared as we in guns, ammunition, man-power and equipment; after Pearl Harbor confusion reigned. This reviewer in 1940 was Officer-of-the-Quarters of two 6-inch guns dated 1899 and 1903. It was with perverse pleasure that he read of 4-inch guns of pre-WW I vintage being fitted aboard US merchant ships. In the RCN we talked wryly of sailing our first corvettes with wooden guns. We now know the USN did the same. The mordant humour of the Anglo Saxon race was evident. A sign in an officers' club at Little Creek said, "Ready-Aim-Abandon ship!" (p.22) By 1945 Little Creek trained 144,970 NAG.

And their duty was clear. "There shall be no surrender and no abandoning ship so long as the guns can be fought." (p.54) Fine stirring words, but no good to untrained men. After the escort abandoned convoy PQ 17 to submarines and Focke Wulf, the merchant crews, including the NAG, panicked often. In the Daniel Morgan, when told to stand by boats, some were slipped, capsized, lives were lost, confusion reigned. But tales of derring-do abound and are the main part of this book; men doing their duty when they are cold and wet and sick and tired and afraid, when nobody will notice if they do not do it. Yet they act as they ought to. These tales can never die.

H.E.T. Lawrence
Victoria, British Columbia


In a substantial work of wide-ranging intellectual dimension and insightful documentary interpretation, Tony Lane offers a fresh and provocative perspective on the British merchant shipping industry at war, 1939-1945. Largely based on the evidence accumulated from an extensive body of archival research, including official government documentation, private manuscript collections, various media fonds (film, radio, newspaper and periodical archives) and a programme of oral interviews, and supplemented by a critical review of the historiography and fictional accounts, the book engages in a compelling round of myth "debunking" and socio-historical decipherment designed to bring into sharper focus the experience of merchant seamen as civilian-industrial workers circumstantially pressed into the role of frontline combatants. Unlike many of the standard texts, histories, and "semi-official" reminiscences, however, this book is not primarily devoted to the war at sea and its
operational prosecution, but more to how the war impinged upon, collided with, and touched shipboard society, how the war catalyzed the behaviour and affected the traditional soci-cultural relations of ordinary seafarers. It relates how a nearly impermeable official "culture of war" frequently demanded and episodically expected certain responses from a community of particular custom which commonly existed in self-imposed occupational isolation; it tests and evaluates seamen-behaviour not only under the duress of war, but under the strain of a whole-scale interruption of an entrenched habit and rhythm of maritime-industrial life-experience.

This is not to say that the war is categorically ignored. On the contrary, the text is very finely balanced, recounting details of military campaigns and convoys in all theatres of operation, and liberally sprinkled with eye-witness accounts and vignettes of "action," shipboard routine, heroism, survivor trauma, and the travails of captivity. The author also provides some new and intriguing data concerning the wartime operations of merchant ships, especially on the subject of seaman mortality, ranging from the time taken to sink vessels, to the effect of time adrift on the death rate, crew survival rates by rank and department, the effect of sea temperature on the death rate, to graphics on casualty density and hazardous ocean areas. Many of the recollections and data sets have nevertheless been selected or compiled to place specifically into context shipboard working conditions and crew behaviour, and to explore the extraordinary circumstances attending the aftermath of encounters with the enemy, either adrift in the rafts and lifeboats, or behind the wire of the prison camp. Considerable weight is also attached to the shoreside experience of merchant seamen in their relations with employers, representatives of institutionalized authority, and the community at large. Here again, especially in his reflections upon military government's attempts to "manage" seamen misconduct through the rigorous application of Defence Regulations and the convening of Naval Courts, Lane offers some startling conclusions based on statistics gleaned from the public records. For example, we learn that the overwhelming majority of Naval Courts were held in the Mediterranean-Middle Eastern theatre between May 1943 and June 1944; that seamen appearing before Merseyside magistrates stood a three timed higher chance of being jailed than seamen appearing before magistrates on the North-East coast; that duty offences were comparatively rare; that the greatest number of offences were committed while in port and of these, one-fifth of the absences without leave and one-third of all disobediences took place in UK harbours and mainly aboard troopships. In effect, the author's intention is to cut through the official rhetoric and media imagery of the contemporary and post-war narrations with a well-referenced and richly researched diagnostic scalpel in order to illustrate and interpret more faithfully the actual social, cultural, occupational, and psychological consequences of a war which abruptly thrust an entire industry and its civilian workforce into semi-militarized activity.

Lane frequently tilts at the straw men of official culture, most notably, the invented tradition of "the people's war," variously promoted and hyperbolized by the media and the idiom characteristic of official reports and contemporary fiction, which stereotypically viewed merchant seamen as icons of British yeomanry collectively united in battle against the enemy. None of this is particularly revelatory, but neither should it be dismissed merely as
iconoclastic. In many instances, the concerted tarnishing of the invented images is cleverly juxtaposed with the hard currency of documentary evidence, providing a convenient and useful framework for analytic conclusions upon the nature of shipboard allegiances, crew discipline (or indiscipline), social and race relations, the milieu and mentalité of the merchant seafaring community, and the alienation and despair of life-boat and prison camp experience. Equally important, however, is the manner in which the author assesses and treats the documentary evidence itself, especially the ships' logs, which provide necessarily the foundation of any real conclusions upon the nature of shipboard activity, crew behaviour, and wartime combat. In a pivotal chapter ("Every Day Life"), Lane identifies an idiom of "shipmaster reporting" nearly extraneous to the conduct of war, a relation of "business as usual" amidst the turmoil of convoy duty and its associated military controls. The occupational rhetoric of the shipmaster, typically conventionalized through a reporting style combining business acumen and narrative understatement, is carefully supplemented with the statements of seafarers captured in interviews, whose reminiscences bring to life what amounts to a dry, dispassionate, and closed view of shipboard activity.

Lane is a sociologist, and naturally brings to the subject a certain amount of academic predisposition. Yet it is not intrusive, but rather very effectively deployed. In fact, one of the important and original contributions of the text is its consistently successful ability to lift apparently disparate evidence and patterns of seaman-behaviour into a cogent interpretive synthesis. Much of this success rests with the sociologist's methodological preoccupation with social-structural and cultural analysis. Reflecting upon the occupational culture of merchant seamen, for example, we are introduced to an essentially anarchic world of "maverick" individuals, conditioned to a freedom deep-rooted in the folklore of seafaring, and grounded in the legal-contractual relationship customarily established between the shipmaster and the crewman. The essential antagonism between this occupational freedom and the wartime spiral of institutionalized-military coercion and insistence upon conformity provides the backdrop for the author's explanation of shipboard and shoreside misconduct, desertion, and revolt. Considerable data is amassed to show that grievances were commonly the product of previous and accumulated experience, employer and shipmaster intransigence, "customary" seaman delinquency, poor and often terrible physical conditions, all exacerbated by a war which established for merchant seamen few familiar boundaries or ground-rules, and for which neither the employer nor the constituted military authorities had any inclination or ability to deal with or remedy. Similarly, in assessing the social relations of the merchant ship or life-raft or prison camp, we are introduced to concepts and dimensions of cultural "space," hierarchically arranged, racially or occupational or class-motivated, seemingly devoid of political motivation, yet rigorously entrenched in tradition and contextual sources of cultural habit. These structural paradigms provide the glue which binds and makes sense of a whole array of contentious issues, squabbles over pay and war risk bonus, Chinese and Lascar strikes, class conflict, ethnic antagonism and racial stereotypes, unionism, manning pools, the foundation of seaman folklore and occupational creditworthiness, the military-industrial complex and its obsession with enforced conformity of behaviour.

This is an excellent book, especially
marked for its efforts to bring new interpretive sense and methodology to a not neglected but largely unwritten history of a community of men reluctantly thrown into the chaos of war. It is surely required reading for anyone interested in the twentieth century history of the merchant shipping industry. For those who personally experienced its wartime manifestation and now strive for official recognition of their sacrifices and contributions, it may also represent something of a catharsis. If there is criticism to level, it may be Mr. Lane's ultimate conclusion that cooperation and solidarity are the essential preconditions for the continuity of human life, that social structures or social continuities preface necessarily the social functions and social activities of individuals. But this is purely a matter of interpretation and academic training, and another story altogether.

Richard G. Brown
Ashton, Ontario


Administrative history is not "sexy." Yet, like sex, structural organization and administration of large institutions is basic to ongoing activities. Like sex education, administrative history provides an important part of our understanding of how and why things happen the way they do.

Hone's study is an excellent introduction to a specific and complex topic which has largely been ignored. Other studies have examined the structure of the office of the Secretary of Defense, have looked at the impact of specific secretaries on defense policy, or have provided biographies of the men who filled important posts. Within the broader context of civil-military relations, a study of the changing functions of the office of the Chief of Naval Operations has, to date, been missing.

The office title and the fact that the incumbent sits on the Joint Chiefs of Staff Committee suggests the position is one of authority and command. The reality is otherwise. First, the principle of civilian control of the armed forces is jealously guarded; both the Secretary of the Navy and his superior, the Secretary of Defense, impose their methods on the organization. In the 1960s Robert McNamara turned the entire Defense Department upside down with his emphasis on analysis, Planning Programming and Budgeting System, and functional rather than service orientation. John Lehman, Secretary of the Navy under Regan, also imposed his own form of control over the Navy. Second, the organization of the USN is arguably so large it is impossible for one person to have effective control. Theatre Commanders in Chief, of the same rank as the Chief of Naval Operations, and heads of development programs which are funded directly by Congress are not easily subordinated to the CNO. Third, there is the question of personality. Admiral Zumwalt, when CNO, had to "negotiate" with Vice Admiral Rickover, who was not only junior in rank but, by organization, two levels below the office of CNO. Specialists will know the position has not always been regarded as a prize.

There are many facets of administration, command, and control of a navy that must be considered in the structural organization. There are personnel matters, including recruitment and training, conditions of service, promotion and appointments, and
ultimately retirement. These ought to be common within a single service, although the USN in some respects has three separate branches—surface, submarine, and air. They must also be coordinated with the other services. There are problems of research and development, technical support, and ship design and construction. There are matters of continuing support maintenance of bases, buildings, dockyards, and the provision of consumables. There are questions of strategic policy, national policy, and the relationship of the service to them, both in formulation and execution. There are also problems of command. These include the operational efficiency of individual ships, their squadrons, and fleets. Operating budgets for fuel training ammunition, and maintenance must be decided. Finally, there must be coherence between all these factors. To meet all these demands the CNO's office staff has grown to nearly 1,500 people—with its own structure to be controlled!

In exercising the functions of office, CNO's are squeezed from below by independent commands and strong willed individuals, from above by civilian secretaries, at all times by the relationship with Congress, and by the wide range of issues and questions that must be resolved. Over time, as different individuals are named to senior positions to implement policies of different administrations, the nature of the office has changed. Admiral King, both CNO and Commander-in Chief had quite a different position in the navy from that of Zumwalt, who became CNO twenty-five years after King retired.

Knowing how the decision-making structure and the limits of the CNO's authority have changed over time is important to understanding US naval policy. Hone says of his work, "It would be presumptuous to believe that the most complex piece of that history (CNO) could be wrapped in less than two hundred pages after six months of research and writing." (p. xiv) Nonetheless, his work stands as an excellent introduction.

William Glover
Ottawa, Ontario


This book adds to a growing list of publications devoted to the study of the powerful Soviet Northern Fleet and/or the US Navy's Forward Maritime Strategy (FMS) which was designed partly in response to it. Contributing editors Skogan and Brundtland have assembled a collection of papers (originally presented in 1988 at a conference of the Norwegian Institute of International Affairs) detailing political and military responses of selected Nordic states to the Soviet naval build-up. The impressive list of contributors includes such well-known scholars as Jiirgen Rohwer, Clive Archer and Geoffrey Till.

Rohwer's sketch of the development of the Russian/Soviet Navy from the 1850s to the present is fast-paced and laced with sufficient leads to satisfy those interested in further historical study. He demonstrates that Russian/Soviet naval planners had global ambitions long before the advent of Admiral Sergei Gorshkov. Skogan's submission provides a wealth of statistical information on the evolution of the four Soviet fleets and traces the recent trend in the quantitative and qualitative strengthening of the Pacific and Northern Fleets at the expense of the Baltic and Black Sea.
Fleets. The Northern Fleet, based in the Murmansk Fjord and Kola Peninsula, possesses—as of 1987—the most powerful combined surface combatant, SSBN and SLBM warhead distribution in the Soviet Navy. With the addition of the Typhoon— and Delta-class SSBNs, the Soviet submarine force is leaner, but meaner. Unfortunately, Skogan's article is presented in a vacuum: he does not adequately link the fleet statistics with capabilities, or capabilities to mission requirements. This is true for the book in general; one learns surprisingly little of "Soviet Seapower" and rather more on NATO responses.

The pivotal role of Norway on NATO's northern flank is prominent throughout the book. In what can be taken as a blanket statement covering all Nordic states in this collection (including Britain and Germany) Brundtland writes: "The growth of Soviet seapower in the postwar period has been keenly followed in Norway and it is beyond doubt that it has had a considerable and increasing impact on the country's security policy." (p.37) The strategic value of the Norwegian and Barents Seas has risen dramatically since the introduction there of Soviet SSBN "bastions" within missile range of North America. Early control of these waters is therefore crucial for NATO and especially for the United States.

Britain's position is well covered by the Archer and Till articles. Since the early 1970s the Royal Navy has become "very much an EASTLANT and Channel fleet with the emphasis on the ASW role." (Archer, p.69) As Norway is a key to the defence of Britain, the Royal Navy would form the backbone of the NATO ASW force in support of the US Navy's FMS in the Norwegian Sea. Archer therefore argues for vastly increased British naval appropriations. Till emphasizes the crucial role the Royal and other European navies would play in threatening Soviet SSBNs in their bastions—forcing Soviet surface and submarine forces to concentrate in northern waters as a protective measure. Hence, an aggressive ASW strategy would provide for a forward, indirect defence of NATO SLOCs.

Clearly, however, this book is now one of history and not strategic studies. With its numerous references to the Warsaw Pact, West Germany, Soviet naval bases in the Baltic states and an outdated conventional military concept of Europe's Central Front, Soviet Seapower in Northern Waters is already obsolete. The strategic implications of the Gulf War for NATO and, most of all, the stunning power shifts that led to the dismantling of the Soviet Union have combined to illustrate just how quickly and to what degree isolated strategic assessments can become virtually irrelevant in the contemporary global context.

Serge Marc Durflinger
Verdun, Quebec


This is a report of the proceedings of a large international conference held in February 1989 at the British Royal Navy College in Greenwich to commemorate the seventy-fifth anniversary of the founding of the Royal Naval Staff College and NATO's fortieth anniversary.

It is a book for the specialist. Its three parts cover Foreign and Defence policy of the Superpowers, Maritime Strategy of the Superpowers, and The European Dimension. It makes fascinating reading today not least because even in the few months
between the conference and actual publication of the book, East-West relations turned upside down, with the revolutions in Eastern Europe in 1989 and the fall of the Berlin Wall on 11 November 1989.

In their introduction the editors say, with considerable understatement, "events...that year have been quite startling and have carried the world a good deal further than most of us would have foreseen," adding that "In the main...this book is a record of what was said at the time; it seems to us that our contributors largely got it right. However, where it seemed necessary to us to incorporate later material because it allowed us to carry the argument on one stage further, we have done so. In most cases it will be obvious where we have succumbed to this temptation." The high pace of events continued, with among others the Gulf War beginning in January 1991, the Warsaw Pact formally溶解ing in March 1991, signing of the Start Treaty in July, and the Soviet Union溶解ing during the summer of 1991. Some feel that there is only one super power these days, but as the book reveals there is still a very powerful Soviet navy, or whatever they end up calling it, out there.

Much of what the contributors said, they did get right. They were certainly not prophets, nor did they purport to be, but they included the important factors which would provide a framework within which to judge the events as they unfolded. The book should be part of the equipment of anyone engaged in defence planning, particularly naval. "The problem," it says, "for naval planners is compounded by the unavoidable mismatch between the quality of help available from the foreign policy community in outlining its future programme and requirements, and the long lead time associated with the procurement of weapon systems and general force planning...Th(e) constant failure to get coherent long-term political direction encourages the military planner to produce unspecific and general purpose forces...The sailor's...almost mystical faith in the capacity of a first-rate balanced fleet to cope with virtually anything, can be distinctly irritating to the unsympathetic."

Having been a naval and defence planner myself over a great many years, arguing for general purpose forces, which I remain convinced are the best investment for this country over the long term, I understand the problem, and can even produce a wry smile at the view of Henry L. Stimson, Franklin Roosevelt's Secretary of War: "the Navy Department—frequently seemed to retire from the realm of logic into a dim religious world in which Neptune was God, Mahan his prophet and the United States Navy the only true Chinch."

The contributors to the book, all Americans and British except for Commander van Rooyen of the Royal Netherlands Navy, provide a nice balance of views on the naval dimension of East-West Relations in the 1990s. The sections on arms control at sea are particularly useful in putting the numerous papers appearing elsewhere on that subject in perspective. The piece on US maritime strategy by Vice-Admiral Joe Metcalf (USN Ret.) and the commentary by Vice-Admiral Ian McGeogh (RN Ret.) is particularly useful in understanding the public discourse on that vexed question.

This book requires too much prior knowledge of the subject for it to be recommended for the general reader, but it is certainly a valuable addition to the library of strategies and defence planners and those who have kept reasonably abreast of international naval developments.

Dan Mainguy
Ottawa, Ontario

This is an excellent technical history of how a department of the Navy worked to salvage many of the severely damaged, beached or sunken units of their fleet during war and peace. It is a large, well-bound and well-presented volume, the kind rarely seen today, especially at the offered price. It is also a clearly written and detailed explanation of how many of the world's most spectacular and often less spectacular salvage and re-floating operations have been carried out in the past century.

The evolution of salvage operations, technology, and the department is presented in a clear, readable manner, with relatively short sections and headings. They guide both the serious researcher and the grasshopper reader to the wealth of easily located and digestible material. Technical operations are painstakingly described, though a glossary of some of the more specialized terms would be an asset.

Regrettably Captain Bartholomew lost his life during an official Navy dive late in 1990, so is unable to receive all the credit he justly deserves for compiling and writing this book. The resources he used along with his own wide experience, gained during a lifetime of naval service, have been listed in an extensive bibliography. The photographs and specifications of all the salvage vessels used by the navy are yet another example of the useful reference material. It is a good illustration of what a technical historical volume should be.

The book fills a niche in maritime history which heretofore has received scant recognition outside of technical journals and trade publications. The clear, simple and yet adequate diagrams go far in helping to clarify the written explanations. While the photographs are sometimes not up to the high quality of the remainder of the book they add much to the information.

Not every achievement of the naval salvage service dealt with locating and retrieving naval vessels. The righting and salvage of the 65,000 tonne *Lafayette* (ex. *Normandie*) in New York Harbor in 1942 was a major success at a time when the resources of both the civilian and naval salvage teams were stretched after the disaster of Pearl Harbor. Clearing harbours of sunken or destroyed cargo vessels was a major task during World War II and the Korean and Vietnamese conflicts. The recovery of downed aircraft of civilian, naval and other branches of the armed forces has provided information of why they crashed, through recovery of their "black boxes," and also recovered the remains of their occupants and sometimes valuable material carried as freight. The largest and most difficult operation of search and salvage was for the remains of the ill-fated space shuttle *Challenger*, lost in early 1986. It took the team seven months to locate and retrieve all the major portions of the craft. The result was successful, in that they were able to identify positively and confirm the cause of the disaster.

Part of the book is devoted to the unique equipment developed and used to locate underwater wreckage and the technology used to identify and record the findings. One historically significant wreck that was identified, documented and analysed by naval salvage experts is that of the *Monitor*, which foundered and sank off Cape Hatteras in 1862 while under tow. They plotted its exact location, made a photomosaic of the
entire hull, and determined its corrosion rate, all from the surface without sending a single diver to the site.

This is a valuable work for anyone requiring information about US underwater salvage, the equipment used, and the men who organized, planned and carried out the dangerous, complex, seldom repetitious and never boring operations. It is a straightforward, uncomplicated, widely documented chronology of a complex topic. It is refreshing to find a comprehensive book on the subject of wrecks, retrieval and salvage without a single mention of the Titanic within its covers.

David A. Walker
Halifax, Nova Scotia


The Kendall Whaling Museum published Forster's *The South Sea Whaler* in 1985; this contained 900 references to nineteenth century whaling activities in the Pacific (see *Argonauta* IV, 3, pp. 10-11). This latest work offers 354 more listings, each with a few explanatory words. The categories are the same as in *The South Sea Whaler*. Books (Contemporary accounts and modern research, Bibliographies, Shipping Lists, Books on scrimshaw and marine Art; General works on the Pacific Ocean, Books on Herman Melville; Fiction; Children's Books), Academic Dissertations, and Book Chapters and Articles which illuminate the subject. It is indexed by subject, author and title, and includes a supplementary author index for *The South Sea Whaler*.

Among the nuggets of information of interest to the reviewer was the fact that in his *Ships and Sailors* (1982), an account of the mutiny in the whaler Sharon, Stanley Rogers had confused Ascension Island in the South Atlantic with Ascension Island in Micronesia. Of special Canadian interest is the listing of Robert L. Webb's *On the Northwest* (Vancouver, 1988), which deals with whaling activities in the Pacific from 1797-1967.

*More South Sea Whaling* is a most useful reference, not just for the specialist but for anyone interested in whaling history in general.

John H. Harland
Kelowna, British Columbia


These three volumes form half of what the Kendall Whaling Museum ambitiously terms its "Monograph Series" in American
whaling history. The museum possesses an extraordinary collection of scrimshaw; each of these carefully produced pamphlets reflects that particular curatorial interest. The authors are plainly interested in redressing the century of "quaint obscurity" into which scrimshaw fell after it declined along with whaling at the end of the last century. The main problem they see is with the anonymity of so many surviving items. "Some scrimshaw, at least," writes Frank in Biographical Dictionary, "must be definitively connected with the documented biographies and shipboard careers of actual practitioners" and its study must be "enlightened by the application of disciplined, systematic methods." (pp.1-2) To this end, these publications provide a biographical dictionary of certain known artists and more detailed biographies of an early nineteenth-century American scrimshander and of a twentieth-century practitioner from Madeira.

In reconstructing these lives, the authors are fortunate that the industry was so well documented. Relying mainly on newspapers, surviving logs and journals, the WPA publication, Whaling Masters (1938), and Alexander Starbuck’s History of the American Whale Fishery (1878), Frank and Basseches have uncovered at least a few details, however sketchy, of a good many scrimshanders' careers. However, it is not yet clear to what useful purpose this research will be put, since their own reflections on the significance of scrimshaws are neither extended nor especially thought-provoking. In the hands of trained experts in folk art, there is surely much that these objects can tell us; the Kendall Museum is certainly paving the way for future study.

The most interesting of the three pamphlets is Basseches' three-page biography of Manuel Cunha, a Madeira islander of this century who spent much of his adult life carving scrimshaw for sale to antique dealers in the United States. Based in New Bedford, these dealers instructed Cunha to produce replicas of nineteenth-century American pieces, refrain from initialling them, and attempt to give them an aged appearance by, for example, burying them in the ground. The author claims that there is nothing to suggest that the dealers were ever involved in representing these as authentic scrimshaw, and Cunha resisted their demand that he leave no identifying marks on his work, but the reader can hardly escape the conclusion that there was an element of fraud, leastways at the American end of the operation. Although this does not diminish Cunha's obvious skill, admirably illustrated in the 107 illustrations that follow the text, the story is chiefly interesting as a chapter in the modern history of the American antique market.

Together, these collections suggest that if the folk art of scrimshaw still awaits its historian, at least one adept in the modern methodologies of material culture, the objects of the study—the "curiously carved" (Biographical Dictionary, p. 1) teeth themselves—are now in good hands.

Daniel Vickers
Memorial University of Newfoundland


Biographies of sailing ships are a rare commodity and have usually been written in the language of the country where the vessels were owned, so it is remarkable that a four-masted barque such as the Herzogin Cecilie, which was not built in
Great Britain nor ever owned there, should have had a second biography written about her in the English language. The first was W. L. A. Derby's, *The Tall Ships Pass*, published in 1937, the year after her loss. He wrote a magnificent history of the ship and her contemporaries but did not have access to the important papers made available to the authors of the present work.

During the 1930s, the surviving square-riggers became objects of admiration wherever they went, and the *Herzogin Cecilie* became well known. But her wreck had the consequence of making her doubly famous. It was part of the tragedy that she was remembered more as a wreck rather than as a queen of the sea. As a preamble to the story of the ship's life under sail, the authors provide an outline of the economic background to European shipping in the nineteenth century, although they commence with four pages on the application and efficient uses of steam power and the screw propeller, adding a picture of Brunel's *Great Britain*, now preserved at Bristol. The text then reverts to sailing ships and their use as cargo-carriers.

Succeeding chapters take one through the life story of the *Herzogin Cecilie* beginning with her launch in 1902 as a cadet ship for Norddeutscher Lloyd, which then owned eighty-four steamers. In 1921, wartime reparations resulted in her being handed over to the French Government, but later the same year Gustaf Erikson bought her and she remained under his flag for the rest of her life. The two authors have produced a most interesting and informative text on the operating of a big square-rigger together with particulars of freight rates, expenses and profits, and this is illustrated with a varied selection of photographs. There is also a good account of the maritime community of the *Aland* Islands and the part it played in shipping and shipowning.

The mysteries surrounding the last hours of this splendid Finnish four-masted barque and her subsequent grounding on rocks off the South Devon coast have been unravelled, using the ship's log-book and statements made before appropriate officials, as well as interviews with surviving members of her crew. Edgar Erikson attributed her loss to a "gross navigational error in fog," and of the incompetence with which the vessel had been handled." (p. 182) The detailed report in Appendix 6, prepared as if for underwriters from available evidence, is particularly instructive.

A few comments on presentation of material are in order. The book says she was lost in "Soar Mill Cove." In 1936 some people still used the original name "Sewer Mill Cove," but it was said that "Sewer" was unattractive to tourists, hence the change. The name of the four-masted barque *Archibald Russell* is consistently spelled here with only one "I" although the reviewer has many photographs of her with the double "I" of *Russell* clearly visible on the hull. On page 214 paragraph 5, ought not "4 April" to read "24 April"?

For persons unable to read any north European languages, these two authors have provided an informative account of the last era of trading under sail.

David R. MacGregor
London, England


I am told by those who devote their lives to the mysteries of seventeenth century bibli-
ography that one of the hot topics for current inquiry is the matter of "white space"—the part of the page which does not carry print may be as (if not more) revealing of the message as that consisting of printed words. This thought occurred to me as I perused the pages of The Hitchhiker's Guide to the Oceans, a slender book of barely a hundred pages, many of which are substantially bereft of print. What message was this meant to convey? Were the authors stuck for something to say? Was the publisher padding the book with nice paper, large print, and lots of white space to heft the price? Or was the essentially Dick and Jane appearance, which carries over to some degree into both content and style, based on the authors' assessment of the intelligence of the potential audience?

All of which is to say that this is a book which is both mystifying and irritating. But, beyond that, it has its merits, and these deserve to be counted. Unfortunately, the book somewhat resembles a sandwich—the interesting material is buried in the middle; to get at it you must plough through stuff which is at best dull and at worst pernicious.

It should be said at the outset that The Hitchhiker's Guide is aimed at an audience of novices. This is made clear on the jacket which tells us that the book is "a practical handbook for the growing body of people wishing to travel by crewing on ocean-going yachts...a mine of information on the demands of the cruising lifestyle-physical, financial and psychological—as well as its obvious joys. Potential crew as well as skippers seeking additional crew will find it an invaluable source of information, advice and inspiration." With the rider that crew would do well to avoid joining any skipper who relies on this novices' handbook as an "invaluable source of information (and) advice," the statement of intent is pretty fair and laudatory, though the word "inspiration" may be thought to be hyperbolic.

How far, then, is this sensible intention realized? The plain answer is—not well to begin with. The first fifteen pages are awkward and shallow. They incorporate a brief introduction of only thirty-two lines in which the authors modishly attempt to promote a gender-free ambience, an attempt substantially defeated by the offsetting statement that "women do excel more than men in some tasks, and there are other things men can accomplish with greater ease than women. It is a fundamental fact of the human species." This have-it-all-ways approach closely follows an opening exhortation in which the reader is asked "have you ever seen a yacht sailing in a warm afternoon sun with all sails set and moving along in a gentle breeze? Have you wished you could be aboard going to a south sea island populated by bronze-skinned, happy, carefree people?" The further information that the thousands of people who do this are called "yachties" only confirms the impression given by the first two pages that this is an occupation for simple-minded, paternalistic loons. Fall in, Dick and Jane!

But it gets worse. The introduction is followed by a series of definitions. Now from first principles, it would seem reasonable that novice aspirants should be provided with some set of definitions appropriate to the calling they have chosen. The key word however is "appropriate," and the definitions must be clearly and fully laid down. The definitions in The Hitchhiker's Guide do not fulfil this function. They stand, rather, as exemplars of a mind-boggling banality, leaving the impression that the potential reader is to possess biceps measurements larger than his or her IQ. What, for example, are we to read from the perceived necessity to define
lifestyle ("a person's general pattern of living"), mental ("pertaining to the totality of an individual's intellectual and emotional processes"), and financial ("concerned with money matters"). These redundancies, derived from dictionaries, are supplemented by others of the author's coining—we are told that this will help us understand the text. A free lifestyle, for example, is said to be "not in the financial sense. A stimulating, challenging lifestyle governed by nature." This reviewer will leave for the potential reader the joy of uncovering the contrasting definitions for conventional lifestyle and cruising lifestyle. In brief, the definitions add nothing to the book and diminish the reader.

This embarrassing section is followed by an unexciting but largely unexceptional account of the history of yachting, and a brief, if ungrammatical, description of the differences between racing yachts and cruising yachts. Then, before we get down to business, a sad relapse into the windy pretentiousness which so disfigures this little book. In a section dubbed "the success formula," we are told that many people are now trying to escape the pressures of "the highly competitive nature of our Western society." To achieve this goal, we must follow the path of the "success formula." And what is a success formula? It is nothing more, in fact, than the setting of a goal "and then creat(ing) a plan that will attain that goal." The problem with this treatment is that it attempts to elevate and mystify a commonplace proposition by investing it with a false scientism. The ultimate result of this approach is to detract from the book's message—it simply becomes hard to take it seriously when it is larded with such dressing. Which is a pity—because the message is serious and worth listening to.

The fact is that these authors do know what ocean cruising is all about, and it is a relief to report that at this point they swing into the substantive contribution of the book. They describe, economically and sensibly, the mental, physical and financial preparation necessary for the novice to embark upon successful and rewarding ocean cruising. They review the nature of the relationship between skipper and crew and outline the mutual obligations between the two; they touch on the problems of personality changes which may occur on long passages; they list and discuss those human habits and preferences which, if not prosecuted with care and mutual regard, may cause problems within the small compass of a cruising boat—drinking, smoking, nudity, music, drugs, children, domestic chores, diet etc.; they note the physical constraints which may require adjustments on the part of the cruising novice—the problems, not normally encountered on land, of restriction on artificial light, water, space, and supplies. And finally, they provide a very useful discussion of the physical preparation required for cruising—the development of desirable skills which make a contribution to the life of the boat and which are over and above the attributes of seamanship: cooking, medical, musical, languages, diesel mechanics, sewing, navigation, radio and electronics, swimming and diving—all individual skills which add enormously to the successful accomplishment of an ocean voyage.

An extended section on living on board, both at sea and in port, enhances the foregoing discussion. To this is added very useful advice on the personal preparation needed in financial and administrative matters: the financial arrangements to be agreed with the skipper/owner; the provision of proof of financial standing to support immigration and visa controls; the garnering of letters of reference. This is a very constructive contribution, and there is
only one cavil—but it is not an insignificant matter. The concern is with the typical rates of exchange used in the examples given of potential costs. It should be observed that this is a British book, but this printing, done in the United States, is clearly aimed at the huge American market. Potential costs, therefore, are given in pounds sterling with, in each case, an arbitrary US dollar equivalent. In all cases, the equivalence given is £1 sterling = $1.33 US. Now most of us will remember the time when the US dollar was at this level (was it twelve or fifteen years ago?)—but that is not the case today. It is closer to US $1.80. The point, however, is that American readers, if they read these exchanges too literally, may seriously underestimate the potential dollar costs of a projected cruise. And Canadian readers might make similar miscalculations by translating from US dollars.

This glitch is, however, more than offset by the succeeding, penultimate section which is, perhaps, the most valuable twenty pages of the book. Here the authors indulge in a short geographical excursus entitled "Where the yachts are." Maps and tables are deployed rather cleverly to show the seasonal patterns of cruising yachts with accompanying advice on how and where to contact skippers. This last advice is both useful and insightful—it directs the prospective crew member to canvass the possibilities of, at one level, formal advertising to, at the other extreme, visiting the nearest launderette to a cruising marina. All this is good, sound advice given with both the appropriate caveats and a dash of imagination.

The book concludes with informational appendices on travel facts—useful information on access to visas, insurance, consulate and foreign representatives—although the utility of these sections is limited for the wider audience by their essentially British provenance.

What then, in summary, do we have in this book? A bad beginning, a solid and useful middle, and a mushy end. But, on balance, a useful acquisition for any novice who can read past the hokey philosophy and psychology, and who can afford the rather elevated price.

Michael Staveley
St. John's, Newfoundland


*Winds of Change* joins a small but growing body of literature dealing with women at sea participating in maritime activities. Until recently the traditional view was that the sea, and all activities pertaining to it, was a wholly and irrevocably male space. More acute observers noticed that this stereotype never held entirely true. This was especially true in the case of catching and processing fish. It was only *deep sea* fishing that excluded women. However, feminist scholars have now begun to chart the scale of women's maritime activities and to assess its significance. It is in this context that the team from the University of Washington have contributed their study of women in the northwest (US) commercial fishery.

Their initial premise was simply to confront the stereotype by assuming "that women would be found in all sectors of the fishing industry, and that women would fish for all commercial species, using all appropriately associated types of gear." (p. xii)
Using a variety of techniques they did succeed in identifying women active in the commercial fishery in a variety of capacities. They then conducted extensive oral "life story" interviews with eighteen women involved as skippers, crew, processors, buyers, administrators, political activists and fishermen's wives. Ten of these stories comprise the bulk of the book, together with a general account of the northwest Pacific commercial fishery and a discussion of the methodology they employed.

The result is a lively, sympathetic and engaging book that goes a long way towards demonstrating both the variety of women's involvement in the fishery and some of the interesting questions that arise when women operate in "non-traditional" spheres. The difficulties in the book, are, in a way, the converse side of these strengths. First, while the researchers' positive orientation shows us the variety of women's involvement, they do not document either the scale of women's participation or their structural position in the fishery. One is left with admiration for the women whose stories appear here, but with less idea of how representative they are, whether conditions are getting harder or easier for women to enter the industry or what consequences increased female involvement might have for what is, after all, still a male dominated sphere. My second problem with Winds of Change stems from the methodology the authors employed both to obtain and to present the life stories. They provide a commendably detailed account of the process, which recognizes many of the issues raised recently in feminist methodology debates. They are especially careful to leave control over the final "stories" with the respondents. The life stories are, as far as possible, the stories the women want told. Valuable in itself, this does not seem, to me, to exonerate the researchers from ensuring that the material provides the information that we, the readers, might need in order to understand the experiences and to link them together. Nor does it exonerate them from analysing the accounts and thus moving our theoretical understanding of gender relations forward. The conclusion attempts some of this, by dividing the women into broad categories (women in different sectors of the industry) and attempting various comparisons, but this in no way does justice to the complicated intersections of gender, class, race, family and generation.

Despite these criticisms, Winds of Change makes a worthwhile addition to the literature, opening up new areas for our attention and introducing us to some of the rich variety of women's lives. It is also a good read.

Marilyn Porter
St. John's, Newfoundland


There seems little doubt that the state of the environment has emerged as the dominant issue of the 1990s. Centuries of abuse to the ecosystem have left it ill-equipped to prevent the sins of recent decades in particular from inflicting havoc of unknown but potentially deadly proportions. Phil Weller examines the source, scope, and urgency of this crisis as it pertains to the Great Lakes. Growing up in Toronto, Weller witnessed the toll that rapid urbanization and industrialization took upon the local environment. This, together with his current activities as Executive Director of the Great Lakes United coalition in Buf-
falo, result in a very personal and compelling study. The problems facing the Great Lakes are not easily answered, though Weller concludes with an optimistic programme to restore the health of these ailing fresh water seas.

The book is divided into three sections, beginning with a lengthy overview of the history of the Great Lakes ecosystem. Despite the lack of original research in this section, it is a highly readable summary of changing attitudes towards the Lakes, the relationship between resources, economic development and transportation systems, and the legislative and regulatory framework that was established to address declining water quality. Farming, milling, canal-building and the reclamation of wetlands contributed to the decline of fish stocks as the environment was reshaped to meet human demands. The Lakes became an open sewer for a growing population that placed a false sense of confidence in the powers of chlorination and dispersal. Industrial and human wastes transformed Lake Erie into a seeming Dead Sea; river fires and dead fish gave evidence that the Lakes were on their way to irreversible ruin.

The second section examines growing public awareness of the crisis facing the Lakes and the limited success of the responses. New government agencies were established in Canada and the United States but the tendency to focus on individual issues led only to partial victories. Citizen and government action had slowed pollution by the 1970s, but the battle took a much different direction with the detection of toxic chemicals in the food chain. The Niagara River and Love Canal became symbols of corporate mismanagement, yet governments failed to enforce rigid water quality standards as industry threatened to move plants and jobs elsewhere. Nor could such problems be localized to individual sites. Atmospheric fall-out from sources as distant as the southern United States was discovered in Lake Superior, while run-off from urban and rural areas contaminated harbour sediments and passing lake currents. Weller makes the point that all parts of the ecosystem have a significant impact on the health of the Lakes and on the well-being of those who draw on these waters for their livelihood and survival.

The last and briefest section of the book offers a programme of ecological rehabilitation to achieve a set of seemingly ambitious goals: the ability to drink water, to eat fish and waterfowl, and to use the Lakes to swim, canoe and sail without injury to health. The success of remedial action plans in Green Bay and Hamilton, as well as smaller projects such as the restoration of trees and vegetation cover along Black Creek in Toronto, suggest that these goals are attainable. Recent initiatives by citizens' groups and governments highlight the need for decision-making with foresight, a process that can only take place with increased monitoring and consultation to ensure that development takes into account implications for the ecosystem. Pollution respects no boundaries. Rehabilitation must therefore reach across local, regional and even national jurisdictions to ensure a coordinated approach. Weller argues that emphasis must be placed on sustainable development and on creating a lifestyle that protects the environment and places the ecosystem before profits and growth.

Although it took Weller more than two years to write this book, his message remains timely. Though his historical analysis is selective and at times superficial, it also suggests areas that deserve more detailed study. His endnotes cite only one graduate thesis that has appeared within
the last decade and which can therefore take the study of pollution abatement beyond the standard general histories of the Lakes. There is also ample room to consider changing public attitudes towards the environment and the implications of these perceptions for the current decision-making process. While many of Weller's calls for research, consultation and the creation of wetlands to serve as environmental filters are received today with sympathy and support, there is also evidence that public concern for the environment is waning under the strain of the current economic downturn. As the battle between environmental preservation and economic development continues into the next century, Weller's book will continue to provide an informative and provocative introduction to this important subject.

Michael B. Moir
Toronto, Ontario


This is not a pretentious book. The author declares the limits of his aims and qualifications at the beginning. The book, he announces, has "no continuing theme." He has "never sailed the lakes for a living." His acquaintance with ships has been that of "an extremely interested observer and passenger." His family has had to adjust itself to his conviction that "vacations must only be spent along the shores where Great Lakes ships pass."

Yet this is not a trivial book. The intensity of the author's private enthusiasm, sustained since childhood, has yielded some solid results. As an accomplished photographer he has made an impressive visual record of many of the lake ships. These photographs are not snapshots with half the ship left out. Generally they have been taken from effective angles and at the right moment. As a collector of old photographs, Wiening has been further able to enlarge his presentation. The illustrations include many interior views, from the arrangements in wheelhouses to below-deck scenes of engine rooms, close to the "growls and roars of massive power."

As for the text, Wiening writes vigorously and vividly. His many years of talking to officers and crews is reflected in the unusual details he has gathered. He has also entered into the feelings that ships are living creatures. He rejoices in their achievements, grieves for their adversities, mourns their endings. His attitude tends to become anthropomorphic. His feelings at times go beyond words into flutters of exclamation marks.

Even in these excesses, however, his emotions, though immoderate, seldom seem artificial. He really has been carried away by the pressure of genuine enthusiasm.

Wiening is an American from Port Washington, Wisconsin. But his interest in the ships has not been restricted by their nationality. American and Canadian ships have both attracted him. In fact, it is the Lemoyne, a CSL ship, that he has featured in full colour on the book's front cover.

While this book will not take a place among comprehensive, scholarly, exacting studies of navigation, it is a good book for browsing. It certainly does capture the spirit of the Great Lakes and of the men who have gone down to the Lakes in ships.

Edgar Andrew Collard,
Ottawa, Ontario

Living over twenty years at a lighthouse conjures up visions of isolation, storms, shipwrecks and tragedy, and yet, *Life on Crossover Island* is very few of these.

Crossover Island is located near Brockville, Ontario in the St. Lawrence River, one of the busiest waterways on earth. The tiny island was literally within yards of every sailing vessel, barge, and steamer that plied the St. Lawrence. A lighthouse was necessary here because of nearby shoals and as a navigational aid to warn traffic to "crossover" from the American channel to Canadian and vice-versa.

The Hills moved to the island in 1909, when the late Ralph Hill was twenty-two months old; the book describes the family's many experiences from 1909 until 1931. For the early years, Hill drew from his father's diary. The book is therefore a fascinating examination of everyday life at a lighthouse station. No facet is left untouched. I felt that I was sitting on Ralph Hill's knee as he recounted his experiences. However, some of the chapters have little to do with lighthouse life and are instead testimonial to Hill's experiences ashore.

This work is an extremely useful social history, yet its value is limited because the book has no true index; the "index" appears at the beginning of the book and is more a table of contents. Any reader or researcher will be hard pressed to find specific items of interest easily. Also, the logical place for a description of Crossover Island and its history is at the beginning of this work and not towards the end. Some of the photographs, which are interspersed throughout the book, are undated. The book also needs a map to highlight Crossover Island.

For those interested in social history this is a recommended book, but users beware of the lack of an index.

Ken McLeod
Osgoode, Ontario


Rarely has a Great Lakes port been so well documented through postcards as has South Haven, Michigan. This small southern Lake Michigan port was founded in the 1850s as a lumber exporting centre. Blueberries, peaches, and other fruits produced on southern Michigan farms and orchards were later shipped from South Haven to other lake cities by boat. By the late 1870s a lucrative steamboat and railroad passenger excursion trade had developed with Chicago, St. Joseph, Kalamazoo, Grand Rapids, and other nearby cities, thereby creating a busy resort town atmosphere. This development led to the production of souvenirs for tourists, and what better way to promote the city and all its comforts than to sell picture postcards? Views of buildings, beaches, lake boats, river launches, and bridges abound.

South Haven historian Jeanette Stieve has included an excellent selection of these postcards in an illustrated history entitled *By the Big Blue Water*. The book begins with a brief history of postcards and postcard collecting and then proceeds in short topical chapters that are arranged in roughly chronological order. Each chapter
includes a brief text and is followed by pertinent postcards and appropriate captions. There are twenty-two chapters in all, including such titles as "Launch Trips to the Parks," "North and South Piers," "Harbours and Docks," and "Schooners to Steamers." An oversize plate map of the city of South Haven taken from a 1904 original has been included to ensure that the reader can relate to the geographic locations listed in the book.

If there is fault with this book, it is that it only contains a small part of the author's extensive knowledge of South Haven's maritime history. Stieve has recently prepared a manuscript history of shipbuilding at South Haven that is also to be published by Michigan Maritime Museum. Until then, By the Big Blue Water represents the best illustrated history of South Haven available.

Jay C. Martin
Holland, Ohio


Cris Kohl has once again published a great book, this time on 250 favourite dive sites around the province of Ontario. Divided into regions and listing various "sites" to dive, the author accurately depicts the background of each site, provides its location and co-ordinates, describes what may be experienced, and offers suggestions to make the dive safe and enjoyable. While unable to include every site in Ontario, Cris Kohl does present the old standbys most enjoyed by the majority.

Regrettably, and in spite of his marine heritage message in Appendix B (where the author speaks of Save Ontario Shipwrecks and the ethics of preserving marine heritage), many of the listings describe the bottles and other goodies which divers may find and presumably collect. While this inconsistency has been somewhat rectified in an Errata, to the uninitiated, the book implies that bottle and artifact collecting is still an accepted activity.

The book is well laid out and reading it is enhanced by the many historical photographs, interesting background information, and "Worth Checking Out" sections to entice divers into visiting sites, which he was unable to describe fully due to lack of space. In addition, the historical aspects of some sites are described in detail, making the book an excellent reference even for the non-diver.

Dive Ontario will make a great addition to the library of all serious divers and maritime historians.

Fred Gregory
Ottawa, Ontario


"So many questions, so many mysteries. It is only by going down ourselves to the depths of the sea that we can hope to clear them up."

Auguste Piccard

This is a good book. It isn't often that a book filled with both scientific/technical information and a compelling story of human activities and personalities is funded by the National Science Foundation, the Office of Naval Research and the National
Oceanic and Atmospheric Administration. Rare, too, for such a book to get through the anonymous peer review process, but pass such criteria and review, it did. It should be equally well received by the reader, "lay" or "scientific." *Water Baby* is quite literally the biography of the deep sea research submersible ALVIN.

It all began in the early 1950s, with oceanographers complaining that the mantle of water covering the major portion of our planet's surface inhibited then-activities. Unlike terrestrial scientists, for whom it was said that "life is relatively easy," they were denied access to the highest peaks, lowest valleys and kilometres upon kilometres of what lay between. Echo sounders, undersea cameras and seismic profiling yielded up information, but they wanted to go and see for themselves. As the idea gained support, serious planning began to take shape concerning the creation of a small deep-diving manned submersible. Scientists experienced with World War II submarines and engineers with the ONR were put to work on the project.

Chief enthusiast among the oceanographers was one Allyn Collins Vine, who doggedly pushed the project through to fruition. Born in 1914 in Garrettsville, Ohio, he received a liberal arts education at Hiram College, Ohio, majoring in physics. He went on to Lehigh University for graduate studies; there, Vine's choice of advisor was W. Maurice "Doc" Ewing, one of the fathers of modern oceanography. For several summers Vine accompanied Ewing to Woods Hole, Massachusetts, and the Woods Hole Oceanographic Institute (WHOI). It was there that Vine, the visionary oceanographer, was born. Eventually, the move to Woods Hole was permanent.

There is not space here to recount the story of A.C. Vine and his océanographic studies, or ALVIN. Read Kaharl's book. It's all there, from those first dreams and plans through the boat's christening on 5 June, 1964, to the many descents of discovery since.

The Woods Hole group named the submersible ALVIN, a contraction of Al Vine - which he resisted to no avail. Despite efforts to create an acronym to explain the name and overcome Vine's protestations, (e.g., Admirable Little Vehicle for Inner-space Navigation, A Little Visit to Interrogate Neptune, or equally facetiously, A Last Voyage Into Nowhere). ALVIN it was, and ALVIN is Al Vine.

Victoria Kaharl has indeed told the story of ALVIN well. The characters are as real and vital as any in literature; one that I must single out is Harvard's Dr. Ruth Turner, a pioneering, sea-going oceanographer. There are the stories of the missions of ALVIN, of suspense and near tragedy. This book is heartily recommended for the scientist and the lay reader alike. It is clear that Kaharl's title, probably the only weak thing about the book in this reviewer's opinion, comes from the fairytale by Charles Kingsley (1863), and yet Kingsley apparently was writing in the spirit of Piccard and Al Vine: "Here begins the never-to-be-too-much-studied account of the wonderful things which Ton saw on his journey to the other end of Nowhere... and all this he learnt when he was a water baby, underneath the sea..."

It is written that Al Vine retired in 1979. In truth he will never retire. The last time I talked to him was at an international océanographic meeting in Baltimore a couple of years ago where he was filled with enthusiasm about the prospect of our SDL1 dives in search of giant squid.

Frederick A. Aldrich
St. John's, Newfoundland